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TASMANIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2016
Findings from the Ecstasy and Related Drugs Reporting System (EDRS)

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TASMANIAN
TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2016

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

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ABBREVIATIONS

1,4B	1,4 butanediol
2CB	4-bromo-2,5-dimethoxyphenethylamine
2CE	2,5-dimethoxy-4-ethylphenethylamine
2CI	2,5-dimethoxy-4-iodophenethylamine
2C-T-7	2,5-dimethoxy-4-(n)-propylthiophenethylamine
5-HTP	5-hydroxytryptophan
5-MEO-DMT	5-methoxy-N,N-dimethyltryptamine
ABCI	Australian Bureau of Criminal Intelligence
ACIC	Australian Criminal Intelligence Commission
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH	Australian Government Department of Health
AUDIT	Alcohol Use Disorders Identification Test
AIHW	Australian Institute of Health and Welfare
A&TSI	Aboriginal and/or Torres Strait Islander
BBVI	blood-borne viral infections
BZP	benzylpiperazine
CIDI	Comprehensive International Diagnostic Interview
DACAS	Drug and Alcohol Clinical Advisory Service
DHHS	Department of Health and Human Services
DMT	N,N-dimethyltryptamine
DOI	2,5-dimethoxy-4-iodoamphetamine
DSM	Diagnostic and Statistical Manual (of mental disorders)
DXM	dextromethorphan
DUI	driving under the influence
ERD	ecstasy and related drug(s)
EDRS	Ecstasy and Related Drugs Reporting System
GBL	gamma-butyrolactone
GHB	gamma-hydroxy-butyrate
GLBT	gay lesbian bisexual transgender
HBV	hepatitis B virus
HCV	hepatitis C virus
HIV	human immunodeficiency virus
ICD	International Classification of Diseases
IDDI	Illicit Drug Diversion Initiative
IDRS	Illicit Drug Reporting System
IDU	injecting drug user
K10	Kessler Psychological Distress Scale
KE	key expert(s) (previously ‘key informant’)
LSA	d-lysergic acid amide
LSD	d-lysergic acid
M	mean
MAOI	monoamine oxidase inhibitor
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylenedioxymethamphetamine (ecstasy)
MDEA	3,4-methylenedioxyethamphetamine
MDPV	methylenedioxypyrovalerone
MSM	methylsulfonylmethane
N	(or n) number of participants

NPS	new psychoactive substances
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDS	National Drug Strategy
NDSHS	National Drug Strategy Household Survey
NMDS	National Minimum Data Set for Alcohol and other Drug Treatment Services
NSP	Needle and Syringe Program
OCD	obsessive-compulsive disorder
OFT	oral fluid test
PDI	Party Drugs Initiative (now EDRS)
PCP	phencyclidine
PMA	paramethoxyamphetamine
PTSD	Post-traumatic Stress Disorder
REU	regular ecstasy user(s) (previously 'party drug user')
SD	standard deviation
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
SSRI	specific serotonin reuptake inhibitor
95%CI	95% confidence interval

EXECUTIVE SUMMARY

Demographic characteristics of REU

The sample of 100 REU interviewed in 2016 were typically in their mid twenties (range 18-49 years). Half (51%) of the sample were male. A majority of participants (70%) had completed Year 12, and 44% had completed tertiary qualifications after school (university or trade/technical). A majority of participants were either employed (46%), studying (22%) or both employed and studying (17%). Few participants had come into contact with drug treatment agencies (2%). These demographic characteristics are generally similar to previous cohorts.

Patterns of drug use over time

Polydrug use was the norm among the REU interviewed, with most having used a range of drug classes in the preceding six months. Recent use of alcohol, cannabis, tobacco, LSD and methamphetamine powder was most common (reported by one-third or more of the sample) and over one-fifth had recently used cocaine, benzodiazepines, crystal methamphetamine or mushrooms.

Ecstasy

Data from the NDSHS shows a significant decline in past-year ecstasy use in the general population between 2010 (3%) and 2013 (2.5%). The proportion reporting past-year use in Tasmania was 2.9% in 2013 and 1.7% in 2010, but these estimates should be interpreted with caution due to a high relative standard error (and hence it is unclear if there has been any change in use at the population level).

Nearly all of the 2016 REU sample (98%) reported use of ecstasy in the past six months. On average participants had been using ecstasy for six years and had first used ecstasy at around 18 years of age (range 13-28 years). Ecstasy was typically last used at music-related venues including nightclubs, pubs, private parties or live music events.

Ecstasy had typically been used in tablet (98%), capsule (41%), crystal (34%) or powder (29%) form in the last six months. Ecstasy was typically taken orally, but snorting was also common.

On average, ecstasy had been used on 12 days in the last six months or approximately fortnightly. Almost one-fifth (17%) had recently used ecstasy weekly or more frequently and one-fifth (19%) had used ecstasy in a 'binge session' (a continuous 48-hour period of drug use without sleep).

A median of one ecstasy tablet was taken in a typical session of use in the last six months, compared to a median of two tablets among the four EDRS cohorts prior to 2015.

A majority of REU (98%) had used other drugs when last under the influence of ecstasy. The drugs most commonly used when last under the influence of ecstasy were alcohol (85%), tobacco (62%), cannabis (43%), energy drinks (14%), crystal methamphetamine (11%) and benzodiazepines (8%). A large proportion (65%) of the sample reported consuming more than five standard drinks when they were last under the influence of ecstasy.

Price, purity and availability of ecstasy

The median last purchase price for ecstasy was $30 for one tablet (range $15-50) and $35 for one capsule (range $20-45). No recent price changes were noted and three-quarters (74%) indicated that price had remained stable in the past six months.

The median last purchase price for MDMA crystal was $300 per gram (range $25-550), and price was reported to be have been stable (76%) in the last six months.

Ecstasy (pills, capsules, powder) was reported to be medium (45%) or fluctuating (38%) in purity. In contrast, MDMA crystal was typically reported to be high (46%) or medium (42%) in purity, and this purity was reported to have been stable (84%) in the last six months.

Ecstasy (pills, capsules, powder) was reported to be easy (50%) or very easy (37%) to obtain in 2016. MDMA crystal was typically reported to be easy (42%) or very easy (29%) to obtain.

Methamphetamine

Data from the NDSHS shows that there were no significant changes in lifetime or past yearly use of methamphetamine in the general Australian population between 2010 and 2013. While the past-yearly use of methamphetamine in Tasmania was estimated to be 3% in 2013 and 1.1% in 2010, differences between these estimates should be interpreted with caution due to high relative standard errors.

Two-fifths (42%) of the 2016 REU sample had used some form of methamphetamine in the preceding six months, similar to 2015 (45%).

Methamphetamine was used on a median of three days during this period (approximately once every two months on average).

Recent use of methamphetamine powder was most common (32%), followed by crystal methamphetamine (21%), with lower levels of use for methamphetamine base (4%).

Methamphetamine powder was typically snorted, base was typically swallowed, and crystal was typically smoked or injected.

Due to the small number of REU who commented on methamphetamine base, trends in price, purity and availability over time are largely examined for methamphetamine powder and methamphetamine crystal only.

The median last purchase price for one point (0.1g) of methamphetamine powder was $50 (range $40-80), which is similar to 2015 ($50). The median last purchase price for one gram of methamphetamine powder was $317.50 (range $35-600).

The median last price for one point (0.1g) of methamphetamine crystal was $95 (range $45-100), which is similar to previous years. The median last purchase price for one gram was $500 (range $450-600).

Methamphetamine powder was reported to be low (45%) or medium (31%) in purity, similar to 2015. This purity was reported to be stable (69%) during the previous six months. One-half (49%) reported that methamphetamine powder was easy or very easy to obtain, similar to 2015 (50%).

Crystal methamphetamine was reported to be medium (41%) or high (47%) in purity. This purity was reported to be stable (53%) or fluctuating (35%) during the previous six months.

Most of those who commented (88%) reported that crystal methamphetamine was easy (41%) or very easy (47%) to obtain, and that this availability had remained stable over the past six months (71%).

Cocaine

One-quarter (24%) of the 2016 sample had used cocaine during the six months preceding the interview, a similar proportion to 2015 (17%).

Cocaine was most typically snorted and was used on a median frequency of two days (range 1-12 days) in the last six months, with an average of one gram used in a typical session.

Cocaine was reported to be medium (50%) or low (38%) in purity over the past six months, and that purity levels had remained stable (82%) in this time. Most of the REU who commented regarded cocaine difficult (38%) or very difficult (44%) to obtain in the past six months.

LSD and other psychedelics

Almost three-quarters (72%) of the 2016 sample had used LSD at some stage of their lives and two-fifths (39%) had used LSD in the six months preceding the interview, similar to the proportion in 2015 (41%).

LSD had been used on a median of four days (range 1-20 days) in the preceding six months with one tab or drop of liquid LSD (range 1-3) taken orally in a typical session of use.

One-quarter (24%) had used mushrooms in the preceding six months. Mushrooms had been used on a median of three days (range 1-24 days) during this time.

The median last price for one tab/drop of LSD in 2016 was $15 (range $4-40), and this price was reported to have remained stable (78%) during the past six months.

The purity of LSD was considered by REU to be high (45%) or medium (41%) and to have remained stable (63%) during the last six months.

A large majority of those commenting indicated that LSD was very easy (28%) or easy (53%) to obtain and that availability had recently been stable (72%).

Cannabis

According to the 2013 NDSHS, it was estimated that approximately 11.8% of Tasmanians (aged 14 years and over) had used cannabis in the past year, a significantly greater proportion relative to 2010 (8.6%), but similar to the proportion in 2007 (10.8%). Nationally, the past year prevalence of cannabis use was estimated to be 10.2% with no significant change noted relative to 2010.

Three-quarters (77%) of the sample had used cannabis during the six months preceding the interview. In the last six months, cannabis had typically been smoked (97%), with one-fifth (22%) reporting ingestion of cannabis, and one-seventh (13%) reporting that they had inhaled cannabis in a vaporised form.

The median frequency of cannabis use was 100 days (range 2-180) or approximately four days per week. One-third of the sample (29%) reported daily use of cannabis during this time.

The median quantities used on the last day of use during this time were six cones (range 1-30) or two joints (range 0.5-2).

The median last purchase price for one ounce of hydroponically-grown ('hydro') cannabis was $280 (range $200-310), compared to $200 (range $80-275) for one ounce of bush grown ('bush') cannabis.

The potency of hydro was reported to be high (41%) or medium (48%), and the potency of bush was reported to be medium (60%) with no recent changes noted.

Both bush and hydro were reported to be easy or very easy to obtain, and this level of availability was generally perceived to have remained stable during the six months preceding the interview.

Alcohol

Most (98%) of the 2016 REU sample had recently consumed alcohol, on an average of three days a week in the last six months. Sixty-nine (69%) of participants had used alcohol at least weekly (but not daily), which is substantially higher than the estimate of prevalence in the general population among those aged 18-24 (22.1%) and 25-29 (19.3%) nationally – a comparable age group to the current REU cohort.

Tobacco

Tobacco had recently been used by three-quarters (76%) of the sample in the past 6 months. The proportion of the 2016 Tasmanian EDRS sample who reported daily smoking (58%) is higher than the 2013 population estimate for a comparable age group (20-29 years) both in Tasmania (30.1%) and nationally (15.2%) (AIHW, 2014). Over one-tenth (15%) reported use of e-cigarettes in the last six months. A majority had used e-cigarettes which contained nicotine (73%), and one-third (33%) had used e-cigarettes as a smoking cessation tool.

Mephedrone and other new psychoactive substances (NPS)

One-quarter (26%) of the 2016 sample reported use of any NPS substance in the last six months, similar to the 2015 sample (21%). Less than one-tenth (5%) reported use of mephedrone in the last six months, which is similar to the proportion in 2015 (9%). Mephedrone was swallowed or snorted on a median of two days (range 2 days) in the last six months.

Recent use of other NPS was relatively low. The most commonly used substances in the last six months were methoxetamine (5%), DMT (4%), methylone (4%), mescaline (3%) and 2CI (3%). In addition, almost one-fifth of the sample (15%) reported recent use of capsules of 'unknown contents'.

Patterns of other drug use

Less than one-tenth of REU reported recent use of MDA (8%), Ketamine (3%) or GHB, gamma-butyrolactone (GBL) or 1,4 butanediol (1,4B) (1%).

Use of inhalants was relatively stable, with 15% reporting use of nitrous oxide and 11% reporting use of amyl nitrite in the preceding six months.

One-quarter (25%) of REU had used benzodiazepines during the last six months, with almost one-fifth (21%) reporting illicit (non-prescribed) use. Use of illicit benzodiazepines was relatively low in frequency, at 8 days (range 2-30 days) in the last six months.

One-fifth (20%) of REU reported recent illicit use of pharmaceutical stimulants (such as dexamphetamine or methylphenidate) in 2016. The median frequency of use was two days (range 1-15 days) in the last six months, with a median of 2.75 tablets (range 1-5) taken in a typical session of use.

Only a small proportion of the 2016 sample had recently used heroin (3%), methadone (1%), or 'other illicit opioids' (5%) (restricted pharmaceuticals and alkaloid poppy derivatives). Over one-tenth (13%) reported recent non-pain use of over-the-counter codeine preparations.

Health-related issues

Overdose. One-tenth (10%) of the 2016 REU sample had overdosed on a drug in the preceding six months, similar to 2015 (14%). In 2016, 3% reported a recent overdose episode on a stimulant drug (e.g., ecstasy, LSD, mephedrone) and 7% reported a recent overdose on a depressant drug (e.g., alcohol, benzodiazepines). Although the overdose symptoms that were experienced were not medically trivial, most participants had not received any formal medical treatment in relation to their last overdose episode.

Access to health services. Despite regular substance use, less than one-fifth (17%) of REU had accessed health services in relation to drug use in the last six months, and, when they did so, this was most commonly a GP (59%), a psychologist (47%) or a drug and alcohol worker (35%).

Mental health problems. Nearly half (48%) of the 2016 REU sample reported experiencing mental health problems during the six months prior to the interview. Among these individuals, depression (75%) and/or anxiety (60%) were most commonly reported. Just over half (56%) of those who had experienced mental health problems had attended a health professional in relation to these problems during this time, suggesting an unmet demand for service provision.

Psychological distress. Mean scores on the Kessler psychological distress scale (K10) were higher among the current sample of REU relative to the general Australian population (National Health Survey; ABS, 2009). The proportion of the 2016 EDRS sample with scores categorised as high/very high (52%) is substantially higher relative to the three EDRS samples prior to 2015 (33-37%) and both the national (11.8%) and Tasmanian (9.2%) normative samples from the 2011/12 NHS (aged 18-24).Those classified in the high range have increased rates of experience of mental health problems and may benefit from interventions with health professionals. Those with high/very high K10 scores were significantly more likely to report a mental health problem (69% vs. 25%), and to have attended a mental health professional (39% vs 15%) in the last six months, but were not more likely to report accessing a health service in relation to drug use during this time (21% vs 13%).

Ecstasy dependence. While half of recent ecstasy users (47%) reported experiencing no symptoms of dependence in relation to their ecstasy use, almost one-third (28%) reported experiencing significant symptoms of dependence. Those who reported significant symptoms of ecstasy dependence were no more likely to have accessed a health service in relation to drug use compared to those who did not below 4 (19% vs. 17%).

Methamphetamine dependence. While two-fifths (44%) of recent methamphetamine users reported experiencing no symptoms of dependence in relation to their methamphetamine use, one-third (34%) reported experiencing significant symptoms of dependence. Those who reported significant symptoms of methamphetamine dependence were significantly more likely to have accessed a health service in relation to drug use compared to those who did not (50% vs. 4%).

Tasmanian drug treatment data

While a number of calls have been made to the Tasmanian ADIS in relation to ecstasy over the past five years, these account for a small percentage (between 0.7% and 1.7%)

of the calls made to this service. In the 2015/16 reporting period, one-third (34%) of all calls related to alcohol, followed by amphetamines (18%), opioids other than heroin (12%) and cannabis (7%). While there was an increase in the proportion of calls relating to amphetamine-type substances between 2012/13 (15.9%) and 2014/15 (27.2%), there was a decline in 2015/16 (17.9%). There has also be been a decrease in the number of calls relating to cannabis (from 23.4% in 2012/13 to 7.2% in 2015/16).

Data from the NMDS for alcohol and other drug treatment services in Tasmania show that alcohol (40%), cannabis (29%) were more commonly coded as the principal drug of concern in closed treatment episodes, followed by meth/amphetamine (18%), morphine (2.7%), and ecstasy (1%). The proportion of closed treatment episodes relating to meth/amphetamine was higher than 2013/14 (12% vs 18%). The most common form of treatment was counselling (43% of episodes).

Tasmania hospital admission data

The number of cannabis-related admissions increased from 2009/10, from 83 admissions per million population in (equating to 51% of the national rate) to 100 admissions per million population in 2015/16 (equating to 161% of the national rate).

A similar increase in number of methamphetamine-related admissions was observed (60 admissions in 2015/16 versus 38 admissions in 2014/15). It is critical to note that, unlike when similar numbers were reported in 2006/07 and 2007/08, the Tasmanian rate is still substantially less than the national rate (48% of the national rate).

Risk behaviours

Injecting drug use. One-tenth (10%) of the 2016 REU sample had recently used substances intravenously.

Sexual risk behaviour. Nearly two-thirds (62%) of REU reported penetrative sex with a casual partner during the six months preceding the interview and a large majority of these (95%) reported sex with a casual partner while under the influence of drugs, most commonly alcohol, ecstasy, or cannabis. Almost three-quarters (71%) of those who reported sex with a casual partner indicated that they did not use any protective barriers on the last occasion in the previous six months.

Two-fifths of the sample (39%) had never had a sexual health check-up. A majority (83%) of the sample had never been diagnosed with a sexually transmitted infection (STI).

Alcohol Use Disorders Identification Test (AUDIT). Almost one-fifth (17%) of REU who completed the AUDIT scored in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence) which is a lower rate than in 2015 (30%). A further 14% scored in zone 3 (harmful or hazardous drinking), almost one-half (47%) scored in zone 2 (alcohol use in excess of low-risk guidelines[1]), and 22% scored in zone 1 (a level reflecting low-risk drinking or abstinence).

Drug driving. Of those who had driven a car (n=71), one-quarter (25%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the

[1] It should be noted that this threshold for low-risk is based on standards employed in the 2007 NDSHS, which represents a threshold substantially higher than that specified by the National Health and Medical Research Council in their revised guidelines. However, the thresholds used in the Household Survey have been reported here in order to facilitate comparisons with such national indicators.

last six months, and over one-third (35%) reported driving while under the influence of illicit drugs in the last six months.

Binge drug use. Almost one-third (29%) had recently binged on ecstasy or related drugs (a continuous period of use for more than 48 hours without sleep), on a median of three occasions (range 1-24) in the last six months. Substances most commonly used in a binge session of use were alcohol (83%), ecstasy (66%), cannabis (59%), methamphetamine (powder 14%; crystal 38%) and energy drinks (31%).

Criminal activity, policing and market changes

Criminal activity. One-quarter (26%) of the 2016 REU sample reported taking part in any criminal activity in the last month. The most common crimes were drug dealing (20%) and property crime (12%). One-tenth (11%) of REU had been arrested during the preceding 12 months. Arrests were generally for non-drug related offences.

Arrests and seizures by Tasmania Police. In 2015/16 there were a greater number of ecstasy-related consumer (n=40) and provider (n=26) arrests relative to the previous five reporting periods (2-13 consumer arrests, and 1-14 provider arrests). There were 25 seizures and a total of 3,146 tables/capsules seized by Tasmania Police in 2015/16, representing a substantial decrease relative to the 2014/15 reporting period (96 seizures and 12,730 tablets/capsules).

Arrest data for methamphetamine-related offences (Figure 43) indicated a similar number of arrests in 2015/16 (433 arrests) compared to 2014/15 (430 arrests), with similar number of consumer arrests (308 vs. 292) and provider arrests (125 vs. 138) recorded in 2015/16 relative to in 2014/15. There was a decrease in the number of methamphetamine seizures in 2015/16 (610 seizures) compared to 2014/15 (828 seizures). The total weight of methamphetamine seizures was also less in 2015/16 (3,795 grams) relative to in 2014/15 (7,014 grams).

Cautions and arrests relating to cannabis were similar in 2015/16 (1,451 arrests) compared to in 2014/15 (1,446 arrests). However, the number of cannabis seizures was decreased while the total weight of seizures increased in 2015/16 compared to 2014/15.

Illicit drug diversions/cautions. In 2015/16 the total number of diversions (624 diversions) was slightly lower than 2014/15 (648 diversions). Similarly, the number of second-level and third-level diversions to health interventions (178 diversions) was lower than in 2014/15 (216 diversions). Diversions were largely for cannabis-related offences (91%).

Drug-related charges in Tasmanian courts. The total number of drug-related offences before the Hobart magistrate court between 2015/16 and 2014/15 was stable (262 vs 269). The downward trend of drug-related offences over the four previous reporting periods has been largely due to decrease in the number of offences related to possession/use of illicit drugs (120 in 2015/16 compared to 179 in 2011/12).

The number of individuals incarcerated at Hobart Prison in relation to drug offences in 2015/16 (143 individuals) was much higher compared to 2014/15 (72 individuals), as well as previous years. This increase was reflected in the number of offences among those incarcerated (430 in 2015/16 compared to 219 in 2014/15).

Tasmanian roadside drug testing data. There was a marginal increase in the number of roadside drug tests conducted on Tasmanian roads in 2015/16 relative to 2014/15 (3,738

vs. 3,431). There was also a small decrease in the proportion of tests which returned a positive result (52% vs. 56%), however, as at 30 June 2016, 253 blood results were still pending analysis.

In 2015/16[2], 2,294 (out of 3,738) roadside drug tests and 2,179 (out of 2,318) blood tests returned a positive result. Cannabis was the most commonly detected drug, with 60% of all OFT tests and 66% of all blood tests returning positive results. Positive results for meth/amphetamine were also common in both OFT (41% amphetamine, 31% methamphetamine) and blood tests (48% amphetamine, 55% methamphetamine). Few OFT (<1%) or blood tests (3%) returned a positive result for the presence of MDMA/ecstasy.

Special topics of interest

NPS supply and purchasing patterns. One-quarter (26%) of the Tasmanian sample reported using a NPS in the last 12 months, most commonly methoxetamine (23%), mephedrone (15%) and DMT (15%). The majority of those who had used a NPS in the last 12 months nominated a friend (73%) as their main source. Smaller numbers nominated a dealer (15%) or 'online' (8%) as their main NPS source. Participants were asked in the last 12 months if they provided any NPS to others. Of those who commented (n=25), 64% reported that they did not provide any NPS to others, while 36% reported that they had provided any NPS to others.

Half (54%) of recent NPS users reported that they had experienced an unexpected adverse effect on their last occasion of use. The most common adverse effects reported were paranoia (71%), heart racing or erratic (71%), restlessness/anxiety (57%), panic (50%), overheating (43%) and numbness or coldness in fingers or toes (43%). One participant indicated that they sought emergency help after taking an NPS.

Online Purchasing. In 2016, 11% of Tasmanian EDRS participants reported that they had ever purchased an illicit drug online, with 6% having done so in the previous year (2015: 16% lifetime and 10% in the past year). Purchases of illicit drugs were made from either International webstores (on the 'surface web'; 33%), 'dark net' marketplaces similar to the now-closed Silk Road (50%), or social networking sites (17%).

Gambling. Over one-quarter (28%) of the Tasmanian sample had gambled on a median of five days in the last six months (range 1-180 days). Seven percent believed they had an issue with gambling.

Implications

The aim of the EDRS is to investigate the patterns of drug use, drug markets, and associated risks and harms among a sentinel group of participants that use ecstasy on a regular basis; as such, this population is not necessarily representative of all consumers of ERD, and the prevalence of ecstasy and other drug use cannot be inferred. However, the study is designed to identify emerging trends and important issues, and the findings suggest the following key areas for consideration.

1. Examination of trends in methamphetamine use state-wide

While this study found a stable rate of methamphetamine use among ERD consumers in 2016 relative to 2015, other local studies have identified increasing rates of use of the high potency crystalline methamphetamine (Lusk, Ney, Peacock, & Bruno, 2017) among people who frequently inject drugs. There remains significant community concern in relation to

[2] 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

methamphetamine availability, particularly crystalline methamphetamine, in other areas of Tasmania. The existing indicators of methamphetamine markets in regions outside of Hobart are scant and have been recently reviewed (DHHS, 2014). One of the recommendations of this recent report was that "Tasmanian Inter-Agency Working Group on Drugs could be tasked specifically with monitoring this and any other emerging drug use trends and providing regular reports to government" (p. 7). Similarly, one of the key recommendations of the National Ice Taskforce report was improvements in data and monitoring in relation to use of illicit drugs.

The methodology of the EDRS and IDRS are well suited to extension to other regions of the state, and has previously identified quite distinct drug use markets between southern and northern regions (de Graaff & Bruno, 2007b). As such, consideration of regularly extending the EDRS and IDRS studies to the North and North-West of Tasmania would be appropriate to improve understanding of drug markets and to provide early warning of emergent trends. While data from wastewater-based epidemiology has been proposed as a regular monitoring framework to assess population level changes in consumption, data from these studies requires information from consumers (in relation to quantity and frequency and modes of use and associated harms) and from other data sources (such as purity data from law enforcement) in order to interpret such data. As such, consumer studies remain a cornerstone of an integrated monitoring framework alongside these other indicators of use.

2. Funding of specific health programs to meet the needs of local consumers

There are currently no services that specifically target users of ERDs in Hobart, and aside from volunteer organisations at predominantly large-scale events, there is currently very little dissemination of harm-reduction information to these populations. This indicates a clear need for funding and a proactive response in terms of the implementation of harm-reduction strategies. Drug information is typically sought from peers or peer-run organisations (e.g., harm-reduction-based websites such as www.pillreports.com or www.bluelight.ru), responses to overdose incidents were typically handled by peers, and REU do not typically come into contact with traditional drug-related services. Thus, it is likely that harm-reduction programs will attain maximum impact if delivered through peer-based organisations and mediums appropriate to the target group (e.g., internet sites and outreach workers or information at events).

3. Focused interventions to reduce the harm associated with high risk patterns of substance use and risky behaviours

Whereas the long-term effects and risks of extended ecstasy use are not completely understood, evidence from toxicology studies in rats and neuropsychological studies in humans suggests that those using the drug frequently or in large amounts for extended periods of time may be at a greater risk for neurological and neuropsychological harm. Among the REU cohort in the present study, almost one-fifth of the 2016 sample had recently used ecstasy weekly or more frequently (17%), had used ecstasy in a binge session (19%) (a continuous 48-hour period of drug use without sleep), or reported using more than two tablets in a typical session of use (13%).

Polydrug use is also an issue of concern in this population. Concomitant use of different drugs may have potentially harmful interactions, thus dissemination of information regarding the negative effects of specific drug combinations may be beneficial. Of particular concern is the high level of coincidental ecstasy and binge alcohol use among REU. A large majority (65%) typically consumed more than five standard drinks when under the influence of ecstasy. There is an increased risk of dehydration when alcohol is combined with ecstasy. Additionally, larger quantities of alcohol can be consumed when under the influence of psychostimulants without experiencing the immediate effects of intoxication. There is also emerging evidence from animal studies that alcohol may dramatically alter the pharmacology of MDMA in the brain, in particular increasing the concentration of the drug

and its metabolites in particular regions (Hamida et al., 2008), which may exacerbate the potential for neurological harms or drug dependence.

The use of NPS and capsules with unknown content is a potentially risky practice. For these substances, it may be difficult for consumers to predict time of onset and harms may ensue if consumers take multiple tablets/capsules in an attempt to compensate for a perceived low potency dose. When consuming unknown psychostimulants, Winstock, Marsden and Mitcheson (2010) suggest the following general harm reduction principles: 1) avoid regular use to avoid development of tolerance; 2) avoid co-incident use of multiple psychostimulants or in combination with large doses of alcohol or other depressants; 3) avoid becoming overheated; 3) avoid consuming 'stacked' multiple doses; and 5) avoid psychostimulants if there is a history of mental health disorder, cardiac or neurological problems.

Hazardous drinking practices are also an issue of general concern in this population. Three-quarters of REU (78%) had used alcohol at least weekly (but not daily), which is substantially higher than the estimate of prevalence in the general population among those aged 18-24 (22.1%) and 25-29 (19.3%) nationally – a comparable age group to the current REU cohort. Similarly, over three-quarters of REU (78%) scored 8 or more on the Alcohol Use Disorders Identification Test (AUDIT), suggestive of hazardous and harmful alcohol use and the possibility of alcohol dependence. Additionally, the majority of overdose episodes reported by REU in the current and previous cohorts has involved alcohol and/or polydrug use.

Tobacco use is very common among the EDRS cohorts with a large majority (76%) of the 2016 sample reporting use in the last six months. The proportion who reported daily smoking (58%) was higher than the 2013 population estimate for a comparable age group (20-29 years) both in Tasmania (30.1%) and nationally (15.2%) (AIHW, 2014). Additionally, the incidence of intermittent tobacco use is extremely high, suggesting a need for focused interventions among this population. For example, traditional interventions (e.g., nicotine patches) may not meet the needs of the high proportion of intermittent consumers, and novel tailored interventions may be necessary.

Almost three-quarters (71%) of those who reported sex with a casual partner indicated that they did not use any protective barriers on the last occasion in the previous six months. Use of protective barriers among this population is an issue of concern given the high rates of sexually transmitted infections in the general population. Among those interviewed in the present study, two-fifths (39%) reported that they had never had a sexual health check-up. Thus targeted interventions aimed at increasing awareness of safe sexual practices is necessary.

4. Increased awareness of and access to primary health, mental health and emergency services in this population

The level of harm experienced by the majority of participants was relatively low. However, there is a subset of this cohort that experienced notable symptoms of dependence, recent mental health problems, and clinically significant levels of psychological distress. Almost one-half (48%) of the 2016 REU sample reported recent experience of mental health problems (most commonly depression and/or anxiety), and over half (56%) of these individuals attending a health professional in relation to these problems. This suggests under-recognition of mental health problems and a need to improve recognition and access to treatment for mental health problems in this population.

Similarly, despite regular substance use, less than one-fifth (17%) of the sample had recently accessed health services in relation to drug use. The services most commonly accessed by REU in 2016 were GPs, dentists, psychologists and drug and alcohol workers.

As such, there may be some benefit in increasing awareness among primary health care practitioners in regard to ecstasy and related drugs and associated problems.

Almost one-quarter (23%) of the 2016 REU sample had overdosed on a drug in the preceding six months, and the majority of these had not received any formal medical treatment or were monitored/watched by friends. Thus peer education on how to help friends in an emergency, and the situations in which medical treatment may or may not be appropriate, may also be of benefit for this group.

5. Continued monitoring and focused interventions to increase the awareness of the effects and risks of the use of mephedrone and other emerging substances, as well as interventions to address risky substances sold as 'ecstasy'

Data from the EDRS has indicated significant changes in ERD markets in Hobart over the years. This has included fluctuations in the ecstasy and methamphetamine markets (including use of MDMA capsules/crystal and crystal methamphetamine), the rise and changing face of NPS use (including mephedrone and related substances) and the emergence of an illicit capsule market. Given the changing illicit drug market both nationally and internationally and the continual development and release of new substances and online markets, it is imperative that the use of NPS are continually monitored and that focused interventions are developed to increase the awareness of the effects and risks of their use among both consumers and health workers in this area. Moreover, given the risks to consumers from the use of unknown drugs, it is important that when new substances are identified by law enforcement or other sources, that information about these drugs are made publicly available in a timely manner so that consumers, researchers and health workers are able to respond appropriately to any new risks that such substances pose. There have been recent identification nationally of high risk combinations of substances (fluoroamphetamine and 25C-NBOMe) sold as 'ecstasy' which has led to significant overdoses. The risk from these unknown substances is high and needs rapid communication to consumers. There have been increasing calls nationally for consideration of roll-outs of pill checking services at high risk/high volume events as a potential means to reduce harm from these substances. One model under consideration by some of these advocates proposes a behind the scenes testing services operating on-site at festivals, examining drugs seized at the event or deposited in amnesty bins and communicating the results of these to health and law enforcement professionals and consumers in real time at the event, to provide rapid warning of risky substances in the local marketplace. Should such a model be considered for implementation, careful evaluation of the benefits and any unintended harms should be deployed .

1.0 INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS, formerly the Party Drugs Initiative or PDI) is a companion project to the Illicit Drug Reporting System (IDRS). The IDRS focuses on drugs such as methamphetamine, opioids, cannabis, and cocaine, and issues that pertain particularly to intravenous drug use in Australia. In contrast, the EDRS aims to examine emerging trends in the use, price, purity and availability of ecstasy and related drugs (ERD) in Australia. ERD are defined as drugs commonly used recreationally in the context of venues such as nightclubs and dance- or music-related events. These drugs primarily include ecstasy, methamphetamine, cocaine, d-lysergic acid (LSD), ketamine, gamma-hydroxy-butyrate (GHB) and novel psychoactive substances (NPS).

The feasibility of the EDRS was assessed with a two-state trial funded by the National Drug Law Enforcement Research Fund (NDLERF) in 2000 (Breen, Topp, & Longo, 2002) and NDLERF provided additional funding for a two-year project in every Australian state and territory beginning in 2003. The EDRS was funded by the Australian Government Department of Health (AGDH) and the Ministerial Council on Drug Strategy as a project under the cost-shared funding arrangement in 2005 and by the AGDH since 2006.

The current report contains new data collected in Tasmania in 2016. Tasmanian trends between 2003 and 2015 can be found in previous Tasmanian EDRS reports (Bruno & McLean, 2004b; Matthews & Bruno, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2013; Matthews, Batt & Bruno, 2015, Matthews, Bruno, & Nicholls, 2014; Matthews, Bruno & Peacock, 2012, Matthews, Lusk & Bruno, 2016). National reports including jurisdictional comparisons are available online from the National Drug and Alcohol Research Centre (NDARC), University of New South Wales (Black et al., 2008; Breen et al., 2004; Dunn et al., 2007; Sindicich et al., 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016; Stafford et al., 2005, 2006).[3]

1.1 Aims

The aims of the Tasmanian EDRS are: to describe the demographic characteristics and patterns of ecstasy and other drug use among a sample of regular ecstasy users (REU) and regular psychostimulant users (RPU) in Hobart and surrounding areas; to examine and identify trends in the price, purity, and availability of ERD in Hobart; to examine the nature and incidence of risk behaviours and health-related harms among the group of participating REU/RPU; to investigate other emerging trends in local ERD markets that may warrant further investigation or monitoring; and to identify issues that are pertinent to developing harm-reduction strategies. A further aim is to, where possible, incorporate converging data from key experts (KE) and indicator data and to identify emerging trends through comparison with EDRS data collected in Hobart in previous years (Bruno & McLean, 2004b; Matthews & Bruno, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2013; Matthews, Batt & Bruno, 2015, Matthews, Bruno, & Nicholls, 2014; Matthews, Bruno & Peacock, 2012; Matthews, Lusk & Bruno, 2016).

[3] These reports are available electronically at the NDARC website: http://ndarc.med.unsw.edu.au/.

2.0 METHODS

The EDRS uses a convergent validity methodology involving the triangulation of data from three different sources. The three components include a survey of REU in Hobart, interviews with KE who have regular contact with ecstasy users in Hobart through the nature of their work or role in the community, and an examination of existing data sources that pertain to ERD in Tasmania. Focusing on convergent trends among the three data sources allows the validity of each data set to be established. Specific information about the three data sources used in the present study is outlined below.

2.1 Survey of REU

2.1.1 Recruitment

One hundred REU were interviewed using a structured face-to-face interview between April and June 2016. Interviews were conducted at locations such as cafes, bars, the University of Tasmania, and where appropriate, private residences such as participants' and interviewers' homes. Inclusion criteria for the study included at least monthly use of ecstasy (REU) or other psychostimulants (RPU) in the last six months, an age of at least 17 years, and having resided in the greater Hobart area for at least 12 months prior to the interview. In 2016, 98% of the sample met the criteria for REU. Participants were recruited through posters and flyers distributed in the Hobart area at various locations (e.g., cafes, bars, nightclubs, music stores, universities, youth services), internet forums, and through snowball methods (word of mouth and recruitment through friends and associates). In 2016, REU reported hearing about the study through street press (6%), internet (42%), flyers (11%) or 'snowballing' methods (peer referral) (23%). One-quarter (24%) of the 2016 cohort had participated in the EDRS in previous years and a small proportion (6%) had participated in the IDRS report before.

2.1.2 Procedure

Participants contacted the researchers through voicemail, email, or SMS to leave their contact details and were subsequently contacted by one of the interviewers. Participants were screened by phone to establish their eligibility for the study. Interviewers arranged to meet eligible participants at a mutually acceptable time and place. Prior to commencing the interview, participants gave written informed consent. Participants were informed that the survey was strictly confidential, that they could not be personally identified in any way, and that they were free to withdraw at any time without prejudice, or decline to answer any questions. Interviews took a median of 60 minutes to complete (range 20-90 minutes) and participants were reimbursed a sum of $40 for their travel and out of pocket expenses.

2.1.3 Measures

The structured interview focused on the six-month period preceding the interview and assessed demographic characteristics; patterns of ecstasy and other drug use including frequency, quantity and route of administration; the price, purity, and availability of different drugs; patterns of purchasing; symptoms of dependence; help seeking; injecting drug use; overdose; safe sex; problems associated with drug use (e.g., work/study, risk to self/others, social, legal problems); psychological distress; mental health; and self-reported criminal activity. In addition, the following special interest modules were included in 2016: use and adverse effects of new psychoactive substances (NPS), online purchasing and video gaming and gambling.

2.1.4 Data analysis

Differences between the means of continuous normally distributed variables were analysed using *t*-tests. The non-parametric Mann-Whitney *U* test was used to analyse differences on continuous variables that did not follow a normal distribution. Chi-square tests and 95% confidence intervals (95%CI) were used to analyse differences between categorical variables. Confidence intervals for the difference between two proportions were determined according to Tandberg[4] using an implementation of the optimal methods identified in Newcombe (1998). A categorical variable for age was created using a median split, resulting in a 'younger' group (aged 22 years and below, n=47) and an 'older' group (aged above 22 years, n=53). All statistical analyses were conducted using IBM SPSS Statistics 22.0 for Windows (IBM, 2013).

2.2 Survey of KE

Key experts who had regular contact with illicit drug users in the six months preceding the interview were eligible to participate in the study. Twenty-seven KE participated in semi-structured face-to-face interviews at their place of work, private residences, locations such as coffee shops or bars, or over the phone between August and September 2016. KE included members of the Department of Justice (law enforcement professionals n=2, policy n=1), and from the Department of Health and Human Services (pharmacists n=4, emergency medicine n=1). KE's also included those working in prison mental health (n=2) or as prison drug and alcohol counsellors (n=3). Other KE's worked specifically in the drug and alcohol field, comprising psychiatrists (n=2), counsellors and outreach workers (n=3), needle and syringe outlet workers (n=2), and an Addiction Medicine specialist (n=1). KE's who worked in night clubs (n=2), as a DJ (n=1), as a party promoter (n=1), or as security guards at night clubs (n=2) were also interviewed.

The semi-structured KE interview included sections on demographic characteristics, drug use patterns and price/purity/availability of ecstasy and other drugs, criminal behaviour and health issues, and was particularly focused on indicating any recent changes in these areas. Interviews took approximately 60 minutes to complete. Questions were generally open-ended and interviewers wrote verbatim responses at the time of the interview. Interviews were later transcribed in full and recurring themes were identified and tabulated using Microsoft Excel. Information from single KEs may be included in the report where deemed reliable by the interviewer and/or pertinent to the explanation of particular trends. Some closed-ended questions were asked in relation to the price/purity/availability of ecstasy and analysed using IBM SPSS Statistics 22.0 for Windows (IBM, 2013).

2.3 Other indicators

Data from existing sources such as survey, health and law enforcement data were collated to provide contextual information and to complement and validate the data from the survey of both REU and KE. The pilot study for the IDRS (Hando et al., 1998) recommended that such data should be available at least annually; include 50 or more cases; provide brief details of illicit drug use; be collected in the main study site (Hobart or Tasmania for the current study); and include details on the main illicit drugs under investigation. However, due to the relatively small size of the illicit drug-using population in Tasmania and a paucity of available data, the above recommendations have been used as a guide only. Indicators not meeting the above criteria should be interpreted with due caution and the relevant limitations of each data source are noted in the text. The following included data sources fulfilled the majority of these criteria.

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[4] Tandberg, D. *Improved confidence intervals for the difference between two proportions and Number Needed to Treat (NNT).* Available on the University of Oxford Centre for Evidence Based Medicine website: www.cebm.net.

National Drug Strategy Household Surveys (1998, 2001, 2004, 2007, 2010, 2013). The National Drug Strategy Household Survey (NDSHS) aims to determine the prevalence of the use of illicit drugs such as cannabis, methamphetamine, hallucinogens, cocaine, and ecstasy among the general community. Tasmanian participants were English-speaking individuals, over the age of 14, who lived in private residences in Tasmania during 1998 (n=1,031), 2001 (n=1,349), 2004 (n=1,208), 2007 (n=1,143), 2010 (n=1,060) and 2013 (1,134) (Australian Institute of Health and Welfare [AIHW], 1999, 2000, 2002a, 2002b, 2005a, 2005b, 2008a, 2008b, 2011, 2014). Participants were asked to indicate whether they had used each type of illicit drug at some stage in their life or during the 12 months preceding the interview. Data for the 2016 NDSHS was not available at the time of publication.

Telephone Advisory Services Data. The Tasmanian Alcohol and Drug Information Service (ADIS) is a confidential drug and alcohol counselling, information and referral service that has been serviced by Turning Point Alcohol and Drug Centre in Victoria since May 2000. Turning Point systematically records data for each call received. In this report, data is included from the 2007/08 to 2015/16 reporting periods for each drug type (Turning Point, 2008-2016).

Police and Justice data. Information on drug seizures, charges, price and purity were obtained from Australian Illicit Drug Reports produced by the Australian Bureau of Criminal Intelligence (ABCI) (1999-2002), Illicit Drug Data Reports provided by the Australian Crime Commission (ACC) (2003-2015) and Illicit Drug Data Reports provided by the Australian Criminal Intelligence Commission (ACIC) (2016). While data on the purity of drugs seized were provided through the ACIC; not all drug seizures are analysed for purity. The ACIC reports do not necessarily report seizure and arrest data separately for drugs such as ecstasy. This is provided by Tasmania Police State Intelligence Services where possible. ACIC data for the 2015/16 reporting period were unavailable at the time of publication but, where possible, preliminary data were provided by Tasmania Police State Intelligence Services. These preliminary data are subject to revision and may differ from ACIC data due to differences in counting rules. Tasmania Police also provided data in relation to the Illicit Drug Diversion Initiative (IDDI) and roadside drug testing in Tasmania.

Public hospital admission data – AIHW. The AIHW has provided hospital morbidity data for ‘principal’ and ‘additional’ diagnoses in relation to drug use from the years 1999/00 to 2015/16 (Roxburgh & Breen, 2017). These data relate to public hospital admissions, for individuals aged between 15 and 54 years. Diagnoses were coded based on the International Classification of Diseases (ICD) 10, second edition. A ‘principal diagnosis’ refers to the instance where it is established upon examination that the drug was principally responsible for the patient’s episode in hospital. An ‘additional diagnosis’ refers to the case where the condition or complaint is either co-morbid with the principal diagnosis or arises during the course of the episode in hospital. It should be noted that data from Tasmania’s only public detoxification centre were included only from June 2002 onwards. In this report, hospital admissions are reported separately for amphetamines, cannabis, and cocaine.

The National Minimum Data Set for Alcohol and other Drug Treatment Services (NMDS). The NMDS was developed as a nationally consistent response to data collection for alcohol and other drug treatment services. Data collection began on 1 July 2000 and is available from the AIHW for the financial years between 2000/01 and 2014/15 (AIHW, 2002-2016). Data for the 2015/16 financial year were not available at the time of publication.

3.0 DEMOGRAPHICS

Summary:

- The sample of 100 REU interviewed in 2016 were typically in their mid-twenties (range 18-49 years). Half (51%) of the sample were male.
- A majority of participants (70%) had completed Year 12, and 44% had completed tertiary qualifications after school (university or trade/technical).
- A majority of participants were either employed (46%), studying (22%) or both employed and studying (17%).
- Few participants had come into contact with drug treatment agencies (2%).
- These demographic characteristics are generally similar to previous cohorts.

3.1 Overview of REU sample

Table 1 shows the demographic characteristics of REU interviewed for the EDRS in 2016. Half of the sample was male (51%). The mean age of participants was 25 years (range 18-49 years), and males were significantly older than females (26 versus 23 years, $t(97)=2.02$, $p=.046$).

The majority of participants nominated their sexual identity as heterosexual (91%) and spoke English as their main language (99%). A small proportion (5%) of participants were of Aboriginal and/or Torres Strait Islander (A&TSI) descent.

Participants typically lived in their own accommodation (owned or rented) (72%), or were living in their parents' or family's home (23%).

Participants had completed 12 years of school education on average (range 9-12 years), and the majority of participants (70%) had completed Year 12. Almost one-half (44%) had completed tertiary qualifications after school, with one-quarter (25%) having completed a trade/technical qualification and almost one-fifth having completed a university degree (19%).

A majority of participants were either employed (29% part-time/casual, 17% full-time), studying full-time (22%), or were both employed and studying (17%). Over one-tenth (13%) were currently unemployed.

Three-fifths (61%) of the sample reported an annual income between $13,000 and $31,199, and the mean weekly income was $531.

Few REU were receiving drug treatment at the time of interview (2%) or had received a previous prison conviction (5%).

The demographic characteristics of the 2016 sample were generally similar to the samples recruited between 2011 and 2015. There were significantly more participants in part-time casual employment (29% vs. 14%, $\chi^2=4.76$, $p=.029$) in 2016 when compared to 2015, but this number was similar to years prior to 2015.

KE who commented on the demographic characteristics of the ecstasy consumers with whom they had regular recent contact indicated that this group was representative of a wide range of people from various educational and employment backgrounds, with the main group of users being aged 18-30 years.

Table 1: Demographic characteristics of REU sample, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Mean age (range)	24 17-39	24 18-57	25 18-42	24 17-38	24 17-55	**25** **18-49**
Sex (% male)	65	55	57	63	63	**51**
Heterosexual (%)	91	81	87	93	85	**91**
English speaking (%)	100	100	99	98	97	**99**
A&TSI (%)	0	3	5	3	4	**5**
Accommodation						
Own/rented (%)	81	74	79	76	65	**77**
Live with family (%)	13	23	18	23	33	**23**
Boarding house^ (%)	1	1	1	1	0	**0**
No fixed address (%)	4	2	0	0	1	**0**
Mean school years(range)	12 8-12	12 9-12	12 7-12	12 10-12	12 10-12	**12** **9-12**
Tertiary qualifications						
Trade/technical (%)	11	24	17	19	28	**25**
University (%)	42	19	24	30	17	**19**
Employment (%)						
Full-time	32	25	49	27*	23	**17**
Part-time/casual	23	25	18	29	14*	**29***
Full-time student	11	35	4	19*	19	**22**
Student/employed	16	4	13#	12#	28#*	**17**
Home duties	0	1	0	0	4	**1**
Not employed	19	9	16	13	12	**13**
Annual income (%)						
$1-7,799	3	1	1	1	4	**4**
$7,800-12,999	10	13	10	6	8	**9**
$13,000-20,799	25	26	16	26	26	**23**
$20,800-31,199	15	27	22	34	34	**25**
$31,200-41,599	15	11	24	12	16	**26**
$41,600-$51,999	10	6	14	10	3	**8**
$52,000+	23	16	14	11	10	**5**
Current drug treatment (%)	4	5	3	2	1	**2**
Previous prison conviction (%)	n/a	3	5	2	1	**5**

Source: EDRS interviews

^ includes hostel/refuge # includes 'part-time students *significantly different to previous year

4.0 DRUG USE TRENDS

4.1 Drug use history and current drug use

Summary:

- REU reported use of a range of different drugs in the preceding six months. Recent use of alcohol, cannabis, tobacco, LSD, and methamphetamine powder was most common, and over one-fifth had recently used benzodiazepines, cocaine, mushrooms or crystal methamphetamine.

Alcohol was the preferred or favourite drug for one-quarter of participants (24%) followed by ecstasy (20%), cannabis (13%), cocaine (13%), crystal methamphetamine (7%) or LSD (6%). Smaller proportions preferred mushrooms (5%), methamphetamine powder (3%), ketamine (2%), heroin (2%), benzodiazepines (1%) or other opiates (1%).

Table 2 shows proportion of the sample reporting lifetime and recent (in the last six months) use for each of the substance examined. The majority of REU had used alcohol (100%), cannabis (98%), tobacco (94%) or methamphetamine powder (86%) at some stage of their lives, and substantial proportions had ever used LSD (72%), cocaine (67%), nitrous oxide (65%), psychedelic mushrooms (56%), pharmaceutical stimulants (50%), methamphetamine base (49%), benzodiazepines (44%), crystal methamphetamine (42%), mephedrone (38%), ketamine (38%) and amyl nitrite (32%).

During the six months preceding the interview, a majority had used alcohol (98%), cannabis (77%), tobacco (76%), with sizeable proportions also consuming LSD (39%), methamphetamine powder (32%), benzodiazepines (25%), cocaine (24%), mushrooms (24%), crystal methamphetamine (21%), pharmaceutical stimulants (20%), nitrous oxide (15%) and mephedrone (5%).

Table 2: Proportion of REU reporting lifetime and recent drug use, 2011-2016

Variable (%)	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Alcohol						
Ever used	100	99	100	100	100	**100**
Use last 6 months	100	98	100	98	100	**98**
Cannabis						
Ever used	100	96	96	97	100	**98**
Use last 6 months	67	69	78	76	80	**77**
Tobacco						
Ever used	97	95	90	97	99	**94**
Use last 6 months	83	80	76	83	85	**76**
Methamphetamine powder						
Ever used	76	87	95	87	77	**86**
Use last 6 months	47	61	53	58	39*	**32**
Methamphetamine base						
Ever used	16	38*	45	33	39	**49**
Use last 6 months	8	16	7	17	5*	**4**
Crystal methamphetamine						
Ever used	25	32	38	34	26	**42**
Use last 6 months	5	10	17	14	13	**21**
Pharmaceutical stimulants						
Ever used	41	49	45	54	53	**50**
Use last 6 months	16	20	20	18	13	**20**
Cocaine						
Ever used	75	61	49	60	56	**67**
Use last 6 months	39	26	17	22	17	**24**
LSD						
Ever used	65*	67	79	71	71	**72**
Use last 6 months	43*	30	38	35	41	**39**
MDA						
Ever used	32*	13*	16	21	14	**15**
Use last 6 months	21*	4*	8	6	4	**8**
Ketamine						
Ever used	32	25	18	30	26	**38**
Use last 6 months	8	4	9	14	5	**3**
GHB/GBL/1,4B						
Ever used	5	10	8	5	4	**9**
Use last 6 months	3	2	0	0	0	**1**
Amyl nitrite						
Ever used	76	53*	42	39	33	**32**
Use last 6 months	29*	24	9*	12	12	**11**
Nitrous oxide						
Ever used	59	80*	61	61	65	**66**
Use last 6 months	36	27	9*	17	6	**15**
Benzodiazepines						
Ever used	61	45*	47	55	41	**44**
Use last 6 months	45*	31	34	40	23*	**25**
Antidepressants#						
Ever used	23	16	24	24	18	**6**
Use last 6 months	8	4	9	5	4	**1**

Source: EDRS interviews
*significant change (*p*<.05) relative to previous year
includes only illicit use in 2016, licit and illicit use had been recorded prior to 2016

Table 2: Proportion of RPU reporting lifetime and recent drug use, 2011-2016 (continued)

Variable (%)	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Heroin						
Ever used	17	10	16	12	5	**9**
Use last 6 months	8	1	5	2	1	**3**
Methadone#						
Ever used	8	9	7	13	9	**18**
Use last 6 months	4	4	1	3	4	**1**
Buprenorphine#						
Ever used	8	4	5	6	0	**5**
Use last 6 months	3	2	4	2	0	**0**
Other opioids#						
Ever used	29	16	28	30	18	**29**
Use last 6 months	16*	4*	11	15	10	**10**
Mushrooms						
Ever used	64	81*	71	63	54	**56**
Use last 6 months	23	26	15	21	15	**24**
Mephedrone						
Ever used	37	29	42	48	39	**38**
Use last 6 months	35	10*	24*	23	9*	**5**
Over counter codeine^						
Ever used	n/a	21	24	22	15	**25**
Use last 6 months	9	16	9	12	10	**13**
Over counter stimulants^						
Ever used	20	12	7	8	8	**11**
Use last 6 months	5	4	3	2	1	**5**
Steroids						
Ever used	0	1	0	3	4	**2**
Use last 6 months	0	0	0	0	4	**1**
Antipsychotics#						
Ever used	n/a	n/a	9	13	10	**9**
Use last 6 months			5	7	4	**3**
e-cigarettes						
Ever used	n/a	n/a	n/a	45	35	**44**
Use last 6 months				32	23	**15**

Source: EDRS interviews
* significant change ($p<.05$) relative to previous year
# includes illicit and licit use
^ non-medical use

4.2 Ecstasy use

Summary:

- The majority (98%) reported use of ecstasy in the past six months. On average participants had been using ecstasy pills for six years and had first used ecstasy at around 18 years of age (range 13-28 years).
- Ecstasy had typically been used in tablet (98%), capsule (41%), crystal (34%) or powder (29%) form in the last six months.
- Ecstasy was typically taken orally, but snorting was also common.
- On average, ecstasy had been used on 12 days in the last six months or approximately fortnightly. Almost one-fifth (17%) had recently used ecstasy weekly or more frequently and one-fifth (19%) had used ecstasy in a 'binge session' (a continuous 48-hour period of drug use without sleep).
- A median of one ecstasy tablet was taken in a typical session of use in the last six months, compared to a median of two tablets in the four years preceding 2015.
- Ecstasy was typically last used at music-related venues including nightclubs, dance parties, pubs, or at private parties.
- The majority of REU (98%) had used other drugs when last under the influence of ecstasy. Alcohol, cannabis, and tobacco were the drugs most commonly used in combination with ecstasy. A large proportion (65%) of the sample reported consuming more than five standard drinks when they were last under the influence of ecstasy.
- Data from the NDSHS shows a significant decline in past-yearly ecstasy use in the general population between 2010 (3%) and 2013 (2.5%). The proportion reporting past-yearly use in Tasmania was 2.9% in 2013 relative to 1.7% in 2010 but these estimates should be interpreted with caution due to a high relative standard error.

4.2.1 Ecstasy use among REU

The entire 2016 sample reported lifetime use of ecstasy. The mean age of first ecstasy use was 18 years (range 13-28 years). There was no gender difference in the median age of first use, with males starting at the same age as females (18 years). Ecstasy pills had been used for a median of six years (range 0-17 years) and all but three participants had been using ecstasy pills for at least one year.

Nearly all the 2016 sample (98%) reported use of ecstasy in the past six months. Ecstasy had typically been used in tablet (98%) form in the last six months, followed by capsules (41%), MDMA crystals (34%), and MDMA powder (29%) (Table 3).

Ecstasy (tablets, powder, capsules) had been used by REU on a median of 12 days (range 3-76 days), or on average fortnightly in the six months preceding the interview (Table 3). Almost one-fifth reported using ecstasy weekly or more frequently (17%) or had recently 'binged' on ecstasy (19%) (see also Section 7.4).

Ecstasy tablets had recently been swallowed (95%) or snorted (62%) (ground-up) tablets, while smaller proportions had recently smoked (4%), injected (3%) or shelved/shafted (vaginal/anal administration) (2%) tablets. The median frequency of use for ecstasy tablets was 10 days (range 1-70) or almost fortnightly during the six months preceding the interview. The median number of ecstasy tablets consumed in a typical session of use in the past six months was one tablet (range 1-7), similar to the previous year. The median number of ecstasy tablets consumed in the heaviest session of use was three tablets (range 1-12). More 2016 participants reported consuming more than two tablets in a typical session of use than 2015 REU at a trend level (13% vs. 4%, χ^2=3.44, p=.064).

Ecstasy capsules had been swallowed (84%), snorted (63%), smoked (8%) or injected (3%) in the last six months. The median frequency of use was three days (range 1-10) in the last six months, with a median of one capsule taken in a typical session (range 1-3).

Ecstasy powder had been snorted (100%), swallowed (46%) or injected (4%), on a median of five days (range 1-20) during the previous six months.

MDMA crystals had been swallowed (61%), snorted (61%), smoked (9%) or injected (6%) in the last six months. The median frequency of use was four days (range 1-30), or every month and a half during this time, with a median of 0.75 grams (range 0.5-1.5, n=4) or one point (range 1-3, n=3) used in a typical session of use.

The most common last locations of ecstasy use (Table 3) were a nightclub (33%), a pub/bar (17%), a private party (14%) or a live music event (13%).

Table 3: Patterns of ecstasy use among REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Mean age first used ecstasy (range)	19 14-29	17 13-29	18 13-28	18 13-32	17 14-29	**18 13-28**
Use in last 6 mths						
Forms used (%)						
Tablets/pills	95	92	95	92	99	**98**
Capsules	80	75	53	49	50	**41**
Powder	26	30	20	20	15	**29**
MDMA crystals	n/a	n/a	47	29*	36	**34**
Median days use[#]	12	14	10	11	12	**12**
Tablets/pills	6	6	8	8	10	**10**
Capsules	6	5	2	2	5	**2.5**
Powder	6	5	3	3	2	**4.5**
MDMA crystals	-	-	3	4	2	**4**
Use weekly or more often (%)[#]	23	23	13	10	12	**17**
Recent binge^ on ecstasy[†] (%)	14	27	22	10	14	**19**
Median pills 'typical' session (range)	2 1-8	2 1-4	2 0.5-3	2 0.5-4	1 1-3	**1 1-7**
Median pills 'biggest' session (range)	3 1-25	3 1-13	3 0.5-12	2 1-10	2 1-15	**3 1-12**
Used > 2 pills typical session (%)	14	17	15	7	4	**13**
Last location (%)						
Home	4	8	17	8	1	**5**
Dealer's home	1	1	0	1	0	**0**
Friend's home	8	3	15	11	5	**8**
Rave/dance party	4	7	3	6	10	**4**
Nightclub	37	43	28	28	37	**33**
Pub/Bar	23	9	9	19	21	**17**
Private party	14	18	16	22	18	**14**
Outdoors	3	2	3	0	4	**2**
Live music event	5	7	11	3	3	**13**
Other	0	1	0	2	1	**1**

Source: EDRS interviews
[†]Binged defined as the use of stimulants for more than 48 hours continuously without sleep
[#] Includes pills, powder and capsules combined. In 2016, frequency of use was reported by ecstasy form.
* Statistically significant change from previous year

4.2.2 Polydrug use among REU

A large proportion of recent ecstasy consumers (98%) reported use of other drugs when under the influence of ecstasy on the last occasion (Table 4). The drugs most commonly used when last under the influence of ecstasy were alcohol (85%), tobacco (62%), cannabis (43%), energy drinks (14%), crystal methamphetamine (11%) and benzodiazepines (8%). There were significantly more 2016 REU who had used tobacco when under the influence of tobacco (62%) compared to 2015 (37%), χ^2=30.94, p<.001.

Table 4: Drugs used when under the influence of ecstasy on last occasion in the last six months, 2013-2016

	Under the influence of ecstasy			
	2013 n=76	2014 n=99	2015 n=78	2016 n=98
None (%)	4	8	6	2
Meth. powder (%)	1	9	5	6
Meth. base (%)	1	0	0	0
Crystal meth. (%)	1	2	3	11
Pharm. stimulants (%)	5	2	1	2
Cocaine (%)	3	1	3	5
LSD (%)	4	3	4	6
Ketamine (%)	1	1	3	0
Amyl nitrite (%)	3	3	0	1
Nitrous oxide (%)	1	1	0	0
Cannabis (%)	37	33	28	43
Alcohol				
Any alcohol (%)	91	85	82	85
> 5 standard drinks (%)	84	81	65*	65
Methadone (%)	0	0	1	0
Other opioids (%)	0	0	1	0
Tobacco (%)	68	63	37	62*
Benzodiazepines (%)	5	3	3	8
Mushrooms (%)	3	3	0	4
NPS (%)	0	1	3	1
Energy drinks	22	16	13	14
OTC codeine	0	0	0	0
Other (%)	3	1	0	3

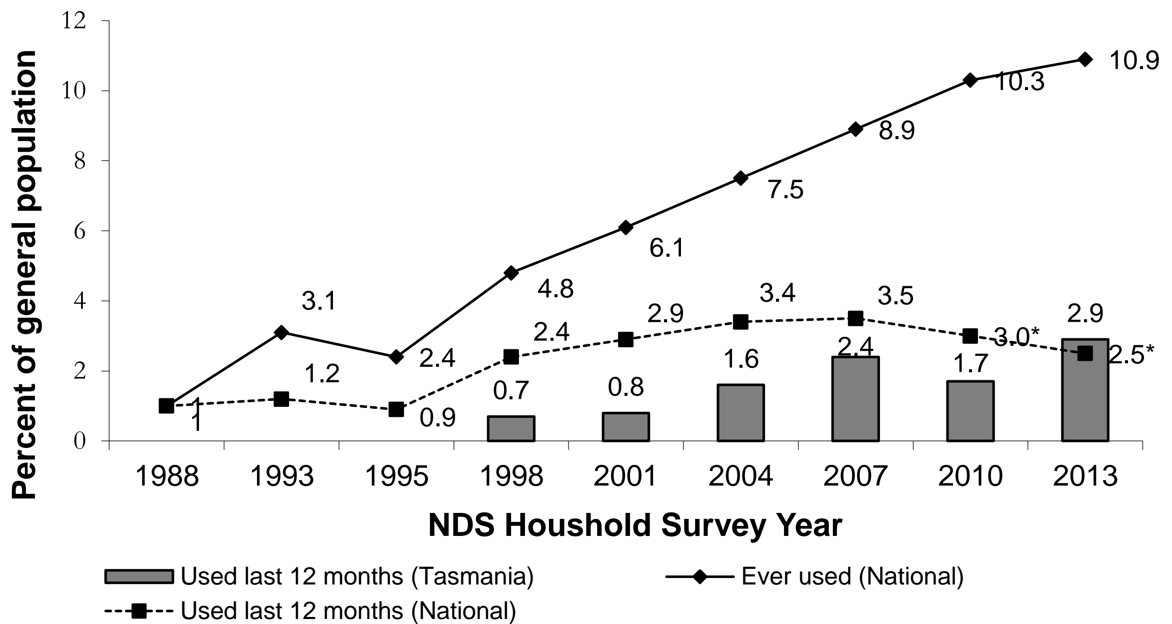
Source: EDRS interviews

* Statistically significant change relative to previous year

4.2.3 Ecstasy use in the general population

Figure 1 shows the prevalence of lifetime and recent ecstasy use in the general population and in Tasmania based on data collected by the NDSHS between 1988 and 2013 (AIHW, 1999, 2000, 2002a, 2002b, 2005a, 2005b, 2008a, 2008b, 2010, 2014). The estimated past-yearly prevalence of ecstasy use among the general population has declined significantly over the last two survey periods from 3.5% in 2007 to 2.5% in 2013. In 2013, the estimated prevalence of past-yearly ecstasy use in Tasmania was 2.9%. While this is consistent with the national prevalence estimate and is greater relative to 2010, this estimate should be interpreted with caution due to a high relative standard error.

Figure 1: Prevalence of ecstasy use in Australia and Tasmania among those aged 14 years and over, 1988-2013



Source: National Drug Strategy Household Survey 1988-2013
* Statistically significant change since preceding survey

4.3 Methamphetamine use

Summary:

- Two-fifths (42%) of the 2016 REU sample had used some form of methamphetamine in the preceding six months, similar to 2015 (45%).
- Methamphetamine was used on a median of three days during this period (approximately once every two months on average).
- Recent use of methamphetamine powder was most common (32%), with lower levels of use for methamphetamine base (4%) and crystal methamphetamine (21%). While rates were similar in comparison to 2015, the proportion reporting recent use of powder and base was significantly lower relative to 2014.
- Methamphetamine powder was typically snorted, base was typically swallowed, and crystal was typically smoked.
- Data from the NDSHS shows that there were no significant changes in lifetime or past yearly use of methamphetamine in the general population between 2010 and 2013. While the past-yearly use of methamphetamine in Tasmania was estimated to be 3% in 2013 and 1.1% in 2010, differences between these estimates should be interpreted with caution due to high relative standard errors.

There is a diversity of forms of methamphetamine sold in the Australian illicit market. While there is some disagreement among both consumers and researchers as to the nature of these forms, it is clear that these are marketed differently to injecting drug users (IDU) and REU, and often sold on differing price scales. With the exception of methamphetamine-based tablets marketed as ‘ecstasy’, and pharmaceutical stimulants such as dexamphetamine and methylphenidate, there are three dominant ‘preparations’ of methamphetamine used within the Tasmanian (and Australian) drug market – each falling at three points along a continuum of form, but all essentially the same substance.

Powder methamphetamine[5] is the presentation of the drug which has traditionally been available in Australia. This powder can range from fine to more crystalline or coarse, and may take different colours (commonly white, yellow, brown, orange or pink), depending on chemical process used in its production. It is typically produced within Australia, most commonly in small, portable ‘laboratories’, and is usually based on pharmaceutical pseudoephedrine (extracted from, for example, Sudafed tablets). Because of its powder form, it is fairly easy to ‘cut’ (dilute) and is commonly sold at fairly low purity/potency, although this can vary substantially. The presence of crystals in powder methamphetamine may represent higher purity methamphetamine, or alternatively it may be explained by the use of an adulterant such as methylsulfonylmethane (MSM) in the late stages of production. The introduction of MSM forms crystals, giving the powder methamphetamine a crystalline appearance (Fetherston & Lenton, 2006).

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

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[5] Powder form methamphetamine is also referred to in national and other jurisdiction IDRS and EDRS reports as ‘speed’.

The final form of methamphetamine is often referred to as ‘ice’ or ‘crystal meth(amphetamine)’. This is the product of a careful production process, and is believed to be chiefly imported into Australia from Asian countries (Topp & Churchill, 2002), although there are also indications of domestic production in recent years (ACC, 2007). It commonly appears as clear, ice-like crystals, and, as such, is difficult to ‘cut’ (dilute), resulting in a relatively high-purity/potency product. However, as previously noted, MSM may be used to give lower purity powder methamphetamine the appearance of higher purity crystal methamphetamine (although it should be noted that there is currently no forensic validation that this has been present in drugs used in Tasmania).

4.3.1 Methamphetamine use among REU

The majority (91%) of the 2016 sample reported lifetime use of methamphetamine and over two-fifths (42%) had used the drug in the past six months, similar to 2015 (45%). The median frequency of use of any form of methamphetamine over the last six months was three days (range 1-180 days).

Table 5: Patterns of methamphetamine (any form) use among REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	84	89	96	92	85	**91**
Used last 6 months (%)	52	64	57	64	45*	**42**
Median days use last 6 mths (range)	3 (1-48)	3 (1-55)	3 (1-95)	3 (1-180)	2 (1-50)	**3 (1-180)**

Source: EDRS interviews
* Statistically significant difference from previous year, *p*<.05

Methamphetamine powder (speed)

The majority (86%) of the 2016 sample reported lifetime use of methamphetamine powder (Table 6). The median age of first use was 19 years (range 15-30 years), and there was no significant difference between the age of first use for males (19 years) and females (19 years).

Almost two-thirds (32%) had used methamphetamine powder during the six months preceding the interview, which is similar to 2015 (39%), but significantly lower than 2014 (58%), χ^2=12.63, p<.001. Recent use of methamphetamine powder was similar among males (39%) relative to females (25%), χ^2=2.28, p=.131. There was no significant difference in the proportion of 'older' (>22 years: 34%) and 'younger' (≤22 years: 30%) participants (based on a median split for age) reporting recent use of methamphetamine powder.

Among KE who commented on the forms of methamphetamine currently available in Hobart, several noted recent decreases in the use (n=3) and/or availability (n=4) of methamphetamine powder.

The majority of those who had recently used methamphetamine powder had snorted (81%) the drug during the six months preceding the interview, and smaller proportions reported swallowing (16%) or injecting (16%) the drug.

The median frequency of use during the six months preceding the interview was two days (range 1-60 days), or once every three months on average (Table 6). A majority (78%) of those who had recently used methamphetamine powder had done so once monthly or less.

The usual amount used was one point (0.1 of a gram) in a typical session (n=2) and 2 points in the biggest session (n=3) of use in the last six months.

Table 6: Patterns of methamphetamine powder (speed) use among REU, 2011-2016

Methamphetamine powder	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	76	87	95	87	77	**86**
Median age of first use (range)	20.5 14-30	18 13-24	19 12-28	19 14-33	18 14-37	**19** **15-30**
Used in last 6 months (%)	47	61	53	58	39	**32**
Median days use (range)#	3 1-48	3 1-40	2 1-90	3 1-180	2 1-14	**2** **1-60**
Route (%)#						
Smoked	15	5	18	11	0	**0**
Snorted	60	77	82	83	90	**81**
Swallowed	69	64	51	44	13	**16**
Injected	18	7	20	9	10	**16**
Shaft/shelved	0	0	0	2	0	**0**
Median points#						
Typical session	2	2	2	2	2	**1**
(range)	0.5-5	1-3	0.5-6	0.5-7	1-5	**1-3**
Biggest session	2	2	2	3.5	2	**2**
(range)	0.5-6	1-6	0.5-6	0.5-15	1-6	**0.5-5**

Source: EDRS interviews

#among those who had used in last six months

Methamphetamine base

Almost half of the 2016 sample (49%) had used methamphetamine base at some stage of their lives (Table 7). The median age of first use of methamphetamine base was 24 years (range 17-30 years).

A small proportion (4%) of the 2016 sample had used base during the six months preceding the interview, similar to 2015 (5%).

Half of those who had recently used methamphetamine base had swallowed (50%) the drug, whereas the other two cases had injected (25%) or snorted (25%). The median frequency of use was two days (range 1-60 days). The median quantity of methamphetamine base used in the preceding six months was .6 of a point (0.06 of a gram) in both a typical session and biggest session of use, as reported by a single participant.

Table 7: Patterns of methamphetamine base use among REU, 2011-2016

Methamphetamine base	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	16	38	45	33	39	**49**
Median age of first use (range)	20 16-23	19 13-35	20 15-32	19 15-30	20 15-24	**24** **(17-30)**
Used in last 6 months (%)	8	16	7	17	5	**4**
Median days use (range)#	3~ 1-4	2 1-20	1~ 1-48	8 1-100	2~ 1-5	**2** **1-60**
Route (%)#						
Smoked	-	19	-	12	25	**0**
Snorted	-	6	-	24	25	**25**
Swallowed	50	100	80~	82	75	**50**
Injected	50	13	40~	41	25	**25**
Shaft/shelved)	0	0	20~	6	0	**0**
Median points#						
Typical session	2~	2	2~	2	1~	**0.6**
(range)	2-2	0.5-3	2-2	0.5-5	1-2	**0.6**
Biggest session	4~	2	2~	2	1~	**0.6**
(range)	2-4	1-4	2-2	0.5-25	1-2	**0.6**

Source: EDRS interviews
~ n<10
#among those who had used in last six months

Crystal methamphetamine

Two-fifths (42%) of the REU interviewed in 2016 reported lifetime use of crystal methamphetamine (Table 8) and 21% reported use during the six months preceding the interview, which is higher but not statistically different to 2015 (21% vs. 13%, χ^2=1.51, *p*=.219).

The majority of REU who had recently used crystal methamphetamine reported smoking the drug (76%), while 43% had injected it. Crystal methamphetamine had been used on a median of 10 days (range 1-180) during the preceding six months, with a median of 1 point (0.1 of a gram) used in a typical session of use, and a median of 1.75 point used in the biggest session of use.

Among KE who commented on the forms of methamphetamine currently available in Hobart, several noted recent increases in the use (n=3) and availability (n=7) of crystal methamphetamine.

Table 8: Patterns of crystal methamphetamine use among REU, 2011-2016

Crystal methamphetamine	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016** **n=100**
Ever used %)	25	32	38	34	26	**42**
Median age of first use (range)	19 14-30	20 15-36	22 16-36	22 17-34	21 15-26	**22** **15-32**
Used in last 6 months (%)	5	10	17	14	13	**21**
Median days use (range)[#]	2~ 1-5	1.5 1-12	3 1-72	3.5 1-150	8 1-50	**10** **1-180**
Route (%)						
Smoked	50	70	77	86	80	**76**
Snorted	25	10	8	21	10	**19**
Swallowed	25	40	8	21	20	**5**
Injected	0	20	8	21	30	**43**
Shaft/shelved	0	0	0	0	10	**0**
Median points						
Typical session	2.5~	1	2	1.5~	1~	**1**
(range)	5-15	1-3	0.25-3	1-7	0.25-2	**0.5-3**
Biggest session	2.5~	1.75	1	4.5~	1~	**1.75**
(range)	5-15	1-5	0.25-5	1-8	0.25-2	**0.6-6**

Source: EDRS interviews

~ n<10

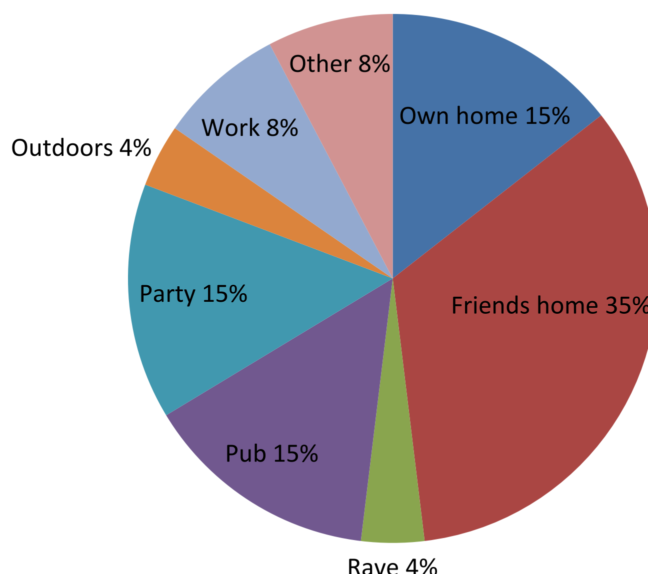
#among those who had used in last six months

Location of last methamphetamine use

Figure 2 shows the last location of last use for methamphetamine powder among those who had used it during the six months preceding the interview. Data refers to locations where participants spent most of their time while under the influence of the drug (rather than the place of ingestion). The most common locations of last use included private residences, private parties and public bars. Data for base methamphetamine is not reported due to small sample sizes.

Crystal methamphetamine was most commonly last used (n=16) at friends' houses (38%), other venues (19%), private parties (13%), outdoors (13%) and at the respondent's own home (13%)

Figure 2: Location of most recent methamphetamine powder use (n=26) 2016

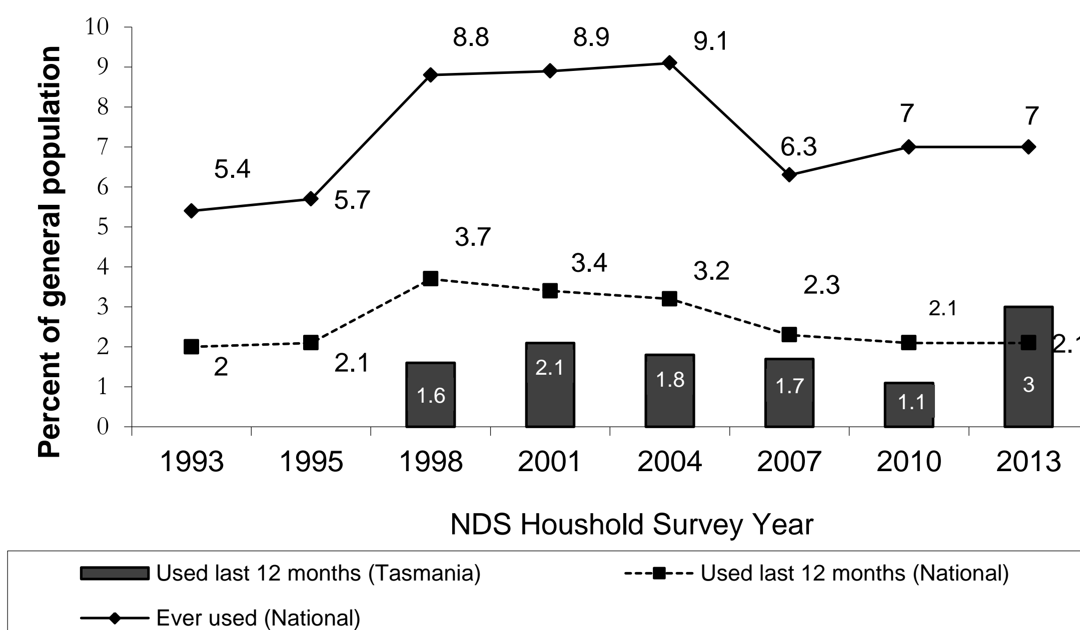


Source: EDRS interviews

4.3.2 Methamphetamine in the general population

According to the findings of the 2013 NSDHS (AIHW, 2014), the lifetime and recent use of meth/amphetamine (7% and 2.1% respectively) in the general population (aged 14 years and older) was not significantly different to the 2010 sample (7% and 2.1% respectively) (Figure 3). Among Tasmanian residents surveyed in 2013, 3% reported use of meth/amphetamine in the last year (Figure 3). The proportion reporting use in 2010 was 1.1%, however differences between these estimates should be interpreted with caution due to the high relative standard error of both estimates.

Figure 3: Prevalence of meth/amphetamine use in Australia and Tasmania among those aged 14 years and over, 1993-2013



Source: NDSHS, 1993-2013

4.4 Cocaine use

Summary:

- One-quarter (24%) of the 2016 sample had used cocaine during the six months preceding the interview, a similar proportion to 2015 (17%).
- The frequency of recent cocaine use was not significantly different among older (>22 years: 23%) relative to younger (≤22 years: 26%) participants.
- Cocaine was most typically snorted and was used on a median frequency of two days (range 1-12 days) in the last six months, with an average of one gram used in a typical session.

4.4.1 Cocaine use among REU

Two-thirds of the 2016 REU sample (67%) had ever used cocaine (see Table 9). The median age of first use of cocaine was 21 years (range 14-35 years), and there was no significant difference between the median age of first use for males (22 years) and females (21 years).

One-quarter (24%) of the 2016 sample had used cocaine during the six months preceding the interview (see Table 9). There was a non-significant difference in the proportion of males (29%) and females (19%) who had recently used cocaine, χ^2=1.53, p=.216; and there was no difference in the proportion of older (>22 years: 23%) relative to younger (≤22 years: 26%) participants who reported recent use.

The median frequency of cocaine use was two days (range 1-12 days) in the preceding six months compared to one day in 2015. Two-fifths (42%) of those who had recently used cocaine had done so on only one occasion in the preceding six months, similar to the pattern in 2015 (54%). There was no significant difference in the median frequency of use for males (2 days) and females (1 day).

Those that had recently used cocaine reported using a median of one gram (range 0.25-1 grams) or a median of one 'point' (range 0.5-3 points) in a typical session, and one gram (range 0.3-1.5 grams) or one 'point' (range 0.5-4 points) in the biggest session of use in the last six months. These amounts were reported by a small number of participants and should be interpreted with caution.

Most of those who had used cocaine in the preceding six months had snorted the drug (96%) and smaller proportions had swallowed (21%) or injected (4%) the drug.

The most common locations for last use of cocaine among those who commented (Table 9) were at a private party (27%), a nightclub (20%), public bar (13%) or a friend's house (13%).

Several KE (n=6) indicated that there was 'none' or 'low' use of cocaine use among the drug consumers that they were familiar with, however three KE reported a slight increase in use of the drug.

Table 9: Patterns of cocaine use among REU, 2011-2016

Cocaine	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	75	61	49	60	56	**67**
Median age first used (range)	22 15-36	20 15-30	20 15-29	21 14-32	20 16-29	**21** **14-35**
Used in last 6 months (%)	39	26	17	22	17	**24**
Median days Use (range)#	1 1-30	2 1-20	3 1-6	2 1-13	1 1-8	**2** **1-12**
Route (%)#						
Smoked	0	0	0	0	0	**0**
Snorted	100	96	92	100	85	**86**
Swallowed	24	54	8	10	23	**21**
Injected	0	0	0	0	8	**4**
Shafted/shelved	0	0	0	10	10	**0**
Median amounts used per session#						
Grams typical	0.5	0.5	1~	0.4	2~	**1~**
(range)			0.5-2	0.1-1	1-3	**0.25-1**
Grams biggest	0.5	0.5	1~	0.5	2~	**1~**
(range)			1-2	0.1-7	1-3	**0.3-1.5**
Points typical	1.75~	1.5~	1.5~	1~	3~	**1~**
(range)			1-2	0.25-3	1-7	**0.5-3**
Points biggest	2~	3~	1.5~	1~	4~	**1~**
(range)			1-2	0.25-3	1-7	**0.5-4**
Last location (%)#	n=17	n=10	n=9	n=15	n=6	**n=15**
Home	12	10	0	13	0	**7**
Dealer's home	0	0	0	7	0	**0**
Friend's home	18	10	22	20	33	**13**
Rave/dance party	0	0	0	7	0	**0**
Nightclub	29	30	11	20	17	**20**
Pub/bar	24	40	0	13	17	**13**
Private party	6	0	22	7	17	**27**
Outdoors	0	0	0	0	0	**0**
Live music event	12	10	22	7	0	**7**
Public place	0	0	0	0	0	**0**
Work	0	0	0	0	17	**7**
Other	0	0	22	7	0	**7**

Source: EDRS interviews

~ n<10

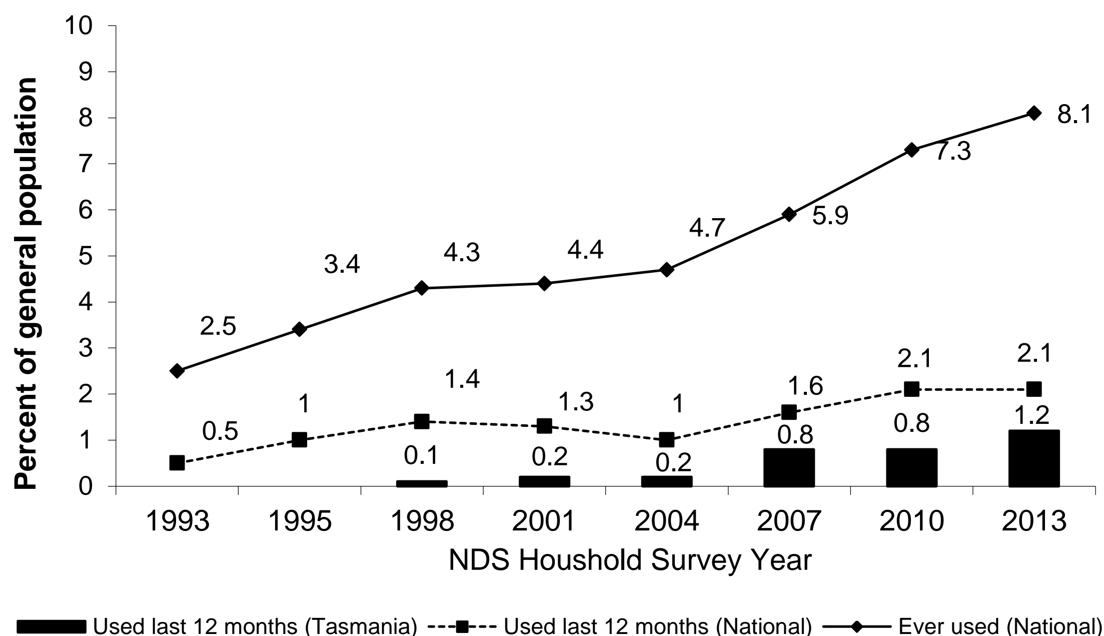
among those who had used in last six months

4.4.2 Cocaine use in the general population

According to the findings of the 2013 NDSHS (Figure 4), 8.1% of the Australian general population (aged 14 and over) reported lifetime use of cocaine and 2.1% of the population reported use of cocaine in the past year, with no significant changes noted relative to 2010.

Among residents surveyed in Tasmania in 2013, 1.2% reported past yearly use of cocaine. However, this estimate is considered unreliable due to standard error greater than 50%.

Figure 4: Prevalence of cocaine use in Australia and Tasmania among those aged 14 years and over, 1993-2013



Source: NDSHS, 1993-2013

4.5 LSD use

Summary:

- Almost three-quarters (72%) of the 2016 sample had used LSD at some stage of their lives and almost two-fifths (39%) had used LSD in the six months preceding the interview, which is similar to the proportion in 2015 (41%).
- LSD had been used on a median of four days (range 1-20 days) in the preceding six months with one tab or drop of liquid LSD (range 1-3) taken orally in a typical session of use.

4.5.1 LSD use among REU

Table 10 shows that almost three-quarters (72%) of the 2016 REU sample had used LSD at some stage of their lives. The median age of first use was 18 years (range 13-26 years) which is similar to prior years, and there was no significant difference between the mean age of first use for males (19 years) and females (18 years).

Two-fifths (39%) of the 2016 sample reported use of LSD during the six months preceding the interview (Table 10), which is similar to the proportion in 2015 (41%). There was no significant difference in the proportion of 'younger' (≤22 years: 34%) and 'older' (>22 years: 43%) participants reporting recent use, nor was there a significant difference in the proportion of males (43%) and females (33%) who reported recent use of LSD.

Of those who had recently used LSD, all (100%) had taken the drug orally.

The median frequency of use for those who had recently used LSD was four days (range 1-20 days). There was no significant difference in the median frequency of use for males (4.5 days) and females (3.5 days).

The median number of tabs/drops of LSD used in a typical session was one (range 1-3) and the median number of tabs/drops used in the biggest session of use was one (range 1-5).

REU were asked which locations they had last used LSD (when they were under the influence of the drug, not necessarily the location of ingestion) during the six months preceding the interview (Table 10). LSD had most commonly been used at friends' homes (21%) and dance parties/raves/doofs (19%), followed by at the respondents' own houses (17%), at private parties (14%) and outdoors (12%).

Table 10: Patterns of LSD use among REU, 2011-2016

LSD	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	65	67	79	71	71	**72**
Median age of first use (range)	19 15-37	17 14-25	19 12-30	19 14-29	18 12-27	**18** **13-26**
Used in last 6 months (%)	43	30	38	35	41	**39**
Median days use# (range)	3.5 1-48	3 1-30	2 1-12	2 1-48	3 1-45	**4** **1-20**
Route (%)#						
Smoked	0	3	0	0	0	**0**
Snorted	6	7	0	0	6	**0**
Swallowed	94	97	100	100	97	**100**
Injected	3	0	0	3	0	**0**
Shelved/Shafted	**0**	**0**	**0**	**0**	3	**0**
Median tabs/drops#						
Typical session (range)	1 0.25-5	2 0.5-4	1 0.25-5	1 0.5-6	1 0.5-4	**1** **1-3**
Biggest session (range)	1 0.25-16	2 1.5-6	1 0.25-5	2 0.5-27	2 0.5-10	**1** **1-5**
Last Location (%)#	n=27	n=26	n=26	n=34	n=31	**n=42**
Home	22	8	23	38	7	**17**
Dealer's home	0	0	0	3	0	**0**
Friend's home	19	23	12	15	16	**21**
Dance party*	7	39	23	6	19	**19**
Nightclub	7	4	4	3	7	**5**
Pub/bar	7	0	12	12	3	**7**
Restaurant/café	0	0	0	0	0	**0**
Private party	4	12	4	6	19	**14**
Outdoors	4	8	4	6	13	**12**
Live music event	15	4	15	3	16	**5**
Public place	7	4	0	6	0	**0**
Other	4	0	4	3	0	**0**

Source: EDRS interviews
* includes raves and doofs
#among those who had used in last six months

4.5.2 LSD use in the general population

In the 2013 NDSHS (AIHW, 2014), it was estimated that approximately 9.4% of the general population (aged 14 years and over) had ever used LSD, with 1.3% having used LSD in the past year. There were no available estimates of hallucinogen use for Tasmania.

4.6 Cannabis use

Summary:

- Almost all (98%) of the 2016 sample had ever used cannabis and three-quarters (77%) had used cannabis during the six months preceding the interview.
- In the last six months, cannabis had typically been smoked (97%), with one-fifth (22%) reporting ingestion of cannabis, and one-seventh (13%) reporting that they had inhaled cannabis in a vaporised form.
- The median frequency of cannabis use was 100 days (range 2-180) or approximately four days per week. One-third of the sample (29%) reported daily use of cannabis during this time. There was a trend towards significance in the proportion of younger (≤22 years: 85%) relative to older (>22 years: 70%) participants who had recently used cannabis.
- The median quantities used on the last day of use during this time were six cones (range 1-30) or two joints (range 0.5-2).
- According to the 2013 NDSHS, it was estimated that approximately 11.8% of Tasmanians (aged 14 years and over) had used cannabis in the past year, a significantly greater proportion relative to 2010 (8.6%), but similar to the proportion in 2007 (10.8%). Nationally, the past year prevalence of cannabis use was estimated to be 10.2%, with no significant change noted relative to 2010.

4.6.1 Cannabis use among REU

Nearly the entire REU sample (98%) surveyed in 2016 had used cannabis at some stage of their lives (Table 11). The median age of first cannabis use was 15 years (range 1-30 years), and there was no significant difference in the mean age of first use for males (15 years) and females (15 years).

Three-quarters (77%) of respondents had used cannabis during the six months preceding the interview, which is similar to the proportion of the sample in 2015 (80%). There was no significant difference in the proportion of males (78%) and females (75%) reporting recent use of cannabis, though there was a trend towards significance in the proportion of younger (≤22 years: 85%) relative to older (>22 years: 70%) participants, χ^2=3.29, *p*=.070 (based on a median split for age).

A majority of those reporting recent use had smoked cannabis (97%), around one-fifth (22%) had ingested cannabis and one-seventh (13%) had inhaled cannabis (i.e. in a vaporised form). This rate of inhalation was slightly higher than 2015 (10%), which was the first year to ask participants whether they had engaged in this route of administration.

The median frequency of cannabis use during this six month period was 100 days (range 2-180 days), or approximately four times a week. Around one-third (29%) of recent users reported daily use of cannabis during the last six months, which is the same as in 2015 (29%). The median frequency of use was not significantly different between females (150 days) and males (90 days), t(74)=0.64, *p*=.523,

Those who had recently used cannabis were asked how many cones (smoked through a water pipe or bong) or joints (rolled into a cigarette) they had smoked on the last day that they had smoked the drug (Table 11). The median number of cones (n=38) smoked on the last day of use was six (range 1-30) and the median number of joints (n=21) was two (range 0.5-2). It has been estimated that the quantity of a standard cone is 0.0825g or one-third of a standard cannabis unit which is defined as one-quarter of a gram (Ritter, Lancaster, Grech & Reuter, 2011).

Table 11: Patterns of cannabis use of REU, 2011-2016

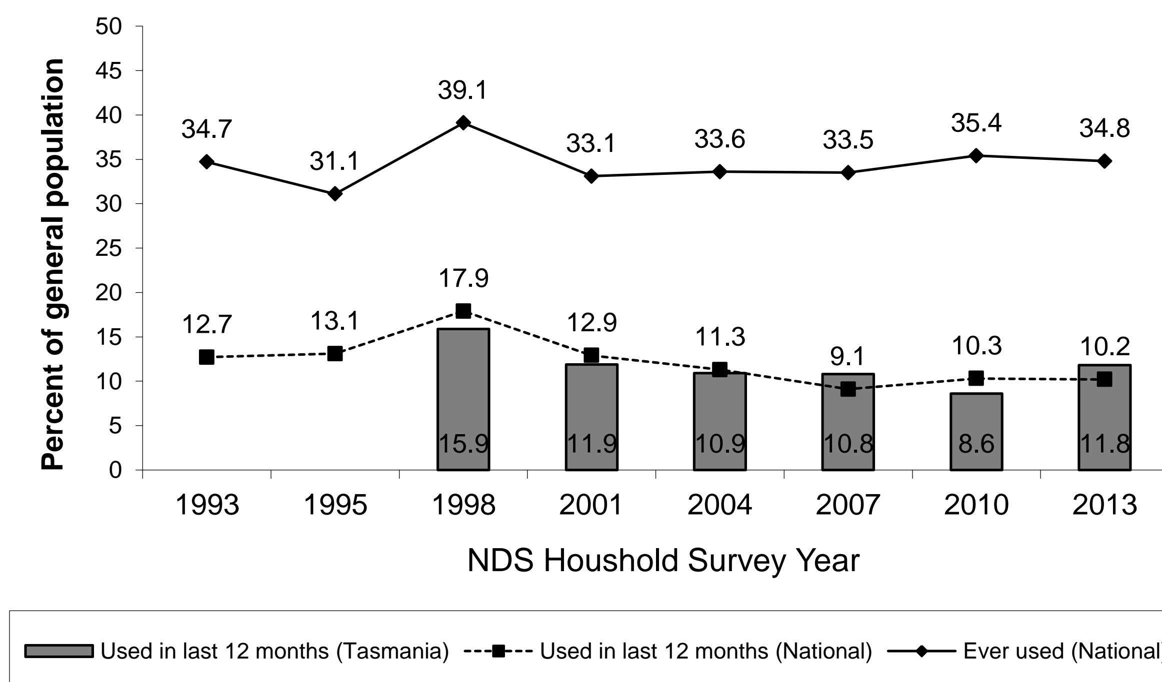
Cannabis	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	100	96	96	97	100	**98**
Median age first used (range)	15 12-21	15 8-23	16 12-25	16 9-25	16 10-31	**15** **1-30**
Used last 6 months (%)	67	69	78	76	80	**77**
Used daily (%)#	8	32	22	23	29	**29**
Median days used (range)#	24 1-180	120 1-180	48 1-180	50 1-180	80 1-180	**100** **2-180**
Median cones last session (range)#	5 1-24 n=17	8 1-30 n=41	7 1-20 n=27	5 1-10 n=36	4 1-70 n=30	**6** **1-30** **n=38**
Median joints last session (range)#	1 0.3-5 n=31	1 0.2-6 n=28	1 0.25-7 n=29	1 0.33-5 n=35	1 1-4 n=25	**2** **0.5-2** **n=21**

Source: EDRS interviews
#among those who had used in last six months

4.6.2 Cannabis use in the general population

In the 2013 NDSHS (AIHW, 2014) it was estimated that 34.8% of the general population (aged 14 years or more) had ever used cannabis and 10.2% had used cannabis in the past year. There were no significant differences in national prevalence estimates between the 2010 and 2013 surveys. In Tasmania, it was estimated that approximately 11.8% (95%CI 10.1-13.8) of Tasmanians (aged 14 years and over) had used cannabis in the past year (Figure 5), a significantly greater proportion relative to 2010 (8.6%, 95%CI 7.0-10.4), but similar to the proportion in 2007 (10.8%, 95%CI 9.1-12.7).

Figure 5: Prevalence of cannabis use in Australia and Tasmania (aged 14 years and over), 1993-2013



Source: NDSHS, 1993-2013

4.7 Other drug use

Summary:

- Nearly all (98%) of 2016 REU sample had recently consumed alcohol, on an average of three days a week in the last six months. Almost three-quarters (70%) of participants had used alcohol at least weekly (but not daily), which is substantially higher than the estimate of prevalence in the general population among those aged 18-24 (22.1%) and 25-29 (19.3%) nationally – a comparable age group to the current REU cohort.
- Tobacco had recently been used by three-quarters (76%) of the sample in the past 6 months. The proportion of the 2016 Tasmanian EDRS sample who reported daily smoking (58%) is higher than the 2013 population estimate for a comparable age group (20-29 years) both in Tasmania (30.1%) and nationally (15.2%) (AIHW, 2014). Over one-tenth (15%) reported use of e-cigarettes in the last six months. A majority had used e-cigarettes which contained nicotine (73%), and one-quarter (33%) had used e-cigarettes as a smoking cessation tool.
- Less than one-tenth of REU reported recent use of Ketamine (3%) or MDA (8%), and only 1% reported recent use of GHB, gamma-butyrolactone (GBL) or 1,4 butanediol (1,4B).
- Almost one-quarter (24%) had used mushrooms in the preceding six months. Mushrooms had been used on a median of three days (range 1-24 days) during this time.
- Use of inhalants was relatively stable, with 11% reporting use of nitrous oxide and 15% reporting use of amyl nitrite in the preceding six months.
- One-fifth (25%) of REU had used benzodiazepines during the last six months, with one-fifth (21%) reporting illicit (non-prescribed) use and less than one-tenth (9%) reporting licit use. Use of illicit benzodiazepines was relatively low in frequency, at 8 days (range 2-30 days) in the last six months.
- One-fifth (20%) of REU reported recent illicit use of pharmaceutical stimulants (such as dexamphetamine or methylphenidate) in 2016. The median frequency of use was two days (range 1-15 days) in the last six months, with a median of 2.75 tablets (range 1-5) taken in a typical session of use.
- Only a small proportion of the 2016 sample had recently used heroin (3%), methadone (1%), or ‘other illicit opioids’ (5%) (restricted pharmaceuticals and alkaloid poppy derivatives), and none reported the use of buprenorphine.
- Over one-tenth (13%) reported recent non-pain use of over-the-counter codeine preparations and less than one-tenth (5%) reported recreational use of stimulant-based over-the-counter preparations.
- Illicit antipsychotics had been used by less than one-tenth (3%) of the sample.
- One-quarter (26%) of the 2016 sample reported use of any Novel Psychoactive Substance (NPS) in the last six months, similar to the 2015 sample (22%). Less than one-tenth (5%) reported use of mephedrone in the last six months, which is similar to the proportion in 2015 (9%). Mephedrone was snorted, swallowed or injected on a median of two days (range 2-2 days) in the last six months.
- Recent use of other NPS was relatively low. The most commonly used substances in the last six months were methoxetamine (4%), DMT (4%), methylone (4%), mescaline (3%), and 2CI (3%). Just 1% reported use of synthetic cannabinoids. In addition, over one-tenth of the sample (15%) reported recent use of capsules of ‘unknown contents’.

4.7.1 Alcohol

The entire sample (100%) of REU interviewed in 2016 reported lifetime use of alcohol (see Table 12). The median age of first use was 14 years (range 3-21 years) which is consistent with previous EDRS samples, though in the current sample males (14 years) had a significantly earlier median age of first use than females (15 years), $t(97)=2.13$, $p=.036$.

Nearly all participants (98%) had used alcohol during the six months preceding the interview, with a median frequency of 80 days (range 6-180 days), or approximately three days a week on average. The median frequency of use was similar for males (96 days) and females (80 days).

Three-quarters (78%) of the 2016 EDRS sample had used alcohol at least weekly during the six months preceding the interview, which is substantially higher relative to those aged 18-24 (22.1%) and 25-29 (19.3%) in the general population nationally (AIHW, 2014). Similarly, the proportion of REU reporting recent daily use of alcohol in 2016 was 8% compared to 1.8% (aged 18-24) and 3.7% (aged 25-29) in the general population nationally (AIHW, 2014).

Table 12: Patterns of alcohol use of REU, 2011-2016

Alcohol	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016** **n=100**
Ever used (%)	100	99	100	100	100	**100**
Median age first used (range)	14 1-18	14 8-18	14 8-25	14 5-18	14 8-18	**14** **3-21**
Used last 6 months (%)	100	98	100	98	100	**98**
Median days used (range)	60 3-180	80 13-180	72 1-180	72 4-180	72 10-180	**80** **6-180**

Source: EDRS interviews
#among those who had used in last six months

4.7.2 Tobacco

Almost all (94%) of the 2016 REU sample reported lifetime use of tobacco (Table 13). The median of first use was 15 years (range 8-23 years) and there was no significant difference between the age of first use for males (15 years) and females (15 years).

Three-quarters (76%) of the sample had smoked tobacco during the six months preceding the interview, similar to the proportion in 2015 (85%). There was no significant difference in the proportion of males (69%) and females (83%) reporting recent use of tobacco, or in the proportion of younger (≤22 years: 81%) relative to older (>22 years: 72%) participants (based on a median split for age).

Almost three-fifths (58%) of those who had recently smoked reported smoking tobacco on a daily basis during the six months preceding the interview, similar to the proportion in 2015 (65%). There was no significant difference in the number of males (41%) and females (48%), who reported daily tobacco smoking, or in the number of older (>22 years: 42%) or younger (≤22 years: 47%) participants. One-fifth of recent smokers (22%) had smoked weekly or less during the six months preceding the interview, similar to the proportion in 2014 (20%).

The proportion of the Tasmanian EDRS sample who reported daily smoking (58%) is higher than the 2013 population estimate for a comparable age group (20-29 years) both in Tasmania (30.1%) and nationally (15.2%) (AIHW, 2014).

Participants were asked about their use of electronic cigarettes for the first time in 2014 (Table 13). Over two-fifths (44%) of 2016 participants reported lifetime use of e-cigarettes

and almost one-fifth (15%) reported use of e-cigarettes in the last six months. The median age of first use was 22 (range 18-36). Among those who had used e-cigarettes in the last six months, the median frequency of use was 3 days (range 1-20). Over one-tenth (15%) reported use of e-cigarettes in the last six months. A majority had used e-cigarettes which contained nicotine (73%), and one-third (33%) had used e-cigarettes as a smoking cessation tool.

Table 13: Patterns of tobacco use of REU, 2011-2016

Tobacco	2011 n=75	2012 n=100	2013 n=76	2014 n=97	2015 n=78	**2016 n=100**
Ever used (%)	97	95	90	97	99	**94**
Median age first used (range)	15 7-23	14 5-26	16 5-25	16 8-61	16 8-22	**15 8-23**
Used last 6 months (%)	83	80	76	83	85	**76**
Used daily (%)[#] Used weekly or less (%)[#]	38 33	61 18	59 22	59 17	65 20	**58 22**
e-cigarettes						
Ever used (%)	n/a	n/a	n/a	45	35	**44**
Median age first used (range)	n/a	n/a	n/a	22 17-35	21 16-31	**22 18-36**
Used last 6 months (%)	n/a	n/a	n/a	32	23	**15**
Days of use on last 6 mths (%)[#]	n/a	n/a	n/a	3 1-180	3 1-120	**3 1-20**

Source: EDRS interviews
[#]among those who had used in last six months

4.7.3 Ketamine

Almost two-fifths (38%) of the 2016 REU sample reported lifetime use of ketamine (Table 14). Only 3% of participants had used ketamine in the six months preceding the interview in 2016, which is similar to the proportion among the 2015 sample (5%) (Table 14). The median frequency of ketamine use was three days (range 1-10 days) in the six months preceding the interview.

Table 14: Patterns of ketamine use among REU, 2011-2016

Ketamine	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	32	25	18	30	26	**38**
Median age first used (range)	21 16-29	20 15-32	20 17-28	21.5 17-33	19.5 16-25	**- -**
Used in last 6 months (%)	8	4	9	14	5	**3**
Median days used (range)[#]	2.5~ 2-30	2~ 1-3	2~ 1-2	2 1-13	1.5~ 1-3	**3~ 1-10**
Route (%)[#]						
Snorted	100	75	100	71	25	**67**
Swallowed	0	25	0	36	75	**67**
Injected	17	0	0	14	0	**33**
Smoked	17	0	0	7	0	**0**
Median points used typical session (range)[#]	1.5~ 1-2	0.5~ n=1	2~ 1-2.5	2~ 0.5-2	2~ 2-2	**-**
Median points used biggest session (range)[#]	3~ 2-4	1~ n=1	2.5~ 1-5	2.5~ 0.5-4	8~ 8-8	**-**

Source: EDRS interviews
~n<10 [#]among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.4 GHB/GBL/1,4B

GHB may also be known as 'GBH', 'grievous bodily harm', 'fantasy', 'liquid ecstasy', 'liquid E' and 'blue nitro' in Australia. Several substances such as GBL and 1,4B are included in this category as they are metabolised to GHB following ingestion and may be used as substitutes for GHB (ACC, 2003). GHB has a relatively high overdose potential, particularly when used in in combination with alcohol (Degenhardt, Darke & Dillon, 2003).

Data in relation to GHB/GBL/1,4B should be interpreted with caution due to small sample sizes. Nine (9%) participants in the 2016 sample had used GHB/GBL/1,4B at some stage of their lives (Table 15). In 2016, only one participant (1%) reported ingesting GHB/GBL/1,4B in the six months preceding the interview (Table 15), which is consistent with the low levels of recent use among previous EDRS cohorts (0%-3%).

Table 15: Patterns of GHB/GBL/1,4B use among REU, 2011-2016

GHB	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	5	10	8	5	4	**9**
Median age first used (range)	25.5~ 23-28	19.5 16-24	21.5~ 15-31	24~ 20-25	24~ 19-24	**-** **-**
Used last 6 months (%)	3	2	0	0	0	**1**
Median days used (range)#*	1.5 1-2	1 1-1	-	**-**	-	**-**
Route (%)#* Swallowed	 100	 100	 -	 **-**	 -	 **100**
Median quantity used (ml) #*	n=2	n=1				
Typical session (range)	16~ (2-30)	60~	-	**-**	-	**-**
Biggest session (range) #*	16~ (2-30)	120~	-	**-**	-	**-**

Source: EDRS interviews

~n<10 # among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.5 MDA

Almost one-fifth (15%) of the 2016 sample had ever used MDA (Table 16) which is similar to the proportion in 2015 (14%). Eight (8%) participants had consumed MDA during the six months preceding the interview (Table 16), which is similar to the proportion in 2015 (4%).

Table 16: Patterns of MDA use among REU, 2011-2016

MDA	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	32	13	16	21	14	**15**
Median age first used (range)	19 17-28	20 16-29	20 17-33	21 17-29	18 16-25	**-** **-**
Used in last 6 months (%)	21	4	8	6	4	**8**
Median days used (range)#	2 1-12	9~ 4-30	2.5~ 1-48	3.5~ 2-10	2~ 1-5	**2~** **1-150**
Route (%)#						
Smoked	6	0	17	0	0	**0**
Snorted	63	50	17	83	33	**25**
Swallowed	75	75	83	67	67	**63**
Injected	0	25	17	0	0	**13**
Median caps#						
Typical session	1.5	1~	1.75~	4~	2~	**1.5~**
(range)	.5-5	1-2	1-3	2-6	2-2	**1-2**
Biggest session	3	2~	2.25~	4~*	2~	**2~**
(range)	1-9	2-3	2-5	2-6	2-2	**2-2**

Source: EDRS interviews
~n<10 # among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.6 Psychedelic mushrooms

Over half (56%) of the 2016 REU sample had ever used psychedelic mushrooms (Table 17).

Almost one-quarter (24%) of the 2016 sample had used mushrooms in the preceding six months, higher but not statistically different to the proportion in 2015 (24% vs. 15% χ^2=1.52, *p*=.218) (Table 17). There was no significant difference in the proportion of males (26%) relative to females (23%) who reported recent use, nor was there any significant difference in use among younger (≤22 years: 23%) relative to older (>22 years: 25%) participants.

All of those that had recently used mushrooms (100%) had ingested them. The median frequency of mushroom use was three days (range 1-24 days) in the preceding six months, or approximately once every two months.

Table 17: Patterns of psychedelic mushroom use of REU, 2011-2016

Psychedelic mushrooms	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	64	81	71	63	54	**56**
Median age first used (range)	18.5 14-25	17 13-26	17.5 12-29	18 13-26	17 15-26	**-** **-**
Used in last 6 months (%)	23	26	15	21	15	**24**
Median days used (range)#	3 1-24	2.5 1-24	2 1-6	3 1-15	3 1-20	**3** **1-24**

Source: EDRS interviews
#among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.7 Inhalants

Amyl nitrite

One-third (32%) of the 2016 REU sample had ever used amyl nitrite (Table 18).

Approximately one-tenth of the sample (11%) reported recent use of amyl nitrite in 2016, similar to the rate in 2015 (12%). There was no significant difference in the proportion of males (12%) and females (10%), or the proportion of younger (≤22 years: 6%) and older (>22 years: 15%) participants (based on a median split for age) who reported recent use.

The median frequency of use was two days (range 1-60) during the six months preceding the interview or once every three months.

Table 18: Patterns of amyl nitrite use of REU, 2011-2016

Amyl nitrite	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	76	53	42	39	33	**32**
Median age first used (range)	20 15-26	20 13-35	19 14-28	19 14-31	18.5 16-28	**-** **-**
Used last 6 months (%)	29	24	9	12	12	**11**
Median days used (range)#	4 1-20	2 1-14	4 1-20	3 1-40	1 1-10	**2** **1-60**

Source: EDRS interviews

among those who had used in last six months. Age of first use data was not collected in 2016.

Nitrous oxide

Two-thirds of the 2016 sample (66%) had ever used nitrous oxide (Table 19). Almost one-fifth (15%) of the 2016 sample had used nitrous oxide during the six months preceding the interview, which is higher but not statistically different to 2015 (15% vs. 6%, χ^2=2.44, *p*=.118). There was a trend towards significance in the difference in the proportion of males (22%) and females (8%) who had recently used nitrous oxide, χ^2=3.37, *p*=.066. There was no difference in the proportion of younger (≤22 years: 11%) and older (>22 years: 19%) participants (based on a median split for age) reporting recent use.

The median frequency of use during the last six months was two days (range 1-180 days). The median number of bulbs used was 7 (range 2-50 bulbs) in a typical session and 10 (range 2-50 bulbs) in a heavy session of use.

Table 19: Patterns of nitrous oxide use of REU, 2011-2016

Nitrous oxide	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	59	80	60	65	65	**66**
Median age first used (range)	19 12-28	17 13-27	17 14-28	17 15-28	17 14-24	**-** **-**
Used last 6 months (%)	36	27	9	5	6	**15**
Median days used (range)#	5 1-24	4 1-50	1.5 1-60	3 1-15	1 1-1	**2** **1-180**
Bulbs used#						
Typical session (range)	5.5 1-20	8 2-90	8 3-40	10 2-100	4 2-7	**7** **2-50**
Biggest session (range)	10 1-40	15 2-90	8 5-60	12.5 2-60	4 2-7	**10** **2-50**

Source: EDRS interviews

#among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.8 Benzodiazepines

Two-fifths (44%) of the 2016 sample had used benzodiazepines at some stage of their life (Table 20). There was no significant difference in use for females (31%) relative to males (20%), however, a significantly lower proportion of younger (≤22 years: 15%) relative to older (>22 years: 34%) participants (based on a median split for age) reported recent use, χ^2=4.83, p=.03, similar to 2015.

One-quarter (25%) of the sample had used benzodiazepines during the six months preceding the interview, which is similar to the proportion in 2015 (23%). The median frequency of recent benzodiazepine use was 6 days (range 1-180 days) during the last six months. Over one-half (56%) of those who had recently used benzodiazepines had done so on 10 or less occasions in the last six months.

Less than one-tenth (9%) of the sample reported recent licit (prescribed) use. Licit benzodiazepines had been swallowed on a median frequency of 20 days (range 1-180 days) during the six months preceding the interview.

One-fifth (21%) reported recent illicit (non-prescribed) use of benzodiazepines in 2016, which is similar to the proportion in 2015 (17%). All (100%) participants who reported illicit benzodiazepine use had swallowed the drug, on a median of eight days (range 2-30 days) during this time. There was no significant difference in rates of illicit use for females (25%) relative to males (18%), however, there was a significant difference in the proportion of younger (≤22 years: 11%) and older (>22 years: 30%) participants (based on a median split for age) reporting recent illicit drug use, χ^2=5.74, p=.017, similar to 2015.

Table 20: Patterns of benzodiazepine use of REU, 2011-2016

Benzodiazepines	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016** **n=100**
Ever used (%)	61	45	47	55	41	**44**
Median age first used (range)	20 12-35	19 13-34	19 12-30	20 13-29	17.5 13-29	**-** **-**
Used in last 6 months (%)	45	31	34	40	23	**25**
Injected last 6 months (%)	0	0	0	0	0	**0**
Median days used (range)[#]	7 1-180	5 1-180	6 1-180	4.5 1-180	9 2-180	**6** **1-180**
Licit use last 6 months (%)	12	10	8	13	8	**9**
Illicit use last 6 months (%)	36	25	30	31	17	**21**

Source: EDRS interviews

[#] among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.9 Antidepressants

Up until 2015, licit and illicit anti-depressants were assessed in EDRS. In 2016, REU were asked questions only about illicit use of antidepressants. Less than one-tenth (6%) of the 2016 sample had used illicit antidepressants at some stage of their life (Table 21).

Only one (1%) participant had used illicit antidepressants in the six months preceding the interview, and they reported oral use during this time with a median frequency of 8 days of use.

Table 21: Patterns of antidepressant use of REU, 2011-2016

Anti-depressants	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	23	16	24	24	18	**6**
Median age first used (range)	17 14-27	18.5 14-30	18 12-31	18 12-30	17 13-23	**-** **-**
Used last 6 months (%)	8	4	8	5	4	**1**
Median days used (range)#	135 3-180	180 72-180	180 14-180	97 7-180	12 1-100	**8** **8-8**
Licit use last 6 months (%)	7	4	9	5	3	**-**
Illicit use last 6 months (%)	1	1	0	0	3	**1**

Source: EDRS interviews

among those who had used in last six months. Age of first use data and licit antidepressant use was not collected in 2016.

4.7.10 Pharmaceutical stimulants

In 2016, 6% of the sample reported past use of licit pharmaceutical stimulants and 2% had used licit pharmaceutical stimulants during the six months preceding the interview.

One-half (50%) of the 2016 sample had ever used illicit pharmaceutical stimulants (Table 22). One-fifth (20%) had used illicit pharmaceutical stimulants in the six months preceding the interview, which is higher but not statistically different to 2015 (20% vs. 13% χ^2=1.14, p=.286).

Of those who had recently used illicit pharmaceutical stimulants the majority had taken the drugs orally (85%) in the preceding six months. The median frequency of use was two days (range 1-15 days) in the six months preceding the interview. The median number of tablets used was 2.75 in typical session (range 1-5 tablets) and three in the heaviest session of use (range 1-12 tablets).

Table 22: Patterns of illicit pharmaceutical stimulant use of REU, 2011-2016

Pharmaceutical stimulants	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	39	46	43	53	53	**50**
Median age of first use (range)	17 13-30	20 12-45	19 12-28	18 10-29	17 14-24	**-** **-**
Used last six months (%)	15	20	18	18	13	**20**
Median days used (range)#	5 3-20	3 1-20	3 1-12	2.5 1-48	2 1-14	**2** **1-15**
Median tablets typical session (range)#	3.5 2-10	2 1-7.5	2 1-5	3 1-8	1 1-6	**2.75** **1-5**
Median tablets biggest session (range)#	5 3-15	3 1-25	4 1-10	3 1-20	2 1-6	**3** **1-12**

Source: EDRS interviews

among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.11 Over-the-counter (OTC) preparations

One-quarter (25%) of the 2016 sample had ever used over-the-counter (OTC) codeine-based products (e.g., Nurofen plus, Panadeine) for non-medical purposes. Over one-tenth (13%) had used these products for non-medical purposes during the last six months (Table 23). The median frequency of this use was five days (range 1-150 days) in the last six months.

Table 23: Non-medical use of codeine-based over-the-counter preparations among REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	0	21	24	22	15	**25**
Median age first use (range)	0	20 10-51	20 13-28	19 13-33	18 16-25	**- -**
Used last 6 months (%)	9	16	9	12	10	**13**
Injected last 6 mths (%)	0	0	0	0	0	**0**
Median days use (range) [#]	4 1-64	4 1-40	7 1-90	2 1-50	15 1-72	**5 1-150**

Source: EDRS interviews
*n<10 [#] among those who had used in last six months. Age of first use data was not collected in 2016.

Eleven (11%) participants reported having used stimulant-based products (e.g., pseudoephedrine-based cold and flu tablets) for non-medical purposes during their life. Five participants (5%) reported ingesting over-the-counter stimulant-based products for non-medical purposes during the six months preceding the interview at a median of five days (range 2-48 days).

Table 24: Non-medical use of stimulant-based over-the-counter preparations among REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	39	12	7	8	8	**11**
Median age first use (range)	17 13-30	22.5 12-30	18 14-23	18.5[~] 14-27	19[~] 16-22	**- -**
Used last 6 months (%)	5	4	3	2[~]	1[~]	**5[~]**
Injected last 6 mths (%)	0	0	0	0	0	**0**
Median days use (range) [#]	5 3-20	3.5 1-22	2.5 2-3	5.5[~] 4-7	5[~] 5-5	**5[~] 2-48**

Source: EDRS interviews
[~]n<10 [#] among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.12 Heroin and other opiates

Heroin

Approximately one-tenth (9%) of the 2016 REU sample had ever used heroin (Table 25). Three participants (3%) reported intravenous use of heroin during the six months preceding the interview. The low reported use and availability of heroin among REU in Hobart is consistent with data reported in the Tasmanian IDRS among people who inject drugs (see Lusk, Ney & Bruno, 2017).

Table 25: Patterns of heroin use of REU, 2011-2016

Heroin	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	17	10	16	12	5	**9**
Median age first use (range)	21 16-23	20.5 14-23	19 15-29	22 14-28	22~ 16-30	**-** **-**
Used in last 6 months (%)	8	1	5	2	1~	**3~**
Injected last 6 months (%)	8	1	4	2	1~	**3~**
Median days used (range) #	13 2-31	4 n=1	5.5 3-30	2.5~ 1-4	3~ 3-3	**6~** **2-14**

Source: EDRS interviews

~n<10 #among those who had used in last six months. Age of first use data was not collected in 2016.

Methadone

Almost one-fifth (18%) of the 2016 REU sample had ever used methadone (licit or illicit), which is higher but not statistically different to 2015 (18% vs. 9%, χ^2=2.26, *p*=.133) (Table 26). participant (1%) reported use of methadone in the last six months.

Table 26: Patterns of methadone use of REU, 2011-2016

Methadone	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	8	9	7	13	9	**18**
Median age first used (range)	22 18-25	23 18-30	25 18-29	20 17-30	20~ 15-25	**-** **-**
Used in last 6 months (%)	4	4	1	3	4	**1**
Injected last 6 months (%)	3	0	1	0	4	**0**
Median days used (range)#	180~ 6-180	14.5~ 3-48	1~ n=1	15.5~* 1-30	3~ 2-180	**70~** **70-70**

Source: EDRS interviews

~n<10;#among those who had used in last six months. Age of first use data was not collected in 2016.

Buprenorphine

Consistent with the low levels of buprenorphine (licit or illicit) use among the REU cohorts in previous years, less than one-tenth (5%) of the 2016 sample reported lifetime use of buprenorphine (Table 27). No participants had used buprenorphine in the past six months.

Table 27: Patterns of buprenorphine use of REU, 2011-2016

Buprenorphine	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	8	4	5	6	0	**5**
Median age of first use (range)	28.5 23-33	37 23-46	21 12-28	21 19-33	- -	**-** **-**
Used last 6 months (%)	3	2	4	2	-	**0**
Injected last 6 months (%)	1	0	4	1	-	**-**
Median days used (range) #	9.5˜ 4-15	92˜ 24-160	9˜ 1-10	2˜ 1-3	-	**-**

Source: EDRS interviews

˜n<10 #among those who had used in last six months. Age of first use data was not collected in 2016.

Other illicit opioids

'Other illicit opioids' comprise a broad drug class including restricted pharmaceuticals such as morphine and oxycodone, and alkaloid poppy plant derivatives such as opium or 'poppy wash'. Almost one-fifth (19%) of the 2016 REU sample had ever used 'other illicit opioids' for not-as-prescribed (or non-licit) purposes (Table 28). The median frequency of use was 17 days (range 3-150 days) during the six months preceding the interview. For those who had recently used 'other opioids', their routes of administration were swallowing (100%) and injecting (40%).

Less than one-tenth (5%) of the sample had used 'other illicit opioids' for non-medical purposes in the last six months.

Table 28: Patterns of illicit 'other opioid' use among REU, 2011-2016

Other opioids	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	29	16	22	22	13	**19**
Median age first used (range)	19.5 16-25	21.5 14-31	20 13-32	20 15-33	21.5˜ 14-25	**-** **-**
Used last 6 months (%)	16	4	11	11	6	**5**
Injected last 6 months (%)	9	3	5	5	3	**2**
Median days used (range)#	6 1-40	4˜ 1-5	5.5 1-30	7 1-45	3˜ 1-20	**10`** **3-21**

Source: EDRS interviews

˜n<10 #among those who had used in last six months. Age of first use data was not collected in 2016.

4.7.13 Antipsychotic medications

One-tenth (9%) of the 2016 REU sample had ever used antipsychotic medications (Table 29), and 3% had used these drugs during the six months preceding the interview. All recent users (100%, n=3) had used these drugs illicitly in the past six months.

Illicit antipsychotics (quetiapine) had been taken orally (100%) on a median of two days (range 1-20), or approximately every three months, during this time.

Table 29: Patterns of antipsychotic medication use among REU, 2014-2016

Antipsychotic medication	2014 n=13	2015 n=78	**2016** **n=100**
Ever used (%)	13	10	**9**
Used in last 6 months (%)	7	5	**3**
Licit use in last six months (%)	1	1	**0**
Median days licit use#	2~ n=1	1~ n=80	**-**
Illicit use in last six months (%)	7	4	**3**
Median days illicit use#	3~ 1-12	4~ 2-130	**2~** **1-20**

Source: EDRS interviews
~n<10 #among those who had used in last six months

4.8 New psychoactive substance (NPS) use

The proportion reporting any use of an NPS substance in 2016 (26%) was similar to the 2015 cohort (21%).

4.8.1 Mephedrone

Mephedrone (4-methylmethcathinone) is a synthetic stimulant (common names include 4-MMC, meow meow, m-cat, plant food) that is chemically similar to cathinone which is found in the *Catha edulis* or 'khat' plant. The 'khat' plant has a long history of human use, particularly in many east African communities such as in Yemen and Somalia. Mephedrone has grown in popularity worldwide in recent years, particularly in the UK and Europe (see Brunt, Poortman, Niesink, & Van den Brink, 2010; Winstock et al, 2010). For more information on mephedrone and other NPS substances in Australia, see Burns et al (2014).

Mephedrone is purported to have both stimulant and hallucinogenic/euphoriant properties and its effects have been likened to cocaine, MDMA, and amphetamines (Measham, Moore, Newcombe, & Welch, 2010; Winstock et al, 2010). Based on its chemical structure, it is likely that mephedrone has effects similar to amphetamines and therefore stimulates the release of monoamine neurotransmitters and then inhibits their reuptake (Winstock et al., 2010).

Almost two-fifths (38%) of the 2016 REU sample reported lifetime use of mephedrone and a small proportion (5%) reported use of mephedrone in the last six months (Table 30). While lifetime mephedrone rates have been similar between 2011-2016, there has been a downward trend of use within the last six months from 2013 to 2016.

Mephedrone had been snorted (100%), swallowed (40%) or injected (20%) on a median frequency of two days (n=5) in the last six months (range 2-2), or approximately once every three months. Mephedrone was obtained from a friend (71%) or from the internet (29%) in the past six months.

Table 30: Patterns of mephedrone use of REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever used (%)	37	29	42	48	39	**38**
Used last 6 months (%)	27	10	24	23	9	**5**
Route of administration						
Swallow (%)	68	70	78	65	71	**40**
Snort (%)	74	60	44	57	57	**100**
Smoke (%)	0	0	6	0	0	**0**
Inject (%)	5	0	6	9	0	**20**
Median days used (range) #	3 1-30	2.5 1-12	3 1-12	2 1-60	2 1-20	**2˜ 2**

Source: EDRS interviews

#among those who had used in last six months

˜n<10 #among those who had used in last six months

4.8.2 Other NPS

Table 31 shows the proportion of the EDRS cohorts reporting recent use of other 'new psychoactive substances' during the six months preceding the interview. Chemicals such as mephedrone and 2CI/2CB/2CE are relatively new substances and little is known about the effects and risks associated with their use. In many countries, these chemicals are not controlled substances and they can often be purchased through chemical supply companies for 'research' purposes. Also included as NPS are substances which have been around for many years (e.g., mescaline, DMT) but which may have the potential to emerge as popular substances among this group.

The most common NPS substances used among the 2016 cohort were mephedrone (5%) and related substances such as methylone (also known as bk-MDMA) (4%).

Small proportions of the sample reported recent use of other psychedelics such as DMT (4%), mescaline (3%), 2CI (3%), 2CB (1%) and 2CE (1%).

Small proportions also reported recent use of the dissociative anaesthetic methoxetamine (MXE) (5%) or synthetic cannabinoids (1%).

Participants were specifically asked whether they had recently consumed capsules of 'unknown content' (following from anecdotal reports of an 'unspecified' illicit capsule market in Hobart) or substances that could be classified as 'herbal highs' (given their availability in local 'head shops' and over the internet). Recent use of capsules (contents unknown) was reported by 15% of the sample and recent use of 'herbal highs' was reported by none of the sample.

Consistent with reduced use of mephedrone and other NPS substances among REU, several KE (n=8) indicated that there seemed to be less use of NPS among the group of regular drug users that they were familiar, possibly due to the high incidence of adverse effects.

Table 31: Use of NPS in last six months among REU, 2011-2016

% used in last 6 months	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Stimulants						
Mephedrone	27	10	24	23	9	**5**
Methylone (bk-MDMA)	4	2	1	4	5	**4**
Other cathinone^	-	1	-	2	-	**-**
MDAI	-	1	-	1	-	**-**
BZP	-	-	-	-	-	**-**
MDPV (ivory wave)	1	1	4	3	1	**-**
Benzo fury	-	-	-	1	-	**-**
Psychedelic phenethylamines						
2CB	-	-	5	4	1	**1**
2CI	4	2	4	4	3	**3**
2CE	1	1	1	2	-	**1**
2C-other	-	-	-	-	1	**-**
DOI	-	-	-	-	-	**-**
Mescaline #	1	2	3	4	5	**3**
NBOMe	-	-	-	5	5	**-**
Psychedelic tryptamines						
DMT #	4	6	11	9	4	**4**
5-MeO-DMT #	3	1	3	1	-	**-**
PMA	-	-	-	-	-	**-**
Plant derivatives						
Datura	-	-	1	-	-	**-**
Salvia divinorum	-	1	1	1	1	**-**
LSA (wood rose seeds)	3	1	-	1	-	**-**
Synthetic cannabinoids	1	4	1	4	1	**1**
Other substances						**-**
Methoxetamine (MXE)	-	-	-	10	4	**5**
DXM**	3	4	4	5	1	**-**
Ephedrine	-	-	-	-	-	**-**
Melanotan	1	-	-	-	-	**-**
Capsule (contents unknown)	15	16	20	11	19	**15**
Herbal highs	11	8	4	3	4	**-**

Source: EDRS interviews
** dextromethorphan (a common ingredient in over-the-counter cough medicines)
# can also be derived from plants
^ includes methcathinone

5.0 DRUG MARKET TRENDS: PRICE, PURITY, AVAILABILITY AND SUPPLY

5.1 Ecstasy

Summary:

- The median last purchase price for ecstasy was $30 for one tablet (range $15-50) and $35 for one capsule (range $20-45). No recent price changes were noted and three-quarters (74%) indicated that price had remained stable in the past six months.
- The median last purchase price for MDMA crystal was $300 per gram (range $25-550), and price was reported to be have been stable (76%) in the last six months.
- Ecstasy (pills, capsules, powder) was reported to be medium (45%) or fluctuating (38%) in purity. In contrast, MDMA crystal was typically reported to be high (46%) or medium (42%) in purity, and this purity was reported to have been stable (84%) in the last six months.
- Ecstasy was reported to be easy (50%) or very easy (37%) to obtain in 2016. MDMA crystal was typically reported to be easy (42%), very easy (29%) or difficult (25%) to obtain.
- Ecstasy was typically last purchased from friends and last obtained at the respondent's own home, a nightclub or a public bar.

5.1.1 Price

The median last purchase price for one ecstasy tablet was $30 (range $15-50) which is similar to the years prior to 2016.

The median last purchase price for one capsule of ecstasy was also $35 (range $20-45), which is consistent with data from the past five years.

The median last purchase price for MDMA crystal was $300 per gram (range $25-550).

Three-quarters (74%) of the sample indicated that the price of ecstasy (pills, capsules, and powder) had recently remained stable. In relation to crystal MDMA (which was examined separately in 2016), three-quarters (76%) reported that price had recently been stable in the last six months.

KE comments on the price of ecstasy were varied. The price for one ecstasy pill was reported to range from $15 to $40 (n=5).

Table 32: Price of ecstasy purchased by REU and price variations, 2011-2016

Median price (range)	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Pill/Tablet						
Last price per pill (range)	$30 15-40 n=61	$30 18-50 n=86	$30 20-40 n=69	$30 5-45 n=88	$35 10-50 n=73	**$30 15-50 n=94**
Powder						
Last price per gram (range)	$300~ n=1	$350~ n=1	$300~ 90-400 n=5	$200~ 140-400 n=4	$300~ 40-350 n=7	**$275~ 35-300 n=4**
Capsule						
Last price per capsule (range)	$30 10-40 n=46	$30 5-40 n=67	$30 20-40 n=26	$30 15-50 n=27	$30 5-40 n=32	**$35 20-45 n=42**
MDMA crystal						
Last price per gram (range)	-	-	$200~ n=2	$290 40-400 n=20	$225 80-350 n=10	**$300 25-550 n=11**
Last price per point (range)	-	-	$100~ 30-150 n=3	$35~ 25-350 n=9	$50~ 20-85 n=9	**$42.50~ 30-60 n=4**
Price change (%)[#]						
Don't know	5	7	9	9	4	**7**
Increased	14	7	11	6	9	**8**
Stable	65	74	63	67	60	**69**
Decreased	5	8	9	3	5	**10**
Fluctuated	11	4	8	14	22	**6**

Source: EDRS interviews
~n<10
#last six months

Table 33 shows the price of ecstasy reported by Tasmania Police to the ACIC. A price of $40-50 for one pill was reported in 2014/15 which is similar the prices reported by REU in 2013/14, and seems to reflect a steady increase in price in the past two years. At the time of publication, data were not available for the 2015/16 financial year.

Table 33: Price per tablet of ecstasy reported by Tasmania Police 2005/06-2014/15

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	**14/15**
Price per pill ($)	25-40	40	30-45	35-40	35-50	30-50	-	35	50	**40-50**

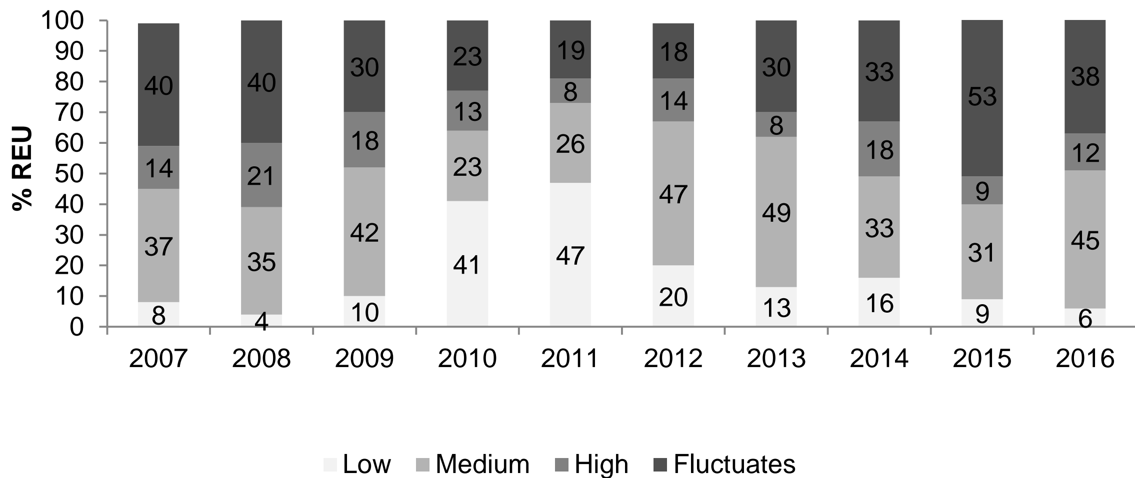
Source: ACC (2007-2015), ACIC (2016)

5.1.2 Purity

Ecstasy (pills, capsules, powder) was reported to be medium (45%) or fluctuating (38%) in purity in the past six months (Figure 6). Ecstasy purity was reported to have either remained stable (43%) or fluctuated (38%) during the six months preceding the interview. Significantly less 2016 REU reported fluctuating purity change in the past six months than in 2015 (38% vs. 63%, χ^2=9.63, p=.002) (Figure 7).

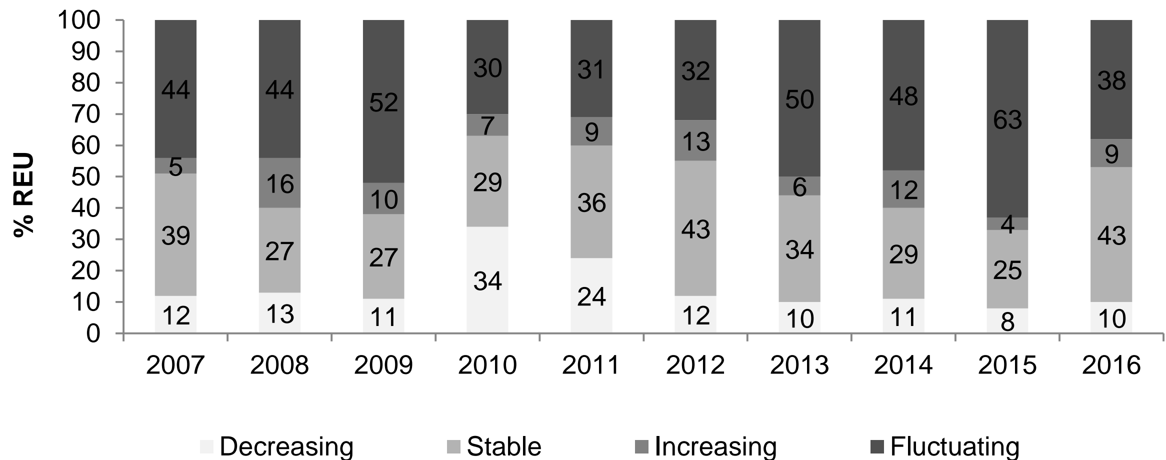
In relation to MDMA crystal (which was examined separately in 2016), a majority of those who commented (n=25) indicated that MDMA crystal was high (46%) or medium (42%) in purity, and purity was reported to have been stable (84%) in the last six months.

Figure 6: Reports of current ecstasy purity among REU who commented, 2006-2016



Source: EDRS interviews
Note: 2015/16 data includes only non-crystal forms

Figure 7: Reports of change in ecstasy purity in the last six months among REU who commented, 2007-2016



Source: EDRS interviews
Note: 2015/16 data includes only non-crystal forms

There is little objective data on the purity of phenethylamines (the class of drugs including ecstasy, or MDMA, and drugs such as MDA, MDEA and mescaline) in Tasmania, as only a proportion of seizures are analysed for purity by Tasmania Police. The median purity of seizures has ranged from 24.6% to 34.2% between 2003/04 and 2009/10, with one sample of 64% purity reported in the 2013/14 reporting period. No purity levels were reported for the 2014/15 period (see Table 34). Data for the 2015/16 reporting period were not available at the time of publication.

Table 34: Median purity of phenethylamine seizures 2005/06-2014/15

	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	**2014/ 15**
Median % Purity	-	27.1 n=4	24.6 n=3	-	34.2 n=1	-	-	-	64.0 n=1	**-**

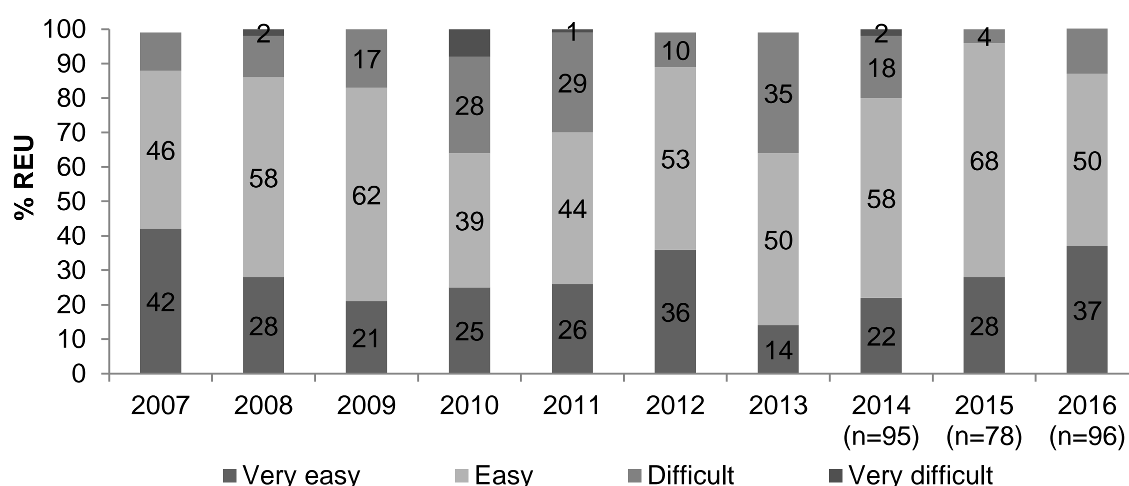
Source: ACC (2007-2015), ACIC (2016)

5.1.3 Availability

Ecstasy (pills, capsules, powder) was reported to be easy (50%), very easy (37%) or difficult (14%) to obtain in the past six months (See Figure 8), and to remained stable (72%) or to have become have become easier (13%) or more difficult (13%) to obtain in this period of time (See Figure 9).

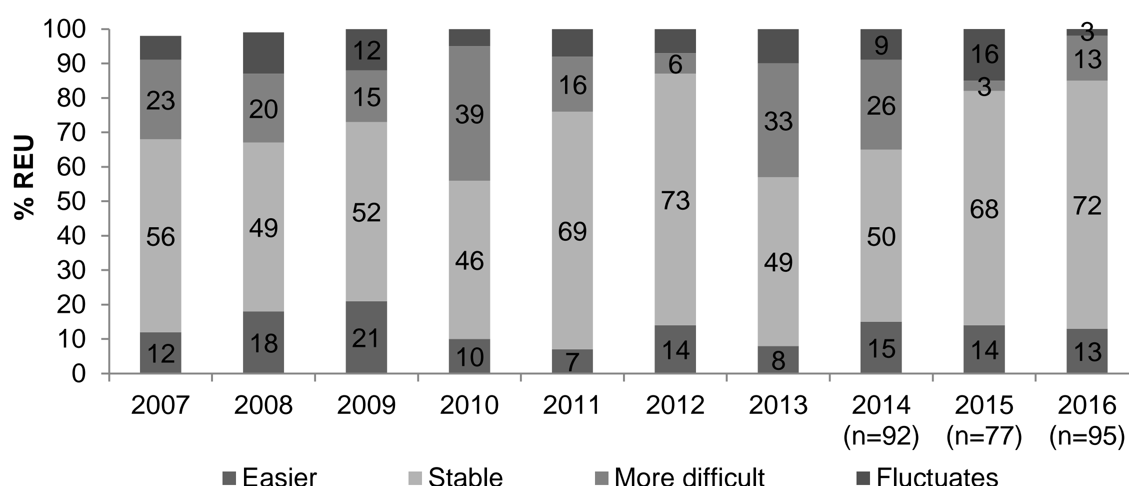
For MDMA crystal (which was examined separately in 2016), those who commented (n=24) typically indicated that it had been easy (42%) or very easy (29%) to obtain in the past six months, with the remainder reporting that it had been difficult (25%) or very difficult (4%) to obtain. This availability was reported to have been stable (65%) or to have become easier (22%) in this period of time.

Figure 8: REU reports of current availability of ecstasy, 2007-2016



Source: EDRS interviews

Figure 9: REU reports of change in ecstasy availability in the last six months, 2007-2016



Source: EDRS interviews

REU were asked who they had last obtained ecstasy from and the location where they had last obtained the drug in the last six months (Table 35). Similar to 2015, a majority indicated that they last obtained ecstasy from friends (52%), most typically from a public bar (22%), the respondent's own home (20%), nightclubs (16%), private parties (8%) or friends' homes (8%).

Among those who commented on MDMA crystal (n=24), a majority had obtained the drug from friends (67%) or known/unknown dealers (25%) on the last occasion, and it was typically last purchased at public pubs/bars (33%), at a friend's home (29%) or at the respondent's own home (21%).

Table 35: REU reports of ecstasy last source and location in the preceding six months, 2011-2016

	2011	2012	2013	2014	2015	**2016**
Person last purchased from	n=72	n=99	n=76	n=98	n=78	**n=95**
Friends (%)	76	65	71	66	54	**52**
Known dealers (%)	15	11	8	12	14	**18**
Acquaintances (%)	8	10	7	4	9	**13**
Workmates (%)	0	4	4	7	8	**7**
Unknown people (%)	0	6	7	3	9	**5**
Street/Mobile dealers (%)	0	0	0	0	0	**1**
Online (%)	0	0	0	1	0	**0**
Other (%)	0	0	0	6	3	**1**
Location last purchased ecstasy	n=72	n=99	n=76	n=97	n=78	**n=95**
Friend's home (%)	29	28	32	27	22	**8**
Dealer's home (%)	6	5	5	4	9	**6**
Home (%)	18	20	20	16	14	**20**
Nightclub (%)	14	7	11	14	15	**16**
Rave/doof/dance party	3	3	3	1	5	**2**
Private party (%)	3	10	5	9	8	**8**
Pub/bar (%)	14	11	11	17	12	**22**
Street (%)	4	3	3	1	1	**0**
Agreed public location (%)	3	3	1	2	4	**5**
Work (%)	0	5	4	7	6	**3**
Online (%)	3	1	0	1	0	**0**
Other (%)	0	0	0	1	0	**6**

Source: EDRS interviews

5.2 Methamphetamine

Summary:

- The median last purchase price for one point (0.1g) of methamphetamine powder was $50 (range $40-80), which is similar to 2015.
- Methamphetamine powder was reported to be low (45%) or medium (31%) in purity. This purity was reported to be stable (69%) during the previous six months.
- The purity of crystal was reported to be medium (41%) or high (47%) in the last six months, and this was reported to be stable (53%) or fluctuating (35%).
- Half (49%) reported that methamphetamine powder was 'easy' or 'very easy' to obtain, continuing the downwards trend from 2015. On the contrary, crystal was reported to be very easy (41%) or easy (47%) to obtain.

5.2.1 Price

REU were asked to indicate the last purchase price for the three major forms of methamphetamine (see Table 37). A greater number of respondents were able to report confidently on the price of methamphetamine crystal and powder relative to methamphetamine base. As such, prices reported for the latter methamphetamine form should be interpreted with caution.

The median last purchase price for one point (0.1 of a gram) of methamphetamine powder was $50 (range $40-80) which is similar to the median price of $50 reported in 2015 (range $25-100). The median last purchase price for one point of crystal methamphetamine was similar to the last purchase price in 2015, 2014 and 2013 ($100) at $95 (range $45-100).

The last purchase price for one gram of methamphetamine powder was $317.50 (range $35-600), though these figures were based on the reports of only two commenting participants and should be interpreted with caution. The median last purchase price for one gram of crystal methamphetamine was higher at $500 (range $450-600).

Over four-fifths (84%) of REU who commented on recent price changes in methamphetamine powder (Figure 10) indicated that the price had been stable in the last six months. The one participant who commented on the price change of base methamphetamine commented that it had been increasing in the past six months. For crystal methamphetamine, the price was reported to have been stable (63%) or decreasing (19%) in the last six months, with fewer participants (13%) reporting it as increasing.

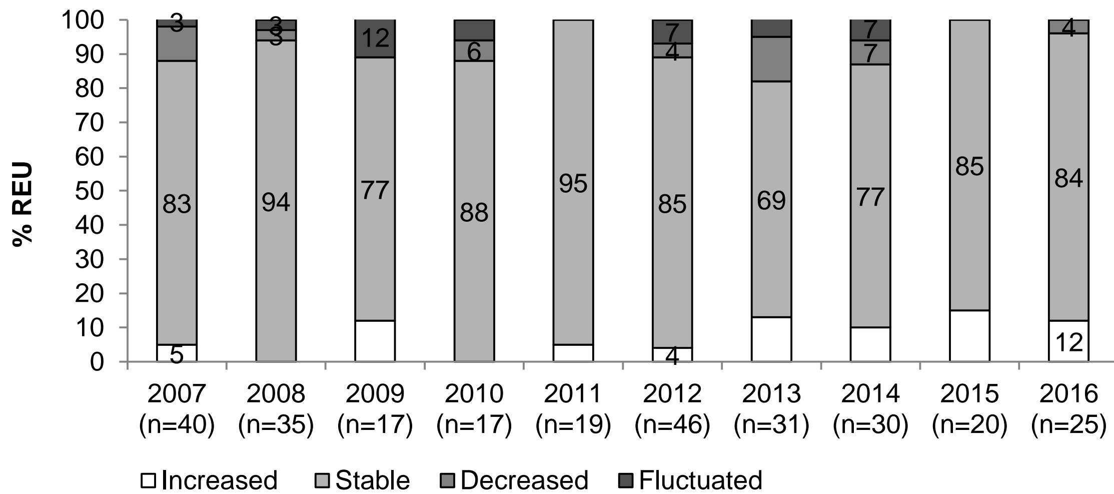
Among KE who were interviewed in Hobart, the price per gram was reported to be $300 for powder and $800-900 for crystal. The price per point was reported to be $50-75 for powder compared to $100 for crystal. These estimates are relatively consistent with the prices reported by REU.

Table 37: Last purchase price of methamphetamine forms purchased by REU, 2011-2016

Median last price	2011	2012	2013	2014	2015	**2016**
Powder						
Point	$35~	$50	$50	$42.50	$50	**$50**
(range)	20-50	20-100	25-100	25-100	25-100	**40-80**
	n=9	n=31	n=10	n=16	n=19	**n=23**
Gram	$250~	$300	$300	$300	$300~	**$317.50~**
(range)	100-300	100-350	130-400	150-350	150-320	**35-600**
	n=9	n=16	n=12	n=17	n=6	**n=2**
Base						
Point	$50~	$50	-	$30~	$65~	**$80~**
(range)	50-50	20-100		25-40	60-70	**80**
	n=2	n=10		n=4	n=2	**n=1**
Gram	$150~	$300~	$210~	$300~	-	**$650**
(range)		200-300	120-300	170-800		
	n=1	n=6	n=2	n=5		**n=1**
Crystal						
Point	$50~	$60~	$100~	$100~	$100~	**$95**
(range)	50	50-100	100-100	50-100	40-100	**45-100**
	n=2	n=5	n=5	n=8	n=9	**n=14**
Gram	$275~	$300~*	-	$500~	$600~	**$500~**
(range)	250-300	80-300		400-700	280-800	**450-600**
	n=2	n=3		n=3	n=3	**n=5**

Source: EDRS interviews
~n<10

Figure 10: Recent changes in price of methamphetamine powder purchased among REU who commented, 2007-2016



Source: EDRS interviews

Tasmania Police Drug Investigation Services gather regular information regarding current prices of illicit drugs. This data has been provided to the authors through the ACIC (Table 37). During the 2014/15 financial year, Tasmania Police reported methamphetamine (non-crystal) prices as $50 per point (0.1g) and $300 per gram compared to $100 per point and $500 per gram for crystal methamphetamine. Data for the 2015/16 reporting period were unavailable at the time of publication.

Table 38: Methamphetamine prices in Tasmania reported by Tasmania Police Drug Investigation Services, 2007/08-2014/15

Non-crystal form	Point (~0.1 g)	Full gram (1.0 g)	Ounce (28 g)
2007/08	$30-50	$200-300	$5,000-8,000
2008/09	$50	$300	-
2009/10	-	-	-
2010/11	$50-80	$300-400	$4,000-5000
2011/12	$50-70	$300	$4,000-5,000
2012/13	$50-80	-	$4,000-5,000
2013/14	$50	$300	$4,000-5,000
2014/15	**$50**	**$300**	**$4,000-5,000**
Crystal form			
2007/08	-	-	-
2008/09	$50	$300-	-
2009/10	-	-	-
2010/11	$50	$400	-
2011/12	$80-100	-	-
2012/13	$80-100	-	$10,000-12,000
2013/14	$100	$500	$10,000-14,000
2014/15	**$100**	**$500**	**$10,000-14,000**

Source: ACC (2008-2015)
Note: Data for 2015/16 financial year were not available at the time of publication

5.2.2 Purity

Due to the small number of REU who commented on methamphetamine base, trends in purity are examined over time for methamphetamine powder and crystal methamphetamine only.

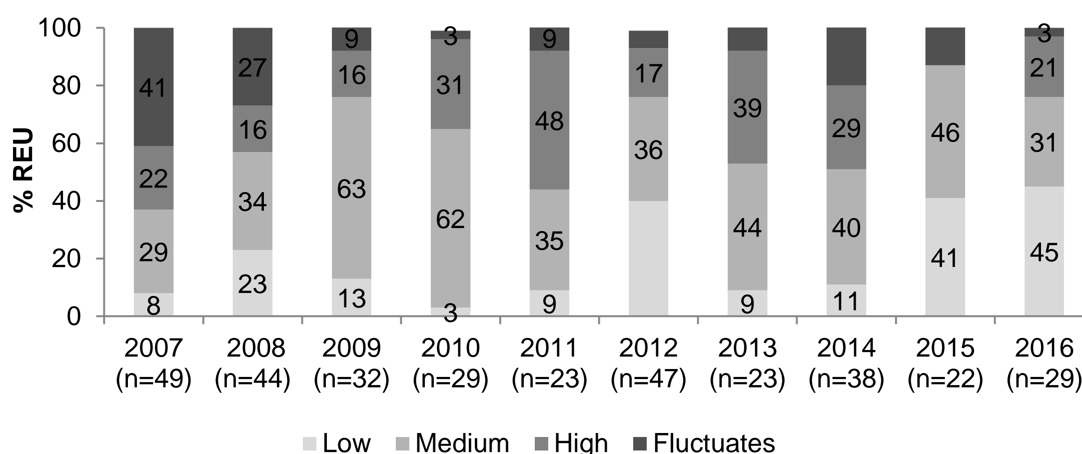
The majority of REU who commented in 2016 indicated that methamphetamine powder was low (45%) or medium (31%) in purity, with a smaller number reporting it as being high (21%) (Figure 11). There were similar levels of participants reporting low purity in 2016 (45%) to 2015 (41%), which reflects an ongoing change from previous years. Most respondents indicated that the purity of methamphetamine powder had remained stable in the last six months (69%). Significantly more 2016 REU reported purity changes to have been stable than in 2015 (69% vs. 35%, χ^2=4.05, p=.044) (Figure 12).

Although a small number of people commented on the purity of base (n=2), this was reported to be medium (50%) or high (50%).

The purity of crystal was reported to be medium (41%) or high (47%) in the last six months. Half (53%) of those who commented reported that purity of crystal methamphetamine had remained stable in the past six months, whereas one-third (35%) reported that purity had been fluctuating.

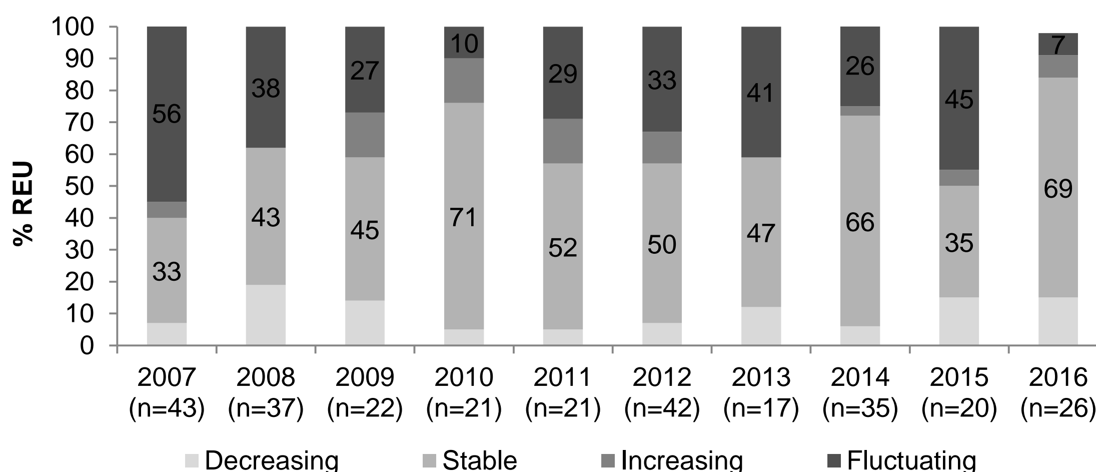
KE who commented on methamphetamine crystal indicated that it was currently high in purity (n=3). In 2016, one KE commented that the purity of powder methamphetamine was medium.

Figure 11: Reports of methamphetamine powder purity among REU who commented, 2007-2016



Source: EDRS interviews

Figure 12: Reports of changes in methamphetamine powder purity in the past six months among REU who commented, 2007-2016



Source: EDRS interviews

Table 39 shows purity of methamphetamine seizures received at Tasmanian Police analytical laboratories between 2005/06 to 2014/15 financial years. Data for the 2015/16 reporting period were not available at the time of publication.

Drugs seized by Tasmania Police are not routinely tested for purity, thus data for some reporting periods should be interpreted with caution due to small sample sizes and non-random selection of seizures for analysis.

In the 2014/15 reporting period, the total median purity of analysed methamphetamine seizures (n=23) was relatively high (73.1%), and higher than the previous reporting period (64.3%).

Table 39: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 2005/06-2014/15

	2005 /06	2006 /07	2007 /08	2008 /09	2009 /10	2010 /11	2011 /12	2012 /13	2013/ 14	**2014/ 15**
≤2 g										
n	6	15	7	11	-	3	2	1	-	**3**
Median % purity	15	24.6	7.6	12.6		33.6	5.2	64	-	**78**
> 2 g										
n	3	23	32	9	5	50	21	6	17	**20**
Median % purity	6.9	6.5	8.5	7.8	4.4	9.3	71.9	62.2	64.3	**67.2**
Total										
n	9	38	39	20	5	53	23	7	17	**23**
Median % purity	13	12.4	8.5	9.2	4.4	9.3	7.9	64	64.3	**73.1**
Range	1.7-58.7	2.4-27.7	1.9-39.5	3.2-14.1	1.3-6.7	1.8-36.6	1.7-71.9	5.7-77.6	10.2-79.0	**31.5-79.8**

Source: ACC (2007-2015), ACIC (2016)
Note: No seizures made by the Australian Federal Police in the state were analysed during these reporting periods. Data for the 2015/16 period were unavailable at time of publication

5.2.3 Availability

Few REU were able to comment on the availability and changes in availability for methamphetamine base (n=1). Thus availability over time is examined for methamphetamine powder and crystal methamphetamine only.

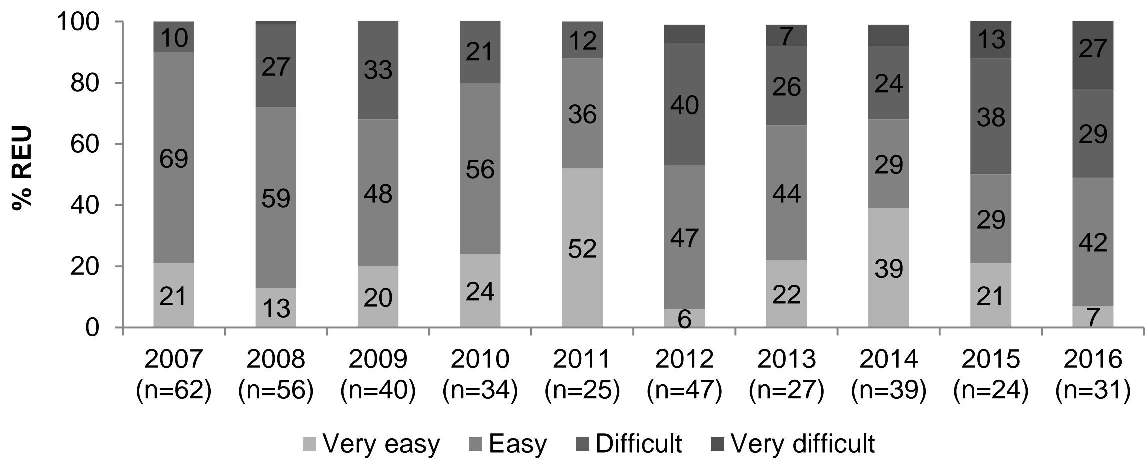
Half of the 2016 REU reported that methamphetamine powder was currently ‘very easy’ (7%) or ‘easy’ (42%) to obtain. The other half reported that it was currently ‘difficult’ (29%) or ‘very difficult’ (23%) to obtain (Figure 13). Most REU (83%) reported that availability had remained stable during the last six months. Significantly more 2016 REU reported stable availability over the past six months than in 2015 (83% vs. 52%, χ^2=4.29, p=.038) (Figure 14).

As for crystal methamphetamine, the majority of participants who commented reported it to have been ‘very easy’ (41%) or ‘easy’ (47%) to obtain in the past six months. Most of these participants noted that availability had been ‘stable’ (71%) over the past six months.

Figure 15 shows the proportion of the REU sample who indicated that each methamphetamine form was very easy or easy to obtain between 2007 and 2016. In 2016, half (49%) reported that powder was easy/very easy to obtain, slightly lower to the proportions in 2013 (66%) and 2014 (68%), though consistent with 2015 (50%). A majority of those who commented reported that base (100%) and crystal (88%) were easy/very easy to obtain in 2016.

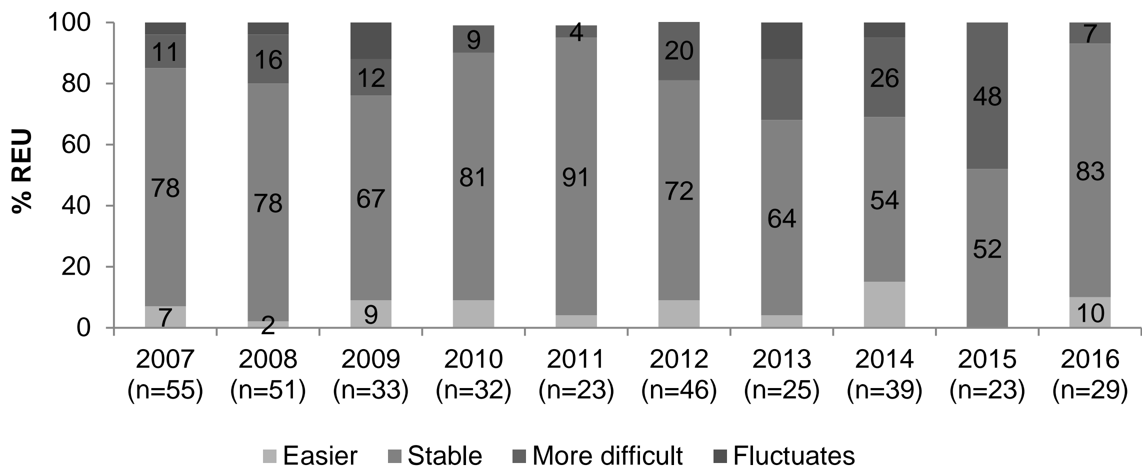
Among KE who commented on the forms of methamphetamine currently available in Hobart, several noted recent decreases in the use (n=3) and availability (n=4) of methamphetamine powder. Similarly, recent increases were noted in the use (n=3) and availability (n=7) of crystal methamphetamine.

Figure 13: REU reports of current availability of methamphetamine powder, 2007-2016



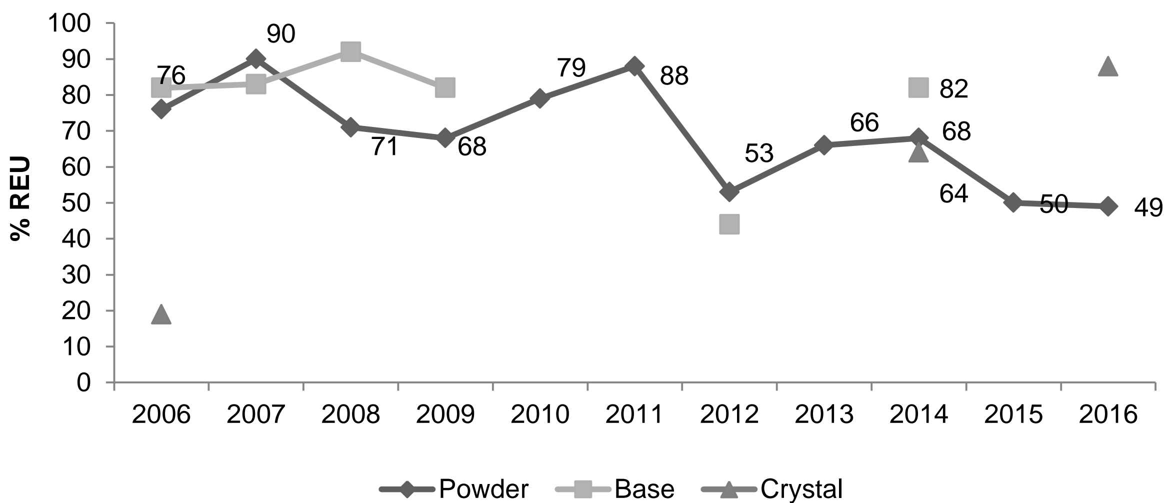
Source: EDRS interviews

Figure 14: REU reports of change in methamphetamine powder availability in the last six months, 2007-2016



Source: EDRS interviews

Figure 15: Proportion of REU reporting various forms of methamphetamine as very easy or easy to obtain in the six months preceding interview, 2007-2016

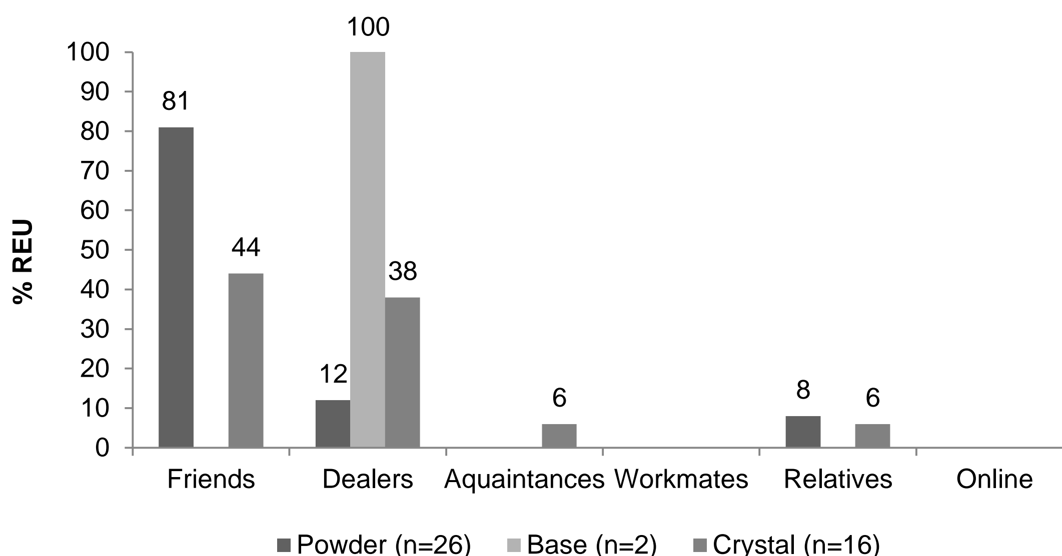


Source: EDRS interviews

Note: Data not reported where n<10

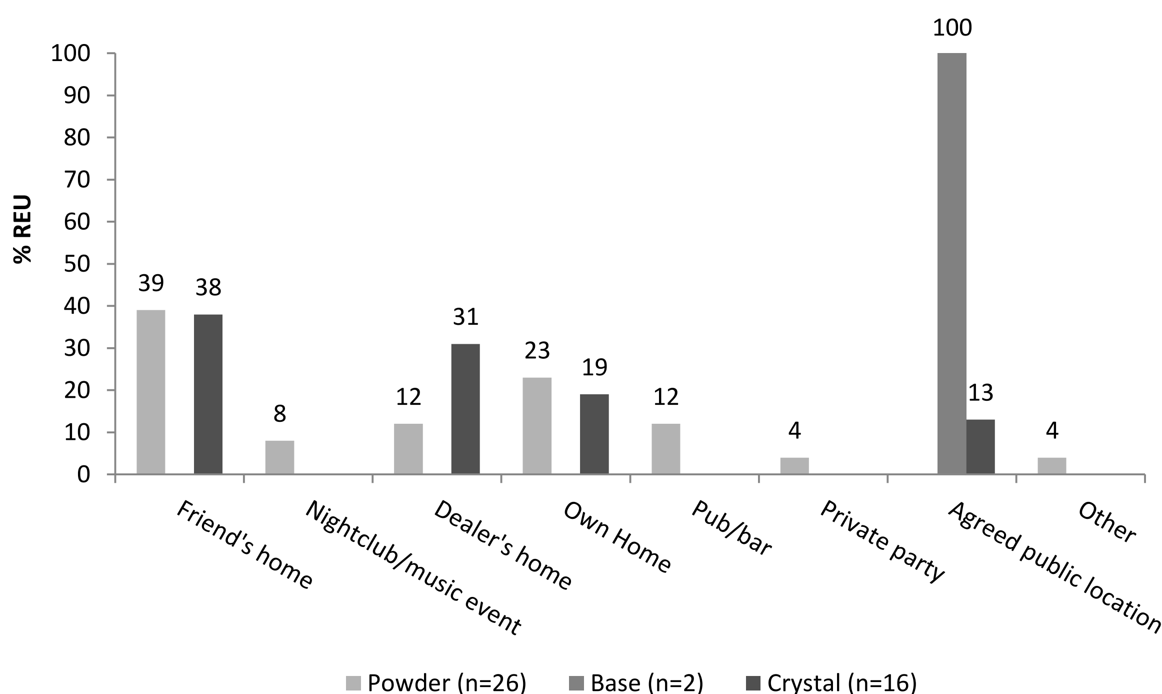
REU were asked who they had obtained each methamphetamine form from on the last occasion of use in the previous six months, and at which locations they had obtained the drug (see Figure 16 and Figure 17 respectively). For powder methamphetamine, participants were most likely to have last obtained the drug from friends (81%), while base was equally obtained from known dealers (100%) and crystal was obtained from friends (44%) and known dealers (38%) (Figure 16). The most common locations for the last purchase of methamphetamine powder (Figure 17) were a friend's home (39%) or the respondent's own home (23%). The most common last location of purchase for base was an agreed public location (100%), whereas crystal was most typically purchased at a friend's or dealer's home (38%).

Figure 16: People from whom methamphetamine powder, base and crystal were last purchased in the preceding six months, 2016



Source: EDRS interviews
Note: Where n<10 data should interpreted with caution

Figure 17: Locations where methamphetamine powder, base and crystal were last purchased in the preceding six months, 2016



Source: EDRS interviews
Note: Where n<10 data should interpreted with caution

5.3 Cocaine

Summary:

- The median last purchase price for one gram of cocaine was stable at $387.50 (range $250-500) and prices had remained stable (91%) in the last six months.
- Cocaine was reported to be medium (50%) or low (38%) in purity and this purity was reported to have remained 'stable' (82%) in the last six months.
- The majority of those who commented on the availability of cocaine indicated that it was currently 'difficult' (38%) or 'very difficult' (44%) to obtain. Availability was reported to have remained stable (77%) in the last six months.

5.3.1 Price

Table 40 shows median prices and price variations reported by REU for cocaine between 2011 and 2016. These price estimates are typically based on small sample sizes and should be interpreted with caution. In 2016, the median last purchase price for one gram of cocaine was $387.50 (range $250-500). Of those who commented (n=11), the majority (91%) indicated that the price had remained stable in the last six months.

Table 40: Last purchase price of cocaine and perceptions of price changes in the last six months among REU who commented, 2011-2016

	2011	2012	2013	2014	2015	**2016**
Median last price						
Point	-	$80˜	-	$20˜	$75˜	**-**
(range)		40-120		n=1	n=2	
Gram	$300	$300˜	$300˜	$350˜	$287˜	**$387.50˜**
(range)	200-400	250-350	280-350	75-400	275-300	**250-500**
Price change (%)	n=13	n=10	n=3	n=5	n=3	**n=11**
Increased	15	10	0	20	0	**0**
Stable	77	60	67	60	33	**91**
Decreased	0	20	0	0	0	**9**
Fluctuated	8	10	33	20	67	**0**

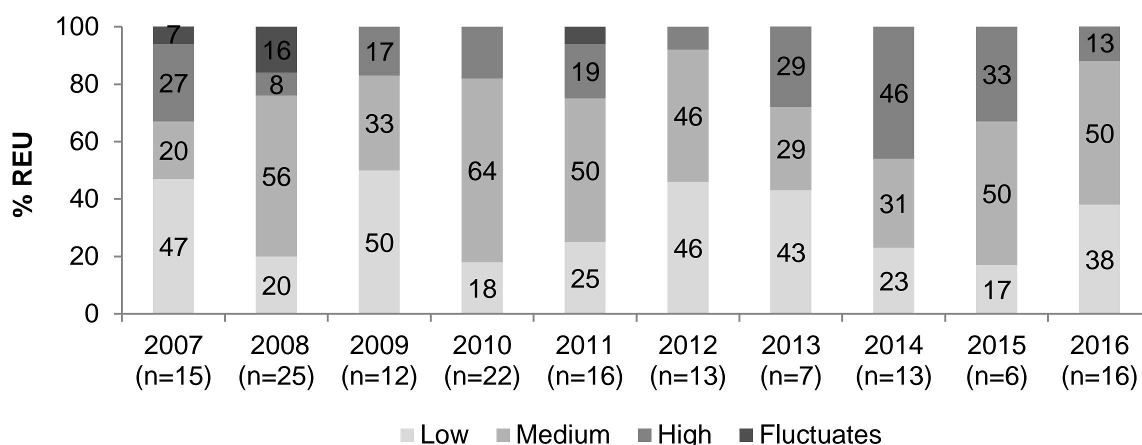
Source: EDRS interviews
˜n<10

Cocaine prices were reported by Tasmania Police for the 2014/15 ACIC Illicit drug data report (ACIC, 2016). The price for one gram of cocaine in Tasmania was reported to be $300-500, which is relatively consistent with price reported by the Tasmanian REU sample in 2016. Data for the 2015/16 reporting period were unavailable at the time of publication.

5.3.2 Purity

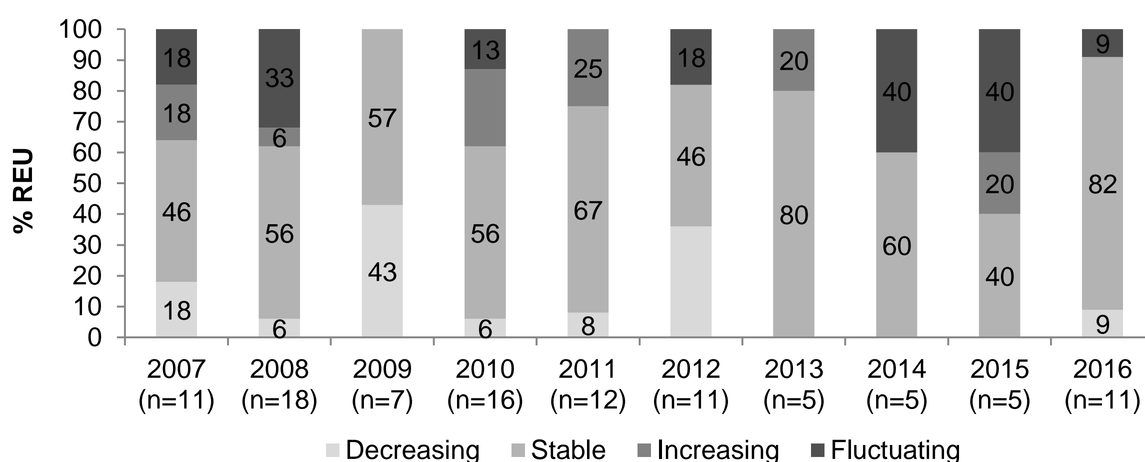
REU were asked about the current purity of cocaine (Figure 18) and any changes in purity in the last six months (Figure 19). Those who commented in 2016 indicated that cocaine was currently medium (50%) or low (38%) in purity. Those who commented on changes in purity in the last six months indicated that it had remained stable (82%) in this time (Figure 19).

Figure 18: REU reports of current purity of cocaine, 2007-2016



Source: EDRS interviews
Note: Where n<10 data should interpreted with caution

Figure 19: REU reports of changes in cocaine purity in the past six months, 2007-2016



Source: EDRS interviews
Note: Where n<10 data should interpreted with caution

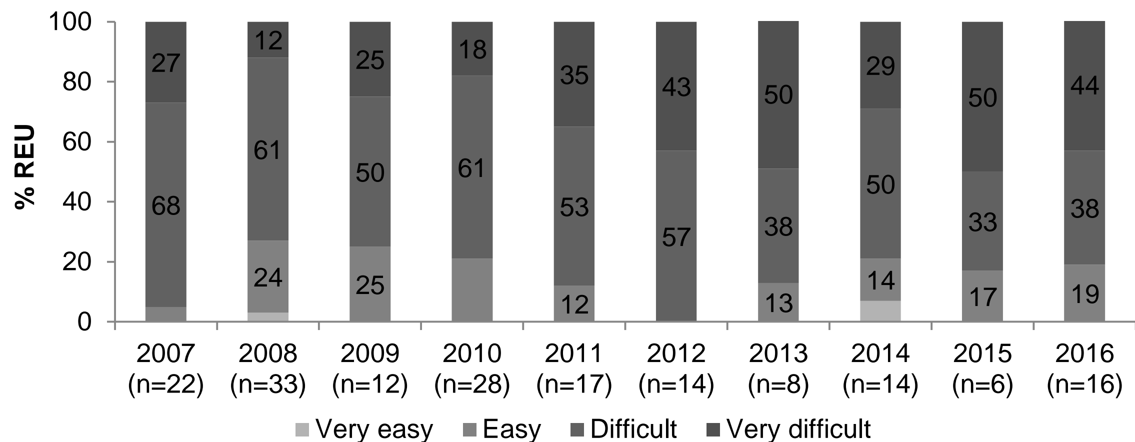
There were no cocaine seizures analysed for purity by Tasmanian Police as reported in the 2014/15 illicit drug data report (ACIC, 2016). One sample of cocaine (>2 grams) was analysed (29.8% purity) in the 2011/12 reporting period (ACC, 2013). Data for the 2015/16 reporting period was unavailable at the time of publication.

5.3.3 Availability

Those who commented on the current availability of cocaine (see Figure 20) indicated that cocaine was currently difficult (38%) or very difficult (44%) to obtain and availability was reported to have remained stable (77%), or to have become more difficult (15%) during the preceding six months (Figure 21). Similarly, most KE who commented on cocaine (n=7) indicated that the use and availability of the drug was currently low in Hobart, though three KE reported a small increase.

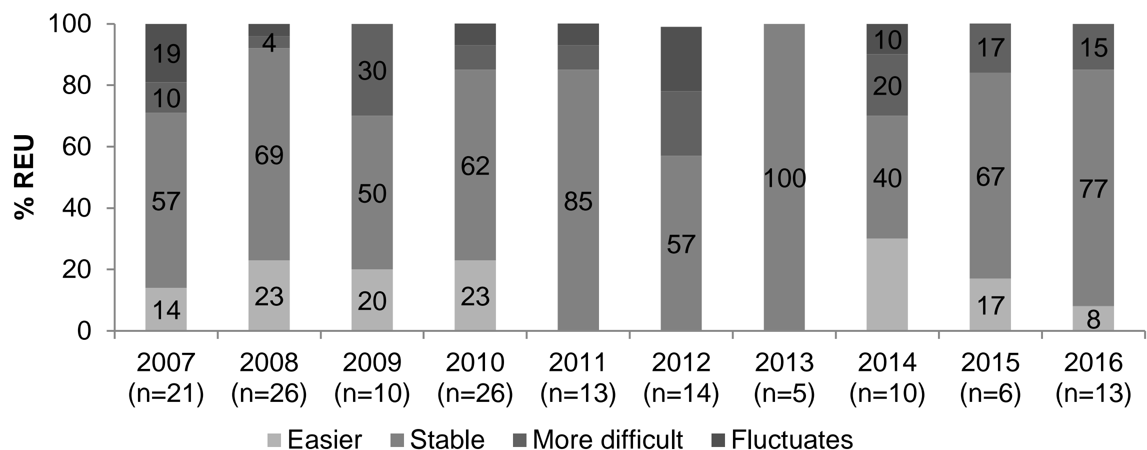
Cocaine had typically last been purchased from friends (67%) or work mates (20%), and had been last obtained from a friend's home (27%), from public pubs/bars (20%), from work (13%) or at the respondent's own home (13%) on these occasions (Table 41).

Figure 20: REU reports of current availability of cocaine, 2007-2016



Source: EDRS interviews
Note: Where n<10 data should interpreted with caution

Figure 21: REU reports of change in cocaine availability in the last six months, 2007-2016



Source: EDRS interviews
Note: Where n<10 data should interpreted with caution

Table 41: REU reports of last cocaine source in the preceding six months, 2011-2016

Cocaine	2011	2012	2013	2014	2015	**2016**
Person last purchased from	n=19	n=16	n=10	n=15	n=6	**n=15**
Used not purchased (%)	11	44	10	0	0	**0**
Friends (%)	47	31	80	87	50	**67**
Dealers (%)	26	6	10	7	17	**7**
Acquaintances (%)	5	6	0	0	17	**0**
Unknown dealers (%)	5	0	0	0	0	**0**
Work mates (%)	5	13	0	0	0	**20**
Other (%)	0	0	0	7	17	**7**
Location last purchased	n=19	n=16	n=10	n=15	n=6	**n=15**
Used not purchased (%)	11	44	10	0	0	**0**
Home (%)	5	0	0	20	17	**13**
Friend’s home (%)	37	13	60	40	50	**27**
Dealers’ home (%)	5	0	0	7	0	**0**
Rave/dance party (%)	0	0	0	0	0	**0**
Nightclub (%)	0	6	10	7	0	**7**
Public bar (%)	21	19	0	0	0	**20**
Private party (%)	0	0	10	13	17	**7**
Agreed public location (%)	5	0	0	0	0	**7**
Live music event (%)	5	0	10	7	0	**7**
Acquaintance’s home (%)	0	6	0	0	0	**0**
Work (%)	0	13	0	0	0	**13**
Online (%)	0	0	0	7	0	**0**
Other (%)	10	0	0	0	17	**0**

Source: EDRS interviews

5.4 LSD

Summary:

- The median last price for one tab/drop of LSD in 2016 was $15 (range $4-40), and this price was reported to have remained stable during the past six months.
- The purity of LSD was considered by REU to be high (45%) or medium (41%) and to have remained stable during the last six months.
- A large majority of those commenting indicated that LSD was very easy (28%) or easy (53%) to obtain and that availability had recently been stable (72%).
- LSD was typically last obtained from friends and was most commonly last obtained from private residences.

5.4.1 Price

The median last purchase price for one tab of LSD in 2016 was consistent with 2015 at $15 (range $4-40), which is slightly lower than the median price of $20 reported between 2011 and 2014 (Table 42). During the six months preceding the interview, almost four-fifths (78%) of those who commented on the price of LSD indicated that it had remained stable during this time.

Table 42: Prices of LSD purchased by REU, 2011-2016

LSD	2011	2012	2013	2014	2015	**2016**
Median last price	n=26	n=28	n=25	n=30	n=30	**n=42**
Tab	$20	$20	$20	$20	$15	**$15**
(range)	10-35	5-25	10-30	10-39	5-30	**4-40**
Price change (%)	n=29	n=34	n=21	n=29	n=28	**n=40**
Increased	14	6	14	10	7	**3**
Stable	79	82	67	48	71	**78**
Decreased	3	6	10	3	11	**10**
Fluctuated	3	6	10	38	11	**10**

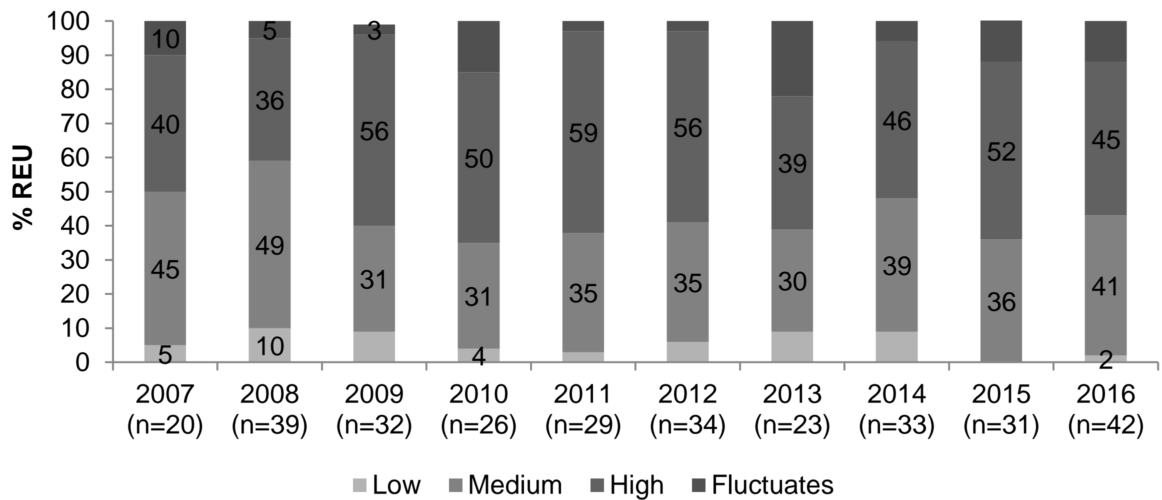
Source: EDRS interviews
[#] last six months

During the 2014/15 period, Tasmania Police reported a price of $10-20 for one tab of LSD (ACIC, 2016), which is relatively consistent with the price reported by REU in 2016. Data for the 2015/16 reporting period were unavailable at the time of publication.

5.4.2 Purity

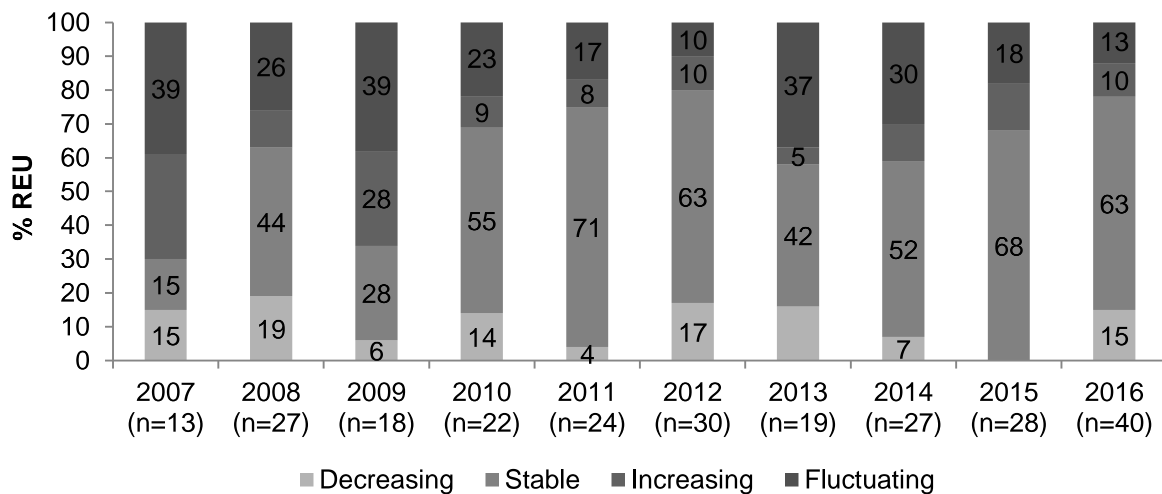
LSD was typically reported to be high (45%) or medium (41%) in purity (Figure 22). Over three-fifths of REU (63%) reported that this purity had remained stable during the six months preceding the interview, with smaller numbers of participants reporting increasing (10%), decreasing (15%) and fluctuating (13%) purity (Figure 23).

Figure 22: Current purity of LSD, 2007-2016



Source: EDRS interviews

Figure 23: Recent change in purity of LSD, 2007-2016



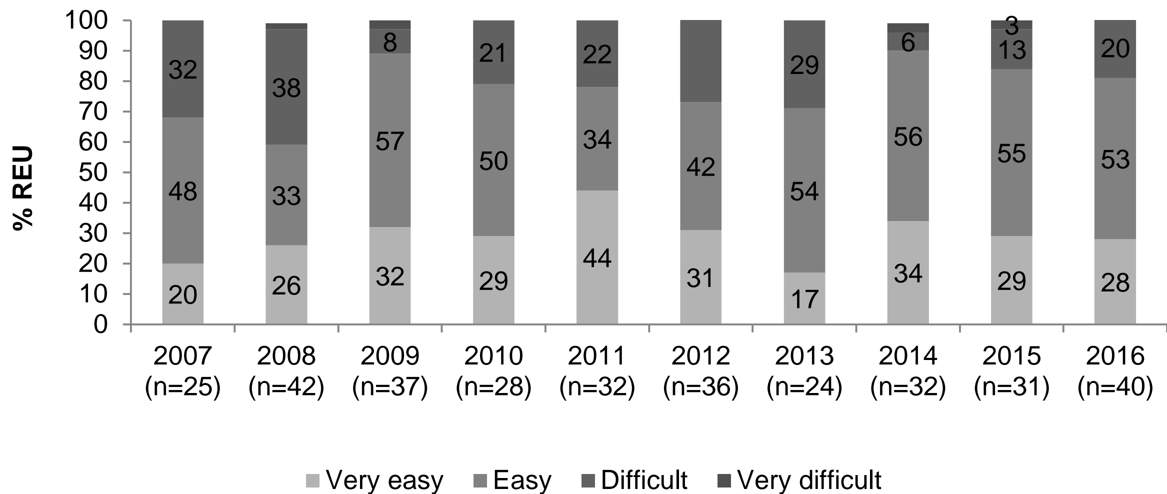
Source: EDRS interviews

5.4.3 Availability

A large majority of those who commented in 2016 reported that LSD was currently very easy (28%) or easy (53%) to obtain (see Figure 24), with the majority (72%) indicating that the availability of LSD had remained stable during the preceding six months (Figure 25).

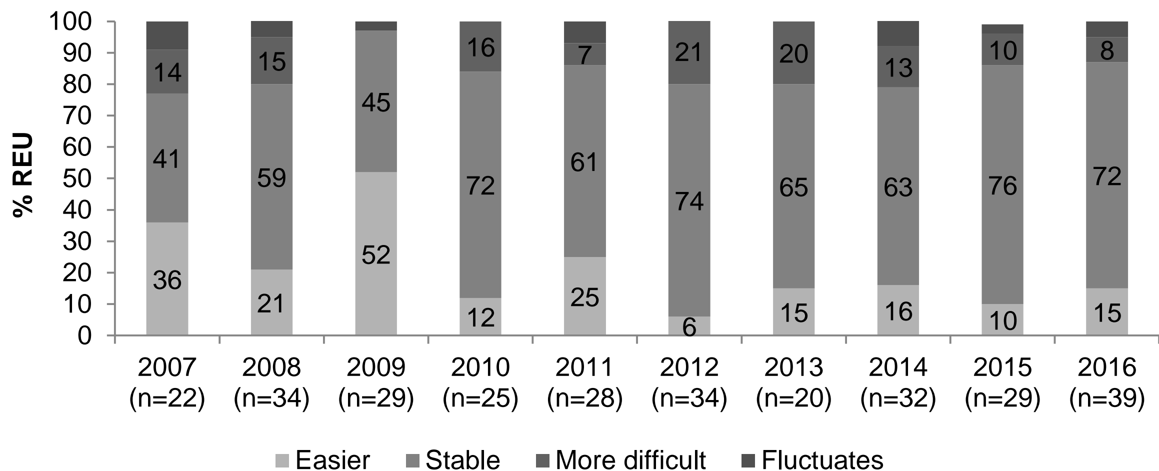
On the last occasion, LSD had most commonly been obtained from friends (48%), known dealers (24%) or acquaintances (17%) at either friends' homes (29%), pubs/bars (14%) or at raves/doofs/dance parties (14%) (Table 43).

Figure 24: REU reports of current availability of LSD, 2007-2016



Source: EDRS interviews

Figure 25: REU reports of change in LSD availability in the last six months, 2007-2016



Source: EDRS interviews

Table 43: REU reports of availability of LSD in the preceding six months, 2011-2016

LSD	2011	2012	2013	2014	2015	**2016**
Person last purchased from	n=27	n=26	n=28	n=35	n=31	**n=42**
Used not purchased (%)	0	0	4	0	0	**0**
Friends (%)	74	77	57	80	68	**48**
Dealers (%)	11	8	29	11	7	**24**
Workmates (%)	0	4	0	0	0	**2**
Acquaintances (%)	11	4	11	6	16	**17**
Unknown persons (%)	40	4	0	3	3	**10**
Location last purchased	n=27	n=26	n=28	n=34	n=31	**n=42**
Used not purchased (%)	0	0	4	0	0	**0**
Home (%)	26	19	11	12	13	**10**
Friend's home (%)	33	31	21	27	36	**29**
Dealer's home (%)	0	4	11	3	3	**7**
Rave/doof/dance party (%)	0	31	21	6	7	**14**
Nightclub (%)	7	4	4	27	0	**2**
Pub/bar (%)	4	0	11	15	0	**14**
Agreed public location (%)	0	0	4	0	7	**2**
Private party (%)	4	4	4	6	13	**7**
Acquaintance's home (%)	7	0	0	0	0	**2**
Live music event (%)	11	0	11	3	16	**5**
Work (%)	0	4	0	0	0	**2**
Other (%)	7	4	0	3	3	**2**

Source: EDRS interviews

5.5 Cannabis

Summary:

- The median last purchase price for one ounce of hydroponically-grown ('hydro') cannabis was $280 (range $200-310), compared to $200 (range $80-275) for one ounce of bush grown ('bush') cannabis. Prices per quarter ounce were also lower for bush ($65) compared to hydro ($80).
- The potency of hydro was reported to be medium (48%) or high (41%), and the potency of bush was reported to be medium (60%) with no recent changes noted.
- Both bush and hydro were reported to be easy or very easy to obtain, and this level of availability was generally perceived to have remained stable during the six months preceding the interview.
- Both hydro and bush were typically obtained from friends or dealers at a private residence.

5.5.1 Price

REU reported last purchase prices for both hydroponically-grown (hydro) cannabis (Table 44) and bush-grown (bush) cannabis (Table 45). Price estimates which are based on small sample sizes (<10) should be interpreted with caution.

The median last purchase price for one ounce (28 grams) of hydro was $280 (range $200-310) compared to $200 (range $80-275) for bush.

The median last purchase price for a quarter of an ounce (seven grams) was $80 (range $50-100) for hydro and $65 (range $25-90) for bush.

A majority of those who commented on recent price changes indicated that the price of hydro (93%) and bush (81%) had recently remained stable.

Table 44: Price and weights of hydro cannabis purchased by REU, 2011-2016

Last purchase price	2011	2012	2013	2014	2015	**2016**
One gram (range)	-	$20˜ 10-25	$10˜ 10-25	$20 10-25	$20 15-20	**$20** **10-20**
1/4 ounce (range)	$70˜* 50-100	$90 25-190	$80 60-100	$90 65-120	$90 60-100	**$80** **50-100**
1/2 ounce (range)	$163˜ 125-200	$155˜ 150-250	$150˜ 75-200	$150 130-240	$155 110-175	**$150** **100-180**
One ounce (range)	$287˜ 225-350	$300 150-350	$280 120-350	$300 250-350	$300 180-330	**$280** **200-310**
Price change	n=7	n=48	n=46	n=45	n=47	**n=58**
Increased (%)	0	8	7	9	6	**2**
Stable (%)	100	85	87	71	89	**93**
Decreased (%)	0	0	2	0	0	**2**
Fluctuated (%)	0	6	4	20	4	**3**

Source: EDRS interviews
˜n<10

Table 45: Price and weights of bush cannabis purchased by REU, 2011-2016

Last purchase price	2011	2012	2013	2014	2015	2016
One gram (range)	$10˜	$15˜* 10-25	$20˜* 15-25	$15˜ 10-25	$15˜ 5-20	**$15˜** **5-25**
1/4 ounce (range)	$70˜*	$70 15-150	$65 50-90	$70 50-100	$70 50-100	**$65** **25-90**
1/2 ounce (range)	$125˜	$125˜ 100-260	$130˜ 70-150	$150˜ 80-190	$130˜ 85-160	**$150˜** **40-220**
One ounce (range)	$225˜	$250 70-320	$200 150-280	$225˜ 100-290	$200 200-300	**$200** **80-275**
Price change	n=8	n=46	n=39	n=39	n=38	**n=43**
Increased (%)	0	2	0	5	5	**7**
Stable (%)	100	83	90	82	87	**81**
Decreased (%)	0	11	8	5	8	**2**
Fluctuated (%)	0	4	3	8	0	**9**

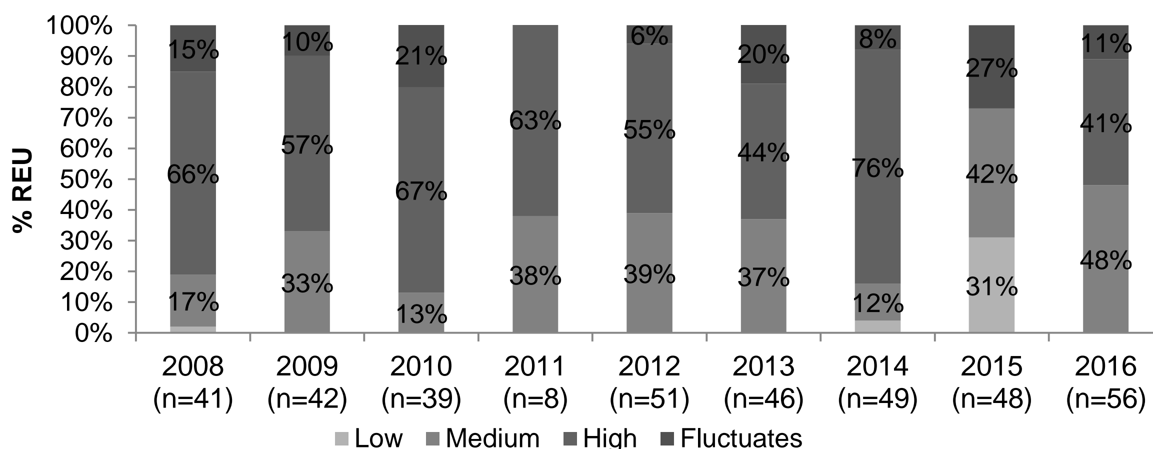
Source: EDRS interviews
˜n<10

In the 2014/15 Illicit Drug Data Report, Tasmania Police reported that the price for one 'deal' (approximately one gram) of both hydro and bush cannabis was $25 and the price for one ounce was reported to be $25- for bush cannabis and $300 for hydro cannabis (ACIC, 2016). Data for the 2015/16 financial year were unavailable at the time of publication.

5.5.2 Potency

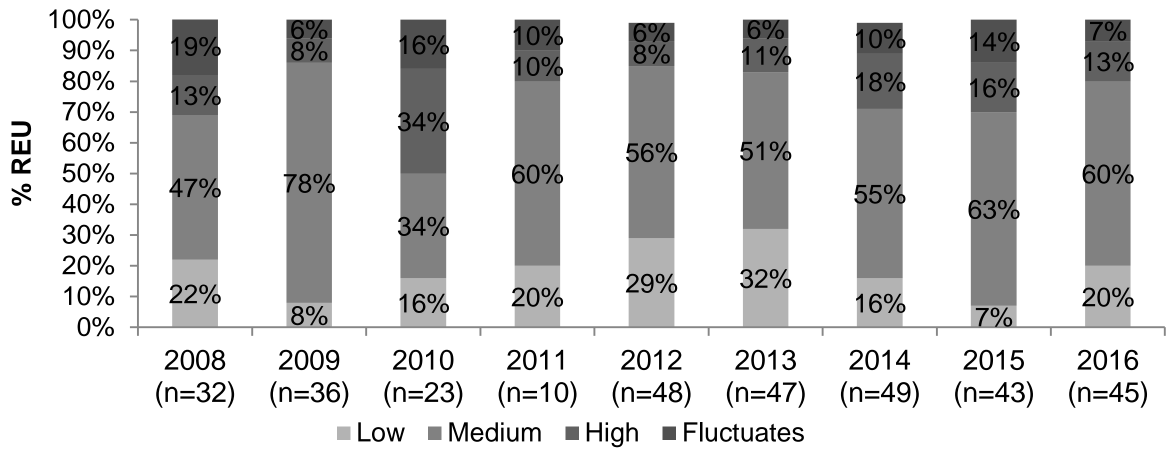
Participants were asked to comment on the current potency of hydroponic (Figure 26) and bush cannabis (Figure 27) and changes in potency during the six months preceding the interview (Figure 28). Almost half (48%) of respondents reported that hydroponically-grown cannabis was currently medium in potency, while two-fifths indicated it was high (41%) in potency. Bush was reported to be medium (60%) in potency. The majority of those who commented indicated that the potency of both bush (75%) and hydro (69%) had remained stable during the preceding six months.

Figure 26: Current potency of hydro cannabis, 2008-2016



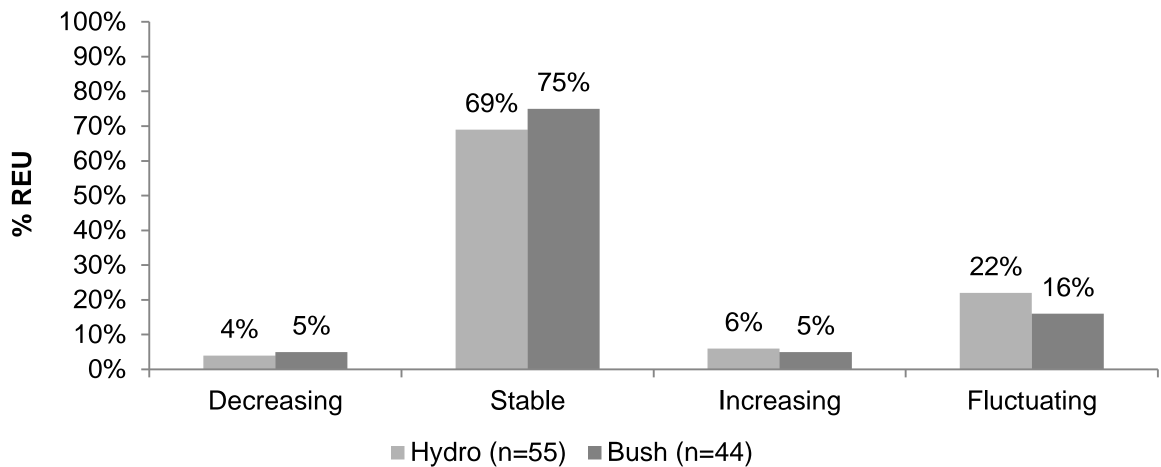
Source: EDRS interviews

Figure 27: Current potency of bush cannabis, 2008-2016



Source: EDRS interviews

Figure 28: Recent change in potency of cannabis, 2016

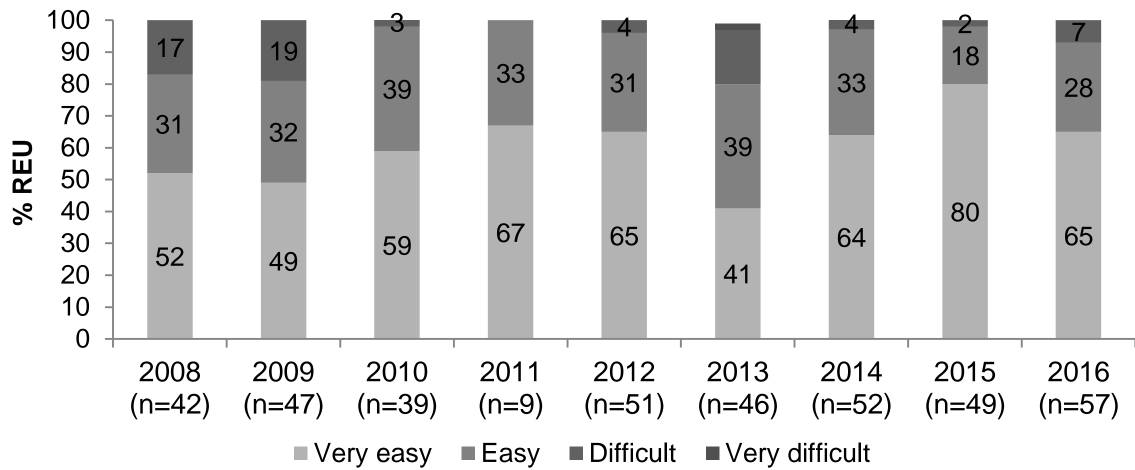


Source: EDRS interviews

5.5.3 Availability

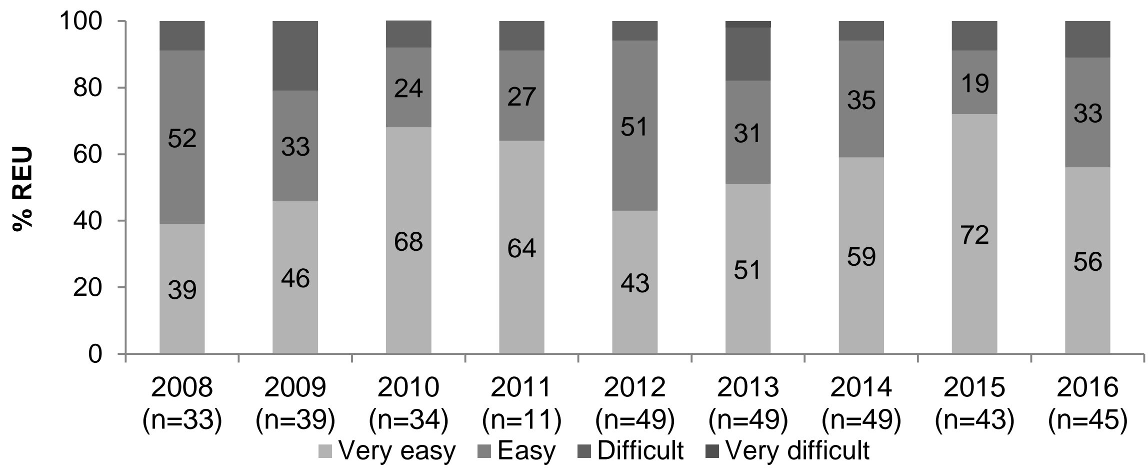
REU were asked to comment on the current availability of hydro and bush cannabis (Figures 29 and 30 respectively) and changes in this availability (Figures 31 and 32 respectively) during the six months preceding the interview. A majority of those that commented on the current availability of hydro indicated that it was currently very easy (65%) or easy (28%) to obtain, and that this availability had been stable (84%) during the preceding six months. Similarly, bush was reported to be very easy (56%) or easy (33%) to obtain, and this availability had been stable (82%) during the last six months.

Figure 29: REU reports of current availability of hydro cannabis, 2008-2016



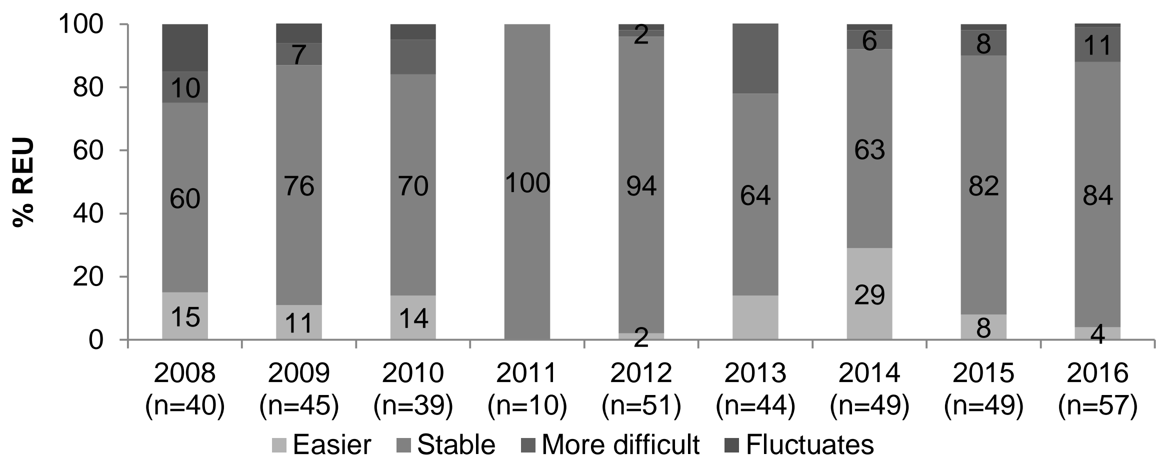
Source: EDRS interviews

Figure 30: REU reports of current availability of bush cannabis, 2008-2016



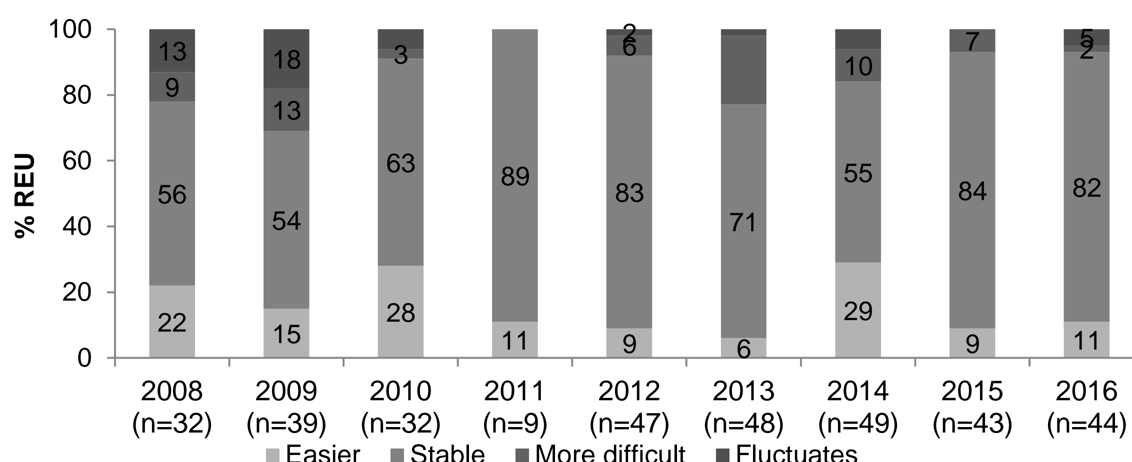
Source: EDRS interviews

Figure 31: REU reports of change in hydro cannabis availability in the last six months, 2008-2016



Source: EDRS interviews

Figure 32: REU reports of change in bush cannabis availability in the last six months, 2008-2016



Source: EDRS interviews

REU were asked who they had last obtained cannabis from, and the location that they had last purchased the drug, in the preceding six months (Tables 46 and 47). Hydro was most commonly last obtained through purchases from dealers (46%) or friends (43%) at private residences, most typically a friend's home (30%), the respondent's own home (30%), or dealer's home (24%). Similarly, bush was last obtained from friends (61%) or dealers (23%), and was most typically last obtained at private residences, including a friend's home (50%) or the respondent's own home (21%).

Table 46: REU reports of last hydro source in the last six months, 2011-2016

	2011	2012	2013	2014	2015	**2016**
Person last purchased*	n=9	n=50	n=45	n=52	n=49	**n=54**
Used not purchased (%)	0	2	7	2	0	**0**
Friends (%)	56	60	44	0	47	**43**
Dealers (%)	44	26	38	62	37	**46**
Workmates (%)	0	4	0	0	4	**2**
Acquaintances (%)	0	2	2	33	0	**4**
Unknown persons (%)	0	6	0	2	0	**0**
Other (%)	0	0	0	2	12	**6**
Last location purchased*	n=10	n=50	n=45	n=51	n=49	**n=54**
Used not purchased (%)	0	2	7	2	1	**0**
Home delivery (%)	27	32	40	24	29	**30**
Friend's home (%)	36	36	22	41	31	**30**
Dealer's home (%)	27	18	27	14	16	**24**
Acquaintance's home (%)	0	0	0	2	0	**0**
Agreed public location (%)	0	2	2	6	14	**15**
Street market (%)	0	0	0	0	0	**0**
Work (%)	0	2	0	2	2	**0**
Pub/bar (%)	0	0	0	4	2	**0**
Other (%)	0	6	0	6	2	**2**

Source: EDRS interviews
* among those who commented and who had used cannabis in the last six months

Table 47: REU reports of last bush source in the last six months, 2011-2016

	2011	2012	2013	2014	2015	**2016**
Person last purchased*	n=11	n=46	n=47	n=51	n=43	**n=43**
Used not purchased (%)	0	4	2	2	1	**0**
Friends (%)	64	63	55	0	42	**61**
Dealers (%)	27	22	32	69	33	**23**
Workmates (%)	0	2	0	0	7	**5**
Acquaintances (%)	0	2	2	20	5	**0**
Unknown persons (%)	0	7	0	4	0	**5**
Relative (%)	0	0	0	4	9	**5**
Other (%)	0	0	0	2	0	**2**
Last location purchased*	n=11	n=46	n=47	n=50	n=43	**n=44**
Used not purchased (%)	0	10	2	2	1	**0**
Home delivery (%)	27	26	19	34	21	**21**
Friend's home (%)	36	39	40	40	37	**50**
Dealer's home (%)	27	18	26	6	16	**5**
Acquaintance's home (%)	0	0	0	0	2	**2**
Agreed public location (%)	0	0	4	6	14	**11**
Street market (%)	0	0	0	0	0	**0**
Work (%)	0	2	0	0	0	**2**
Private party (%)	0	0	0	4	0	**5**
Pub/bar (%)	0	0	0	2	2	**2**
Other (%)	9	7	4	6	0	**2**

Source: EDRS interviews

6.0 HEALTH-RELATED TRENDS

Summary:

- **Overdose.** One-tenth (10%) of the 2016 REU sample had overdosed on a drug in the preceding six months, a similar proportion relative to 2015 (14%). In 2016, 3% reported a recent overdose episode on a stimulant drug (e.g., ecstasy, speed) and 7% reported a recent overdose on a depressant drug (e.g., alcohol, heroin). Although the overdose symptoms that were experienced were not medically trivial, most participants had not received any formal medical treatment in relation to their last overdose episode.
- **Access to health services.** Despite regular substance use, less than one-fifth (17%) of REU had accessed health services in relation to drug use in the last six months, and, when they did so, this was most commonly a GP (59%), a psychologist (47%) or a drug and alcohol worker (35%).
- **Mental health problems.** Nearly half (48%) of the 2016 REU sample reported experiencing mental health problems during the six months prior to the interview. Among these individuals, depression (75%) and/or anxiety (60%) were most commonly reported. A half (56%) of those who had experienced mental health problems had attended a health professional in relation to these problems during this time, suggesting an unmet demand for service provision.
- **Psychological distress.** Mean scores on the Kessler psychological distress scale (K10) were higher among the current sample of REU relative to the general Australian population (National Health Survey, NHS; ABS, 2009). The proportion of the 2016 EDRS sample with scores categorised as high/very high (52%) is similar to 2015, which is substantially higher relative to the three EDRS samples prior to 2015 (33-37%) and both the national (11.8%) and Tasmanian (9.2%) normative samples from the 2011/12 NHS (aged 18-24). Those classified in the high range have increased rates of experience of mental health problems and may benefit from interventions with health professionals. Those with high/very high K10 scores were significantly more likely to report a mental health problem (69% vs. 25%), and to have attended a mental health professional (39% vs 15%) in the last six months, but were not more likely to report accessing a health service in relation to drug use during this time (21% vs 13%).
- **Ecstasy dependence.** While one-half of recent ecstasy users (47%) reported experiencing no symptoms of dependence in relation to their ecstasy use, over one-quarter (28%) reported experiencing significant symptoms of dependence. Those who reported significant symptoms of ecstasy dependence were no more likely to have accessed a health service in relation to drug use compared to those who did not below 4 (19% vs. 17%).
- **Methamphetamine dependence.** While almost one-half of recent methamphetamine users (44%) reported experiencing no symptoms of dependence in relation to their methamphetamine use, one-third (34%) reported experiencing significant symptoms of dependence. Those who reported significant symptoms of methamphetamine dependence were significantly more likely to have accessed a health service in relation to drug use compared to those who did not (50% vs. 4%).

- **Tasmanian drug treatment data.** While a number of calls have been made to the Tasmanian ADIS in relation to ecstasy over the past five years, these account for a small percentage (between 0.7% and 1.7%) of the calls made to this service. In the 2015/16 reporting period, one-third (34%) of all calls related to alcohol, followed by amphetamines (18%), opioids other than heroin (12%) and cannabis (7%). While there was an increase in the proportion of calls relating to amphetamine-type substances between 2012/13 (15.9%) and 2014/15 (27.2%), there was a decline in 2015/16 (17.9%). There has also be been a decrease in the number of calls relating to cannabis (from 23.4% in 2012/13 to 7.2% in 2015/16).
- Data from the NMDS for alcohol and other drug treatment services in Tasmania show that alcohol (40%) and cannabis (29%) were more commonly coded as the principal drug of concern in closed treatment episodes, followed by meth/amphetamine (18%), morphine (2.7%), and ecstasy (1%). The proportion of closed treatment episodes relating to meth/amphetamine was higher relative to 2013/14 (12% vs 18%). The most common form of treatment was counselling (43% of episodes).
- Tasmania hospital admission data. In 2009/10, the rate of admissions per million persons in Tasmania was 83, equating to 51% of the national rate (164 per million persons). These rates recently increased to 141% and 159% and 149% of the national rate in 2011/12, 2012/13, and 2013/14, respectively. There was a slight rates increase in 2014/15 to 161% of the national rate.
- There was an increase in the number of methamphetamine-related public hospital admissions in 2014/15 compared to 2013/14 (233 vs 147 admissions per million). However, since 2008/09, the rate of admissions in Tasmania has been well below the national admission rate, with a rate of 233 (per million persons) reported in Tasmania in 2014/15 compared to a rate of 342 nationally.
- There have been very few hospital admissions recorded in Tasmania in relation to cocaine in previous years, with local cases remaining substantially less than that the national rate.

6.1 Overdose

Almost one-quarter (23%) of the 2016 REU sample had overdosed on any drug at some stage of their life (Table 48). Of those who had ever overdosed on any drug, the median number of times was two (range 1-21). One-tenth (10%) of the 2016 REU sample had overdosed on a drug in the preceding six months, which is lower but not statistically different to the proportion among the 2015 sample (14%).

Participants were asked to distinguish between stimulant and depressant drug overdose episodes. An overdose episode was defined by the common symptoms experienced. For a stimulant overdose, these symptoms included nausea/vomiting, chest pain, tremors, increased body temperature, increased heart rate, or seizure. For a depressant overdose, these symptoms included reduced level of consciousness, respiratory depression, turning blue, or collapsing. Following these definitions, one-tenth of the 2016 sample had overdosed on a stimulant drug (3%) or on a depressant drug (7%) during the preceding six months (Table 48).

Table 48: Overdose (OD) on both stimulants and depressants among REU, 2011-2016

	2011# n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Ever OD any drug (%)	53	24	35	40	31	**23**
Median times ever OD (range)*	6.5 1-122	1.5 1-20	1 1-60	5 1-102	2 1-12	**2 1-21**
OD on any drug last in 6 months (%)	41	6	8	21	14	**10**
OD on stimulant drug last 6 months (%)	13	4	4	10	9	**3**
OD on depressant drug last 6 months (%)	32	2	4	14	5	**7**

Source: EDRS interviews
*of those reporting overdose episode
#data reported in 2011 should be interpreted with caution due to an unintentional broadening of the definition of overdose in relation to alcohol

The main drugs involved in the last stimulant overdose in the last six months amongst the three cases (Table 49) were ecstasy (67%) and speed (33%). Alcohol had been used in all of these stimulant overdose cases (100%), and participants had also used cannabis (67%) and crystal methamphetamine (33%) at the same time. These last stimulant overdose episodes occurred at a music event (33%) and nightclubs (67%). A majority reported that they either received no treatment (67%) or that they were watched by friends (33%) on this occasion. The main symptoms experienced included: nausea (67%), shallow breathing (67%), increased body temperature and heart rate (67%), panic (67%), headache (67%), chest pain (33%), tremors (33%), irregular breathing (33%).

The main drug involved in the last depressant overdose in the last six months was alcohol (71%), with heroin (14%) and Seroquel (14%) being the other two drugs associated with overdose. Other drugs used at the time of overdose included ecstasy (40%), crystal methamphetamine (20%), heroin (20%), mushrooms (20%), cannabis (20%) and alcohol (20%). The overdose episode occurred at a pub (40%), a private party (20%), a friend's home (20%) or the respondent's own home (20%). Participants were either watched by friends (100%) or received no treatment (57%) on this occasion. The main symptoms experienced included: loss of consciousness (57%), vomiting (29%), collapsing (29%), turning blue (14%) and loss of mobility with heart palpitations (14%).

Table 49: Characteristics of last overdose on stimulant and depressant drugs among REU who had experienced an overdose episode in the last six months, 2012-2016

	Stimulant overdose					Depressant overdose				
	2012	2013	2014	2015	**2016**	2012	2013	2014	2015	**2016**
Main drug (%)#	n=4	n=3	n=10	n=7	**n=3**	n=2	n=3	n=14	n=4	**n=7**
Ecstasy	25	-	50	57	**67**	-	-	-	-	-
Meth powder	-	33	-	-	**33**	-	-	-	-	-
Meth base	--	-	10	-	-	-	-	-	-	-
Crystal meth	-	33	10	-	-	-	-	-	-	-
Alcohol	-	-	-	-	-	100	33	86	75	**71**
Benzodiazepines	-	-	-	-	-	-	33	7	25	-
Pharm. stimulants	-	-	-	-	-	-	-	-	-	-
Other opioids	-	-	-	-	-	-	-	-	-	-
Capsule (unknown)	25	-	-	-	-	-	-	-	-	-
Mephedrone	-	-	-	-	-	-	-	-	-	-
Heroin	-	-	-	-	-	-	33	7	-	**14**
Cocaine	25	-	-	-	-	-	-	-	-	-
DXM	25	-	-	-	-	-	-	-	-	-
MDA	-	33	-	-	-	-	-	-	-	-
LSD	-	-	10	29	-	-	-	-	-	-
Other NPS	-	-	20	14	-	-	-	-	-	-
Other drugs (%)#	n=4	n=3	n=10	n=7	**n=3**	n=2	n=3	n=14	n=4	**n=6**
Ecstasy	-	100	10	29	-	50	-	7	-	**33**
Meth powder	-	33	-	14	-	-	-	-	-	-
Meth base	-	-	-	-	-	50	-	-	-	-
Crystal meth	-	-	-	14	**33**	-	-	-	-	**17**
Alcohol	100	100	50	71	**100**	-	33	14	25	**33**
Cannabis	25	33	20	29	**67**	-	-	29	50	**33**
Antidepressants	-	-	-	-	-	-	-	-	-	-
Benzodiazepines	-	-	10	-	-	-	-	-	-	-
Amyl nitrite	-	-	-	-	-	-	-	-	-	-
LSD	-	-	10	-	-	-	-	-	-	-
Other opioids	-	-	10	-	-	-	-	-	25	-
Methadone	-	-	-	-	-	-	-	-	-	-
Energy drinks	-	-	-	-	-	-	-	-	-	-
Mushrooms	25	-	-	-	-	-	-	-	-	**17**
Ketamine	-	-	20	-	-	-	-	-	-	-
Cocaine	-	-	-	29	-	-	-	-	-	-
Last location (%)#	n=4	n=3	n=10	n=7	**n=3**	n=2	n=3	n=14	n=4	**n=7**
Home	25	33	30	14	-	50	-	14	25	**14**
Friend's home	25	67	30	14	-	50	67	-	-	**14**
Dealer's home	-	-	-	-	-	-	-	7	25	-
Pub	25	-	10	14	-	-	-	7	-	**29**
Live music event	25	-	-	29	**33**	-	-	-	25	-
Nightclub	-	-	-	-	**67**	-	-	7	-	-
Rave/dance party	-	-	30	29	-	-	33	7	-	-
Outdoors	-	-	-	-	-	-	-	7	-	**14**
Private party	-	-	-	-	-	-	-	50	25	**29**
Other	-	-	-	-	-	-	-	-	-	-
Treatment (%)#	n=4	n=3	n=10	n=7	**n=3**	n=2	n=3	n=17	n=4	**n=7**
None	50	-	50	43	**67**	50	67	64	50	**57**
Watched by friends	50	100	40	14	**33**	50	33	36	50	**57**
Onsite help	-	-	-	-	-	-	-	-	-	-
Hospital/ambulance	-	-	-	29	-	-	-	-	-	-
Taken to doctor	-	-	-	-	-	-	-	-	-	-
Other	-	-	20	14	-	-	-	7	-	**14**
Don't know	-	-	10	-	-	-	-	7	-	-
Median hours partying before OD (range)*	4 .2-48	12 8-48	11 1-336	7 2-24	**7** **2-24**	15 6-24	8 6-10	6.5 3-16	6 6-10	- -

Source: EDRS interviews

# of those reporting an overdose episode in last six months. Median hours partying before OD data was not collected in 2016.

6.2 Help-seeking behaviour

Two-thirds (68%) of the 2016 REU sample had accessed health or medical services for any reason in the past six months (Table 50). Those who had accessed health services had done so on a median of two occasions (range 1-12) during the past six months. The services that were most typically accessed were a GP (82%), dentist (28%), other health professionals (19%), psychologist (19%), emergency department (16%), specialist doctor (12%), psychiatrist (10%), hospital (3% inpatient, 7% outpatient), drug and alcohol counsellor (9%), social/welfare worker (7%), ambulance (4%) or medical tent/first aid (3%).

Almost one-fifth (17%) had accessed a health or medical service in relation to their drug use during the past six months (Table 50). The median number of occasions during this time was three (range 1-26). Among those who had recently accessed health services in relation to drug use, the most commonly accessed services were a GP (59%), a psychologist (47%) or a drug and alcohol worker (35%). On the last occasion, services had most often been accessed in relation to ecstasy (36%), methamphetamine (18%) or a combination of more than one drug (18%).

Table 50: Access to health services in the last six months among REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=75	2014 n=100	2015 n=78	**2016 n=100**
Accessed any health service in last 6 months (%)	n/a	n/a	53	78	65	**68**
Median number of times accessed services (range)	n/a	n/a	n=40 3 1-54	n=77 4 1-25	n=51 3 1-38	**n=68** **4** **1-43**
Services accessed (%)	n/a	n/a	n=40	n=77	n=51	**n=68**
GP			78	84	86	**82**
Psychologist			23	14	16	**19**
Psychiatrist			5	3	6	**10**
Drug/alcohol counsellor			5	7	4	**9**
Social/welfare worker			10	5	14	**7**
Dentist			28	29	41	**28**
Specialist doctor			10	21	10	**12**
Emergency Department			5	14	8	**16**
Hospital (inpatient)			5	17	8	**3**
Hospital (outpatient)			3	8	6	**7**
Medical tent/First Aid			5	4	12	**3**
Ambulance			3	5	-	**4**
Other health service			**10**	**16**	10	19
Accessed health service in relation to drug use in last 6 months (%)	13	11	9	11	6	**17**
Median number of visits related to drug use (range)	n/a	n/a	n=7 2 1-46	n=11 5 1-22	n=5 4 1-14	**n=17** **3** **1-26**
Services accessed in relation to drug use (%)*	n=12	n=11	n=7	n=11	n=5	**n=17**
GP	50	55	43	73	40	**59**
First aid	-	-	14	-	-	**6**
Ambulance	-	-	-	-	-	**6**
Emergency	17	-	-	9	-	**12**
Hospitalisation	-	-	-	9	-	**12**
Counsellor	17	9	-	-	-	**-**
Drug & alcohol worker	8	18	29	46	40	**35**
Psychologist	8	9	29	18	40	**47**
Psychiatrist	-	-	-	-	-	**6**
Social/welfare worker	-	-	14	-	20	**12**
Specialist doctor	-	-	14	-	-	**6**
Dentist	-	-	-	9	-	**6**
Other	-	9	-	9	-	**-**
Main drug on last visit (%)*	n/a	n/a	n=7	n=11	n=5	**n=17**
Alcohol			-	18	-	**12**
Ecstasy			29	9	20	**36**
Methamphetamine			-	27	20	**18**
Cannabis			29	9	40	**12**
Polydrug			14	-	-	**18**
Other opioids			14	-	-	**-**
Pharmaceutical stimulants			-	9	-	**-**
Tobacco			-	9	-	**-**
Other			-	18	-	**6**

Source: EDRS interviews

*out of the total number of treatment episodes, participants may have attended more than one service

6.3 Mental health problems and psychological distress

6.3.1 Mental health problems

Nearly half (48%) of the 2016 REU sample reported that they had experienced mental health problems during the six months prior to the interview (Table 51). Of those who had experienced mental health problems, the most common problems experienced were depression (75%) and anxiety (60%).

Over one-half (56%) of those who reported experiencing mental health problems had attended a health professional in relation to these problems during the last six months, which equates to one-quarter of the sample (27%). This suggests an unmet demand in terms of service provision.

Almost one-fifth of the sample reported being prescribed antidepressants (9%), benzodiazepines (7%) or antipsychotics (1%) for psychological conditions during this time.

Table 51: Self-reported mental health problems in last six months, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016** **n=100**
Experienced mental health problem in last 6 months (%)	27	34	41	33	45	**48**
Mental health problem*	n=20	n=34	n=31	n=33	n=35	**n=47**
Depression (%)	50	50	74	61	74	**75**
Anxiety (%)	60	71	55	70	66	**60**
Paranoia (%)	10	32	13	21	26	**13**
Panic (%)	20	15	10	6	3	**9**
Psychosis (%)	5	3	-	3	6	**-**
OCD (%)	-	-	7	3	-	**6**
Bipolar disorder (%)	15	3	3	-	9	**-**
Eating disorder (%)	-		-	3	-	**-**
Self-harm (%)	-		-	-	-	**-**
Schizophrenia (%)	-	3	3	-	-	**-**
Mania (%)	-	3	-	3	-	**-**
Personality disorder (%)	5	-	3	3	6	**4**
Phobia (%)	-	-	7	6	-	**-**
PTSD (%)	-	-	13	9	6	**4**
Other (%)	-	-	-	9	3	**9**
Attended mental health professional (%)	19	14	21	14	21	**27**
Prescribed antidepressants (%)	7	1	9	6	6	**9**
Prescribed benzodiazepines (%)	7	4	7	5	6	**7**
Prescribed antipsychotics (%)	3	1	3	1	6	**1**

Source: EDRS interviews
* among those who had experienced a mental health problem

6.3.2 Psychological distress

The Kessler Psychological Distress Scale (K10) is a 10-item questionnaire designed to measure the level of distress and severity associated with psychological symptoms in population surveys, and it has been shown to be a marker for possible clinical diagnosis of anxiety or affective disorders (Andrews & Slade, 2001; Slade, Grove & Burgess, 2011). Participants were asked to rate the extent to which they had experienced particular psychological symptoms (e.g., How often did you feel depressed?) in the preceding month on a five-point Likert scale.

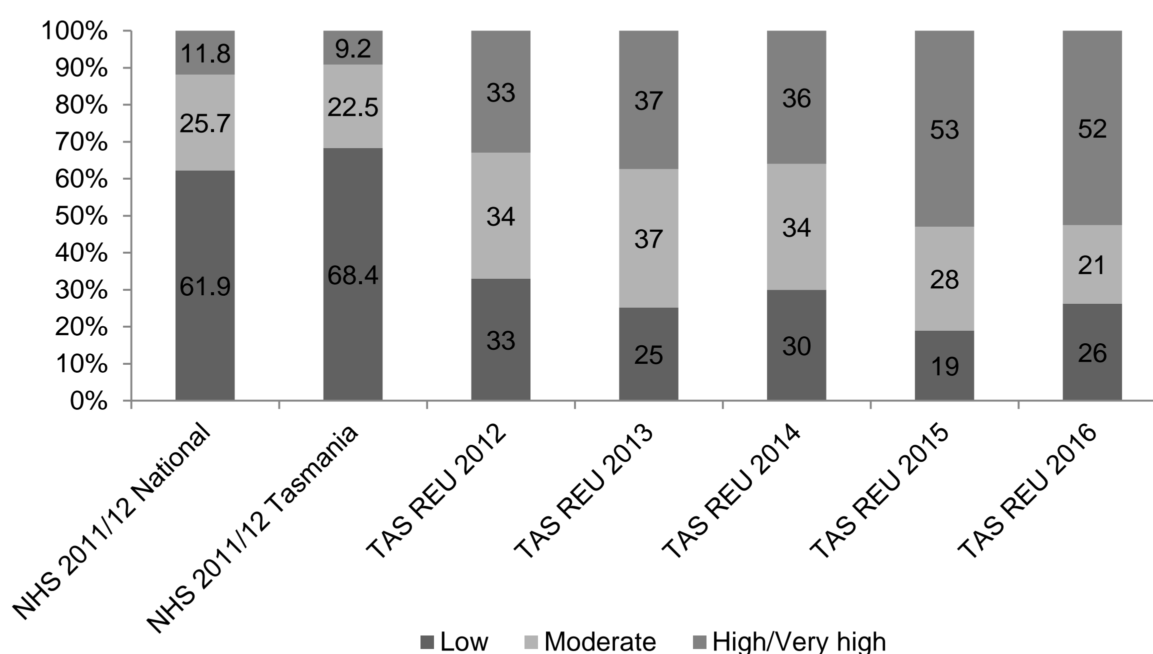
Among a normative Australian population sample from the 2007 National Survey of Mental Health and Wellbeing, the mean K10 score was 14.5 (SE=0.1) out of a possible score of 50 (Slade et al., 2011). Among the REU interviewed in 2016, the mean K10 score was higher at 21.8 (SD=7.7) and the median was 22 (range 10-40). A score of 22 equates to a score close to the 90th percentile of the normative sample (Slade et al. 2011).

K10 scores can also be grouped into four categories of psychological distress: low (10-15); moderate (16-21); high (22-29); and very high (30-50). Individuals with high levels of psychological distress have increased rates of mental health problems and may benefit from intervention with a health professional (Andrews & Slade, 2001; Slade et al., 2011). For example, in the 2007 Australian National Survey of Mental Health and Well-being, 80% of those with a K10 score of 30 or greater met criteria for a DSM-IV mental disorder in the preceding 12 months, with 67% meeting criteria for an anxiety disorder and 54% for an affective disorder (ABS, 2008). Similarly, it has been estimated that those in the 'very high' category are 17.6 (95%CI 13.8-22.6) times more likely to experience a diagnosable affective disorder and 12.2 (95%CI 9.3-16.0) times more likely to experience a diagnosable anxiety disorder according to the ICD-10 classification system (Slade et al., 2011).

In the current sample, 15% of REU had a score of 30 and above and therefore 'very high' levels of psychological distress. Nearly two-fifths scored in the 'high' (37%) category, one-fifth (21%) scored in the 'moderate' category, and one-quarter scored in the 'low' (26%) category (Figure 33). The proportion of respondents who scored in the 'high'/'very high' categories is similar to 2015 REU (53%), which was higher than the proportion among the previous three EDRS samples (33-37%). Figure 33 shows a comparison between the EDRS sample and national and Tasmanian samples (aged 18-24) from the 2011/12 National Health Survey (ABS, 2012). The proportion of the 2016 EDRS sample with scores categorised as high/very high (52%) is substantially higher than both the national (11.8%) and Tasmanian (9.2%) samples from the NHS.

Those with high/very high K10 scores were significantly more likely to report a mental health problem in the last six months (69% vs. 25%, χ^2=16.6, p<.001), and to have attended a mental health professional (39% vs 15%, χ^2=7.2, p=.007) in the last six months, but were not more likely to report accessing a health service in relation to drug use during this time (21% vs 13%, χ^2=1.3, p=.250).

Figure 33: Responses to the K10 questionnaire in the National Health Survey 2011/12 (aged 18-24) and EDRS, 2012-2016



Source: EDRS interviews, 2012-2016; National Health Survey, 2011/12

6.4 Other self-reported problems associated with ERD use

6.4.1 Self-reported symptoms of ecstasy dependence

REU were asked about how they had felt about their stimulant (ecstasy or methamphetamine) use during the 6 months preceding the interview using a version of the Severity of Dependence Scale (SDS) (Gossop et al., 1995). Each scale consisted of five multiple choice questions that were rated on a scale from 0 to 3, resulting in a range of possible scores from 0-15 where high scores suggest greater psychological dependence. Participants completed the SDS in response to both ecstasy use and methamphetamine use. Participants were asked if they thought that their ecstasy/methamphetamine use was out of control, if the prospect of missing a dose had made them feel anxious or worried, if they had worried about their ecstasy/methamphetamine use, if they had wished they could have stopped, and if they would find it difficult to stop, or go without ecstasy/methamphetamine.

Previous research suggests that a score of 3 or more shows a good balance between sensitivity and specificity for identifying problematic ecstasy use (Bruno, Gomez, & Matthews, 2009). A score of 4 or more was also considered as a more conservative estimate. Of those who completed this section (n=97), the median ecstasy SDS score was 1 (range 0-10) (Table 52). Almost half of participants (47%) obtained a score of zero on the ecstasy SDS and therefore reported no or few symptoms of dependence in relation to ecstasy use. One-third (34%) of the 2016 REU sample had a score of 3 or above on the ecstasy SDS and over one-quarter (28%) had a score of 4 or more.

Table 52: Self-reported symptoms of ecstasy dependence, 2011-2016

	2011 n=75	2012 n=100	2013 n=74	2015 n=77	**2016 n=97**
Median ecstasy SDS score (range)	0 0-7	1 0-7	0 0-6	2 0-9	**1** **0-10**
% ecstasy SDS score ≥ 3	12	41	19	42	**34**
% ecstasy SDS score ≥ 4	5	33	11	31	**28**

Source: EDRS interviews
Note: ecstasy SDS was not administered in 2014

6.4.2 Self-reported symptoms of methamphetamine dependence

REU participants that had used methamphetamine during the six months preceding the interview (n=41) were asked about how they felt about their use of this drug in the last 12 months, using the Severity of Dependence Scale (SDS). The scale consisted of 5 multiple choice questions that were rated on a scale of 0-3, resulting in a range of possible scores from 0-15, where higher scores suggest greater psychological dependence. Participants were asked if they thought that their methamphetamine use was out of control, if the prospect of missing a dose had made them feel anxious or worried, if they had worried about their methamphetamine use, if they had wished they could have stopped, and if they would find it difficult to stop or go without methamphetamine.

The median SDS score for those who had used methamphetamine in the preceding six months was 1 (range 0-10) (Table 53). Over one-fifth of those who completed the methamphetamine SDS received a score of 0 (44%), indicating no symptoms of dependence. A score of 4 on the SDS in relation to methamphetamine use has been validated as a reasonable cut-off for predicting DSM-III-R diagnosis of severe amphetamine dependence (Topp & Mattick, 1997). One-third (34%) of those REU who completed the methamphetamine SDS had a score of 4 or more, suggesting significant psychological symptoms of dependence. This is substantially higher than the proportion among the 2011 EDRS samples (5%).

Table 53: Self-reported symptoms of methamphetamine dependence, 2011-2016

	2011 n=40	2015 n=32	**2016** **n=41**
Median methamphetamine SDS score (range)	0 0-8	2 0-7	**1** **0-10**
% methamphetamine SDS score ≥ 4	5	28	**34**

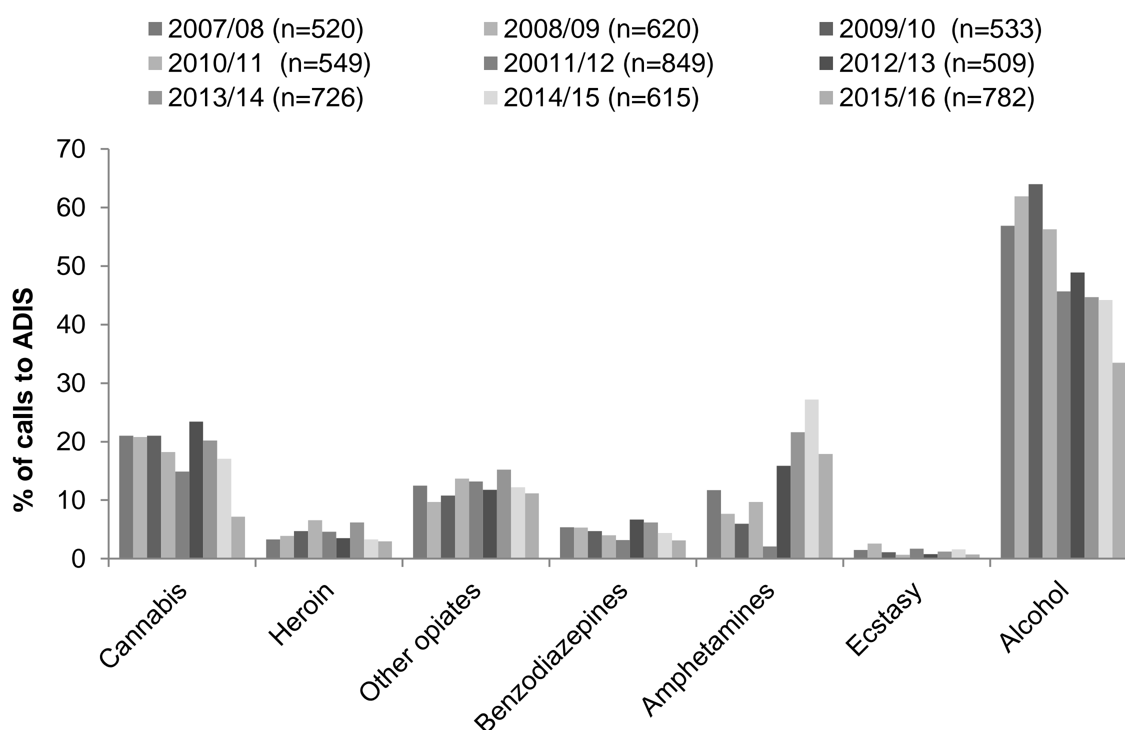
Source: EDRS interviews
Note: methamphetamine SDS was not administered between 2012 and 2014

6.5 Drug treatment indicator data

6.5.1 Alcohol and Drug Information Service data

The Tasmanian ADIS is a telephone information and referral service that is administered by Turning Point Alcohol and Drug Centre in Victoria (Turning Point, 2008-2016). In the 2015/16 reporting period, one-third (33.5%) of all calls related to alcohol, followed by amphetamines (17.9%), opioids other than heroin (11.2%) and cannabis (7.2%) (Figure 34). While there was an increase in the proportion of calls relating to amphetamine-type substances between 2012/13 (15.9%) and 2014/15 (27.2%), there was a decline in 2015/16 (17.9%). There has also be been a decrease in the number of calls relating to cannabis (from 23.4% in 2012/13 to 7.2% in 2015/16).

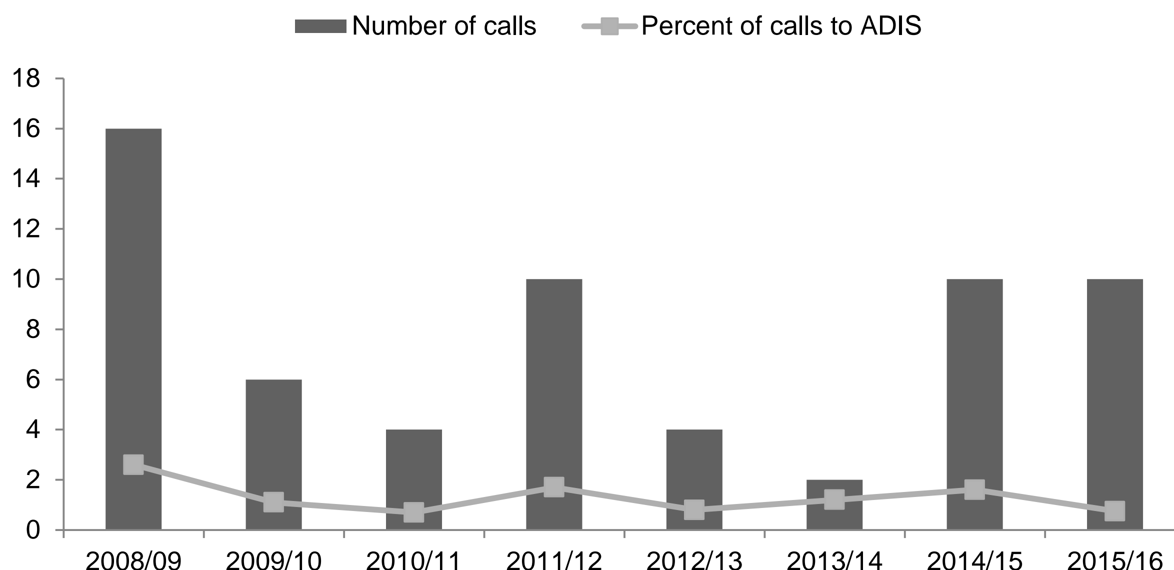
Figure 34: Percentage of inquiries to ADIS for each drug type, 2007/08-2015/16



Source: ADIS & DACAS Tasmania Annual reports, Turning Point Alcohol and Drug Centre

A small but consistent number of calls (between 4 and 17 calls per annum) have been recorded in relation to ecstasy between the 2007/08 and the 2015/16 reporting periods (Figure 34), with 10 calls (0.75% of all calls) recorded in 2015/16.[6] In addition, a small proportion of calls related to cocaine (0.32%), hallucinogens (0.22%), and other party drugs (0.22%).

Figure 35: Number of calls and percentage of inquiries to ADIS with regard to ecstasy, 2007/08-2015/16



Source: ADIS & DACAS Tasmania Annual reports, Turning Point Alcohol and Drug Centre

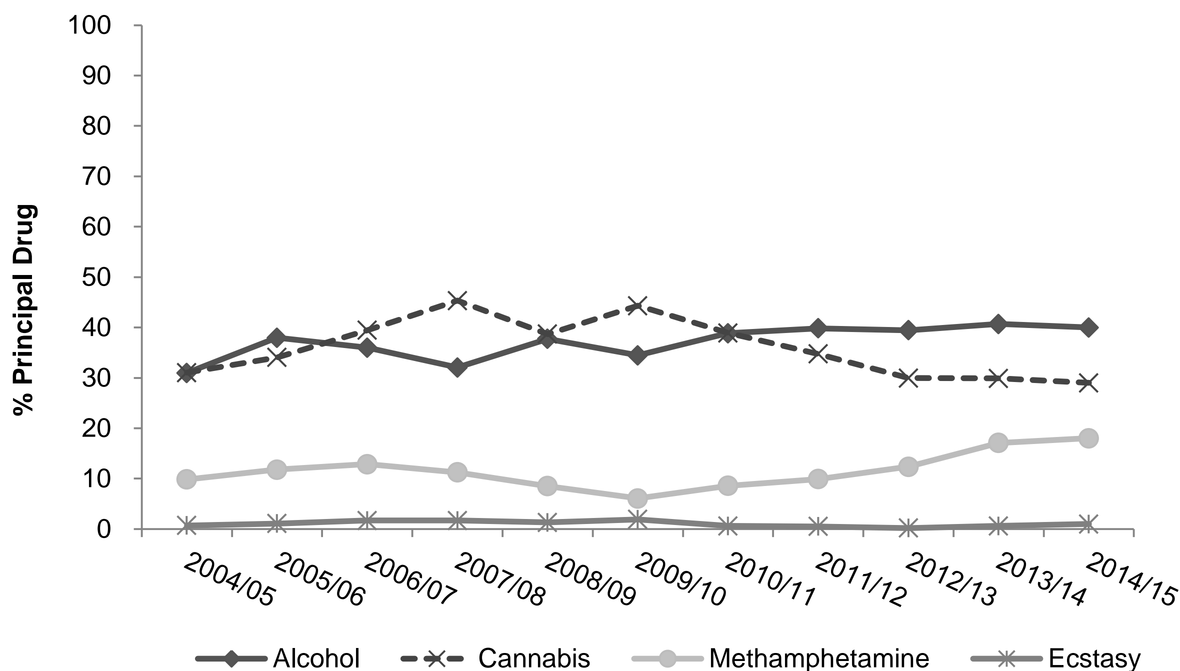
6.5.2 NMDS treatment episode data

Figure 36 shows the principal drug of concern for closed treatment episodes at alcohol and other drug treatment services in Tasmania between 2004/05 and 2014/15 (AIHW, 2016). Data for the 2015/16 financial year were not available at the time of publication.

Of all drug treatment episodes in Tasmania during 2014/15 (N=3,241), alcohol (40%) or cannabis (29%) were most commonly coded as the principal drug of concern, followed by meth/amphetamine (18%), morphine (2.7%), and ecstasy (1%). The proportion of closed treatment episodes relating to meth/amphetamine was higher relative to 2013/14 (12% vs 18%). With regard to all treatment episodes, the most common ‘main’ treatment was counselling (43%) followed by assessment (32%), and rehabilitation (11%).

[6] Data from calls made to the Turning Point-administered ADIS have been reported over differing time periods due to the requirements of the Department of Health and Human Services; however, for comparative purposes (and since this annual data are the only information available to the authors), these slightly differing reporting periods were each treated as financial year periods.

Figure 36: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set: Closed treatment episodes by principal drug of concern, 2004/05-2014/15



Source: AIHW

6.6 Hospital admission indicator data

Hospital morbidity data in relation to use of drugs have been provided by the AIHW for the 1993/94 to 2014/15 financial year periods (Roxburgh & Breen, 2017). Data for the 2015/16 period were not available at the time of publication. These data relate to Tasmanian public hospital admissions for individuals aged between 15 and 54 years where drug use was recorded as the 'principal diagnosis'; namely, where the effect of drugs was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre were only included in this dataset from June 2002. Data is provided for hospital admissions in relation to cannabis, methamphetamine and cocaine. Hospital admission data for opioids can be found in the 2016 IDRS report (Lusk, Ney, Peacock, & Bruno, 2017). There are no objective hospital admission data in relation to substances such as ecstasy, ketamine, GHB, LSD, and MDA in Tasmania.

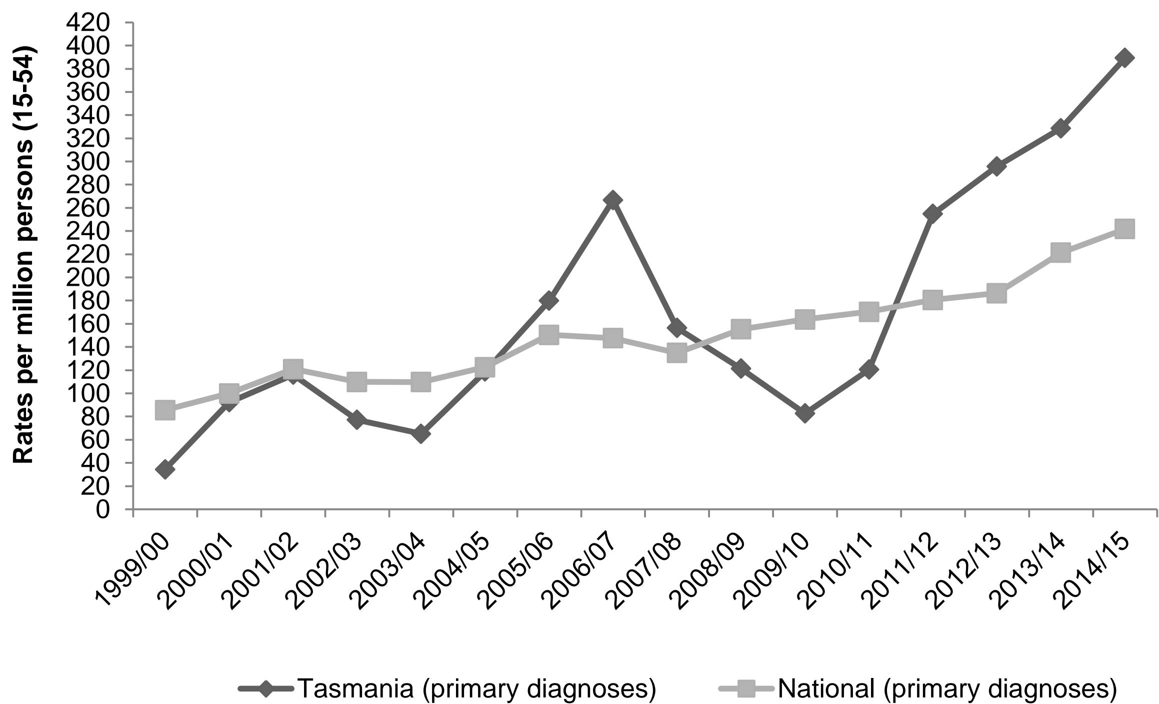
6.6.1 Cannabis

Tasmanian public hospital admissions where cannabis use was noted as the principal diagnosis among persons aged 15-54 years are presented in **Error! Reference source not found.**37. Examining these figures, it appears that the number of cases per annum has varied in recent years: between 1993/94 and 2004/05 there were between 6 and 31 cases per financial year. In the following two reporting periods, a spike in admission numbers occurred, with 70 reported in 2006/07. While the number of admissions had declined between 2008/09 to 2010/12 (22-32 admissions per year), since 2011/12 the number of admissions has increased to those levels evident in 2006/07, with 85 admissions in 2013/14. In 2014/15 there was again an increase to 100 admissions (Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

The population-adjusted rates for cannabis-related admissions in Tasmania increased overall between 1994/95 and 2006/07, from 30 per million population to 267. In the subsequent three reporting periods, this trend reversed (156, 121 and 83 admissions per million persons reported respectively). In 2010/11, a small increase was observed, with 121 admissions per million persons at the local level and 164.

The Tasmanian admission rate per million population had been consistently lower than the national rate between 1994/95 and 2004/05, however, this trend was reversed in 2005/06 and 2006/07, with the Tasmanian admission rate increasing to 119% and 180% of the national rate, respectively. Despite lower admission rates in Tasmania between 2008/09 and 2010/11, Tasmanian admission rate were again in excess of the national rates from 2011/12 onwards, to 161% of the national rate in 2014/15 (**Error! Reference source not found.**) (Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

Figure 37: Public hospital admissions (aged 15-54) where cannabis was noted as the primary contribution to admission, rates per million population for Tasmania and Australia, 1999/00-2014/15

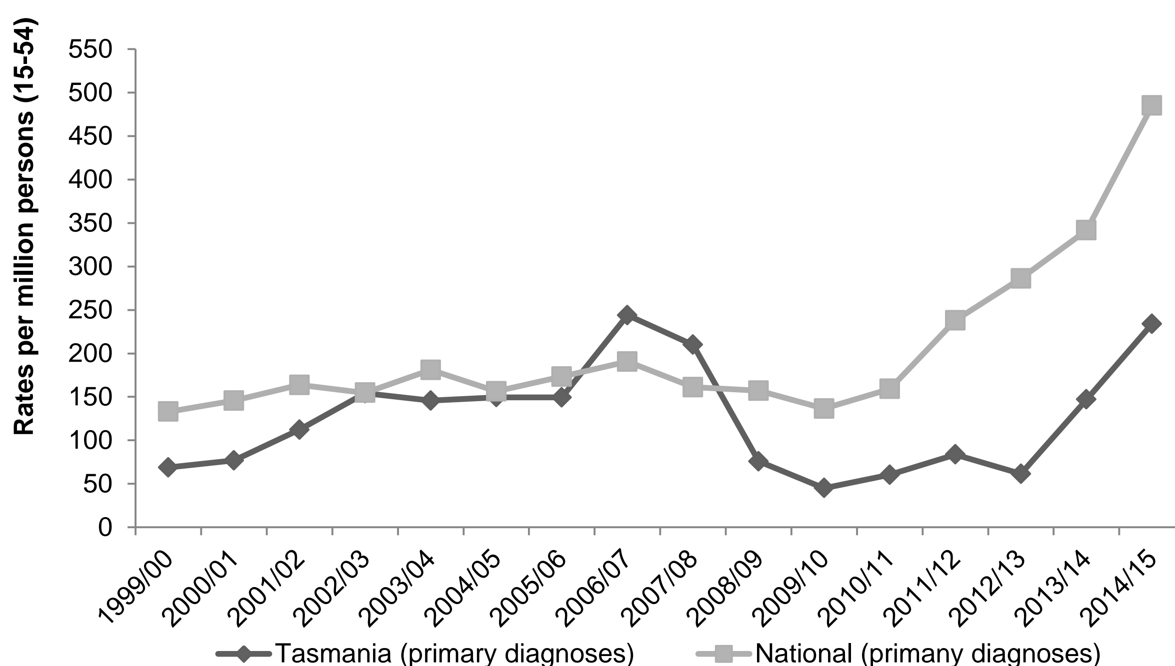


Source: AIHW (Roxburgh & Breen, in press)
Note: 2015/16 data was not available at the time of publication

6.6.2 Methamphetamine

Population-adjusted rates of Tasmanian public hospital admissions, where methamphetamine use was noted as the principal diagnosis, are presented in **Error! Reference source not found.**. Local population-adjusted rates were substantially lower than the national figures prior to 2002/03. However, these figures did not include data from the state's detoxification service (introduced for the first time in the 2002/03 figures). Between 2002/03 and 2005/06, local population-adjusted rates were similar to the national figures. However, in 2006/07 and 2007/08, the Tasmanian rate of admissions per million persons increased to approximately 130% of the national rate. This was reversed in 2008/09, with the Tasmanian rate of admissions per million population decreasing from 210 in 2007/08 to 76 in 2008/09 (48% of the national rate). Between 2009/10 and 2012/13, the Tasmanian rate was between 45 and 84 admissions per million population respectively (21% of the national rate in 2012/13). Rates increased to 147 in 2013/14 (43% of the national rate; Roxburgh & Breen, 2016), and remained stable in 2014/15 (48% of the national rate; Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

Figure 38: Public hospital admissions (aged 15-54) where methamphetamine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia 1999/00-2014/15



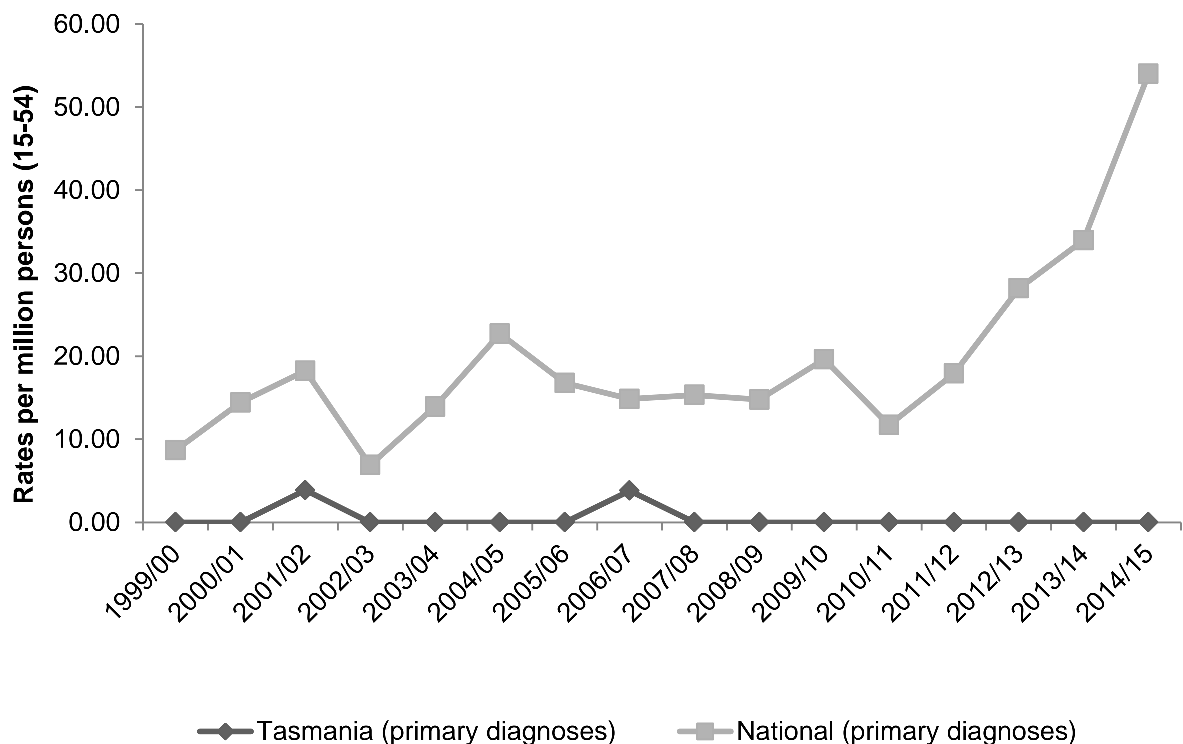
Source: AIHW (Roxburgh & Breen, in press)

Note: 2015/16 data was not available at the time of publication

6.6.3 Cocaine

Consistent with the apparent low levels of availability and use of cocaine locally, the rate of cocaine-related hospital admissions amongst those aged between 15 and 54 years in Tasmania is consistently very low (between zero and four persons per million between 1999/00 and 2012/13) (**Error! Reference source not found.**39). When the local rates of cocaine-related public hospital admissions are compared to the national Australian rate, these are substantially lower, with the total local cases where cocaine was noted as the primary factor contributing to the admission remaining 26% or less than that of the national rate between 1999/00 and 2013/14. In 2014/15 there were no hospitalisations for cocaine in Tasmania (0% of the national rate) (Roxburgh & Breen, 2017). Data for 2015/16 were not available at the time of publication.

Figure 39: Public hospital admissions (aged 15-54) where cocaine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia, 1999/00-2014/15



Source: AIHW (Roxburgh & Breen, in press)

Note: 2014/15 data was not available at the time of publication

7.0 RISK BEHAVIOUR

Summary:

- **Injecting drug use.** One-tenth (10%) of the 2016 REU sample had recently used substances intravenously. One-fifth of these recent users had borrowed a used needle in the past month and 10% (n=1) had lent a used needle to someone else.
- **Sexual risk behaviour.** Nearly two-thirds (62%) of REU reported penetrative sex with a casual partner during the six months preceding the interview and a large majority of these (95%) reported sex with a casual partner while under the influence of drugs, most commonly alcohol, ecstasy, or cannabis. When under the influence of drugs, almost one-fifth (17%) reported always using protective barriers with a casual partner and approximately one-seventh (15%) never used protective barriers. Almost three-quarters (71%) of those who reported sex with a casual partner indicated that they did not use any protective barriers on the last occasion in the previous six months.
- Two-fifths of the sample (39%) had never had a sexual health check-up. A majority (83%) of the sample had never been diagnosed with a sexually transmitted infection (STI) and the remainder had been diagnosed in the last year (4%) or more than a year ago (13%).
- **Alcohol Use Disorders Identification Test (AUDIT).** Almost one-fifth (17%) of REU who completed the AUDIT scored in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence) which is a lower rate than in 2015 (30%). A further 14% scored in zone 3 (harmful or hazardous drinking), almost one-half (47%) scored in zone 2 (alcohol use in excess of low-risk guidelines[7]), and 22% scored in zone 1 (a level reflecting low-risk drinking or abstinence).
- **Drug driving.** Of those who had driven a car (n=71), one-quarter (25%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months, and over one-third (35%) reported driving while under the influence of illicit drugs in the last six months.
- **Binge drug use.** Almost one-third (29%) had recently binged on ecstasy or related drugs (a continuous period of use for more than 48 hours without sleep), on a median of three occasions (range 1-24) in the last six months. Substances most commonly used in a binge session of use were alcohol (83%), ecstasy (66%), cannabis (59%), methamphetamine (powder 14%; crystal 38%) and energy drinks (31%).

[7] It should be noted that this threshold for low-risk is based on standards employed in the 2007 NDSHS, which represents a threshold substantially higher than that specified by the National Health and Medical Research Council in their revised guidelines. However, the thresholds used in the Household Survey have been reported here in order to facilitate comparisons with such national indicators.

7.1 Injecting drug use

One-fifth (19%) of the 2016 REU participants had used substances intravenously at some stage of their lives (Table 54), which is similar to the proportion among previous REU cohorts (10-22%). The percentage of males (12%) and females (7%) who reported lifetime injection was similar, χ^2=1.28, *p*=.259. The median age of first injection was 19.5 years (range 15-30).

In 2016 injecting risk behaviour data during the one month prior to interview was collected whereas risk behaviours during the previous six months prior to interview has been collected. One-tenth (10%) of the 2016 sample had used substances intravenously during the one month preceding the interview. One-fifth (20%) of those who had injected in the past month had used a needle (borrowed) after someone else had used it. One recent injector (10%) had lent a needle to someone else after using it themselves. In the past month, 40% of recent injectors had injected a partner or friend with a clean needle after injecting themselves, and one participant (10%) had been injected by someone who had just injected themselves (Table 54).

Table 54: Injecting risk behaviour during the last six months among REU, 2011-2016

	2011 n=10	2012 n=6	2013 n=8	2014 n=8	2015 n=8	**2016 n=10**
Ever injected (%)	22	12	18	15	10	**19**
Median age first injected (range)	19 16-23	19.5 15-30	21 15-27	20 15-30	19.5 16-23	**19.5 15-30**
Injected last 6 months# (%)	13	6	11	8	10	**10**
Used needle after someone# (%)	-	17 n=1	13 n=1	13 n=1	- n=0	**20 n=2**
Lent a needle# (%)	-	-	-	-	-	**10 n=1**
Injected a partner/friend after injecting self# (%)	-	-	-	-	-	**40 n=4**
Injected by somebody else after injecting themselves# (%)	-	-	-	-	-	**10 n=1**

Source: EDRS interviews.
Note: # prior to 2016 injecting risk behaviour data during the six months prior to interview was collected, whereas in 2016 risk behaviours during the past month prior to interview was collected.

7.2 Sexual risk behaviour

Penetrative sex was defined as the penetration of the vagina/anus by the penis/hand. Participants were given the option of self-completing this section of the report due to the personal nature of the questions.

Nearly two-thirds (62%) of the 2016 REU sample reported having penetrative sex with a casual partner during the six months preceding the interview (Table 57). The number of casual sexual partners was typically two to five partners during this time.

A large majority of those who reported casual sex (95%) had done so while under the influence of ERD during the last six months (Table 57), with four-fifths (80%) doing so on three or more occasions during this time or approximately every two months or more. On the last occasion, respondents most commonly reported having sex under the influence of alcohol (85%), ecstasy (64%), or cannabis (24%).

Of those who had sex with a casual partner under the influence of drugs in the preceding six months (Table 57), approximately one-seventh (15%) reported that they never used protective barriers. Almost one-fifth reported that they always used protective barriers (17%) and the remainder reported inconsistent use of protective barriers (68%).

Almost three-quarters (71%) of those who reported sex with a casual partner (while under the influence of drugs) indicated that they did not use any protective barriers on the last occasion in the last six months. Common reasons for not using protective barriers on this occasion included: being on a contraceptive (34%), intoxication (20%), respondent not wishing to (14%), lack of availability (14%), it wasn't mentioned (11%), or agreeing not to with the partner (6%).

Two-fifths (39%) of the 2016 REU sample had never had a sexual health check-up (Table 57). The majority of the sample (83%) had never been diagnosed with an STI and smaller proportions had been diagnosed with an STI in the last year (4%) or more than a year ago (13%).

Table 55: Prevalence of sexual activity, protective barrier use, and sexual health among REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=75	2014 n=100	2015 n=78	**2016 n=100**
Casual sex last 6 mths (%)	64	60	56	62	63	**62**
No. casual partners*	n=48	n=60	n=42	n=61	n=49	**n=62**
One partner (%)	23	12	38	20	16	**18**
Two partners (%)	21	22	19	25	29	**24**
Three-five partners (%)	38	48	29	34	39	**37**
Six-ten partners (%)	15	12	14	13	16	**19**
More than ten partners (%)	4	7	-	8	-	**2**
Casual sex with drugs/alcohol (%)	59	58	53	93	90	**95**
Number of times#	n=44	n=58	n=40	n=57	n=44	**n=59**
Once (%)	2	5	15	7	2	**3**
Twice (%)	18	17	20	16	32	**17**
Three-five times (%)	16	38	25	35	34	**34**
Six-ten times (%)	27	21	33	21	23	**29**
More than ten times (%)	36	19	8	21	9	**27**
Drugs used last time#	n=44	n=58	n=40	n=57	n=44	**n=58**
Ecstasy (%)	48	55	63	68	60	**64**
Cannabis (%)	34	41	25	35	16	**24**
Alcohol (%)	89	64	48	98	96	**85**
Meth. powder (%)	14	14	8	19	2	**5**
Meth. base (%)	-	-	-	2	-	**-**
Crystal meth (%)	-	3	-	2	5	**12**
Cocaine (%)	2	2	3	4	-	**9**
LSD (%)	9	7	5	-	9	**9**
GHB (%)	-	-	-	-	-	**-**
Amyl nitrite (%)	2	-	-	-	-	**2**
Nitrous oxide (%)	-	-	-	2	-	**-**
Methadone (%)	5	-	3	4	-	**-**
Benzodiazepines (%)	-	2	3	4	-	**-**
Mushrooms (%)	-	3	-	2	-	**3**
Pharm. stimulants (%)	2	-	5	-	2	**-**
MDA (%)	5	-	-	2	-	**2**
Mephedrone (%)	-	-	-	4	1	**-**
Methylone (%)	-	-	-	-	-	**-**
Heroin (%)	2	-	-	-	-	**-**
Other (%)	-	2	3	5	2	**2**
Protective barrier use under influence#	n=43	n=58	n=40	n=57	n=44	**n=59**
Always (%)	26	26	43	28	16	**17**
Never (%)	19	12	18	16	18	**15**
Inconsistent or rare use (%)	56	62	39	56	66	**68**
Ever sex health check (%)	n=75	n=100	n=75	n=98	n=78	**n=100**
No	20	28	45	43	45	**39**
Yes (in the last year)	56	43	25	38	28	**36**
Yes (more than 1 year ago)	24	29	27	19	27	**25**
Don't know	-	-	3	-	-	**-**
Ever diagnosed STI (%)	n=74	n=100	n=75	n=98	n=78	**n=100**
No	81	78	87	80	83	**83**
Yes (in the last year)	1	5	4	7	5	**4**
Yes (more than 1 year ago)	18	16	7	13	12	**13**
Don't know	-	1	3	-	-	**-**

Source: EDRS interviews

* of those who had sex with a casual partner in the last six months

[#] of those who had sex with a casual partner while under the influence of alcohol/drugs in last six months

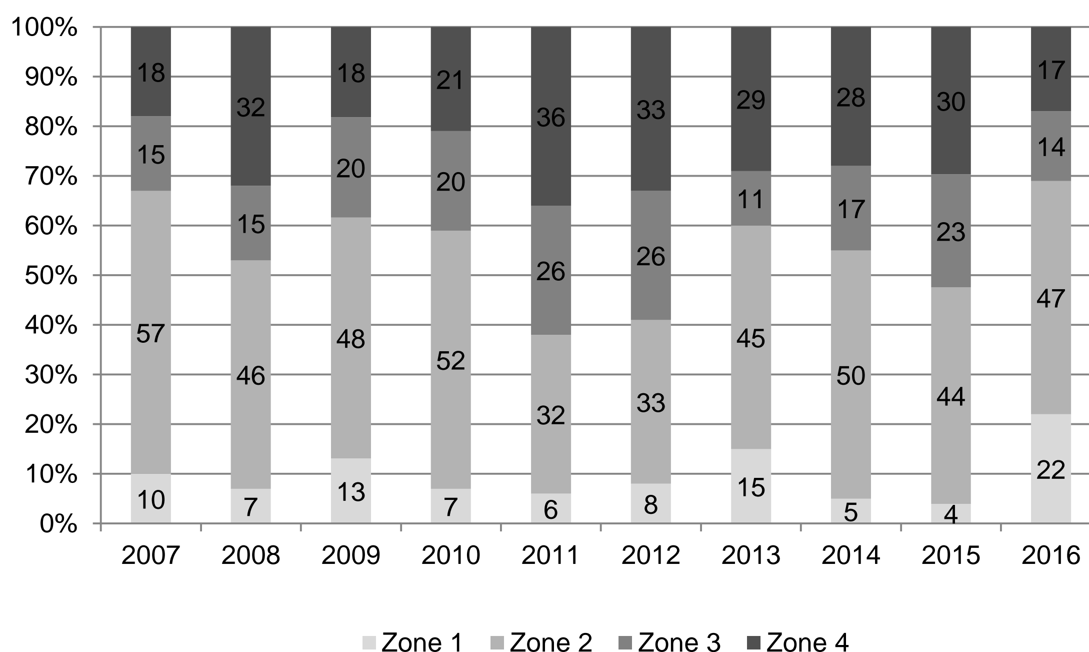
7.3 AUDIT

The AUDIT was designed by the World Health Organization as a brief screening scale to identify individuals with alcohol problems, including those in early stages (Saunders et al., 1993). It is a 10-item scale, designed to assess three conceptual domains: alcohol intake, dependence, and adverse consequences (Reinert & Allen, 2002). Total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence (Babor et al., 2001). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor et al., 2001).

The overall mean score on the AUDIT was 13.3 (median=13, range 0-35, SD=6.7). Of those REU who completed the AUDIT (n=100), over three-quarters (78%) scored 8 or more, a level at which alcohol intake may be considered hazardous.

The total AUDIT score places respondents into one of four zones, or risk levels. Figure 40 shows the proportion of REU categorised within each of the AUDIT risk categories between 2007 and 2016. In 2016, 22% of REU scored in zone 1 (a level reflecting low-risk drinking or abstinence). Almost half (47%) scored in zone 2 (alcohol use in excess of low-risk guidelines[8]), a further 14% scored in zone 3 (harmful or hazardous drinking) and 17% scored in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence).

Figure 40: Proportion of REU categorised with each AUDIT risk zone, 2007-2016



Source: EDRS interviews

[8] It should be noted that this threshold for low-risk is based on standards employed in the 2007 NDSHS, which represents a threshold substantially higher than that specified by the National Health and Medical Research Council in their revised guidelines. However, the thresholds used in the Household Survey have been reported here in order to facilitate comparisons with such national indicators.

7.4 Driving risk behaviour

Nearly three-quarters (71%) of REU interviewed in 2016 had driven a car during the six months preceding the interview (Table 58). One-quarter (25%) of recent drivers had driven while they perceived themselves to be over the legal alcohol limit during this time. Further, over one-third (35%) of those that had recently driven a car had driven soon after taking a drug in the last six months, which is lower than the proportion in 2015 (51%).

Table 56: Driving under the influence (DUI) of alcohol and other drugs among REU who had driven a car in the last six months, 2008-2016

Variable	2008 n=86	2009 n=87	2010 n=88	2011 n=65	2012 n=75	2013 n=51	2015 n=59	**2016 n=71**
Driven over legal alcohol limit last 6 mths (%)	49	59	48	37	47	26	40	**25**
Median times driven over legal limit last 6 mths (range)[#]	n=42 3 1-24	n=51 4 1-30	n=42 3 1-24	n=24 2 1-20	n=35 2 1-14	n=13 1 1-20	n=23 4 1-28	**n/a**
% breath tested last 6 mths If tested, % over limit (≥1)	40 -	56 15	61 7	50 -	40 10	29 7	44 4[a]	**n/a**
% driven soon after taking any drug in last 6 mths	63	51	39	40	47	55	51	**35**
Median times DUI of drugs in last 6 mths (range)*	n=54 6 1-150	n=44 3 1-180	n=34 3 1-180	n=26 6 1-180	n=35 30 1-180	n=28 8 1-160	n=30 6 1-100	**n/a**
% saliva tested last 6 mths If tested, % tested positive	2 -	2 -	5 -	- -	11 -	16 25	5 -[a]	**n/a**
Drugs DUI last 6 mths (%)*^	n=54	n=44	n=34	n=26	n=35	n=28	n=30	**n/a**
Cannabis	52	48	59	81	83	82	77	**-**
Ecstasy	83	71	62	27	51	25	37	**-**
Meth. powder	13	7	12	23	46	14	3	**-**
Meth. base	4	7	6	4	9	4	-	**-**
Crystal meth	2	9	-	4	3	4	-	**-**
Benzodiazepines	6	5		4	-	7	-	**-**
Psychedelic mushrooms	6	5	6	4	-	-	-	**-**
LSD	13	11	9	8	11	4	17	**-**
Amyl nitrite	4	-	-	-	-	-	-	**-**
Nitrous oxide	4	7	-	-	-	-	-	**-**
Cocaine	2	2	3	-	9	-	3	**-**
Ketamine	-	-	-	-	-	-	3	**-**
Other opioids	2	2	3	12	-	4	-	**-**
Pharmaceutical stimulants	2	-	-	-	-	4	3	**-**
GHB	-	-	-	-	-	-	-	**-**
Methadone	2	-	3	-	-	-	-	**-**
2CI/2CB/2CE	-	2	-	-	-	-	-	**-**
Mephedrone	-	-	12	-	-	-	-	**-**
Methylone	-	-	3	-	-	-	-	**-**
Heroin	-	-	-	8	-	4	-	**-**

Source: EDRS interviews
[#] of those who had driven while over the legal limit of alcohol in the last six months
* of those who had driven under the influence of drugs in the last six months
[a] refers to most recent occasion in 2015
^ drugs used on any occasion of DUI of drugs, not necessarily simultaneously
n/a not assessed

7.5 Binge drug use

Table 59 shows that almost one-third (29%) of the 2016 REU sample had recently binged on ERD (i.e., used them for more than 48 hours continuously without sleep). Those that had recently binged had done so on a median of three occasions (range 1-24) during the six months preceding the interview. The median length of the longest period of continuous use during this time was three days (range 2-8 days).

Of those who had recently binged, the substances used most commonly during any one binge session of use were alcohol (83%), ecstasy (66%), cannabis (59%), methamphetamine (powder 14%; crystal 38%), energy drinks (31%), benzodiazepines (17%) and LSD (17%). A majority (72%) also reported use of tobacco in a binge session of use. Among those who had used alcohol in a binge session of use, almost all (96%) reported typical use of more than five standard drinks in a binge session.

Table 57: Binge drug use among REU, 2011-2016

Variable	2011 n=72	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Binged on any stimulant drug last 6 mths (%)#	22	31	33	24	19	**29**
Median times binged in last 6 mths (range)*	2.5 1-60	2 1-24	2 1-14	3 1-40	5 1-24	**3 1-24**
Median length (days) biggest binge last 6 mths (range)*	2 2-4	2 2-12	2 2-4	3 2-8.5	3 2-5	**3 2-8**
Drugs used in binge session (%)*						
Ecstasy	63	87	68	54	73	**66**
Meth. powder	38	48	44	46	13	**14**
Meth. base	6	3	4	13	-	**-**
Crystal meth.	6	13	20	33	33	**38**
Pharm. stimulants	-	3	20	4	7	**3**
Cocaine	13	10	16	17	-	**7**
LSD	25	32	24	29	27	**17**
Ketamine	6	7	4	13	7	**-**
MDA	6	3	4	-	7	**-**
GHB	-	-	-	-	-	**-**
Amyl nitrite	-	3	16	-	-	**-**
Nitrous oxide	6	7	8	13	13	**3**
Cannabis	56	55	72	58	33	**59**
Alcohol	81	94	88	88	93	**83**
Benzodiazepines	6	3	20	25	13	**17**
Mushrooms	6	13	4	8	-	**-**
2CI	6	-	-	-	-	**-**
Other opioids	6	-	-	4	7	**-**
Mephedrone	-	-	4	4	-	**-**
Methylone	-	-	-	-	-	**-**
DOI	-	-	-	-	-	**-**
BZP	-	-	-	-	-	**-**
OTC codeine	6	-	-	-	-	**-**
Energy drinks	38	65	28	17	13	**31**
Other	-	6	12	17	7	**10**

Source: EDRS interviews
#used for 48 hours continuously without sleep
*among those who had binged in the last six months

8.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

Summary:

- **Criminal activity.** One-quarter (26%) of the 2016 REU sample reported taking part in any criminal activity in the last month. The most common crimes were drug dealing (20%) and property crime (12%). One-tenth (11%) of REU had been arrested during the preceding 12 months. Arrests were generally for non-drug related offences.
- **Arrests and seizures by Tasmania Police.** In 2015/16 there were a greater number of ecstasy-related consumer (n=40) and provider (n=26) arrests relative to the previous five reporting periods (2-13 consumer arrests, and 1-14 provider arrests). There were 25 seizures and a total of 3,146 tables/capsules seized by Tasmania Police in 2015/16, representing a substantial decrease relative to the 2014/15 reporting period (96 seizures and 12,730 tablets/capsules).
- Arrest data for methamphetamine-related offences (Figure 43) indicated a similar number of arrests in 2015/16 (433 arrests) compared to 2014/15 (430 arrests), with similar number of consumer arrests (308 vs. 292) and provider arrests (125 vs. 138) recorded in 2015/16 relative to in 2014/15. There was a decrease in the number of methamphetamine seizures in 2015/16 (610 seizures) compared to 2014/15 (828 seizures). The total weight of methamphetamine seizures was also less in 2015/16 (3,795 grams) relative to in 2014/15 (7,014 grams).
- Cautions and arrests relating to cannabis were similar in 2015/16 (1,451 arrests) compared to in 2014/15 (1,446 arrests). However, the number of cannabis seizures was decreased while the total weight of seizures increased in 2015/16 compared to 2014/15.
- **Illicit drug diversions/cautions.** In 2015/16 the total number of diversions (624 diversions) was slightly lower than 2014/15 (648 diversions) and in the number of second-level and third-level diversions to health interventions (178 diversions) was similar to 2014/15 (216 diversions).
- **Drug-related charges in Tasmanian courts.** The total number of drug-related offences before the Hobart magistrate court between 2015/16 and 2014/15 was stable (262 vs 269). The downward trend of drug-related offences over the four previous reporting periods has been largely due to decrease in the number of offences related to possession/use of illicit drugs (120 in 2015/16 compared to 179 in 2011/12).
- The number of individuals incarcerated at Hobart Prison in relation to drug offences in 2015/16 (143 individuals) was much higher compared to 2014/15 (72 individuals), as well as previous years. This increase was reflected in the number of offences among those incarcerated (430 in 2015/16 compared to 219 in 2014/15).
- **Tasmanian roadside drug testing data.** There was a marginal increase in the number of roadside drug tests conducted on Tasmanian roads in 2015/16 relative to 2014/15 (3,738 vs. 3,431). There was a small increase in the proportion of tests which returned a positive result (52% vs. 56%).
- Cannabis was the most commonly detected drug, with 60% of all OFT tests and 66% of all blood tests returning positive results. Positive results for meth/amphetamine were also common in both OFT (41% amphetamine, 31% methamphetamine) and blood tests (48% amphetamine, 55% methamphetamine). Few OFT (<1%) or blood tests (3%) returned a positive result for the presence of MDMA/ecstasy.

8.1 Reports of criminal activity among REU

One-quarter (26%) of the 2016 REU sample self-reported engaging in some type of crime within the last month (Table 60).

One-fifth (20%) reported dealing drugs for cash profit, with half of these (50%) doing so once a week or less, and one third doing so more than weekly, but less than daily (30%).

One-tenth (12%) reported committing a property crime in the last month. Half of those that had recently committed property crime (50%) had done so on a less than weekly basis, and one-third reported doing so on a weekly basis (33%).

One-tenth (13%) reported being a victim of a crime involving violence in the last month.

One-tenth of the sample (11%) had been arrested during the 12 months preceding the interview. These participants had been arrested for a variety of offences (see Table 60). Few participants had been arrested for drug-related offences.

Most KE (n=8) working in drug treatment or nightclubs reported high levels of aggression amongst crystal methamphetamine users, and that volatile behaviour had been increasing with increasing rates of crystal use.

Table 58: Criminal activity reported by REU, 2011-2016

	2011 n=75	2012 n=100	2013 n=76	2014 n=100	2015 n=78	**2016 n=100**
Any criminal activity in last month (%)	28	26	35	42	33	**26**
Drug dealing	11	18	21	24	21	**20**
Property crime	15	12	19	28	17	**12**
Fraud	5	6	3	5	3	**4**
Violent crime	3	2	3	2	3	**2**
Victim of violent crime (%)	n/a	n/a	n/a	n/a	12	**13**
Arrested last 12 months (%)	16	14	17	13	13	**11**
Property crime	4	3	1	4	-	-
Drug use/possession	3	-	-	2	3	1
Violent crime	1	1	3	3	1	1
Dealing/trafficking	-	-	1	2	1	-
Driving offence	1	-	-	1	-	1
DUI alcohol	1	3	3	5	5	6
DUI drugs	-	-	-	2	-	2
Other reason	9	8	11	5	6	2

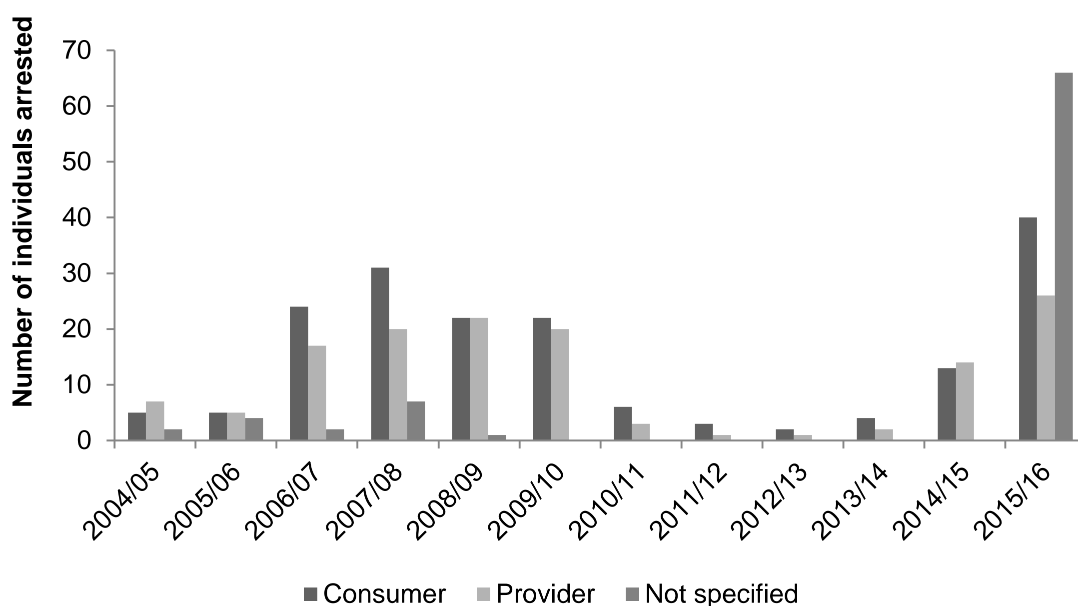
Source: EDRS interviews

8.2 Drug-related arrests and seizures made by Tasmania Police

8.2.1 Ecstasy

Figure 41 shows the number of police arrests recorded by Tasmania Police for ecstasy possession and use (consumers) and for dealing or trafficking of ecstasy (providers) from 2004/05 to 2015/16[9]. In 2015/16 there were a greater number of ecstasy-related consumer (n=40) and provider (n=26) arrests relative to the previous five reporting periods (2-13 consumer arrests, and 1-14 provider arrests).

Figure 41: Number of police incidents recorded for ecstasy possession/use (consumers) and deal/traffic (providers), 2004/05-2015/16

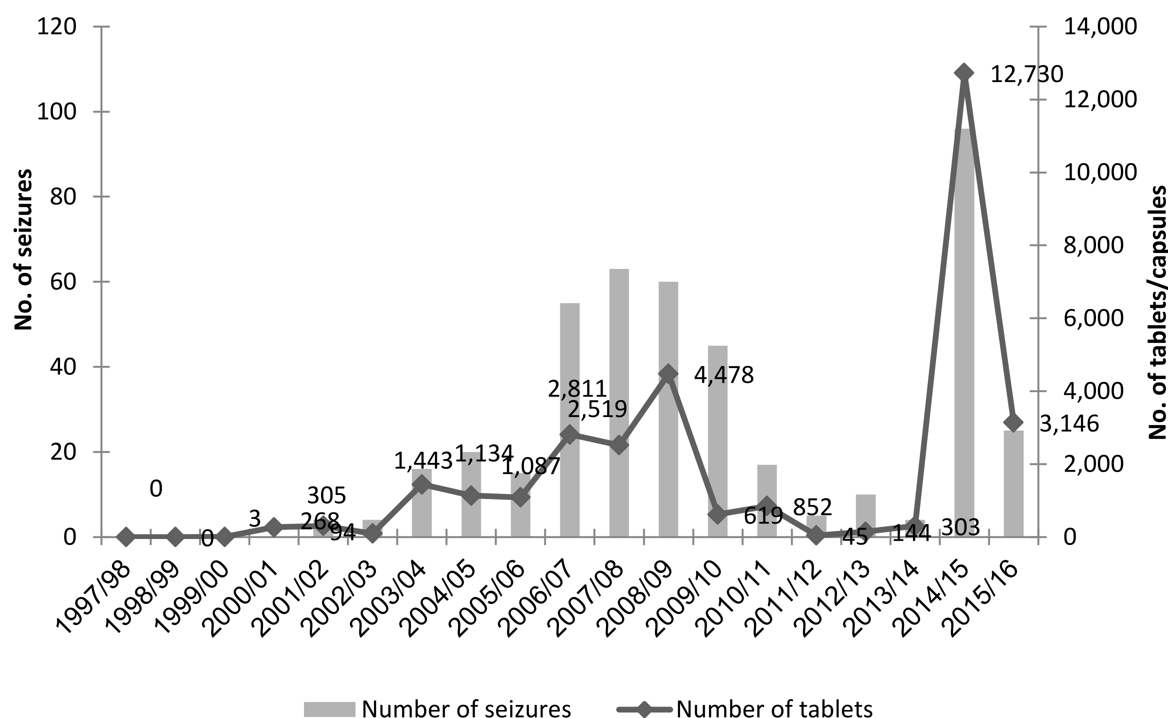


Source: State Intelligence Services, Tasmania Police
Note: Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Figure 42 shows the number of MDMA seizures and the total number of tablets/capsules seized by Tasmania Police between 2004/05 and 2015/16[10]. In 2015/16 there were 25 seizures and a total of 3,146 tables/capsules seized by Tasmania Police, a substantial decrease relative to the 2014/15 reporting period (12,730 tablets/capsules).

[9] 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.
[10] 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Figure 42: Total number of tablets/capsules suspected to contain ecstasy seized by Tasmania Police, 2004/05-2015/16



Source: State Intelligence Services, Tasmania Police
Note: Data includes only those seizures that were recorded in tablet/capsule form. Totals may differ from those reported in the Department of Police and Emergency Management and ACIC annual reports due to differences in counting rules.

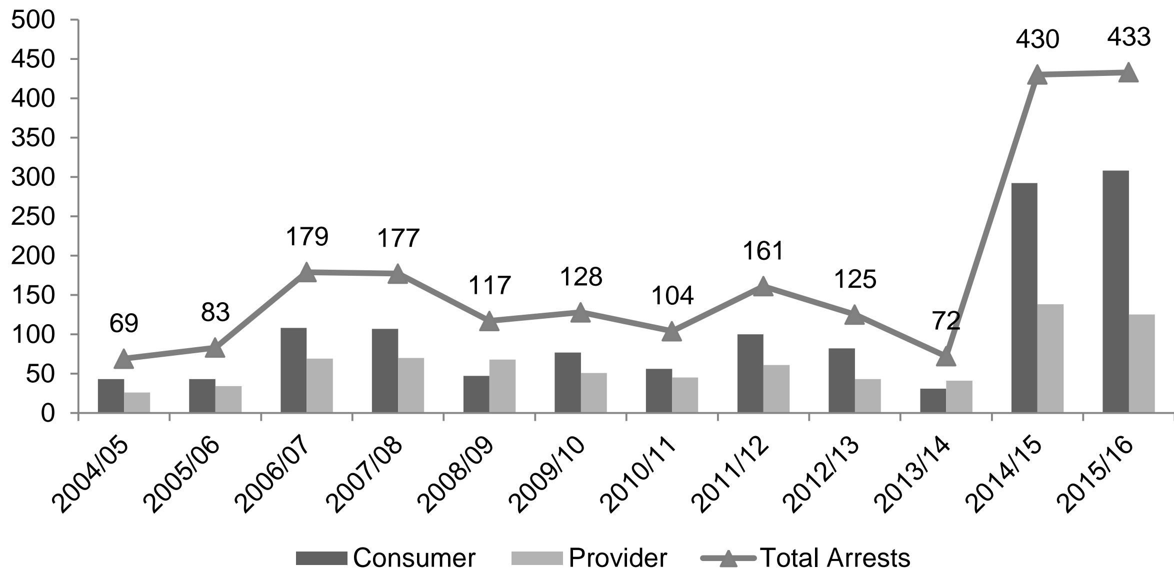
8.2.2 Methamphetamine

Arrest data for methamphetamine-related offences (Figure 43) indicated a similar number of arrests in 2015/16[11] (433 arrests) compared to 2014/15 (430 arrests), with similar number of consumer arrests (308 vs. 292) and provider arrests (125 vs. 138) recorded in 2015/16 relative to in 2014/15.

Tasmania Police seizures of drugs suspected to be methamphetamine have varied in recent years (Figure 44). The number of methamphetamine seizures decreased between 2006/07 and 2009/10 with a large peak in the weight of seizures observed in 2008/09. Between 2009/10 and 2012/13, the number of seizures increased from 111 to 241, and the weight of these seizures increased also. In 2013/14, the number of seizures had decreased, with 175 reported for the financial year, although an increased weight was observed. Data for 2014/15 yielded the highest number of seizures (828) for the 2005/06 to 2014/15 period, though the weight of the seizures was not as high as in the 2013/14 period. In 2015/16, there was a decrease in both the number of seizures (610) and the weight of the seizures (3,795 grams). It should be noted that in 2015/16 there were an additional 21 seizures coded in units other than grams.

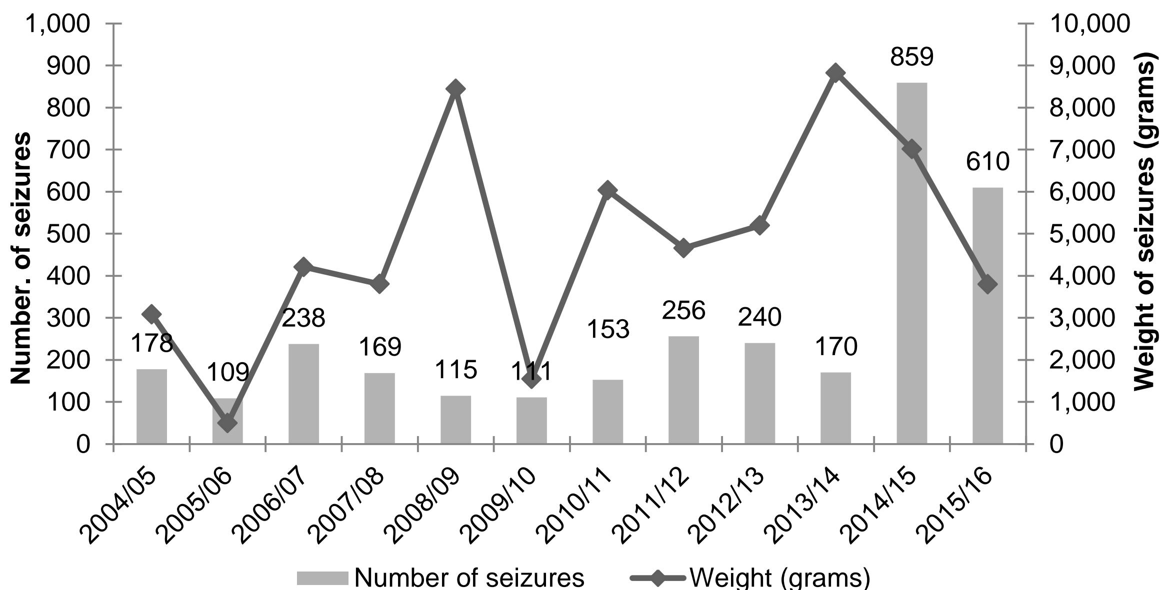
[11] 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Figure 43: Consumer and provider arrests for methamphetamine and related substances, 2004/05-2015/16



Source: ACIC and State Intelligence Services, Tasmania Police
Note: 2015/16 data were provided by Tasmania Police State Intelligence Service and are preliminary and subject to revision. Data prior to 2014/15 were provided by the ACIC. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. Cases relate to both arrest and summons charges. 'Consumer' refers to persons charged with use-type offences (e.g., possession, administration), while 'provider' refers to persons charged with supply-type offences (e.g., supply, cultivation or manufacture). Where a person has been charged with multiple offences, that person is only counted once. The sum of consumer and provider arrests may not equal total arrests due to missing data.

Figure 44: Weight and number of methamphetamine seizures made by Tasmania Police, 2004/05-2015/16



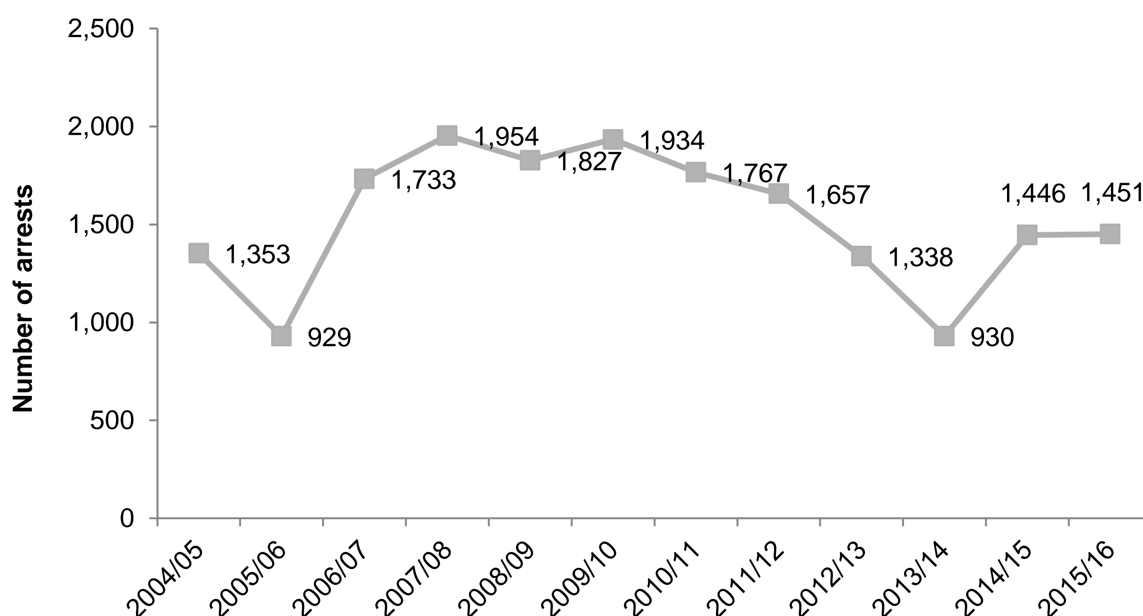
Source: ACIC and State Intelligence Services, Tasmania Police
Note: 2015/16 data were provided by Tasmania Police State Intelligence Service and are preliminary and subject to revision. Data prior to 2014/15 were provided by the ACIC. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. Seizures for 2005/06 were only reported to the ACIC for part of the financial year. In 2015/16 there were an additional 21 seizures coded in units other than grams.

8.2.3 Cannabis

Figure 45 shows the number of cannabis-related arrests made by Tasmania Police between 2004/05 and 2015/16[12]. Cautions and arrests relating to cannabis were similar in 2015/16 (1,451 arrests) compared to in 2014/15 (1,446 arrests).

Figure 46 shows cannabis seizures made by Tasmania Police, between 2004/05 and 2015/16[13]). Data for 2015/16 from Tasmania Police suggests a decrease in the number of seizures (1899 seizures) but an increase in the total weight (193,430 grams) relative to 2014/15 (but similar to 2013/14). In addition to the 1,899 seizures which were coded in grams in 2015/16, Tasmania Police reported an additional 404 seizures including 285 seizures of plants (totalling 3,609 plants) and 41 seizures of seeds (totalling 479 seeds).

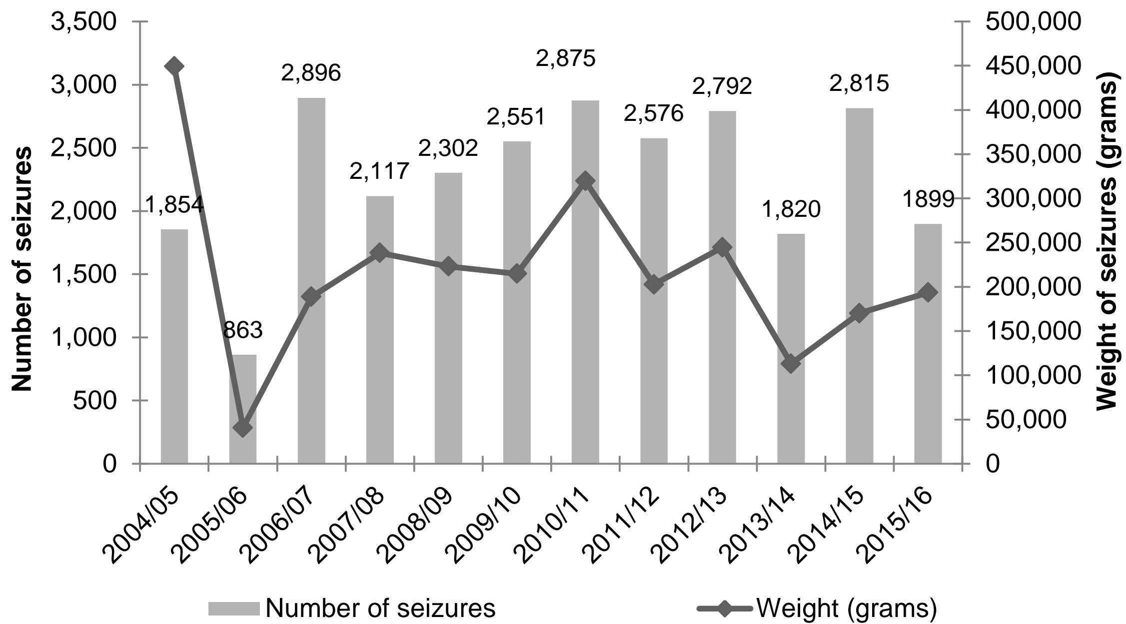
Figure 45: Number of arrests (including cautions and diversions) for cannabis-related offences in Tasmania, 2004/05-2015/16



Source: ACIC and State Intelligence Services, Tasmania Police
Note: 2015/16 data were provided by State Intelligence Services and are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. Data prior to 2014/15 were provided by the ACIC. 2005/06 arrests were only reported to the ACIC for part of the financial year.

[12] 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.
[13] 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Figure 46: Seizures of cannabis by Tasmania Police, 2004/05-2015/16



Source: ACIC and State Intelligence Services, Tasmania Police

Note: Data in 2015/16 were provided by Tasmania Police State Intelligence Service and are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. Data prior to 2014/15 were provided by the ACIC. Seizures for 2005/06 were only reported to the ACIC for part of the financial year.

8.2.4 Cocaine

There have been a small number of arrests and seizures in Tasmania in relation to cocaine between 2004/05 and 2013/14, with a small increase in the number of arrests and the weight and number of cocaine seizures in 2014/15 relative to previous years (Table 59). In 2015/16, Tasmanian Police made 9 arrests for cocaine-related offences (six consumer and three provider arrests).

Table 59: Consumer and provider arrests for cocaine, 2004/05-2015/16

	2004 /05	2005 /06	2006 /07	2007 /08	2008 /09	2009 /10	2010 /11	2011 /12	2012 /13	2013 /14	2014 /15	**2015 /16**
Arrests (n)												
Consumer	0	0	0	0	1	1	0	1	1	0	2	**6**
Provider	0	0	1	0	0	2	1	1	1	1	4	**3**
Total	0	0	1	0	1	3	1	2	2	1	6	**9**
Seizures (n)	0	1	2	0	2	3	3	7	0	2	25	**12**
Weight (g)	0	1	7	0	7	46	28	64.6	-	25	273	**30**

Source: ACIC and State Intelligence Services, Tasmania Police

Note: 2015/16 data were provided by Tasmania Police State Intelligence Service and are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. Data prior to 2014/15 were provided by the ACIC.

8.2.5 Hallucinogens

Data for hallucinogens includes tryptamines such as LSD and psilocybin (mushrooms). There have been a small number of arrests and seizures in Tasmania in relation to hallucinogens between 2004/05 and 2014/15. In the 2014/15 period, Tasmania police reported six consumer and four provider arrests in relation to LSD, and six seizures. In 2015/16, there was an increase in the number of hallucinogen seizures with Tasmania Police reporting 19 seizures, with seven consumer and one provider arrests related to LSD (Table 60)[14].

Table 60: Consumer and provider arrests for hallucinogens, 2004/05-2015/16

	2004 /05	2005 /06	2006 /07	2007 /08	2008 /09	2009 /10	2010 /11	2011 /12	2012 /13	2013 /14	2014 /15	**2015 /16**
Arrests (n)												
Consumer	0	1	1	1	2	7	6	1	0	3	6	7
Provider	1	2	1	2	0	1	2	2	3	1	4	1
Total	1	3	2	3	2	8	8	3	3	4	10	8
Seizures (n)	3	0	2	1	2	1	3	0	2	3	6	19

Source: ACIC and State Intelligence Services, Tasmania Police

Note: 2015/16 data were provided by Tasmania Police State Intelligence Service and are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

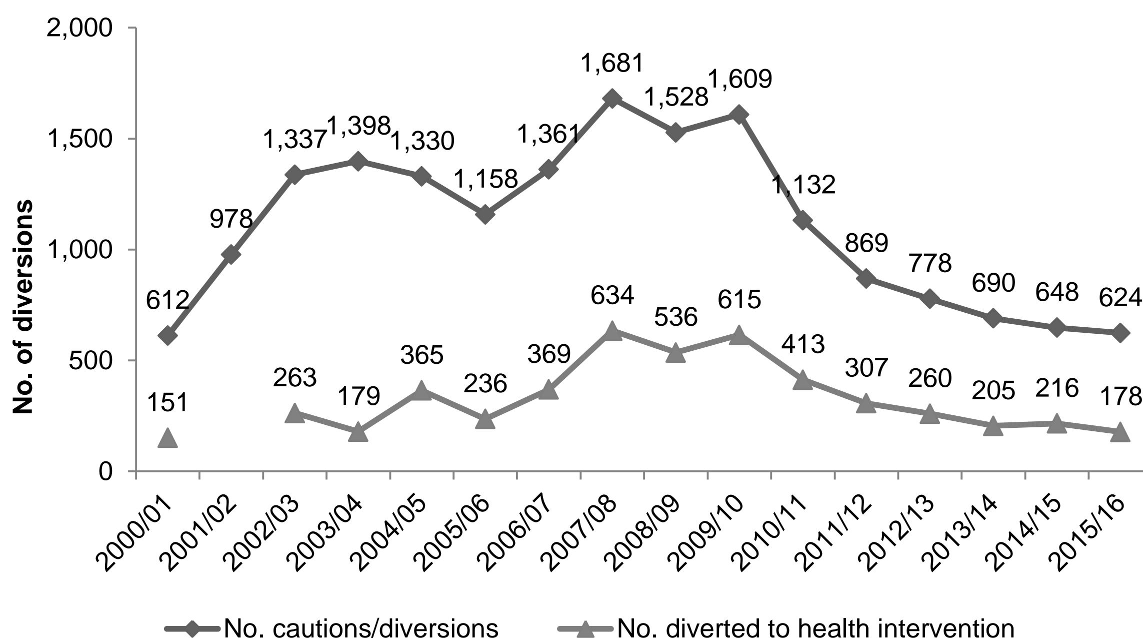
8.3 Illicit drug diversion data

Figure 47 shows the number of illicit drug diversion between 2000/01-2014/15. While there was a reduction in the number of diversions in 2010/11, from the second half of 2010/11 data no longer include persons less than 18 years of age, who are now dealt with in accordance with the *Youth Justice Act 1997* and are encouraged to access appropriate health interventions.

In 2015/16 the total number of diversions (624 diversions) [15] was slightly lower than 2014/15 (648 diversions) and in the number of second-level and third-level diversions (to health interventions) (178 diversions) was similar to 2014/15 (216 diversions).

[14] 2014/15 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.
[15] 2014/15 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Figure 47: Drug diversions or cautions issued state-wide by Tasmania Police, 2000/01-2015/16



Source: Alcohol and Drug Services, Tasmanian Department of Health and Human Services
2005/06 arrests and cautions were only reported for part of the financial year; missing data reflects cases where the relevant data were not provided to the authors; totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

8.4 Drug-related charges in Tasmanian courts

There has been a downward trend in the total number of drug-related offences over the past four years. This decline is largely due to a decrease in the number of offences relating to the possession/use of illicit drugs. In 2015/16, the number of individuals before the Hobart magistrates court (262 individuals) was stable in comparison to 2014/15 (269 individuals). Data relating to drug-related offences before the Supreme Court were not available for inclusion in the present report (**Error! Reference source not found.**).

The number of individuals incarcerated at Hobart Prison in relation to drug offences (143 individuals) was much higher than the number incarcerated in 2014/15 (72 individuals), 2013/14 (93) and 2012/13 (47 individuals). The number of offences amongst those incarcerated (430 in 2015/16) was also higher than 2013/14 and 2014/15 (217 versus 219, respectively) (**Error! Reference source not found.**).

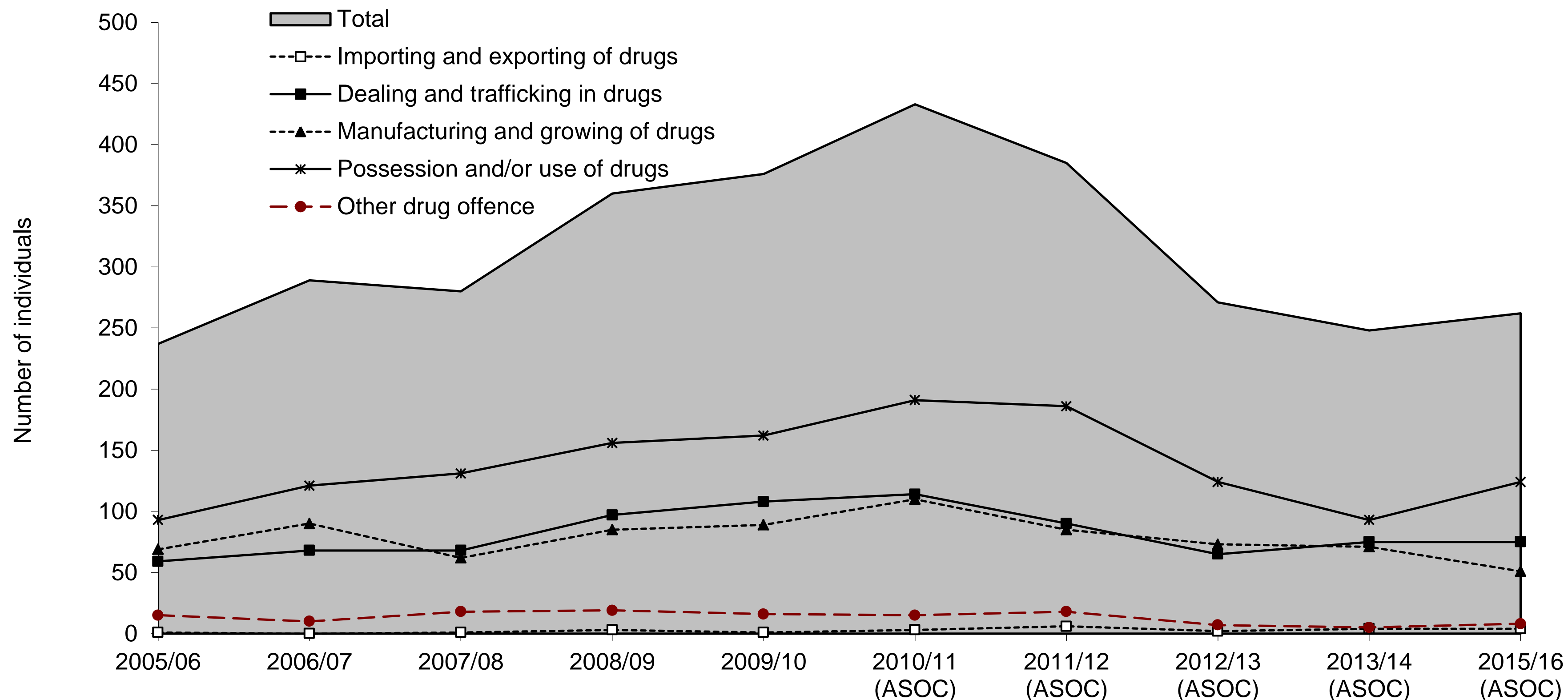
Table 61: Number of individuals before Hobart magistrates court or imprisoned on drug charges, 2004/2005-2015/16

	2005 /06	2006 /07	2007 /08	2008 /09	2009 /10	2010 /11	2011 /12	2012 /13	2013 /14	2014 /15	**2015 /16**
No. individuals (alleged no. of offences in parentheses):											
Import/export of illicit drugs	1 (1)	0 (0)	1 (1)	3 (4)	1 (1)	3 (3)	6 (13)	2 (6)	4 (6)	4 (6)	**4 (9)**
Deal or traffic in illicit drugs / commercial quantity	22 (25)	21 (25)	34 (42)	29 (30)	17 (24)	24 (28)	28 (28)	28 (30)	26 (34)	31 (31)	**26 (27)**
Deal or traffic in illicit drugs / non-commercial quantity	47 (110)	47 (108)	34 (68)	68 (126)	91 (172)	90 (173)	62 (128)	37 (103)	49 (98)	52 (96)	**49 (88)**
Manufacture of illicit drugs	1 (2)	0 (0)	1 (1)	0 (0)	0 (0)	3 (4)	1 (3)	0 (0)	0 (1)	4 (4)	**0 (0)**
Cultivation of illicit drugs	68 (78)	90 (104)	61 (77)	85 (100)	89 (99)	107 (142)	84 (103)	73 (88)	71 (79)	52 (62)	**51 (60)**
Possession of illicit drugs	91 (440)	120 (561)	129 (494)	151 (653)	159 (677)	188 (843)	179 (746)	116 (661)	90 (493)	116 (521)	**120 (739)**
Use of illicit drugs	2 (41)	1 (50)	2 (51)	5 (71)	3 (81)	3 (90)	7 (85)	8 (93)	3 (51)	1 (59)	**4 (99)**
Other Illicit drug offences	15 (129)	10 (150)	18 (151)	19 (184)	16 (169)	15 (214)	18 (191)	7 (150)	5 (127)	9 (138)	**8 (218)**
HOBART PRISON^											
No. individuals incarcerated	57	56	n/p	84	53	80	81	47	93	72	**143**
No. of offences among those incarcerated	117	128	144	165	121	183	237	111	217	219	**460**

Sources: Hobart Magistrates Court (Magistrates Court data); Corrective Services (Prison data), Department of Justice, Tasmania

*Hobart Magistrates Court data does not include individuals brought before the youth court. ^The number of incarcerations refers to cases presented before both the Supreme and Magistrates courts

Figure 48: Number of individuals before the Hobart Magistrates Court for drug-related offences, 2005/06-2015/16



Source: Hobart Magistrates Court

8.5 Tasmanian roadside drug testing data

Roadside drug testing was introduced in Tasmania in 2005. Drivers who are selected for drug-testing are required to provide a saliva sample, returning a result in approximately five minutes. Drivers who test positive are then requested to provide a blood sample for confirmation of this result. In Tasmania, drivers are typically tested for cannabis, amphetamine and MDMA.

There was a marginal increase in the number of roadside drug tests conducted on Tasmanian roads in 2015/16 relative to 2014/15 (3,738 vs. 3,431) (Table 62). Of the 3,738 tests, 2,318 drivers were required to undergo a confirmatory blood test, with 1,939 drivers confirmed to be driving under the influence of a prohibited illicit drug in their system. This represented a small decrease in the proportion of tests which returned a positive result (52 % vs. 56%). This may indicate a more targeted testing strategy. Of note, at 30 June 2016, 253 blood results were still pending analysis.

Table 62: Tasmania Police roadside drug testing statistics, 2011/12-2015/16

	2011/12	2012/13	2013/14	2014/15	**2015/16**
Number of roadside drug tests conducted	1,678	1,698	1,819	3,431	**3,738**
Proportion of drivers tested who returned positive tests for prohibited drugs (%)	34.7	30.9	35.1	56.1	**51.8**

Source: Department of Police and Emergency Management Annual Reports

Table 63 shows the number of positive drug screens conducted by Tasmania Police for drug driving between 2012/13 and 2015/16. It is important to note that in some cases an individual tested positive to both tests; whilst in some cases individuals tested negative to the initial oral fluid test (OFT) and positive to the blood test. Additionally, as the OFT is a screening test, at times this may return a false-positive result.

In 2015/16[16], 2,294 (out of 3,738) roadside drug tests and 2,179 (out of 2,318) blood tests returned a positive result. Cannabis was the most commonly detected drug, with 60% of all OFT tests and 66% of all blood tests returning positive results. Positive results for meth/amphetamine were also common in both OFT (41% amphetamine, 31% methamphetamine) and blood tests (48% amphetamine, 55% methamphetamine). Few OFT (<1%) or blood tests (3%) returned a positive result for the presence of MDMA/ecstasy.

[16] 2015/16 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Table 63: Tasmania Police positive roadside drug test results, 2012/13-2015/16

	Oral Fluid Testing				Blood Testing			
Drugs detected in positive tests (%)	2012/13 n=480	2013/14 n=535	2014/15 n=1,924	**2015/16 n=2,294**	2012/13 n=498	2013/14 n=650	2014/15 n=1,862	**2015/16 n=2,179**
Amphetamine	44	44	37	**41**	33	34	41	**48**
Cocaine	3	1	1	**1**	-	-	-	**<1**
Methamphetamine	17	28	27	**31**	39	41	49	**55**
Cannabis	57	71	65	**60**	76	77	74	**66**
Ecstasy (MDMA)	-	-	<1	**<1**	2	<1	2	**3**
Opiates	8	5	6	**6**	5	4	6	**6**
Benzodiazepines	n/a	n/a	n/a	**n/a**	7	3	1	**<1**
Ketamine	n/a	n/a	n/a	**n/a**	2	<1	<1	**<1**

Source: Tasmania Police State Intelligence Services
Note: Multiple drugs may be indicated on one oral fluid or blood test. Differences between OFT and blood test results may be due to a negative OFT but positive blood test and positive blood tests returned after breath rather than saliva testing. These results are preliminary and are subject to change, and in some instances further analysis on tests was being conducted at the time of publication.

9.0 SPECIAL TOPICS OF INTEREST

Summary:

- **NPS supply and purchasing patterns.** One-quarter (26%) of the Tasmanian sample reported using a NPS in the last 12 months, most commonly methoxetamine (23%), mephedrone (15%) and DMT (15%).
- The majority of those who had used a NPS in the last 12 months nominated a friend (73%) as their main source. Smaller numbers nominated a dealer (15%) or 'online' (8%) as their main NPS source.
- Participants were asked in the last 12 months if they provided any NPS to others. Of those who commented (n=25), 64% reported that they did not provide any NPS to others, while 36% reported that they had provided any NPS to others.
- Half (54%) of recent NPS users reported that they had experienced an unexpected adverse effect on their last occasion of use. The most common adverse effects reported were paranoia (71%), heart racing or erratic (71%), restlessness/anxiety (57%), panic (50%), overheating (43%) and numbness or coldness in fingers or toes (43%). One participant indicated that they sought emergency help after taking an NPS.
- **Online Purchasing.** In 2016, 11% of Tasmanian EDRS participants reported that they had ever purchased an illicit drug online, with 6% having done so in the previous year (2015: 16% lifetime and 10% in the past year). The majority of these participants (67%) reported that less than 25% of their drugs were purchased online.
- Purchases of illicit drugs were made from either International webstores (on the 'surface web'; 33%), 'dark net' marketplaces similar to the now-closed Silk Road (50%), or social networking sites (17%).
- Six participants reported buying a traditional illicit substance online, of which most reported this was ecstasy (any form) (33%), followed by methamphetamine (any form) (17%), pharmaceutical stimulants (17%) and LSD (17%). Two participants reported purchasing an NPS online, including mephedrone (50%) and methoxetamine (MXE) (50%).
- **Video Games and Gambling.** Almost two-thirds (63%) of the sample reported playing video games in the last six months on a median of 30 days (more than once a week; range 1-180 days). The median amount of time spent playing video games on a typical day was 60 minutes (ranged from 10mins to 9 hours). Thirteen percent of those who had played video games in the last six months believed they had an issue with video gaming.
- Over one-quarter (28%) of the Tasmanian sample had gambled on a median of five days in the last six months (range 1-180 days). Seven percent believed they had an issue with gambling.

9.1 NPS supply and purchasing patterns

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

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

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

In order to address these issues, additional questions were included in the 2016 EDRS survey which examined the supply and purchasing patterns of past year NPS consumers. As outlined in Table 64, one-quarter (26%) of the Tasmanian sample reported using a NPS in the last 12 months, most commonly methoxetamine, mephedrone and DMT. The majority of those who had used a NPS in the last 12 months nominated a friend as their main source. Smaller numbers nominated a dealer or 'online' as their main NPS source.

Participants were asked in the last 12 months if they provided any NPS to others. Of those who commented (n=26), 64% reported that they did not provide any NPS to others, while 36% reported that they had provided any NPS to others (Table 64).

For more detailed results (including differences in purchasing and supply patterns across NPS consumers), please refer to Sutherland, Barratt, Peacock, Dietze, Breen, Burns, and Bruno, 2017.

Table 64: Purchasing and supply patterns among past year NPS consumers, 2016

	2016 n=100
% used NPS last 12 months	**26**
% Main NPS used last 12 months	**(n=26)**
DMT	15
2C-x	8
NBOMe	8
Synthetic cannabinoids	8
Methoxetamine	23
DXM	0
Methylone	12
PMA	0
Mephedrone	15
Salvia Divinorum	0
Mescaline	8
5-MeO-DMT	0
Other	4
% How obtained substance[#]	(n=26)
Bought it	39
Given for free	50
Exchanged for something other than cash	19
% Main source	(n=26)
Friend	73
Acquaintance	0
Known dealer	15
Unkown dealer	4
Online dark net	8
Online surface web	0
Other	0
% Supplied NPS to others	36
% Who supplied NPS to*[#]	(n=9)
Friends	-
Relatives	-
Acquaintances	-
Strangers	-
% Method of supply*[#]	(n=9)
Gave away for free	-
Shared	-
Provided at cost price	-
Provided for cash profit	-
Exchanged	-

Source: EDRS participant interviews
* Multiple responses allowed, hence sum of percentages may exceed 100%
[#] Among those who had supplied NPS to others in the past year
- Data not published due to small numbers commenting (n<10)

9.1.2 NPS adverse effects

Among past year NPS consumers, 54% (n=14) reported that they had experienced an unexpected adverse effect on their last occasion of use. The most common adverse effects reported were paranoia (71%), heart racing or erratic (71%), restlessness/anxiety (57%), panic (50%), overheating (43%) and numbness or coldness in fingers or toes (**Error! Reference source not found.**). One participant indicated that they sought emergency help after taking an NPS.

Two KE with contact with drug users reported that decreased rates of NPS use amongst Tasmanian REU is due to the high potential for adverse effects.

Table 65: Unexpected adverse NPS effects experienced on last occasion of use, 2016

Unexpected adverse effect	n=14 %
Paranoia	71
Seeing things that were not there	7
Panicky	50
Nausea/vomiting	21
Overheating	43
Heart racing	71
Hearing things that were not there	0
Restless or anxious	57
Shortness of breath	21
Chest pain	29
Shaky hands	29
Skin discoloured (blue/red)	36
Anger/aggression	0
Skin rash	36
Numbness/coldness in gingers/toes	43
Other effects	21

Source: EDRS interviews

Other effects included: skin rash, confusion, drowsy, cold/numb finders or toes, headache, seizure, anger, and paralysed locked jaw

9.2 Online purchasing

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

Participants were asked what proportion of their drugs were purchased online. The majority (67%) reported that less than 25% of their drugs were purchased online, with around 17% reporting that between 25% and 49% of their drugs were purchased online, and 17% reporting that all of their drugs were purchased online. Results are summarised in Table 66.

In 2016, 11% of Tasmanian EDRS participants reported that they had ever purchased an illicit drug online, with 6% having done so in the previous year (2015: 16% lifetime and 10% in the past year). These recent purchases occurred between three and five times (Table 67).

Purchases of illicit drugs were made from either International webstores (on the 'surface web'; 33%, n=2), dark net marketplaces similar to the now-closed Silk Road (50%, n=3), or social networking sites (17%, n=1) (Table 66). If participants had purchased from a dark net marketplace, they were asked to specify whether the retailer they purchased from was Australian (67%, n=4), International (33%, n=2).

Table 66: Online purchasing among REU, 2016

	2016 n=100
Ever purchased an illicit drug online (%)	11
Purchased an illicit drug online in the past 12 months (%)	6
Number of times purchased illicit drugs online in past 12 months (%)	**n=6**
Once	17
Twice	0
3-5 times	67
More than 5 times	17
What proportion of all drugs were purchased online? (%)	**n=6**
Less than 25%	67
Between 25% and 49%	17
Between 50% and 74%	0
Between 74% and 99%	0
All (100%)	17
Location purchased illicit drugs online in past year (%)	**n=6**
Australian webstore ('surface web')	0
International webstore ('surface web')	33
'Dark web' marketplace (eg. Silk Road)	50
Other online market place (e.g., ebay, Gumtree)	0
Social networking site (eg. Facebook)	17

Source: EDRS interviews

Illicit substances recently purchased online were specified, see Table 67. Six participants reported buying a traditional illicit substance online, of which most reported this was ecstasy (any form) (33%), followed up methamphetamine (any form) (17%), pharmaceutical stimulants (17%) and LSD (17%). Two participants reported purchasing an NPS online, including mephedrone (50%) and methoxetamine (MXE) (50%).

Table 67: Substances purchased online in the past year by REU, 2016

Illicit drugs (%)	2016 n=6	New psychoactive substances (%)	2016 n=2
Ecstasy (any form)	33	Mephedrone	50
Methamphetamine (any form)	17	Methylone/bk-MDMA	-
Pharmaceutical stimulants	17	MDPV/Ivory wave	-
Cocaine	-	MDAI	-
LSD (acid)	17	5-IAI	-
Mushrooms	-	Benzo fury (6-APB)	-
MDA	-	BZP	-
Ketamine (special K)	-	PMA	-
GHB/GBL, 1, 4B (liquid E)	-	Methoxetamine (MXE)	50
Amyl nitrate (rush)	-	2C-x (2C-B, 2C-I, 2C-E)	-
Nitrous oxide	-	DMT	-
Cannabis	-	5-MeO-DMT	-
Tobacco	-	LSA (Hawaiian Baby Wood rose)	-
Opioids (e.g. heroin, opium)	-	DOI (Death on impact)	-
Pharmaceutical opioids	-	Mescaline	-
(e.g. oxycodone, morphine)	-	Salvia divinorum	-
Antidepressants	-	Datura (Angel's trumpet)	-
Benzodiazepines	-	DXM (cough syrup)	-
(e.g. Valium/Serepax/Xanax)	-	NBOMe (25I, 25B, 25C)	-
Steroids or PIEDs	-	Synthetic cannabinoids	-
Antipsychotics (e.g. Seroquel)	-	Other (e.g., research chemicals)	17

Source: EDRS interviews

All EDRS participants were asked about their level of knowledge of, and familiarity with, the 'dark net' and marketplaces, such as the now-closed Silk Road. Results are outlined in Table 68.

Table 68: Familiarity with the 'dark net', 2016

What is your level of knowledge of the dark net?	(n=100) %
Never heard of the 'dark net'	12% (n=12)
Only heard of the 'dark net' online but never accessed it	39% (n=39)
Researched the dark net but never accessed it	9% (n=9)
Obtained drugs through a friend who purchased them from dark	24% (n=24)
Accessed dark net marketplaces but never purchased from them	6% (n=6)
Purchased drugs from 'dark net' market places	10% (n=10)

Source: EDRS interviews

9.3 Video gaming and gambling

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

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

Among the Tasmanian sample, 63% reported playing video games in the last six months on a median of 30 days (more than once a week; range 1-180 days). The median amount of time spent playing video games on a typical day was 60 minutes (ranged from 10mins to 9 hours). Around half (51%) of those how had used video games in the last months had done so for one hour or less on a typical day of use. Thirteen percent of those who had played video games in the last six months believed they had an issue with video gaming (Table 69).

Participants were also asked questions around gambling. Of the Tasmanian sample over one-quarter (28%) had gambled on a median of five days in the last six months (range 1-180 days). Seven percent believed they had an issue with gambling (Table 69).

Table 691: Video gaming and gambling in the last six months among REU, 2016

	2016
Video games:	(n=100)
% Played video games in the last six months	63
Last six months:	(n=63)
Median days played video games (range)	30 (1-180)
Median number of minutes spent playing video games on a typical day (range)	60 (10-540)
Amount of time spent video games on a typical day:	
% 1 hour or less	51
% More than 1 hour but less than 3 hours	38
% 3 hours or more	11
% Ever had an issue with video gaming	13
Gambling:	(n=100)
% Gambled last six months	28
Last six months:	(n=28)
Median days gambled (range)	5 (1-180)
% Ever had an issue with gambling	7

Source: EDRS participant interviews

One KE reported that 'secondary gambling' – that is, gambling when high on ice – had been referred to as 'the best feeling', due to hypnotic, flashing and noisy machines. Secondary gambling was reported to result in losses of large amounts of money.

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