QUEENSLAND TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2011

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

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

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ABBREVIATIONS

ACC	Australian Crime Commission
ACS	Australian Customs Service
ACT	Australian Capital Territory
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDHA	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
ATS	amphetamine-type stimulant
ATSI	Aboriginal and Torres Strait Islander
CPR	cardiopulmonary resuscitation
DMT	dimethyltryptamine
DUMA	Drug Use Monitoring Australia
ED	emergency department
EDRS	Ecstasy and Related Drugs Reporting System
EPS	emerging psychoactive substances
GHB	gamma hydroxybutyrate acid ('fantasy')
GP	general practitioner
HPV	human papiloma virus
IDRS	Illicit Drug Reporting System
KE	key expert
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
NSP	Needle and Syringe Program
NSW	New South Wales
NT	Northern Territory
PDI	Party Drugs Initiative
PMA	paramethoxyamphetamine
QADREC	Queensland Alcohol and Drug Research and Education Centre
QLD	Queensland
QOL	quality of life
QPS	Queensland Police Service
RBT	random breath testing
ROA	route of administration
SD	standard deviation
WA	Western Australia
WHO	World Health Organization
2CB	4-bromo-2,5-dimethoxyphenethylamine
µg	microgram, 1/1000 of a milligram

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- the health and law enforcement agencies that kindly provided indicator data.

EXECUTIVE SUMMARY

The Ecstasy and Related Drugs Reporting System (EDRS) is an on-going study of regular ecstasy users and is conducted annually in the capital city of every state and territory in Australia. It is designed to identify emerging trends among a sentinel group of drug users, and to inform the health and law enforcement sectors on current drug use consumption patterns, relevant health issues and other special areas of interest.

The demographic characteristics of the 2011 sample of regular ecstasy users in Queensland were similar to previous years. Typically they were in their mid-twenties, male, heterosexual, and engaged in work and/or study. The only significant difference in the demographic characteristics of participants in 2011 and 2010 was the proportion who had completed Year 12 level of education (73% in 2011 vs 85% in 2010). All significant differences are reported at the <0.05 level.

Consumption trends

Current drug use

Despite ecstasy remaining the main drug of choice, significantly fewer participants than in 2010 identified it as their preferred drug. Compared with 2010, alcohol was significantly less likely to be identified as the drug of choice in 2011 (8% vs. 21%). Alcohol consumption in the previous six months, however, remains almost universal, and there was an increase from 2010 in the use of alcohol, along with tobacco and cannabis, in coming down from ecstasy.

The proportion of participants with a recent history of methamphetamine crystal use was significantly higher than in 2010. Recent use of cocaine was also higher among participants in 2011 than in 2010. Poly-drug use, particularly the use of ecstasy with alcohol, tobacco, and/or cannabis, remained common. A higher proportion of participants reported an injecting drug history compared with 2010.

Ecstasy use

The mean age of first ecstasy use has remained relatively stable in recent years, although the overall trend is towards younger initial use. Participants typically consumed two ecstasy pills per session once a fortnight. Approximately one-third of participants reported having recently binged on ecstasy. Ecstasy continued to be taken with other drugs; primarily alcohol, tobacco and cannabis. The same three drugs were also used to reduce the effects of, or 'come down' from, ecstasy.

Methamphetamine use

Use of all forms of methamphetamine (speed powder, base, and crystal/ice) were on the rise in 2011, with the highest rise being in the use of crystal/ice. More than half of participants (60%) had used one or more forms of methamphetamine within the last six months.

Cocaine use

More than half of participants reported recently using cocaine (52%) and most had done so within their lifetime (86%). The median quantity of cocaine used in a typical session was 0.78 grams compared with 0.5 in 2010. The median number of days of use remained stable.

Ketamine use

Whilst 36% of participants had a history of using ketamine at least once in their lifetime, recent use was reported by only four participants.

GHB use

GHB use increased in 2011, with 28% of participants having ever used GHB and 7% having used in the previous six months. Use of GHB in the past six months was occasional and amount typically used was less than in previous years.

Hallucinogen use

Use of LSD was the highest since reporting began in 2003, with 86% having ever used and 52% having used in the preceding six months. Both frequency and amount of LSD used remains generally consistent with previous years. The majority of participants (76%) had used mushrooms at least once in their lifetime, with 21% reporting use within the preceding six months.

Cannabis use

Cannabis remains one of the most consumed illicit drugs in Australia. All participants in 2011 reported some cannabis use, and 93% having used either hydro and/or bush in the last six months. The median frequency of cannabis use was approximately twice weekly. Cones were used most frequently and the median quantity of cones or joints used during the most recent session was three and one respectively.

Other drug use

Limited use of MDA was reported. Use of amyl nitrate remained stable with 22% of participants reporting use in the previous six months, with a median frequency of use of three days. Nitrous oxide was recently used by 16%, with a median frequency of use of four days. Nearly a quarter (24%) reported using heroin in their lifetime, with 7% reporting recent use. Other opioids (e.g. morphine, pethidine) were illicitly used by 18% in the previous six months.

For alcohol, the median number of days of use in the previous six months was 72 days compared with 61 days in 2010. Tobacco was used by 88% in the previous six months.

Use of anti-depressants in previous six months was predominantly licit (12%) rather than illicit (non-prescribed) (2%). Benzodiazepines were more likely to have been used illicitly (36%) than licitly (19%) in the previous six months. Main brands were Valium®, Xanax®, and Temazepam®. Illicit use of pharmaceutical stimulants significantly increased, with 63% reporting use in their lifetime and 26% in the previous six months. Use of OTC codeine was similar to 2010, with 61% reporting use in their lifetime and 49% in the previous six months.

The low use of emerging psychoactive substances was consistent with 2010.

Drug market: price, purity, availability and supply

Ecstasy market

The median price of ecstasy was consistent with the 2010 price of $25 per tablet or capsule, and $235 per gram of powder. About half of all participants described the purity of ecstasy as low, with 43% noting a decrease in purity in the previous six months. However, there is some indication that ecstasy containing reasonably high levels of MDMA has recently been available. Three-quarters of participants reported that ecstasy was easy or very easy to access.

Methamphetamine market

The cost of methamphetamine speed was stable at a median price of $200 per gram; methamphetamine base remained stable at a median price of $40 per point; and methamphetamine ice/crystal increased to a median price of $75 per point.

Most participants considered speed and base to be of medium to high purity, with 61% considering ice/crystal purity to be high. Availability of speed, base, and crystal was reported as mainly easy, and accessibility remained stable.

Cocaine market

The median price per gram of cocaine was reported to be mostly stable at $350. Current purity was rated as medium, with reports of both fluctuation (33%) and stability within the last six months. More than half of those reporting using cocaine in the previous six months found it consistently difficult to access it.

Ketamine market

Interpretation of results was limited because only three participants responded to questions on the market.

GHB market

Interpretation of results was limited because only three participants responded to questions on the market.

LSD market

The median price per tab of LSD remained stable at $20. Purity was reported to be high and consistently stable. LSD continued to be easy to obtain with little change in availability within the previous six months.

Cannabis market

Hashish and hashish oil were rarely used. There was a slight increase in the cost of bush while hydro prices remained similar to 2010. Hydro was reported to be of high strength by more than half the participants (64%); while bush was primarily described as medium strength. The strength of both forms was generally reported to be stable. More participants identified hydro as very easy or easy to obtain than bush.

Health-related trends associated with ecstasy and related drug use

In regard to accidental overdoses in the previous 12 months, 11% reported a stimulant overdose and 14% a depressant overdose. One in five had sought help about a drug-related problem from a service or health professional in the previous six months. Help was most commonly sought from a psychologist (24%) or a drug and alcohol worker (19%). Nine per cent of participants stated they were currently in drug treatment.

Alcohol was the drug most often identified as contributing to recurrent problems in four spheres: social/relationship, legal, increased risky behaviour, difficulty meeting responsibilities.

Seven out of ten participants recorded moderate to very high distress on the Kessler Psychological Distress Scale (K10). Mental health problems in the previous six months were reported by 38%, with the most common problems being depression and anxiety.

Risk behaviour

Almost one-quarter (24%) of participants reported ever injecting a drug in their lifetime, with 16% of participants injecting in the last six months. The most commonly injected drugs were amphetamine powder, methamphetamine base, and heroin. Needles were most likely to be obtained from Needle and Syringe Programs (NSP).

Just over one-third (36%) of participants responded that they had been vaccinated against hepatitis B. Within the last 12 months, 38% of participants were tested for human immunodeficiency virus (HIV) and 55% for a sexually transmitted infection (STI). Chlamydia was the most common STI among participants.

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

In the previous 12 months, 18% of participants had been arrested; and in the previous month, 26% had been involved in criminal activity (other than illicit drug use). Drug dealing was reported by 19% of participants. The majority of participants (62%) believed that police activity towards regular ecstasy users remained stable over the last six months.

Special topics of interest

Online drug activity

Two in three participants reported using the internet for drug-related activity, mostly for accessing information about drugs. Ecstasy was the drug they were most likely to be accessing information about.

Buying and selling of drugs online was only undertaken by a few participants (5% and 2% respectively). Websites, search engines and discussion forums were the most common mediums used for online drug-related activity.

For half of the participants who commented, text messaging was the preferred medium for arranging to obtain ecstasy; and just over half (57%) depended on text messaging completely or quite a lot to obtain ecstasy.

Ecstasy dependence

The majority of respondents reported no or few symptoms of dependence in relation to ecstasy use.

Sleep patterns and practices associated with drug use

Most participants rated their sleep quality as fair or better, with only a few rating it as very poor. Forty-four per cent felt that their drug use impacted negatively on their sleep.

Pleasure, happiness and quality of life scale

For overall quality of life as a whole, the mean score was 7 on a scale from 0 (very bad) to 10 (excellent). On a scale from 0 (nil) to 100 (a lot), the mean contribution to pleasure of taking drugs was 76, to happiness 65, and to quality of life 47.

1 INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is an annual, national study funded by the Australian Government Department of Health and Ageing. It is coordinated nationally by the National Drug and Alcohol Research Centre (NDARC), University of New South Wales. The Queensland component is undertaken by the Queensland Alcohol and Drug Research and Education Centre (QADREC) in the School of Population Health, University of Queensland.

QADREC 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 of the Illicit Drug Reporting System (IDRS). The PDI commenced as a national study in 2003 and was re-named the Ecstasy and Related Drugs Reporting System in 2006. The current report presents the findings of the tenth year of data collection for the EDRS in Queensland (no data was 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 over time.

The annual EDRS national, state and territory reports:

- describe the demographic characteristics of current, regular ecstasy 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
- identify emerging trends in ecstasy and related drug markets that may represent areas of research need.

2 METHODS

The EDRS uses a triangulation method to combine information collected from:

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

2.1 Survey of regular ecstasy users

The market for ecstasy (tablets that are alleged to contain 3, 4-methylenedioxymethamphetamine; MDMA) in Australia has existed for more than two decades. According to the 2010 National Drug Strategy Household Survey (NDSHS), ecstasy is the second most commonly used illicit drug alongside pain-killers/analgesics (used for non-medical purposes). In 2010, recent use of ecstasy (last 12 months) was reported by 3% of the population aged 14 years and over; this is a reduction from the peak of 3.5% in 2007.

For the purposes of the present study, the sentinel population consisted of regular users of tablets sold as 'ecstasy'. From April to June 2011, 102 regular and current ecstasy users were recruited from the greater Brisbane and Gold 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; online drug-related activity; and perceived quality of life.

2.1.1 Recruitment of participants

Participants were recruited from advertisements placed in South East Queensland street press, web sites (e.g. pillreports.ru), posters, and word of mouth.

Advertisements explained that current regular ecstasy users were being recruited to undertake a face-to-face survey of approximately 60 minutes duration, and the respondents would be reimbursed $40 for their time and expenses in completing the questionnaire. On 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
- resided in South East Queensland continuously for the past 12 months
- used ecstasy at least once a month for the past six months (six times or more).

2.1.2 Procedure

Enquiries about participating were made by telephone or email and, if the individual met the selection criteria, an interview was then scheduled at a coffee shop in one of five strategic localities. It was explained that participation was voluntary and anonymous, and information gathered would remain confidential with the de-identification of questionnaires. The nature and purpose of the study was explained to participants before consent was obtained.

2.1.3 Measures

Participants were asked a range of questions about their demographics, drug use history and characteristics of recent use – particularly ecstasy; price, purity and availability of various illicit drugs; risk behaviours; and perceptions of police activity. A dummy drug named 'canthezine' was included in the drug use section as a method of identifying over-reporting of drug use by participants. No participant identified themselves as having used canthezine.

2.1.4 Data analysis

Data were entered into an Access database and then transferred into IBM® SPSS® Statistics, version 18.0 for Windows. 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. Some significance testing was undertaken to compare differences between 2010 and 2011, and when found to be significant at the <.05 level, this was stated within the report. Otherwise, proportional differences observed between 2010 and 2011 may represent sampling variability only.

2.2 Survey of key experts

During August and September, 22 key experts who had knowledge of ecstasy users and/or the ecstasy market were recruited throughout South East Queensland. Key experts were drawn from the health sector, law enforcement/forensic sector and peers.

2.2.1 Recruitment

Key experts were recruited from appropriate organisations 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 or face-to-face in their work environment or at a convenient location. Interviews took on average 30 minutes to complete.

2.2.3 Measures

Key experts were interviewed on topics related to patterns of illicit drug use among people using ecstasy who they had contact with 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 perceptions of crime and police activity.

2.3 Other indicators

Secondary data sources from external health, research and law enforcement sources were collected and included to complement the data collected from participants and key experts. In 2011, the following data were obtained for the EDRS:

- Australian Crime Commission (ACC) – number and purity of drug seizures from Queensland Police Service and the Australian Federal Police
- Australian Customs Service (ACS) – number and weight of drug seizures
- Australian Institute of Health and Welfare (AIHW) – National Drug Strategy Household Surveys (NDSHS)
- Queensland Health – Alcohol and Drug Information Service (ADIS)
- Queensland Police Service (QPS) – clandestine laboratory seizures, drug-related arrests.

3 DEMOGRAPHICS

3.1 Overview of the EDRS sample

As in previous years, participants were typically in their mid-twenties, male, heterosexual, and engaged in work and/or study (Table 1). The only statistically significant difference between demographics details in 2011 and 2010 was for the proportion who had completed Year 12 level of education (73% vs 85% in 2010; p0<.05). The majority (81%) were born in Australia, with 6% coming from New Zealand and 5% from the United Kingdom. A total of 11 countries of origin were reported, with 3% of participants speaking a language other than English in the home.

The average weekly income was $541 (range $125–$2,692). When asked about their primary source of income during the previous month, the majority of participants (58%) said they received a wage or salary, 37% government payments, and the remaining 5% nominated other sources such as parental allowance or criminal activity.

Table 1: Participants' demographic characteristics, 2010 and 2011

	2010 (N = 101)	2011 (N = 103)
Mean age (range)	25	25 (18-43)
% Male	58	70
% English speaking background	100	97
% Aboriginal and/or Torres Strait Islander	1	-
% Sexual orientation		
Heterosexual	83	88
Gay male	7	5
Lesbian female	3	-
Bisexual	6	6
Other	1	1
% Relationship status		
Married/de facto	15	11
Regular partner	29	34
Single	55	54
Divorced/separated/widowed	2	1
% Accommodation		
Own house/flat	6	1
Rented house/flat	64	73
Parents'/family home	26	22
Boarding house/hostel	4	4
No fixed address	-	1
Education		
Mean years of school education	12	12
% Completed Year 12 or equivalent	85*	73*
% University/college qualifications	17	20
% Trade/technical qualifications	21	22
% Employment status		
Not employed	11	15
Full time	20	26
Part time/casual	18	18
Full time student	18	12
Part time student	1	-
Work and study	32	28
Self-employed	1	-
Income		
Mean weekly income	$400	$541

Source: QLD EDRS participant interviews
*Significantly different at p<0.05%.

When asked about participation in previous Illicit Drug Reporting System (IDRS) surveys, 12% responded that they had previously participated in an EDRS survey, and 3% had participated in an Injecting Drug Reporting System (IDRS) survey.

4 CONSUMPTION PATTERN RESULTS

Key Points

- Despite ecstasy remaining the main drug of choice, fewer participants than in 2010 identified it as their preferred drug ($p<0.05$).
- Compared with 2010, alcohol was less likely to be identified as the drug of choice in 2011 (8% vs. 21%; $p<0.05$). Alcohol consumption in the previous six months, however, remains almost universal, and there was an increase from 2010 in the use of alcohol, along with tobacco and cannabis, in coming down from ecstasy.
- Poly-drug use, particularly the use of ecstasy with alcohol, tobacco, and/or cannabis, remained a common occurrence.
- The proportion of participants with a recent history of methamphetamine crystal use was higher than in 2010.
- Recent use of cocaine was also higher among participants in 2011 than in 2010, as was the use of LSD.
- A higher proportion of participants reported an injecting drug history compared with 2010.

4.1 Drug use history and current drug use

4.1.1 Drug history

Table 2 shows participants' lifetime and recent use (i.e. in previous six months) of different drug types, including age of first use, route of administration (ROA), and frequency of use.

Compared to 2010, a higher percentage of respondents in 2011 reported an injecting drug history (24% vs. 17%), with two-thirds of these having injected in the previous six months. While shelving/shafting was included as a route of administration on the questionnaire, it has not been reported in Table 2 due to the small number of participants (n = 9) having ever used this method (with no occurrences in the previous six months).

Table 2: Participant drug use history, 2011

Form of drug	Mean age first used	Ever used %	Used last 6 months %	Ever injected %	Injected last 6 months %	Ever smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallowed %	Swallowed last 6 months %	Median days used last 6 months* (180 days)
Ecstasy pills	18	100	100	11	3	16	8	89	68	99	99	12
Ecstasy powder	18	46	32	6	0	8	5	36	25	40	31	3
Ecstasy capsules	20	89	57	5	0	11	6	58	40	88	53	10
Methamphetamine powder	18	82	49	20	11	27	11	52	22	71	34	3
Methamphetamine base	19	53	26	14	8	19	9	16	6	43	18	4
Methamphetamine crystal	21	52	32	14	10	43	24	16	7	28	14	5
Pharmaceutical stimulants - licit	19	2	1	0	0	0	0	0	0	2	1	n/a
Pharmaceutical stimulants - illicit	19	63	26	2	0	0	0	14	7	60	25	3
Cocaine	20	86	52	9	3	15	5	82	48	26	14	2
LSD	18	86	52	1	0	0	0	1	0	85	52	2

Source: QLD EDRS participant interviews. Note: Responses are for the name given to the drug when it was obtained (i.e. regardless of actual content).
*Median number of days calculated for those who reported using in the preceding six months.

Table 2: Participant drug use history, 2011 (cont'd)

Form of drug	Mean age first used	Ever used %	Used last 6 months %	Ever injected %	Injected last 6 months %	Ever smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallowed %	Swallowed last 6 months %	Median days used last 6 months* (180 days)
MDA	20	17	6	2	0	0	0	4	2	15	5	3
Ketamine	20	36	4	2	-	0	0	26	4	18	0	1
GHB**	22	28	7	2	0					28	7	1
Amyl nitrate	19	57	22									3
Nitrous oxide	18	55	16									3
Cannabis	15	100	93			100	92			78	27	50
Alcohol	14	100	98	0	0					99	98	19
Heroin	21	24	7	17	6	11	2	6	2	2	0	24
Methadone	24	8	2	6	1					7	2	180
Buprenorphine	28	9	8	5	5					8	5	24
Other opioids - licit	18	41	21	3	1	0	0	1	0	37	21	7
Other opioids - illicit	17	28	18	6	3	3	2	3	3	20	13	4

Source: QLD EDRS participant interviews. Note: Responses are for the name given to the drug when it was obtained (i.e. regardless of actual content).
*Median number of days calculated for those who reported using in the six months preceding the interview. ** Includes GBL, 1,4B, 9GBH, 'liquid e', and 'fantasy'.

Table 2: Participant drug use history, 2011 (cont'd)

Form of drug	Mean age first used	Ever used %	Used last 6 months %	Ever injected %	Injected last 6 months %	Ever smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallowed %	Swallowed last 6 months %	Median days used last 6 months* (180 days)
Over the counter codeine	17	61	49	0	0	1	0	1	1	59	47	8**
Tobacco	15	99	88									180
Antidepressants - licit	20	28	12	0	0			0	0	22	10	180
Anti-depressants - illicit	21	9	2	0	0			0	0	6	2	3
Benzodiazepines - licit	22	28	19	2	1	1	0	2	0	28	19	30
Benzodiazepines - illicit	20	60	36	4	0	1	0	7	2	60	36	3
Mushrooms	18	76	21	1	1	8	0	0	0	75	21	2
Over the counter stimulants	18	34	20	1	1	0	0	1	1	31	19	3
Steroids	22	4	2	2	2					3	1	1

Source: QLD EDRS participant interviews. Note: Responses are for the name given to the drug when it was obtained (i.e. regardless of actual content).
*Median number of days calculated for those who reported using in the six months preceding the interview. **Other than for pain relief.

4.1.2 Drug of choice

In 2011 ecstasy was significantly less likely to be the drug of choice compared with 2010 (p<.05), although it remained the most likely preferred drug (Table 3). This downward trend has been consistent since a high of 53% in 2003. The proportion of participants choosing cocaine increased significantly from 5% in 2010 to 13% in 2011 (p<.05).

Table 3: Drug of choice, 2010 and 2011

Drug of choice	2010 (N = 101) %	2011 (N = 103) %
Ecstasy	43*	28*
Cannabis	14	19
Cocaine	5*	13*
LSD	9	9
Speed	2	9
Alcohol	21*	8*
Heroin	-	5
Tobacco	2	2
Ice/crystal	1	2
Other	1	1

Source: QLD EDRS participant interviews
* Significant at p<0.05 level

Participants, who used a drug other than their drug of choice more frequently, generally stated this was due to availability or low purity of their favourite drug. Other reasons included price, health effects, and negative impacts on daily functioning.

4.1.2 Prevalence of ecstasy and related drug use

Within the previous month, most participants had used ecstasy and related drugs (e.g. methamphetamine, cocaine, GHB, LSD, mushrooms, etc.) either weekly or fortnightly (Table 4).

Table 4: Frequency of ecstasy and related drug use during previous month, 2011

	2011 (N = 103) %
Fortnightly	37
Weekly	34
Monthly	21
More than once per week	6
Not in the last month	2

Source: QLD EDRS participant interviews

4.2 Ecstasy use

Key Points

- The mean age of first ecstasy use has remained relatively stable in recent years, although the overall trend is towards younger initial use.
- Participants typically consumed two ecstasy pills per session once a fortnight.
- Approximately one-third of participants had recently binged on ecstasy.
- Ecstasy continued to be taken with other drugs; primarily alcohol, tobacco and cannabis. The same three drugs were also used to reduce the effects, or 'come down' from ecstasy.

4.2.1 Patterns of ecstasy use among regular ecstasy users

Patterns of ecstasy use have been relatively stable in recent years with participants typically using two tablets once a fortnight (Table 5). However, from 2010 to 2011, there was a significant increase in participants who reported using ecstasy weekly or more (from 10% to 24%; $p<0.05$), a decrease in the proportion who nominated ecstasy as their drug of choice (from 43% to 28%; $p<0.05$), and an increase in the proportion who used 'other drugs' to come down from ecstasy (from 44% to 65%; $p<0.05$).

Table 5: Patterns of ecstasy use, 2003 to 2011

	2003 N=136	2004 N=161	2005 N=101	2006 N=100	2007 N=101	2008 N=108	2009 N=88	2010 N=101	2011 N=103
Mean age first used	20.7	21.3	19.2	18.0	18.6	19.0	18.0	18.5	**18.0**
Median days used last 6 months	24	24	17	14	12	12	13	12	**12**
% Use weekly or more	24	41	31	29	24	23	31	10	**24**
Median tablets in 'typical' session	1.5	2	2	2	2	2	2	2	**2**
% Typically use >1 tablet	57	75	77	63	69	73	78	82	**84**
% Ecstasy 'favourite' drug	53	46	55	40	45	31	39	43	**28**

% Ever injected ecstasy	13	21	5	11	6	4	14	9	**11**
% Mainly swallowed ecstasy last 6 mths	91	83	92	97	87	96	87	91	**90**
% Mainly snorted ecstasy last 6 mths	5	7	5	3	10	3	9	9	**7**
% Mainly injected ecstasy last 6 mths	3	6	2	0	1	1	4	0	**1**
% Recently binged on ecstasy†	43	37	42	38	26	21	34	27	**33**
% Use other drugs in conjunction with ecstasy	85	89	92	95	96	94	97	93	**91**
% Use other drugs to 'come down' from ecstasy	79	75	81	85	86	78	75	44	**65**

Source: QLD EDRS participant interviews
† >48 hours without sleep

Participants were asked what proportion of their friends and acquaintances used ecstasy. Responses were: 41% most, 33% about half, 17% a few, and 9% all.

4.2.2 Forms and administration of ecstasy use

Pills continued to be the most used form of ecstasy in our sample, with 99% of respondents ever having consumed them and 90% using them in the previous six months. Capsules were the next most used form (57%), followed by powder (46%). Some participants commented that they converted tablets and capsules to powder for administering via snorting or injecting.

4.2.3 Poly-drug use of regular ecstasy users

Poly-drug use continued to be a common occurrence for regular ecstasy users in 2011, with 91% of the sample using other drugs with ecstasy. The drugs most commonly used with ecstasy were alcohol, tobacco, and cannabis (Table 6).

Nearly two-thirds of participants (65%) had used other drugs to come down from ecstasy. Compared to 2010, there was some evidence of less use of methamphetamine, LSD and cocaine and more use of alcohol, cannabis and tobacco for coming down from ecstasy (Table 6).

Table 6: Use of other drugs with and to come down from ecstasy, 2010 and 2011

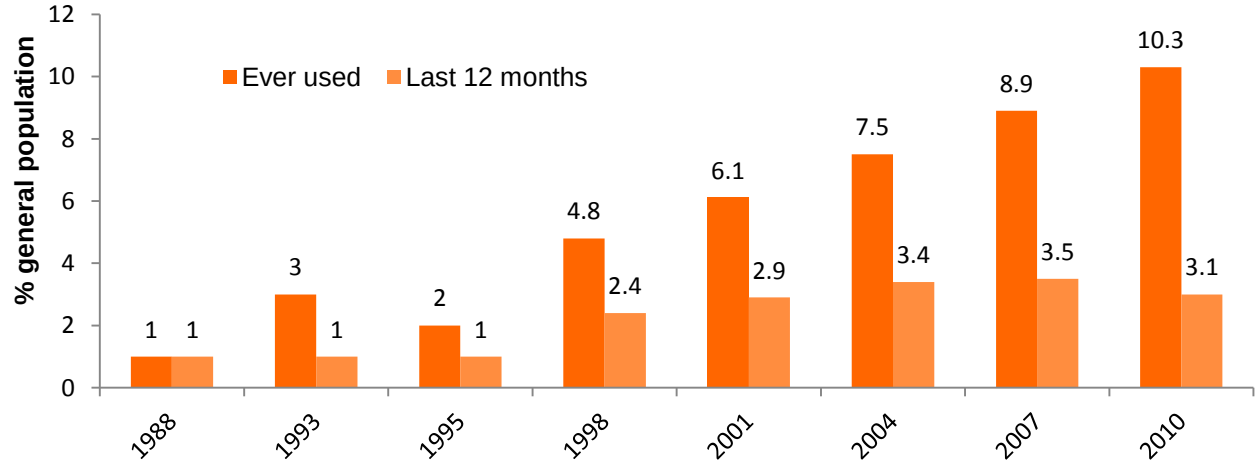
	Use with ecstasy		Use to come down from ecstasy	
	2010 %	2011 %	2010 %	2011 %
Alcohol >5 standard drinks	83	71	5	11
Tobacco	58	71	3	14
Cannabis	35	48	30	54
Speed	14	16	-	0
Alcohol <5 standard drinks	-	15	-	7
Ice/crystal	2	8	-	0
Cocaine	10	7	-	0
LSD	4	6	-	0
Base	4	3	-	0
Other	3	6	8	7

Source: QLD EDRS participant interviews

4.2.4 Ecstasy use in the general population

The 2010 National Drug Strategy Household Survey report (AIHW 2011) shows that from 2007 to 2010 the proportion having ever used ecstasy increased, but the proportion who had used ecstasy in the previous 12 months declined (Figure 1).

Figure 1: Prevalence of ecstasy use among the population aged 14 years and over in Australia, 1988 to 2010



Source: NDSHS 1988–2010 (AIHW, 2011)

4.2.5 Comments from key experts on ecstasy use

Key experts commented on the increasing popularity of alternatives that were being sold as ecstasy, stating this was due to a lower content of MDMA. The decline in availability of ecstasy tablets containing MDMA was confirmed in the finding by the Illicit Drug Group (The Buzz Forensic Chemistry Queensland Health) that MDMA detections had dropped from 1,591 in 2008 to 272 in 2011. While the most common alternatives were considered to be amphetamines and cocaine, these drugs did not necessarily have the same market appeal

as MDMA. However, some young people were reported to be unconcerned about the content of the drug they were taking.

The age of those using ecstasy was perceived to have lowered. As one key expert explained: '*More younger people 18 and 19 taking it, with most starting at high school level*'. Another key expert pointed out that ecstasy was always used with alcohol: '*It is a given that young people will mix ecstasy with alcohol – so commonplace that it doesn't come into decision-making*'.

4.3 Methamphetamine use

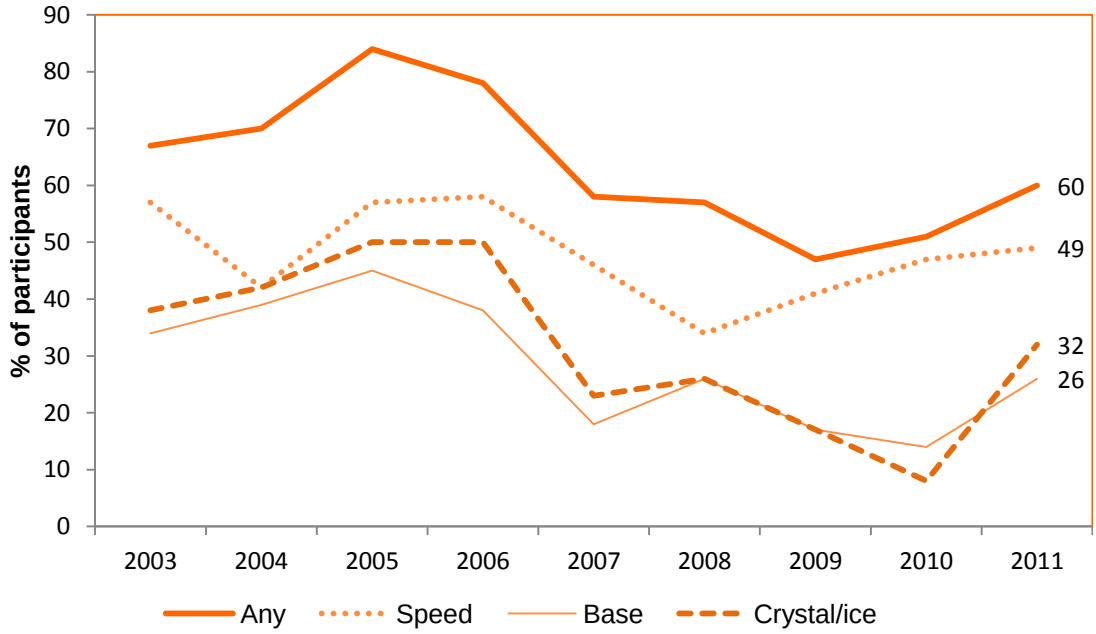
Key Points

- Use of all forms of methamphetamine (speed powder, base, and crystal/ice) increased in 2011, with the highest rise being in the use of crystal/ice.
- More than half of participants (60%) had used one or more forms of methamphetamine within the last six months.

4.3.1 Patterns of methamphetamine use among regular ecstasy users

In recent years, the use of methamphetamines has been declining following a peak in 2005 when 84% of participants reported using some form of methamphetamine in the previous six months; however in 2011 use rose to 60% from 51% in 2010 (Figure 2). All forms of methamphetamine have shown an upward trend in their use, particularly ice which rose from 8% in 2010 to 32% in 2011 ($p<.05$). The median number of days for methamphetamine use in the last six months was six (range 1–159; n = 61).

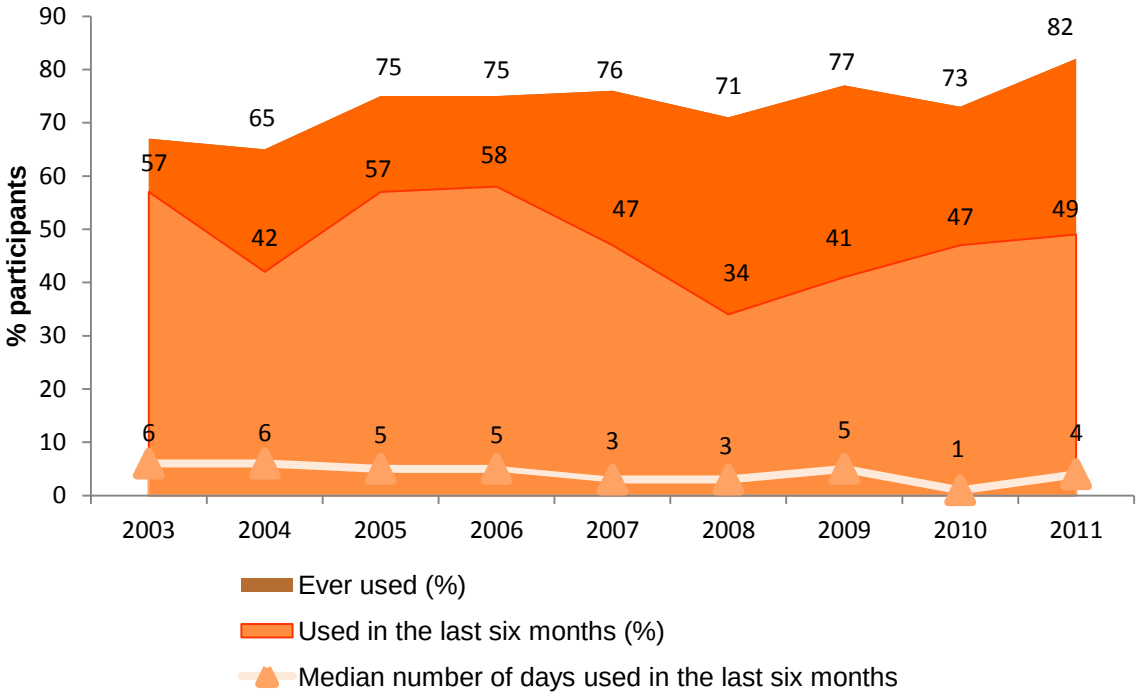
Figure 2: Patterns of methamphetamine use according to type (speed powder, base and ice/crystal) in the previous six months, 2003 to 2011



Source: QLD EDRS participant interviews

4.3.2 Speed methamphetamine use

Figure 3: Patterns of methamphetamine powder (speed) use, 2003 to 2011



Source: QLD EDRS participant interviews

In 2011, the proportion of participants who had used speed methamphetamine in their lifetime rose to a high of 82%; however, use in the previous six months was similar to 2010 with almost half of participants having also used speed (Figure 3).

Of the participants who reported using speed, the median number of days used in the last six months was four (range 1–159, n = 49). The median typical amount used in a session has not changed since 2003, although the heavy range has fluctuated between half and one gram (Table 7).

Table 7: Median grams of speed methamphetamine used in a session in the last six months, 2003 to 2011

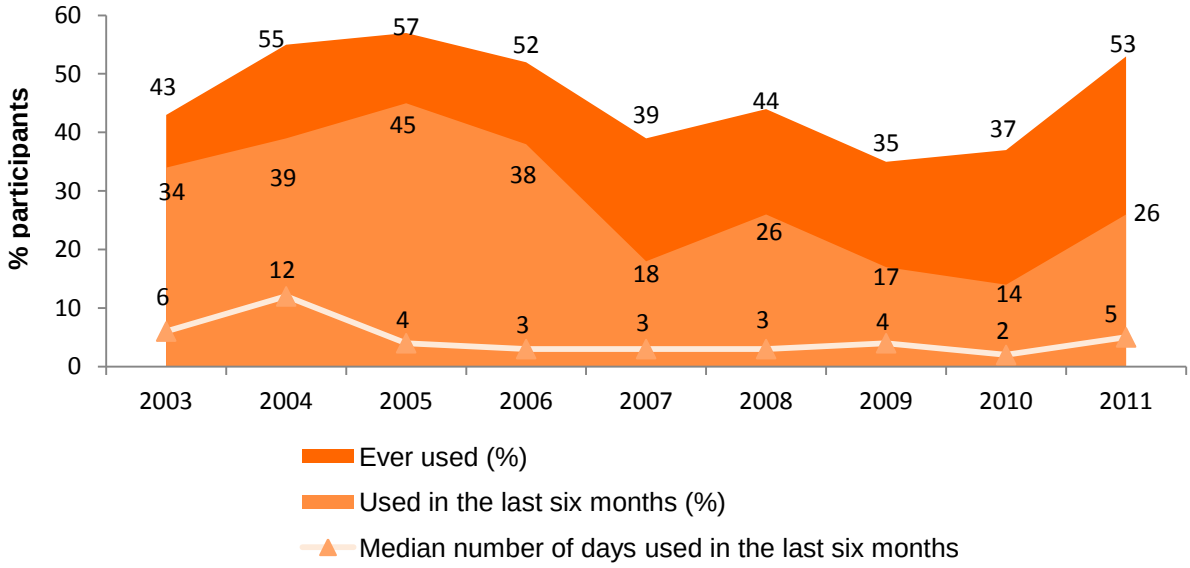
Session	2003	2004	2005	2006	2007	2008	2009	2010	2011
Typical (range)	0.5 (0.1-1.5)	0.5 (0.2-4)	0.5 (0.6-6)	0.5 (0-5)	0.5 (0.1-2)	0.5 (0.25-1.5)	0.5 (0.5-2)	0.5 (0.13-3.5)	**0.5 (0.2-2)**
Heavy (range)	1.0 (0.1-4)	1.0 (0.3-6)	1.0 (0.5-8)	0.5 (0.1-10)	0.5 (0.1-10)	1 (0.25-2)	1 (0.5-3.5)	0.63 (0.13-4)	**0.88 (0.2-3)**

Source: QLD EDRS participant interviews

4.3.3 Base methamphetamine use

In 2011, just over half of participants had used base methamphetamine in their lifetime with about a quarter of participants having used it in the preceding six months (Figure 4). The median number of days of use in the previous six months was five (range 1–72, n = 26).

Figure 4: Patterns of base methamphetamine use, 2003 to 2011



Source: QLD EDRS participant interviews

Table 8 shows that the amount of base methamphetamine used in both typical and heavy sessions in 2011 was lower than in 2010. Since 2003, amounts have varied from between one and three points for typical use, and between two and five for heavy use.

Table 8: Median points of base methamphetamine used in a session in the preceding six months, 2003 to 2011

Session	2003	2004	2005	2006	2007	2008	2009	2010	2011
Typical (range)	1 (0.1-5)	2 (0.2-20)	1 (0.5-5)	2 (0.5-10)	1 (0.5-10)	2 (0.5-6)	2 (0.5-10)	3 (0.3-8)	**2 (0.5-5)**
Heavy (range)	2 (0.1-25)	3 (0.5-40)	2 (0.5-8)	2 (0.5-10)	2 (0.5-10)	2 (0.5-10)	5 (0.5-12)	3 (0.3-14)	**2 (0.5-5)**

Source: QLD EDRS participant interviews

Seven participants also reported use in grams, consuming between 0.25 and 3 grams in a session.

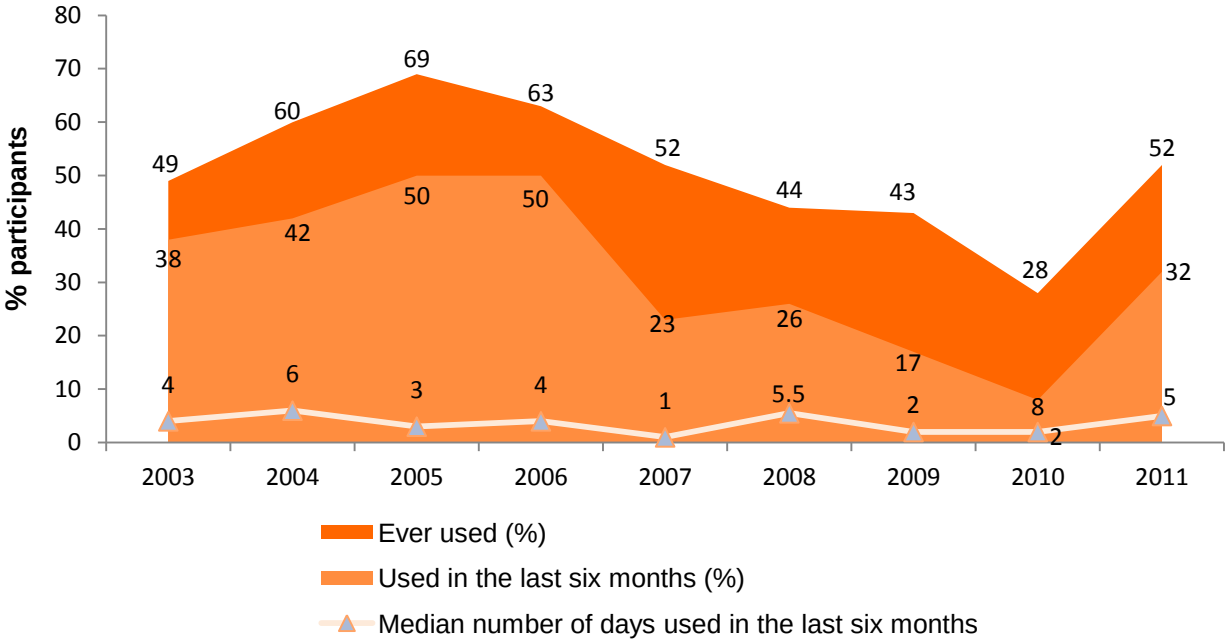
4.3.4 Crystalline methamphetamine (ice/crystal) use

Figure 5 highlights an upward return to levels of crystal methamphetamine use experienced in 2007.

The rise in use of crystal in the last six months was particularly sharp, soaring from 8% in 2010 to 32% in 2011 ($p<0.05$).

The median number of days of crystal methamphetamine used was five (range 1–159, n = 33). This was an increase from 2010 when the median was two days.

Figure 5: Patterns of crystalline methamphetamine (ice/crystal) use, 2003 to 2011



Source: QLD EDRS participant interviews

The typical amounts consumed in a session have remained similar to recent years and are shown in Table 9. While crystal methamphetamine was predominantly reported in points, participants also reported use in grams, with an average use of 0.5 grams used in a session (range 0.25–3 grams; n =25).

Table 9: Median points of crystalline methamphetamine used in a session in the preceding six months, 2003 to 2011

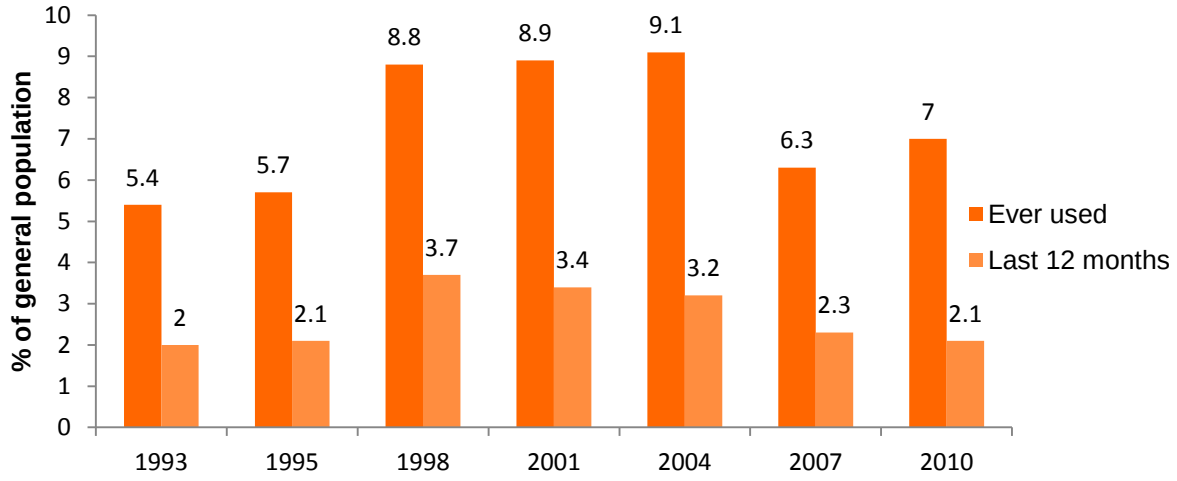
Session	2003	2004	2005	2006	2007	2008	2009	2010	2011
Typical (range)	1.0 (0.3-4)	1.5 (0.2-10)	1.0 (0.3-8)	2.0 (0.1-5)	1.3 (0.5-5)	1.5 (0.25-7)	2.0 (0.5-5)	2.0 (1-5)	**2.0 (1-5)**
Heavy (range)	1.0 (0.3-5)	3.0 (0.3-30)	2.0 (0.3-10)	2.0 (0.2-8)	1.5 (0.5-10)	2.0 (0.25-7)	5.0 (1-20)	2.0 (1-4)	**2.0 (0.5-10)**

Source: QLD EDRS participant interviews

4.3.5 Prevalence of methamphetamine use in the general population

According to the 2010 National Drug Strategy Household Survey report (AIHW, 2011), methamphetamine use in the previous 12 months has slightly declined from 2007 to 2010 in the general population of those 14 years and older (Figure 6).

Figure 6: Prevalence of meth/amphetamine use among the Australian population aged 14 years and over, 1993 to 2010



Source: NDSHS 1988–2010 (AIHW, 2011)

4.3.6 Comments from key experts on methamphetamine use

Overall, key experts tended to report stability of methamphetamine use but some noted the increase in crystal use. The increase in higher end forms of methamphetamines was confirmed by analysis of seizures by the Illicit Drug Group, Forensic Chemistry, Queensland Health. It was also observed that there was a '*young crowd (18–25) who are not chronic users [of methamphetamines], and tend to smoke more than inject*'. Their speed use was attributed in part to the decrease in availability of ecstasy. One key expert noted that '*consistently more males than females use methamphetamines – about three to one*'. (No significant difference was found in our sample.)

4.4 Cocaine use

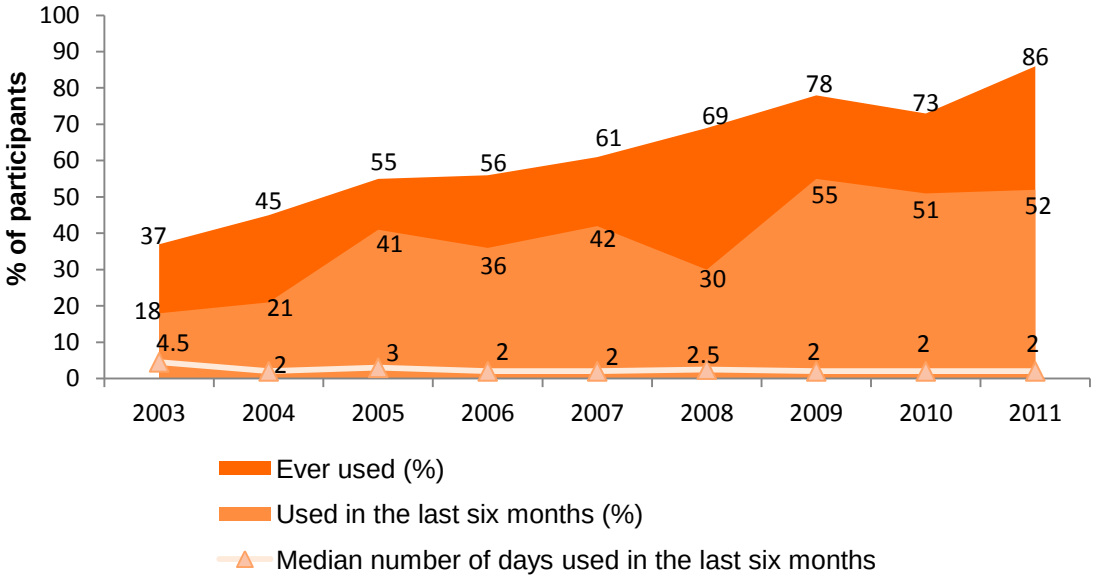
Key Points

- More than half of participants reported recently using cocaine (52%) and most had done so within their lifetime (86%).
- The median quantity of cocaine used in a typical session rose from 0.5 to 0.78 grams. The median number of days of use remained stable.

4.4.1 Patterns of cocaine use among regular ecstasy users

The use of cocaine within a lifetime increased from 37% in 2003 to a high of 86% in 2011. Reported use in last six months increased from 18% in 2003 to 52% in 2011 ($p<0.05$), with a peak of 55% recorded in 2009 (Figure 7).

Figure 7: Patterns of cocaine use, 2003 to 2011



Source: QLD EDRS participant interviews

Table 10 shows the amount in grams of cocaine that participants reported using in typical and heavy sessions. Participants also reported using an average of two lines per session. The median number of days of cocaine use within the last six months was two (range 1–80; n = 52).

Table 10: Median grams of cocaine used in a session in the preceding six months, 2003 to 2011

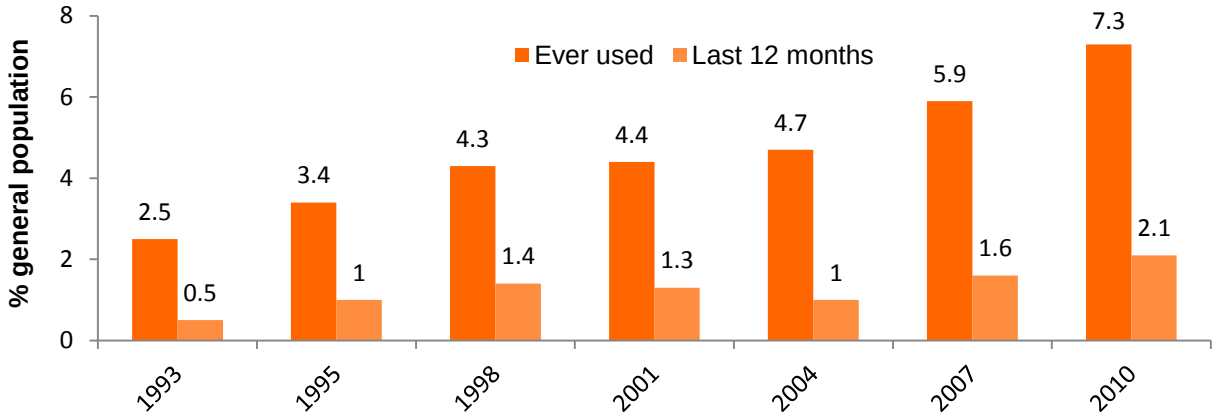
Session	2003	2004	2005	2006	2007	2008	2009	2010	2011
Typical (range)	0.5 (0.3-2)	0.5 (0.1-3.5)	0.5 (0.1-4)	0.5 (0.1-4)	0.5 (0.1-3)	0.5 (0.08-3)	0.5 (0.1-2)	0.5 (0.17-2)	**0.78 (0.2-6)**
Heavy (range)	1.0 (0.3-7)	1.0 (0.2-10)	1.0 (0.1-4)	0.7 (0.1-7)	0.5 (0.1-5)	1.0 (0.08-9)	1.0 (0.1-4)	0.5 (0.17-4)	**1.0 (0.25-6)**

Source: QLD EDRS participant interviews

4.4.2 Prevalence of cocaine use in the general population

According to the 2010 National Drug Strategy Household Survey report (AIHW, 2011), there is an upward trend in cocaine use within the Australian population aged over 14 years (Figure 8).

Figure 8: Prevalence of cocaine use among the Australian population aged 14 years and over, 1993 to 2010



Source: 2010 NDSHS (AIHW, 2011)

4.4.3 Comments from key experts about cocaine use

Key experts reported an increase in cocaine use overall. It was observed that, for some young people, cocaine use was viewed as a 'rite of passage' and that the increase was more in those having tried cocaine than an increase in regular use. Use of cocaine was predominantly seen as opportunistic and not as a primary drug.

4.5 Ketamine use

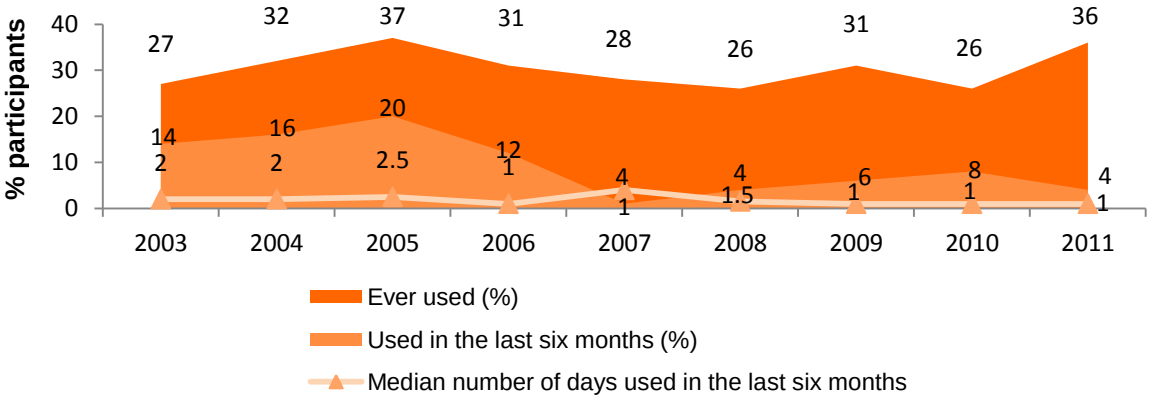
Key Points

- Whilst 36% of participants had a history of using ketamine at least once in their lifetime, recent use was reported by only four participants.

4.5.1 Patterns of ketamine use among regular ecstasy users

Figure 9 shows that while there was an increase in the number of participants reporting use of ketamine in their lifetime (36%), there was a reduction from 2010 with respect to recent use. The median number of days of use has remained consistent since 2009 at one day (maximum use was two days).

Figure 9: Patterns of ketamine use, 2003 to 2011



Source: QLD EDRS participant interviews

Although participants who used ketamine used it only once or twice in the preceding six months, the two participants who commented on amount used had consumed relatively high doses of between three and four bumps in a session.

4.5.2 Ketamine use in the general population

According to the 2010 National Household Drug Strategy Household Survey report (AIHW, 2011), the use of ketamine has remained relatively stable since 2004, with 2% of the national population (over 14 years of age) reporting its use in the previous 12 months.

4.5.3 Comments from key experts about ketamine use

Ketamine was considered to be used by a fairly stable sub-group but otherwise use appeared to be only occasional and less than in previous years. It was reported that when ketamine comes on the market it is distributed very quickly. One key expert reported that a ketamine analogue, methoxetamine (MXE), was being passed off as ketamine.

4.6 GHB use

Key Points

- GHB use increased in 2011, with 28% of participants having ever used GHB and 7% having used in the previous six months.
- Use of GHB in the past six months was only occasional and amount typically used was less than in previous years.

4.6.1 Patterns of GHB use among regular ecstasy users

In 2011, 28% of participants reported ever having used GHB/liquid E/fantasy, with 7% having used in the previous six months. This is higher than in 2010 when 10% of participants reported ever having used, with 2% having used in the previous six months. Given the low numbers, however, meaningful interpretation of the results is not possible.

The median number of days of GHB use in the preceding six months was one (range 1–6; n = 7). This was similar to previous years where one to four days were reported (except for 2010 when an anomalous number of 49.5 days was reported). Table 11 depicts the amounts of GHB used in both a typical and heavy session. The 2011 data is based on responses from five participants.

Table 11: Median millilitres of GHB used in a session in the last six months, 2003 to 2011

GHB	2003	2004	2005	2006	2007	2008	2009	2010	2011
Typical (range)	4.0 (2-10)	4.0 (0.5-100)	7.5 (1-25)	3.5 (2.6-5)	3.3 (1.5-5)	3.0* (3-3)	5.0* (4-6)	5.25 (2.5-8)	**2.5** (0.5-10)**
Heavy (range)	6.0 (5-40)	8.8 (0.5-100)	7.5 (2-40)	5.0 (5-15)	5.0 (5-7)	3.0* (3-3)	13.0* (5-20)	21.5 (8-35)	**5.0** (0.5-12)**

Source: QLD EDRS participant interviews
* based on responses of one participant
**based on responses of five participants

4.6.2 GHB use in the general population

According to the 2010 National Household Drug Strategy Household Survey report (AIHW, 2011), the use of GHB has remained stable since 2004, with 0.1% of both the national and Queensland population (over 14 years of age) reporting its use in the previous 12 months.

4.6.3 Comments from key experts about GHB use

Some key experts reported a rise in GHB, LHB, and 1,4-butanediol, particularly in the Gold Coast region. Key experts in other regions reported no change to the occasional use that has been occurring over the last few years. One key expert noted a rise in use of GHB by young females: '*two to three years ago it was mainly males who were into body building who used GHB, now more females in the younger 18 to 25 years age group*'. Another key expert reported that use of GBL was more common than GHB.

4.7 Hallucinogen use

Key Points

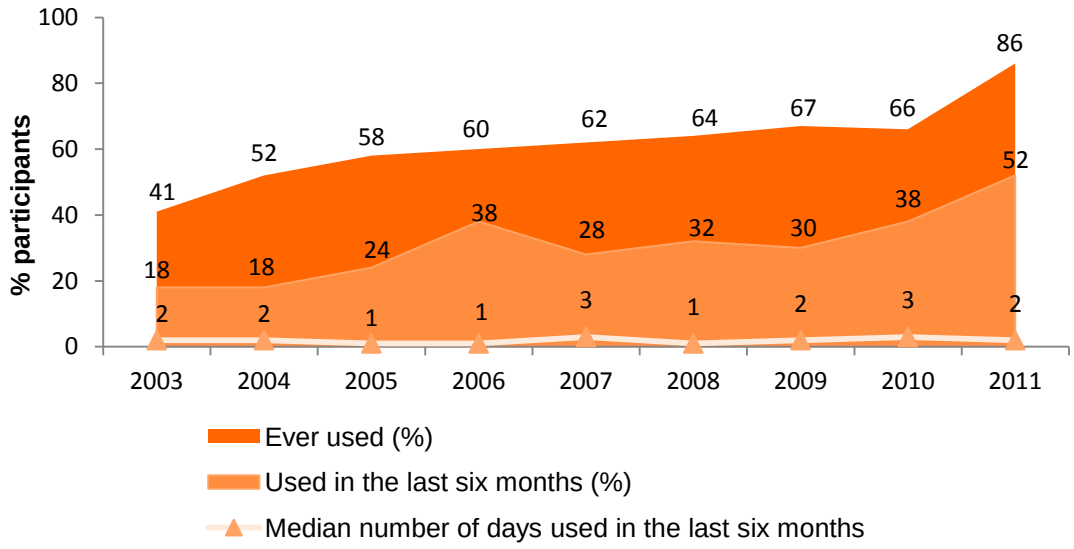
- Highest use of LSD since reporting began in 2003, with 86% having ever used and 52% having used in the preceding six months. Both frequency and amount used remains generally consistent with previous years.
- The majority of participants (76%) had used mushrooms within their lifetime, with 21% reporting use within the preceding six months.

Participants were questioned about their use of LSD and mushrooms.

4.7.1 Patterns of LSD use among regular ecstasy users

In 2011, more than half the participants (52%) had used LSD in the last six months compared with 38% in 2010 (Figure 10). The median number of days of LSD use in the last six months was two (range 1–72; n = 53).

Figure 10: Patterns of LSD use, 2003 to 2011



Source: QLD EDRS participant interviews

Since 2003, the typical amount of LSD used in a session has remained constant at one tab, while the amount used in a heavy session has fluctuated between one and two tabs (Table 12).

Table 12: Median tabs of LSD used in a session in the last six months, 2003 to 2011

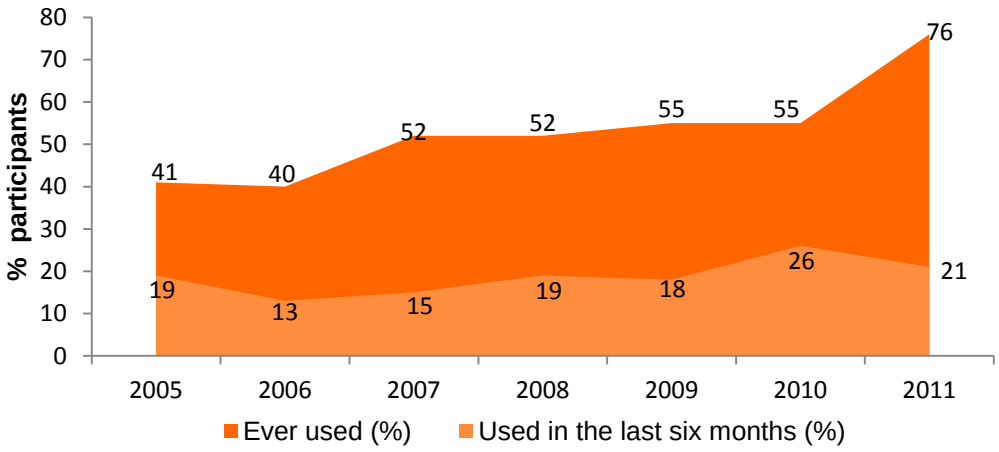
LSD	2003	2004	2005	2006	2007	2008	2009	2010	2011
Typical (range)	1.0 (0.5–3)	1.0 (0.5–4)	1.0 (0.3–3)	1.3 (1–1.5)	1.0 (0.5–5)	1.0 (0.5–3.5)	1.0 (0.5–4)	1.0 (1–5)	**1.0 (0.5–3)**
Heavy (range)	2.0 (1–5)	1.5 (0.5–4)	1.0 (0.5–4)	1.3 (1–1.5)	1.0 (0.5–6)	1.0 (0.5–4)	1.0 (1–4)	2.0 (1–11)	**1.0 (0.5–5)**

Source: QLD EDRS participant interviews

4.7.2 Mushroom use

In 2011, three-quarters of participants had a history of consuming mushrooms at least once during their lifetime (76% vs 55% in 2010) with 21% having used them in the last six months (Figure 11). Compared to previous years, a greater proportion of participants had used mushrooms in their lifetime. However, compared to 2010, recent use had remained stable. The median number of days for mushroom use in the preceding six months was three (range 1–6; n = 22).

Figure 11: Patterns of mushroom use, 2005 to 2011



Source: QLD EDRS participant interviews

4.7.3 Hallucinogen use in the general population

Findings from the 2010 National Drug Strategy Household Survey show that 8.8% of the population over fourteen years of age had ever used hallucinogens, and 1.4% of the population had consumed them in the previous 12 months which is a statistically significant rise from 0.6% in 2007 (AIHW, 2011).

4.7.4 Comments from key experts about hallucinogen use use

Key experts noted the increasing trend in LSD use within the general population, and one key expert reported that this was particularly noticeable amongst males in the 17–19 age group. LSD was reported to usually be in the traditional form of impregnated cardboard. Key

experts considered LSD to generally be a secondary drug rather than the primary drug used. Affordability and availability were thought to be the drivers for the increase in use.

An increase in the use of mushrooms was particularly noticeable at the beginning of 2011, and this was thought to be linked to ideal growing conditions. Key experts also reported hearing about '*some bad trips'.*

4.8 Cannabis use

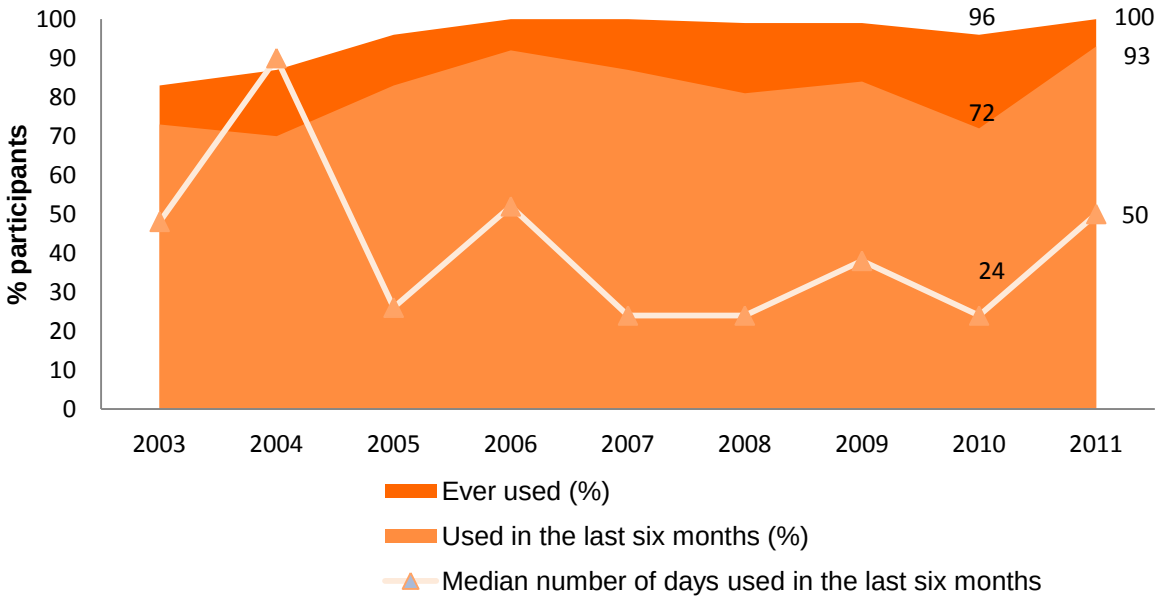
Key Points

- Cannabis remains one of the most consumed illicit drugs in Australia with all Queensland participants in 2011 having a history of its use, and 93% having used either hydro and/or bush in the last six months.
- The median frequency of cannabis use was approximately twice weekly. Cones were used most frequently and the median quantity of cones or joints used during the most recent session was three and one respectively.

4.8.1 Patterns of cannabis use among regular ecstasy users

In 2011, there was an increase in overall use from 2010. All participants reported use of cannabis at least once in their lifetime, and 93% reported its use in the last six months (Figure 12), representing a significant increase of recent use since 2010 ($p<0.05$). The median number of days of use was 50 (range 1–180; n = 94).

Figure 12: Patterns of cannabis use, 2003 to 2011



Source: QLD EDRS participant interviews

Frequency of use has fluctuated since 2003 with more frequent use in 2011 than in 2010 (Table 13).

Table 13: Frequency of cannabis use in the last six months, 2003 to 2011

	2003 (n=99) %	2004 (n=112) %	2005 (n=84) %	2006 (n=92) %	2007 (n=88) %	2008 (n=87) %	2009 (n=74) %	2010 (n=73) %	2011 (n=101) %
Daily (180 days)	32	38	13	23	21	22	24	14	**20**
More than weekly (25 to 179 days)	28	33	39	35	26	23	28	29	**33**
Weekly (24 days)	6	4	0	1	7	12	8	14	**6**
Less than weekly (1-25 days)	34	25	48	42	46	44	39	44	**41**

Source: QLD EDRS participant interviews
Note: Based on participants who used

In 2011, of those who had used cannabis in the previous six months, just over a third (36%) used joints the most recent time, one participant used a vaporiser, and the remainder used cones.

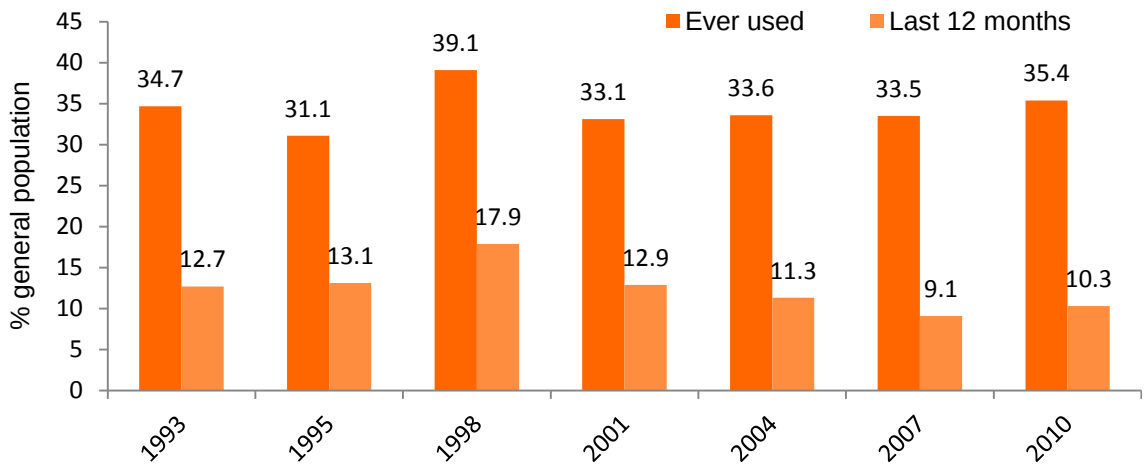
Participants used a median of three cones (range 1–15; n = 49), or a median of one joint (range 0.3–10; n = 32) the last time they used cannabis.

For participants who reported daily consumption of cannabis, cones were primarily used, with a median of five cones (range 1–15; n = 13) or a median of one joint (range 0.5–2; n = 4) used in the most recent session.

4.8.2 Cannabis use in the general population

Findings from the 2010 National Drug Strategy Household Survey (AIHW, 2011) show that nationally 35% of people aged 14 or older had used cannabis in their lifetime, and that 10% had used cannabis within the previous 12 months (Figure 13). These findings were similar to survey findings for 2004 and 2007. Within Queensland 11% of the population fourteen years and older had used cannabis in the previous 12 months.

Figure 13: Prevalence of cannabis use among the Australian population aged 14 years and over, 1993 to 2010



Source: NDSHS 1993–2011 (AIHW, 2011)

4.8.5 Comments from key experts about cannabis use

Key experts reported that use of cannabis was stable, but regular ecstasy users did not necessarily use cannabis. Hydro was observed to be more popular than bush and this was considered to be linked to continuity of supply. The availability of bush is more seasonal so the consistent availability of hydro makes it appealing, particularly to young people. The most common method of use reported was bongs/cones or joints. Use of synthetic cannabis (e.g. 'kronic') was reported as having been common but had since faded.

4.9 Other drugs use

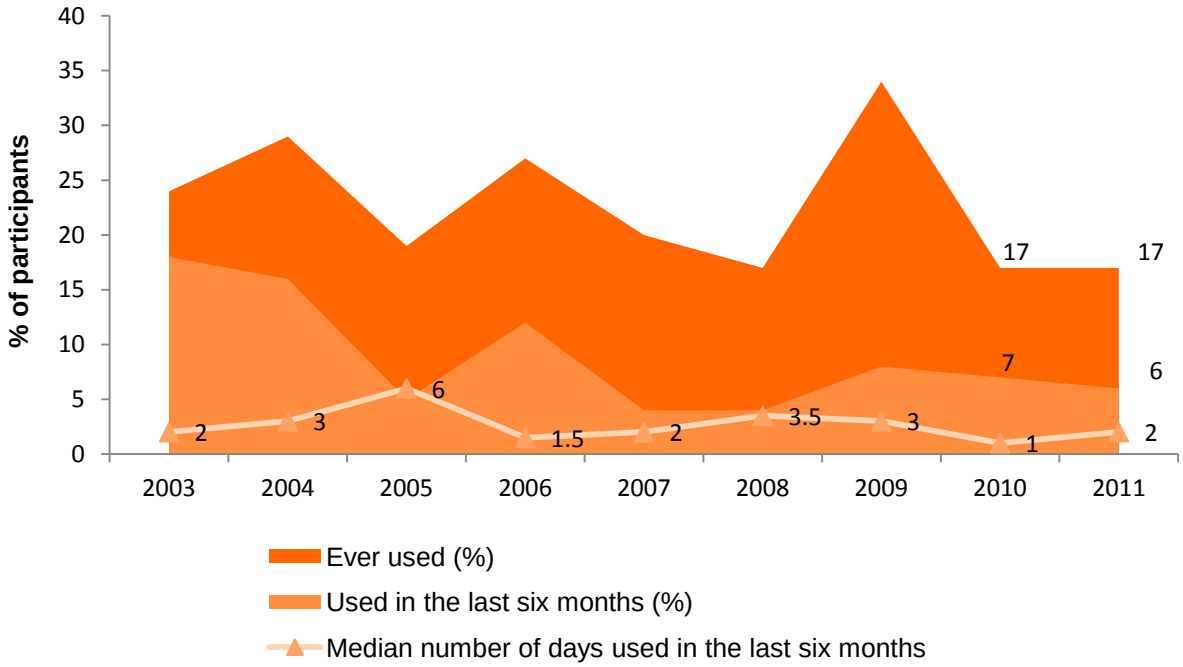
Key Points

- Limited use of MDA.
- The median number of days of alcohol consumption was 72 days compared with 61 days in 2010.
- 88% of participants had used tobacco in the previous six months, with 53% reporting daily use.
- Use of antidepressants in previous six months was predominantly licit (12%) rather than illicit (2%).
- Benzodiazepines were more likely to have been used illicitly (36%) than licitly (19%) in the previous six months. Main brands were Valium®, Xanax®, and Temazepam®.
- Use of amyl nitrate remained stable with 22% of participants reporting use in the previous six months, with a median frequency of use of three days.
- 16% reported recent use of nitrous oxide. Median frequency over previous six months was four days.
- 7% reported recent use of heroin, and 24% reported having used heroin in their lifetime.
- 18% had illicitly used other opioids (e.g. morphine, pethidine) in the previous six months.
- Illicit use of pharmaceutical stimulants significantly increased, with 63% reporting use in their lifetime and 26% in the previous six months.
- Use of OTC codeine was similar to 2010, with 61% reporting use in their lifetime and 49% in the previous six months.
- Low use of emerging psychoactive substances was consistent with 2010.

4.9.1 MDA use

Figure 14 shows that in 2011 the use of MDA in the previous six months was similar to 2010. The median number of days of use was two days (range 1–4; n = 5) up from one in 2010. No data was available for quantity of caps used in a session in 2011.

Figure 14: Patterns of MDA use, 2003 to 2011

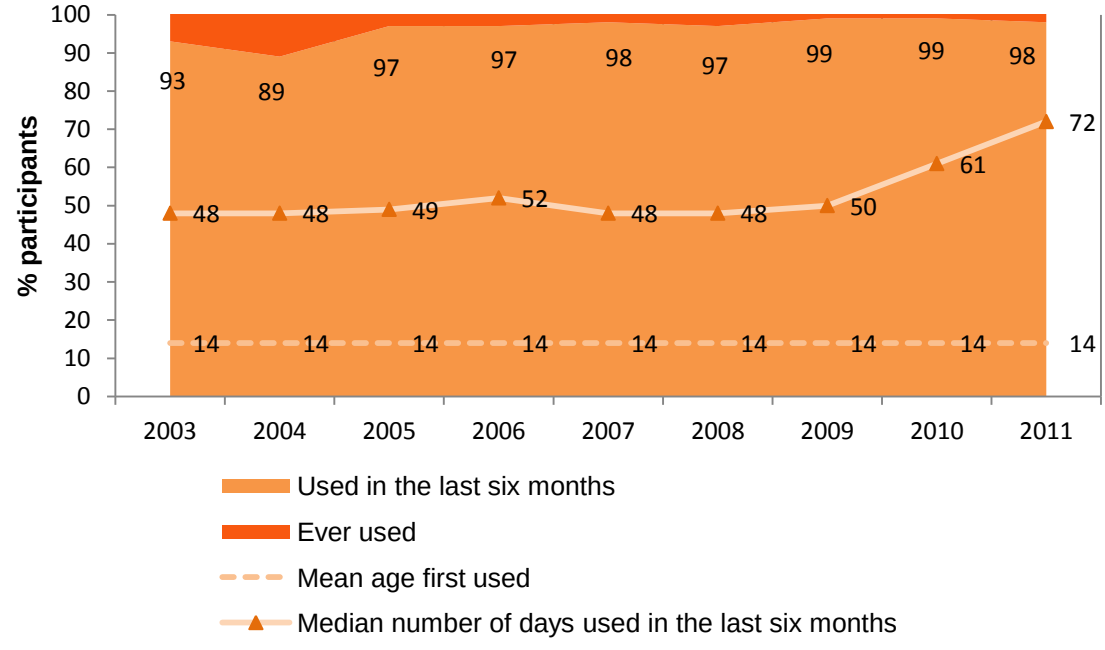


Source: QLD EDRS participant interviews

4.9.2 Alcohol

In recent years, the consumption of alcohol in the previous six months has remained relatively constant (Figure 15). Of those who had consumed alcohol in the last six months, the median number of days of consumption was 72 days in 2011 (range 3–180; n = 100) compared with 61 days in 2010.

Figure 15: Patterns of alcohol use, 2003 to 2011

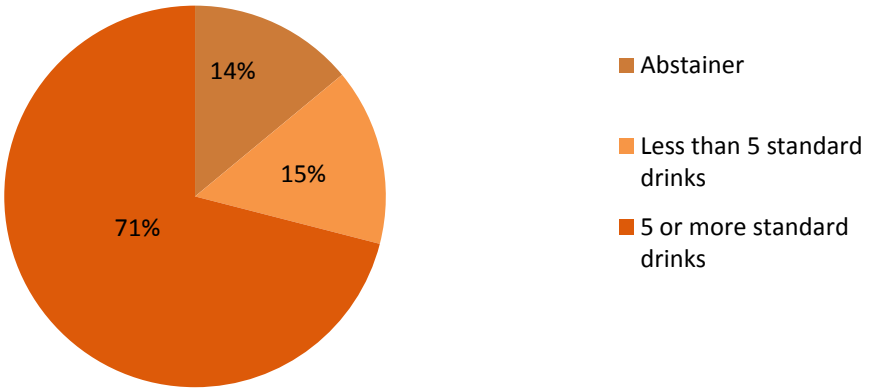


Source: QLD EDRS participant interviews

4.9.2. Combined alcohol and ecstasy use

Most participants (86%) drank alcohol while using ecstasy. Like the previous year, the great majority of participants reported drinking five or more standard drinks (71% in 2011 compared with 82% in 2010) (Figure 16).

Figure 16: Alcohol consumption during ecstasy use, 2011



Source: QLD EDRS participant interviews

Alcohol was also used by 18% of participants to 'come down' from ecstasy, and for 11% of participants the amount drunk was five or more standard drinks.

Alcohol use in the general population

According to the 2010 National Drug Strategy Household Survey report (AIHW, 2011), in 2010 there was a decrease in the frequency of alcohol consumption within the population aged fourteen years and over, with daily use dropping from 8.1% to 7.2% (Table 14).

Table 14: Alcohol drinking status of the Australian population 14 years and older (%), 1991 to 2010

	1991	1993	1995	1998	2001	2004	2007	2010
Daily	10.2	8.5	8.8	8.5	8.3	8.9	8.1	7.2
Weekly	41.0	39.9	35.2	40.1	39.5	41.2	41.3	39.5
Less than weekly	30.4	29.5	34.3	31.9	34.6	33.5	33.5	33.8
Ex-drinker	12.0	9.0	9.5	10.0	8.0	7.1	7.0	7.4
Never a full serve	6.5	13.0	12.2	9.4	9.6	9.3	10.1	12.1

Source: NDSHS 1991–2010 (AIHW 2011)

Comments from key experts about alcohol use

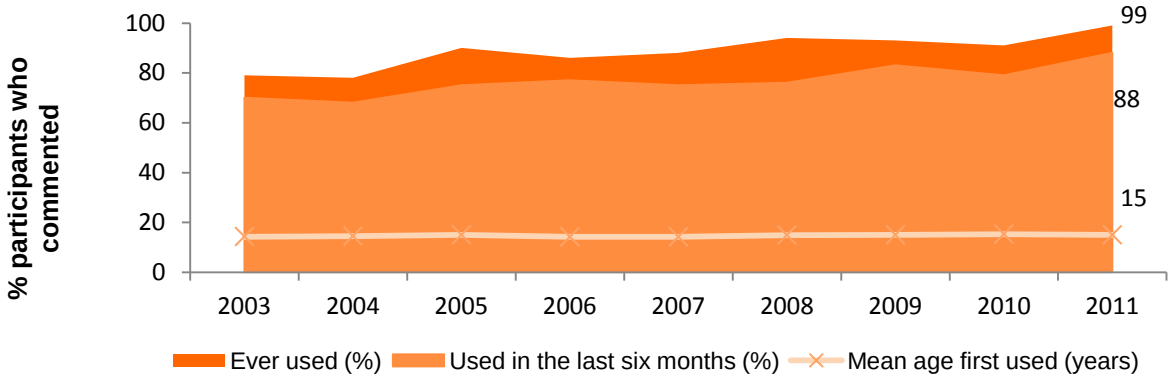
Key experts voiced their concern about the large quantities of alcohol commonly consumed in a session, which could be more than 20 standard drinks. As one peer key expert reported, '*People go out to get wasted on the weekend – no in between*'. Intervention was seen as problematic, particularly among young people who considered 'binge' drinking on the weekend as normal. Key experts also regarded the mixing of large quantities of alcohol with pills as highly problematic, with the most common combination being benzodiazepines and alcohol. Key experts noted there was no concern among users over the possible interaction

between the content of pills taken and alcohol. They also considered that alcohol consumption often exacerbated social problems and contributed to incidences of violence and accidents. One key expert who commented on the high levels of depression amongst clients said it was difficult to untangle whether clients were '*depressed because of high alcohol intake; or depressed, and therefore take alcohol and pills to make them feel better*'.

4.9.3 Tobacco

In 2011, tobacco use was similar to 2010: 99% of participants had used tobacco in their lifetime, and 88% reported use in the previous six months. The median number of days of tobacco use was 180 (range 1–180; n = 91). The average age for commencing tobacco use was 15 (Figure 17).

Figure 17: Patterns of tobacco use, 2003 to 2011



Source: QLD EDRS participant interviews

Recent daily use of tobacco was reported by 53% of participants. Forty-two per cent of female participants reported smoking every day in the preceding six months compared with 58% of males.

Seventy-one per cent of participants reported combined use of tobacco and ecstasy in the previous six months, and 14% stated they had used tobacco to 'come down' from ecstasy.

Heavy Smoking Index nicotine dependence

For the first time in 2011, participants who smoked daily (n = 53) were asked two questions from the Fagerstrom test for nicotine dependence, known as the Heavy Smoking Index (HSI). These questions were '*How soon after walking do you smoke your first cigarette*?' and *'How many cigarettes a day do you smoke*?'. The responses were then scored between zero and six. A score of zero is 'no dependence', 1–2 'very low dependence', 3 'low to moderate dependence', 4 'moderate dependence' and 5 or above 'high dependence' (Heatherton, Kozlowski, Frecher, Rickert, & Robinson, 1989).

As seen in Table 15, a fifth (21%) of participants, who identified as daily smokers, smoked their first cigarette within five minutes of waking and 38% between 5 to 30 mins of waking. Nearly half reported smoking 10 or fewer cigarettes in a day. The mean Heavy Smoking Index score was 2.3 (Table 16). Eight per cent of daily smokers scored five or above indicating high nicotine dependence.

Table 15: Daily smoking behaviour, 2011

	2011 (n = 53) %
'How soon after waking do you smoke your first cigarette?'	
Within 5 mins	21
5-30 mins	38
31-60 mins	25
60+ mins	17
Number of cigarettes smoked daily	
10 or fewer	47
11-20	38
21-30	13
31 or more	2

Source: QLD EDRS participant interviews

Table 16: Nicotine dependence, 2011

	2011 (n = 53) %
None	13
Very low	45
Low to moderate	19
Moderate	20
High	8
Mean score	**2.3**

Source: QLD EDRS participant interviews

Tobacco use in the general Australian population

Findings from the 2010 National Drug Strategy Household Survey (AIHW, 2011) revealed a continued decline in tobacco use among those aged 14 and above, with daily use reducing from 16.6 in 2007 to 15.1 in 2010 (Table 17). The proportion having never smoked has been steadily increasing (i.e. from 49% in 1991 to 57.8% in 2010).

Table 17: Smoking status, proportion of the Australian population 14 years and older, 1991 to 2010

	1991	1993	1995	1998	2001	2004	2007	2010
Daily	24.3	25.0	23.8	21.8	19.5	17.4	16.6	15.1
Weekly	2.8	2.3	1.6	1.8	1.6	1.6	1.3	1.5
Less than weekly	2.4	1.8	1.8	1.3	2.0	1.6	1.5	1.4
Ex-smoker*	21.4	21.7	20.2	25.9	26.2	26.4	25.1	24.1
Never smoked**	49.0	49.1	52.6	49.2	50.6	52.9	55.4	57.8

Source: NDSHS (AIHW, 2011)
* smoked at least 100 cigarettes in lifetime and no longer smoke
** never smoked more than 100 cigarettes in lifetime

4.9.4 Antidepressants

In 2011, 34% of participants had used antidepressants (licit or illicit) in their lifetime, with 13% having used them in the previous six months. The median number of days used in the previous six months was 180, representing daily use (range 3–180; n = 13).

With licit antidepressants, 28% of participants had used them in their lifetime, and 12% had used them in the previous six months. The main brands used recently were Cymbalta®, Effexor®, Zoloft® and Prozac®. The median age of first use of licit anti-depressants was 19 years (range 10–35 years; n = 29).

The illicit (non-prescribed) lifetime use of antidepressants was reported among 9% of participants, and only two participants had used them in the previous six months. The median age of first use of illicit antidepressants was 18 years (range 15–31; n = 9).

4.9.5 Benzodiazepines

In 2011, 70% of participants reported using benzodiazepines (licit or illicit) in their lifetime, with 46% having used them in the previous six months.

With licit benzodiazepines, 28% of participants used them in their lifetime, and 19% used them in the previous six months. The main brands used recently were Valium®, Xanax®, and Temazepam®. The median age of first use of licit benzodiazepines was 21 years (range 14–39 years; n = 28). The median number of days used in the previous six months was 30 days (range 3–180; n = 20).

With illicit benzodiazepines, 60% of participants used them in their lifetime, and 36% used them in the previous six months. The main brands used recently were Valium®, Xanax®, and Temazepam®. The median age of first use of illicit benzodiazepines was 20 years (range 14–34; n = 61). The median number of days used in the previous six months was three (range 1–180; n = 36).

Comments from key experts about benzodiazepine use

Key experts regarded the use of benzodiazepines (e.g. Xanax® and Valium®) as becoming increasinglu problematic. They reported that often young people were legitimately prescribed a benzodiazepine but consumed it at above dose levels. Others used benzodiazepines prescribed for parents or other family members, or purchased from friendship networks. The easy accessibility of benzodiazepines was thought to add to their popularity.

4.9.6 Inhalant use

In 2011, over half of participants (57%) reported using amyl nitrate within their lifetime (40% in 2010). Use of amyl nitrate in the previous six months was reported by 22% which was similar to 2010 (23%). The median number of days of use in the previous six months was stable at three (range 1–100, n = 22).

Just over half of the participants (55%) reported having used nitrous oxide in their lifetime (49% in 2010). Use of nitrous oxide in the previous six months was reported by 16% (23% in 2010). The median number of days of use was four (range 1–48; n = 16).

Comments from key experts about inhalant use

Key experts reported increasing use of inhalants, particularly amyl nitrate and glue. Although inhalant use is generally more prevalent amongst young people, service providers reported use by older clients, particularly men over 35 years. One key expert felt that a group of his older clients were replacing alcohol with inhalant use. Inhalant use appears to take place in

certain clusters of people and in specific localities. Key experts in the health sector said that people who use inhalants were often reluctant to seek help, and that this was particularly the case with males. The 2010 National Drug Strategy Household Survey report confirms an increased use of inhalants (AIHW, 2011).

4.9.7 Heroin and other opiates

Use of heroin and substitution pharmacotherapy drugs such as methadone and buprenorphine remained stable. In 2011, 24% of participants had used **heroin** in their lifetime, with 7% using it in the previous six months. The median age of first use was 21 years (range 14–35; n = 23). Among those who had recently used heroin, the median days of use were 24 (range 1–80 days; n = 7). One participant reported using heroin the last time they used ecstasy.

For **methadone**, 8% of participants reported using it during their lifetime, with two participants using it in the previous six months. The median age of first use was 22 years (range 17–33; n = 8). Six per cent of participants reported ever injecting methadone, and one participant had injected it in the previous six months.

For **buprenorphine**, 9% of participants reported using it during their lifetime, with 8% using in the previous six months. Five per cent of participants had injected buprenorphine in their lifetime and 5% had also injected it in the last six months.

For **other opiates** (e.g. morphine, Panadeine forte®, pethidine), 58% had used them (licit or illicit) in their lifetime, and 34% in the previous six months.

Use of licit other opiates was 41% within a lifetime, and 21% within the preceding six months. This was a sharp rise from 19% within a lifetime and 7% within the preceding six months in 2010. However, prompting on these questions was more rigorous in 2011 than in 2010 and this may have influenced responses. Licit other opiates were injected by 3% within their lifetime and 1% in the preceding six months.

Use of illicit (non-prescribed) other opiates was 28% within a lifetime, and 18% within the preceding six months. Illicit other opiates were injected by 6% within their lifetime and 3% in the preceding six months.

4.9.8 Pharmaceutical stimulants

In 2011, 2% of participants had used licit pharmaceutical stimulants (e.g. Ritalin®) in their lifetime (age of first use 17 and 21 years) with only one having used them in the previous six months.

For illicit (non-prescribed) pharmaceutical stimulants, 63% reported use in their lifetime, and 26% in the preceding six months. This is a significant increase from 2010 when 34% reported use in their lifetime and 12% in the preceding six months ($p<0.05$). The median age of first illicit use of pharmaceutical stimulants was 18 years (range 12–39; n = 65). The median number of days used in the preceding six months was three, representing once every two months (range 1–72; n = 27).

4.9.9 Over the counter (OTC) codeine

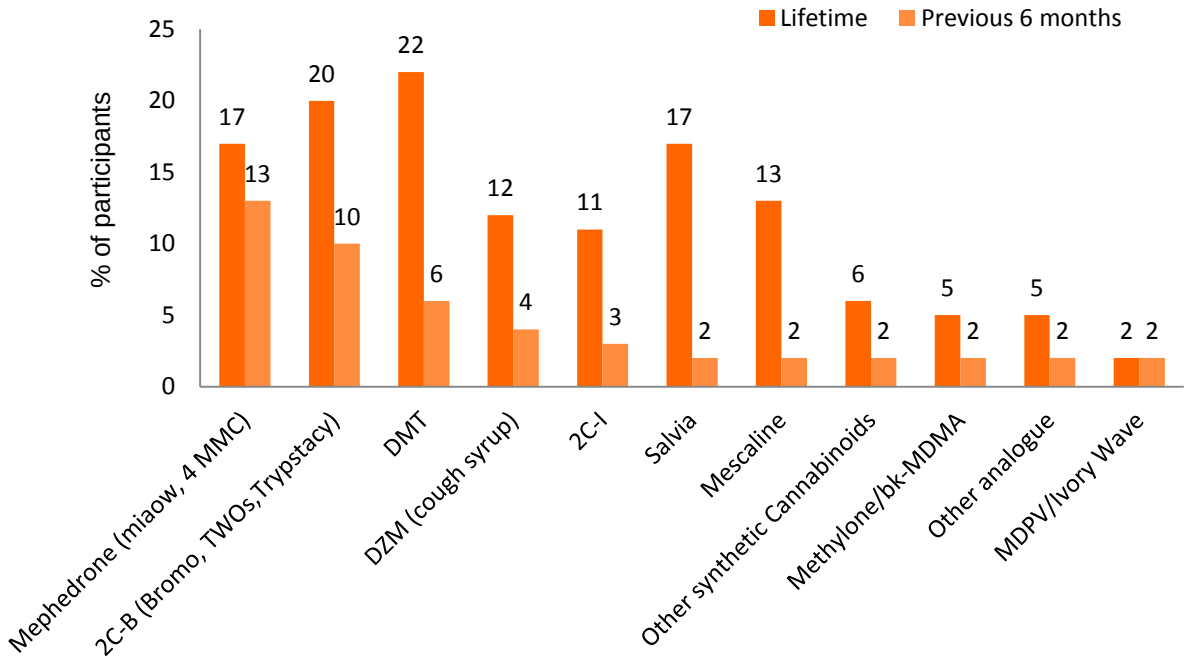
Use of OTC codeine was similar to 2010, with 61% of participants reporting use over a lifetime and 49% in the preceding six months. The median age of first use was 17 years (range 10–29; n = 56). The median number of days where OTC codeine was used for pain relief in the preceding six months was 10 (range 1–48; n = 44).

Use of OTC codeine for reasons other than pain relief was reported by 12% of participants, with use occurring for a median of 8 days (range 1–156; n = 12).

4.9.10 Emerging psychoactive substance (EPS) use

Respondents were questioned about their use of emerging psychoactive substances (EPS), including analogues and research chemicals. Figure 18 shows EPS used by participants recently and over their lifetime. Participants were asked about other EPS including 2C-E, LSA, 2C-E, 2C-(Other), LSA, 5-MeO-DMT, BZP, K2/spice, DOI (death on impact), PMA, datura, melanotan, and MPTP. The low use of EPS was similar to 2010 (e.g. proportion using mephedrone remained constant), with the only noticeable change being the rise in the recent use of 2C-B from 2% in 2010 to 10% in 2011.

Figure 18: Use of other drugs, 2011



Source: QLD EDRS participant interviews

The most used EPS in the previous six months was mephadrone (Figure 18), which was at the same level as 2010 (13%). The second most recently used EPS, 2C-B was used by 10% compared with 2% in 2010.

The median number of recent days of mephedrone use by participants was two (range 1–12; n = 13). 2CB was used on a median of one day in the preceding six months (range 1–6; n = 10).

Comments from key experts about emerging psychoactive substance use

Key experts reported use of emerging psychoactive substances but noted there were still very small numbers of people using them. Emerging psychoactive substances included mephedrone, MDPV (ivory wave), angel's trumpet, ephedrine/ephedra, and 2C-B. Key experts commented that mephedrone use had decreased. The popularity of various emerging psychoactive substances appears to wax and wane with new analogues briefly experiencing a wave of popularity.

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY & SUPPLY

5.1 Ecstasy

Key Points

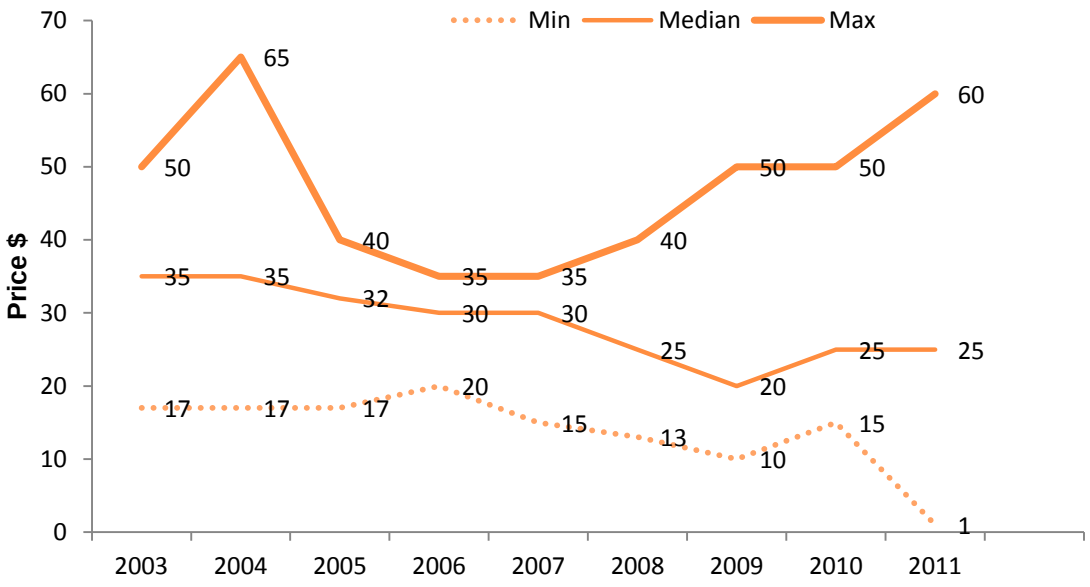
- The median price of ecstasy was reported to be $25 per tablet or capsule, and $235 per gram of powder. Prices remained stable.
- About half of all participants described the purity of ecstasy as low.
- 43% of participants noted a decrease in ecstasy purity in the previous six months. However, a small proportion reported purity was increasing and this was in keeping with the analysis of recent seizures of tablets.
- Three-quarters of participants reported that ecstasy was easy or very easy to access.
- Half the sample stated no change in availability, while about one-quarter reported increased difficulty in obtaining ecstasy.

Responses in this section are reported from the entire EDRS sample.

5.1.1 Price

Participants reported that ecstasy was most commonly found in tablet form, but was also available as a capsule or powder. When asked about the most recent purchase, participants reported paying a median price of $25 per tablet (range $1–$60) (Figure 19), and also $25 per capsule (range $20–$40).

Figure 19: Price of ecstasy per tablet, Queensland, 2003 to 2011



Source: QLD EDRS participant interviews

As in previous years, the median price per ecstasy pill tended to decrease if purchased in larger quantities (Table 18).

Table 18: Price of ecstasy pills according to quantity purchased, 2010 and 11

Quantity	2010 Median (Range)	2011 Median (Range)
1	$25 ($15–$50)	$25 ($15–$40)
10	$20 ($5–$25)	$20 ($12–$70)
20	$18 ($5–$25)	$18 ($11–$25)
50	$15 ($7–$20)	$16 ($10–$25)
100	$14 ($8–$22.50)	$14 ($7–$25)

Source: QLD EDRS participant interviews

EDRS survey participants reported cheaper cost per tablet for single tablet purchases when compared to Australian Crime Commission data (ACC, 2011) however, reported prices for bulk purchases were similar (Table 19).

Table 19: ACC reported price per unit of ecstasy in Queensland, 2009–10

Weight	Price per unit
1 tablet/capsule	$40
2-24 tablets/capsules	$22–35
25-99 tablets/capsules	$16–20
100-999 tablets/capsules	$14.5–20.5
1000+ tablets/capsules	$7–10.5

Source: Australian Crime Commission (ACC 2011).

As in 2010, the majority of participants (61%) stated the price of ecstasy had remained stable over the previous six months; although one-quarter reported it had increased (Table 20).

Table 20: Changes in recent price of ecstasy, 2010 and 2011

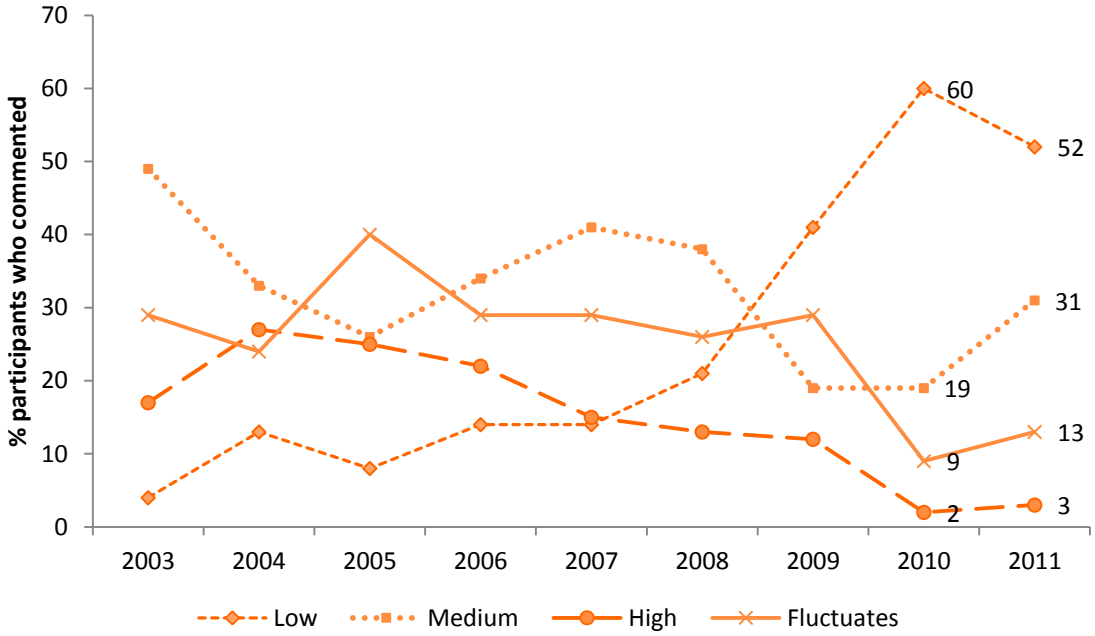
Price Change	2010 (n = 97) %	2011 (n = 103) %
Increasing	18	25
Stable	58	61
Decreasing	5	3
Fluctuating	20	11

Source: QLD EDRS participant interviews

5.1.2 Purity

Figure 20 shows the perceptions of purity of ecstasy among participants from 2003 to 2011. In 2011, just over half (52%) reported low purity and a third (31%) reported medium purity.

Figure 20: Perception of ecstasy purity, 2003 to 2011



Source: QLD EDRS participant interviews

The purity of ecstasy was most commonly considered to be decreasing, with a small percentage considering it to be increasing (Table 21).

Table 21: Perceived changes in recent ecstasy purity, 2003 to 2011

	2003 %	2004 %	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %
Decreasing	10	15	13	23	16	22	42	60	**43**
Stable	39	28	31	36	33	30	27	15	**20**
Increasing	18	9	14	11	4	6	6	3	**9**
Fluctuating	31	42	38	28	41	35	25	22	**25**

Source: QLD EDRS participant interviews

In recent years, the Queensland Health Forensic and Scientific Services have consistently reported low percentages of MDMA in ecstasy-type tablets (average MDMA purity in 2010 was 16.7%). Data for 2011 is not yet available but the Service reports anecdotal indications that levels of purity are rising.

5.1.3 Availability

Nearly three-quarters (74%) of respondents reported ecstasy to be either easy or very easy to access (Table 22). Consistent with previous years, half reported no change in availability.

Table 22: Ease of access and reported change in availability of ecstasy in the previous six months, 2010 and 2011

	2010 (N = 101) %	2011 (N = 103) %
Ease of access to ecstasy		
Very easy	25	36
Easy	48	38
Difficult	24	24
Very difficult	3	1
Change in availability		
Stable	54	50
Easier	6	18
More difficult	32	24
Fluctuating	8	6

Source: QLD EDRS participant interviews

5.1.4 Purchasing patterns and locations of use

Participants were asked about their ecstasy purchasing patterns in the previous six months and these are presented in Table 23. Findings in 2011 are consistent with those from 2010.

Table 23: Patterns of purchasing ecstasy in last six months, 2010 and 2011

	2010 (N = 101)	2011 (N = 103)
Number of people purchased from		
Median (range)	3 (1–15)	3 (0–15)
Number of ecstasy tablets purchased		
Median (range)	5 (1–400)	5 (1–500)
% Purchased for		
Self only	36	38
Self and others	64	61
Others only	0	0
Did not buy	-	1
% Number times purchased		
1-6	47	49
7-12	35	32
13-24	17	17
25 +	1	2

Source: QLD EDRS participant interviews

Table 24 shows that participants most commonly obtained ecstasy from a friend (58%), with most transactions taking place in a home environment – most likely at a friend's home (34%).

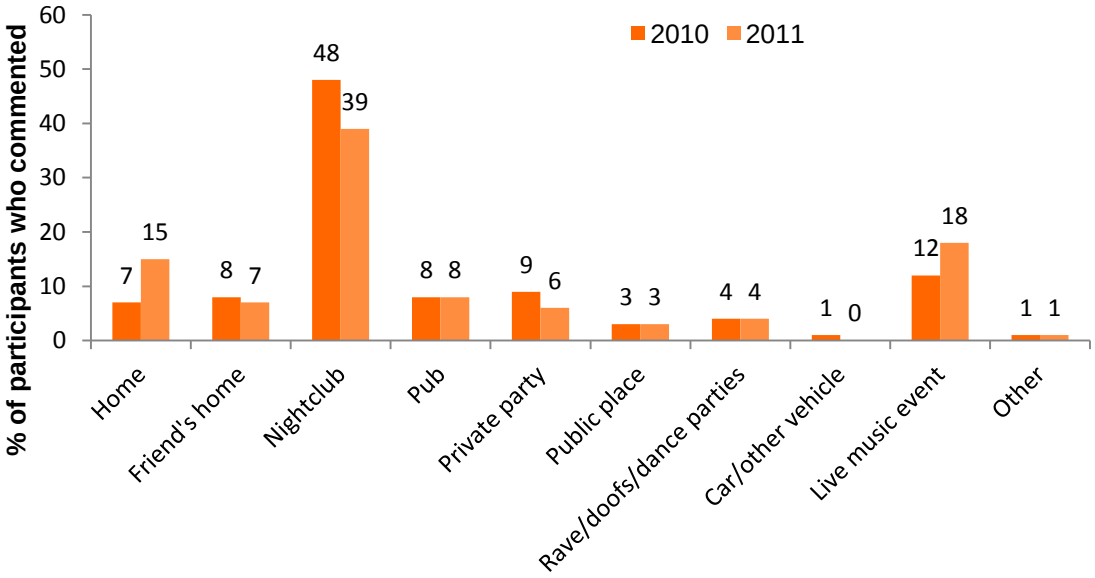
Table 24: Source and location of most recent ecstasy purchase, 2010 and 2011

	2010 (N = 101) %	2011 (N = 103) %
Persons scored from		
Friends	66	58
Known dealers	18	21
Acquaintances	9	11
Work colleagues	4	0
Unknown dealers	3	9
Other	-	2
Venues scored from		
Own home	17	13
Friend's home	37	34
Dealer's home	4	14
Nightclub	18	13
Pubs	4	6
Raves/dance parties	--	1
Street	4	2
Agreed public location	4	8
Work	1	--
Live music event	--	5
Acquaintance's home	--	3
Private party	--	2
Street	--	2

Source: QLD EDRS participant interviews
Note: Those responding 'used not scored' were excluded from analyses

The most common venue for ecstasy use was a nightclub (39%) followed by a live music event (18%) and home (15%) (Figure 21). In 2011, 15% of participants used ecstasy at home and 39% used at a nightclub.

Figure 21: Venue for most recent ecstasy use, 2010 and 2011



Source: QLD EDRS participant interviews

5.1.5 Awareness of laws relating to ecstasy

Participants were asked about their awareness of laws relating to being charged with possession and supply of ecstasy.

Half of participants responded that they did not know the quantity of ecstasy needed to be charged with supply if caught by the police. There was a wide variety of answers with very little commonality from those who did state a quantity.

Over half of participants (57%) believed there was a difference in penalty if someone was caught with ecstasy and said it was for personal use, rather than for a friend. Of these (n = 58), 88% believed that purchasing ecstasy for a friend would incur a heavier penalty.

5.1.6 Comments from key experts

Although the overall consensus was that purity of ecstasy pills was very low, some key experts related they had heard reports of some high quality ecstasy being available. One key expert explained that '*quality depends on who you get it from*' and that wholesale supply was cyclical on a two to three months basis to limit the risk.

One key expert reported that crystal MDMA was available '*but only very rarely*' and that it was '*generally put in capsules and sold because more profitable'.* Price of ecstasy was confirmed as remaining at around $25 per tablet. Cost effective strategies (i.e. one person bulk buying to share with friends and pre-purchasing before going out to a venue) were considered to be common.

5.2 Methamphetamine

Key Points

- The cost of methamphetamine speed was stable at a median price of $200 per gram.
- The cost of methamphetamine base remained stable at a median price of $40 per point.
- Ice/crystal increased to a median price of $75 per point at last purchase.
- Most participants considered speed and base to be of medium or high purity, with 61% considering ice/crystal purity to be high.
- Availability of speed powder, base, and crystal was reported as mainly easy, and accessibility remained stable.

The methamphetamine market is reported on according to three forms – speed, base and ice/crystal. Of the entire sample, 39% answered questions about the speed market, 12% about base, and 18% about crystal/ice. Responses in this section are reported from these sub-samples, and when numbers are low caution is needed when interpreting changes.

5.2.1 Price

Price changes for each form of methamphetamine are presented in Table 25. The price of speed has remained consistent with 2010. No other comparisons over time could be made due to limited responses.

Table 25: Median price (range) of most recent methamphetamine purchase, 2010 and 2011

	2010	2011
Speed - Gram (1g)	$200 (60–800)	$200 (100–600)
Base - Point (0.1g)	$35*	$40 (6–50)
Ice - Point (0.1g)	$50*	$75 (45–100)

Source: QLD EDRS participant interviews
*Based on the report of one participant

As shown in Table 26, just over two-thirds of the sample considered the price of speed to be stable. Base was generally considered to be stable or increasing, and over half considered the price of crystal to be increasing.

Table 26: Perceived price changes for methamphetamines purchased in previous six months, 2010 and 2011

	Speed %		Base %		Crystal %	
	2010 (n = 25)	2011 (n = 39)	2010 (n = 5)	2011 (n = 12)	2010 (n = 3)	2011 (n = 16)
Increasing	28	15	-	33	33	56
Stable	52	67	20	42	-	33
Decreasing	-	5	-	8	-	0
Fluctuating	20	5	80	8	67	0

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

The price of 1 point of ice/crystal is reported as $50 in the financial year 2009–10 by the Australian Crime Commission (ACC) (Table 27) and this is lower than the price of $75 reported by our EDRS sample in 2011.

Table 27: ACC reported methylamphetamine (crystal form) prices in Queensland, 2009–10

Weight	Price per unit
1 point (0.1 gram)	$50
1 gram / 'weight'	$350–600
1/8 ounce (3.5 grams) / 'eight ball'	$440–1,750
1 ounce (28 grams)	$3,300–8,000
1 pound (454 grams)	$90,000

Source: Australian Crime Commission (ACC, 2011)

The Australian Crime Commission reports the price of speed and base combined, so a direct comparison with the EDRS data is difficult. Overall, however, the Commission's prices are similar to those reported by the EDRS participants (Table 28).

Table 28: ACC reported methylamphetamine (non-crystal form) prices in Queensland, 2009–10

Weight	Price per unit
1 point	$50
1 gram 'weight'	$250
1/8 ounce (3.5 grams) / 'eight ball'	$600
1 ounce (28 grams)	$4,000
1 pound (454 grams)	$45,000

Source: Australian Crime Commission (ACC, 2011)

5.2.2 Purity

About half the respondents answering questions on the current purity of methamphetamines rated both speed and base forms as being of medium purity and 61% rated crystal as being of high purity (Table 29).

Table 29: Perception of methamphetamine purity in previous six months, 2010 and 2011

	Speed %		Base %		Crystal %	
	2010 (n = 28)	2011 (n = 39)	2010 (n = 7)	2011 (n = 12)	2010 (n = 5)	2011 (n = 18)
Low	11	13	14	0	20	0
Medium	39	53	14	50	-	22
High	11	26	43	50	80	61
Fluctuates	39	8	29	0	-	17

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

Purity was general considered to be fluctuating or stable for all three forms (Table 30). Base purity was most commonly viewed as stable.

Table 30: Perceived changes in purity of methamphetamine, 2010 and 2011

	Speed %		Base %		Crystal %	
	2010 (n = 28)	2011 (n = 39)	2010 (n = 7)	2011 (n = 12)	2010 (n = 5)	2011 (n = 18)
Increasing	12	8	14	9	20	17
Stable	28	35	29	46	-	28
Decreasing	24	16	14	9	80	17
Fluctuating	36	41	43	36	-	39

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

Table 31 shows the purity of amphetamine seizures made by the Queensland Police Service (QPS) in the financial year 2009–10 was low and consistent with 2008–09: whereas the two seizures made by the Australian Federal Police (AFP) were higher in purity (18.6%) than in previous years (ACC, 2011).

Table 31: Medium purity of amphetamine seizures analysed in Queensland by police, 2007–08 to 2009-10

	2007–08		2008–09		2009–10	
	n	%	*n*	%	*n*	%
QPS	22	5.7	38	2.0	20	1.2
AFP	5	8.7	6	7.8	2	18.6

Source: Australian Crime Commission (ACC, 2011)

Table 32 shows the purity of methylamphetamine seizures by QPS was 6.8% in the financial year 2009-10 compared with 11.9% in 2008–09 and in 2007–8 (ACC, 2011).

Table 32: Medium purity of methylamphetamine seizures analysed in Queensland by police, 2007–08 to 2009–10

	2007–08		2008–09		2009–10	
	n	*%*	*n*	*%*	*n*	*%*
QPS	1,649	11.9	2,002	11.9	1,568	6.8
AFP	0	0	0	0	1	18.8

Source: Australian Crime Commission (ACC, 2011)

5.2.3 Availability

Most participants stated that speed, base, and crystal were easy or very easy to obtain (Table 33). Availability of crystal was viewed by most to be stable as was speed. Base was mostly rated as being stable (46%) and fluctuating (27%).

Table 33: Availability of methamphetamine, 2010 and 2011

	Speed %		Base %		Crystal %	
	2010 (n = 30)	2011 (n = 38)	2010 (n = 8)	2011 (n = 12)	2010 (n = 5)	2011 (n = 18)
Current availability						
Very easy	17	37	25	42	40	39
Easy	50	42	75	25	20	56
Difficult	27	21	-	25	40	6
Very difficult	7	0	-	8	-	0
Change in Availability						
More difficult	26	16	-	18	40	11
Stable	44	61	25	46	40	72
Easier	19	18	63	9	20	6
Fluctuating	11	5	13	27	-	11

Source: QLD EDRS participant interviews

5.2.4 Source and locations of use

Respondents reported obtaining all forms of methamphetamine primarily from friends and known dealers in the previous six months (Table 34). The source location was most commonly a friend's home for all forms of methamphetamine.

Table 34: Most recent source person and location for methamphetamine obtained in the preceding six months, 2010 and 2011

	Speed %		Base %		Crystal %	
	2010 (n = 27)	2011 (n = 38)	2010 (n = 7)	2011 (n = 12)	2010 (n = 5)	2011 (n = 18)
Source person						
Friend	70	45	75	67	50	56
Known dealer	22	37	25	33	25	33
Workmate	4	3	--	--	--	6
Acquaintance	4	3	--	--	25	--
Unknown dealer	--	3	--	--	--	--
Other	--	1	--	--		6
Source location						
Home	4	16	13	8	--	28
Friend's house	56	35	50	50	75	33
Dealer's house	7	19	13	25	25	17
Nightclub	4	3	25	8	--	11
Private party	--	5	--	--	--	6
Agreed public location	15	5	--	8	--	6
Pub	--	3	--	--	--	--
Other	15	5	--	--	--	--

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analysis

Locations where methamphetamines were used differed between the different forms (Table 35). Speed was most commonly used at nightclubs (27%); base was most commonly used at a friend's house (25%), while crystal was most commonly used at home (33%).

Table 35: Location of most recent methamphetamine use, 2010 and 2011

	Speed %		Base %		Crystal %	
	2010 (n = 27)	2011 (n = 37)	2010 (n = 8)	2011 (n = 12)	2010 (n = 4)	2011 (n = 18)
Home	19	8	14	8	75	33
Friend's house	7	14	14	25	--	22
Dealer's house	--	--	4	--	--	--
Nightclub	33	27	57	8	--	6
Private party	15	5	--	17	--	--
Pub	--	16	--	8	--	11
Other	4	3	--	8	25	11
Live music festival	22	11	--	--	--	--
Outdoors	--	3	--	--	--	--
Work	--	--	--	--	--	6

Source: QLD EDRS participant interviews

5.2.5 Comments from key experts

Key experts noted a decrease in the purity of low end methamphetamines (i.e. base) and an increase in high end methamphetamines (i.e. ice/crystal). Key experts from the legal sector advised, however, that although there have been seizures of pure crystal methamphetamine, this pure form is likely to be mixed with other low cost substances (i.e. 'cut') to increase profitability. One key expert who reported on the increase in availability of ice/crystal said that there was as '*increase in amount for same cost as previously*'.

5.3 Cocaine

Key Points

- The median price per gram of cocaine was reported to be mostly stable at $325.
- Current purity was rated as medium, with reports of both fluctuation (33%) and stability (27%) within the last six months.
- More than half of those reporting on cocaine stated it had been consistently difficult to access in the previous six months.

Of the entire sample, approximately one-third answered questions about the cocaine market. This section reports on responses from this sub-sample. When numbers are low, caution is needed when interpreting changes.

5.3.1 Price

Table 36 shows the most recent prices paid for cocaine. Quantities were primarily in grams, and the price per gram was consistent with the price reported in 2010. Price of a 'cap' was rarely reported.

Table 36: Median price of most recent cocaine purchased, 2011

Quantity	Price (range)
1 point (n = 2)	$35 ($20–50)
1 gram (n = 30)	$325 (120–500)

Source: QLD EDRS participant interviews

The price of cocaine remained mostly stable in the preceding six months (Table 37).

Table 37: Changes in prices of cocaine in preceding six months, 2010 and 2011

	2010 (N = 20) %	2011 (N = 26) %
Increasing	24	27
Stable	71	54
Decreasing	0	4
Fluctuating	5	15

Source: EDRS QLD participant interviews
Note: Those choosing 'don't know' were excluded from analysis

Prices of cocaine reported on by the Australian Crime Commission (ACC, 2011) were consistent with those reported by our sample of regular ecstasy users (Table 38).

Table 38: Cocaine prices in Queensland, 2009–10

Weight	Price per unit
1 cap	$50
1 gram	$300–350
1 ounce (28 grams)	$7,500

Source: Australian Crime Commission (ACC, 2011)

5.3.2 Purity

Reports of cocaine purity were similar to reports in 2010 (Table 39). In 2011, 33% of participants stated that purity was fluctuating (compared with 52% in 2010). For 27% of participants cocaine purity was stable (compared with 17% in 2010).

Table 39: Perception of cocaine purity in previous six months, 2010 and 2011

	2010 (n = 20) %	2011 (n = 32) %
Current purity		
Low	31	33
Medium	54	42
High	11	12
Fluctuates	4	9
Change in purity		
Increasing	9	6
Stable	52	27
Decreasing	22	15
Fluctuating	17	33

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

Analysis of cocaine seized by the Queensland and Federal Police shows median purity to be relatively stable (Table 40).

Table 40: Median purity of cocaine seizures analysed in Queensland, July 2007 to June 2010

	2007–08		2008–09		2009–10	
	n	%	*n*	%	*n*	%
QPS	133	35.2	214	28.1	257	30.1
AFP	6	84.6	6	41.7	3	53.7

Source: Australian Crime Commission (ACC, 2011)
Note: Data not available for 2011. Figures do not represent purity of all cocaine seizures, but only of those submitted for analysis

5.3.3 Availability

In 2011, 56% of participants perceived cocaine to have been difficult or very difficult to access in the previous six months. About half perceived that availability was stable, though for 25% of respondents it had been more difficult (Table 41).

Table 41: Availability of cocaine in previous six months, 2010 and 2011

	2010 (n = 20) %	2011 (n = 32) %
Current availability		
Very easy	8	16
Easy	42	22
Difficult	42	53
Very difficult	8	3
Change of ease of access		
More difficult	17	25
Stable	68	47
Easier	13	16
Fluctuates	13	6

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses.

5.3.4 Source, source location and location of use

Most participants had made their most recent purchase of cocaine from friends or dealers in the preceding six months (Table 42). Cocaine was most commonly scored at a friend's house.

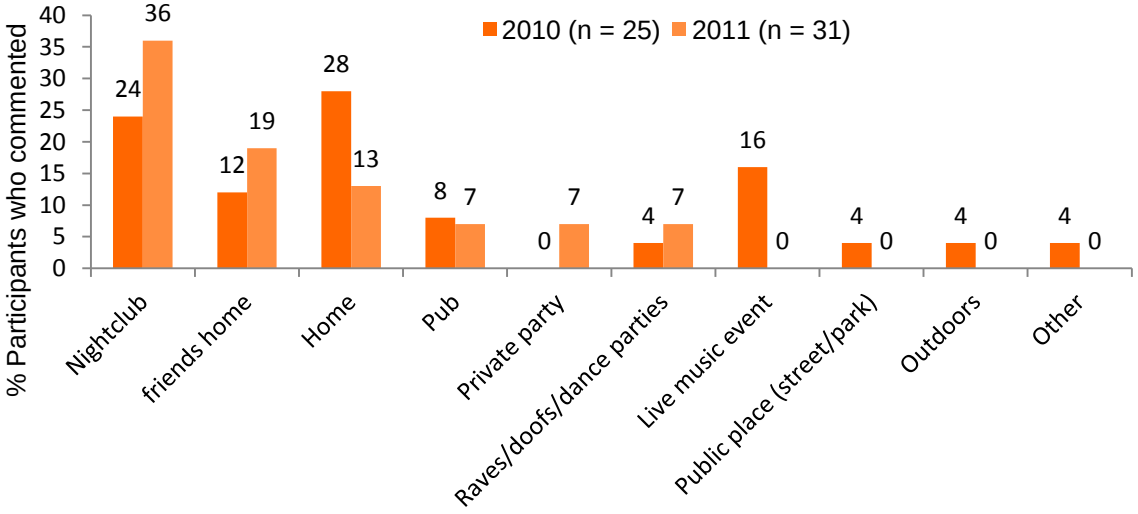
Table 42: Most recent source and location for obtaining cocaine, 2010 and 2011

	2010 (n = 25) %	2011 (n = 32) %
Persons scored from		
Friends	64	38
Dealers (known/unknown)	20	34
Acquaintances	12	13
Work colleagues	4	3
Location scored from		
Own home	8	13
Friend's home	48	28
Nightclub	16	13
Agreed public location	-	9
Pubs	-	6
Work	-	6
Dealer's home	16	3
Private party	-	3
Acquaintance's home	-	3
Other	-	3

Source: QLD EDRS participant interviews

In 2011, over one-third (36%) of participants who had used cocaine in the previous six months reported doing so at a nightclub (Figure 22).

Figure 22: Location of most recent cocaine use, 2010 and 2011

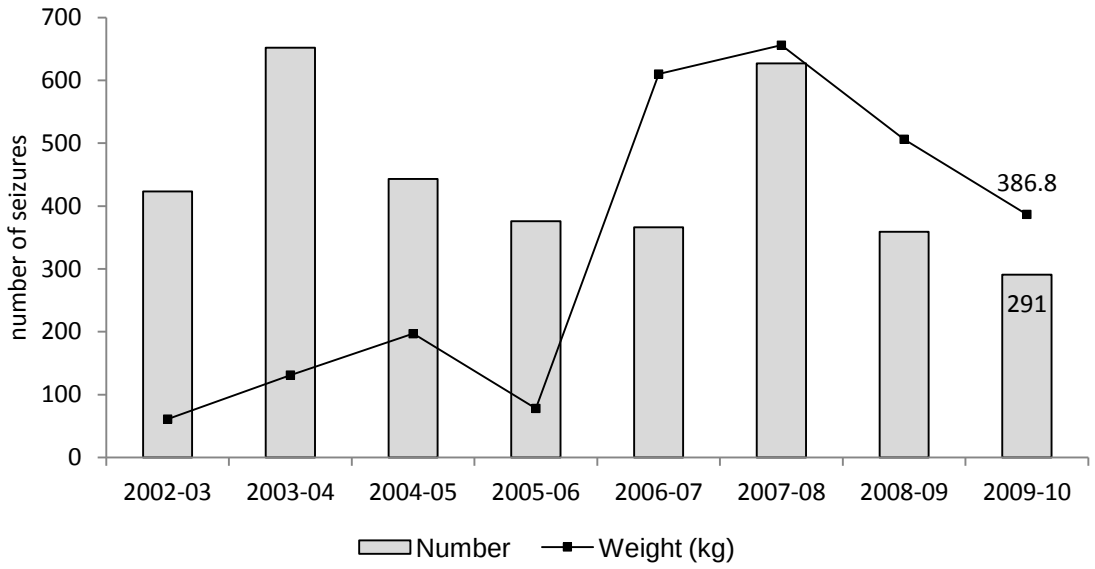


Source: QLD EDRS participants interviews

5.3.5 Cocaine seizures

Weight and number of cocaine seizures by the Australian Customs Service at the Australian border are only available for the financial year 2009–10 and these are presented in Figure 23 with reports from earlier years.

Figure 23: Number and weight of cocaine seizures by ACS, 2002–03 to 2009–10



Source: Australian Customs Service (ACS)

5.3.6 Comments from key experts

Availability of cocaine was reported as increasing but purity levels as being down. Key experts perceived that cocaine was too expensive for regular use. Key experts' reports on price of cocaine were consistent with the prices reported by participants (i.e. approximately $350 per gram).

5.4 Ketamine

Only three participants responded to questions on the ketamine market.

5.4.1 Price, purity and availability

Of the three who did respond, two participants paid $250 per gram and one paid $150 per gram, and all three stated price was stable. Availability of ketamine was reported to be difficult or very difficult, with little change in availability in the last six months.

5.4.2 Source and Location of use

The most recent purchase of ketamine was either from a dealer or friend, with the transaction venue and the location of use different in each case.

5.4.3 Comments from key experts

There were no reports about the ketamine market from key experts.

5.5 GHB

Only three participants responded to questions on the GHB market.

5.5.1 Price, purity and availability

Prices varied between $1–10/ml, and had remained stable. No conclusive reports were obtained on purity and availability.

5.5.2 Source and locations of use

GHB was obtained either from a friend or a dealer at the friend's home or the gym.

5.5.3 Comments from key experts

Concentration was reported as being stable. Prices were $7 for 2ml and $4 for 1ml.

5.6 LSD

Key Points

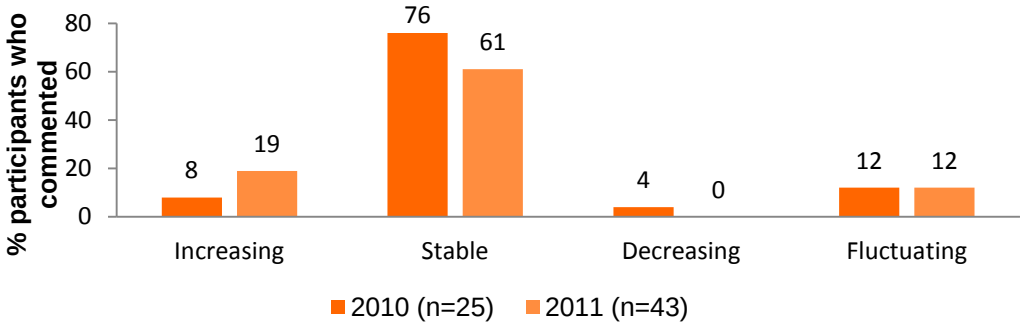
- The median price per tab of LSD remained stable at $20.
- Purity was reported to be high and consistently stable.
- LSD continued to be easy to obtain with little change in availability within the previous six months.

Of the entire sample of regular ecstasy users, 42% responded to questions about the LSD market, and their responses are reported in this section.

5.6.1 Price

The median price per tab for most recent purchase was $20 (range $10 to $25). Price was generally considered to be stable (Figure 24).

Figure 24: Change in price of LSD in preceding six months, 2010 and 2011

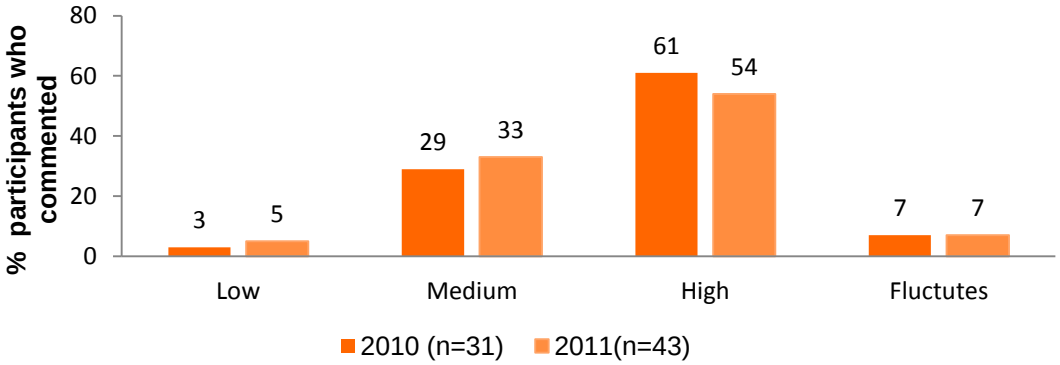


Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

5.6.2 Purity

In 2011, current purity of LSD was rated high by a majority of participants (54%) and medium by 33% of the sample (Figure 25).

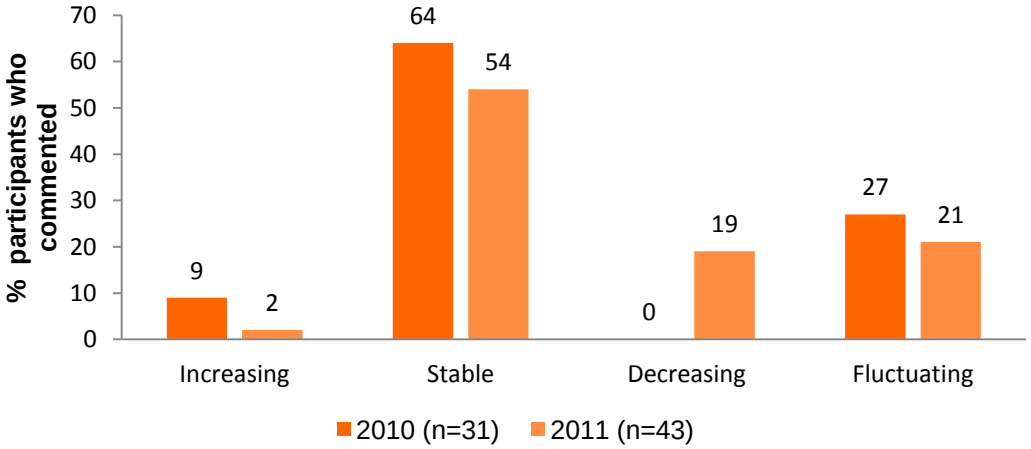
Figure 25: Purity/strength of LSD in preceding six months, 2010 and 2011



Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

Perceptions of changes in purity differed somewhat from 2010, with 19% reporting decreasing purity (Figure 26). However, just over half of participants reported purity as stable.

Figure 26: Changes in purity/strength of LSD in preceding six months, 2010 and 2011

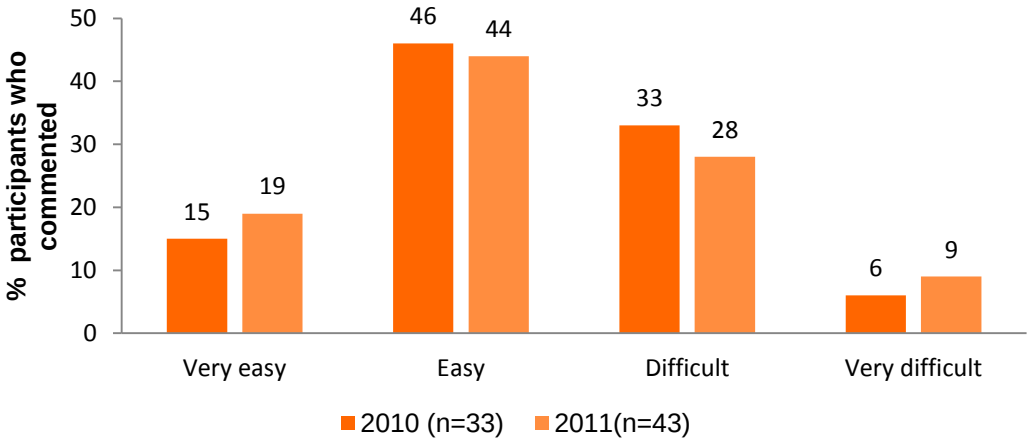


Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

5.6.3 Availability

Availability of LSD was similar in 2011 to 2010 with about two-thirds of participants finding it easy or very easy to access (Figure 27).

Figure 27: Availability of LSD in preceding six months, 2010 and 2011



Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

Availability of LSD was mostly rated as stable and this was consistent with reports in 2010 (Figure 28). However, 29% compared with 7% in 2010 found it easier to obtain (Figure 28).

Figure 28: Changes in availability of LSD in preceding six months, 2010 and 2011

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

5.6.4 Source and locations of use

When asked about the last time they obtained LSD in the preceding six months, 72% of participants stated they obtained it from a friend, and this occurred most commonly at a friend's house (Table 43). On both accounts this was higher than in 2010.

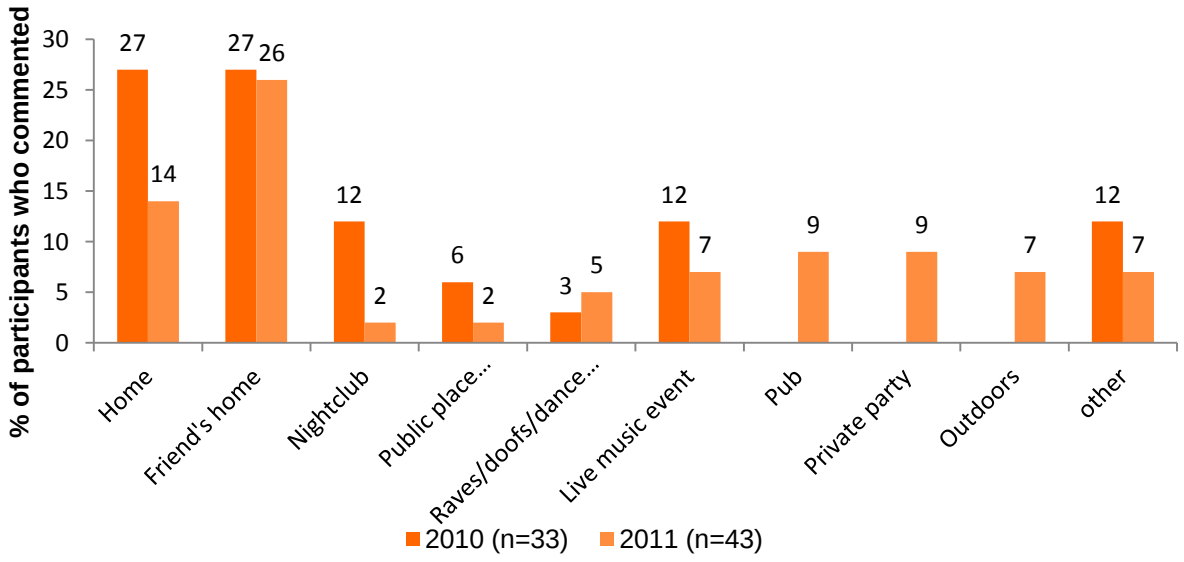
Table 43: Source person and location for obtaining LSD most recent time, 2010 and 2011

	2010 (n = 34) %	2011 (n = 43) %
Source person		
Friends	59	72
Dealers (known/unknown)	21	9
Acquaintances	12	5
Unknown dealer	9	5
Other	0	9
Location sourced from		
Own home	15	19
Friend's home	29	42
Nightclub	3	0
Agreed public location	9	7
Pubs	3	2
Work	-	0
Dealer's home	18	7
Private party	6	9
Acquaintance's home	-	2
Other	12	12

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

The most likely location of most recent LSD intoxication was a friend's home and this was similar to 2010 (Figure 29). In 2011, fewer participants nominated their own home than in 2010 (14% vs 27%).

Figure 29: Location of most recent LSD intoxication, 2010 and 2011



Source: QLD EDRS participant interviews

5.6.5 Comments from key experts

Key experts confirmed that the price of a tab was stable at around $20. The Queensland Health Forensic and Scientific Services reported that over the last five years the average amount of LSD per tab was 32µg (range 1–96 µg).

5.7 Cannabis

Key Points

- Hashish and hashish oil were rarely used.
- Slight increase in the cost of bush while hydro prices remained similar to 2010.
- Hydro was reported to be of high strength by more than half the participants (64%). In contrast, bush was primarily described as of medium strength. The strength of both forms was generally reported to be stable.
- More participants identified hydro as very easy or easy to obtain compared with bush.

The proportion of participants who were able to distinguish between hydro and bush was 86%. Of those participants, 72% were able to answer questions about the hydro market, and 59% about the market for bush. Only five participants had knowledge about the hashish oil market.

5.7.1 Price

Cannabis users were questioned about their knowledge of hashish and hashish oil's price, purity and availability. Nearly all considered it to be very rare or no longer available.

The price for both hydro and bush forms of cannabis is shown in Table 44. While the median price of hydro decreased in 2011 for both a gram and an ounce, the median price of bush increased for both a gram and a quarter ounce.

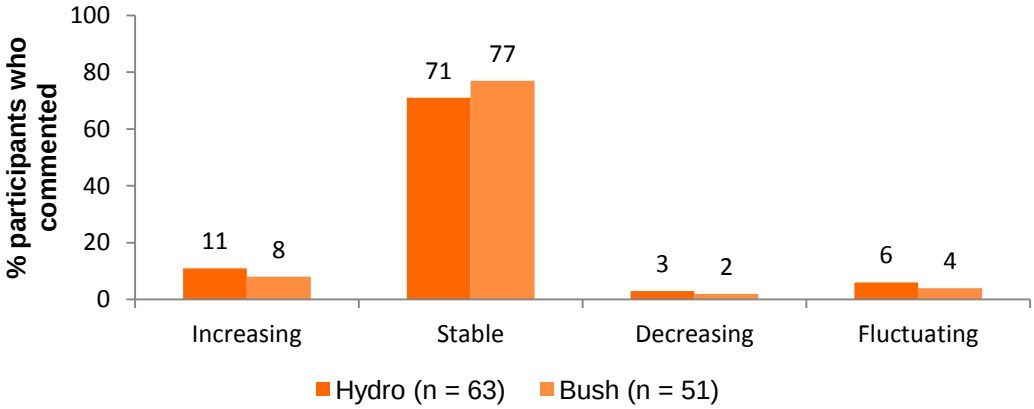
Table 44: Cannabis prices according to type and amount recently purchased, 2010 and 2011

	2010 Median (range)	2011 Median (range)
Hydro		
Gram	$25 (15–25)	$20 (12.50–25)
Quarter ounce	$90 (50–120)	$90 (25–125)
Ounce	$325 (150–370)	$300 (130–350)
Bush		
Gram	$15 (10–20)	$20 (10–20)
Quarter ounce	$75 (50–150)	$80 (50–100)
Ounce	$260 (200–300)	$250 (130–400)

Source: QLD EDRS participant interviews

Most participants stated that the price of hydro and bush was stable (Figure 30).

Figure 30: Price changes of cannabis in preceding six months, 2011

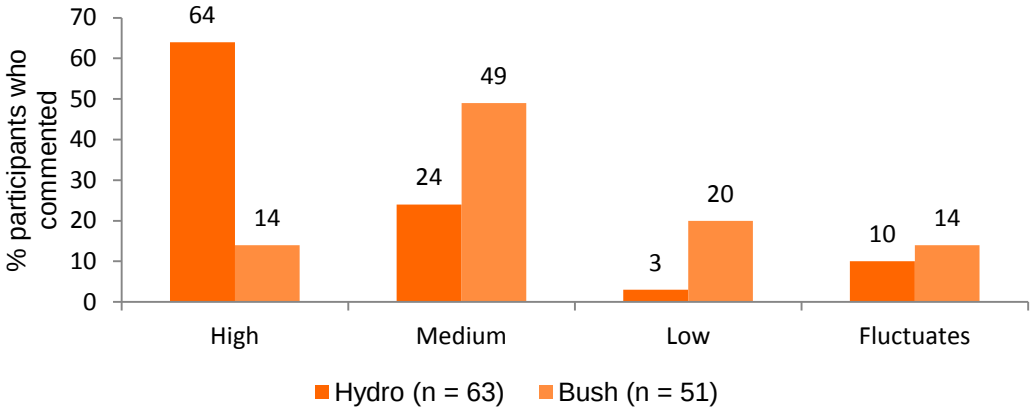


Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

5.7.2 Purity

Hydro was perceived to be of high strength by 64% participants, while bush was primarily described as medium strength (49%) (Figure 31).

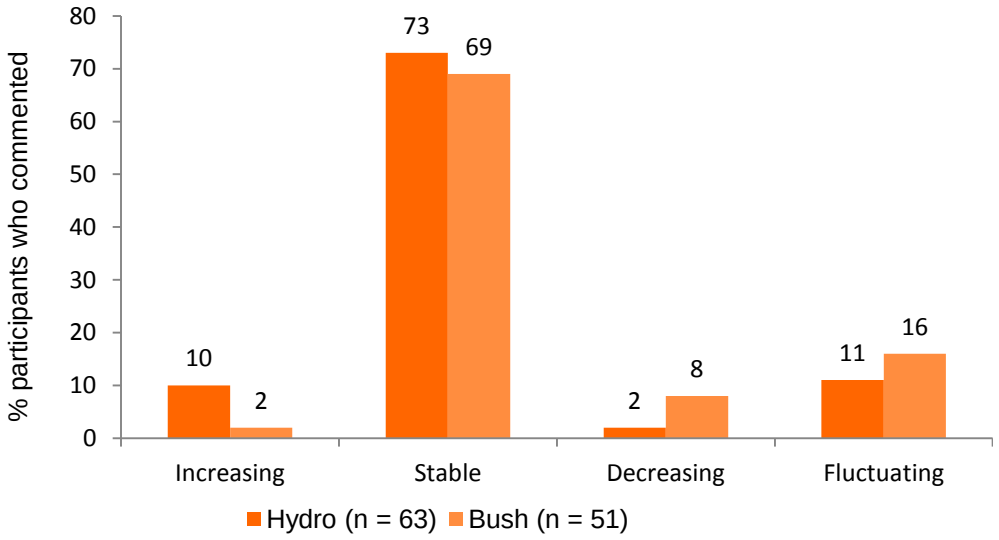
Figure 31: Perception of cannabis purity in preceding six months, 2011



Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

Most participants rated the purity/strength of both hydro and bush as stable in the previous six months (Figure 32).

Figure 32: Perceived change in recent purity of cannabis, 2011



Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

5.7.3 Availability

Most participants reported hydro to be very easy to access (68%); conversely, only a minority reported bush very easy to access (29%) (Table 45). The availability of both hydro and bush was generally considered to have remained stable during the previous six months.

Table 45: Availability of cannabis in preceding six months, 2010 and 2011

	Hydro		Bush	
	2010 (n = 50) %	2011 (n = 63) %	2010 (n = 31) %	2011 (n = 61) %
Current ease of access				
Very easy	62	68	26	29
Easy	28	22	32	28
Difficult	10	10	39	39
Very difficult	-	0	3	4
Change in availability in last six months				
More difficult	18	5	16	12
Stable	68	86	74	77
Easy	6	5	3	6
Fluctuates	8	3	7	2

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

5.7.4 Source and locations of use

Most participants reported purchasing cannabis from a friend on the most recent occasion in the previous six months (Table 46). Purchases were most often made at homes, and most likely at a friend's home.

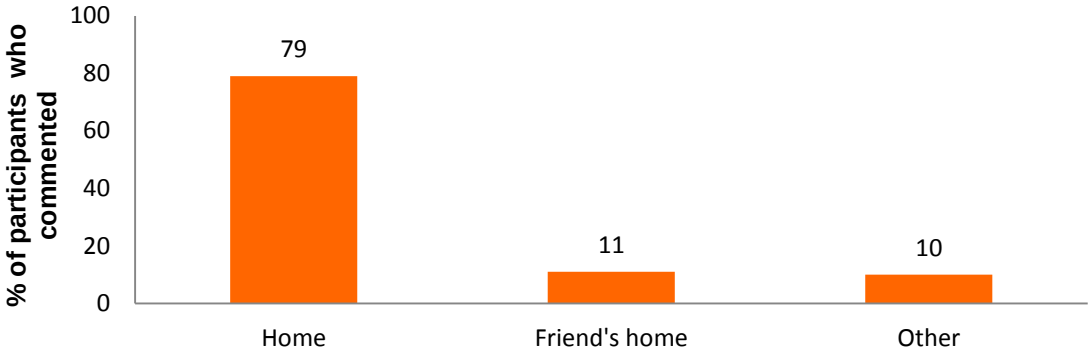
Table 46: Source person and location of most recent cannabis purchase, 2010 and 2011

	Hydro		Bush	
	2010 (n = 49) %	2011 (n = 62) %	2010 (n = 30) %	2011 (n = 50) %
Score person				
Friend	71	60	67	52
Known dealer	24	29	17	16
Acquaintances	-	7	17	6
Unknown dealer	-	5	-	10
Street dealer	-	-	-	10
Other	4	0	-	4
Score location				
Home	29	32	27	16
Dealer's home	16	23	17	16
Friend's home	43	39	43	41
Agreed public location	4	5	3	2
Work	4	0	3	2
Street market	-	-	-	14
Live music event	-	-	-	4
Other	4	1	7	2

Source: QLD EDRS participant interviews
Note: Those choosing 'don't know' were excluded from analyses

Most respondents reported being at home on the most recent occasion they used cannabis in the preceding six months (Figure 33).

Figure 33: Venue of most recent cannabis intoxication, 2011



Source: QLD EDRS participant interviews
Note: The category 'haven't used' is omitted. Other includes the responses 'outdoors', 'at the movies' and 'everywhere'

5.7.5 Comments from key experts

Price has remained stable with key experts confirming that a stick (1 to 1.5 grams) sold for $25 and an ounce from between $380 to $420. Purity was not always assured as key experts from the legal sector reported cannabis being mixed with other crops such as Lucerne hay. Availability of hydro was considered consistent whereas bush was more seasonal.

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

Key Points

- 11% of participants reported an accidental stimulant overdose in the previous 12 months.
- 14% of participants reported an accidental depressant overdose in the previous 12 months.
- One in five had sought help about a drug-related problem from a service or health professional in the previous six months. Help was most commonly sought from a psychologist (24%) or a drug and alcohol worker (19%).
- 9% of participants stated they were currently in drug treatment.
- Alcohol was the drug most often identified as contributing to recurrent problems in four spheres: social/relationship, legal, increased risky behaviour, difficulty meeting responsibilities.
- 70% of participants recorded moderate to very high distress on the Kessler Psychological Distress Scale (K10).
- 38% of participants reported having had mental health problems in the preceding six months, with the most common problems being depression and anxiety.

6.1 Overdose and drug-related fatalities

6.1.1 Non-fatal stimulant overdose

Overdose on stimulant drugs over a lifetime was reported by about one-quarter of participants (24%). The median number of times a participant overdosed was once (range 1–20 times).

Of those who had ever experienced a stimulant overdose (n = 25), 56% had done so in the preceding 12 months (i.e. 11% of all participants). This was similar to results of 2010 (10%). Ecstasy was the most common drug attributed to the most recent overdose (Table 47).

Among the 11 participants who had recently overdosed on a stimulant, 60% reported that the most recent overdose had occurred during a 'normal night out', with 40% reporting it had been a particularly 'heavy session'. The median number of hours that participants reported partying before the overdose was five (range 1–52 hours). Most were in a public place, most likely a nightclub.

Table 47: Primary and secondary drugs attributed to most recent accidental stimulant overdose, and location, 2010 and 2011

	2010 (n = 10)	2011 (n = 11)
Main drug attributed to the overdose		
Ecstasy	8	7
Meth powder	1	2
GHB	-	1
Cocaine	1	1
Other	1	-
Other drugs taken (multiple responses permitted)		
No other drugs were taken	1	7
Alcohol	7	5
Cannabis	2	3
Ecstasy	2	2
Meth powder	2	2
Ice/crystal	1	-
Cocaine	1	1
Benzodiazepines	1	1
Methadone	-	1
Antidepressants	1	-
Energy drinks	1	-
Location		
Home	2	1
Friend's home	3	1
Nightclub	2	4
Pub	1	1
Live music event	2	2
Private party	-	1
Outdoors	-	1

Source: QLD EDRS participant interviews
* Multiple responses permitted

Symptoms experienced most recent stimulant overdose

Participants who had overdosed on a stimulant drug within the previous 12 months reported experiencing various symptoms. The most likely symptoms were extreme anxiety (27%) and panic (18%).

Treatment of stimulant overdose

Of the 11 participants who reported a stimulant overdose in the previous 12 months, seven received some form of immediate treatment and only one sought out further treatment/information and this was from a phone information service (Table 48). The most common treatment was being monitored/watched by friends, and there was less variety of treatment than in 2010.

Table 48: Treatment received most recent stimulant overdose, 2010 and 2011

	2010 (n = 10) count	2011 (n = 11) count
Did not receive treatment	-	4
Monitored/watched by friends	4	5
Ambulance attendance	3	1
Hospital emergency department	3	1
Counsellor	2	-
CPR from a health professional	1	-
GP	1	-
Psychologist	1	-
Psychiatrist	1	-
Phone information service	-	1
Other	1	-

Source: QLD EDRS participant interviews
Note: Multiple responses permitted

6.1.2 Non-fatal depressant overdose

Accidental overdose on depressant drugs over a lifetime was reported by one-quarter of the sample (n = 23), with 61% of these participants having overdosed in the preceding six months (i.e. 14% of all participants). Participants reported overdosing on depressants an average of seven times over their lifetime (range 1–50).

Alcohol was most commonly identified as the primary drug contributing to the most recent overdose in the past six months (Table 49). The median number of hours spent partying before the last overdose was four (range 1–168). Most of the 14 participants (62%) said the overdose occurred during a 'heavy session' rather than a 'normal night out' (39%).

The most recent depressant overdoses most commonly occurred in a private location (64%), mostly at home. On this occasion, most (71%) reported having a sober person available for assistance.

Table 49: Primary and secondary drugs attributed to most recent accidental depressant overdose, and location, 2010 and 2011

	2010 (n = 13) count	2011 (n = 14) count
Main drug attributed to the overdose		
Alcohol	11	8
Heroin	-	4
GHB	1	-
Other opiates	-	1
Other	1	1
Other drugs taken (multiple responses permitted)		
No other drugs were taken	3	4
Cannabis	2	1
Alcohol	1	2
Ecstasy	1	1
LSD	1	0
Location		
Home	5	6
Friend's home	1	2
Nightclub	2	2
Pub	3	1
Live music event	1	1
Private party	1	1
Car	-	1

Source: QLD EDRS participant interviews

Symptoms experienced most recent accidental depressant overdose

Four in five participants (79%) who had recently overdosed on depressants reported a loss of consciousness as the main symptom. Other primary symptoms experienced included vomiting (14%), and collapsing (7%).

Treatment received most recent accidental depressant overdose

At the time of the most recent depressant overdose, most received some form of immediate treatment. Table 50 depicts the type of service or intervention used both immediately and post-incident.

Table 50: Treatment received most recent depressant overdose, 2010 and 2011

	2010 (n = 13) count	2011 (n = 14) count
Did not receive treatment	2	3
Monitored/watched by friends	10	7
Ambulance attendance	2	1
Hospital emergency department	4	3
Counsellor	-	-
CPR from a health professional	1	2
GP	-	-
Psychologist	-	-
Psychiatrist	-	-
Phone information service	-	1
Other ('internet/website information')	-	2

Source: QLD EDRS participant interviews
Note: Multiple responses permitted

6.1.3 Queensland Ambulance Service

Table 51 presents the number of attendances during the 2009–10 and 2010–11 financial years by the Queensland Ambulance Service to people who were coded as having a drug overdose and the primary drug was recorded. There were very similar patterns in both years. Alcohol was by far the most common primary drug followed by anti-depressants, benzodiazepines, and heroin.

Table 51: Overdose cases attended by Queensland Ambulance Service where primary substance was recorded, 2009–10 and 2010–11

Primary drug	2009–10	2010–11
Alcohol	3,629	3,813
Antidepressants	766	661
Benzodiazepines	467	490
Heroin	242	285
Antipsychotics	228	208
Cannabis	182	198
Ecstasy	166	107
Amphetamines	132	149
Inhalants	74	80
Methadone	39	34
GHB	38	32
Cocaine	33	28
Buprenorphine	5	2

Source: Queensland Ambulance Service

These data are conservative for several reasons, and cannot be considered a definitive record of the number of overdoses attended by the service in the specified time period. Queensland Ambulance Service data do not include formal diagnoses, as these are not made until the patient has received treatment at a hospital emergency department. Also the ambulance service may have attended people who had overdosed without an overdose code being assigned, thus excluding them from the data shown.

Moreover, the 'drug type' field is optional as it is not always possible for paramedics to establish the drug type involved. Only the primary drug is recorded so the data does not capture the range of different illicit drugs that may be involved in each overdose case. Finally, these data relate only to cases where the primary case nature was coded as overdose. Any overdose cases where the overdose was coded as secondary to the primary problem are not included (e.g. cardiac arrest due to drug overdose, trauma, and/or psychiatric cases).

6.2 Help-seeking behaviour

Various services exist for providing assistance to individuals seeking help with drug use and related issues. Participants were asked whether they had sought help about a drug-related problem from a service or health professional in the previous six months. One in five had accessed help and this was fewer than in 2010 (Table 52). Compared with 2010, a greater proportion in 2011 reported accessing a counsellor, psychologist or telephone counselling, and a smaller proportion of participants accessed an emergency department, hospital or general practitioner.

Table 52: Type of health services accessed by respondents for drug-related issues in preceding six months, 2010 and 2011

Health Service Type	2010 (n = 34) %	2011 (n = 21) %
First aid	12	-
Ambulance	15	-
Emergency department	26	10
Hospitalisation (admitted)	18	5
GP	50	14
Counsellor	6	14
Drug and alcohol worker	21	19
Social/welfare worker	3	-
Psychologist	21	24
Psychiatrist	15	-
Telephone counselling	6	10
Internet counselling	9	-
Other	3	5

Source: QLD EDRS participant interviews
Note: Multiple responses permitted

The Alcohol and Drug Information Service (ADIS) is a 24-hour information and counselling service provided by Queensland Health. In the last financial year 2010–2011, the majority of calls to their service were about alcohol, with only a small proportion being about ecstasy (Table 53).

Table 53: Number of calls to Alcohol and Drug Information Service (ADIS) according to drug type, 2010–11

Drug type	Calls	%
Alcohol	5,871	37
Cannabis	2,363	15
Amphetamines	1,543	10
Licit opioids	1,487	9
Illicit opioids	849	5
Benzodiazepines	845	5
Cocaine	99	1
Ecstasy	126	1
Hallucinogens	48	<1
Other	2,831	18

Source: Alcohol and Drug Information Service

As seen in Table 54, callers were most likely to be in the 25 to 34 year age groups for all drug types except alcohol (35 to 44 age group) and inhalants (18 to 24 age group).

Table 54: Number of calls to Alcohol and Drug Information Service (ADIS) by drug type and age, Queensland 2010–11

Age (years)	Alcohol	Cannabis	Amphet-amines	Benzo-diazapine	Cocaine	Ecstasy	Hallucino-gens	Other
0–17	108	226	46	4	2	11	5	108
18–24	496	537	343	58	31	52	22	268
25–34	1,344	735	594	176	33	42	13	532
35–44	1,647	446	298	149	17	13	4	417
45–54	865	128	54	104	4	1	1	278
55>	460	30	3	254	0	0	0	390
Total	5,012	1,632	1,338	746	87	119	45	1,997

Source: Alcohol and Drug Information Service
Note: This represents the number and percentage of calls about each drug where there was a person with a drug history and information is known (as opposed to a call for information for assignments, etc). More than one drug may be mentioned on each call

6.3 Drug treatment

Similar to previous years, only a relatively small proportion of participants (9%) were currently in any form of drug treatment. Of the six who specified the type of treatment, two were undertaking drug counselling, two were on a Subutex® program, one on a Suboxone® program, and one on a methadone program.

6.4 Other self-reported problems associated with ecstasy and related drug use

Of the 89 participants who answered questions about drug-related problems in the previous six months, 30% reported their drug use had contributed to social problems, 10% to legal

problems, 42% to being hurt or at risk (self and/or others), and 48% to not meeting responsibilities either at work or at home.

Table 55 shows which drugs participants believed contributed to the issues they had experienced in the previous six months. Alcohol was the drug most often identified as contributing, across all four problem areas. The area where ecstasy was most likely to be nominated as contributing was social/relationship problems.

Table 55: Primary drug contributing to recurrent problems within previous six months, 2011

Main Drug	Recurrent Problems			
	Social/ relationship (n = 26) %	Legal (n = 9) %	Increased risky behaviour (n = 36) %	Difficulty meeting responsibilities (n = 42) %
Ecstasy	27	-	14	21
Methamphetamine Powder	12	11	6	5
Methamphetamine Crystal	15	-	6	10
Cannabis	8	44	3	21
Alcohol	35	44	61	38
Heroin	4	-	3	2
LSD	-	-	6	-
Benzodiazepines	-	-	3	-
Cocaine	-	-	-	2

Source: QLD EDRS participant interviews

6.5 Mental health problems

6.6.1 Mental health problems and psychological distress (K10)

The Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) was designed as a screening tool for measuring psychological distress. It has well-established psychometric properties and validity for identifying anxiety and affective disorders (Andrews & Slade, 2001). The K10 comprises ten 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 16–20); ‘high’, likely to have a moderate mental disorder (scores 22–29); ‘very high’, likely to have a severe mental disorder (scores 30–50).

In 2011, levels of distress were slightly higher compared with 2010 (Table 56). The median score in 2011 was 19 (range 10–43), indicating a moderate likelihood of mild mental disorder.

Table 56: K10 level of distress, 2010 and 2011

	2010 (N = 101) %	2011 (N = 103) %
Low to no distress	34	30
Moderate distress	38	34
High distress	22	25
Very high distress	7	11

Source: QLD EDRS participant interviews

6.6.2 Self-reported mental problems and medication

In 2011, 38% of participants reported having had mental health problems in the preceding six months, with the most common problems being depression and anxiety (Table 57). Among these participants, 59% reported seeking help from a professional in the preceding six months, with 83% of these respondents being prescribed medication: antidepressants (n = 10), benzodiazepines (n = 9), antipsychotics (n = 4).

Table 57: Self-identified recent mental health problems, 2009 to 2011

	2009 (n = 33) %	2010 (n = 32) %	2011 (n = 39) %
Depression	67	60	80
Anxiety	42	78	62
Panic	9	3	21
Paranoia	21	6	18
OCD	3	3	8
Schizophrenia	9	6	8
Any personality disorder	-	-	5
Manic depression/bipolar disorder	18	9	5
Drug-induced psychosis	15	3	3
Other	-	25	10

Source: EDRS QLD participant interviews
Note: Multiple responses permitted. In 2010, 'other' category includes PTSD, ADHD, chronic fatigue, lethargy, night terrors, sleeping disorder and 'slight anger issues'. In 2011, 'other' category includes anorexia nervosa, insomnia, short-term memory loss, sleeping disorder and 'anger problems'

7 RISK BEHAVIOUR

Key Points

- Almost one-quarter (24%) of participants reported ever injecting a drug in their lifetime.
- 16% of participants reported injecting in the previous six months.
- The most commonly injected drugs were amphetamine powder, methamphetamine base, and heroin.
- Needles were most likely to be obtained from Needle and Syringe Programs.
- Just over one-third (36%) of participants responded that they had been vaccinated against hepatitis B.
- Within the last 12 months, 38% of participants were tested for HIV and 55% for a STI.
- Chlamydia was the most common STI among participants.

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

In 2011, 24% of participants reported having injected a drug in their lifetime (Table 58). The median age when first injected was 18 years (range 14–28).

Table 58: Injecting risk behaviour, 2008 to 2011

	2008 (n = 108)	2009 (n = 88)	2010 (n = 101)	2011 (n = 103)
Ever injected (%)	13	22	17	24
Median age first injected (range)	18 (15-43)	19 (14-30)	20 (14-29)	18 (14-28)
Injected last 6 months (%)	7	13	11	16

Source: EDRS QLD participant interviews

7.1.2 Recent injectors

Sixteen per cent of participants reported injecting in the last six months, and median days of injecting were 22 (i.e. nearly once a week).

Among the 16 participants who reported injecting in the previous six months, the last drug injected was most commonly methamphetamine powder (27%), crystal methamphetamine

(27%) or heroin (27%). Half reported they were at home when they last injected, while one-quarter were at a friend's house. Other locations were public toilets and in a car.

The 16 participants who had recently injected acquired their needles from one or more of the following places: Needle and Syringe Program (NSP) (81%), chemists (31%), friends (19%), partner (13%), hospital (6%) and NSP vending machine (6%).

Only one participant reported having recently used a needle after someone else had already used it.

7.1.3 Injecting drug use in the general population

According to the 2010 National Drug Strategy Household Survey, 1.8% of Australians aged 14 and over had injected a drug other than that prescribed to them at least once in their lifetime. In the previous 12 months, 0.4% Australians reported having injected illegally (AIHW, 2011).

Queensland Needle and Syringe Programs (NSP) dispensed a total of 7,374,360 needles in the 2010–11 financial year; an increase of 1,222,800 from the previous year.

7.2 Blood-borne viral infections (BBVI) and sexually transmitted diseases (STI)

In 2011, participants had the option of self-completing a series of questions on testing and vaccinating against blood-borne viruses.

7.2.1 Testing among participants

Of those who responded to the question about being vaccinated for hepatitis B (n = 72), over a third had never been vaccinated (Table 59). The most common reasons for vaccination were 'going overseas' or 'vaccinated as a child'. Of those who had been tested for hepatitis C, 6% reported being hepatitis C positive.

Table 59: Testing and vaccination for hepatitis, 2011

	%
Vaccinated for hepatitis B (n = 72)	
No	36
Yes, didn't complete	7
Yes, completed	57
Main reason for hepatitis B vaccination* (n = 44)	
At risk, injecting drug user	2
At risk, sexual transmission	11
Going overseas	32
Vaccinated as a child	30
Work	18
Other	7
Tested for hepatitis C (n = 83)	
No	42
Yes, in the last year	40
Yes, more than one year ago	18
Hepatitis C positive # (n = 48)	
Yes	6
No	94

Source: EDRS QLD participant interviews
* among those who had been vaccinated
# among those who have been tested

Thirty-eight per cent of participants reported having being tested for HIV in the preceding 12 months (Table 60). Four per cent of those ever tested reported being HIV positive. Chlamydia was the most common sexually transmitted infection (STI) reported, followed by gonorrhoea.

Table 60: HIV and other sexual health check-ups, 2011

	%
Tested for HIV (n = 93)	
No	41
Yes, in the last year	38
Yes, more than one year ago	22
HIV positive* (n = 55)	
Yes	4
No	96
Other sexual health check-ups (n = 99)	
No	28
Yes, in the last year	58
Yes, more than one year ago	14
Ever diagnosed with STI* (n = 71)	
No	69
Yes, in the last year	7
Yes, more than one year ago	24
Diagnosis of those ever found STI positive* (n = 22)	
Gonorrhoea	14
Chlamydia	68
Syphilis	0
HPV (genital warts)	9
Other	23

Source: EDRS QLD participant interviews
* among those who were tested

7.2.3 The National Notifiable Diseases Surveillance System

There appears to be an increasing trend in the number of notifications for blood-borne diseases and sexually transmitted disease among the general Queensland population in recent years, as seen in Table 61. Cases of hepatitis B and C appear to be decreasing.

Table 61: Registered cases of blood-borne viruses and sexually transmitted diseases in Queensland, 2009 to 2011

Disease	2009	2010	2011
Hepatitis B (newly acquired)	50	58	45
Hepatitis B (unspecified)	1,014	1,067	862
Hepatitis C (unspecified)	2,702	2,757	2,452
Syphilis – congenital	-	2	3
Syphilis < 2 years	191	195	275
Syphilis >2 years	294	178	201
Chlamydial infection	16,695	19,176	18,598
Gonococcal infection	1,558	2,071	2,959

Source: National Notifiable Diseases Surveillance System, 2009-2011 (NNDSS, 2012). Available at: http://www9.health.gov.au/cda/source/Rpt_2.cfm?RequestTimeout=500

7.3 Sexual risk behaviour

In 2011, all but one participant (n = 102) responded to the optional self-complete section on sexual risk behaviour.

7.3.1 Casual sex partners

Of the participants who completed the section on sexual risk behaviour in the preceding six months, 28% reported they did not have a casual sex partner (This includes people who also have a regular sex partner). Among the 74 participants who reported recently engaging in penetrative sex with a casual partner, 26% reported having had one partner, 26% having had two partners, 26% having had between 3–5 partners, 11% having had between 6–10 partners, and 12% having had more than 10 partners.

In 2011, 91% of participants who reported having a casual sex partner in the last six months also reported engaging in casual sex while under the influence of ecstasy or other drugs (including alcohol). Alcohol was the most commonly reported substance (79%). Other common substances were ecstasy (55%), cannabis (51%), cocaine (13%), ice/crystal (12%), speed (10%), and LSD (9%).

Among participants who engaged in recent casual sex while under the influence of ecstasy or other drugs (n = 66), 52% used a barrier (condom/gloves) during the most recent time. This is similar to the proportion (50%) that used a barrier during the most recent time they engaged in casual sex while sober. The number of occasions in the last six months that participants engaged in casual sex while under the influence of ecstasy or other drugs (including alcohol) ranged between 3 to 5 times, with 38% having done so more than 10 times.

7.4 Driving risk behaviour

In 2011, 79% of participants had driven a vehicle in the preceding six months. Of these, 64% reported having driven while under the influence of alcohol, with 43% reported having driven over the alcohol limit. Of the 81 participants who had driven in the last six months, 56% reported driving soon after taking illicit drugs, and that they did this a median of six times. Of the 45 participants who answered the question about the impact on their driving, 42% reported their driving had been slightly impaired, 47% reported it made no impact, while 9%

reported their driving ability was slightly or quite improved. Only one participant reported that their driving was quite impaired. Cannabis is the drug most likely to be taken prior to diving (Table 62).

Table 62: Drugs taken prior to driving in preceding six months, 2011

	% (n = 45)
Drugs taken prior to driving in preceding six months	
Cannabis	76
Ecstasy	51
Ice/crystal	16
Cocaine	13
LSD	11
Methamphetamine base	9
Heroin	9
Methamphetamine powder	7
Mushrooms	4
Pharmaceutical stimulants	2
Ketamine	2
Methadone	2
Other opiates	2
Benzodiazepines	2
GHB	2
Drugs taken most recent time prior to driving	
Cannabis	67
Ecstasy	20
Methamphetamine powder	4
Ice/crystal	11
Mushrooms	2
LSD	4
GHB	2
Cocaine	9
Heroin	7
Pharmaceutical stimulants	2

Source: EDRS QLD participant interviews
Note: Multiple responses permitted

Ten participants reported having been tested for drug driving by a saliva test in their lifetime. On the most recent occasion when tested, one participant was found to be positive for cocaine.

7.4.1 Perceptions of risk associated with driving while under the influence

In 2011, participants were asked their likelihood of having an accident while driving soon after taking the following: alcohol, ecstasy, methamphetamine and cannabis. Consumption of alcohol above the legal limit prior to driving was considered to have the highest likelihood of an accident followed by ecstasy (Table 63).

Table 63: Perceived likelihood of having an accident while driving soon after taking alcohol, ecstasy, methamphetamine, or cannabis, 2011

	Perceived likelihood of having an accident				
	Very unlikely	Unlikely	No more or less likely than any other time	Likely	Very likely
Alcohol (over the legal blood alcohol limit) (n = 101) %	18	6	6	40	31
Ecstasy (n = 99) %	22	15	10	36	16
Methamphetamine (speed, base, crystal) (n = 95) %	24	28	10	25	13
Cannabis (n = 100) %	25	20	22	19	14

Source: EDRS QLD participant interviews

When asked about perceived likelihood of being caught and identified as driving under the influence, the majority of participants thought this would be likely or very likely while being over the legal blood alcohol limit, but some participants thought this would be unlikely if driving under the influence of ecstasy, methamphetamine, or cannabis (Table 64).

Table 64: Perceived likelihood of being caught by the police and identified as driving under the influence, 2011

	Perceived likelihood of being caught and identified				
	Very unlikely	Unlikely	No more or less likely than any other time	Likely	Very likely
Alcohol (over the legal blood alcohol limit) (n = 9) %	7	6	11	32	43
Ecstasy (n = 100) %	13	29	22	23	13
Methamphetamine (speed, base, crystal) (n = 94) %	13	27	28	18	15
Cannabis (n = 99) %	13	27	26	23	10

Source: QLD EDRS participant interviews

7.5 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, Higgins-Biddle, Saunders, & Monteiro, 2001). Table 65 indicates a majority of participants in 2011 (86%) were drinking at levels which may be harmful to their health.

Table 65: AUDIT results and recommended intervention, 2010 and 2011

Zone (Score)	**2010** (N = 101) %	**2011** (N = 103) %	**Intervention recommended**
At risk (≥ 8)	92	86	-
Zone			
I (0-7)	6	14	Alcohol education
II (8-15)	37	36	Simple advice
III (16-19)	23	19	Simple advice plus brief counselling and continued monitoring
IV (20-40)	33	30	Referral to specialist for diagnosis and treatment

Source: EDRS QLD participant interviews

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

Key Points

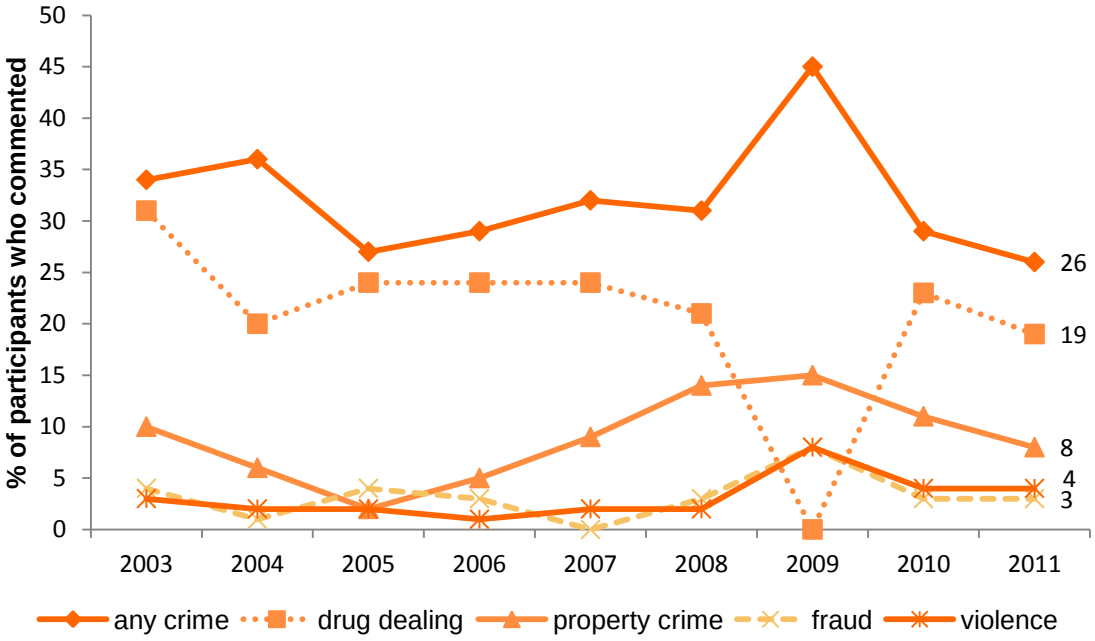
- 18% of participants had been arrested in the last 12 months.
- 26% had been involved in criminal activity (other than illicit drug use) in the last month.
- Drug dealing was reported by 19% of participants.
- The majority of participants (62%) believed that police activity towards regular ecstasy users remained stable over the previous six months.

8.1 Reports of criminal activity among participants

In 2011, 18% of participants had been arrested in the preceding 12 months. This is similar to reports from 2010.

Figure 34 shows that in 2011, 26% of participants reported involvement in criminal activity (other than illicit drug taking) in the preceding month. The most common crime reported was selling drugs for profit.

Figure 34: Criminal activity in the last month, 2003 to 2011



Source: EDRS QLD participant interviews

8.2 Perceptions of police activity towards regular ecstasy users

In 2011, the majority of participants commented that police activity towards regular ecstasy users had remained stable over the preceding six months (Table 66).

Table 66: Perceptions of changes in police activity towards ecstasy users over the preceding six months, 2009 to 2011

	2009 (n = 63) %	2010 (n = 65) %	2011 (n = 60) %
Less activity	5	5	3
Stable	44	58	62
More activity	51	37	35

Source: EDRS QLD participant interviews
Note: Those choosing 'don't know' were excluded from analyses

8.3 Arrests

In 2011, 18% of participants reported having been arrested in the preceding six months.

When asked about the cause of their arrest, responses were: use/possession, dealing/trafficking, violent crime, drink driving, drug driving, drunk and disorderly. Participants were allowed multiple responses.

Queensland Police Service report that cannabis followed by amphetamine-type stimulants were the main drugs attributable to drug-related arrests from July 2009 to June 2010 (Table 67).

Table 67: Drug-related arrests by drug type, Queensland 2009–10

Type of drug	Consumer	Provider	Total
Amphetamine-type stimulants	2,870	486	3,356
Cannabis	14,316	2,009	16,325
Cocaine	158	46	204
Hallucinogens	129	39	168
Total	17,473	2,580	20,053

Source: Queensland Police Service (ACC, 2011)
Note: Consumers= use, possession or administering for their own use; providers = importation, trafficking, selling, cultivation and manufacture

9 SPECIAL TOPICS OF INTEREST

9.1 Online drug-related activity

Key Points

- Two-thirds of participants reported using the internet for drug-related activity, predominantly for accessing information about drugs.
- Ecstasy was the most common drug about which they accessed information.
- A very small minority of participants in this sample reported buying and selling of drugs online (5% and 2% respectively).
- Websites, search engines and discussion forums were the most common mediums used for online drug-related activity.
- Text messaging was reported to be the preferred medium for arranging to obtain ecstasy for about half the participants who commented.

Internet use has become part of everyday life. Undoubtedly, those who use illicit drugs will sometimes undertake these types of activities in respect of their drug use:

> *'In recent years, the volume of illicit sales of narcotic drugs and psychotropic substances through websites has risen, making the internet a major source of drugs for drug abusers.'*
>
> The International Narcotics Control Board quoted in submission to the Parliamentary Joint Select Committee on Cyber-Safety by the Australian Customs and Border Protection Service, July 2010. Guidelines available at http://www.incb.org/pdf/Internet_Guidelines/Internet_guidelines_English.pdf (INCB 2009).

Online marketing and knowledge sharing is particularly relevant when dealing with the increasing trend towards so called 'designer drugs' or research chemicals and drugs marketed as 'legal highs'. Uninformed users may incur health and legal consequences (Schmidt, Sharma, Schifano, & Feinmann, 2011). Not only are the drugs themselves being marketed and traded but key experts in the legal sector have voiced their concern about the growing market for drug precursors:

> *'There is availability of precursors and equipment to manufacture ... don't even need to be able to read as YouTube and videos demonstrate the process...*
>
> *Internet has brought the ability to source interstate and even overseas.'*

There is huge potential for the internet and other electronic mediums to be used as a way of relating health and safety messages (Belenko, Mericle, & Forman, 2009). The success of such messages will rely heavily on an increased understanding of the online drug market.

In 2011, participants were asked about online drug-related activity. To place this activity in context, participants were first asked how often they got drugs and how often they went online (i.e. generally and not specifically about drugs). Almost all participants (97%) reported using the internet at least monthly in the preceding six months (Table 68).

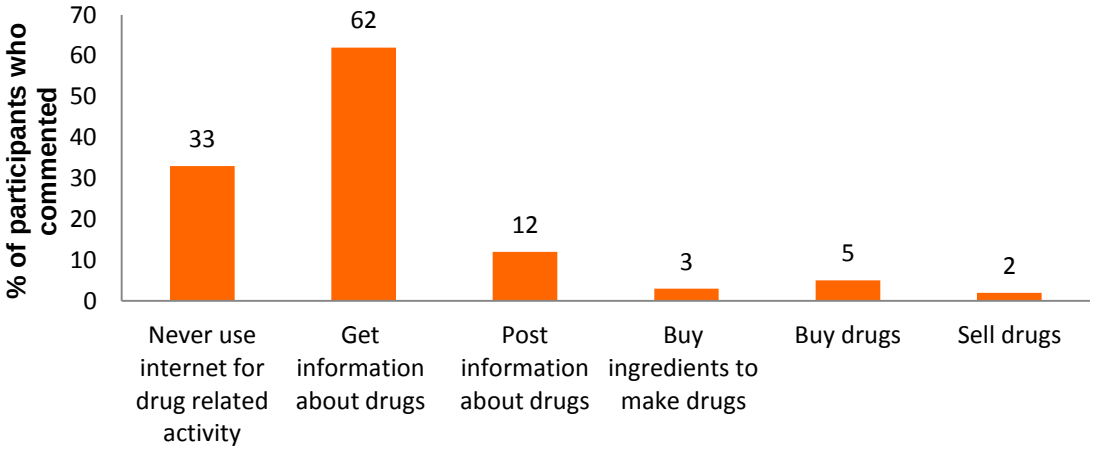
Table 68: Frequency of obtaining drugs and going online in the previous six months, 2011

Frequency	Got drugs (N = 101) %	Went online (N = 103) %
Never	-	4
Daily	7	82
At least weekly	45	11
At least fortnightly	29	3
At least monthly	18	1

Source: QLD EDRS participant interviews
Note: In this question 'get' includes buying, obtaining by barter/exchange, and receiving as a gift; and is not restricted to online (i.e. from any source)

One-third of all participants reported never engaging in any online activity related to drugs in the preceding six months (Figure 35). The majority of those who did use the internet for drug-related activity reported using it to get information about drugs, while some also posted information about drugs.

Figure 35: Online drug-related activity in the previous six months, 2011



Source: QLD EDRS interviews
Note: Multiple responses permitted if internet was used for drug-related activities

Among those who did get information about drugs online, almost a third (31%) did so at least once every two weeks (Table 69).

Table 69: Frequency of engaging in online drug-related activity in the previous six months, 2011

Activities	At least weekly	At least fortnightly	At least monthly	Less than monthly
Get information about drugs (n = 61) %	18	13	20	49
Post information about drugs (n = 12) %	8	0	50	42

Source: QLD EDRS participant interviews

Ecstasy was the most common drug that participants sourced the internet for information, with over 55% of respondents reporting that this was the main drug for which they searched the internet for information. Ecstasy was also the drug about which most participants posted about and bought online.

Websites were the most commonly used medium for online drug-related activity, followed by search engines and online forums (Table 70). The use of Myspace and Twitter was not reported for drug-related activity among this sample.

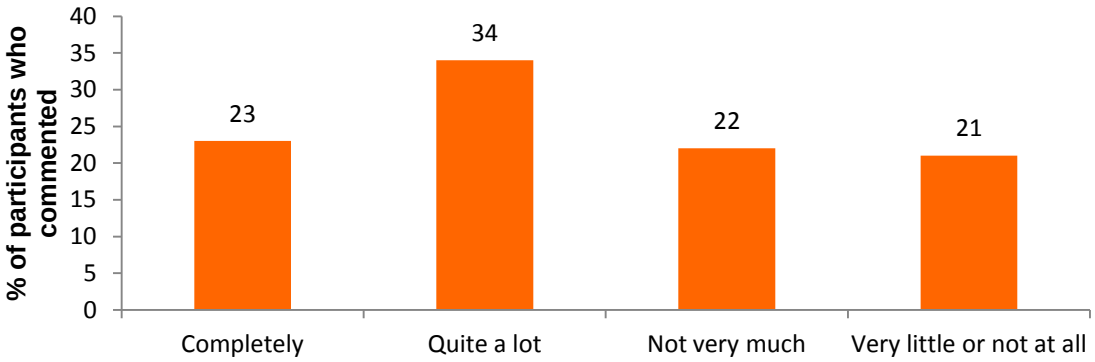
Table 70: Mediums used for online drug-related activity among participants, 2011

	Frequency of online activity related to illicit drugs				
Activities	Daily	At least weekly	At least fortnightly	At least monthly	Less than monthly
Website (n = 56) %	0	20	14	38	29
Search engine (n = 41) %	2	10	10	29	51
Online forum (n = 30) %	0	23	20	27	30
Blog site (n = 6) %	0	33	0	50	17
Facebook (n = 16) %	19	19	13	25	25
Email (n = 9) %	0	11	11	67	11

Source: QLD EDRS participant interviews

Among those who commented (n = 79), about half (51%) responded that text messaging was their preferred method of arranging to get ecstasy (Figure 36).

Figure 36: Self-reported dependency on text messaging to obtain ecstasy and similar drugs in the previous six months, 2011



Source: QLD EDRS participant interviews

9.2 Ecstasy dependence

Key Points

- The majority of respondents reported no or few symptoms of dependence in relation to ecstasy use.

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, findings in relation to ecstasy dependence should be interpreted with caution due to limited research of this syndrome (see (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 interviewed in the EDRS.

In 2011, the participants in the EDRS were asked questions from the Severity of Dependence Scale (SDS) adapted to investigate ecstasy dependence. The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with and anxiety about use. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe, Loxton, Hides, Kavanagh, & Mattick, 2002). 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). Eighteen per cent of EDRS participants obtained a score of three and above. The cut off of four and above is a more conservative estimate which has been used previously in the literature as a validated cut-off for methamphetamine dependence (Bruno, et al., 2009; Topp & Mattick, 1997). Thirteen per cent of EDRS participants scored four or above. There was no significant gender differences regarding mean stimulant SDS score and those who scored three or four or above.

The median SDS score was 0 (range = 0–12). Fifty-five per cent of participants obtained a score of zero on the ecstasy SDS, and one in five (19%) obtained a score of one on the scale: thus, the majority of respondents reported no or few symptoms of dependence in relation to ecstasy use. These findings are supported by the majority of participants (79%) responding 'never or almost never' to the question about whether they thought their use of ecstasy was out of control, and 79% reporting that they would find it 'not difficult to stop or miss a prospective dose of ecstasy' (Table 71).

Table 71: Feelings about ecstasy use in the past six months, 2011

	2011 (n = 102) %
Ever think use of ecstasy was out of control	
Never/almost never	79
Sometimes	17
Often	2
Always/nearly always	2
Prospect of missing a dose makes you feel anxious or worried	
Never/almost never	79
Sometimes	16
Often	3
Always/nearly always	2
Worry about your use of ecstasy	
Never/almost never	56
Sometimes	38
Often	5
Always/nearly always	1
Wish you could stop	
Never/almost never	80
Sometimes	13
Often	4
Always/nearly always	3

Source: QLD EDRS participant interviews

Table 72: Perception of difficulty stopping or going without ecstasy, 2011

	2011 (n = 102) %
Not difficult	79
Quite difficult	17
Very difficult	2
Impossible	2

Source: QLD EDRS participant interviews

9.3 Sleep patterns and practices associated with drug use

Key Points

- Most participants rated their sleep quality in the preceding month as fair or better. Very poor sleep quality was rare.
- 44% felt that their drug use impacted negatively on their sleep.

Of the entire sample, approximately 83% answered questions about sleep patterns and practices associated with drug use.

Any drug that passes the blood–brain barrier has the potential to alter the quality and/or architecture of sleep. It has been well documented that ecstasy users hold differing sleep patterns to controls (Allen, McCann, & Ricaurte, 1993; Carhart-Harris, Nutt, Munafo, & Wilson, 2009; Dughiero, Schifano, & Forza, 2001; McCann & Ricaurte, 2007; Parrott, 2000, 2006). The areas of impact of sleep include: decreased stage 2 sleep (Allen, et al., 1993; McCann & Ricaurte, 2007), decreased total sleep time (Allen, et al., 1993), and trends towards decreased REM onset latency (ROL) (Allen, et al., 1993; McCann & Ricaurte, 2007) have been recorded in two relatively large samples of ecstasy users.

In 2011, participants were asked additional questions about their sleep patterns and practices associated with drug use. Approximately 83% answered these questions. The questions assessed the type of sleep problems experienced within this sample of regular poly-drug users. The questions also aimed to assess the extent to which different areas of life were being affected by sleep problems and to examine which medications or substances were being used to treat sleep problems.

Overall, most participants rated their sleep quality in the preceding month as fair or better (Table 73). Very poor sleep quality was rare.

Table 73: Self-rated sleep quality in the preceding month, 2011

Quality of sleep	% (n = 83)
Very poor	4
Poor	15
Fair	23
Good	31
Very good	21
Excellent	7

Source: QLD EDRS participant interviews

When ranked on a satisfaction scale of 1 (very dissatisfied) to 10 (very satisfied), the median level of satisfaction with sleep on weekdays was seven, and six on weekends.

Just under half (44%) of participants felt that their drug use impacted negatively on their sleep; and one-third reported having used sleep medication at least once in the last month (Table 74). When asked which drug was used on the most recent occasion, Xanax® (alprazolam) and Valium® (diazepam) were the most commonly reported, followed by Panadeine®.

Table 74: Frequency of use of sleep medication in preceding month, 2011

	% (n = 83)
Not in past month	68
Less than once a week	18
Once or twice a week	4
Three or more times a week	11

Source: QLD EDRS participant interviews

9.4 Pleasure, happiness and quality of life scale

Key points

- For overall quality of life as a whole, the mean score was 7 on a scale from 0 (very bad) to 10 (excellent).
- On a scale from 0 (nil) to 100 (a lot), the mean contribution to pleasure of taking drugs was 76, to happiness 65, and to QOL 47.

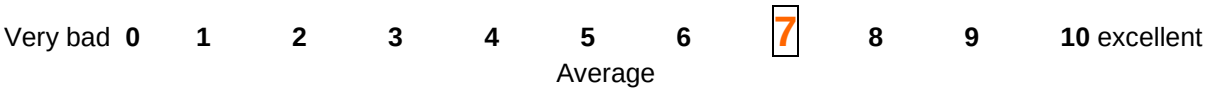
There is a need to understand more about the extent to which drug use fits into the broader life experiences of the individuals who use drugs. Repeated studies of community samples suggest that family life, close personal relationships and social networks are important factors which are associated with a better or worse quality of life (e.g. Myers & Diener, 1996). Little is known about how a person's quality of life might be influenced by their drug use; although there is reason to suspect the effect may be negative (Ventegodt & Merrick, 2003), possibly because drug use has a negative impact on family life and social networks.

Drugs are used to enhance the pleasure of the user. The type of pleasure may vary with the drug involved but it would seem evident that using drugs is intended to achieve a particular desired experience (relaxation, stimulation, a feeling of warmth and disinhibition). However, there have been few studies which have documented the extent to which actual use is associated with greater pleasure. Pleasure itself is associated with some related concepts. Thus experiences of pleasure should lead to greater happiness which, in turn, should lead to a better quality of life. Of course, it is possible that some activities which lead to pleasure may reduce happiness (happiness being a longer-term experience) and even the quality of life. It is possible that drug use enhances the experience of pleasure, has little impact on happiness and a negative impact on the quality of life.

The scales were constructed from interview data with university students and involved respondents reporting the most important things that influence their pleasure, happiness and quality of life.

Our sample participants were first asked to rate their quality of life as a whole on a scale from 0 (very bad) to 10 (excellent). The overall mean score among participants was seven (Figure 37).

Figure 37: Mean score on overall quality of life



Using the scale below, participants were then asked the contribution of 15 life aspects to each of the three concepts: pleasure, happiness, and quality of life.

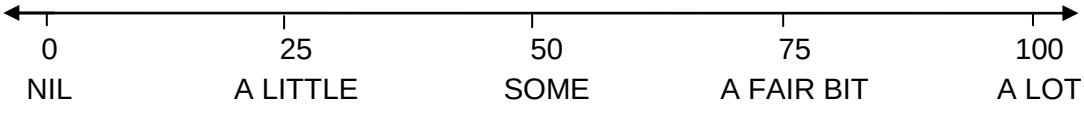


Table 75 shows the ranking and participants' mean rating score for the contribution of 15 life aspects to pleasure, happiness and quality of life (QOL). For taking drugs, the mean

contribution to pleasure was 75, to happiness 65 and to QOL 47. This downward trend across the three concepts was also reported for the normative sample of university students.

Table 75: Self-reported ranking of life aspects that contribute to pleasure, 2011

Pleasure ranking		(mean score)
1	Being with friends	86
2	Listening to music	85
3	Having sex	82
4	Travel to new places	79
5	Eating a good meal	77
6	Taking drugs	76
7	Personal achievements	75
8	Good sleep	74
9	Having lots of money	73
10	Being with family	70
11	Drinking alcohol	68
12	Being with partner	65
13	Cooking	63
14	work/education/study	61
15	Doing physical activity/exercise	59

Source: QLD EDRS participant interviews
Note: Ranking is based on 2 decimal places; 0 = nil and 100 = a lot

Table 76: Self-reported rankings on life aspects that contribute to happiness, 2011

Happiness ranking		(mean score)
1	Being with friends	84
2	Listening to music	81
3	Having sex	79
4	Good sleep	75
5	Travel to new places	75
6	Personal achievements	74
7	Having lots of money	72
8	Eating a good meal	71
9	Being with partner	70
10	Being with family	67
11	Taking drugs	65
12	work/education/study	59
13	Doing physical activity/exercise	58
14	Drinking alcohol	58
15	Cooking	57

Source: QLD EDRS participant interviews
Note: Ranking is based on 2 decimal places; 0 = nil and 100 = a lot

Table 77: Self-reported rankings on life aspects that contribute to quality of life, 2011

QOL ranking		(mean score)
1	Being with friends	83
2	Good sleep	77
3	Having lots of money	74
4	Eating a good meal	74
5	Listening to music	74
6	Having sex	73
7	Personal achievements	73
8	Travel to new places	73
9	Being with family	73
10	Work/education/study	72
11	Doing physical activity/exercise	69
12	Being with partner	68
13	Cooking	58
14	Taking drugs	47
15	Drinking alcohol	42

Source: QLD EDRS participant interviews
Note: Ranking is based on 2 decimal places; 0 = nil and 100 = a lot

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