

Queensland

C.L. Salom and R. Alati

**QUEENSLAND TRENDS IN ECSTASY AND RELATED DRUG
MARKETS 2016**

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

Australian Drug Trend Series No. 180

QUEENSLAND TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2016



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

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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
CCC	Crime and Corruption Commission
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 (synthesised 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 2016, 92 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 2016 sample (24 years) was similar to previous years (e.g. 24 years in 2015). The proportion of single participants was also similar in 2016 (63% vs 64% in 2015), with increases in those working full-time (15% vs 7% in 2015) and the median weekly income (\$506 vs \$420 in 2015; $p < 0.05$).

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 18.4 years. Nearly all (97%) reported using some form of ecstasy/MDMA in the previous six months. For the first time, the most common form was crystalline MDMA (68%). Recent use of MDMA pills by 67% of participants was lower than in 2015. Ecstasy was mainly swallowed, sometimes snorted but not smoked, shelved/shafted or injected. When last using ecstasy, 99% of participants also used another drug. Among those who reported using drugs for 48 hours or more without sleep in the previous six months ($n = 33$), 68% reported having used ecstasy on the most recent occasion. Key experts reported few changes in ecstasy use.

Methamphetamine use

Two-thirds (67%) of participants reported lifetime use of methamphetamines and 39% reported recent use. This is similar to 2015 levels. Lifetime and recent use of speed powder rose to 58% and 25% respectively ($p < 0.05$). Lifetime use of base was reported by 20% of participants, but only 8% reported recent use. Ice (crystalline methamphetamine) remained the type of methamphetamine most used in the past six months; recent use remained stable at 18%.

Lifetime use of ice remained at 32%. Frequency of recent ice use rose to 12 days (i.e. fortnightly) in 2016 ($p < 0.05$).

Cocaine use

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

Ketamine use

One in five participants (22%) had recently used ketamine and their use was infrequent. Lifetime use was reported by 35%.

GHB use

Lifetime use of GHB was higher at 22%, with occasional use reported by participants in the previous six months.

Hallucinogen use

There was a return in the use of LSD to levels seen in 2014. Lifetime use significantly increased to 75% in 2016 from 66% in 2015 ($p < 0.05$). Recent use increased from 42% in 2015 to 55% in 2016 ($p < 0.05$). Frequency of use increased to a median of three 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 most (86%) reporting use in the previous six months. Frequency of use increased to three times per week. Cannabis was predominantly smoked, though it was also reported to be eaten, and inhaling using a vaporiser remained at 36%.

Other drug use

The use of alcohol and tobacco remained high and frequent. Recent use of methylenedioxymethamphetamine (MDA) was reported by fewer participants (16%, $p < 0.05$) and use remained occasional. The prevalence of lifetime and recent use of illicit anti-depressants remained low. Recent illicit use of benzodiazepines increased ($p < 0.05$) to 46%. Recent use of nitrous oxide at 25% was higher than in 2015 ($p < 0.05$), but recent use of amyl nitrite appeared lower at 9%.

The use of heroin, methadone, buprenorphine and prescribed other opioids (e.g. morphine and oxycodone) remained low, but lifetime use of illicit other opioids was higher. Just over one in three (39%) reported ever using opioids not prescribed to them compared with 28% in 2015 ($p < 0.05$).

Recent licit use of pharmaceutical stimulants remained low at 9%, whereas recent use of illicit pharmaceutical stimulants increased to 56% in 2016 (from 31% in 2015; $p < 0.05$), while frequency of use remained monthly.

New psychoactive substances

In 2016, nearly half of participants (49%) reported recent use of new psychoactive substances (NPS) and/or synthetic cannabis, which was similar to 2015. Use of synthetic cannabinoids remained low, and recent use of all NPS other than DMT and 2C-B dropped.

Drug markets: price, purity, availability and supply

Ecstasy market

Crystalline MDMA overtook pills as the most common form of ecstasy purchased in the previous six months. The median price per pill remained stable at \$25. Two thirds of participants who commented reported the purity (strength) of pills, powder and caps to be medium/high, with half reporting that purity fluctuated (49%). 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 private home.

Methamphetamine market

The price of speed powder dropped to approximately \$33 per point in 2016. Fewer participants than in 2015 rated it to be of high purity or easy to obtain; purchases were few. Four purchases of base were reported. A point of ice cost about \$38, or \$320 per gram—significantly less than 2015 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 private home.

Cocaine market

The median price of cocaine remained stable at \$325 per gram. Among those who commented, 48% 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

Eleven participants reported having purchased ketamine, at \$250 per gram, with prices reported as stable and strength as high. Two reported buying GHB in the previous six months but did not agree on price, purity or availability.

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 2015. More participants reported LSD to be difficult or very difficult to obtain (38% in 2016 vs 17% in 2015), 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 as medium to high. Both forms remained easy/very easy to obtain in the previous six months. Cannabis was most often obtained from a friend, at a private home, and was most often used at home.

Health-related trends associated with ecstasy and psychostimulant use

Overdose and drug-related fatalities

In 2016, 26% reported having overdosed on a stimulant drug at least once in their lifetime, with 15% reporting a stimulant overdose in the previous year. These figures were similar to 2015. The stimulant drug most commonly attributed to an overdose in the previous year was ecstasy, followed by ketamine.

A lifetime experience of overdose on a depressant drug was reported by 11% of participants, all of whom experienced a depressant overdose in the previous 12 months, again similar to 2015. The drugs most commonly attributed to a depressant overdose in the previous year were alcohol and 2C-B.

Dependence

Dependence was not common among users of ecstasy: only 9% scored four or more on the Severity of Dependence Scale. One third (36%) of methamphetamine users showed indications of dependence.

Help-seeking behaviour

The majority (89%) 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 general practitioner (GP), a change from 2015 where help was most often sought from a drug and alcohol counsellor.

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

Among all participants, 49% reported moderate to very high levels of psychological distress on the K10. One-third (30%) self-reported a mental health problem in the previous six months. The most common mental health problems experienced were anxiety and depression, with 15% attending a health professional for mental health reasons in the previous six months.

Risk behaviour

Injecting risk behaviours

Low levels of recent injecting were reported in 2016; 10% reported injecting any drug in the previous six months compared with 2% in 2015. Drugs recently injected were speed, heroin, base and steroids.

Casual sex

Two thirds (64%) 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, ecstasy and cannabis, with cannabis use significantly decreasing (from 67% in 2015 to 48% in 2016; $p < 0.05$); ecstasy and alcohol use associated with casual sex remained stable.

Half of participants (52%) reported having a recent sexual health check-up.

Alcohol use

Seventy percent of 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. Over half (55%) drove soon after using an illicit drug.

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

Prison history remained low (7%). Eleven per cent of participants reported having been arrested in the previous six months; the most common offences were use/possession of drugs, violent crimes and public order offences. Drug dealing in the previous month was reported by 21% of participants.

Special topics of interest

NPS use

Nearly half of participants (48%) reported using a novel psychoactive substance in the last year, predominantly DMT and members of the 2C-X family. Most purchased from friends, often sharing or giving away to friends rather than selling for profit.

Online purchasing

One-third of participants (34%) reported ever purchasing substances online, most (30%) having done so in the last year. This was higher than national reports of 18% and 14% respectively. Most (55%) bought less than a quarter of their drugs online, typically buying traditional substances such as MDMA, LSD, cannabis and pharmaceutical stimulants rather than NPS. Only 2% were unaware of the 'dark web', while 23% had purchased substances through this avenue.

Gambling and video gaming

Nearly two-thirds (63%) of participants had used video games in the last six months, spending a median of two hours per episode playing. Only 12% believed they may have had an issue with gaming. Less than one-third (31%) reported having gambled in the last six months, and only 4% believed they may have had a problem with gambling.

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 was 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 92 current, regular users of substances sold as 'ecstasy' or other psychostimulants was recruited between April and June 2016 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 2016 Queensland EDRS recruited a total of 92 participants. The majority of participants (85%) had used ecstasy (MDMA) at least once a month in the past six months, while 13 participants had used only other illicit psychostimulants at least six times in the previous six months.

2.1.2 Procedure

Interested individuals inquired via telephone, SMS or email about participating in the survey. 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 reported using 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 2016 and 2015; statistical significance at the $p < 0.05$ level using t-tests is reported within the text. Other proportional differences observed between 2016 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 2016, the following data were obtained for the EDRS:

- Australian Criminal Intelligence Commission (ACIC) — 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 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
- Queensland Minimum Data Set for Needle and Syringe Programs 2015
- Queensland Police Service Annual Statistical Review 2015-2016
- National Notifiable Diseases Surveillance System
- National Hospital Morbidity Data

DEMOGRAPHICS

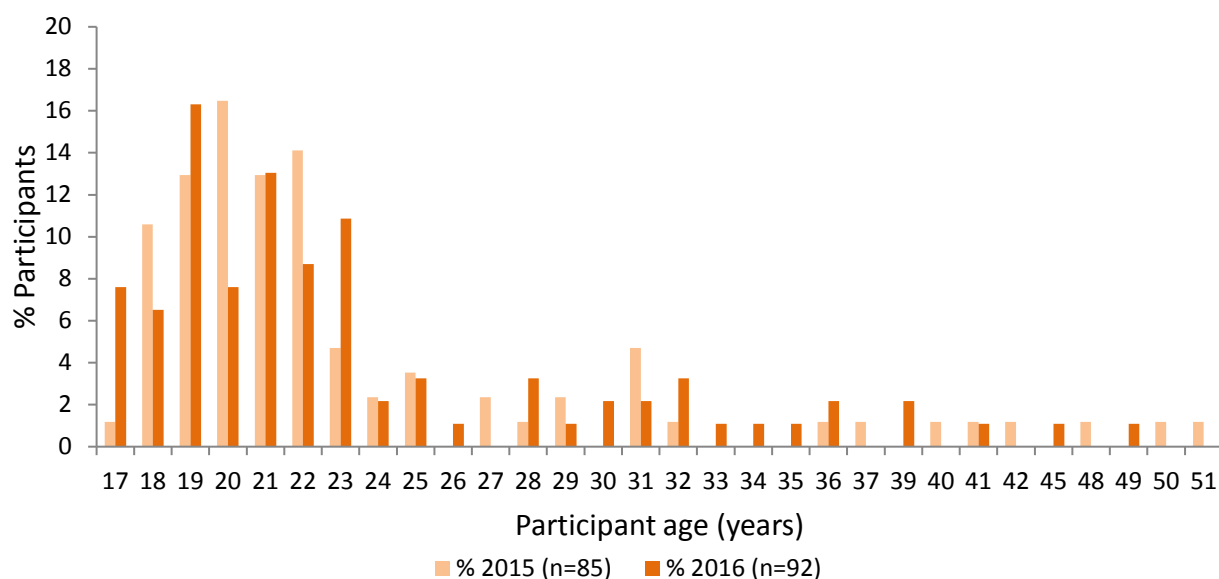
Key points

- Most were male, single, heterosexual, aged early-mid twenties
- Most had completed Year 12, over half still studying
- Most had some form of employment

3.1 Overview of the EDRS sample

The 2016 EDRS sample in Queensland was of similar age to that of previous years (Figure 1). The mean age of 24 years was similar to earlier years (24 years in 2015 and 25 years in 2014).

Figure 1: Distribution of participant ages, 2015 and 2016



Source: QLD EDRS participant interviews

Table 1 shows demographic characteristics of the 2016 sample. These were very similar to those of 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 \$506 (n = 92, range \$50–\$2300), which was higher than 2015 (mean \$420), potentially due to the small increase in those reporting full-time employment. The income profile was similar to previous years. In 2016, 51% of all participants reported their main source of income in the previous month was from a wage or salary, with 26% reporting it was from a government pension, allowance or benefit (i.e. Centrelink), but only 1% reported it was from a parental allowance. Seven participants reported they received no income in the previous month and three participants reported their own savings as their main source of income.

Table 1: Demographic characteristics, 2015 and 2016

	2015 (n=85)	2016 (n=92)
Mean age (range)	24 (17–51)	24 (17–49)
% Male	58	68
% English-speaking background	94	89
% Aboriginal and/or Torres Strait Islander	1	4
% Sexual identity		
Heterosexual	79	90↑
Gay male	4	1
Lesbian female	5	0
Bisexual	12	8
Other	1	1
% Relationship status		
Married/de facto	2	3
Regular partner	34	34
Single	64	63
Divorced/separated/widowed	-	-
% Accommodation		
Own house/flat	9	5
Rented house/flat	77	77
Parents'/family home	9	12
Boarding house/hostel	2	1
No fixed address	2	4
Education		
Mean years of school education	12	12
% Completed Year 12 or equivalent	88	88
% University/college qualifications	23	15
% Trade/technical qualifications	23	23
% Employment status		
Not employed	14	11
Full time	7	15↑
Part time/casual	15	10
Full time student	18	24
Part time student	1	1
Work and study	44	39
Other	1	0
Income		
Mean weekly income	\$420	\$506 ↑

Note: Arrow symbol signifies a significant difference between 2016 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.
- Alcohol, ecstasy and cannabis respectively had the highest prevalence of recent use.
- There was no increase in the prevalence of recent ice use.
- Few participants reported ice as the drug most used during the past six months.
- Half of participants reported using ecstasy weekly or more often.
- 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 2016, three participants reported shelving/shafting ecstasy capsules or pills, and one MDMA crystal, during the last six months.

Table 2: Drug use history, 2016

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	92	18	67	6	0	2	22	66
Ecstasy powder	47	25	34	2	0	0	17	27
Ecstasy capsules	79	20	64	6	0	1	9	56
MDMA crystals	78	21	68	6	1	1	34	57
Amphetamine powder (speed)	58	20	25	2	2	2	11	12
Methamphetamine base	20	28	8	2	5	0	0	3
Crystalline methamphetamine (ice)	32	25	18	12	5	16	1	1
Pharmaceutical stimulants (licit)	9	-	4	20	0	0	0	4
Pharmaceutical stimulants (illicit)	72	-	50	5	1	0	5	39
Cocaine	66	20	41	2	1	2	38	3
LSD	75	19	55	4	0	0	1	54
MDA	27	-	16	2	0	1	1	16
Ketamine	35	-	21	2	0	0	20	5
GHB ^d	15	-	7	1	0	-	-	7
Amyl nitrate	24	-	9	2.5	-	-	19	-
Nitrous oxide	48	-	25	3	-	-	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, 2016 (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	99	16	86	72	-	78	27	21
Alcohol	99	14	98	48	1	-	-	97
Heroin	8	-	1	5	1	1	0	1
Methadone	3	-	1	42	1	-	-	1
Buprenorphine	3	-	0	0	-	-	-	-
Other opioids (licit)	25	-	5	10	0	0	0	5
Other opioids (illicit)	39	-	22	2.5	0	1	0	20
Over-the-counter codeine^e	24	-	16	4	0	0	0	15
Tobacco	83	16	75	96	-	77	-	-
Anti-depressants (illicit)	7	-	1	1	0	0	0	1
Benzodiazepines (licit)	18	-	14	6	0	0	0	10
Benzodiazepines (illicit)	58	-	46	3.5	0	0	2	40
Mushrooms	54	-	26	2	0	1	0	2
Over-the-counter stimulants (illicit)	16	-	5	6	0	0	1	4
Steroids	1	25	1	60	1	-	-	-

^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

^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 2015, there were no significant changes in participants' nominated drug of choice, with ecstasy as most preferred, followed by cannabis.

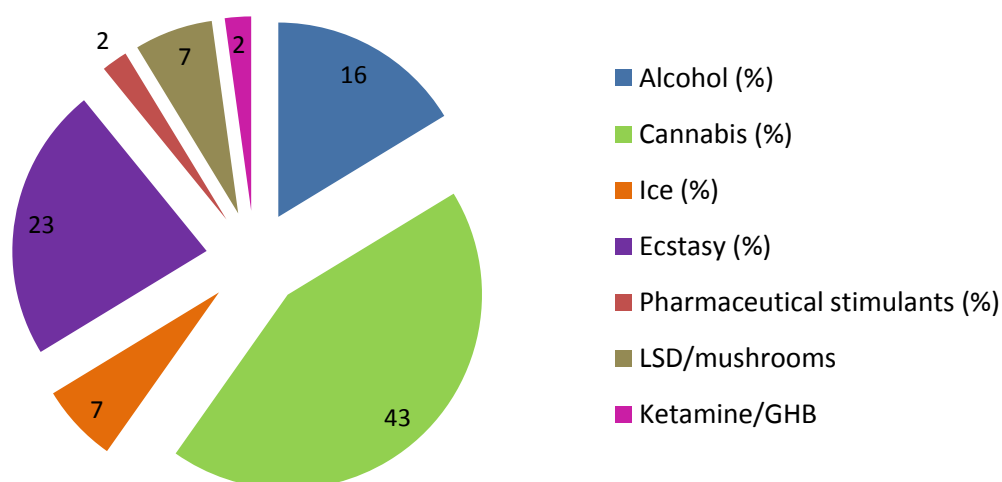
Table 3: Drug of choice, 2015 and 2016

Drug of choice	2015 (n=85) %	2016 (n=92) %
Ecstasy	38	40
Cannabis	31	21
Cocaine	8	12
Alcohol	11	9
LSD	5	10
Crystalline methamphetamine (ice)	5	4
Other*	4	4

Note: 'Other' includes MDA, tryptamine and mushrooms. Source: QLD EDRS participant interviews

Figure 2 shows that cannabis (43%), was the drugs used most often in the previous six months, followed by ecstasy (23%) and alcohol (16%). Price and availability were the reasons most commonly given for disparities between drug of choice and drug most often used. Compared with 2015 data, there was a significant decrease in alcohol being reported as the drug most used (from 28% to 16%; $p < 0.05$) but no change in ecstasy, cannabis or ice use. A small but significant proportion (7%, $p < 0.05$) of participants nominating hallucinogens (LSD/mushrooms) as the drug most used in 2016.

Figure 2: Drug used most often in previous six months, 2016



Source: QLD EDRS participant interviews

4.1.3 Frequency of ecstasy and related drug use

In 2016, at least half of participants (52%) reported at least weekly use of ecstasy and related drugs. Fewer reported fortnightly use ($p < 0.05$) and a higher proportion of participants reported weekly use in 2016 ($p < 0.05$).

Table 4: Frequency of ecstasy and related drug use during previous month, 2015 and 2016

	2015 (n=85) %	2016 (n=92) %
Not in the last month	2	0
Monthly	15	21
Fortnightly	39	27 ↓
Weekly	20	30 ↑
More than once per week	26	22
Once a day	0	0
More than once a day	0	0

Arrow signifies a statistical difference between 2016 and 2015 ($p < 0.05$).

Source: QLD EDRS participant interviews

4.2 Ecstasy use

Key points

- Mean age of first ecstasy use remained stable at 18.4 years.
- Ecstasy as drug of choice remained stable at 40%.
- Recent use of MDMA crystals (68%) and powder (34%) increased, but use of capsules remained stable (64%) and use of pills decreased (67%; $p < 0.05$).
- Ecstasy in all forms was mainly swallowed, sometimes snorted, and rarely smoked or injected.
- The most recent time participants used ecstasy, 99% also used another drug.
- 36% 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 2016 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 18.4 years in 2016. Pills were the most common

form of ecstasy ever used (by 92% of participants), followed by caps (79%), crystals (77%) and powder (46%).

Forty percent of participants nominated ecstasy as their drug of choice in 2016, similar to 2015. In the previous six months, most participants (97%) reported using some form of ecstasy: MDMA crystal (68%) overtook pills (67%) as the most commonly-used form in 2016.

Quantity and frequency of use appeared to remain stable. 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 = 62), 23% reported using more than two pills in a usual session. Among those who reported using ecstasy of any form in the previous six months (n = 89), half (51%) used at least fortnightly and 20% reported using at least weekly. The median frequency of ecstasy pill use was six times in the previous six months (n = 62, range 1–60), similar to that of capsules and MDMA crystal. This was similar to the frequency of pill use in 2015 (median = 8). Powder use was less frequent (twice in six months).

Table 5: Patterns of ecstasy use, 2012–16

	2012 (n=62)	2013 (n=88)	2014 (n=100)	2015 (n=85)	2016 (n=92)
% Ecstasy (any form) in last six months ^a	100	100	94 ^a	98 ^a	97^a
Mean age first used ecstasy (any form)	18.6	17.3	18.5	18.5	18.4
Median days used any form in last 6 months ^b	18	14	10	12	12
% Use weekly or more in last six months ^b	37	33	30	33	36
Median pills in 'typical' session ^b	2	2	2	2	2
% Typically use >1 pill ^b	86	83	78	74	71
% Favourite drug	21	46	29	38	40
% Ever injected ecstasy	9	3	12	-	-
% Mainly swallowed ecstasy recently ^b	89	75	84	73	-
% Mainly snorted ecstasy recently ^b	8	25	13	20	-
% Mainly injected ecstasy recently ^b	3	0	2	0	-
% Recently binged on ecstasy ^{b,c}	34	36	23	36	36
% Used other drugs with ecstasy ^b	87	92	82	85	99↑

^a Criteria for recruitment changed in 2013 from people who had used ecstasy six or more times in the previous six months (2005–12) 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 = 89).

^c Used for > 48 hours without sleep

Note: Arrow symbol signifies a significant difference between 2016 and 2015 (p < 0.05).

Source: QLD EDRS participant interviews

4.2.2 Forms of ecstasy recently used and route of administration

Nearly all participants (97%) reported recent use of a form of ecstasy. As shown in Table 2, MDMA crystal was the most commonly-used form (68%, up from 43% in 2015, p < 0.05).

Recent use of pills (67%), was lower than in 2015 (86%, $p < 0.05$). Use of powder was 34%, up from 22% in 2015 while use of capsules in 2016 (64%) was similar to use in 2015.

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 was one report of recently injecting crystal MDMA. Smoking of MDMA was only reported by four participants.

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 but one 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, cannabis or tobacco.

About a third of all participants (37%) reported 'bingeing' (i.e. using drugs for more than 48 hours or more without sleep). Substances most often used during a 'binge' included ecstasy, alcohol (more than five standard drinks), cannabis and tobacco.

Table 6: Substances used on last occasion, and when bingeing, 2016

	Last occasion (n=92) %	While bingeing (n=33) %
Ecstasy	67	68
Alcohol >5 standard drinks	54	59
Tobacco	50	53
Cannabis	60	56
Cocaine	4	24
LSD	20	15
Alcohol <5 standard drinks	21	18
Ice	9	38
Nitrous oxide	-	3
Energy drinks	2	9
Speed	3	
Base	-	-
Benzodiazepines	2	3
Pharmaceutical stimulants	8	18
Mushrooms	-	12
Ketamine	3	6
Amyl nitrite	1	-
MDA	2	3
Over-the-counter codeine	-	-
Other	6 ^a	12

^a 2C-B, Caffeine, DXM, unknown capsule; ^c Caffeine, DMT, unknown capsule

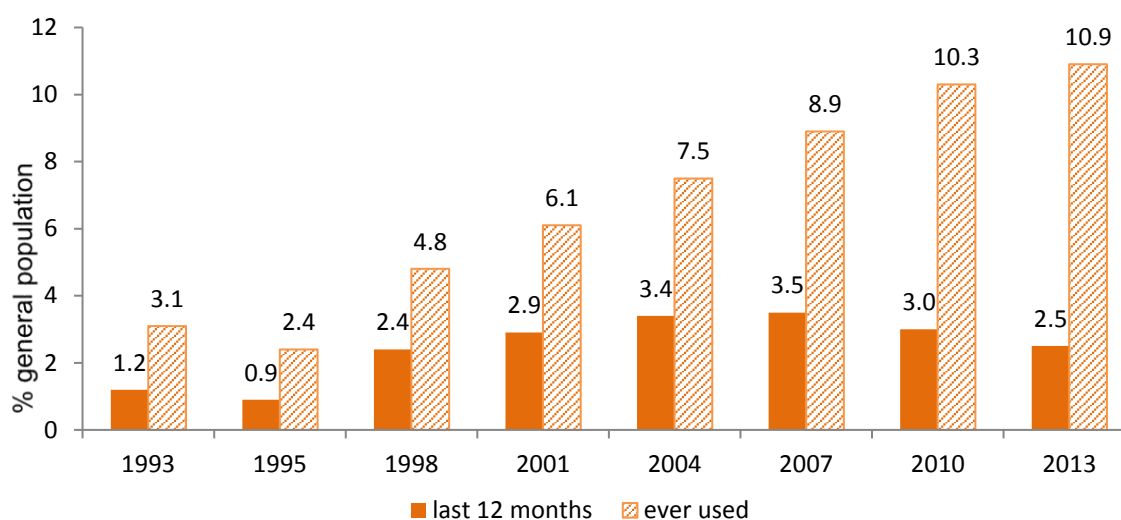
Note: Multiple responses permitted

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 (the group 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. 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 regional centres such as the Gold Coast.

Key experts noted that most forms of ecstasy were very easily available, but saw a preference among users for caps and crystals rather than pills, generally due to the perception of higher purity. Increased purity was confirmed by forensic analyses, but law enforcement noted an increase in local manufacture, with higher levels of contaminant substances, such as ethylone, clenbutyrol and caffeine, further away from main supply routes.

The use of powder and crystalline forms was associated with increased snorting of MDMA. 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

- Recent use of ice was unchanged in 2016 while use of powdered methamphetamine increased ($p < 0.05$).
- There was no increase in reports of lifetime use of ice.
- Frequency of ice use in the previous six months remained occasional.

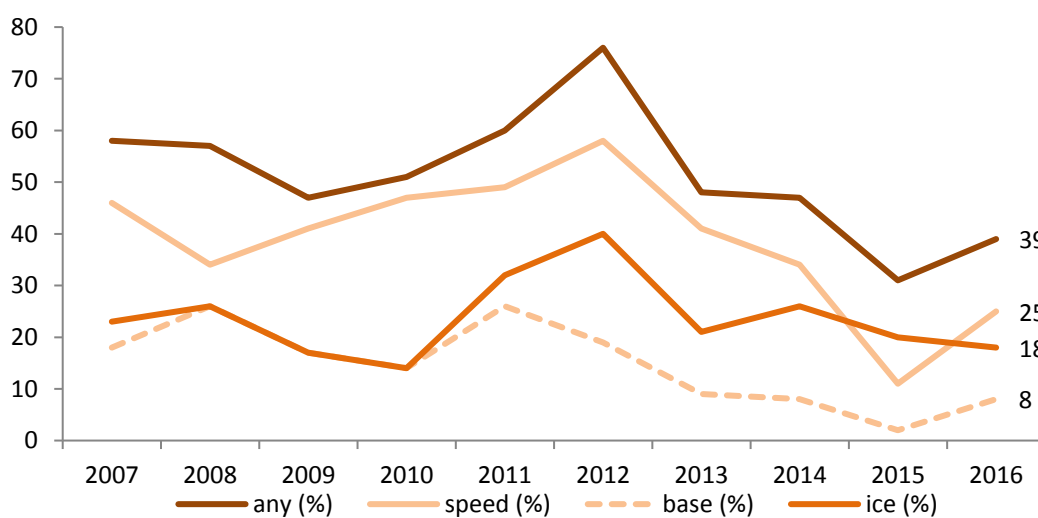
4.3.1 Patterns of methamphetamine use among regular psychostimulant users

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

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

Figure 4 presents trends of recent methamphetamine use among participants over the last decade. In 2016, 67% of participants reported lifetime use of any form of methamphetamine, with 39% reporting recent use. Lifetime use was higher than 2015 reports (55%, $p < 0.05$) but still lower than 2014. In 2016, speed returned to being the type of methamphetamine most used in the previous six months.

Figure 4: Patterns of recent methamphetamine use according to type, 2007–16

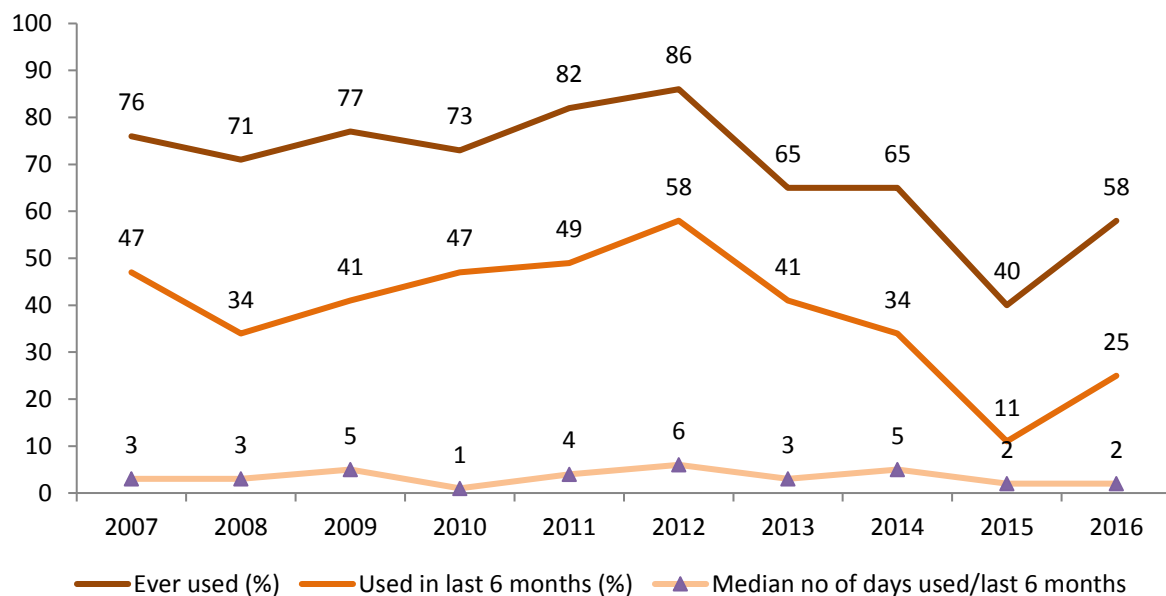


Source: QLD EDRS participant interviews

4.3.2 Speed use

Figure 5 shows that in 2016, the proportion of participants reporting lifetime and recent use of speed increased over the previous year. Despite this, the downward trend in recent use since 2012 continued. Frequency of speed use was estimated at two days (n = 23, range 1–12 days) over the previous six months.

Figure 5: Patterns of amphetamine powder (speed) use, 2007–16



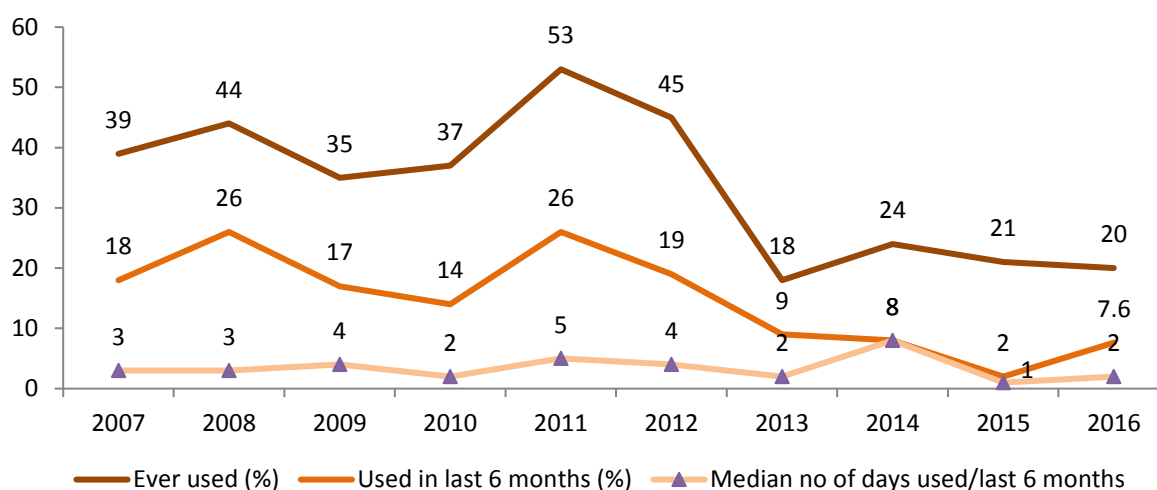
Source: QLD EDRS participant interviews

Among those who reported the amount used in a typical session in points (0.1 grams) and grams, the median number of points used was one (n = 16, range 0.1–15 points). One participant reported the amount in caps (one cap in a typical session), and two reported the amount in lines (one or two lines in a typical session). These figures were identical for the largest amount used in one session.

4.3.3 Base use

Lifetime use of base was similar to reports in 2015 (Figure 6). Recent use was low in 2016, reported by only seven participants. Use remained infrequent with the median days of use being two in the last six months (n = 7, range 1–12 days). Amounts used per session ranged from 0.1 points to 2 grams, with the majority reporting a single point per session.

Figure 6: Patterns of methamphetamine base use, 2007–16

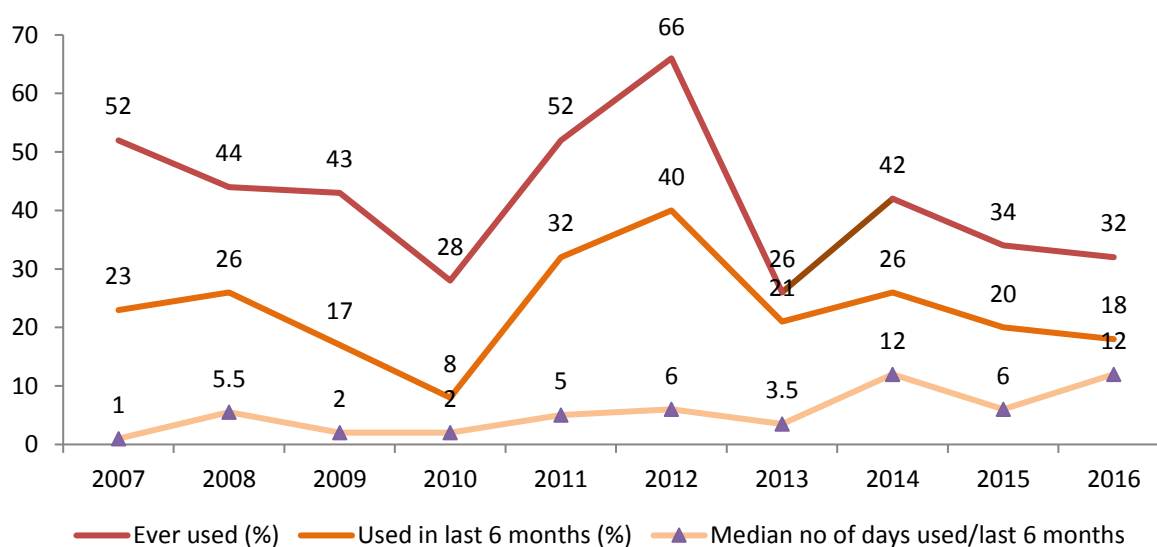


Source: QLD EDRS participant interviews

4.3.4 Ice use

The proportions of participants who reported lifetime and recent use of ice were unchanged in 2016, at 32% and 18% respectively (Figure 7). However, the frequency of ice use increased from a median of 6 days in 2015 to 12 days in 2016, representing more participants using fortnightly or more often.

Figure 7: Patterns of crystalline methamphetamine (ice) use, 2007–16



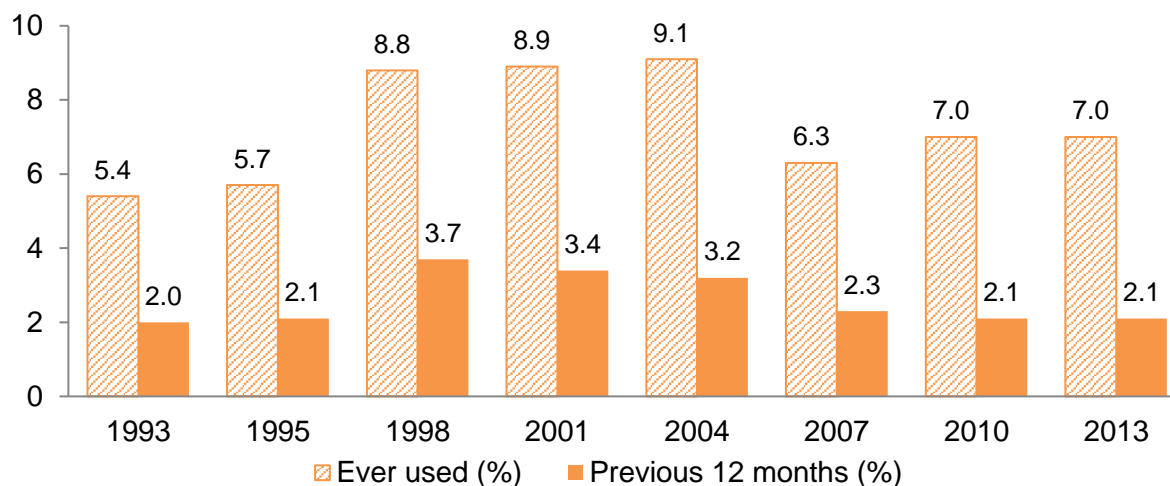
Source: QLD EDRS participant interviews

Among those who reported the amount of ice used in a typical session in points (0.1 g) and grams, the median number of points used was one (n = 17, range 0.05–20 points). In a heavy session, among those who responded in points and grams, the median number of points used was one (n = 17, range 0.1–80 points).

4.3.5 Prevalence of methamphetamine use in the general population

Lifetime methamphetamine use in the general population is estimated by the NDSHS 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, 1993–2013



Source: NDSHS 1993–2013 (AIHW, 2014)

4.3.6 Comments from key experts on methamphetamine use

Key experts noted the continued predominance of ice among methamphetamine users rather than speed and base. Small-scale localised supply was being replaced by imported materials at higher purity and lower cost. 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 about younger age of initiation, with young users trying ice first up, particularly via smoking, rather than progressing from alcohol and cannabis.

Smoking of methamphetamines was seen as common, as was mixing with other substances such as cannabis (i.e. 'snow cones'). 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, often with alcohol use during binges, and then benzodiazepines and cannabis use in the come-down period. Concern was expressed about workplace use, despite testing, due to the short timeframe of action and lower perceived chance of detection.

4.4 Cocaine use

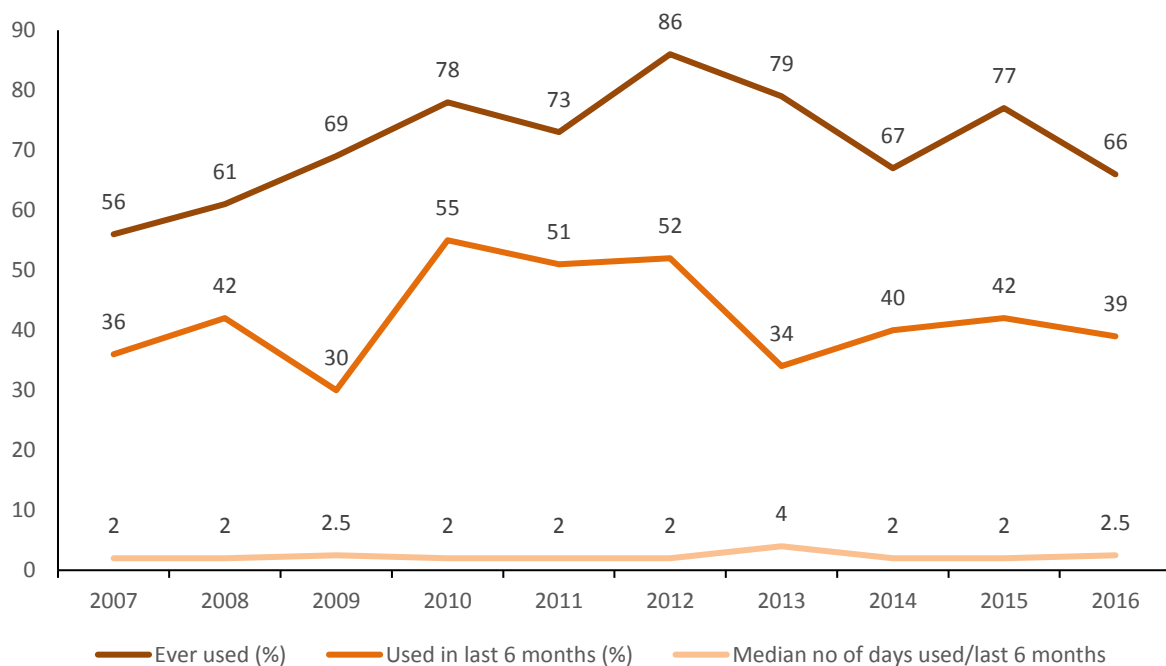
Key points

- 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 use of cocaine dropped slightly, with two-thirds reporting having ever used, and 39% reporting use 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, 2007–16



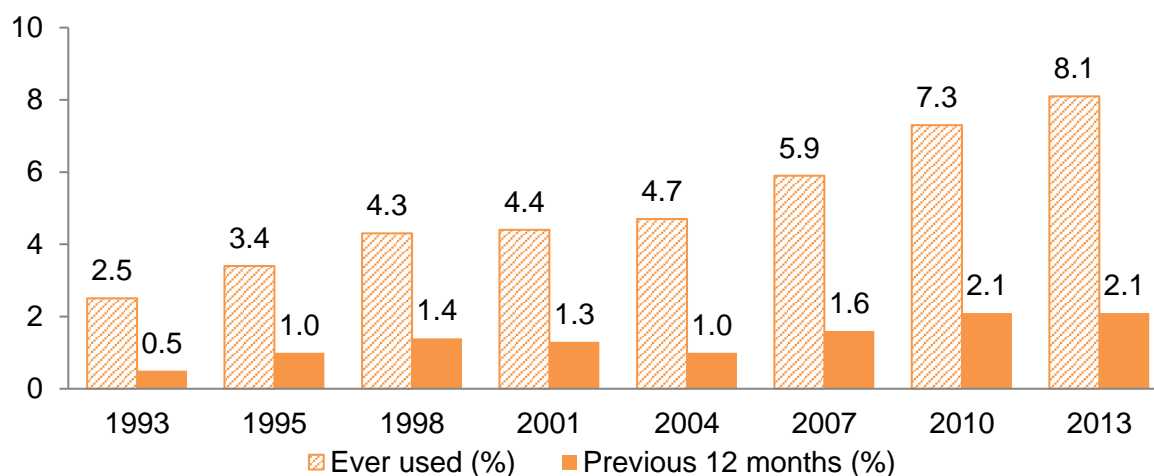
Source: QLD EDRS participant interviews

Among those who reported the median average amount used in a typical session in grams, the median amount was 0.5 grams ($n = 22$, range 0.05–1 gram), the same for a heavy session (range 0.01–3 grams).

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 although recent wastewater analyses reportedly indicated higher levels in regional areas like the Gold Coast (data not yet released). It was no longer regarded as a ‘movie star drug’ due to low purity levels, 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 common in night clubs.

4.5 Ketamine use

Key points

- One in five participants (22%) had recently used ketamine and frequency of use remained low.

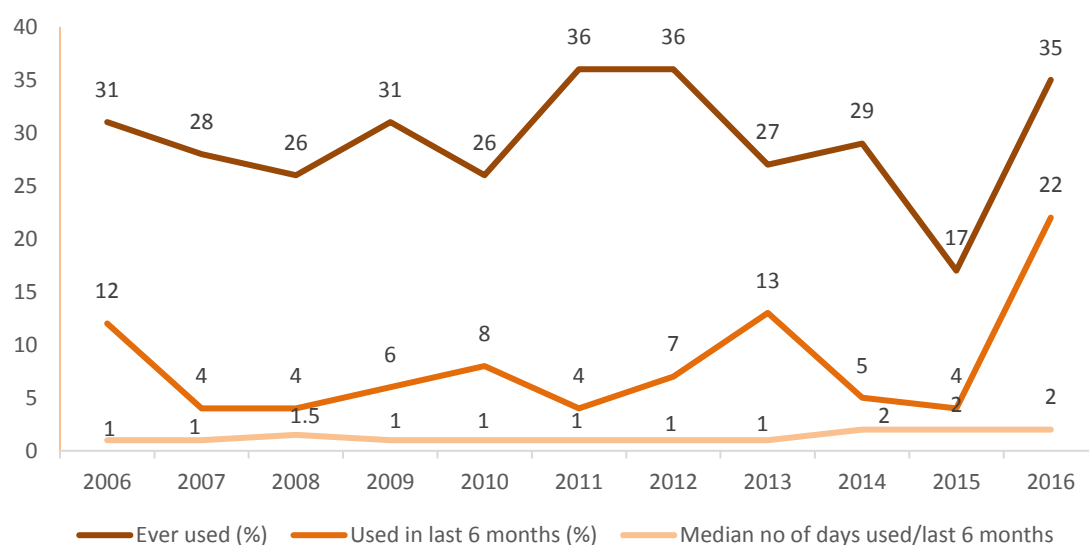
4.5.1 Patterns of ketamine use among regular psychostimulant users

One third (35%) of participants had used ketamine in their lifetime, and 22% reported recent use (Figure 11). This is a significant increase over 2015 (4%, $p < 0.05$). As in previous years, the frequency of use has remained very low. Median use was one bump in a typical session ($n = 9$, range 0.5–5 bumps), and two bumps in a heavy session ($n = 8$, range 1–5 bumps).

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.

Figure 11: Patterns of ketamine use, 2007–16



Source: QLD EDRS participant interviews

4.5.3 Comments from key experts about ketamine use

Key experts reported that use of ketamine appeared to be limited, although it was still available and use had been noted at events. There was some evidence that it may be an ingredient/contaminant in some illicit drug seizures.

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 2016, 15% of participants reported ever using GHB, with only 7% reporting recent use, and most using only on one occasion. This is similar to reports in 2015. The amount of GHB used in a typical session was 0.5–5 millilitres, and the same amount in 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 and its depressive effect tends to go undetected among alcohol use.

4.7 Hallucinogen use

Key Points

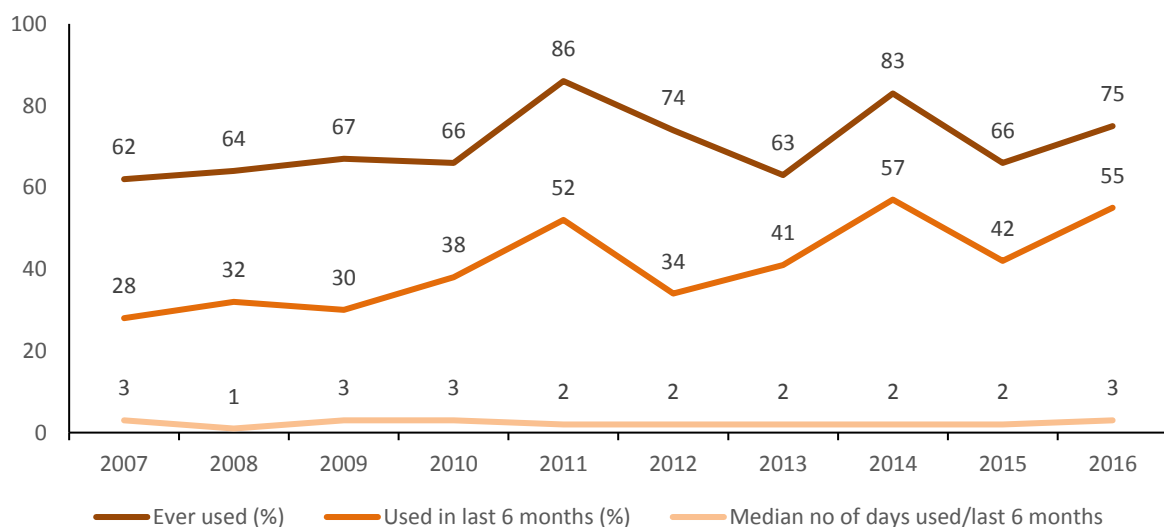
- Recent use of LSD increased significantly from 2015, with 55% having used in the last six months. Lifetime use of LSD (75%) did not significantly increase.
- Frequency of LSD use remained low, with median use being three times in the previous six months.
- One LSD tab was the median amount used in 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 lifetime use of LSD was reported by 75% of participants in 2016. Recent use increased to 55% in 2016 from 42% in 2015 ($p < 0.05$). Frequency of use remained occasional at a median of three days in the previous six months.

Figure 12: Patterns of LSD use, 2007-2016



Source: QLD EDRS participant interviews

Table 7 shows the quantity of LSD tabs reported to have been used. In 2016, 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, 200616

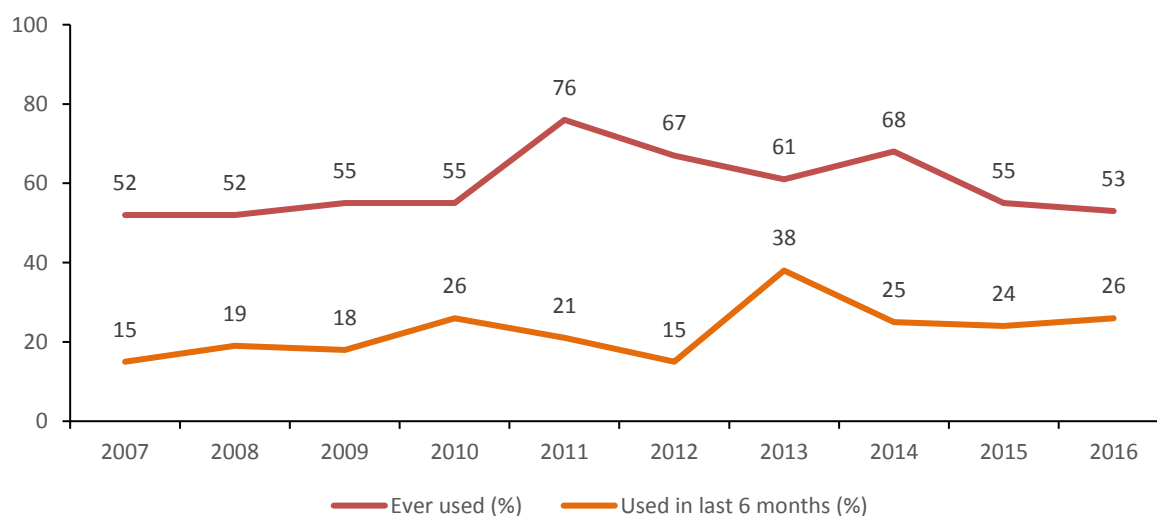
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Typical (range)	1.0 (.5–5)	1.0 (.5–3.5)	1.0 (.5–4)	1.0 (1–5)	1.0 (.5–3)	2.0 (1–4)	1.0 (.5–6)	1.0 (.3–5)	1.0 (.25–3)	1.0 (0.5–2)
Heavy (range)	1.0 (.5–6)	1.0 (.5–4)	1.0 (1–4)	2.0 (1–11)	1.0 (.5–5)	2.0 (1–4)	1.3 (.5–12)	2.0 (.5–8)	1.0 (1–3)	2.0 (1–5)

Source: QLD EDRS participant interviews

4.7.2 Mushroom use

The lifetime and recent use of hallucinogenic mushrooms remained stable, with over half reporting lifetime use and one-quarter reporting use in the previous six months (Figure 13). Frequency of use was estimated at two days in the previous six months (n = 24, range 1–10 days).

Figure 13: Patterns of mushroom use, 2007–16



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 had been higher in the last year—that it was once again popular at music festivals, with considerable ‘home-made’ product being

available. Comments suggested that use was no longer restricted to the previous 'small group of regular users' although use remained occasional.

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. Recent adverse events were attributed to the presence of NBOMe contaminants, rather than LSD.

4.8 Cannabis use

Key points

- Use of cannabis has remained high and stable with 86% reporting use in the previous six months.
- Frequency of use increased to three times per week but amounts used per occasion are similar to reports from 2015.

4.8.1 Patterns of cannabis use among regular psychostimulant users

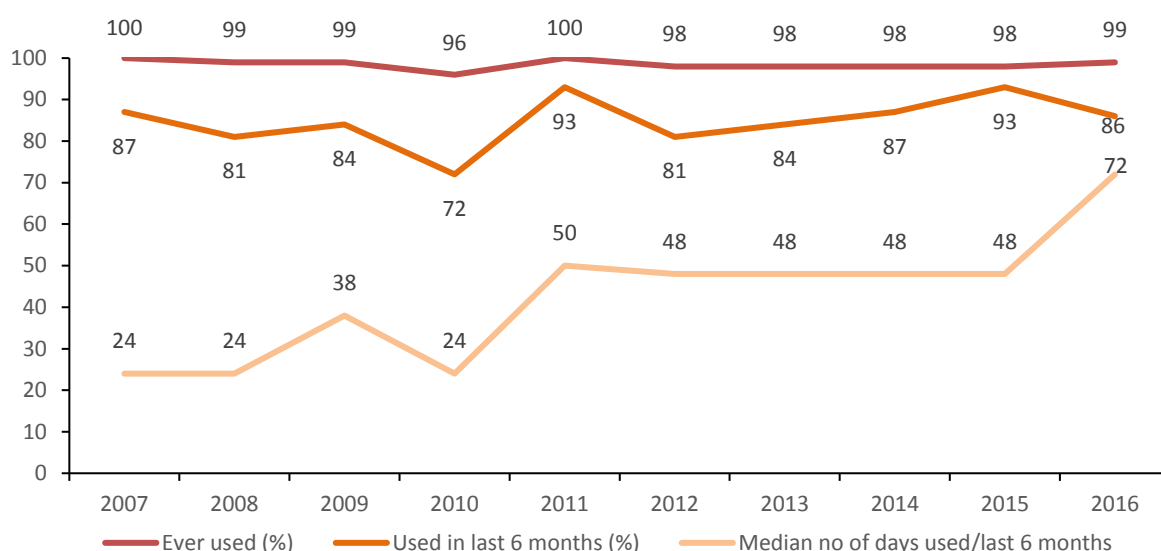
In 2016, use of cannabis remained high and stable, with almost all participants (99%) reporting lifetime use and 86% reporting use in the previous six months (Figure 14). In 2016, the median number of days of cannabis use in the previous six months rose to 72 ($p < 0.05$), corresponding to three times a week ($n = 79$, range 1–180). The mean age of first use of cannabis was stable at 16 years ($n = 91$, range 11–21).

Among those who reported recent cannabis use ($n = 79$), smoking remained the main route of administration (93%), followed by inhaling (36%) and eating (35%). The levels of inhaling (vaping) are consistent with those seen in 2015.

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 but reports are similar to 2015:

- Joints: one ($n = 26$, range 0.25–5)
- Cones: two ($n = 39$, range 1–20)
- Grams: half ($n = 14$, range 0.1–3)

Figure 14: Patterns of cannabis use, 2007–16



Source: QLD EDRS participant interviews

Among participants who reported recent use of cannabis (n = 79), 30% 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, 2007–16

	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) %	2016 (n=79) %
Daily	21	22	24	14	20	26	23	18	25	30
> Weekly	26	23	28	29	33	32	41	40	37	42
Weekly	7	12	8	14	6	8	10	7	2	11 ↑
< Weekly	46	44	39	44	41	34	23	34	28	16 ↓

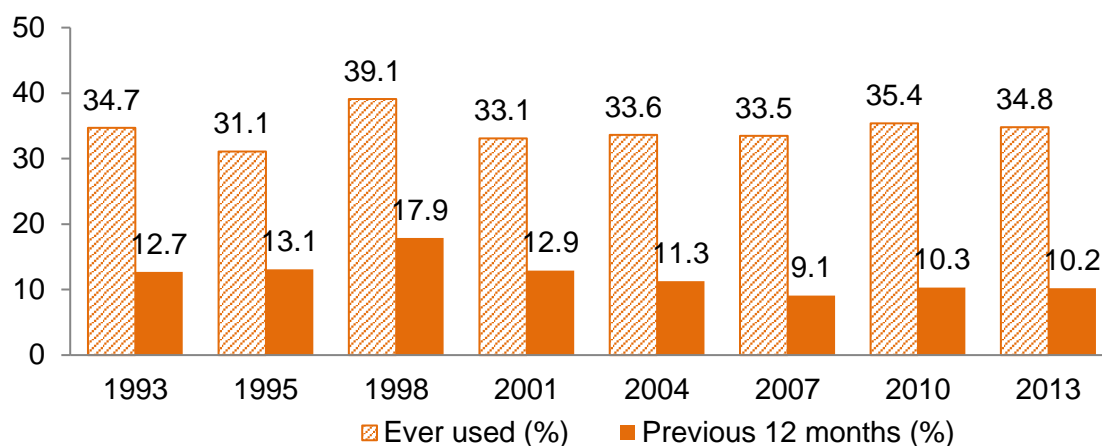
Note: Based on participants who used cannabis in the previous six months. Daily = 180 days; more than weekly = 25–179 days; weekly = 24 days; and less than weekly = 1–23 days.

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 remained very common among people who used psychostimulants. Treatment providers noted high levels of use among clients, particularly younger clients—although most did not report it as a drug of concern. Several also commented on use concurrent with ice, which created problems, potentially due to the ‘doubling up of hallucinogenic effects’. The use of synthetic cannabis was regarded as very low, with preference being given to hydro and bush due to ease of access and preferred effects.

4.9 Other drugs used

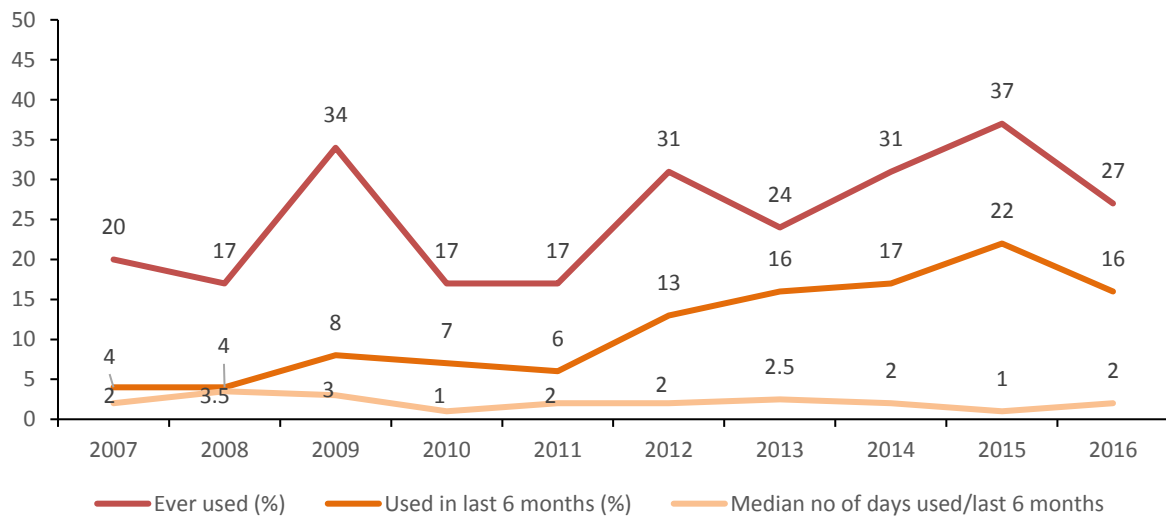
Key Points

- The use of alcohol and tobacco remained high, frequent and stable.
- Use of MDA was low and occasional.
- There was an increase in recent use of licit benzodiazepines.
- Heroin, buprenorphine and methadone use remained low.
- There was an increase in recent illicit use of other opioids, with 21% reporting doing so in the previous six months
- Recent illicit use of pharmaceutical stimulants increased.

4.9.1 MDA use

In 2016, MDA use was low and occasional, similar to recent years (Figure 16). Lifetime use was reported by 27%, with 16% reporting use in the previous six months. The average amount used in a session was one cap ($n = 11$, range 0.5–3 caps), with the most used in a single session in the previous six months estimated at two caps ($n = 11$, range 1–14 caps).

Figure 16: Patterns of MDA use, 2007–16

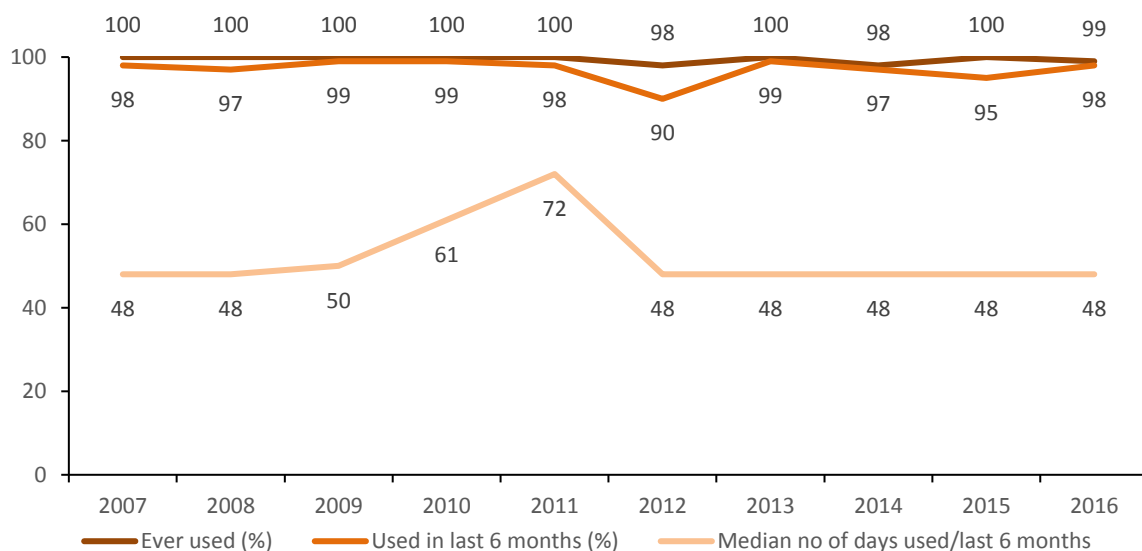


Source: QLD EDRS participant interviews

4.9.2 Alcohol

Similar to previous years, lifetime and recent use of alcohol remained high and frequent in 2016 (Figure 17). All participants but one had used alcohol in their lifetime, and only two had not used it in the previous six months. Over the past decade, the mean age of first use has been stable at 15 years.

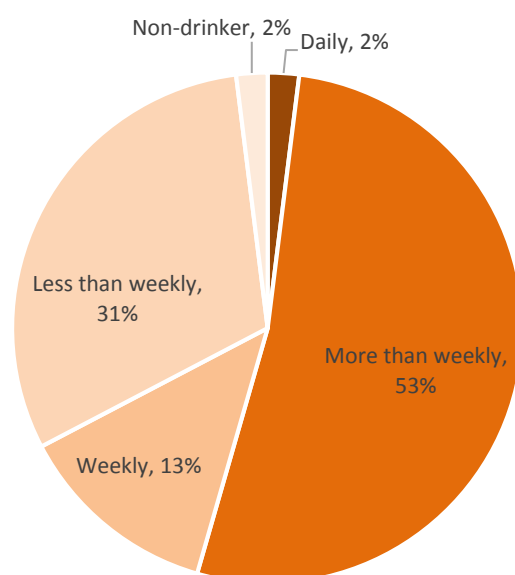
Figure 17: Patterns of alcohol use, 2007–16



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 = 90, range 2–180 days).

Figure 18: Frequency of alcohol use, 2016



Note: Based on participants who used alcohol in the previous six months (n = 98). Daily = 180 days; more than weekly = 25–179 days; weekly = 24 days; 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 = 62), 21% reported they had consumed between one and five standard drinks, while 66% 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 (%), 1993–2013

	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

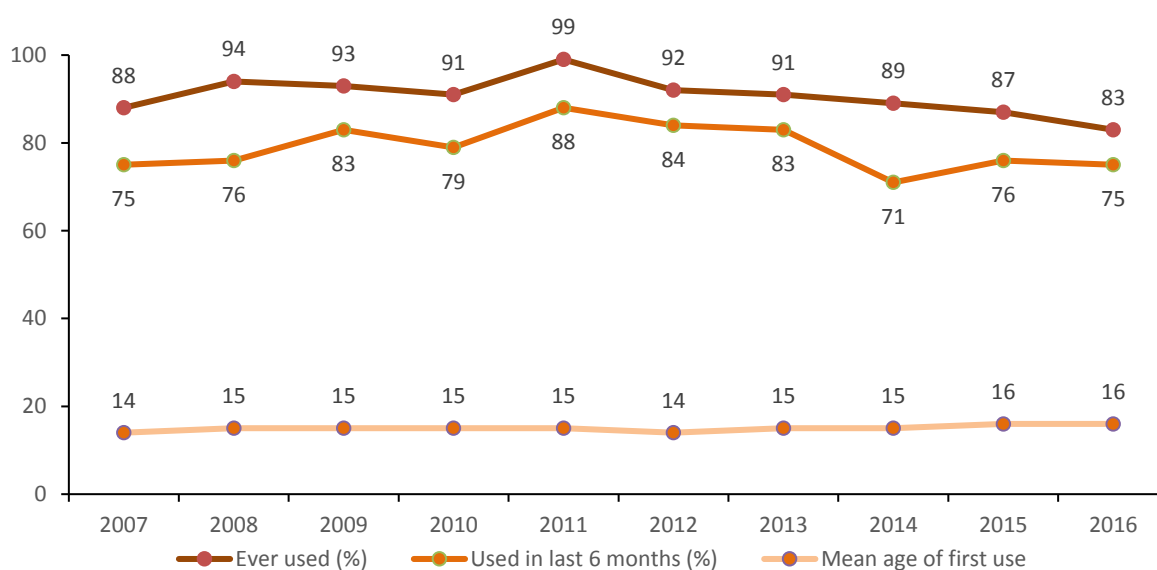
As in past years, many key experts regarded alcohol as the most problematic drug. Bingeing on alcohol was reported as common, as was using alcohol in combination with illicit drugs, primarily psychostimulants. Treatment services observed that alcohol misuse was very high among clients, but not generally 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 or naïve drinkers were more likely to need immediate assistance.

4.9.3 Tobacco

In 2016, tobacco use remained high among participants (Figure 19), similar to 2015.

Among those who reported using tobacco in the previous six months ($n = 69$), 45% reported daily use. The median number of days of use was 96 days or four days/week; in 2015 this was 150 days. This indicates a significant drop in the frequency of smoking among those who were not daily smokers. The mean age of initiation for tobacco was 16 years ($n = 76$, range 10–23 years). This was similar to previous years.

Figure 19: Patterns of tobacco use, 2007–16



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 2013 and 2010

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

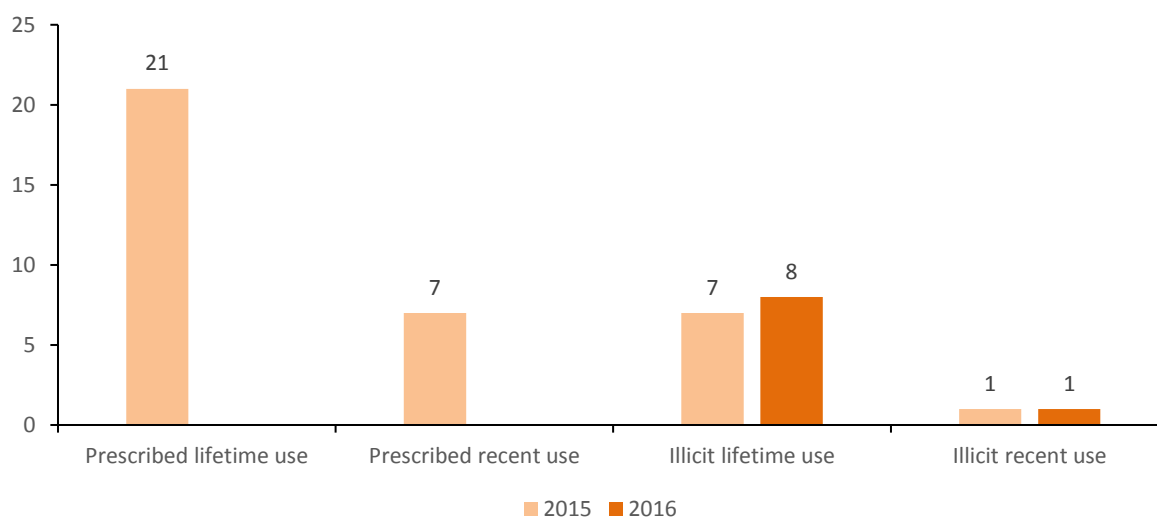
^b Never smoked more than 100 cigarettes in lifetime

Source: NDSHS 1993–2013 (AIHW, 2014)

4.9.4 Antidepressants

The prevalence of lifetime and recent illicit use of licit anti-depressants was unchanged from 2015 to 2016 (Figure 20). Prescribed use was not queried in 2016. Only one participant reported illicit use of anti-depressants in the previous six months.

Figure 20: Lifetime and recent use of anti-depressants, 2015 and 2016



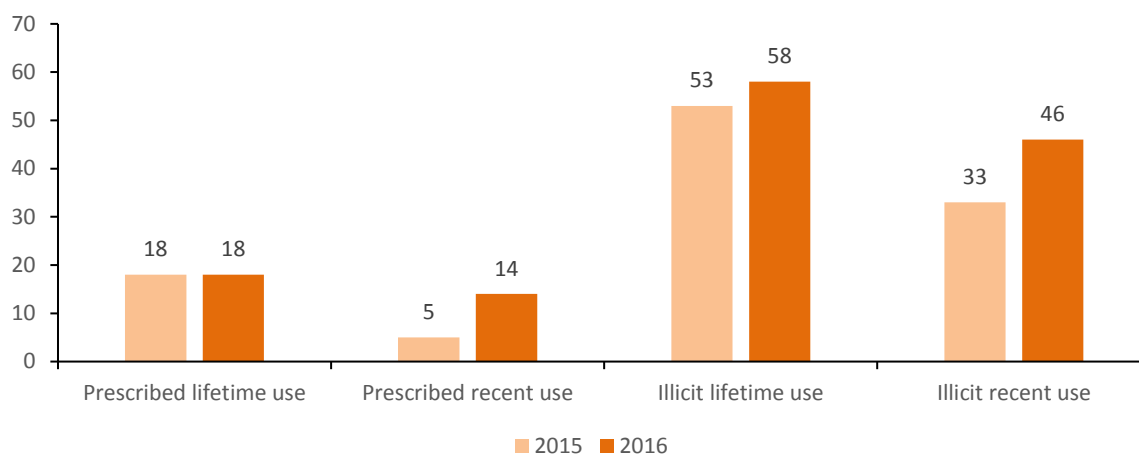
Source: QLD EDRS participant interviews

4.9.5 Benzodiazepines

Lifetime use of prescribed benzodiazepines remained stable in 2016 but recent use increased significantly (Figure 21; $p < 0.05$). The median number of days using prescribed benzodiazepines was six ($n = 13$, range 1–69 days), corresponding to monthly use. Five participants reported being prescribed Valium (diazepam), two Temazepam, one Serepax, and one Xanax (alprazolam).

Lifetime illicit use of benzodiazepines was stable, but recent illicit use increased significantly in 2016 ($p < 0.05$), with nearly half of participants (45%) reporting non-prescribed use in the last six months. The median number of days using illicit benzodiazepines was four ($n = 42$, range 1–25 days), corresponding to less than monthly use. Among those who reported illicit use of benzodiazepines in the previous six months ($n = 42$), the brands most commonly used without a prescription were Valium (diazepam; 50%), Xanax (alprazolam; 33%) and Serepax (3%), with 26% of respondents not reporting the brand most commonly used. There were no reports of benzodiazepine use in conjunction with ecstasy on the last occasion of use.

Figure 21: Lifetime and recent use of benzodiazepines, 2015 and 2016

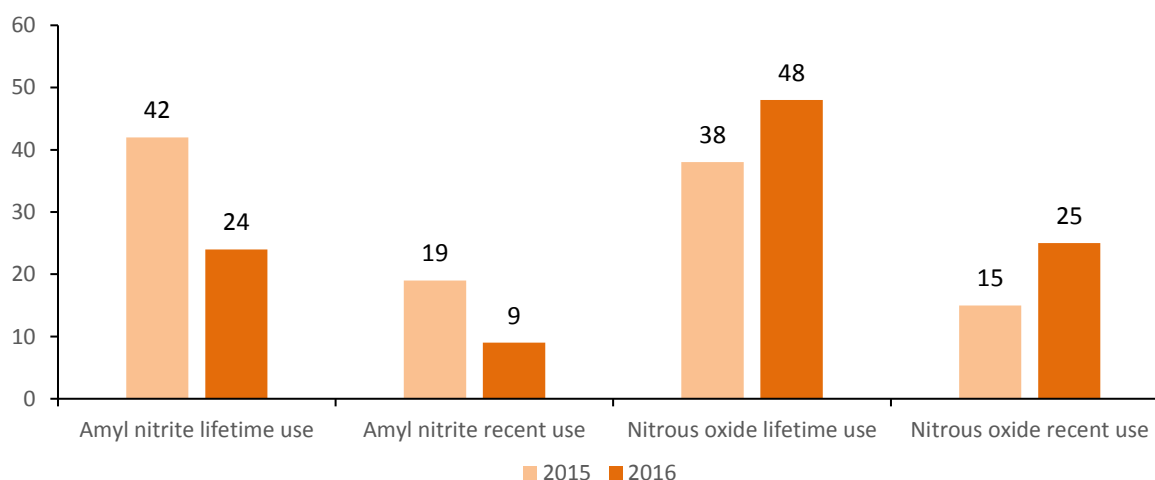


Source: QLD EDRS participant interviews

4.9.6 Inhalant use

Lifetime and recent use of amyl nitrite decreased in 2016 ($p < 0.05$), while lifetime and recent use of nitrous oxide were similar to levels reported in 2015 (Figure 22).

Figure 22: Lifetime and recent use of inhalants, 2015 and 2016



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 2016, 8% of participants reported lifetime use of heroin (compared with 9% in 2015), with one participant reporting use in the previous six months (similar to 2015). The mean age of first use of heroin was 18.5 years ($n = 8$, range 17–28). The participant reporting recent use had used five times in the previous six months, corresponding to occasional use (less than monthly), and having swallowed the dose.

Methadone

Lifetime use of methadone was reported among 3% of participants, compared with 4% in 2015. The mean age of first use of methadone was reported to be 18 years ($n = 3$, range 15–19). One participant reported on recent use—42 days (corresponding to twice weekly) — and both injecting and swallowing.

Buprenorphine

In 2016, 3% of participants reported having ever used buprenorphine (compared with 1% in 2015), 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 25%, with 5% reporting recent use. The median number of days used in the previous six months was ten, corresponding to just under bimonthly use. The brands used were Endone ($n = 3$) and generic oxycodone ($n = 1$). No participants reported injecting their own prescribed opioids.

Other illicit opioids

In 2016, 39% of participants reported using other opioids not prescribed to them (illicit use), similar to the 42% reported in 2014 after a drop in 2015 to 28%. Recent illicit use of opioids was reported by 21%, up from 11% in 2015 ($p < 0.05$). The median number of days used in the previous six months was two ($n = 20$, range 1–42 days), corresponding to less than monthly use. No participants reported injecting opioids in the previous six months. The main brands used were Endone ($n = 16$), generic oxycodone ($n = 3$), and Panadeine Forte ($n = 1$).

4.9.8 Pharmaceutical stimulants

The lifetime use of prescribed (licit) pharmaceutical stimulants (e.g. dexamphetamine) was reported by 9% of participants, unchanged from 2015. Recent use was reported by four participants (also similar to 2015).

In 2016, the reported lifetime illicit use of pharmaceutical stimulants was 72%, similar to 62% in 2015. Recent illicit use rose to 50% in 2016 from 31% in 2015 ($p < 0.05$). Frequency of use in the previous six months was stable at five days, corresponding to near-monthly use ($n = 46$, range 1–150 days).

Lifetime use of over-the-counter stimulants (e.g. cold and flu drugs) for non-medical/recreational use was similar to previous years (16% in 2016 and 19% in 2015). Five participants reported using it in the previous six months.

4.9.9 Over-the-counter codeine

In 2016, 24% of participants reported ever using over-the-counter codeine for non-medical use, with 16% reporting recent use. This is similar to previous years (28% ever used and 15% recently used in 2015).

4.10 New psychoactive substance (NPS) use

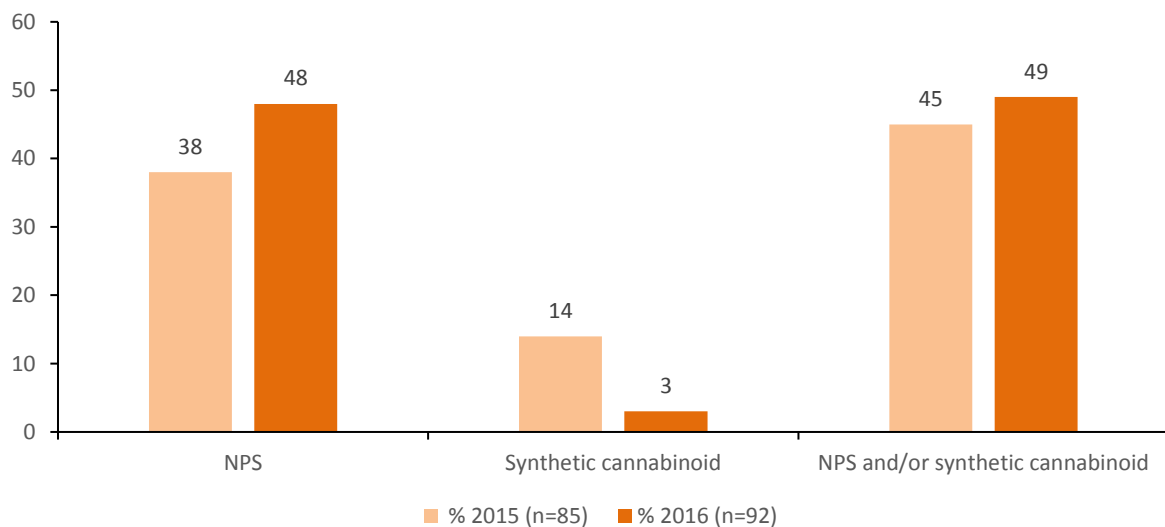
Key points

- Nearly half of participants (49%) reported using some form of NPS and/or synthetic cannabis in the previous six months.
- Lifetime and recent use of most NPS remained low, apart from 2C-B and DMT.
- Nearly one-third (29%) of participants reported lifetime use of cannabinoids, but recent use was very low.

4.10.1 Patterns of use among regular psychostimulant users

In 2016, 45 participants reported using NPS and/or synthetic cannabinoids in the previous six months (Figure 23). There appears to have been an increase since 2015 in recent use of any NPS (47% in 2016 from 32% in 2015), while recent use of synthetic cannabinoids decreased further ($p < 0.05$ for both).

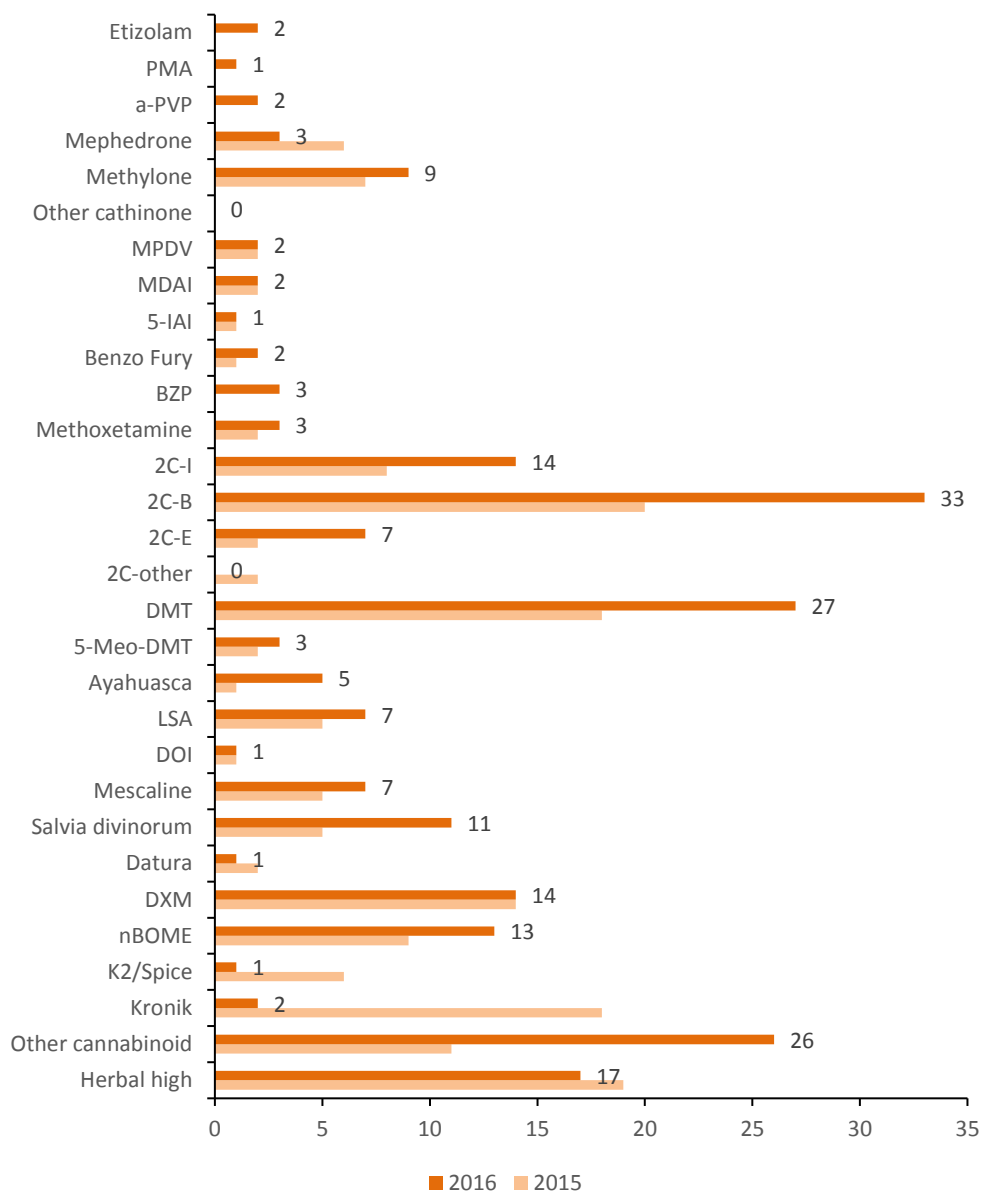
Figure 23: Recent use of any NPS and synthetic cannabinoids, 2015 and 2016



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 2C-B (33% in 2016 from 20% in 2015) and cannabinoids other than Kronic (26% in 2016 from 11% in 2015; $p < 0.05$ for both) increased in 2016.

Figure 24: Lifetime use of NPS and synthetic cannabinoids, 2015 and 2016



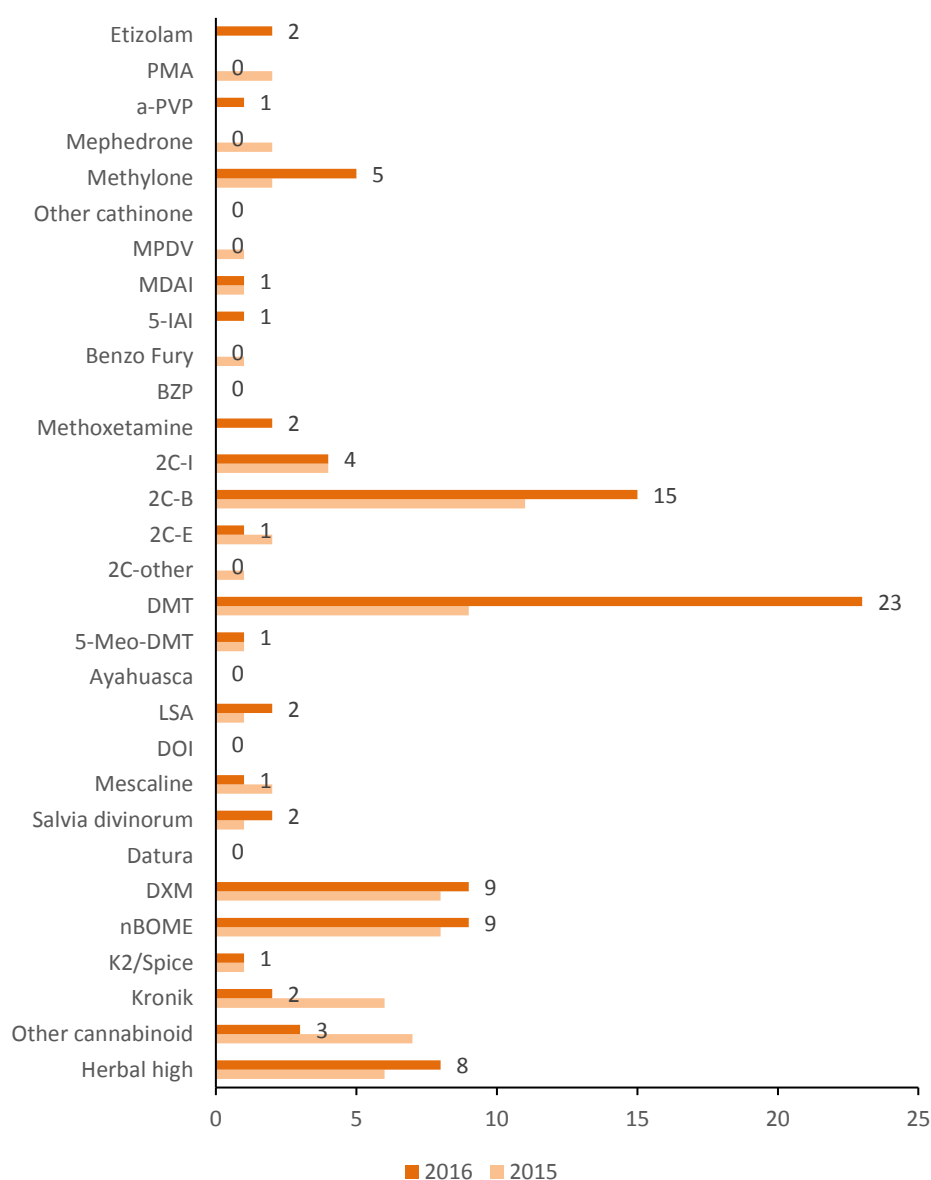
Note: Multiple responses permitted

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). Recent use of DMT increased significantly in 2016 (23%, up from 9% in 2015; $p < 0.05$). Other than DMT and 2C-B (15% in 2016), recent use of most NPS and synthetic cannabinoids remained low.

Figure 25: Recent use of NPS and synthetic cannabinoids, 2015 and 2016



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 adverse effects

Forty-eight per cent of the Queensland RPU sample (n = 44) reported that they had used an NPS in the past year, most commonly DMT (32%) and 2C-x (30%). Among past year NPS consumers, 41% reported that they had experienced an unexpected adverse effect on their last occasion of use. The most common adverse effects reported were paranoia (29%), nausea/vomiting (29%) and restlessness/anxiety (25%) (Table 11). Three participants reported that they had sought emergency medical help for an NPS in the past year.

Table 11: Unexpected adverse effects among past-year NPS consumers, 2016

	National 2015	National 2016	Queensland 2016
Any unexpected adverse effect (%)	56	41	41
Type of adverse effect (%)	n=180	n=129	n=12
Paranoid	31	29	17
Nausea/vomiting	19	29	42
Restless/anxious	28	25	25
Heart racing or erratic	24	17	17
Visual hallucinations	18	16	25
Panic	25	16	17
Shaky hands/fingers	17	13	0
Auditory hallucinations	11	12	8
Overheating	18	11	17
Chest pain	6	9	8
Shortness of breath	12	8	0
Fingers/toes cold or numb	7	8	0
Angry or aggressive	3	5	17
Skin discoloured (blue/red)	6	5	0
Skin rash	5	5	0
Other	34	33	33

Source: 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 and limited. Some NPS (e.g. DMT) seem to be used by preference when available in settings such as musical festivals, due to shorter duration of effect than LSD. Other NPS appeared to hold limited appeal: 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

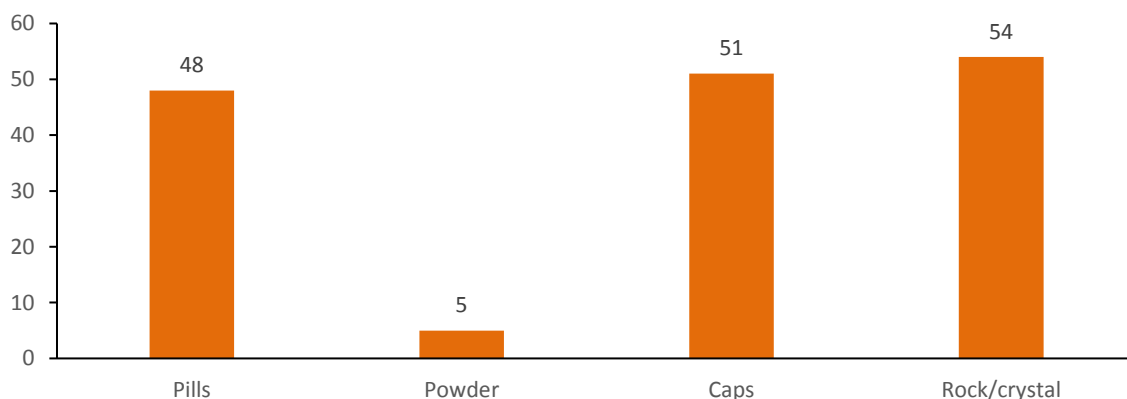
- Crystal MDMA overtook pills as the most common form of ecstasy purchased.
- Price per ecstasy pill remained stable at \$25.
- More participants reported purity of pills, powder and caps to be medium/high, with fewer reports that purity fluctuated.
- MDMA crystal was considered to be of much higher purity than pills, powder and caps, with few reports of fluctuation in purity.
- Ecstasy was most likely to have been bought from someone known to the buyer, at a private 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 (purchase reported by 85% of participants)
- MDMA crystal (purchase reported by 54% of participants).

In 2016, 98% of participants reported purchasing some form of ecstasy/MDMA in the previous six months. For the first time, rock/crystal forms overtook ecstasy pills as the most popular form of ecstasy purchased (Figure 26).

Figure 26: Form of ecstasy obtained over the last six months (n = 87), 2016



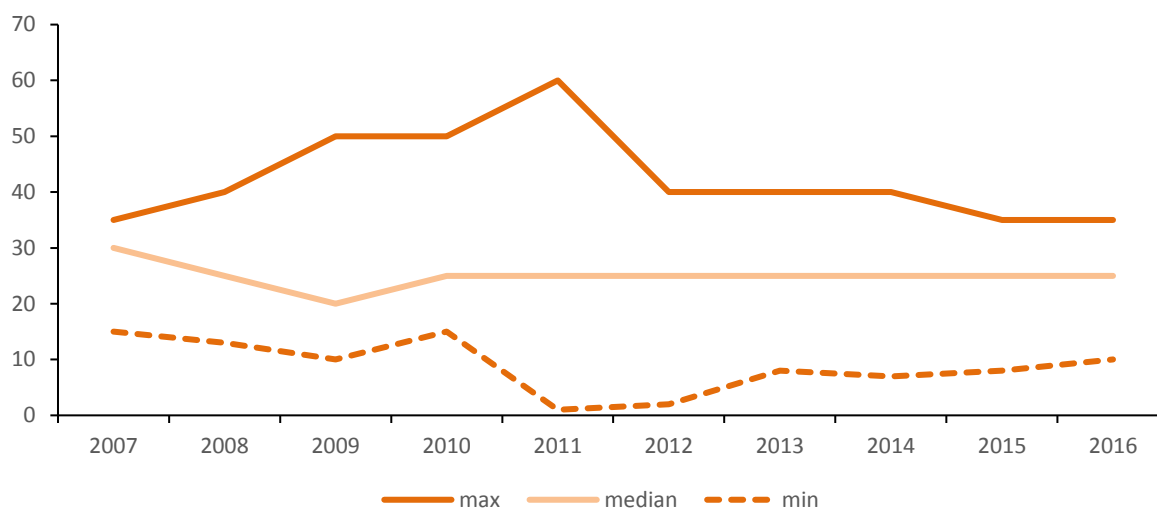
Source: QLD EDRS participant interviews

5.1.1 Price

Ecstasy pills, powder and caps

The median price of ecstasy pills remained unchanged at \$25 per pill (n = 44, range \$10–35; see Figure 27).

Figure 27: Price of ecstasy per tablet, 2007–16



Source: QLD EDRS participant interviews

Prices were slightly lower than those reported by the Australian Crime Commission (ACC; 2016) for 2014–15. One tablet/capsule was reported by the ACC to be between \$20–50.

Table 12 shows that, similar to 2015, most participants who commented (77%) reported that the price of ecstasy had remained stable over the previous six months.

Table 12: Changes in recent price of ecstasy pills, powder and caps, 2015 and 2016

Price Change	2015 (n=77) %	2016 (n=71) %
Increasing	8	3
Stable	66	65
Decreasing	5	6
Fluctuating	21	27

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 2016, 54% of participants reported purchasing MDMA crystal during the previous six months.

The median price per gram of MDMA crystal was \$210 (n = 24; range \$20–300), down from \$300 in 2015 (p < 0.05), while the price per point was \$30 (n = 19; range 14–75). Most

participants who commented perceived the price of crystal to have remained stable in the previous six months (67%); a higher proportion than 2105 reported price fluctuation (Table 13).

Table 13: Perceptions in recent change of price of MDMA crystal, 2015 and 2016

	2015 (n=28) %	2016 (n=45) %
Increasing	11	0
Stable	77	67
Decreasing	7	7
Fluctuating	4	27

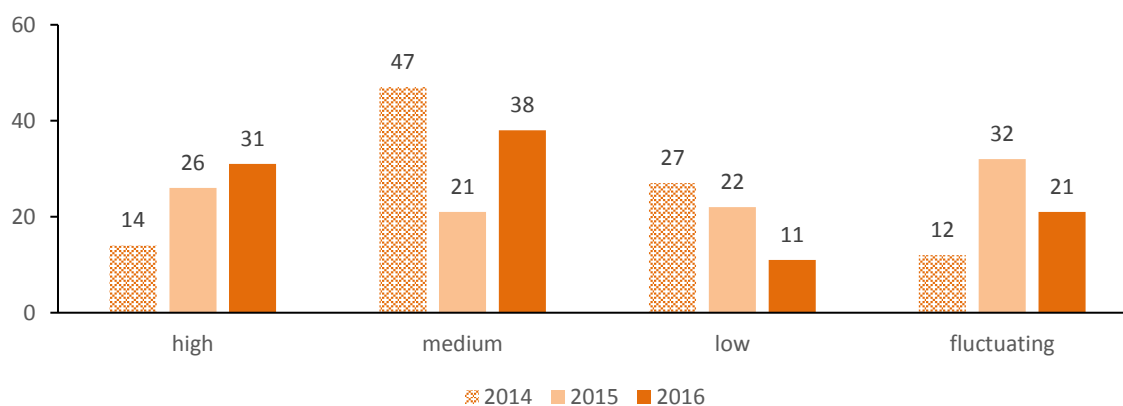
Source: QLD EDRS participant interviews

5.1.2 Purity

Ecstasy pills, powder and caps

Perceived purity of ecstasy pills, powder and caps was variable in this sample in 2016 (Figure 28). A greater proportion of respondents believed that the purity of ecstasy had been high/medium in the previous six months (up to 55% in 2016 from 40% in 2015; $p < 0.05$); this continues an upward trend of perceptions that purity was high since the lowest point (2%) in 2010. Fewer participants believed purity to be low or fluctuating than in 2015 ($p < 0.05$ for both).

Figure 28: Perception of purity for ecstasy pills, powder and caps, 2014–16



Source: QLD EDRS participant interviews

There was little overall consensus on the perceived purity change for ecstasy pills, powder and caps (Table 14). Reports of changes in purity were not significantly different to 2015.

Table 14: Perceived changes in recent purity of ecstasy pills, powder and caps, 2007–16

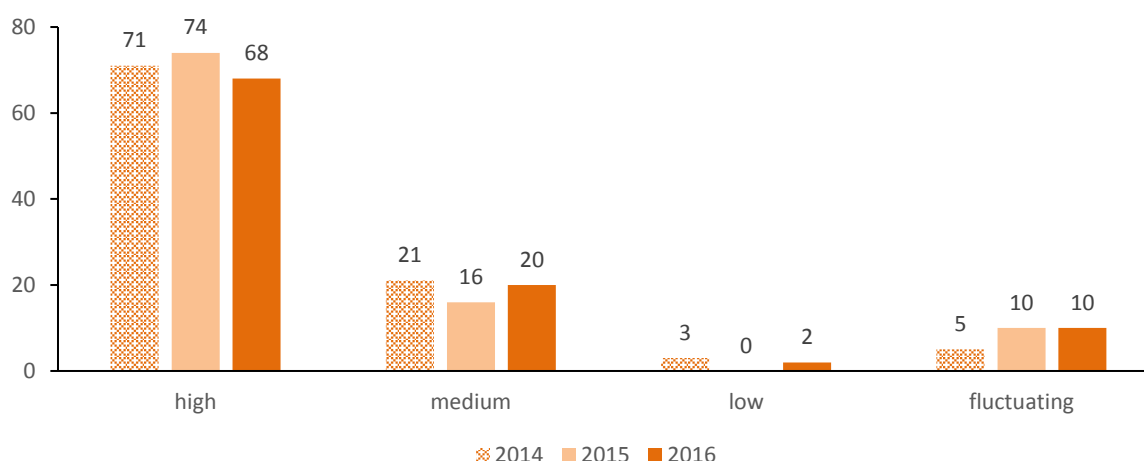
	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %	2014 %	2015 %	2016 %
Decreasing	16	22	42	60	43	29	29	26	11	4
Stable	33	30	27	15	20	25	24	35	35	39
Increasing	4	6	6	3	9	15	13	11	14	7
Fluctuating	41	35	25	22	25	31	34	28	40	49

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 68% of participants who commented on the purity of MDMA crystal (n=50) reported it to be high (compared with 31% for ecstasy pills, powder, and caps). This was consistent with previous years.

Figure 29: Perceptions of recent purity of MDMA crystal, 2014–16



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 = 47), 60% reported it had remained stable and 36% reported fluctuations in purity.

5.1.3 Availability

Ecstasy pills, powder and caps

Of those who commented on the previous six-month availability of ecstasy pills, powder and caps, 96% reported them to be easy or very easy to obtain (Table 15). When asked whether

they believed ease of access had changed in the previous six months, an increased majority (68%; $p < 0.05$) reported it to have remained stable, with 15% reporting it to have become easier.

Table 15: Ease of access and reported change in availability of ecstasy pills, powder and caps in the previous six months, 2014–16

	2014 %	2015 %	2016 %
Ease of access to ecstasy	(n=85)	(n=78)	(n=78)
Very easy	29	49 ↑	54
Easy	52	42 ↓	42
Difficult	15	9	4
Very difficult	4	0	0
Change in availability	(n=82)	(n=76)	(n=75)
Stable	55	53	68↑
Easier	7	24 ↑	15
More difficult	22	7 ↓	5
Fluctuating	26	17 ↓	12

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 ($n = 50$), the current ease of access and availability of MDMA crystal was reported to be easy (44%) or very easy (38%); this was a significant increase from 2015 (20%; $p < 0.05$). Only 18% reported it to be difficult to obtain. When asked whether availability of MDMA crystal had changed ($n = 50$), most (74%) reported it had remained stable, while 8% reported it was becoming more difficult to obtain, 8% reported it was easier, and 10% reported that it fluctuated.

5.1.4 Purchasing patterns and locations of use

Ecstasy pills, powder and caps

The most common source location was a private home, primarily one's own home (Table 16). There was a decrease in purchases in agreed public locations ($p < 0.05$). Friends remained the most common source from which ecstasy pills, powder and caps, were purchased the last time. For the first time, a small group (5%) reported dark-web purchases of MDMA.

Table 16: Source person and location of most recent purchase of ecstasy pills, powder and caps, 2014–16

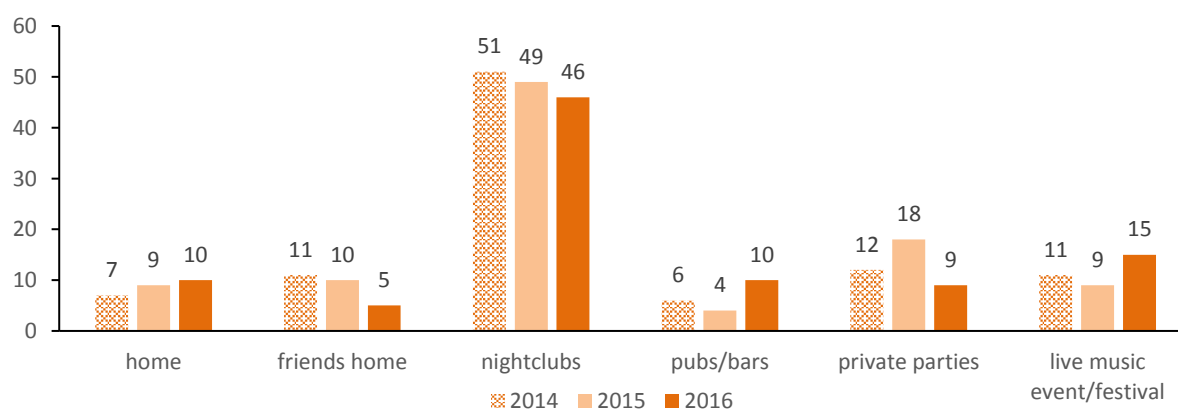
	2014 (n=85) %	2015 (n=78) %	2016 (n=78) %
Venue scored from			
Friend's home	37	24 ↓	22
Own home	20	21	27
Dealer's home	12	12	17
Nightclub	12	8	12
Agreed public location	8	21 ↑	12↓
Private party	4	5	1
Pubs/bar	2	3	1
Acquaintance's home	2	3	0
Rave/doof/dance party	1	-	0
Street	1	3	1
Live music event	-	1	3
Source person			
Friends	61	54	53
Known dealers	17	21	19
Acquaintances	9	21 ↑	15
Unknown dealers	9	5	4
Work colleagues	1	0	3
Online dark website	-	-	5

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 these forms (Figure 30).

Figure 30: Venue of most recent use of ecstasy pills, powder or caps, 2014–16



Source: QLD EDRS participant interviews

MDMA crystal

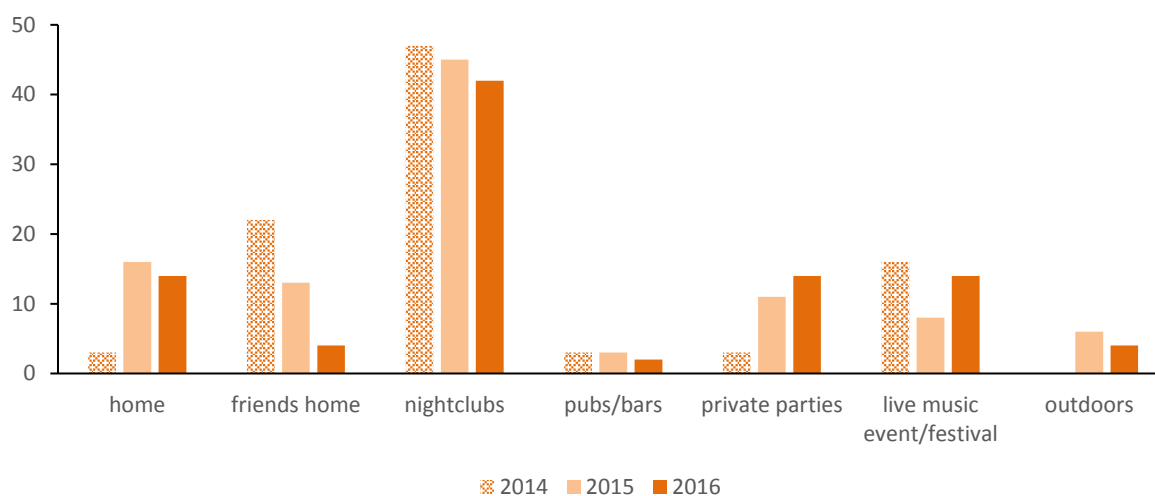
Among those who reported purchasing MDMA crystal in the previous six months (n = 50), participants reported they made their most recent purchase from a range of people. Table 17 shows that purchase at a private home remained most common, there was an increase in sourcing at a dealer's home and a decrease in buying from friends (p < 0.05 for both).

Table 17: Source person and location of most recent MDMA crystal purchase, 2014–16

	2014 (n=85) %	2015 (n=32) %	2016 (n=50) %
Venue scored from			
Friend's home	40	44	26↓
Own home	16	19	20
Dealer's home	16	13	26↑
Nightclub	3	3	0
Agreed public location	5	3	10
Private party			2
Pubs/bar	5	6	0
Acquaintance's home	3	3	0
Rave/doof/dance party	5		2
Street			1
Online	8	9	8
Source person			
Friends	46	53	36↓
Known dealers	30	19	26
Acquaintances	3	19	20
Unknown dealers	8	6	2
Work colleagues	-	3	0
Online dark website			12

Source: QLD EDRS participant interviews

Figure 31: Location of most recent use of MDMA crystal, 2014–16



Source: QLD EDRS participant interviews

Among those who commented in 2016 ($n = 50$), the location where most time was spent under the influence of MDMA crystal on the last occasion was predominantly a nightclub (as per previous years; Figure 31).

5.1.5 Comments from key experts about the ecstasy market

Ecstasy pills were reported by key experts as being very readily available, with an increase in local manufacture due to increased availability of precursors. Quality was reported as variable, but higher overall than in past years. Forensic experts reported further increases in high purity materials submitted for analysis, particularly capsules and MDMA crystal. The majority of pills typically contained 10–30% MDMA, frequently including contaminants but some ranged as high as 70%, containing doses of up to 190 milligrams per tablet. 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 \$33 per point. Purity was rated as medium/high, and about half reported that it was difficult to obtain.
- The four prices reported for methamphetamine base ranged from \$20–150 per point
- The median ice price dropped to \$38 per point, and \$320 per gram. Purity was rated as medium/high, and accessibility as very easy.
- Ice was most likely to have been sourced from a friend, at a private home.

In 2016, participants commented on the market trends for three forms of methamphetamine:

- Amphetamine powder (speed); n = 11
- Methamphetamine base (base); n = 5
- Crystalline methamphetamine (ice); n = 14

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

5.2.1 Price

Speed

When asked how much speed cost the most recent time they purchased a point (0.1g), the median response was \$33 (n=8, range \$20–100). One participant reported paying \$170 for a gram. Of the six participants who were able to comment on the price of speed, five reported that the price had remained stable in the previous six months, while one reported it had decreased. This is similar to 2015, although numbers are too low for meaningful comparison.

Base

Four participants reported purchasing methamphetamine base in the last six months paying between \$20 and \$150 per point.

Ice

The median reported price per point of ice was \$38 (n = 8, range \$25–100), significantly lower than 2015 (\$80). One gram was a median of \$320 (n = 3, range \$300–500)—slightly down from 2015 (\$500), although small numbers prevented meaningful comparison. Twelve participants commented on the change in price of ice in the previous six months: five reported it to be stable, four as decreasing, and three as fluctuating. Table 18 shows that the price ranges reported by the ACC (2016) for ice in 2012–13 and 2013–2014 were slightly higher than those reported by our study participants in 2016.

Table 18: ACC reported methylamphetamine (crystal form) prices in Queensland, 2013–14 and 2014–15

Weight	Price per unit	
	2013–2014	2014–2015
1 point (0.1 gram)	\$50–150	\$50–150
1 gram / 'weight'	\$300–500	\$500–1000
1/8 ounce (3.5 grams) / 'eight ball'	\$750–1750	\$750–1700
¼ ounce	\$1200–3400	n/r
1 kilogram	\$200,000–250,000	\$150,000–280,000

Source: ACC 2015, ACIC 2016

The prices reported by the ACIC cannot be compared with those reported by EDRS participants, as the ACIC 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 19). However, it appears that the price of the crystalline form has again decreased at bulk purchase level.

Table 19: ACC reported methylamphetamine (non-crystal form) prices in Australia, 2013–14 and 2014–15

Weight	Price per unit	
	2013–2014	2014–2015
1 point	\$50–150	\$50–150
1 gram 'weight'	\$70–700	\$180–500
1/8 ounce (3.5 grams) / 'eight ball'	\$600–1100	\$600–1100
1 kilogram	n/r	n/r

Source: ACC 2015, ACIC 2016

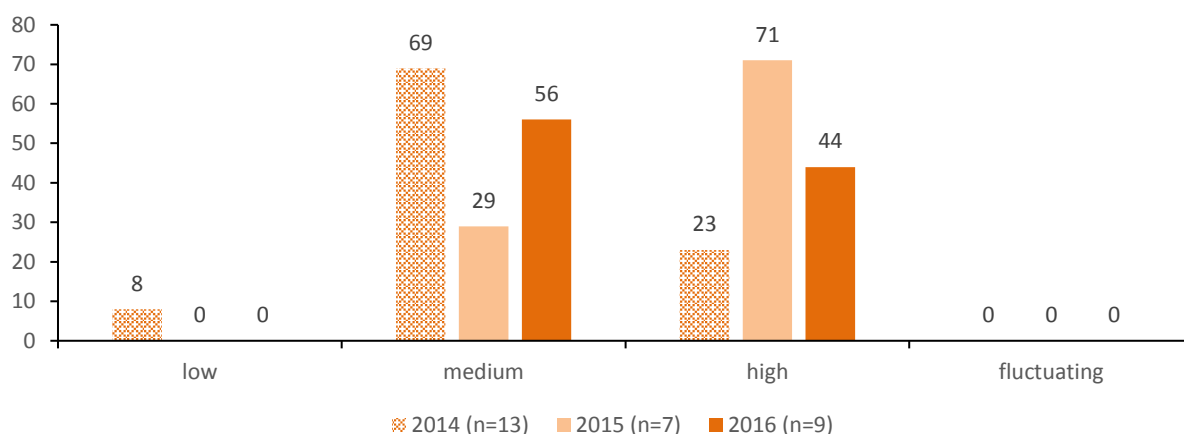
5.2.2 Purity

Speed

In 2016, nine 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 2015 reports.

In 2016, only eight participants commented on perceived changes in purity of speed in the previous six months: seven considered it to be stable and one fluctuating. Low numbers prevented comparison with 2015.

Figure 32: Perception of speed purity in previous six months, 2014–16



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

Base

Four participants in 2016 reported on perceived purity of base, rating it as medium (one), high (one) and fluctuating (two).

Ice

In 2016, 14 participants were able to comment on the purity of ice. The responses were:

- high 43% (50% in 2015)
- medium 43% (10% in 2015)
- fluctuating 14% (30% in 2015)

This suggests less fluctuation than responses in 2015 (in brackets). Among those who reported on perceived changes in purity of ice in the previous six months (n = 12), six reported it to have remained stable, five to have fluctuated, and one to have decreased.

Table 20 shows that in the financial year 2014–15 the Queensland Police Service (QPS) made 22 seizures of often low purity speed and base (range 0.2–64.5%); this is a significant decrease in the number of seizures, if not the purity. The Australian Federal Police (AFP) record only four seizures of amphetamine in Queensland for this period (ACIC, 2016).

Table 20: Median purity of amphetamine seizures analysed in Queensland by police, 2009–10 to 2014–15

	2009–10		2010–11		2011–12		2012–13		2013–14		2014–15	
	n	%	n	%	n	%	n	%	n	%	n	%
QPS	20	1.2	56	0.8	14	1.5	46	3.2	115	2.0	22	1.9
AFP	2	18.6	5	14.3	9	69.1	1	13.7	n/r	n/r	4	24.5

Source: ACIC, 2016

Table 21 shows the purity of the numerous methylamphetamine seizures by QPS was 72.1% (range 0.1–80.3%) in the financial year 2014–15. The 16 AFP seizures ranged in purity from 22.6% to 81.3% (median 79.1%; ACIC, 2016).

Table 21: Median purity of methylamphetamine seizures analysed in Queensland by police, 2009–10 to 2014–15

	2009–10		2010–11		2011–12		2012–13		2013–14		2014–15	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
QPS	1,568	6.8	1,884	13.9	1,694	34.2	1,763	52.6	1,931	58.8	2,589	72.1
AFP	1	18.8	3	31.7	7	76.2	16	71.1	13	79.4	52	79.1

Source: ACC, 2015

5.2.3 Availability

In 2016, 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 22). 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 22: Perceived availability by methamphetamine type, 2016

	Speed %	Base %	Ice %
Current availability	(n=11[^])	(n=4[^])	(n=14)
Very easy	9	-	64
Easy	36	-	29
Difficult	55	75	7
Very difficult	-	25	-
Change in availability	(n=8[^])	(n=3[^])	(n=12)
More difficult	25	100	-
Stable	75	-	75
Easier	-	-	25
Fluctuates	-	-	-

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

Speed

Eleven participants reported having obtained speed in the previous six months. Of these, four sourced it from a dealer the most recent time it was obtained, five from a friend, relative or acquaintance, and one from the dark web. Locations were their own home (five), a

friend's home (two), a dealer's home (two), at a pub or bar (one) and online/posted (one). Statistical comparisons with 2015 were not possible due to low numbers.

When participants were asked where they had spent most of their time the most recent time they used speed (n = 11), the most common location was at home (seven), and the other locations were all different: a friend's home, a private party, a nightclub, and a live music event.

Base

Only four people comment on recent acquisition of base; in all cases, it was scored from friends in different locations: at home, a friend's house, a private party, and a bar.

Ice

Among those who commented on the most recent time they purchased ice in the previous six months (n = 13), the majority reported they had obtained it from a friend (11), an acquaintance (one) or a dealer (one). Delivery to a friend's home (seven) or home (four) was most common. Only two people reported acquiring ice in a public venue.

When asked where participants spent the majority of the time the most recent occasion they had used ice, most participants reported using it at their own home (five) or the home of a friend (five). Other locations included a dealer's home (one) and a live music event (two).

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 \$180–500 per gram. Although only larger quantities attracted lower prices, purity was regarded as higher.

5.3 Cocaine

Key points

- The median price of a gram of cocaine remained stable at \$325.
- 52% of participants who commented perceived cocaine as easy or very easy to obtain in the previous six months. Purity was perceived as medium to high.
- A friend was the most common source person and a private home the most common source location, but nightclubs remained the most common venue for the last occasion of use in the previous six months.

In 2016, 14 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 \$325 the most recent time it was purchased in the previous six months (n = 14, range \$250–450). This was the same as in previous years. Most reported the price to have remained stable in the previous six months (Table 23).

Table 23: Changes in prices of cocaine in previous six months, 2014–16

	2014 (n=16) %	2015 (n=11) %	2016 (n=16) %
Increasing	31	-	13
Stable	63	82	62
Decreasing	-	9	-
Fluctuating	6	9	25

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 ACIC (2016) for 2014–15. The ACIC (2016) reported that one gram of cocaine was \$300–\$400.

5.3.2 Purity

The purity of cocaine was perceived to be medium (48% of respondents). Differences to reports of purity in 2015 are likely to be due to small sample size (Table 24).

Table 24: Perception of cocaine purity in previous six months, 2014–16

	2014 %	2015 %	2016 %
Current purity	(n=17)	(n=17)	(n=21)
Low	39	47	24 ↓
Medium	29	24	48 ↑
High	29	12	24
Fluctuates	5	18	5
Change in purity	(n=17)	(n=16)	(n=17)
Increasing	6	-	6
Stable	53	63	59
Decreasing	35	6	6
Fluctuating	6	31	29

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 25. In 2014–15, QPS seizures ranged in purity from 0.1–79% (median 29.7%), and AFP seizures ranged from 0.2–84.3% (median 64.7%; ACIC, 2016).

Table 25: Median purity of cocaine seizures analysed in Queensland, 2010–11 to 2014–15

	2010–11		2011–12		2012–13		2013–14		2014–15	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
QPS	126	19.8	125	18.7	178	27.8	176	33.8	305	29.7
AFP	21	76.2	9	66.0	11	65.5	18	57.5	13	64.7

Note: Figures do not represent purity of all cocaine seizures, but only of those submitted for analysis
Source: ACIC, 2016

5.3.3 Availability

In 2016, 48% of participants who commented perceived cocaine as difficult to obtain in the previous six months (Table 26), and that this had remained stable (65%).

Table 26: Availability of cocaine in previous six months, 2014–16

	2014 %	2015 %	2016 %
Current availability	(n=20)	(n=17)	(n=21)
Very easy	5	-	19
Easy	50	59	33
Difficult	35	35	48
Very difficult	10	6	-
Change of ease of access	(n=19)	(n=16)	(n=17)
More difficult	32	13	12
Stable	63	69	65
Easier	-	6	12
Fluctuates	5	13	12

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 27).

Table 27: Most recent source and location for obtaining cocaine, 2014–16

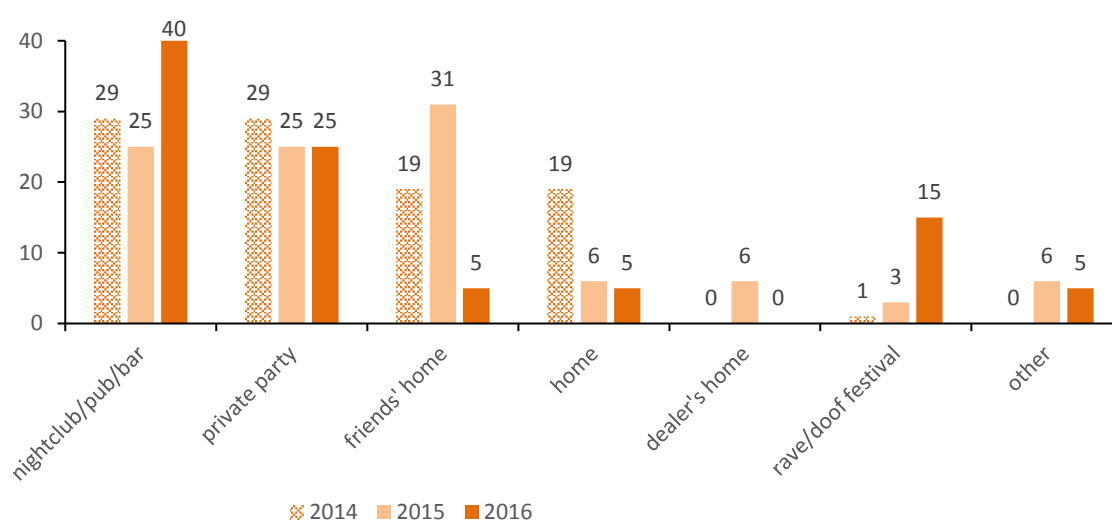
	2014 (n=21) %	2015 (n=15) %	2016 (n=21) %
Persons scored from			
Friend	67	60	52
Known dealer	33	13	14
Acquaintance	5	20	19
Unknown dealer	5	7	5
Online/dark web	-	-	5
Location scored from			
Friend's home	52	29	24
Dealer's home	19	7	-
Own home	10	21	10
Private party	5	7	19
Agreed public location	5	14	10
Nightclub	-	7	24
Online/dark web	-	-	5

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

Nightclubs, private parties and music events were the most commonly reported locations for most recent use of cocaine (Figure 33).

Figure 33: Location of most recent cocaine use, 2014–16



Source: QLD EDRS participant interviews

5.3.5 Cocaine seizures

Figure 34 shows the weight and purity of cocaine detections in Queensland over the last decade. In 2014–15 both the number and purity of seizures increased substantially over the 2013–2014 period.

Figure 34: Number and purity of cocaine detections in Queensland, 2010–11 to 2014–15

	2010–11		2011–12		2012–13		2013–14		2014–15	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
QPS	126	19.8	125	18.7	178	27.8	176	33.8	305	29.7
AFP	21	76.2	9	66.0	11	65.5	18	57.5	13	64.7

Source: ACIC, 2016

5.3.6 Comments from key experts on the cocaine market

According to key experts cocaine quality was variable, as was price. 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

In 2016, eleven participants reported having bought ketamine in the previous six months; the median price paid was \$250 per gram ($n = 9$, range \$100–\$300). Two participants reported paying \$25 and \$30 per dose. Most participants (5) regarded the price as stable, the current strength as high (nine) or stable (six), and the ease of access easy or very easy (six) or stable (five). Purchases were mostly through friends (seven) at a private home (six) or a music event (four), with recent use mostly at the same places. 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

Only two participants reported having purchased gamma-hydroxy-butyrate (GHB) in the previous six months. One paid \$20 and the other \$80 per millilitre; they regarded the price as stable. One purchased through friends at home and used there, the other through the deep web and used outdoors.

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

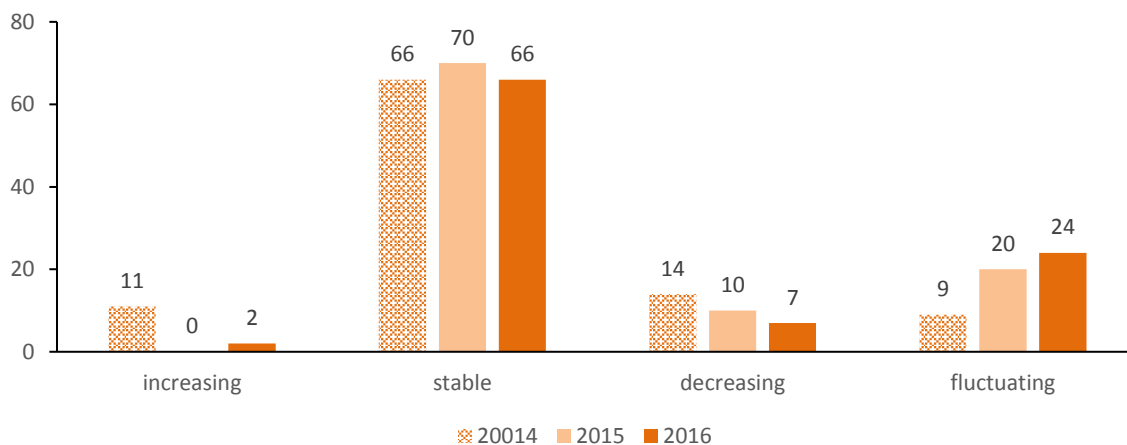
- One tab of LSD cost approximately \$20; price was stable.
- Purity of LSD was perceived as similar to 2015.
- Two-thirds reported LSD to be easy or very easy to obtain, and availability had remained stable.
- LSD was most likely to have been obtained from a friend at a friend's home.

In 2016, 43 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 = 43, range \$5–30), similar to previous years and regarded as stable by most (66%) over the previous six months (Figure 35). This was comparable to prices of \$10–25 per tab reported by the ACIC (ACIC 2016).

Figure 35: Change in price of LSD in previous six months, 2014–16



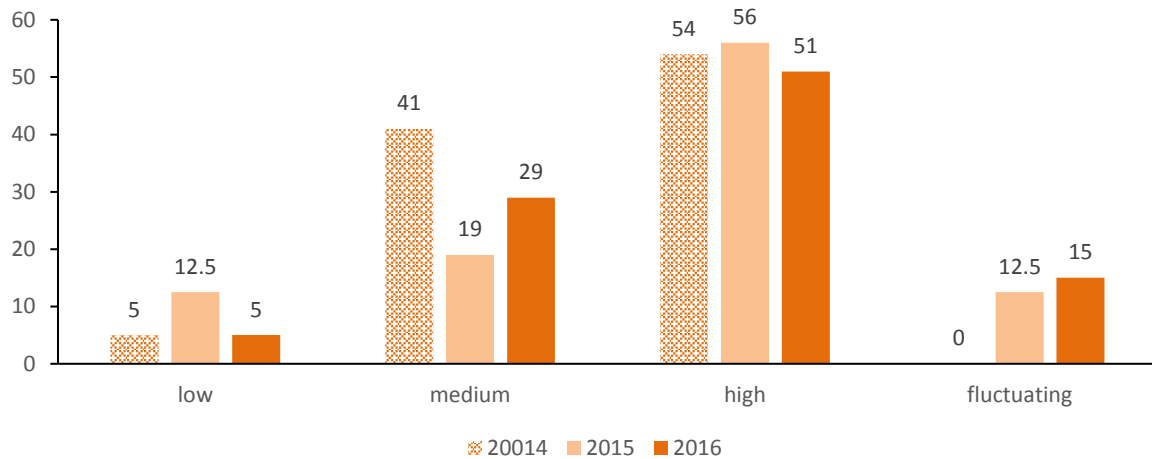
Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.6.2 Purity

In 2016, similar to 2015, half (51%) of participants reported the current purity of LSD as high (Figure 36).

Figure 36: Purity of LSD in previous six months, 2014–16

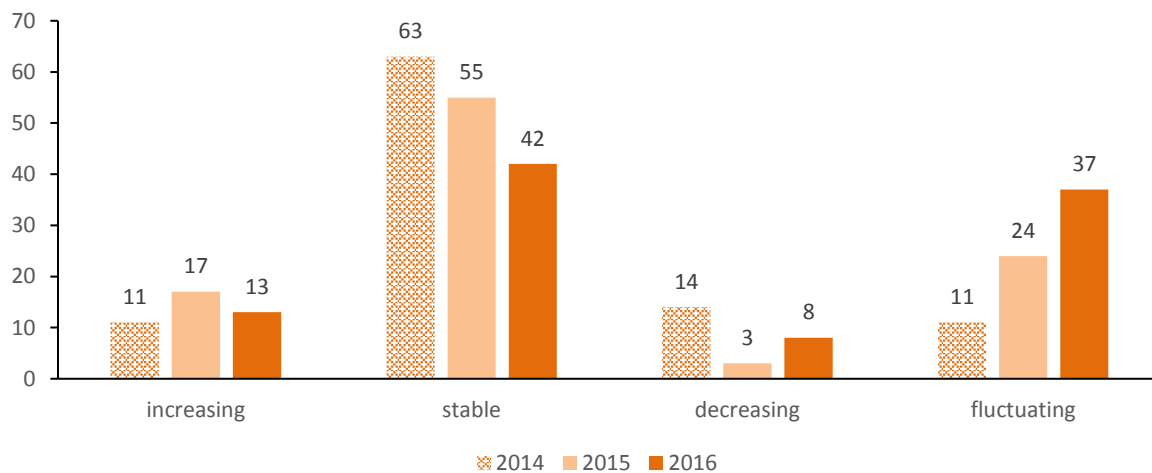


Note: Those choosing ‘don’t know’ were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Less than half (42%) of 2016 participants perceived the purity of LSD had remained stable during the previous six months (Figure 37), with significantly more reporting fluctuation (37%; $p < 0.05$) than in previous years.

Figure 37: Changes in purity of LSD in previous six months, 2014–16



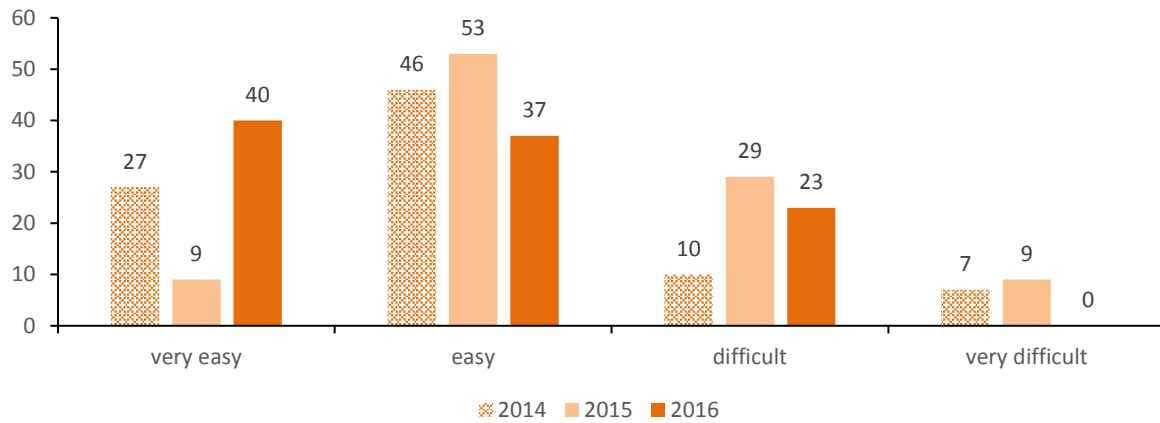
Note: Those choosing ‘don’t know’ were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.6.3 Availability

Three quarters reported LSD to be easy or very easy to obtain (Figure 38). Perceived availability was similar to 2015, but more participants reported it was very easy to obtain.

Figure 38: Availability of LSD in previous six months, 2014–16

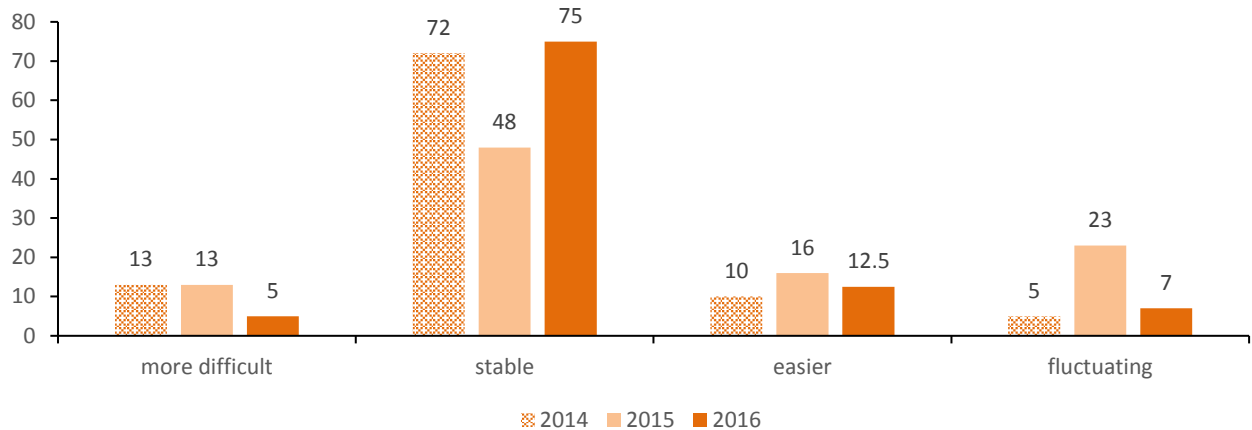


Note: Those choosing ‘don’t know’ were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Three-quarters (75%) reported the recent availability of LSD to be stable (Figure 39). This is somewhat higher than 2015 but similar to 2014 (Figure 39).

Figure 39: Changes in availability of LSD in previous six months, 2014–16



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 online purchasing increased in 2016 ($p < 0.05$). A private home was the most common location when LSD was last obtained in the previous six months (Table 28).

Table 28: Source person and location last time obtained LSD, 2014–16

	2014 (n=41) %	2015 (n=34) %	2016 (n=42) %
Source person			
Friend	61	47	60
Dealer (known/unknown)	20	38	14↓
Acquaintances	5	12	2
Relative	2	-	-
Online/deep web	10	3	24↑
Location sourced from			
Friend's home	34	35	38
Own home	15	12	36↑
Dealer's home	7	26	2
Online	5	-	10↑
Live music event/festival	7	6	7
Agreed public location	5	18	2
Nightclub/pub/bar	4	-	
Private party	2	3	5

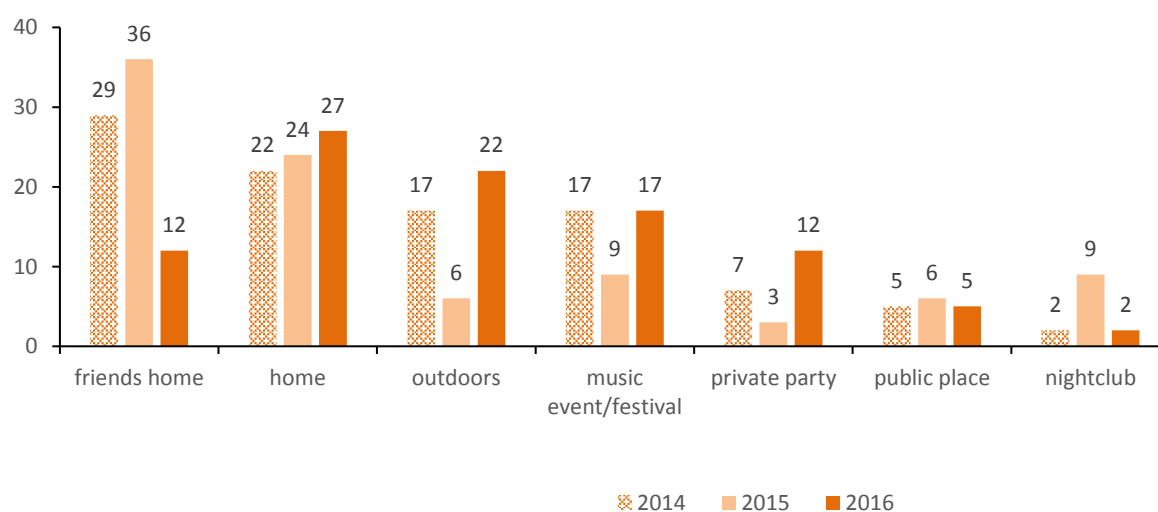
Note: Small numbers; interpret with caution. Those choosing 'don't know' were excluded from analyses.

Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Figure 40 shows that home was the most common venue for using LSD on the most recent occasion in the previous six months, followed by outdoors and music events or festivals.

Figure 40: Location of most recent LSD intoxication, 2014–16



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 return to use of LSD from the previous year. 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 NBOMe 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 both forms of cannabis remained easy/very easy, with rating as 'very easy' increasing.
- Cannabis was most often obtained from a friend at home, and was most often used at a participant's own home.

In 2016, 65 participants reported they were able to distinguish between hydro and bush cannabis. Fifty-three participants were able to comment on hydro, and 44 were able to comment on the bush cannabis market. Seven participants said they were able to comment on the price of hash, reporting prices ranging from \$30–120 per gram.

5.7.1 Price

The price of cannabis remained similar to previous years (Table 29). In 2016, the price of hydro was again slightly higher than that for bush: the median price for an ounce of hydro was \$280 (n = 17, range \$10–350) while the price for an ounce of bush was \$250 (n = 10, range \$200–320).

Table 29: Cannabis prices by type and amount recently purchased, 2014–16

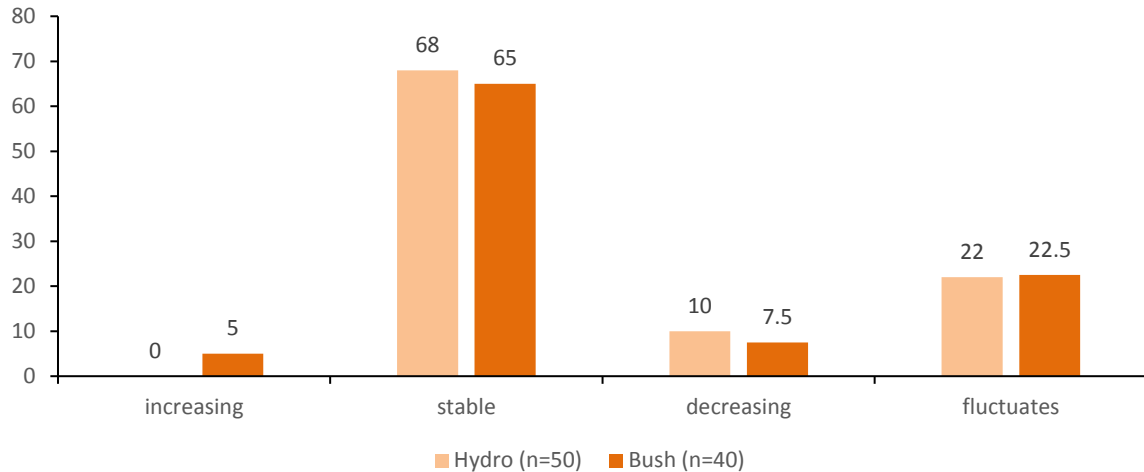
	2014 Median (range)	2015 Median (range)	2016 Median (range)
Hydro			
Gram	\$11 (10–17) ^	\$10 (9–25)	\$20 (\$5–50)
Quarter ounce	\$80 (70–90)	\$85 (9–180)	\$80 (\$50–180)
Ounce	\$280 (250–350)	\$280 (100–300)	\$280 (\$10–350)
Bush			
Gram	\$15 (10–20) ^	\$12.50 (10–15) ^	\$20 (\$10–70) ^
Quarter ounce	\$80 (70–180)	\$90 (65–100)	\$80 (\$30–100)
Ounce	\$275 (200–300) ^	\$250 (100–320)	\$250 (\$200–320)

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), as for previous years. These prices compare with the price range of \$15–25 per gram reported by the ACIC (ACIC 2016) for both bush and hydro forms.

Figure 41: Price changes of cannabis in previous six months, 2016



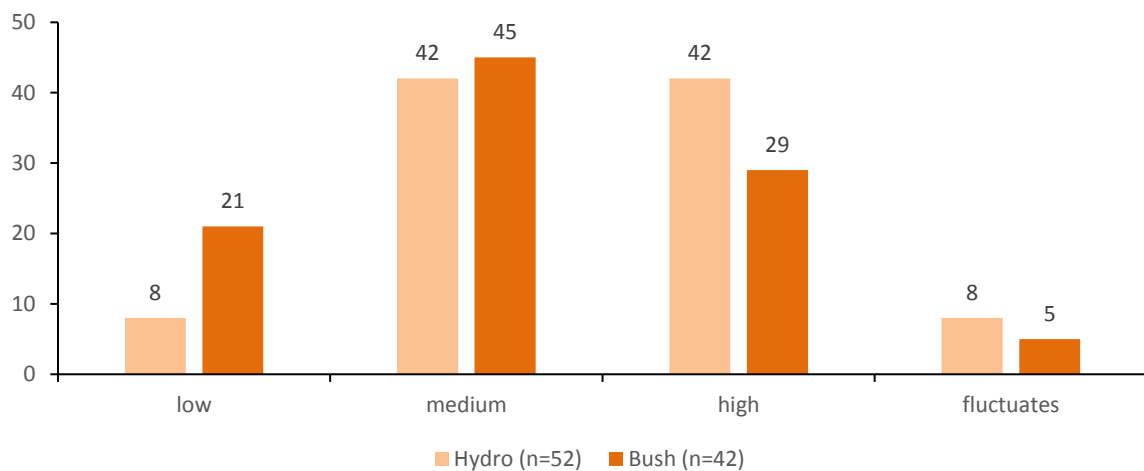
Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.7.2 Purity

Figure 42 shows that the purity (i.e. strength) of both hydro and bush cannabis was largely perceived to be medium to high, as was the case in 2015.

Figure 42: Perception of cannabis purity in previous six months, 2016

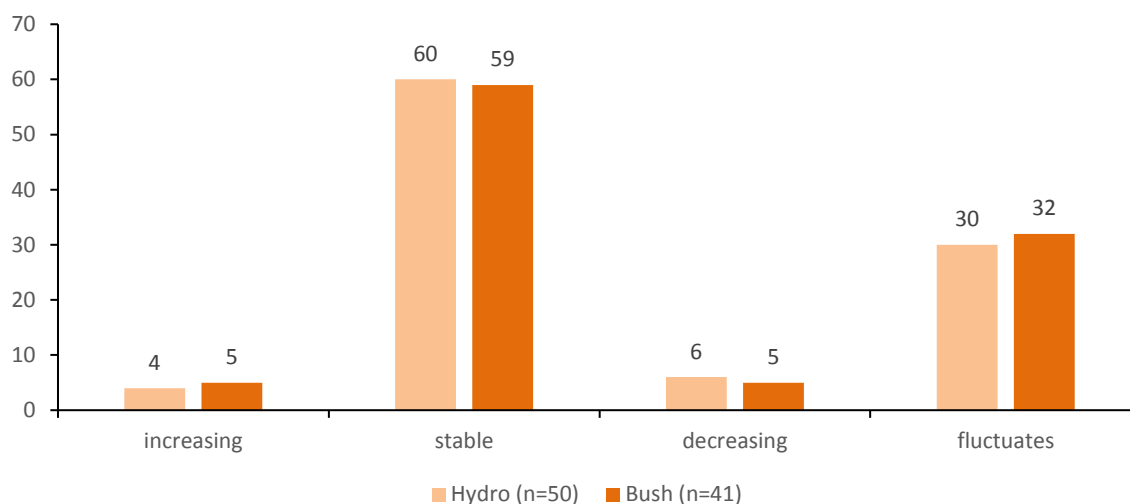


Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

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, 2016



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 was perceived to be more difficult to obtain than hydro (Table 30). In 2016 a significantly higher percentage of participants reported both to be very easy to obtain.

Table 30: Availability of cannabis in preceding six months, 2015 and 2016

	Hydro		Bush	
	2015 %	2016 %	2015 %	2016 %
Current ease of access	(n=60)	(n=52)	(n=43)	(n=43)
Very easy	62	81↑	26	56↑
Easy	32	15	40	12
Difficult	7	4	33↑	21
Very difficult	0	0	2	0
Change in availability in previous six months	(n=59)	(n=52)	(n=41)	(n=42)
More difficult	12	0	10	7
Stable	68	88↑	66	79
Easier	12	6	12	5
Fluctuates	9	6	12	10

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 one's own home for both forms (Table 31).

Table 31: Source person and location of most recent cannabis purchase, 2015 and 2016

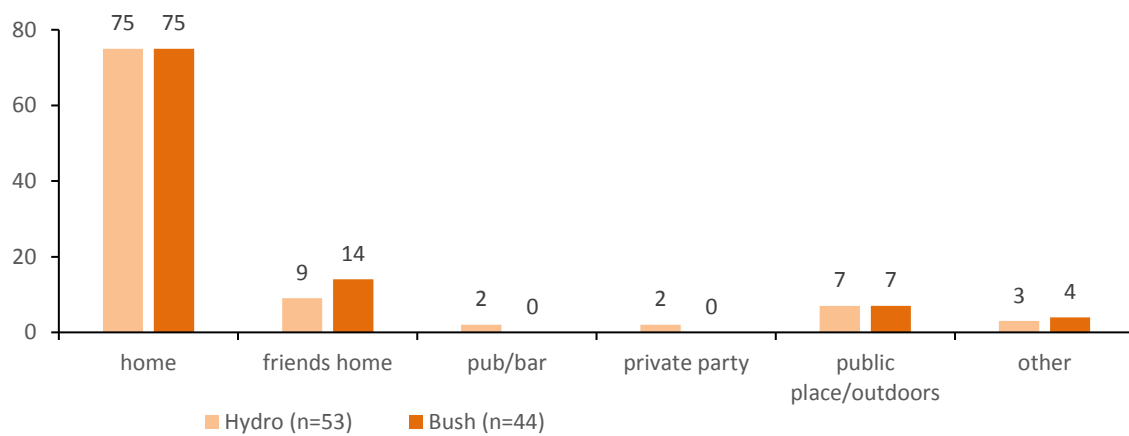
	Hydro		Bush	
	2015 (n=61) %	2016 (n=53) %	2015 (n=40) %	2016 (n=44) %
Source person				
Friend	53	51	45	61 ↑
Known dealer	18	23	20	14
Unknown dealer	3	0	5	2
Acquaintances	18	25	13	11
Street dealer	2	0	10	9
Other	7	0	6	2
Online/deep web	-	2	-	2
Source venue				
Own home	25	32	30	41 ↑
Friend's home	34	28	26	34
Dealer's home	12	19	5	0
Agreed public location	16	13	23	9
Pub/bar	0	24 ↑	0	0
Other	8	6	5	4
Street market	2	2	7	9

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, 2016



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

- 26% reported a lifetime stimulant overdose, with 15% 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 ketamine.
- 11% 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 (89%) 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 one participant reporting they were currently in some form of treatment.
- 49% scored moderate to very high levels of psychological distress on the K10.
- 30% self-reported having a mental health problem in the previous six months, most commonly depression; and 15% 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-six per cent of participants reported experiencing a stimulant overdose in their lifetime. The median number of times this had ever happened was once ($n = 22$, range 1–4 times). Fifteen 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 ($n = 14$), the two drugs most commonly attributed to the overdose were ecstasy (61%), followed by ketamine (15%). In most overdoses more than one drug was involved (92%).

The most common location of the most recent stimulant overdose was at a private home (own or friend's; 36%), followed by at a nightclub (29%) or private party (21%). Other locations included at work and at a live music event. The main symptoms experienced were nausea, visual hallucinations and increased body temperature. Vomiting, tremors, agitation, delirium and loss of consciousness were also reported.

Over half of those who experienced a stimulant overdose (57%) reported someone sober was present during the overdose to assist, and being watched over by friends. One participant reported seeking assistance from a GP after the overdose.

6.1.2 Non-fatal depressant overdose

Eleven per cent of participants reported experiencing an overdose on a depressant drug in their lifetime. The median number of depressant overdoses was twice (n = 9, range 1–20).

All of those participants had experienced a depressant overdose in the previous 12 months. Of these ten participants, six attributed the overdose to alcohol, one to 2C-B, and three did not specify. Four participants reported an overdose occurring at a private party. Other locations included home and nightclubs.

Main symptoms included loss of consciousness and vomiting. Other symptoms included memory loss and inability to walk.

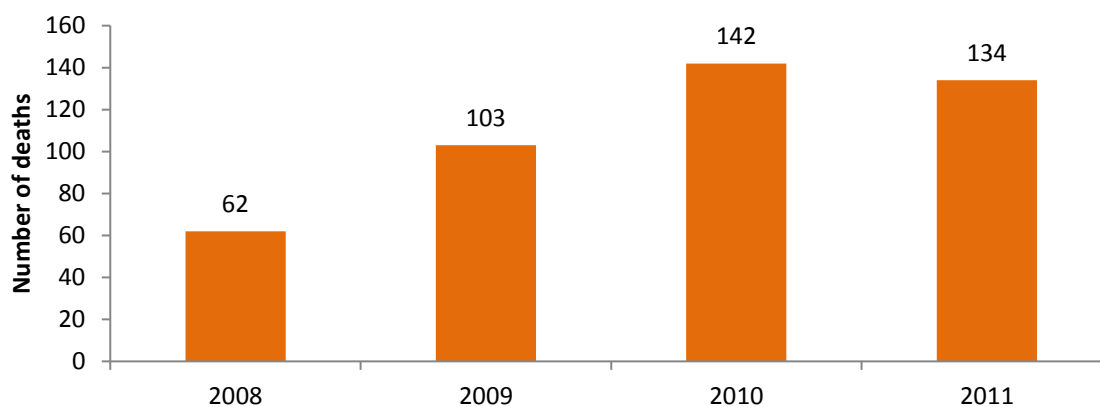
Four of the seven participants reported that a sober person was present who was able to assist, and two were monitored by friends. No other forms of treatment were reported.

6.1.3 Stimulant and depressant overdose data from other sources

Overdose data from emergency services in Queensland were not available for 2016 due to changes being made to overdose reporting methodologies.

The Australian Bureau of Statistics (ABS) collates and manages the database for national causes of death, utilising information from the National Coronial Information System (NCIS). Drug-induced deaths in Australia attributable to methamphetamines 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). Deaths in Australia due to accidental overdose increased 15% from 2013 to reach 1137 in 2014 (Pennington Institute, 2016). People aged between 30 and 59 years (substantially older than the EDRS cohort) accounted for 78% of overdose deaths.

Figure 45: Drug-induced deaths due to methamphetamine or cocaine, 2005–11



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 in patients across five samples in Sydney and London who used heroin, cocaine, amphetamine and methadone-(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 2016, 23% of EDRS participants scored three or more for ecstasy use, similar to the 24% reported in 2015 (see Table 32). 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 9% of participants scored four or more for ecstasy use, which was similar to the 13% reported in 2015.

Table 32: SDS scores, ecstasy and methamphetamines, 2016

	Ecstasy	Methamphetamines
SDS score	2016 (n=84) %	2016 (n=23) %
0	39	48
3 or more	23	44
4 or more	9	35

Source: QLD EDRS participant interviews

Symptoms of dependence were also common among recent methamphetamine users: one in three (35%) scored four or more for their methamphetamine use, with nearly one-half (44%) showing symptoms of dependence with the lower cut-off. The 31% who reported they would find it quite/very difficult to go without (Table 33) appears somewhat higher than the 12% of methamphetamine users nationally in 2013 who 'could not stop or cut down on use if they wanted to' (AIHW 2014).

In 2016, 39% of ecstasy users and 48% of methamphetamine users reported no symptoms of dependence (a score of zero). Cumulatively, 60% of each group obtained a score of one or less. The median SDS score for ecstasy was one (n = 84; range 0–5). 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 33: Symptoms of dependence, ecstasy and methamphetamines, 2015–16

Symptoms of dependence	Ecstasy		Methamphetamines	
	2015 (n=83) %	2016 (n=84) %	2015 (n=23) %	2016 (n=23) %
Ever think use was out of control				
Never/almost never	76	74	74	61
Sometimes	22	25	13	22
Often	2	1	9	17
Always/nearly always		0	4	0
Prospect of missing a dose makes you feel anxious or worried				
Never/almost never	78	73	74	70
Sometimes	18	24	22	22
Often	4	4	-	9
Always/nearly always	-	0	4	0
Worry about your use				
Never/almost never	59	57	52	52
Sometimes	35	40	35	22
Often	6	2	9	22
Always/nearly always	-	0	4	4
Wish you could stop				
Never/almost never	80	86	61	65
Sometimes	19	12	30	22
Often	1	1	4	9
Always/nearly always	-	1	4	4
How difficult to stop or go without				
Not difficult	81	85	83	70
Quite difficult	18	14	9	22
Very difficult	1	1	9	9
Impossible	-	0	-	0

Source: QLD EDRS participant interviews

6.3 Help-seeking behaviour

6.3.1 Use of health services among participants

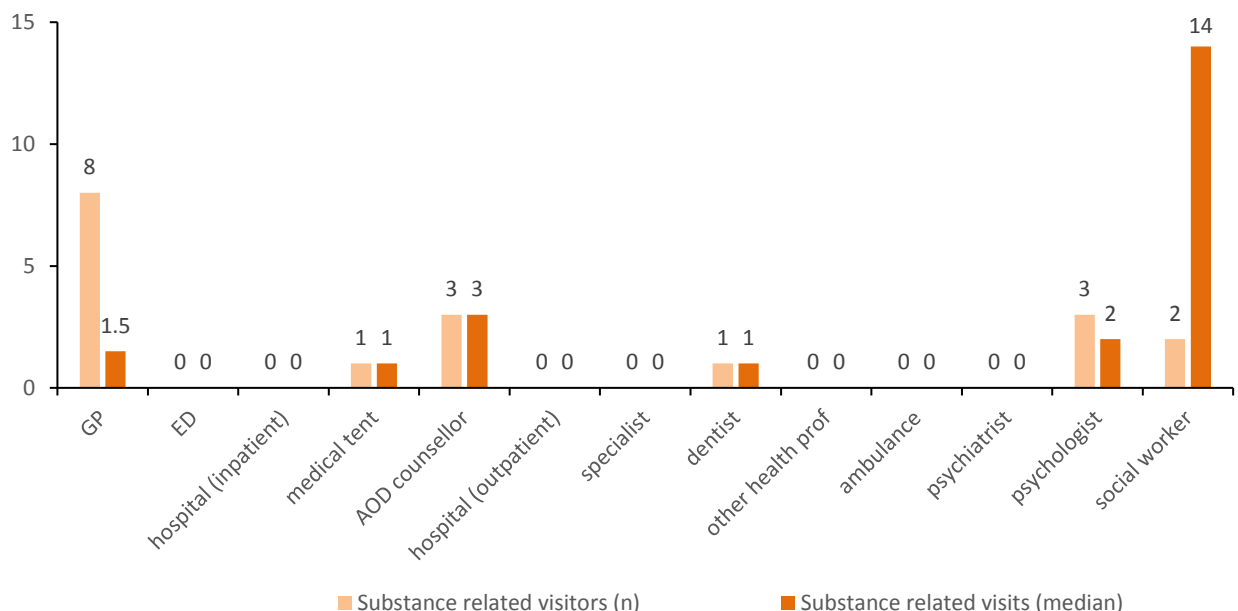
Similar to previous years, only 14% of participants reported they had thought about accessing a service or health professional about their drug and/or alcohol use in the previous six months.

Eleven per cent of participants (n = 10) reported that they had sought help for their drug and/or alcohol use from a service or health professional in the previous six months. Most commonly this was a GP (eight), followed by a drug and/or alcohol counsellor (three) or a psychologist (three). Other professionals consulted included a social worker (two), a dentist (one) and a medical tent at a rave (one).

The most frequently visited service for substance-related issues was a social worker (Figure 46). The main drugs of concern for seeking help were alcohol and cannabis. Other drugs of concern were ice, MDA, cocaine and tobacco. The largest numbers of visits to a provider were related to alcohol.

This is consistent with drug treatment information from the National Minimum Data Set (AIHW 2015) showing that for Queensland in 2013–14, 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.

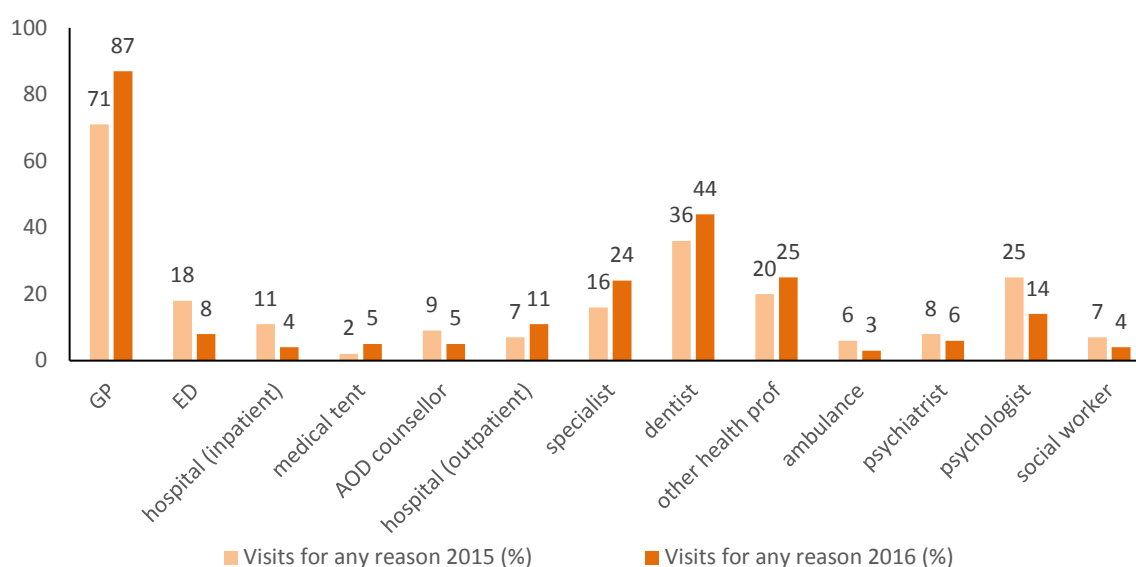
Figure 46: Substance-related visits to health professionals, 2016



Source: QLD EDRS participant interviews

Eighty-six 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 dropped in 2016 ($p < 0.05$) to 2014 levels (not shown).

Figure 47: Main service accessed for any reason in the previous six months, 2015 and 2016



Source: QLD EDRS participant interviews

6.4 Drug treatment

Similar to previous years, participation in drug treatment was low among this sample. Only one participant reported currently being in some form of drug treatment—drug counselling.

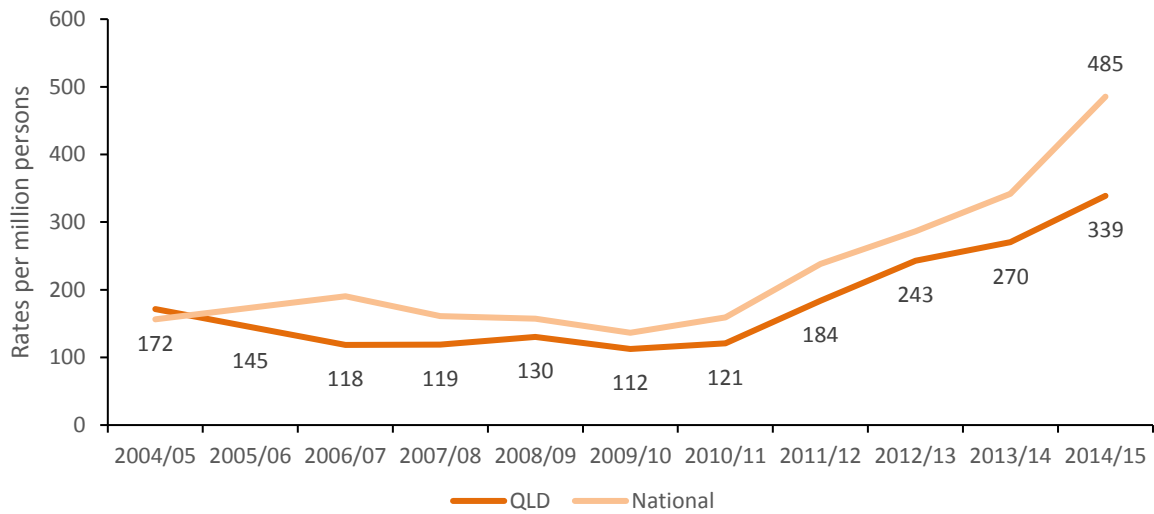
6.5 Hospital admissions

The most recently available hospital admission data covers the financial year 2014–15. These data are described by substance below.

6.5.1 Methamphetamine

For the financial year 2014–15, the number of inpatient hospital admissions in Queensland where the principal diagnosis related to amphetamines was 883 for persons aged 15–54 years (Figure 48). This equates to 339 per million persons, up from 270 per million in 2013–14. The national rate per million persons is 485. 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, 2004–05 to 2014–15

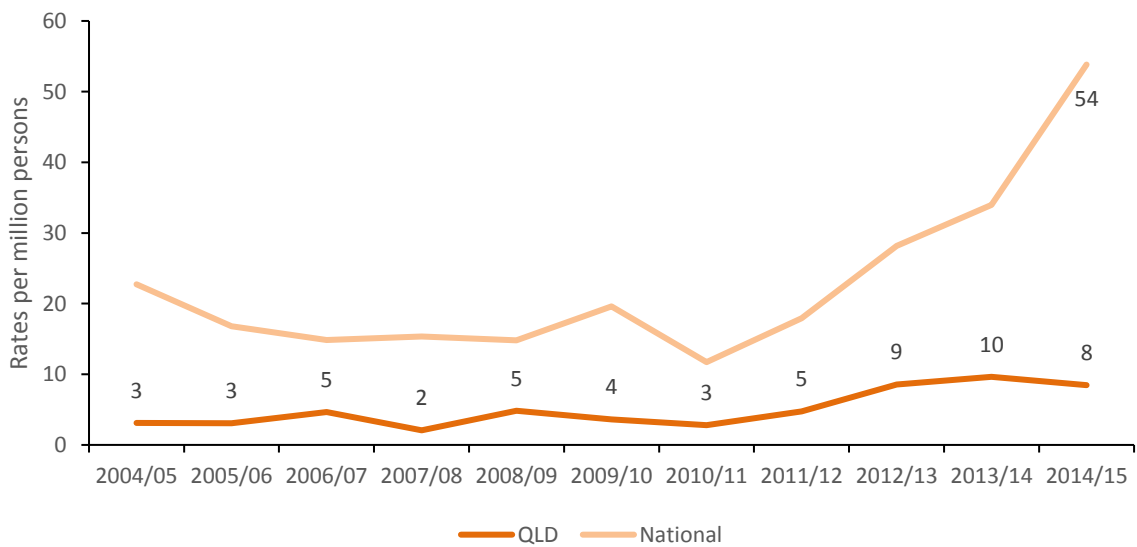


Source: Roxburgh and Breen (2017), in press

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 eight admissions per million persons is much lower than the national rate of 54, and equates to 22 admissions during the period.

Figure 49: Number of principal cocaine-related hospital admissions per million persons aged 15–54 years, Queensland, 2004–05 to 2014–15

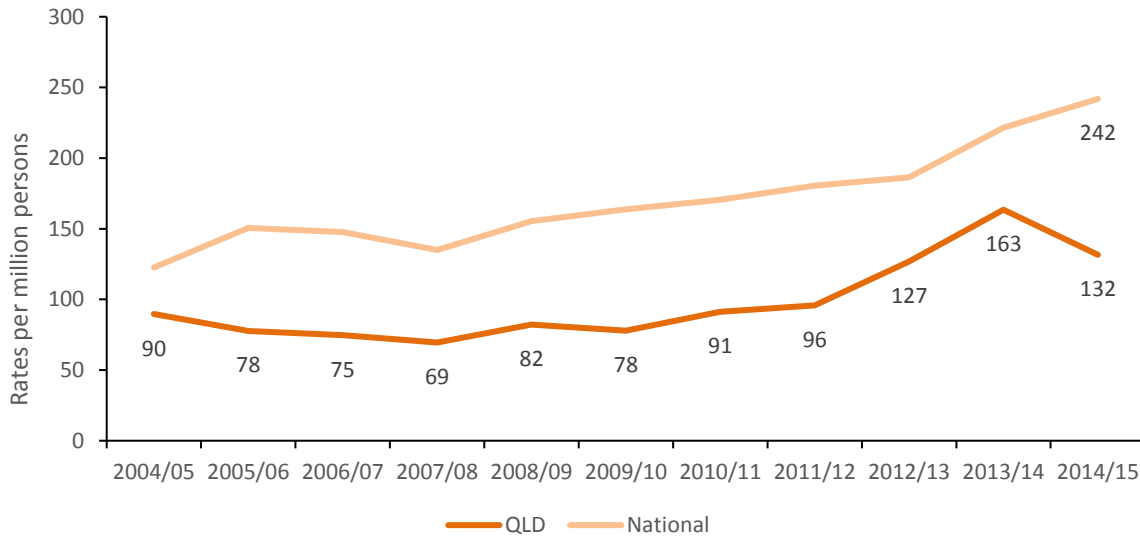


Source: Roxburgh and Breen (2017), in press

6.5.3 Cannabis

In 2014–15, there were 343 inpatient hospital admissions in Queensland for those aged 15–54 years where the principal diagnosis related to cannabis. This equates to 132 inpatient hospital admissions per million persons (Figure 50). Queensland admission numbers have dropped for this period while national figures continue to show an upward trend. The national rate was 242.

Figure 50: Number of principal cannabis-related hospital admissions per million persons aged 15–54 years, Queensland, 2004–05 to 2014–15

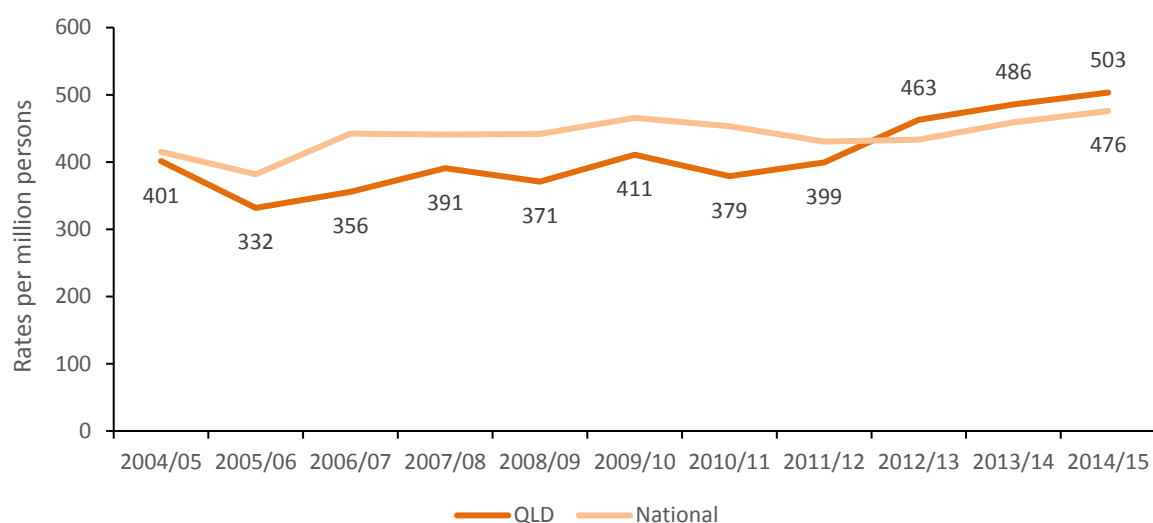


Source: Roxburgh and Breen (2017), in press

6.5.4 Opioids

In 2014–15, there were 1312 inpatient hospital admissions in Queensland for those aged 15–54 years where the principal diagnosis related to opioids. This equates to 503 inpatient hospital admissions per million persons (Figure 51). Admission numbers are continuing to trend upwards. The national rate was 476.

Figure 51: Number of principal opioid-related hospital admissions per million persons aged 15–54 years, Queensland, 2004–05 to 2014–15



Source: Roxburgh and Breen (2017), in press

6.6 Mental and physical health problems

6.6.1 General health

For the first time in 2016, participants were asked about their general health. Nearly sixty per cent regarded their health as very good or excellent (Table 34) and none as poor.

Table 34: Self-reported general health, 2016

	2016 (n=92) %
Excellent	16
Very good	43
Good	29
Fair	11
Poor	0

Source: QLD EDRS participant interviews

6.6.2 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 2016, 49% of participants who commented reported experiencing moderate to very high levels of distress in the previous month (Table 35). This is lower than 2015 ($p < 0.05$).

Table 35: K10 level of distress, 2014–16

	2014 (n=93) %	2015 (n=84) %	2016 (n=92) %
Low to no distress (0–15)	40	32	51
Moderate distress (16–21)	31	41	27
High distress (22–29)	20	24	17
Very high distress (30–50)	9	4	4

Source: QLD EDRS participant interviews

6.6.3 Self-reported mental problems and medication

In 2016, 30% of all participants reported having a mental health problem in the previous six months. Half of these (51%) reported multiple problems. As per previous years, depression and anxiety were the most commonly reported mental health problems. Other disorders appeared at similar levels to previous years (Table 36).

Table 36: Self-reported recent mental health problems, 2010–15

	2011 (n=39) %	2012 (n=22) %	2013 (n=38) %	2014 (n=30) %	2015 (n=37) %	2016 (n=28) %
Anxiety	62	45	61	70	43	61
Depression	80	68	61	63	62	64
Panic	21	14	18	17	11	11
OCD	8	9	11	13	11	0
Manic depression/bipolar disorder	5	9	8	7	5	4
Drug-induced psychosis	3	14	4	3	5	0
Schizophrenia	8	9	-	3	3	0
Paranoia	18	18	4	-	5	4
Any personality disorder	5	9	-	-	8	0
Other	10	18	20	23	32	7

Note: Multiple responses permitted. In 2016, 'other' included PTSD, mania, phobias, other psychoses, anger and self-harm. Source: QLD EDRS participant interviews

Fifteen per cent of all participants reported attending a health professional for a mental health problem in the previous six months—half of those who reported having a mental health problem. Of those who attended (n = 14), 64% were prescribed medication. These participants (n = 9) were prescribed a range of medications:

- anti-depressants (i.e. Prozac, Lexapro, Mirtazepine, Valdoxan) —seven participants
- benzodiazepines (i.e. Temazepam, Valium, lithium) —four participants
- pharmaceutical stimulants (i.e. Ritalin) —one participant.

Mood stabilisers and anti-psychotics were not reported as having been prescribed.

7 RISK BEHAVIOURS

Key Points

- Increase in reports of recent injecting, with ten participants reporting injecting a drug in the previous six months.
- Ice and base were the drugs injected most often
- 65% reported having penetrative sex with a casual sex partner in the previous six months, with an increase in those with more than ten casual partners.
- Similar to past years, drug use when having penetrative sex with a casual partner most commonly involved alcohol and ecstasy.
- 71% scored eight or higher on the AUDIT, corresponding to drinking at levels which may be harmful to their health, with 17% having 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

Ten per cent of participants reported having ever injected a drug. This is similar to the 11% in 2015 who reported having injected. All of those participants reported they had injected a drug in the previous six months (Table 37).

Table 37: Injecting risk behaviour, 2010–15

	2011 (n=103)	2012 (n=62)	2013 (n=88)	2014 (n=100)	2015 (n=85)	2016 (n=92)
Ever injected (%)	24	29	14	25	11	10
Median age first injected (range)	18 (14–28)	19 (13–43)	18 (15–26)	21 (14–35)	19 (17–28)	18 (16–38)
Injected last 6 months (%)	16	16	7	19	2	10

Source: QLD EDRS participant interviews

The mean age of first injection was 18 years (n = 9, range 16–38 years). The most common drugs first injected were speed, followed by heroin, base, and steroids.

7.1.2 Recent injectors and risky injecting behaviours

In 2016, ten participants reported injecting drugs in the previous six months, which was more than the two participants in 2015 ($p < 0.05$). Drugs injected over the last six months included base (five), ice (five), 2C-B (two), MDMA crystal (one), cocaine (one) and pharmaceutical stimulants (one).

Six participants had injected within the last month. In that time, one participant reported using a needle after someone else, and twice having someone use the needle after them. Four participants reported injecting a partner or friend, all with a new needle. None reported allowing someone else to inject them

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 5,202,400 syringes to service users and providing 183,204 occasions of service during 2015 (QLD Health, 2016). Unlike EDRS participants, opioids were the drugs most injected by NSP clients. However, the average age for NSP clients in 2015 was 38 years, with clients aged over 35 years comprising 61% of the occasions of service. In contrast, 73% of 2016 EDRS participants were under the age of 25 years. NSPs reported that amphetamine use was more prevalent in clients under 25 years.

7.2.1 Sexual risk behaviours

Participants were asked optional questions about whether they engaged in sexual behaviour with a casual sex partner. In 2016, all 92 participants completed this section, with 59 participants reporting penetrative sex with a casual sex partner at least once in the previous six months (Table 38). Fewer participants reported a single casual partner in 2016 than in 2015, and more reported having had more than ten casual partners over the last six months ($p < 0.05$ for both).

Table 38: Number of casual partners with whom participants had penetrative sex in previous six months, 2013–15

	2014 (n=60) %	2015 (n=60) %	2016 (n=59) %
One person	27	40	22↓
Two people	27	18	12
3–5 people	30	27	32
6–10 people	13	12	17
More than 10 people	3	3	17↑

Source: QLD EDRS participant interviews

Among those who reported having penetrative sex with a casual sex partner in the previous six months ($n = 59$), 85% reported having done so while under the influence of drugs. Table 39 shows that 84% did this more often than once.

Table 39: Penetrative sex with a casual sex partner while under the influence of a drug in the previous six months, 2014–16

	2014 (n=54) %	2015 (n=57) %	2016 (n=50) %
Once	20	14	16
Twice	24	18	8
3–5 times	22	25	24
6–10 times	22	21	20
More than 10 times	11	23	32

Source: QLD EDRS participant interviews

In 2016, 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 (Table 40). There was a significant drop in reports of having used cannabis the most recent time ($p < 0.05$).

Table 40: Drugs used most recent time of penetrative sex with a casual sex partner while under the influence, 2014–16

Substance	2014 (n=54) %	2015 (n=57) %	2016 (n=50) %
Alcohol	82	82	66
Ecstasy	46	53	50
Cannabis	32	67	48↓
Cocaine	19	12	6
LSD	13	5	8
Ice	11	9	10
Speed	9	4	2
MDA	7	2	2
Amyl nitrate	4	9	2
Benzodiazepines	4	5	2
Base	2	0	0
Nitrous oxide	2	0	0
Pharmaceutical stimulants	2	4	6
Mushrooms	-	2	2
GHB	-	-	2
Ketamine	-	-	4

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

Source: QLD EDRS interview participants

In 2016, only 29% 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 46% 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, 38% reported doing so every time (Table 41), although this is greater than the number who reported doing so last time.

Table 41: Frequency of condom or barrier use when having penetrative sex with a casual sex partner while under the influence of drugs, 2014–16

	2014 (n=53) %	2015 (n=57) %	2016 (n=50) %
Every time	30	26	38
Often	23	19	22
Sometimes	19	12	8
Rarely	6	19	10
Never	23	23	22

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 2016, 92 participants responded to questions about their sexual health. Among these, 52% reported having a sexual health check-up in the previous 12 months, similar to 2014 levels. Almost one-in-five participants (18%) reported ever having had a sexually transmitted infection (STI; Table 42).

Table 42: STI check-ups, 2013–15

	2014 %	2015 %	2016 %
Had a sexual health check-up	(n=84)	(n=81)	(n=92)
No	36	33	39
Yes, in the last year	56	44	52
Yes, more than one year ago	8	22	9
Ever diagnosed with STI	(n=84)	(n=76)	(n=89)
No	77	80	82
Yes, in the last year	4	7	9
Yes, more than one year ago	18	13	9

Note: Those who reported 'don't know' were excluded from the analysis. Percentages may not total 100% due to rounding.

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 2016, 71% of participants scored eight or higher on the AUDIT, corresponding to drinking at levels which may be harmful to their health (Table 43). The mean score was 12, corresponding to Zone II. This was similar to 2014 and 2015. A decrease was noted from 2015 in the proportion of drinkers for whom specialist diagnosis/treatment was recommended. This represented a return to levels reported in 2014.

Table 43: AUDIT results and recommended intervention, 2014–16

	2014 (n=98) %	2015 (n=85) %	2016 (n=92) %	Intervention recommended
Zone I (scores 0–7)	20	21	29	Alcohol education
Zone II (scores 8–15)	47	36	37	Simple advice
Zone III (scores 16–19)	16	15	16	Simple advice plus brief counselling and continued monitoring
Zone IV (scores 20–40)	16	27	17↓	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

Participants were asked a series of questions about driving under the influence of alcohol and/or other drugs. In 2016, 79% of participants reported driving a vehicle during the previous six months. Among these ($n = 73$), 30% reported driving while over the limit of alcohol in the previous six months. This is similar to the previous year (34% in 2015). Over half (55%) of participants reported recently driving soon after taking any drug (within three hours).

8 LAW ENFORCEMENT RELATED TRENDS ASSOCIATED WITH REGULAR PSYCHOSTIMULANT USE

8.1 Reports of criminal activity among RPU

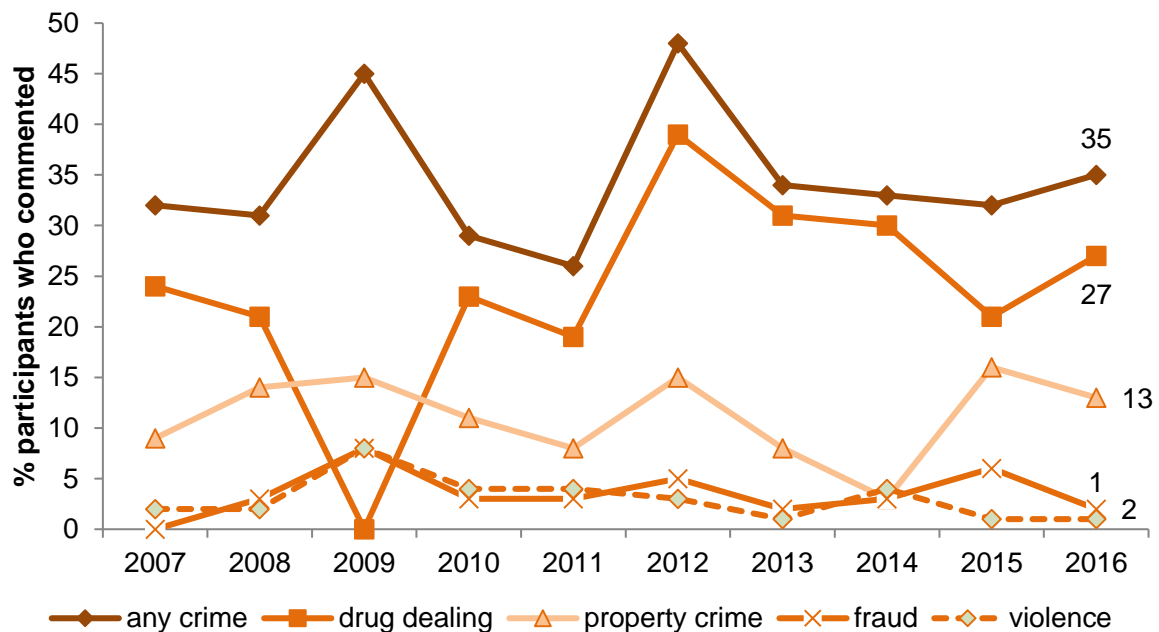
Key Points

- Prison history remained low among participants (7%).
- 11% reported being arrested in the previous six months.
- 27% reported drug dealing in the previous month.

Seven 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 (n = 10) was use/possession of drugs (six), violent crime (three), followed by property crime (two) and public order offences (two). Other offences included use or possession of weapons, dealing/trafficking, failing to appear and obstructing police (one each; multiple responses permitted).

Similar to 2015, 35% 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, 2007–16



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). The overall pattern of arrests during the 2014–15 period was similar to 2013–14, with the majority of arrests related to cannabis (59%) followed by amphetamine-type stimulants (24%). A total of 40,404 arrests were recorded, compared with 32,391 in 2013–14 (Table 44). This represented an overall increase of 25% in arrests, with greater increases in arrests relating to consumption of cocaine (66%), amphetamine type stimulants (42%) and steroids (24%). Arrests relating to provision of cocaine (90%), steroids (63%) and amphetamine-type stimulants increased (32%). There was no substantial increase in arrests for provision or consumption of opioids but arrest numbers remained small in these categories.

Substance-specific arrest data from QPS for 2015–16 were unavailable at the time of publication, but overall reporting of drug offences in Queensland for 2015–16 were approximately 10% higher than 2014–15. Drunk-driving offences were up 19% over the previous year. Males were more likely to offend than females (74% of drug offences were male) and the largest offender age group was 20–24-year-olds (20%). The 15–34 age group (most closely aligned with EDRS participants) accounted for over half (57%) of all drug offences (QPS 2016).

Table 44: Drug-related arrests by QPS by drug type, 2013–14 and 2014–15

	Consumer		Provider		Total	
	2013–14	2014–15	2013–14	2014–15	2013–14	2014–15
Cannabis	17,835	21,211	2384	2639	20,219	23,850
Amphetamine-type stimulants ^a	5958	8462	814	1071	6772	9533
Other/unknown	3458	4 690	610	658	4068	5348
Heroin/other opioids	290	284	28	29	318	313
Steroids	462	573	79	129	541	702
Cocaine	191	317	40	76	231	393
Hallucinogens	195	215	47	50	242	265
Total	28,389	35,752	4,002	4,652	32,391	40,404

^a includes amphetamine, methylamphetamine, and phenethylamines

Note: consumer=use, possession or administering for own use; provider=importation, trafficking, selling, cultivation and manufacture. Source: ACC, 2016

Cannabis accounted for the greatest proportion of drug seizures (by weight and number) in Queensland during 2014–15, followed by amphetamine-type stimulants (ATS; Table 45) and then cocaine. This pattern was similar for QPS and the Australian Federal Police (AFP). The number and weight of AFP seizures for cannabis, opioids other than heroin, cocaine, steroids and hallucinogens increased very significantly. QPS seizure numbers increased for opioids, ATS and cocaine, with greater quantities seized for ATS, steroids and cocaine.

The number and weight of ATS (excluding MDMA) precursor detections at Australian borders decreased significantly (40%) in the 2014–15 period, while the number of MDMA precursor detections hit a record high over this period.

Table 45: Queensland drug seizures by police service and drug type, 2013–14 and 2014–2015

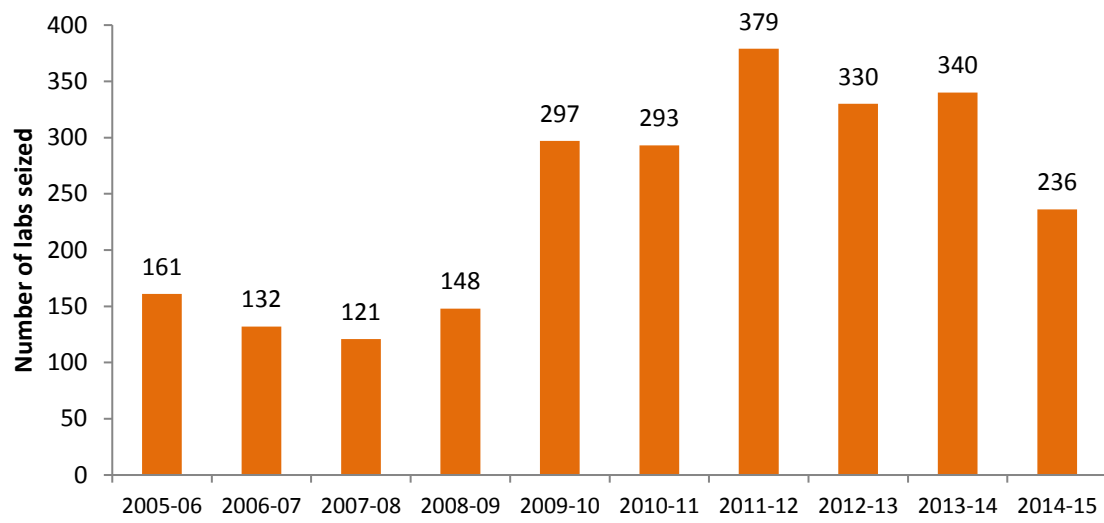
	Police force	No of seizures		Weight (grams)	
		2013–14	2014–15	2013–14	2014–15
Cannabis	QPS	15,712	17,305	913,911	818,119
	AFP	103	227	761	14,500
Amphetamine-type stimulants	QPS	4806	6268	26,263	45,545
	AFP	271	459	283,457	146,306
Heroin	QPS	191	209	1986	1226
	AFP	6	11	4232	4552
Other opioids	QPS	3	3	0	0
	AFP	5	9	218	5152
Cocaine	QPS	155	251	2809	3659
	AFP	81	164	10,992	56,741
Steroids	QPS	101	124	1881	5733
	AFP	1	12	2	10,568
Hallucinogens	QPS	29	29	2024	604
	AFP	9	31	39	742
Other/unknown drugs	QPS	836	870	59,983	281,831
	AFP	90	269	2,233,158	76,716

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, 2016

Nationally, a total of 667 clandestine labs were detected in the 2013–14 financial year (a decrease from 744 in 2013–14). In Queensland there were 236 detections (Figure 53), with 43% being amphetamine-type stimulants (excluding MDMA) labs. The number of MDMA clandestine lab detections remained low (two for Queensland). Most of the detections in Queensland were addict-based labs. Data for 2015–16 were unavailable at the time of publication.

Figure 53: Clandestine labs seized in Queensland from 2005–06 to 2014–15



Source: ACC, 2016

SPECIAL TOPICS OF INTEREST

Key Points

- 48% reported having used NPS in the last six months; most common were DMT and 2C-X
- Most sourced NPS from friends, and gave away or shared with friends
- 34% reported ever buying drugs online, with 30% doing so in the previous year.
- Dark web marketplaces were the most common online location for purchasing.
- The most common drugs purchased online were ecstasy and LSD.

9.1 New Psychoactive Substance supply and purchasing patterns

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

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

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

To address these issues, additional questions were included in the 2016 EDRS survey which examined the supply and purchasing patterns of past year NPS consumers. As outlined in Table 46 **Error! Reference source not found.**, forty percent of the national sample and nearly half (48%) of the Queensland sample reported using a NPS in the last 12 months, most commonly DMT and 2C-x. The majority of those who had used a NPS in the last 12 months nominated a friend as their main source. Smaller numbers nominated a dealer or online as their main NPS source.

Participants were asked in the last 12 months if they provided any NPS to others. Of those in Queensland who commented (n = 41), 57% reported that they did not provide any NPS to others, while 43% reported that they had provided any NPS to others; mainly to friends for free or to share (Table 46). For more detailed results (including differences in purchasing and supply patterns across NPS consumers), please refer to Sutherland 2017 (in press).

Table 46: Purchasing and supply patterns among past year NPS consumers, 2016

	National (n=795) %	QLD (n=92) %
% used NPS last 12 months	40	48
% Main NPS used last 12 months	(n=311)	(n=41)
DMT	33	34
2C-X	19	32
NBOMe	9	7
Synthetic cannabinoids	7	5
Methoxetamine	5	5
DXM	5	2
Methylone	3	5
PMA	2	0
Mephedrone	2	0
Salvia Divinorum	2	0
Mescaline	1	0
5-MeO-DMT	1	0
Other	16	12
% How obtained substance[#]	(n=312)	(n=42)
Bought it	62	62
Given for free	45	38
Exchanged for other than cash	7	2
% Main source	(n=314)	(n=44)
Friend	55	52
Acquaintance	5	5
Known dealer	11	14
Unknown dealer	5	5
Online dark net	7	11
Online surface web	1	0
Other	14	14
% Supplied NPS to others	44	43
% Who supplied NPS to^{**}	(n=138)	(n=19)
Friends	96	95

Relatives	5	0
Acquaintances	7	0
Strangers	6	0
% Method of supply*#	(n=137)	(n=19)
Gave away for free	45	26
Shared	56	63
Provided at cost price	22	11
Provided for cash profit	14	5
Exchanged	12	0

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

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

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

Source: EDRS participant interviews

9.2 Online Purchasing

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

In 2016, 34% of Queensland EDRS participants reported that they had ever purchased an illicit drug online, with 30% having done so in the previous year. This is higher than the national sample, where 18% had ever purchased online and 14% had done so in the last year, and higher than Queensland figures for 2015 (15% ever purchased and 12% in the last year; $p < 0.05$ for both, data not shown). Of those who had bought online in the last year, purchases were made between once and more than five times (Table 47).

Table 47: Number of times recently purchased illicit drugs online, 2016, National and Queensland samples

How many online purchases of illicit drugs in the past 12 months? ^a	National (n=112) %	Queensland (n=31) %
Once	32% (n=36)	29% (n=9 [^])
Twice	15% (n=17)	16% (n=5 [^])
3-5 times	23% (n=26)	13% (n=4 [^])
More than 5 times	30% (n=33)	32% (n=10 [^])

^a Of those who had ever purchased illicit drugs online

[^]Small numbers; interpret with caution

Source: EDRS participant interview

Participants were asked what proportion of their drugs were purchased online. The majority (55%) reported that less than 25% of their drugs were purchased online, with around 6% reporting that all of their drugs were purchased online. These results were similar to national figures. Results are summarised in

| Table 48.

Table 48: What proportion of drugs were purchased online, 2016

What proportion of all purchased drugs was purchased online? ^a	National (n=112) %	Queensland (n=31) %
Less than 25%	56% (n=63)	55% (n=17)
Between 25% and 49%	10% (n=11)	6% (n=2 [^])
Between 50% and 74%	13% (n=14)	10% (n=3 [^])
Between 75% and 99%	17% (n=19)	13% (n=4 [^])
All (100%)	5% (n=5)	6% (n=2 [^])

^a Of those who had ever purchased illicit drugs online

[^] Small numbers; interpret with caution

Source: EDRS participant interviews

Of those purchasing recently from the internet (n = 31), 64% reported that they were purchasing for the purposes of supplying to friends, 4% for the purposes of selling for a profit, and 7% for both supply to friends and for profit.

Purchases of illicit drugs were primarily made from either international webstores (on the 'surface web'; 21%) or dark-net marketplaces similar to the now-closed Silk Road (79%). If participants had purchased from a dark-net marketplace, they were asked to specify whether the retailer they purchased from was Australian (70%) or international (22%).

Illicit substances recently purchased online were specified, see

Table 49. Twenty-five participants reported buying a traditional illicit substance online, of which most reported this was ecstasy (52%) followed by LSD (42%) and cannabis (35%). Two participants reported purchasing an NPS online: one from the 2C-X family and one, DMT. Patterns were similar to the national cohort.

Table 49: Illicit substances reportedly purchased online recently, 2016

Online substance purchased ^a	National %	Queensland %
Traditional illicit substances	(n=91)	(n=31)
Ecstasy (any form)	51% (n=54)	52% (n=16)
LSD	41% (n=45)	42% (n=13)
Cannabis	23% (n=26)	35% (n=11)
Benzodiazepines	14% (n=15)	10% (n=3 [^])
Ketamine	10% (n=11 [^])	10% (n=3 [^])
Methamphetamine (any form)	8% (n=9 [^])	3% (n=1 [^])
Mushrooms	7% (n=8 [^])	13% (n=4 [^])
Cocaine	6% (n=7 [^])	3% (n=1 [^])
Pharmaceutical stimulants		29% (n=9 [^])
NPS illicit substances	(n=33)	(n=2) [^]
2C-X family	76% (n=25)	(n=1)
DMT	42% (n=14)	(n=1)
NBOMe	21% (n=7)	0
Mephedrone	9% (n=3 [^])	0
MXE	9% (n=3 [^])	0
Methylone	9% (n=3 [^])	0
5-MeO-DMT	6% (n=2 [^])	0

^a Of those who had ever purchased illicit drugs online;
Source: EDRS participant interviews

[^]Small numbers; interpret with caution

All EDRS participants were asked about their level of knowledge of, and familiarity with, the 'dark net' and marketplaces, such as the now-closed Silk Road. Very few participants were unaware of the dark net (2%); nearly a quarter (23%) had used dark-net marketplaces to buy drugs. Results are given in Table 50

Table 50: Familiarity with the dark net, 2016

What is your level of knowledge of the dark net?	National (n=788) %	Queensland (n=92) %
Never heard of the 'dark net'	15% (n=118)	2% (n=2)
Only heard of the 'dark net' online but never accessed it	38% (n=303)	38% (n=35)
Researched the dark net but never accessed it	8% (n=63)	13% (n=12)
Obtained drugs through a friend who purchased them from dark	13% (n=101)	9% (n=8)
Accessed dark net marketplaces but never purchased from them	12% (n=91)	15% (n=14)
Purchased drugs from 'dark net' market places	14% (n=112)	23% (n=21)

Source: EDRS participant interviews

9.3 Video gaming and gambling

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

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

Among the national sample, 64% reported playing video games in the last six months on a median of 24 days (around once a week; range 1–180 days). The Queensland sample was similar. The median time spent playing video games on a typical day was 90 minutes for the national sample but 120 minutes for Queensland (ranges from 2 minutes to 24 hours). Around half (48%) of those who had used video games in the last months had done so for an hour or less on a typical day of use. Twelve percent of Queenslanders who had played video games in the last six months believed they had an issue with video gaming (Table 51).

Participants were also asked questions around gambling. Nearly half of the national sample (42%) but only one-third of the Queensland sample (31%) had gambled, on a median of four days in the last six months (range 1–180 days). Few believed they had an issue with gambling (Table 51).

Table 51: Video gaming and gambling in the last six months, 2016

	National	QLD
Video games:	(n=795)	(n=92)
% Played in the last six months	64	63
Last six months	(n=504)	(n=57)
Median days played (range)	24 (1–180)	24 (1–180)
Median time spent playing on a typical day (mins; range)	90 (2–1440)	120 (2–720)
Amount of time spent on a typical day:		
% 1 hour or less	48	46
% More than 1 hour but less than 3 hours	40	40
% 3 hours or more	13	14
% Ever had an issue with video gaming	15	12
Gambling:	(n=795)	(n=92)
% Gambled last six months	42	31
Last six months	(n=335)	(n=28)
Median days (range)	4 (1–180)	4.5 (1–45)
% Ever had an issue with gambling	10	4

Source: EDRS participant interviews

REFERENCES

- ACIC (2016). Illicit Drug Data Report 2014/15. Canberra: Australian Criminal Intelligence 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
- American Psychiatric Association 2013. Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition), Washington, DC, American Psychiatric Association.
- 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., Roxburgh, A., Matthews, A., Bruno, R., Lenton, S., & Van Buskirk, J. (2014). The rise of new psychoactive substance use in Australia. *Drug Testing and Analysis*, 6(7-8), 846-849. doi:10.1002/dta.1626
- 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>
- Crime and Corruption Commission Queensland (2016) Illicit Drugs in Queensland: 2015-2016 Intelligence Assessment; retrieved from the CCC website 1/02/2017: <http://www.ccc.qld.gov.au/crime/how-the-ccc-fights-crime/drugs-in-queensland>
- 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.
- European Commission. (2014). Young people and drugs. Flash Eurobarometer 401. Retrieved from http://ec.europa.eu/public_opinion/flash/fl_401_en.pdf
- European Monitoring Centre for Drugs and Drug Addiction. (2011). Online sales of new psychoactive substances/'legal highs': Summary of results from the 2011 multilingual snapshots. Luxembourg: Publications Office of the European Union.

- European Monitoring Centre for Drugs and Drug Addiction. (2016a). EU Drug Markets Report. In-depth Analysis. Luxembourg: Publications Office of the European Union.
- European Monitoring Centre for Drugs and Drug Addiction. (2016b). Health responses to new psychoactive substances. Luxembourg: Publications Office of the European Union.
- European Monitoring Centre for Drugs and Drug Addiction. (2016c). The internet and drug markets. Luxembourg: Publications Office of the European Union.
- Farah, M. J., Smith, M. E., Ilieva, I., & Hamilton, R. H. (2014). Cognitive enhancement. *Wiley Interdisciplinary Reviews-Cognitive Science*, 5, 95-103.
- Grant, J., Potenza, M., Weinstein, A. & Gorelick, D. 2010. Introduction to Behavioral Addictions. *The American Journal of Drug and Alcohol Abuse*, 36, 233-241.
- Hough, M., Warburton, H., Few, B., May, T., Man, L.-H., Witton, J., & Turnbull, P. J. (2003). *A Growing Market: The Domestic Cultivation of Marijuana*. York: Joseph Rowntree Foundation.
- 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.
- Petry, N. M., Stinson, F. S. & Grant, B. F. 2005. Comorbidity of DSM-IV pathological gambling and other psychiatric disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *J Clin Psychiatry*, 66, 564-574.
- 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. (2017). Drug-related hospital stays in Australia 1993-2015. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
- Queensland Health (2016). Queensland Minimum Data Set for Needle and Syringe Programs 2015. Brisbane: State of Queensland.
- Queensland Police Service (2016). Annual Statistical Review 2015/2016. 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.
- Sim, T., Gentile, D. A., Bricolo, F., Serpelloni, G. & Gulamoydeen, F. 2012. A conceptual review of research on the pathological use of computers, video games, and the Internet. *International Journal of Mental Health and Addiction*, Epub ahead of print 13 January 2012. DOI: 10.1007/s11469-011-9369-7.
- 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.
- Sutherland, R., Barratt, M., Peacock, A., Dietze, P., Breen, C., Burns, L. & Bruno, R. 2017 (in press). New psychoactive substances: supply and purchasing patterns in Australia. *Human Psychopharmacology: Clinical and Experimental*, 10.1002/hup.2577.
- Thomas, S. A., Piterman, L. & Jackson, A. C. 2008. Problem gambling: what general practitioners need to know and do about it? *Medical Journal of Australia*, 189, 135-136.
- Widyanto, L., Griffiths, M. D. & Brunnsden, V. 2010. A psychometric comparison of the Internet Addiction Test, the Internet-Related Problem Scale, and self-diagnosis. *Cyberpsychol Behav Soc Netw*, 14, 141-9.