TASMANIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2011

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
ACC	Australian Crime Commission
ADF	Australian Drug Foundation
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH&A	Australian Government Department of Health and Ageing
AOSD	amphetamines and other synthetic drugs
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 Statisical Manual (of mental disorder)
DXM	dextromethorphan
DUI	driving under the influence
ERD(s)	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
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
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 Programs
PDI	Party Drugs Initiative (now EDRS)
PCP	phencyclidine
PMA	paramethoxyamphetamine
PWI	Personal Wellbeing Index
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
TASPOL	Tasmania Police
TAS	Tasmania
95%CI	95% confidence interval

EXECUTIVE SUMMARY

Demographic characteristics of REU

The sample of 75 regular ecstasy users (REU) interviewed in 2011 were typically in their early- to mid-twenties, with ages ranging from 17 to 39 years. Participants were generally well educated and either employed on a full- or part-time/casual basis or currently engaged in study. The majority (85%) had completed year 12, and 53% had completed tertiary qualifications after school (university or trade/technical). Few participants had come into contact with drug treatment agencies. These demographic characteristics are generally consistent with those reported among REU in the previous years of the study. However, a significantly smaller proportion reported current full-time study in 2011 relative to 2010 (11% vs. 27%), and there tended to be a greater proportion of unemployed participants (19% vs. 8%).

Patterns of polydrug 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, tobacco, cannabis, amyl nitrite, methamphetamine powder, benzodiazepines, LSD, cocaine, nitrous oxide, and mephedrone was most common. Relative to 2010, a significantly greater proportion of the 2011 sample reported recent use of LSD (43% vs. 27%), MDA (21% vs. 5%), benzodiazepines (45% vs. 27%), and 'other opioids' (16% vs. 4%), and a significantly smaller proportion reported recent use of amyl nitrate (29% vs. 51%).

Ecstasy

On average, the participants interviewed in the present study had first started to use ecstasy on a regular basis at 19 years and had been using ecstasy for a period of 5 years. Ecstasy had typically been used in tablet (95%) or capsule (80%) form in the last six months, with use of ecstasy powder less common (26%). The proportion reporting recent use of ecstasy capsules increased significantly in 2010 and remained high in 2011.

Ecstasy was typically swallowed, but snorting of ecstasy was also common. In 2010 there was a significant increase in the snorting of ecstasy tablets (89% vs. 71%) and capsules (82% vs. 38%) relative to 2009. This increase was maintained in 2011 for capsules (82%) but not for tablets (77%).

There was a wide variation in the frequency of ecstasy use among the sample, ranging from monthly to several times a week. On average, ecstasy had been used fortnightly with a median of two tablets taken in a typical session. Ecstasy was typically last used at music-related venues including nightclubs and pubs; or in private residences.

There were some concerning patterns of use among the sample from a health perspective. More than one-tenth had used more than two tablets in a typical session of use (14%) or had recently used ecstasy in a 'binge session' (a continuous 48 hour period of drug use without sleep) (14%), and one-quarter had used ecstasy weekly or more frequently (23%). 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 indicate that the safest pattern of use is to use the drug infrequently and in small amounts. Thus, those using the drug frequently or in large amounts for extended periods of time may be at a greater risk of neurological and neuropsychological harm.

Ecstasy was typically consumed in combination with other drugs – in a typical session, alcohol, cannabis, and tobacco were commonly used. A large majority (97%) reported drinking alcohol when last under the influence of ecstasy and nine-tenths of the sample (92%) had consumed more than five standard drinks. High levels of concomitant binge alcohol and ecstasy use is an issue of concern. There is an increased risk of dehydration when alcohol is combined with ecstasy, and larger quantities of alcohol can be consumed when under the influence of psycho-stimulants without experiencing immediate effects of intoxication; however, the harms associated with this use still occur. Moreover, there is emerging evidence from animal studies that alcohol may dramatically alter the pharmacology of 3,4-methylenedioxymethamphetamine (MDMA) in the brain, which may exacerbate the potential for neurological harm from the drug (Hamida et al., 2008).

Data from the NDSHS showed a steady increase in the national prevalence of ecstasy use in Australia between 1995 (0.9%) and 2007 (3.5%), with a significant decrease noted in 2010 (3.0%). The estimated prevalence of recent ecstasy use in Tasmania increased from 1.6% in 2004 to 2.4% in 2007, with a non-significant decrease found in 2010 (1.7%).

Price, purity and availability of ecstasy

The median last purchase price for one tablet of ecstasy was $30 (range $15-$40), reflecting a decrease relative to 2010 ($35). The median last purchase price for a capsule of ecstasy was also $30. No recent price changes were evident, with three-fifths (65%) indicating that the price had recently remained stable.

Relative to 2009 (10%) a significantly greater proportion of the 2010 (41%) and 2011 (47%) samples indicated that ecstasy was currently low in purity.

The proportion reporting that ecstasy was ‘easy’ or ‘very easy’ to obtain was significantly lower in 2010 (61%) and 2011 (70%) relative to 2009 (83%). While a recent decrease in availability was noted in 2010, availability was reported to be relatively stable in 2011.

In summary, there is evidence for a change in the ecstasy market in Hobart over the past few years with indications of a reduction in the price and perceived purity and availability of the drug.

Ecstasy markets and patterns of purchasing

Consistent with previous years, ecstasy was typically purchased from friends and obtained from a friend’s home, the respondent’s own home, or a nightclub/pub. Three-fifths (62%) indicated they typically purchased ecstasy both for themselves and others, with a median of three tablets purchased per occasion.

Although the ecstasy market is predominantly based on individuals sourcing the drug for other friends while making no cash profit, those that purchase ecstasy in larger quantities may be putting themselves at risk of being arrested as a provider rather than a consumer of the drug. Under Tasmanian legislation, the offences of possession, supply, and trafficking of a controlled substance are based on various factors including ‘intent’ and are not necessarily determined by the quantity of the seized substance. However, the offence of trafficking, which carries the largest penalty, may be determined by possession of a trafficable amount of a controlled substance. For ecstasy (MDMA), this trafficable amount is 10 grams.

Methamphetamine

Use of methamphetamine was relatively common among REU in 2011, with over one-half (52%) reporting recent use of some form of methamphetamine in the preceding six months. This is comparable to rates in 2010 (48%) and 2009 (52%), but significantly lower than proportions in previous years samples (63-82%). This finding is consistent with a downward trend in methamphetamine use among the general population in recent years (NDSHS; AIHW, 2007).

Methamphetamine was used on a median of three days during this period (once every two months on average) in relatively small amounts (2 points).

Recent use of methamphetamine powder was most common (47%), with low levels of use of methamphetamine base (8%) and crystal methamphetamine (5%). The proportion reporting recent use of methamphetamine powder (47%) was similar to 2010 and 2009 (40% and 46% respectively) but fewer relative to preceding years (62-77%).

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

The median last purchase price for one 'point' (0.1 g) of all methamphetamine forms was $35, which is lower than previous years ($40). The median last purchase price for one gram of methamphetamine powder ($250) was consistent with prices reported over the past two years and remained lower than that reported prior to 2009 ($300-350).

Methamphetamine powder was reported to be medium to high in purity and was considered to be 'easy' or 'very easy' to obtain among those who commented. Small sample sizes in relation to crystal and base and low levels of recent use among the current cohort both indicate very low availability of these forms in 2011.

Cocaine

Two-fifths (39%) of the 2011 REU sample reported recent use of cocaine, which is similar to the proportion among the 2009 (31%) and 2010 (49%) samples. Prior to 2006, recent use of cocaine was significantly less common with less than one-fifth reporting recent use (7-20%). The upward trend observed in recent cocaine use is consistent with national and Tasmanian population trends (NDSHS: AIHW, 2007, 2011).

Cocaine was typically snorted and was used on a median frequency of one day (range 1-30 days) in the last six months, less than the median of three days reported among the 2010 sample. An average of 0.5 grams was used in a typical session. Cocaine was typically last used at a nightclub, public bar, or private residence.

The median last purchase price for one gram of cocaine was $300 (range $200-400) and no consistent price trends were noted.

Cocaine was reported to be 'medium' in purity and this purity was reported to have remained 'stable' in the last six months.

The majority of those who commented on the availability of cocaine indicated that it was currently 'difficult' or 'very difficult' to obtain, and availability was reported to have recently remained stable in the last six months.

Cocaine had typically been purchased last from friends or dealers either at private residences or public bars.

LSD and other psychedelics

Over three-fifths (65%) of the 2011 sample had used LSD at some stage of their lives. Consistent with previous EDRS samples, lifetime use of LSD was more common among males relative to females. Two-fifths (43%) had used LSD in the six months preceding the interview which is significantly greater relative to the proportion in 2010 (27%).

One tab or one drop of liquid LSD (range 0.25-5) was taken orally in a typical session of use and LSD had been used on a median of 3.5 days (range 1-48 days) in the preceding six months.

LSD was last used at private residences such as the consumer's own home or a friend's home, as well as live music events.

The median last price for one tab of LSD in 2011 was $20 (range $10-35) which is lower relative to the median price of $25 reported in 2010 but relatively consistent with the years prior to this ($15-20).

The purity of LSD was considered by REU to be 'high' (59%) or 'medium' (35%) and to have remained stable during the last six months.

A large majority of those commenting indicated that LSD was 'very easy' (44%) or 'easy' (39%) to obtain and that availability had recently been stable (61%).

LSD was typically last obtained from friends and was most commonly last obtained from private residences, live music events, and nightclubs.

One-quarter (23%) of the 2011 sample had recently used psychedelic mushrooms, with recent use more common among younger (<24 years) than older (≥24 years) participants (based on a median split for age). Mushrooms had been used on a median of 3 days in the last six months, or approximately once every two months on average. Almost one-half (45%) of all participants had recently used some form of psychedelic drug (either LSD or mushrooms) in the last six months.

Cannabis

Over three-fifths (67%) of the 2011 sample had used cannabis during the six months preceding the interview. Cannabis had typically been smoked, with around one-third recently ingesting the drug. There has been less recent use, and a lower median frequency of use among the EDRS cohorts between 2007 and 2011 relative to previous years. While the NDSHS indicated that cannabis use was decreasing in the general population nationally between 2004 (11.3%) and 2007 (9.1%), there was a significant increase in use between 2007 and 2010 (10.3%). In contrast the recent use in Tasmania continued to decrease (but not significantly) between 2007 (10.8%) and 2010 (8.6%).

The median frequency of cannabis use was 24 days (range 1-180 days) or approximately once per week. Daily cannabis smoking was relatively uncommon (8%). The median quantities used on the last day of use during this time were 5 cones (range 1-24) or 1 joint (range 0.3-5).

The median last purchase price for one ounce of 'hydro' was $287.50 (range $225-350) and $225 for 'bush'. The median weight for one $25 bag of hydro was 1.75 grams (range 1.1-2.5 grams), compared to 2.25 grams (1.5-3 grams) for bush. However, few participants commented on the market characteristics of cannabis in 2011 and these data should therefore be interpreted with caution.

The potency of 'hydro' was reported to be high (63%) and the potency of 'bush' was reported to be medium (60%).

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

Alcohol
The entire 2011 REU sample had recently consumed alcohol, on an average of two to three days a week in the last six months. A majority (83%) had used alcohol at least weekly (but not daily), which is substantially higher than the estimate of prevalence in the general population (43.9%, among those aged 20-29 nationally – a comparable age group to the current REU cohort).

Tobacco
Tobacco had recently been used by over four-fifths (83%) of the 2011 REU sample, with two-fifths (38%) reporting daily use in the last six months, which is greater (but not significantly) relative to the proportion in 2010 and similar to 2009 (28% and 42% respectively). This proportion of daily smokers is higher than the 2010 population estimate for this age group (20-29) both in Tasmania (25.5%) and nationally (18%).

Mephedrone (4-methylmethcathinone)
The proportion of REU reporting recent use of mephedrone in 2011 (27%) was significantly fewer relative to the significant increase noted in 2010 (47%). Mephedrone was snorted or swallowed on a median of 3 days in the last six months, indicating a decrease in frequency of use relative to 2010 (6 days). Of those who commented on the last source of mephedrone (n=19), a majority had last obtained mephedrone from a friend (58%) or dealer (32%), with the remainder (11%) obtaining the drug from the internet.

Patterns of other drug use
Consistent with previous years, less than one-tenth reported recent use of ketamine (8%) or GHB/GBL/1,4B (3%).

Almost one-third (29%) reported recent use of amyl nitrite which is significantly less than the proportion in 2009 and 2010 (51%). Frequency of use was relatively low at approximately once every two months.

One-third (36%) reported low frequency (less than monthly) use of nitrous oxide.

Over two-fifths (45%) of REU had used benzodiazepines during the last six months, compared to a significantly smaller proportion in 2010 (27%). One-third (36%) reported recent illicit use of benzodiazepines, which is higher relative to 2010 (23%) and much higher than recent estimates of prevalence in the general population (1.5%). However, use of illicit benzodiazepines was relatively low in frequency, at 5.5 days in the last six months.

Less than one-tenth of the sample (8%) had recently used antidepressants; 7% reported recent licit use and 1% reported recent illicit use.

The use of other pharmaceuticals and opioid drugs was relatively rare among the regular ecstasy users interviewed in the current study, and those that had recently used these drugs had generally done so infrequently. Over one-tenth (15%) of REU reported recent illicit use of pharmaceutical stimulants (such as dexamphetamine or methylphenidate) in 2011. The median frequency of use was 5 days (range 3-20 days) in the last six months. Only small proportions of the 2011 sample had recently used heroin (8%), methadone (4%), and buprenorphine (3%). However, nearly one-fifth (16%) had recently used other opioids

(restricted opioid pharmaceuticals such as morphine and oxycodone, and alkaloid poppy derivatives), a significantly greater proportion relative to 2010 (4%). Less than one-tenth reported recent use of codeine (9%) or stimulant based (5%) over-the-counter preparations.

Recent use of other emerging psychoactive substances was relatively low; however, one-tenth of the sample reported recent use of capsules of 'unknown contents' (15%) or use of 'herbal highs' (11%).

Health-related issues

Overdose. Two-fifths (41%) of the 2011 REU sample reported an overdose episode in the last six months. While this is substantially higher than previous years (6-18%), 2011 data is not directly comparable to previous years due to a broadening of the definition of overdose applied. In 2011, 13% reported a recent overdose episode on a stimulant drug (e.g., methamphetamine, ecstasy and other stimulants) and 32% reported a recent overdose on a depressant drug (e.g., alcohol and other opioids). While these symptoms of overdose were not medically trivial, most participants had not received any formal medical treatment in relation to an overdose episode.

Ecstasy dependence. One-tenth (12%) of REU reported experiencing significant symptoms of dependence in relation to ecstasy.

Methamphetamine dependence. Less than one-tenth (5%) of those who had recently used methamphetamine had experienced significant symptoms of dependence in relation to methamphetamine.

Access to health services. Despite regular substance use, just over one-tenth (13%) 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 (50%), a counsellor (17%) or an emergency department (17%). Participants were most likely to access services in relation to the use of alcohol (42%), polydrug use (17%), or opioid use (17%).

Mental health problems. One-quarter (27%) of the 2011 REU sample reported experience of mental health problems during the six months prior to the interview, most commonly anxiety (60%) and/or depression (50%). Over two-thirds (70%) of those who had experienced mental health problems had attended a health professional in relation to these problems during this time.

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 2007/08; ABS, 2009). The proportion of the sample with scores categorised as 'very high' was similar to the general Australian population; however, the proportion of REU with scores classified as 'high' was significantly greater than the general population. Those classified in the 'high' range have increased rates of experience of mental health problems and may benefit from interventions with health professionals.

Other problems. Over one-half (59%) of the 2011 sample reported a recurrent drug-related problem, suggestive of possible substance abuse, a significant increase relative to 2010. This overall increase was largely due to an increase in the proportion who reported that they had recurrently been under the influence of substances in situations that could have put themselves or others at risk (40% vs. 22%). In addition, one-quarter (27%) reported that drug use had recurrently interfered with their responsibilities at home, work, or school during the six months preceding the interview and smaller proportions had experienced recurrent social/relationship (15%) problems or legal/police problems (5%) in relation to drug use. Problems were most commonly attributed to ecstasy, cannabis, and alcohol.

Drug treatment data
While a consistent number of calls have been made to the Tasmanian Alcohol and Drug Information Service over the last few years in relation to ecstasy (4-17 calls), these account for a small percentage (between 0.7% and 2.6%) of the calls made to this service.

Data from the National Minimum Data Set (NMDS) for alcohol and other drug treatment services in Tasmania show that ecstasy was the principal drug of concern in only 1.9% of all treatment episodes in the 2009/10 period (equating to approximately 28 treatment episodes out of a total of 1,454).

There has been a substantial reduction in Tasmanian cannabis-related hospital admissions over the last two reporting periods with 32 cases reported in 2008/09. This marks a return to admission rates that are slightly lower but more comparable to the national rates (per million population), as Tasmanian admission rates were substantially higher than the national rates in the 2006/07 reporting period.

Tasmanian and national hospital admission rates for methamphetamine increased steadily between 1999/00 and 2002/03, followed by a plateau between 2003/04 and 2005/06. In 2006/07 there was a substantial increase in Tasmanian rates, to a level considerably higher than the national figure reported in both 2006/07 and 2007/08. In 2008/09 there was a substantial reduction in Tasmanian admissions, with a rate well below the national admission rate observed for this period (76 vs. 157 admissions per million population).

Risk behaviours

Injecting drug use. One-tenth (13%) of the 2011 REU sample had recently used substances intravenously. Heroin, methamphetamine, and other opioids were typically the first drug ever injected and the most common drug ever and recently injected. Sharing of needles and equipment was not common.

Blood-borne viral infections. Three-fifths (60%) of the 2011 REU sample had been vaccinated for hepatitis B, over half (54%) had been tested for hepatitis C, and three-fifths (60%) had been tested for HIV.

Sexual risk behaviour. Over three-fifths (64%) of REU reported penetrative sex with a casual partner during the six months preceding the interview and three-fifths (59%) reported sex with a casual partner while under the influence of drugs, most commonly alcohol, ecstasy, or cannabis. When under the influence of ERDs, only around one-fifth reported 'always' using protective barriers with a casual partner and approximately one-quarter 'never' used protective barriers. Over one-half (57%) of those who reported sex with a casual partner indicated that they did not use any protective barriers on the last occasion in the last six months.

One-fifth (20%) of the sample reported that they had never had a sexual health check-up. A majority of the sample (81%) reported that they had never been diagnosed with a STI and the remainder had been diagnosed in the last year (1%) or more than a year ago (18%). The most commonly diagnosed STIs were chlamydia (93%) and herpes (21%).

Drug driving. Of those who had driven a car, over one-third (37%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months, and two-fifths (40%) reported driving within an hour of taking illicit drugs in the last six months. Most commonly, participants reported driving under the influence of cannabis, ecstasy, or methamphetamine powder.

The proportion of REU reporting DUI of ecstasy and methamphetamine has gradually declined over the last six years while DUI of cannabis has remained relatively stable. In addition, DUI of ecstasy was perceived to be more risky in terms of crash risk and to some extent risk of apprehension (being 'caught' by police) in 2011 when compared to attitudes among the 2007 sample. DUI of cannabis was perceived to be more risky in terms of risk of apprehension but not crash risk in 2011.

Alcohol Use Disorders Identification Test (AUDIT). One-third (36%) 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 significantly greater than the proportion categorised in zone 4 among the 2010 sample (21%). A further 26% scored in zone 3 (harmful or hazardous drinking), one-third (32%) scored in zone 2 (alcohol use in excess of low-risk guidelines), and just 6% scored in zone 1 (a level reflecting low-risk drinking or abstinence).

Binge drug use. One-fifth (22%) had recently 'binged' on ecstasy or related drugs (a continuous period of use for more than 48 hours without sleep), on a median of two occasions in the last six months. Substances most commonly used in a binge session of use were ecstasy, alcohol, cannabis, methamphetamine, energy drinks, LSD or cocaine.

Criminal activity, policing and market changes.
The self-reported level of criminal activity among the 2011 REU sample was relatively low. With the exception of property crime (15%), around one-tenth of the REU interviewed had committed other criminal offences during the one month preceding the interview. Almost one-fifth (16%) had been arrested during the preceding 12 months, generally for reasons unrelated to drug use.

Law enforcement data
There was a substantial increase in the number of both consumer and provider arrests and seizures in relation to ecstasy between 2006/07 and 2009/10 relative to any previous years. In 2010/11 a substantial reduction in both the numbers of arrests and number of seizures was noted relative to recent years. It is possible that the decrease in ecstasy seizures is related to the changes in the ecstasy market reported by REU (i.e., decreased price, purity, and availability of the drug in Hobart) and the recent increase in the use and availability of capsules containing substances such as mephedrone or 'unknown substances' among REU.

While the number of methamphetamine-related arrests substantially increased in the 2006/07 and 2007/08 periods, there have been reductions in recent years with a substantial reduction in arrests between the 2010/11 and 2009/10 reporting periods (95 vs. 128). The number of methamphetamine-related seizures increased gradually between 1999/00 and 2006/07. Since this time there has been a reduction; however, an increase in both the weight and number of seizures was noted in 2010/11 relative to 2009/10.

Since 2006/07 the number of cannabis-related arrests and cautions has remained relatively stable while the weight and number of seizures have increased gradually. This upward trend has continued, with an increase in both the weight and number of seizures observed in 2010/11 relative to 2009/10.

The total number of drug diversions or cautions and the number diverted to health interventions were substantially lower in 2010/11 compared to 2009/10. A reduction was also noted in the number of ecstasy-related diversions (8 vs. 25).

The number of individuals before the Hobart Magistrates Court and the number of individuals incarcerated at Hobart Prison in relation to drug offences were greater in

2010/11 relative to 2009/10. However, in 2010/11, the Magistrates Court introduced a new data coding system (ASOC 2008), which means direct comparisons with data from previous years should be made with caution.

Special topics of interest

Online drug-related activity. A large majority of REU (88%) had been online during the last six months. Among those who had been online during this time, 35% had been online to get information about drugs (most commonly ecstasy, LSD and mushrooms) but none reported posting information about drugs during this time. One-half of REU who sought online information reported engaging in a range of behaviours due to information they had accessed online. These included: trying a drug not used before (33%), altering a drug dose (8%), stopping use of drug (8%), and using a new combination or route of administration (4%).

Sleep patterns. Almost one-third (31%) of REU reported problems with sleep and over one-quarter (28%) reported that their current drug use had impacted negatively on sleep. One-quarter (27%) of the sample reported that they had used sleep medication in the past month (most typically less than once a week) with Valium (diazepam) most commonly used.

Heavy Smoking Index. Over one-quarter (27%) of daily smokers reported smoking their first cigarette within 5 minutes of waking and one-third (32%) between 5 to 30 minutes of waking. One-half (50%) of daily smokers reported smoking 10 or less cigarettes per day with the remainder smoking more than this. One-third of daily smokers (32%) scored 4 or above indicating moderate to high nicotine dependence.

Implications

It is important to note that 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 ecstasy and related drugs, and the prevalence of ecstasy and other drug use cannot be inferred from this study. However, the study is designed to identify emerging trends and important issues, and the findings of the 2011 EDRS suggest the following key areas for consideration in future policy.

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

There are currently no services that specifically cater to users of ecstasy and related drugs 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. Although approximately one-third of the REU interviewed among previous EDRS cohorts were actively seeking harm-reduction information in relation to the substances that they chose to use, these messages were not necessarily reaching other consumers.

Considering that 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 the fact that REU do not typically come into contact with traditional health services, it is likely that harm-reduction programs will attain maximum impact if delivered through peer-based organisations and mediums appropriate to the target group such as internet sites and outreach workers or information at events. By contrast, illicit-drug education campaigns based around 'fear arousal' have been shown to be ineffective or to even have contradictory effects (Ashton, 1999; Skiba, Monroe & Wodarski, 2004; West & O'Neal, 2004), and these programs, and associated sensationalised reporting of drug use in the media, run the real risk of undermining the potential for successfully reducing health harms amongst this population.

2. Focused interventions to reduce the harm associated with high risk patterns of drug use, polydrug use, binge drinking (including binge drinking in combination with ecstasy) and tobacco use.

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 indicate that the safest pattern of use is to use the drug infrequently and in small amounts. Thus, 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, more than one-tenth had used more than two tablets in a typical session of use (14%) or had recently used ecstasy in a ‘binge session’ (a continuous 48 hour period of drug use without sleep) (14%), and one-quarter had used ecstasy weekly or more frequently (23%).

Given that ecstasy was typically consumed in combination with other drugs among the current REU cohort, 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 the REU interviewed in the present study. Nine-tenths of the REU sample (92%) 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; however, the harms associated

with this use still occur. Moreover, there is 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 metabolite in particular regions, which may exacerbate the potential for neurological harms or problems such as dependence, arising from use of the drug (Hamida et al., 2008).

Hazardous drinking practices are also an issue of general concern in this population. A large majority (83%) of the 2011 REU sample had used alcohol at least weekly during the six months preceding the interview, which is substantially higher than the estimate of prevalence in the general population (43.9%, among those aged 20-29 nationally – a comparable age group to the current REU cohort). A large majority of REU (94%) 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 and there was a significant increase in the proportion categorised in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence) in 2011 relative to 2010 (36% vs. 21%). Additionally, the majority of overdose episodes reported by REU in the current and previous EDRS cohorts involved alcohol and/or polydrug use.

Tobacco use is very common among the EDRS cohorts with over four-fifths (83%) of the 2011 sample reporting use in the last six months and one-third (31%) reporting daily use during this time. This proportion is higher than that evident in the 2010/09 REU samples and 2010 Tasmanian and national population estimates in equivalent age ranges. Additionally, the incidence of intermittent tobacco use is extremely high. There is a clear need for focused interventions targeting tobacco use among this population. In addition, 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 to target this group.

3. Continued monitoring and focused interventions to increase the awareness of the effects and risks of the use of mephedrone, cocaine, and other emerging substances.

Trends have been noted among the 2010/2011 REU samples that indicate significant changes in the ecstasy and related drug markets in Hobart. Increases in the use of ecstasy capsules and in the snorting of ecstasy as a route of administration seen in the 2010 sample were maintained in 2011. In addition, there were was evidence for a perceived reduction in the price, purity, and availability of ecstasy over the last two years. This has been coupled with a significant increase in the use of mephedrone capsules in 2010 (47%) which was partially maintained in 2011 (27%). Furthermore, 15% of the sample reported recent use of capsules of ‘unknown contents’ in 2011, suggesting the emergence of an illicit capsule market in Hobart and that consumers are not necessarily aware of what they are consuming. In addition, notable proportions reported the use of other psychoactive drugs in the tryptamine family (e.g., 2CI, 2CB, 2CE, 2C-T-7, DMT), or other substances such as methylone, DOI, DMT, and MDPV in recent years.

These ‘emerging psychoactive substances’ such as mephedrone, methylone and 2CI/2CB/2CE are relatively new substances and little is known about the effects and risks of their use. Given these marked changes it is imperative that the use of emerging psychoactive substances 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.

In addition, there has been a notable increase in the recent use of cocaine in recent years with significant increase in recent use in 2011 (39%) and 2010 (49%) relative to 2009 (31%). While the median frequency of cocaine has remained relatively low (one day in the last six months) and the perceived availability of cocaine is low, this is clearly an emerging market in

Hobart. As such, there is a clear need for continued monitoring and dissemination of harm reduction information in relation to cocaine.

4. Interventions aimed at increasing awareness of safe sexual practices

Over one-half (57%) of REU who reported sex with a casual partner indicated that they did not use any protective barriers on the last occasion in the last six months. Use of protective barriers among this population is an issue of concern given the rapidly increasing notifications of sexually transmitted infections in the general population – for example, the rate of notified cases of Chlamydia infections have *almost doubled* between 2002 and 2009 from 122.4 per 100,000 population to 234.5 per 100,000 (Australian Institute of Health and Welfare, 2006). Among those interviewed in the present study, one-fifth reported that they had never had a sexual health check-up.

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

The level of harm experienced by the majority of participants was relatively low, with few reporting recent experience of mental health problems, or high levels of psychological distress, few people accessing health services in relation to drug use, and most not experiencing significant symptoms of dependence in relation to either ecstasy or methamphetamine.

However, there was a subset of this cohort that experienced notable symptoms of dependence, recent mental health problems and clinically significant levels of psychological distress. One-quarter (27%) of the 2011 REU sample reported recent experience of mental health problems (most commonly depression and/or anxiety), with a minority of these (30%) not attending a health professional in relation to these problems, possibly indicating an unmet demand. This finding 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, just over one-tenth (13%) of the sample had recently accessed health services in relation to drug use. The services most commonly accessed by REU were a GP, counsellor, or emergency department. 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.

Very few participants had accessed health services in relation to overdose episodes. Two-fifths of the sample reported a recent overdose episode. However, the majority 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 this may or may not be appropriate, or increased access to emergency services, may also be of benefit for this group.

6. Increased awareness of legislation among local consumers with regard to possession, supply, and trafficking of controlled substances.

Although the ecstasy market is predominantly based on individuals sourcing the drug for other friends while making no cash profit, those that purchase ecstasy in larger quantities may be putting themselves at greater risk of being arrested as a provider rather than a consumer of the drug. Three-fifths (62%) indicated that when they purchased ecstasy they typically purchased the drug both for themselves and others, and a median of three tablets were purchased per occasion. This indicates a need for increased awareness among REU in Tasmania of the risks associated with supplying ecstasy to friends, so that they are able to make informed choices with regard to this.

In addition, consumers are not always aware of the legislation regarding emerging substances such as mephedrone. For example, mephedrone was originally marketed as a 'legal high' until recently legislated against in the UK and other European countries. While mephedrone is a border-controlled drug in Australia and is illegal in most Australian jurisdictions due to analogue laws or recent legislation changes, consumers may not be aware of the legal status of this and other emerging substances. Some companies have also marketed substances as being free of mephedrone in order to continue their promotion as 'legal highs'; however, in some cases testing has revealed these drugs to contain proscribed substances, placing consumers at unwitting legal risk (Brandt et al., 2010).

7. Evaluation of the impact of, and further targeting of, drug driving interventions among regular drug consumers

A substantial proportion of the consumers interviewed in the EDRS study in 2011 reported driving while affected by alcohol (over one-third of those with access to a vehicle) or drugs (two-fifths of those with access to a vehicle). Education and law enforcement interventions designed to reduce the prevalence of drug driving are constantly evolving, and monitoring of the impact of such strategies is recommended, particularly where such evaluation could be used to tailor interventions to this demographic. The proportion of REU reporting DUI of ecstasy and methamphetamine has gradually declined over the last six years while DUI of cannabis has remained relatively stable. It is possible that this reduction is related to the recent introduction of roadside drug testing legislation in Tasmania. In addition, DUI of ecstasy was perceived to be more risky in terms of crash risk and to some extent risk of apprehension (being 'caught' by police) by the current sample when compared to attitudes among the 2007 sample.

8. Basic science research in relation to emerging drugs (mephedrone, 2CI, 2CB, 2CE) in order to establish best-practice harm reduction information.

A substantial proportion of the Tasmanian EDRS sample reported recent use of mephedrone (4-methylmethcathinone) and notable proportions reported the use of 'research chemicals' in the tryptamine family (e.g., 2CI, 2CB, 2CE, 2C-T-7, DMT), or other 'emerging psychoactive substances' such as methylone, DOI, DMT and MDPV. There exists a paucity of information about the physiological or neuropharmacological effects of these drugs, and virtually no information about how these drugs may interact with other illicit substances, pharmaceuticals or existing medical issues. This poses substantial risk of harm to the health of consumers. Notably, the rates of use of these substances was greater than drugs such as GHB or ketamine, both of which have received substantially greater media and research attention, and for which harm reduction information is relatively widely available. While the use of such substances may fluctuate due to the changing legal status of these drugs, basic science research in regard to the actions of these drugs in the body and brain, particularly in relation to the most well-established of these drugs, would be a crucial first step for the development of evidence-based harm reduction information that could contribute to maintaining the health of consumers of these drugs.

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 has been conducted in every Australian state and territory annually since 1999, following successful trials in 1996 and 1997. The IDRS is currently funded by the Australian Government Department of Health and Ageing and was designed to monitor trends and emerging issues in illicit drug use in order to provide a timely early warning system for health and law enforcement services, to provide direction for subsequent further research, and to provide an evidence base for policy. The IDRS focuses on drugs such as methamphetamine, opioids, cannabis, and cocaine, and issues that pertain particularly to the intravenous use of drugs in Australia. The methodology of the IDRS involves the triangulation of three data sources including a survey of people who regularly inject illicit drugs, a survey of 'key experts' (KE) who have regular contact with injecting drug users, and an examination of 'indicator data' or available existing data sources.

The EDRS uses the same triangulated methodology as the IDRS, but aims to examine emerging trends in the use, price, purity and availability of 'ecstasy and related drugs' (ERDs) in Australia. ERDs 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, LSD, ketamine and GHB. 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 and Ageing and the Ministerial Council on Drug Strategy as a project under the cost-shared funding arrangement in 2005 and by the Australian Government Department of Health and Ageing since 2006.

The current report contains new data collected in Tasmania in 2011 and Tasmanian trends between 2003 and 2010 (Bruno & McLean, 2004b; Matthews & Bruno, 2005, 2006, 2007, 2008, 2009, 2010, 2011). National reports including jurisdictional comparisons are available from the National Drug and Alcohol Research Centre, University of New South Wales (Black et al., 2008; Breen et al., 2004; Dunn et al., 2007; Sindicich et al., 2009, 2010, 2011;Stafford et al., 2005, 2006).[1]

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) in Hobart and surrounding areas; to examine and identify trends in the price, purity, and availability of ERDs in Hobart; to examine the nature and incidence of risk behaviours and health-related harms among the group of participating REU; 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. An overarching aim is to, where possible, incorporate converging data from KE and indicator data and to identify emerging trends through comparison with EDRS data collected in Hobart between 2003 and 2009 (Bruno & McLean, 2004b; Matthews & Bruno, 2005, 2006, 2007, 2008, 2009, 2010, 2011).

[1]These reports are available electronically at the National Drug and Alcohol Research Centre 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 regular ecstasy users (REU) in Hobart, interviews with key experts (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 ecstasy and related drugs 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 regular ecstasy users (REU)

2.1.1 Recruitment

Seventy-five regular ecstasy users were interviewed using a structured face-to-face interview between April and July 2011. 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 in the last six months, an age of at least 17 years, and having resided in the greater Hobart area for at least twelve months prior to the interview. Participants were recruited through posters and flyers distributed in the Hobart area at various locations (cafes, bars, nightclubs, clothing stores, music stores, universities, youth services, hairdressers), internet forums, and through snowball methods (word of mouth and recruitment through friends and associates). In 2011, REU reported hearing about the study through 'snowballing' methods (peer referral) (65%), followed by flyers (28%), and street press (5%). Two-fifths (44%) of the 2011 cohort had participated in the EDRS in previous years.

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 65 minutes to complete (range 40-150 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 information in regard to 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; driving under the influence; safe sex; problems associated with drug use (e.g., work/study, risk to self/others, social, legal problems); psychological distress; mental health; self-reported criminal activity; perceptions of police activity; and general trends in ERD markets. In addition, the following special interest modules were included in 2011: online drug related activity, sleep patterns and heavy smoking index.

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[2] 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 below 24 years, n=56) and an 'older' group (aged 24 years and over, n=44). All statistical analyses were conducted using Statistical Package for the Social Sciences (SPSS) 19.0 for Windows (SPSS Inc., 2010).

2.2 Survey of key experts (KE)

Key experts (KE) who had regular contact with ecstasy users in the six months preceding the interview were eligible to participate in the study. Nineteen KE participated in semi-structured face-to-face interviews at either their place of work, private residences, locations such as coffee shops or bars or over the phone between July and September 2011. KE included youth workers (n=2), law enforcement personnel (n=4), ambulance/emergency workers (n=1), alcohol and drug counsellors/workers/psychologists (n=5), NSP workers (n=3), a GP (n=1), a nurse (n=1) a pharmacist (n=1), and a lawyer (n=1).

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 and are included in the text of the report. Information from single KE are also 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 SPSS 17.0 for Windows (SPSS Inc., 2008).

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 obtained 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 (in comparison to other jurisdictions involved in the EDRS), 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.

Data sources that fulfil the majority of these criteria and have been included in this report are as follows.

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

National Drug Strategy Household Surveys (1998, 2001, 2004, 2007, 2010). The National Drug Strategy Household Survey aims to determine the prevalence of the use of illicit drugs such as cannabis, methamphetamine, hallucinogens, cocaine, and ecstasy/designer drugs among the general community. Tasmanian participants were English-speaking individuals, over the age of fourteen, who lived in private residences in Tasmania during 1998 (n=1,031), 2001 (n=1,349), 2004 (n=1,208), 2007 (n=1,143) and 2010 (n=1,060) (Australian Institute of Health and Welfare, 1999, 2000, 2002a,b, 2005a,b, 2008a,b, 2011). 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.

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 2003/04 to 2010/11 reporting period for each drug type and from 2000/01 to 2010/11 for ecstasy.

Police 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, 2000, 2001, 2002) and Illicit Drug Data Reports provided by the Australian Crime Commission (ACC) (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011). The ABCI and ACC 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. Data on the purity of drugs seized were also provided through the ACC; however, not all drug seizures are analysed for purity. ACC data for the 2010/11 financial year were unavailable at the time of publication but, where possible, preliminary data were provided by Tasmania Police State Intelligence Services.

Public hospital admission data – Australian Institute of Health and Welfare. The Australian Institute of Health and Welfare has provided hospital morbidity data for 'principal' and 'additional' diagnoses in relation to drug use from the year 1999/00 to 2008/09. Hospital admission data for the 2009/10 reporting period were not available at the time of publication. 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 National Minimum Data Set for Alcohol and other Drug Treatment Services (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 for the financial years between 2000/01 and 2009/10. Data for the 2010/11 financial year were not available at the time of publication.

3.0 DEMOGRAPHICS

Summary:

- The sample of 75 REU interviewed in 2011 were typically in their early twenties (range 17-39 years). Two-thirds of the sample were male (65%).
- A majority of participants had completed Year 12, and 53% had completed tertiary qualifications after school (university or trade/technical).
- Over one-half (55%) were employed (either full-time or part-time/casual) and one-quarter (27%) were currently students.
- Few participants had come into contact with drug treatment agencies (4%).
- These demographic characteristics are generally similar to previous cohorts. However, significantly fewer participants reported current full-time study in 2011 than 2010 (11%, vs. 27%) and there tended to be a greater proportion of unemployed participants (19 vs. 8%).

3.1 Overview of REU sample

Table 1 shows the demographic characteristics of REU interviewed for the EDRS in 2011. Just over three-fifths of the sample was male (65%). The mean age of participants was 24 years (range 17-39 years), and there was no significant difference between the mean age of males (24 years) and females (24 years) (p>.05).

The majority of participants nominated their sexual identity as heterosexual (91%) and spoke English as their main language (100%). No participants were of Aboriginal and/or Torres Strait Island (A&TSI) descent.

Participants typically lived in their own accommodation (owned or rented) (81%), with a smaller proportion living in their parents' or family's home (13%).

Participants had completed 12 years of school education on average (range 8-12 years), and the majority of participants (85%) had completed Year 12. Three-fifths (60%) had completed tertiary qualifications after school, with two-fifths (42%) having completed a university degree and one-tenth having completed a trade/technical qualification (11%).

One-third of participants were employed on a full-time basis (32%), one-quarter were currently students (11% full-time, 16% part-time), almost one-quarter were employed on a part-time/casual basis (23%), and around one-fifth were currently unemployed (19%). One-half of the sample (50%) reported an annual income between $13,000 and $31,199.

Few REU were receiving drug treatment at the time of interview (4%).

The demographic characteristics of the 2011 sample were generally similar to those reported among the cohorts between 2003 and 2010. However, significantly fewer participants reported current full-time study in 2011 (11%, 95%CI 6-20) compared to 2010 (27%, 95%CI 19-36%) and there tended to be a greater proportion of unemployed participants in 2011 (19 vs. 8%, p=.06).

Few KE commented on the demographic characteristics of the ecstasy consumers whom they had regular recent contact with. Several KE commented that ecstasy use was more common among a younger cohort (17-25 years), and those who came into contact with REU in a treatment setting typically indicated that ecstasy was not the primary drug of concern (n=4).

Table 1: Demographic characteristics of REU sample, 2003-2011

	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Mean age (range)	24 (18-45)	23 (18-32)	24 (18-44)	25 (18-61)	23 (17-40)	24 (18-47)	24 (18-42)	23 (17-36)	**24 (17-39)**
Sex (% male)	61	61	55	58	54	60	64	55	**65**
Heterosexual (%)	85	93	94	91	93	91	98	96	**91**
English speaking (%)	100	100	100	99	100	99	100	100	**100**
A&TSI (%)	6	2	2	2	0	1	-	1	**0**
Accommodation									
Own/rented (%)	75	82	73	80	70	74	77	69	**81**
Live with family (%)	22	17	27	19	21	26	21	31	**13**
Boarding house/	2	1	-	1	9	-	1	-	**1**
Hostel/Refuge (%)	1	-	-	-	-	-	-	-	**-**
No fixed address (%)	-	-	-	-	-	-	1	-	**4**
Mean school years* (range)	12 (8-12)	12 (10-12)	12 (10-12)	12 (9-12)	12 (8-12)	12 (10-12)	12 (10-12)	12 (10-12)	**12 (8-12)**
Tertiary qualifications									
Trade/technical (%)	23	21	25	28	29	26	22	19	**11**
University (%)	21	35	26	19	23	27	24	41	**42**
Employment (%)									
Full-time	27	28	41	33	27	36	27	34	**32**
Part-time/casual	17	26	19	21	19	23	16	21	**23**
Full-time student	40	37	31	32	33	19	22	27	**11**
Student/employed		n/a	n/a	n/a	9	16	20	10	**16**
Home duties	-	-	2	-	-	-	1	-	**-**
Not employed	16	8	5	14	11	6	14	8	**19**
Annual income (%)	n/a	n/a	n/a	n/a	n/s	n/a			
$1-7,799							3	6	**3**
$7,800-12,999							11	7	**10**
$13,000-20,799							26	28	**25**
$20,800-31,199							27	20	**15**
$31,200-41,599							11	14	**15**
$41,600-$51,999							9	12	**10**
$52,000+							12	13	**23**
Current drug treatment (%)	10	1	2	2	-	1	3	1	**4**
Previous prison conviction (%)	3	1	3	3	1	3	-	1	**n/a**

Source: EDRS interviews

*Question changed from 'How many years of school did you complete?' to 'What grade of school did you complete?'

4.0 DRUG USE TRENDS

4.1 Drug use history and current drug use

Summary:

- REU reported using a range of different drugs in the preceding six months. Recent use of alcohol, tobacco, cannabis, amyl nitrite, methamphetamine powder, benzodiazepines, LSD, cocaine, nitrous oxide, and mephedrone was most common.
- Compared to 2010, a significantly greater proportion of the 2011 sample reported recent use of LSD (43% vs. 27%), MDA (21% vs. 5%), benzodiazepines (45% vs. 27%), and 'other opioids' (16% vs. 4%), and a significantly smaller proportion reported recent use of amyl nitrate (29% vs. 51%).

Ecstasy was the preferred or favourite drug for almost one-third of participants (28%). Smaller proportions preferred alcohol (23%), cocaine (19%), cannabis (7%), heroin (5%), methamphetamine powder (4%), LSD (4%), other opiates (4%), ketamine (3%), or other drugs (4%).

Table 2 shows proportion of the sample reporting lifetime and recent (in the last six months) use for each of the drugs examined. The majority of REU had used alcohol (100%), cannabis (100%), and tobacco (97%) at some stage of their lives, and substantial proportions had ever used methamphetamine powder (76%), amyl nitrite (76%), cocaine (75%), LSD (65%), psychedelic mushrooms (64%), and nitrous oxide (59%).

During the six months preceding the interview, the majority had used alcohol (100%), tobacco (83%) and cannabis (67%), and substantial proportions had used amyl nitrite (51%), methamphetamine powder (47%), benzodiazepines (45%), LSD (43%), cocaine (39%), nitrous oxide (36%), and mephedrone (35%).

Compared to 2010, a significantly greater proportion of the 2011 sample reported recent use of LSD (43% vs. 27%), MDA (21% vs. 5%), benzodiazepines (45% vs. 27%), and 'other opioids' (illicit opioids such as morphine or opium poppy products: 16% vs. 4%), and a significantly smaller proportion reported recent use of amyl nitrate (29% vs. 51%). There were no other changes in recent substance use between the 2010 and 2011 samples.

Table 2: Percentage of REU reporting lifetime and recent drug use, 2003-2011

Variable (%)	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Alcohol									
Ever used	100	100	100	100	100	100	100	100	**100**
Use last 6 mths	98	98	98	95	99	100	99	100	**100**
Cannabis									
Ever used	100	98	100	100	96	97	98	100	**100**
Use last 6 mths	90	91	89	82	68	74	76	72	**67**
Tobacco									
Ever used	96	89	89	94	90	96	92	96	**97**
Use last 6 mths	81	77	83	81	74	86	77	80	**83**
Meth. Powder									
Ever used	90	82	89	83	74	84	69	74	**76**
Use last 6 mths	67	68	77	62	65	59	46	40	**47**
Meth. base									
Ever used	36	32	35	49	43	31	25	19	**16**
Use last 6 mths	24	20	23	40	30	16	14	9	**8**
Crystal meth.									
Ever used	58	36	29	42	23	33	29	20	**25**
Use last 6 mths	52	16	10	27	7	15	7	4	**5**
Pharm stim.[#]									
Ever used	n/a	39	44	50	40	42	31	22	**41**
Use last 6 mths	n/a	14	16	12	19	16	10	9	**16**
Cocaine									
Ever used	44	32	43	55	54	61	51	75*	**75**
Use last 6 mths	7	10	20	33	35	35	31	49*	**39**
LSD									
Ever used	62	51	54	52	40	56	52	46	**65**
Use last 6 mths	24	32	31	29	20	41	34	27	**43***
MDA									
Ever used	32	20	8	14	8	15	10	14	**32**
Use last 6 mths	21	15	3	3	5	3	8	5	**21***
Ketamine									
Ever used	38	23	24	23	23	26	21	19	**32**
Use last 6 mths	24	5	11	6	14	6	5	6	**8**
GHB/GBL/1,4B									
Ever used	11	7	7	9	4	7	11	9	**5**
Use last 6 mths	7	3	2	3	1	1	3	2	**3**
Amyl nitrite									
Ever used	78	52	49	41	43	38	67	76	**76**
Use last 6 mths	43	23	16	10	20	15	51	51	**29***
Nitrous oxide									
Ever used	47	57	69	69	64	62	54	57	**59**
Use last 6 mths	25	34	41	39	46	29	32	32	**36**
Benzodiazepines									
Ever used	52	34	40	48	41	51	36	44	**61**
Use last 6 mths	35	23	25	33	25	37	24	27	**45***
Antidepressants									
Ever used	32	14	21	20	24	22	16	16	**23**
Use last 6 mths	14	4	12	9	11	6	10	5	**8**

Source: EDRS interviews

[#] Pharmaceutical stimulants were not included prior to 2004

Table 2: Percentage of REU reporting lifetime and recent drug use, 2003-2011 (continued)

Variable (%)	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Heroin									
Ever used	20	4	8	10	5	6	6	8	**17**
Use last 6 mths	6	0	-	2	-	1	3	2	**8**
Methadone									
Ever used	14	2	5	9	6	3	8	10	**8**
Use last 6 mths	13	2	1	5	1	2	4	5	**4**
Buprenorphine									
Ever used	5	-	2	3	1	2	2	5	**8**
Use last 6 mths	3	-	1	2	1	1	1	1	**3**
Other opioids									
Ever used	35	19	25	33	23	29	19	19	**29**
Use last 6 mths	13	8	13	14	8	17	6	4	**16***
Mushrooms									
Ever used	54	60	63	74	66	61	56	58	**64**
Use last 6 mths	38	41	40	55	39	31	21	18	**23**
2CI									
Ever used	-	5	2	25	20	11	11	15	**12**
Use last 6 mths	-	5	1	23	12	2	9	7	**8**
Mephedrone									
Ever used	-	-	-	-	-	1	14	64*	**37**
Use last 6 mths	-	-	-	-	-	1	14	47*	**35**
Over counter codeine^									
Ever used	n/a	n/a	n/a	n/a	n/a	n/a	17	12	**n/a**
Use last 6 mths							9	5	**9**
Over counter stimulants^									
Ever used	n/a	n/a	n/a	n/a	n/a	n/a	10	13	**20**
Use last 6 mths							6	3	**5**

Source: EDRS interviews

* significant change relative to previous year ($p<.05$).

^ Over the counter medications were not included prior to 2009

4.2 Ecstasy use

Summary:

- On average participants had first used ecstasy at around 19 years of age (range 14-29 years) and had been using ecstasy for 5 years.
- Ecstasy had typically been used in tablet (95%) or capsule (80%) form in the last six months, with use of ecstasy powder less common (26%). The proportion reporting recent use of ecstasy capsules increased significantly in 2010 and remained high in 2011.
- Ecstasy was typically swallowed, but snorting of ecstasy was also common. In 2010 there was a significant increase in the snorting of ecstasy tablets (89% vs. 71%) and capsules (82% vs. 38%) relative to 2009. This increase was maintained in 2011 for capsules (82%) but not for tablets (77%).
- On average, ecstasy had been used fortnightly with a median of two tablets taken in a typical session. More than one-tenth reported using more than two tablets in a typical session of use (14%) or had recently used ecstasy in a 'binge session' (a continuous 48 hour period of drug use without sleep) (14%) and one-quarter had used ecstasy weekly or more frequently (23%).
- Ecstasy was typically last used at music-related venues including nightclubs and pubs; or in private residences.
- The majority of REU (99%) had used other drugs when last under the influence of ecstasy and half (51%) used other drugs when last coming down from ecstasy. Alcohol, cannabis, and tobacco were the drugs most commonly used.
- A large majority (97%) reported drinking alcohol when last under the influence of ecstasy and nine-tenths of the sample (92%) had consumed more than five standard drinks.
- Data from the NDSHS showed a steady increase in the national prevalence of ecstasy use in Australia between 1995 (0.9%) and 2007 (3.5%), with a significant decrease noted in 2010 (3.0%). The estimated prevalence of recent ecstasy use in Tasmania increased from 1.6% in 2004 to 2.4% in 2007, with a non-significant decrease found in 2010 (1.7%).

4.2.1 Ecstasy use among REU

The mean age of first ecstasy use was 19 years (range 14-29 years). There was no significant difference in the mean age of males and females (19 years). Ecstasy had been used by this group for a median of 5 years (range 0-18 years) with only 1% of the sample having used the drug for less than one year.

Ecstasy had typically been used in tablet (95%) or capsule (80%) form in the last six months, with one-quarter (26%) reporting recent use of ecstasy powder (Table 3). The proportion reporting recent use of ecstasy capsules was significantly greater in 2010 (81%, 95%CI 72-87) relative to 2009 (48%, 95%CI 38-58), with no change observed in 2011 (80%, 95%CI 70-87). Several REU (n=3) commented anecdotally that there were currently more capsules than tablets available in Hobart.

The majority of REU had mainly ingested ecstasy orally (71%) in the last six months and one-third (29%) reported that they had mainly snorted the drug during this time.

Ecstasy (tablets, powder, capsules) had been used by REU on a median of 12 days (range 6-78 days), or on average fortnightly in the six months preceding the interview (Table 3). Frequency of use was significantly greater for males (13 days, range 6-72) relative to females (8 days, range 6-78), Mann-Whitney *U*=435.0, *p*=.024, but there was no significant difference between 'younger' (13 days) and 'older' (10 days) participants (based on a median split for age).

Around one-fifth reported using ecstasy weekly or more frequently (23%, 95%CI 15-33) which is significantly fewer relative to 2010 (10% 95%CI 6-17) but similar to previous years (17%-38%). Over one-tenth (14%) reported consuming more than two tablets in a typical session of use and a similar proportion (14%) had recently 'binged' on ecstasy (used ecstasy for more than 48 hours continuously without sleep). Binge drug use is explored in further detail in Section 7.6.

Ecstasy tablets had recently been swallowed (99%) or snorted (69%), while smaller proportions had recently shafted/shelved (4%), injected (3%), or smoked (1%) tablets. The proportion who reported snorting ecstasy tablets increased significantly in 2010 (89%, 95%CI 81-94) relative to 2009 (71%, 95%CI 61-79) with a significant decrease found in 2011 (77% 95%CI 65-86). The median frequency of use for ecstasy tablets was 6 days (range 1-72) or approximately monthly 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 2 tablets (range 1-7.5), and the median number of ecstasy tablets consumed in the heaviest session of use was 3 tablets (range 1-25).

Ecstasy capsules had been swallowed (92%), snorted (77%), smoked (5%) or injected (2%) in the last six months. The median frequency of use was 6 days (range 1-60) in the last six months which reflects an increase relative to 2010 (2 days). The proportion who reported snorting ecstasy capsules was significantly greater in 2011 (77% 95%CI 65-86%) and 2010 (82%, 95%CI 73-88%) relative to 2009 (38%, 95%CI 29-48%).

Ecstasy powder had typically been snorted (95%) or swallowed (68%) on a median of 6 days (range 1-36) during the previous six months, which is higher than the median of 2.5 days observed among the 2010 sample.

The most common last locations of ecstasy use (Table 3) were a nightclub (37%), pub (23%), or private residences (14% private party, 8% friend's home, 4% own home).

The comments of KE were generally consistent with reports of REU. The majority who commented noted that ecstasy was typically taken orally (n=2) with 1-6 tablets (n=2) taken on an occasional or weekend basis (n=3).

Table 3: Patterns of ecstasy use among REU, 2003-2011

	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Mean age first used ecstasy (range)	20 (14-40)	20 (15-32)	20 (14-42)	20 (14-55)	19 (14-32)	19 (14-42)	19 (11-30)	19 (13-30)	**19 (14-29)**
Use of ecstasy last 6 mths									
Forms used (%)									
Tablets/pills	n/a	n/a	100	100	100	100	100	96	**95**
Capsules	n/a	n/a	28	19	47	18	48	81	**80**
Powder	n/a	n/a	18	13	5	6	12	21	**26**
Median days used[#]	14	12	15	12	12	12	12	11	**12**
Use weekly or more often (%)[#]	38	24	29	22	23	17	17	10	**23**
Recent binge on ecstasy* (%)	41	34	37	43	38	33	26	19	**14**
Median pills 'typical' session (range)	1.5 (0.5-7.5)	2 (0.5-12)	2 (1-6)	2 (1-6)	2 (1-7)	2 (0.5-6)	2 (1-6)	2 (0.5-8)	**2 (1-8)**
Median pills 'biggest' session (range)	3 (1-60)	3 (1-30)	4 (1-15)	4 (1-20)	3.5 (1-15)	4 (1-12)	4 (1-15)	3 (1-20)	**3 (1-25)**
Used > 2 pills in typical session (%)	17	18	24	37	21	23	11	15	**14**
Main route (%)									
Swallowed	89	94	96	95	96	93	89	70	**71**
Snorted	6	6	3	4	3	6	10	30	**29**
Injected	5	-	1	1	-	-	1	-	**-**
Shelved/shafted	n/a	-	-	-	1	1	-	-	**-**
Location of last use (%)									
Home	8	10	13	20	10	11	10	9	**4**
Dealer's home	3	-	-	1	-	-	-	-	**1**
Friend's home	11	15	13	22	17	20	7	10	**8**
Rave/dance party	33	37	16	18	11	7	7	3	**4**
Nightclub	37	22	40	18	37	36	46	41	**37**
Pub	4	2	3	-	-	4	7	20	**23**
Private party	4	10	8	14	19	6	5	11	**14**
Outdoors	-	1	1	2	-	1	2	-	**3**
Live music event	n/a	1	4	2	6	14	14	6	**5**
Other	-	2	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

4.2.2 Polydrug use among REU

Almost all of the 2011 sample (99%) reported use of other drugs when under the influence of ecstasy on the last occasion of use and one-half (51%) reported using other drugs when 'coming down' from ecstasy on this occasion (Table 4). The drugs most commonly used when last under the influence of ecstasy were alcohol (97%), tobacco (61%), and cannabis (32%). Notably, a large majority of the sample (92%) reported drinking more than five standard drinks the last time that they were under the influence of ecstasy. The drugs most commonly used when coming down from ecstasy on the last occasion were cannabis (36%), tobacco (15%), and benzodiazepines (13%).

Table 4: Drugs used when under the influence of ecstasy and when coming down on last occasion in the last six months, 2009-2011

	Under the influence of ecstasy			Coming down from ecstasy		
	2009 n=87	2010 n=100	**2011 n=71**	2009 n=87	2010 n=100	**2011 n=72**
None (%)	5	1	**1**	59	55	**49**
Methamphetamine powder (%)	3	6	**9**	-	-	**1**
Methamphetamine base (%)	5	1	**-**	-	-	**-**
Crystal methamphetamine (%)	2	-	**-**	-	-	**-**
Pharmaceutical stimulants (%)	2	1	**-**	-	-	**-**
Cocaine (%)	2	4	**3**	1	-	**-**
LSD (%)	6	3	**9**	-	-	**-**
Ketamine (%)	-	-	**-**	-	-	**-**
GHB (%)	-	-	**-**	-	-	**-**
Amyl nitrite (%)	6	3	**1**	-	2	**-**
Nitrous oxide (%)	8	3	**1**	1	2	**-**
Cannabis (%)	24	29	**32**	28	29	**36**
Alcohol						
Usually drink (%)	87	94	**97**	14	16	**8**
> 5 std drinks (%)	79	83	**92**	6	4	**7**
Methadone (%)	1	-	**1**	-	-	**-**
Other opioids (%)	-	-	**-**	2	1	**-**
Tobacco (%)	38	48	**61**	18	13	**15**
Antidepressants (%)	-	-	**-**	-	-	**-**
Benzodiazepines (%)	-	2	**4**	6	14	**13**
Mushrooms (%)	2	-	**-**	-	-	**-**
Mephedrone/methylone (%)	2	10	**3**	-	-	**1**
Energy drinks	52	26	**24**	-	-	**-**
Other (%)	-	-	**4**	2	-	**4**

Source: EDRS interviews

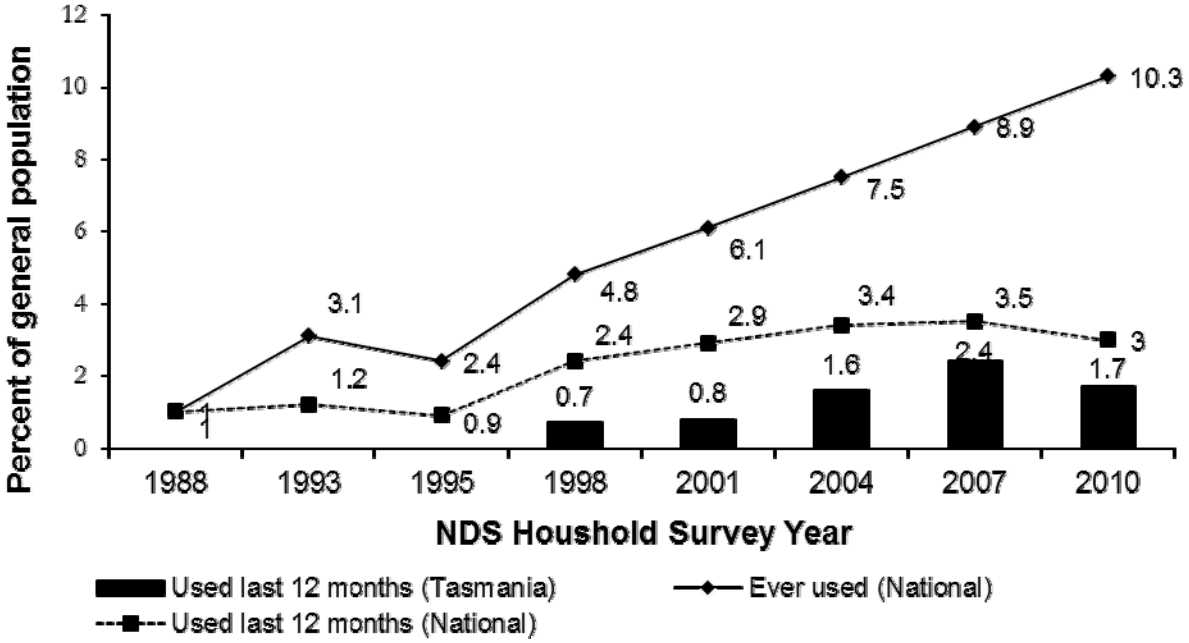
4.2.3 Ecstasy use in the general population

Figure 1 shows the prevalence of lifetime and recent ecstasy use in the general population and in Tasmania based on data collected by the National Drug Strategy Household Survey (NDSHS) between 1988 and 2007 (Australian Institute of Health and Welfare, 1999, 2000, 2002a, b, 2005a, b, 2008a, b, 2010).

The lifetime prevalence of ecstasy use among the general population increased from 1% in 1988 to 10.3% in 2010. The proportion of the Tasmanian sample reporting lifetime use of ecstasy was not available from 2001 onwards as lifetime use was not reported for Tasmania.

The proportion of the national sample reporting past yearly use increased from 1% in 1988 to 3.5% in 2007. A significant decrease was found in 2010 with 3.0% of the general population reporting past yearly use. The estimated prevalence of recent ecstasy use in Tasmania increased from 1.6% (95%CI 1.3-1.8%) in 2004 to 2.4% (95%CI 1.6-3.4%) in 2007. In 2010, the estimated prevalence of recent ecstasy use in Tasmania was lower at 1.7% (95%CI 1.1-2.7%) but this was not statistically different to 2004.

Figure 1: Prevalence of ecstasy use in Australia and Tasmania among those aged 14 years and over, 1988-2010



Source: National Drug Strategy Household Survey 1988-2010

4.3 Methamphetamine use

Summary:

- Half (52%) of the 2011 REU sample had used some form of methamphetamine in the preceding six months. This is comparable to rates in 2010 (48%) and 2009 (52%), but significantly lower than proportions in previous years (63-82%). This finding is consistent with a downward trend in methamphetamine use among the general population in recent years (NDSHS, 2007).
- Methamphetamine was used on a median of three days during this period (once every two months on average) in relatively small amounts (2 points).
- Recent use of methamphetamine powder was most common (47%), with low levels of use of methamphetamine base (8%) and crystal methamphetamine (5%).
- The proportion reporting recent use of methamphetamine powder (47%) was similar to 2009 and 2010 (46% and 40% respectively) but fewer relative to the years prior to this (62-77%).
- Methamphetamine powder was typically swallowed or snorted; base was typically swallowed or injected, whereas crystal was typically smoked.

Throughout the 1980s, the form of illicit amphetamine most available in Australia was amphetamine sulphate (Chesher, 1993). Following the legislative controls on the distribution of the main precursor chemicals in the early 1990s (Wardlaw, 1993), illicit manufacturers were forced to rely on different production methods and the proportion of amphetamine-type seizures that were methamphetamine[3] (rather than amphetamine) steadily increased until methamphetamine clearly dominated the market (ABCI, 1999, 2000, 2001). Across Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine.

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. As such, trends for these forms will be discussed separately, and the term methamphetamine will be used to refer to the drugs in this class. 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 form methamphetamine[4] is the presentation of the drug which has traditionally been available in Australia. This is commonly a powder that can range from fine to more crystalline or coarse, and may take different colours (commonly white, yellow, brown, orange or pink), depending on the type and quality of the 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. Consumers interviewed for the 2011 IDRS survey reported that methamphetamine powder sometimes contained small crystals, and generally appeared white, or alternatively beige, brown, pink, orange or yellow (de Graaff & Bruno, 2012). The presence of crystals in powder methamphetamine may represent higher purity methamphetamine, or may indicate use of an adulterant

[3] Methamphetamine is an abbreviation of the name methylamphetamine, and, as such, both terms are interchangeable.

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

(methylsulfonylmethane, MSM) in the late production stages, giving the powder 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). In the 2011 IDRS study, participants who had recently purchased base commonly described it as 'gluggy', and reported the colour as ranging from white, beige, brown, to yellow or pink (de Graaff & Bruno, 2012).

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 local 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). Consumers in current and previous IDRS studies have generally described this form as white/clear crystals or rocks, looking like crushed glass or rock salt (with crystals commonly larger than sugar crystals) (de Graaff & Bruno, 2012).

4.3.1 Methamphetamine use among REU

Four-fifths (84%, 95%CI 74-91%) of the 2011 sample reported lifetime use of methamphetamine (Table 5), which is similar to the proportion among the 2010 sample (78%, 95%CI 69-85%). One-half (52%) of the 2011 sample had used methamphetamine during the six months preceding the interview, compared to similar proportions in 2010 (48%) and 2009 (52%), and significantly higher proportions in previous years (63-82%). There was no significant difference in the proportion of males (59%) and females (39%) (although this approached statistical significance, p=.087) or younger (52%) and older (52%) participants who had recently used any form of methamphetamine. The median frequency of use of any form of methamphetamine over the last six months was 3 days (range 1-48 days) compared to 2 days in 2010.

Among KE who commented on the forms of methamphetamine currently available in Hobart, powder and base (n=3) were most commonly noted, while crystal was considered rare (n=4). There were also single reports of speed tablets and capsules on the market, and of speed in crystalline form which is not necessarily crystal methamphetamine.

Table 5: Patterns of methamphetamine (any form) use among REU, 2003-2011

	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	93	85	90	94	81	85	72	78	**84**
Use last 6 mths (%)	82	76	78	78	70	63	52	48	**52**
Median days use last 6 mths (range)	7 (1-192)	6 (1-60)	6 (1-140)	6 (1-166)	4 (1-130)	3 (1-41)	3 (1-72)	2 (1-26)	**3 (1-48)**

Source: EDRS interviews

Methamphetamine powder (speed)

Three-quarters (76%) of the 2011 sample reported lifetime use of methamphetamine powder (Table 6). The median age of first use was 20.5 years (range 14-30 years), and there was no significant difference between the age of first use for males and females.

Just under half (47%) had used methamphetamine powder during the six months preceding the interview which is similar to 2009 and 2010 (46% and 40% respectively) but fewer relative to the years prior to this (62-77%). There was no significant difference between the proportion of males (51%) and females (39%), or the proportion of 'older' (46%) and 'younger' (48%) participants (based on a median split for age) reporting recent use of methamphetamine powder.

The majority of those who had recently used methamphetamine powder had swallowed (69%) or snorted (60%) the drug during the six months preceding the interview, and smaller proportions reported injecting (18%), or smoking (15%) the drug.

The median frequency of use during the six months preceding the interview was 3 days (range 1-48 days), or, on average, once every three months (Table 6). Three-quarters (77%) of those who had recently used methamphetamine powder had done so once monthly or less. The usual amount used was 2 points (0.2 of a gram) in both a typical session and the biggest session of use in the last six months. Other participants (n=14) reported using a median of 0.5 grams (range 0.1-1 g) in a typical session and 0.7 grams (range 0.1-3 g) in the biggest session of use.

Table 6: Patterns of methamphetamine powder (speed) use among REU, 2003-2011

Methamphetamine powder	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	90	82	89	83	74	84	69	74	**76**
Median age of first use (range)	19 (16-31)	20 (15-27)	20 (13-44)	20 (15-60)	20 (13-32)	20 (15-44)	20 (14-30)	20 (15-28)	**20.5 (14-30)**
Use last 6 mths (%)	67	68	77	62	65	59	46	40	**47**
Of those who used last 6 mths									
Median days use (range)	4 (1-120)	5 (1-48)	4 (1-90)	3 (1-48)	4 (1-115)	3 (1-24)	2 (1-48)	2 (1-12)	**3 (1-48)**
Route of admin.									
Smoked (%)	4	4	8	8	8	9	2	3	**15**
Snorted (%)	63	63	56	63	49	58	78	65	**60**
Swallowed (%)	79	85	86	89	85	78	59	73	**69**
Injected (%)	16	9	6	8	9	10	17	5	**18**
Shaft/shelved (%)	-	-	-	2	2	-	-	-	**-**
Median points used									
Typical session (range)	1 (0.5-5)	1 (.25-3)	1 (0.2-5)	1 (.25-5)	1 (.25-5)	1 (0.5-4)	2 (.25-4)	2 (.25-4)	**2 (.5-5)**
Biggest session (range)	1 (.5-40)	1 (.25-6)	1.5 (0.2-5)	2 (.13-6)	2 (.25-5)	2 (0.5-6)	2 (0.5-6)	2 (.25-8)	**2 (.5-6)**

Source: EDRS interviews

Methamphetamine base

Almost one-fifth of the 2011 sample (16%) had used methamphetamine base at some stage of their lives (Table 7), which is comparable to 2010 (19%). The median age of first use of methamphetamine base was 20 years (range 16-23 years). A significantly greater proportion of males (22%) relative to females (4%) had ever used base, χ^2=4.34, p<.05.

Less than one-tenth of the 2011 sample (8%) had used methamphetamine base in the six months preceding the interview, which is similar to 2010 (9%). There was no significant difference in the proportion of males (10%) and females (4%) or the proportion of 'older' (9%) and 'younger' (7%) participants (based on a median split for age) who had recently used base (p>.05).

The majority of those who had recently used methamphetamine base had swallowed (50%) or injected (50%) the drug. The median frequency of use was three days (range 1-4 days), or once every two months. The median quantity of methamphetamine base used in the preceding six months was 2 points (0.2 of a gram) in a typical session of use and 4 points (0.4 of a gram) in the biggest session of use.

Table 7: Patterns of methamphetamine base use among REU, 2003-2011

Meth. base	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	36	32	35	49	43	31	25	19	**16**
Median age of first use (range)	21 (16-31)	22 (16-29)	20 (17-29)	21 (15-32)	20 (13-37)	20 (17-28)	21 (16-31)	20 (15-36)	**20 (16-23)**
Use last 6 mths (%)	24	20	23	40	30	16	14	9	**8**
Of those who used last 6 mths									
Median days use (range)	3 (1-96)	3 (1-24)	4 (1-70)	4 (1-150)	2 (1-70)	2 (1-35)	3 (1-14)	2 (1-24)	**3 (1-4)**
Route of admin.									
Smoked (%)	-	5	-	3	3	-	14	33	**-**
Snorted (%)	50	15	39	15	13	25	14	33	**-**
Swallowed (%)	71	85	91	88	90	88	79	78	**50**
Injected (%)	38	30	22	20	7	19	50	11	**50**
Shaft/shelved (%)	-	-	4	-	-	-	-	-	**-**
Median points									
Typical session (range)	1 (0.5-5)	1 (.25-3)	1 (.25-5)	2 (0.5-3)	2 (0.5-3)	2 (.5-4)	1 (.25-5)	1.5 (.25-3)	**2 (2-2)**
Biggest session (range)	1 (1-40)	1 (.25-3)	1 (.25-10)	2 (.5-10)	2 (.5-6)	2 (0.5-5)	2 (.5-5)	2 (.25-3)	**4 (2-4)**

Source: EDRS interviews

Crystal methamphetamine

One-quarter (25%) of the REU interviewed in 2011 reported lifetime use of crystal methamphetamine and just 5% (all males) reported use during the six months preceding the interview (Table 8). Those who had recently used crystal methamphetamine had smoked, snorted, or swallowed the drug on a median of 2 days (range 1-5 days) during the preceding six months.

Table 8: Patterns of crystal methamphetamine use among REU, 2003-2011

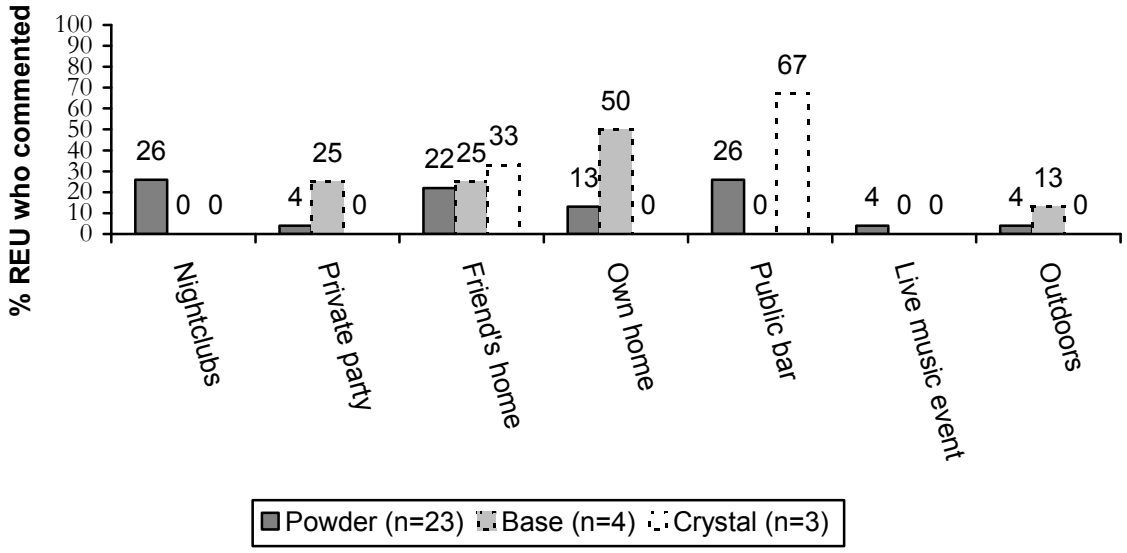
Crystal methamphetamine	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	58	36	29	42	23	33	29	20	**25**
Median age of first use (range)	22 (17-45)	22 (16-29)	23 (15-29)	23 (15-34)	23 (16-31)	20 (16-30)	21 (13-35)	23 (18-36)	**19 (14-30)**
Use last 6 mths (%)	52	16	10	27	7	15	7	4	**5**
Of those who used last 6 mths									
Median days use (range)	3 (1-72)	1 (1-18)	3.5 (1-30)	5 (1-50)	1 (1-20)	2 (1-6)	6 (1-55)	1.5 (1-3)	**2 (1-5)**
Route of admin.									
Smoked (%)	62	69	20	78	43	53	29	100	**50**
Snorted (%)	14	13	20	15	14	40	29	-	**25**
Swallowed (%)	38	31	40	48	71	33	14	-	**25**
Injected (%)	25	6	50	22	14	13	43	-	**-**
Shaft/shelved (%)	-	-	-	-	-	-	-	-	**-**
Median points used									
Typical session (range)	0.5 (0.2-2)	1 (.25-2)	1 (0.5-3)	1 (.5-3.5)	2 (0.5-3)	1 (1-4)	1.5 (0.2-4)	5 (n=1)	**2.5 (5-15)**
Biggest session (range)	1 (.25-10)	1 (.25-3)	1 (.5-10)	2 (.5-10)	2 (1-3)	1 (1-3)	3 (0.2-8)	5 (n=1)	**2.5 (5-15)**

Source: EDRS interviews

Locations of methamphetamine use

Figure 2 shows the last location of use for each methamphetamine form during the six months preceding the interview. Data refers to locations where participants spent most of their time while under the drug's influence (rather than the place of ingestion). Data for crystal and base methamphetamine should be treated with caution due to small sample sizes. The most common locations of last use included public bars, nightclubs, and private residences.

Figure 2: Location of most recent methamphetamine use by form, 2011

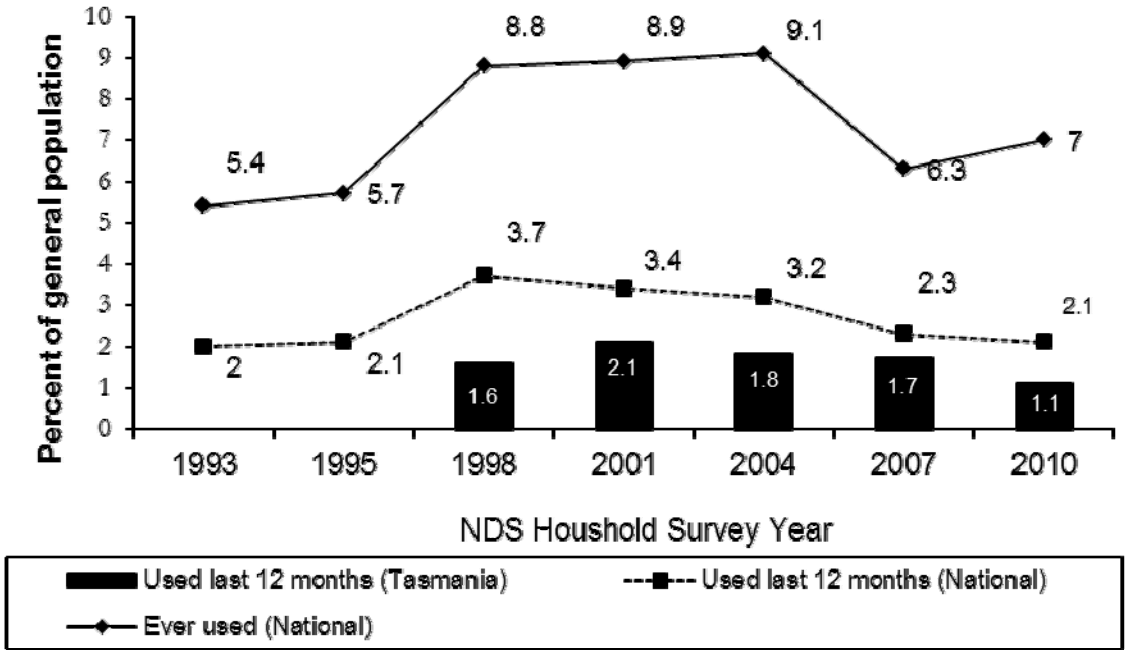


Source: EDRS interviews
Note: Where n<10 data should interpreted with caution

4.3.2 Methamphetamine in the general population

According to the findings of the 2007 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2008), the lifetime and recent use of meth/amphetamine (6.3% and 2.3% respectively) had declined significantly in the general population relative to the 2004 (9.1% and 3.2% respectively) sample (Figure 3). In 2010, 2.1% of the general population reported past yearly use which is not significantly different to 2007. Among Tasmanian residents surveyed in 2010, 1.1% reported using meth/amphetamine in the last year; however, this figure should be interpreted with caution due to a high relative standard error (Figure 3).

Figure 3: Prevalence of meth/amphetamine use in Australia and Tasmania among those aged 14 years and over, 1993-2010



Source: National Drug Strategy Household Survey 1993-2010

4.4 Cocaine use

Summary:

- Two-fifths (39%) of the 2011 sample reported recent use of cocaine, which is similar to the proportion among the 2009 (31%) and 2010 (49%) samples.
- Cocaine was typically snorted and was used on a median frequency of one day (range 1-30 days) in the last six months compared to a median of 3 days among the 2010 sample. An average of 0.5 grams was used in a typical session.
- Cocaine was typically last used at a nightclub, a public bar, or a private residence.

4.4.1 Cocaine use among REU

Three-quarters of the 2011 REU sample (75%) had ever used cocaine (see Table 9). The median age of first use of cocaine was 22 years (range 15-36 years) and there was no significant difference between the average age of first use for females (21 years) and males (21 years).

Two-fifths (39% 95%CI 28-50%) of the 2011 sample had used cocaine during the six months preceding the interview (see Table 9), which was not significantly different to the proportion in 2010 (49%, 95%CI 39-59%) or 2009 (31%, 95%CI 23-41%). Prior to 2006, recent use of cocaine was significantly less common with one-fifth or less reporting recent use (7-20%). There was no significant difference in the proportion of males (39%) and females (39%) or older (33%) and younger (43%) participants who had recently used cocaine.

The median frequency of cocaine use was 1 day (range 1-30 days) in the preceding six months, a decrease from the median frequency of 3 days reported in 2010. One-half (52%) of those who had recently used cocaine had done so on only one occasion in the preceding six months, compared to 26% in 2009.

Those that had recently used cocaine reported using a median of 0.5 grams (range 0.1-5 grams) or a median of 1.75 ‘points’ (range 1-3 points) in a typical session, and 0.5 grams (range 0.1-5 grams) or 2 ‘points’ (range 1-3 points) in the biggest session of use in the last six months. All of those who had used cocaine in the preceding six months had snorted the drug (100%) and one-quarter (24%) had swallowed the drug.

The most common locations for last use of cocaine (Table 9) were at a nightclub (29%), public bar (24%), friend’s home (18%), own home (12%), or live music event (12%).

There were few KE comments in relation to cocaine use, though several KE (n=8) indicated that there was some cocaine use among the drug consumers that they were familiar with.

Table 9: Patterns of cocaine use among REU, 2003-2011

Cocaine	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	44	32	43	55	54	61	51	75	**75**
Median age first used (range)	21 (15-30)	21 (16-32)	20 (15-30)	22 (17-30)	22 (17-31)	21 (18-46)	22 (16-31)	21 (13-30)	**22 (15-36)**
Use last 6 mths (%)	7	10	20	33	35	35	31	49	**39**
Of those used last 6 mths									
Median days use (range)	2 (1-10)*	2 (1-20)	1 (1-5)	2 (1-6)	2 (1-72)	2 (1-10)	2 (1-24)	3 (1-20)	**1 (1-30)**
Route of use (%)									
Smoked	14	-	15	-	3	-	3	2	**-**
Snorted	71	70	90	94	74	94	94	100	**100**
Swallowed	14	30	10	39	51	31	55	40	**24**
Injected	-	10	-	6	-	-	3	-	**-**
Shafted/shelved	-	-	-	-	-	-	-	-	**-**
Median amounts used per session									
Grams typical (range)	0.1*	0.5*	0.5*	0.5	0.5	0.5	0.25	0.5	**0.5 (0.1-5)**
Grams biggest (range)	0.5*	1.0*	0.5*	1	0.5	0.5	0.25	1	**0.5 (0.1-5)**
Points typical (range)	-	1.0*	2	2	2	2*	2*	2	**1.75* (1-3)**
Points biggest (range)	-	0.75*	2	2	2	2*	2*	2	**2* (1-3)**
Location of last use (%)	n=5	n=6	n=11	n=21	n=19	n=28	n=11	n=23	**n=17**
Home	0	7	18	19	16	7	18	-	**12**
Dealer's home	-	-	-	5	-	4	-	-	**-**
Friend's home	40	33	9	33	32	21	9	26	**18**
Rave/dance party	20	17	9	-	5	4	9	4	**-**
Nightclub	20	33	18	19	11	25	36	17	**29**
Public bar	-	-	18	-	-	7	9	26	**24**
Private party	-	-	-	14	16	29	-	17	**6**
Outdoors	-	-	-	5	-	-	-	-	**-**
Live music event	-	-	-	-	11	-	18	4	**12**
Public place	-	-	9	-	11	4	-	-	**-**
Work	-	-	9	-	-	-	-	-	**-**
Other	-	-	9	5	-	-	-	-	**-**

Source: EDRS interviews

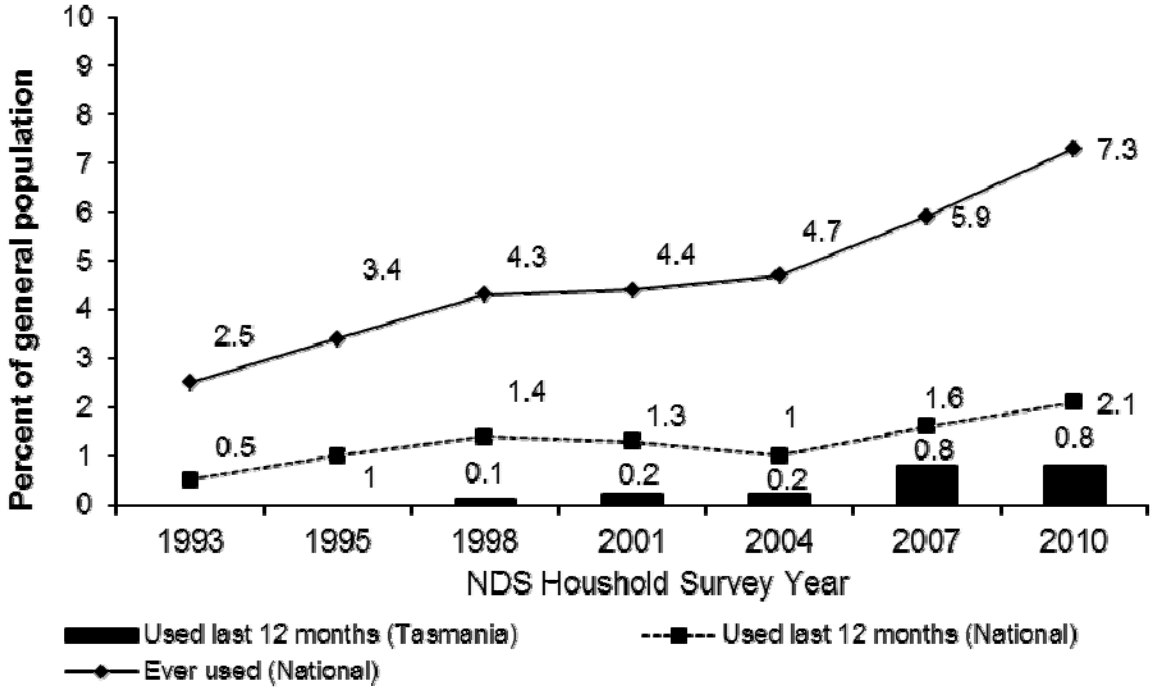
* n<10

4.4.2 Cocaine use in the general population

According to the findings of the National Drug Strategy Household Survey (Figure 4), the lifetime and past yearly use of cocaine has increased significantly between 2004 and 2007 and between 2007 and 2010. In 2010, 7.3% of the general population reported lifetime use and 2.1% of the population reported use in the past year.

Among residents surveyed in Tasmania in 2007, 0.8% (95%CI 0.6-0.9%) reported using cocaine in the preceding year, which was significantly greater than the proportion of the 2004 Tasmanian sample (0.2%, 95%CI 0.1-0.3%), and significantly lower relative to the national sample in 2007 (1.6%, 95%CI 1.55-1.64%). In 2010, 0.8% of surveyed Tasmanians reported past yearly use of cocaine; however, this estimate should be interpreted with caution due to a high relative standard error.

Figure 4: Prevalence of cocaine use in Australia and Tasmania among those aged 14 years and over, 1993-2010



Source: National Drug Strategy Household Survey 1993-2010

4.5 LSD use

Summary:

- Over three-fifths (65%) of the 2011 sample had used LSD at some stage of their lives. Two-fifths (43%) had used LSD in the six months preceding the interview which is significantly greater relative to the proportion in 2010 (27%).
- Consistent with previous EDRS samples, lifetime use of LSD was more common among males relative to females.
- One tab or one drop of liquid LSD (range 0.25-5) was taken orally in a typical session of use and LSD had been used on a median of 3.5 days (range 1-48 days) in the preceding six months.
- LSD was last used at private residences such as the consumer's own home or a friend's home, as well as at live music events.

4.5.1 LSD use among REU

Table 10 shows that over three-fifths (65%) of the 2011 REU sample had used LSD at some stage of their lives. A significantly greater proportion of the male sample (76%) had ever used LSD in comparison to the proportion of the female sample (46%), χ^2=6.46, p<.05. The median age of first use was 19 years (range 15-37 years), and there was no significant difference between the age of first use for males (19 years) and females (20 years).

Two-fifths (43%, 95%CI 32-54) of the 2011 sample reported use of LSD during the six months preceding the interview (Table 10) which is significantly greater relative to the proportion in 2010 (27%, 95%CI 19-36). Several REU (n=3) also commented anecdotally that there had been a recent increase in the use of LSD. There was no significant difference in the proportion of males (47%) and females (35%) or the proportion of 'younger' (45%) and 'older' (39%) participants reporting recent use. The majority (94%) of those who had recently used LSD had taken the drug orally.

The median frequency of use for those who had recently used LSD was 3.5 days (range 1-48 days), an increase on the reported frequency of use from 2003-2010 (1-2.5 days). There was no significant difference in the median frequency of use for males and females. The median number of tabs/drops of LSD used in a typical session was 1 (range 0.25-5) and the number of tabs/drops used in the biggest session of use was 1 (range 0.25-16). The median quantities of use were similar to those observed among previous cohorts.

REU were asked which locations they had last used LSD (to be under the influence of the drug, not necessarily the location of ingestion) during the 6 months preceding the interview (Table 10). LSD was last used at private residences such as the consumer's own home (22%), a friend's home (19%), or a live music event (15%).

Table 10: Patterns of LSD use among REU, 2003-2011

LSD	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	62	51	54	52	40	56	52	46	**65**
Median age of first use (range)	18 (14-25)	19 (14-32)	18 (15-31)	19 (14-35)	19 (13-32)	20 (16-47)	20 (14-30)	19 (15-27)	**19 (15-37)**
Use last 6 mths (%)	24	32	31	29	20	41	34	27	**43**
Of those used last 6 months									
Median days use (range)	1 (1-15)	2.5 (1-12)	1 (1-15)	2 (1-15)	2 (1-25)	2 (1-15)	2 (1-15)	2.5 (1-24)	**3.5 (1-48)**
Route of administration									
Smoked (%)	-	3	-	3	-	-	-	-	**-**
Snorted (%)	-	-	-	3	-	-	-	-	**6**
Swallowed (%)	100	100	100	100	100	100	100	100	**94**
Injected (%)	-	-	-	-	-	-	3	-	**3**
Median tabs/drops									
Typical session (range)	1.25	1	1	1	1	1	1	1	**1 (.25-5)**
Biggest session (range)	3	1.25	1	2	2	2	2	1	**1 (.25-16)**
Location last used (%)	n=27	n=30	n=30	n=26	n=15	n=40	n=31	n=23	**n=27**
Home	22	17	13	23	27	28	23	13	**22**
Dealer's home	4	-	-	-	-	-	-	-	**-**
Friend's home	19	17	40	15	-	20	26	30	**19**
Rave/dance party	22	17	10	31	27	20	7	22	**7**
Nightclub	26	17	13	4	13	3	7	9	**7**
Pub	-	3	-	-	-	-	-	9	**7**
Restaurant/café	-	3	-	-	-	-	-	-	**-**
Private party	7	3	-	12	13	3	10	4	**4**
Outdoors	n/a	13	10	12	20	18	23	17	**4**
Live music event	n/a	7	7	-	-	8	7	4	**15**
Public place	-	-	3	4	-	3	-	-	**7**
Other	-	3	-	-	-	-	-	-	**4**

Source: EDRS interviews

4.5.2 LSD use in the general population

In the 2010 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2011), it was estimated that approximately 1% of Tasmanians had used hallucinogens in the year prior to interview, compared to a similar proportion in 2007 (1%). However, these estimates should be interpreted with caution due to high relative standard errors. Nationally, there was a significant increase in the past yearly use of hallucinogens in 2010, with 1.4% of Australians reporting recent use compared to 0.6% in 2007.

4.6 Cannabis use

Summary:

- Over three-fifths (67%) had used cannabis during the six months preceding the interview.
- Cannabis had typically been smoked, with around one-third recently ingesting the drug.
- The median frequency of cannabis use was 24 days (range 1-180) or approximately once per week. Daily cannabis smoking was relatively uncommon (8%).
- The median quantities used on the last day of use during this time were 5 cones (range 1-24) or 1 joint (range 0.3-5).
- There has been less recent use, and a lower median frequency of use among the EDRS cohorts between 2007 and 2011 relative to previous years.
- While cannabis use was found to decrease in the general population nationally between 2004 (11.3%) and 2007 (9.1%), there was a significant increase in use between 2007 and 2010 (10.3%). In contrast the recent use in Tasmania continued to decrease between 2007 (10.8%) and 2010 (8.6%).

4.6.1 Cannabis use among REU

The entire sample of REU surveyed in 2011 had used cannabis at some stage of their lives (Table 11). The median age of first cannabis use was 15 years (range 12-21 years), and there was no significant difference in the age of first use for males (15 years) and females (16 years).

Two-thirds (67%, 95%CI 55-76%) of respondents had used cannabis during the six months preceding the interview, which is similar to the proportion of the sample between 2006 and 2010 (68-82%), but lower relative to that among the 2003-2005 cohorts (e.g., 2005: 89%, 95%CI 81-94%, χ^2=4.99, p<.05). There was no significant difference in the proportion of males (69%) and females (62%) reporting recent use of cannabis; however, recent cannabis use was more likely to be reported by younger (76%) relative to older (55%) participants (based on a median split for age).

A majority of those reporting recent use had smoked cannabis (100%) and around one-third (32%) had ingested cannabis during the six months preceding the interview.

The median frequency of cannabis use during this six month period was 24 days (range 1-180 days), or approximately once a week, which is greater than the median frequency between 2007 and 2010 (11-15 days). A small proportion of the sample (8%) reported daily use of cannabis during the last six months.

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). Participants were more likely to have last smoked joints (n=31) relative to cones (n=17). The median number of cones smoked on the last day of use was 5 (range 1-24) and the median number of joints was 1 (range 0.3-5). It has been estimated that the quantity of a standard cone is 0.0825 g or 1/3 of a standard cannabis unit which is defined as ¼ of a gram (Ritter, Lancaster, Grech & Reuter, 2011).

Table 11: Patterns of cannabis use of REU, 2003-2011

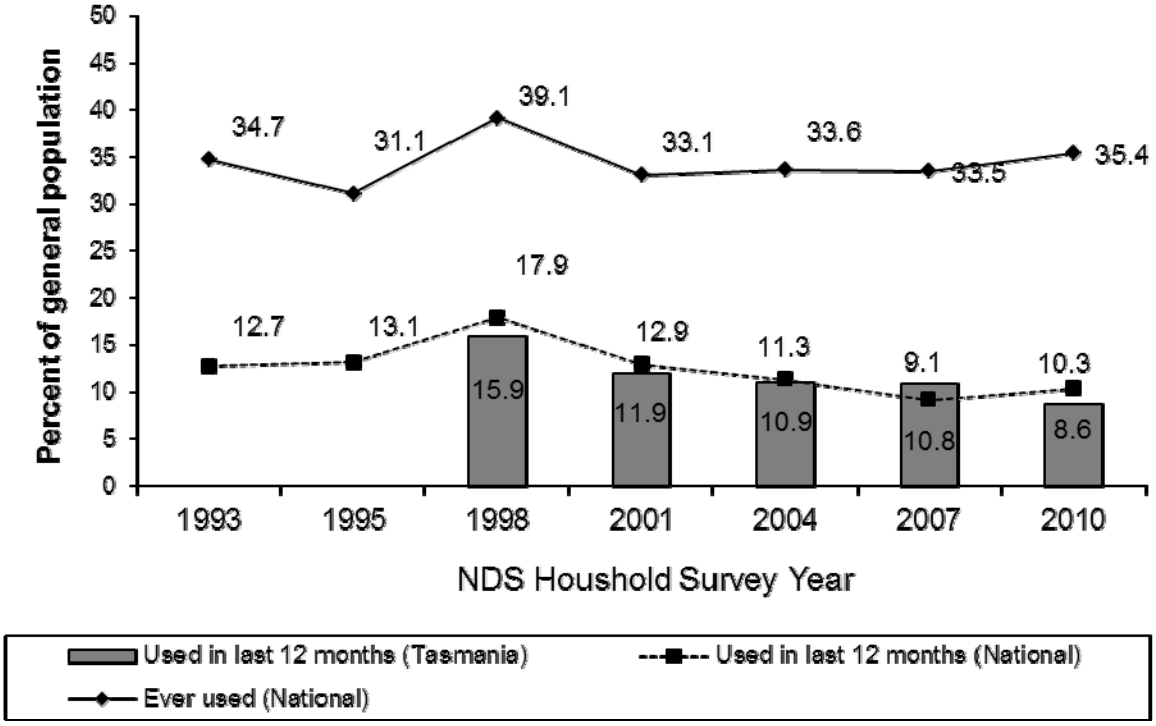
Cannabis	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	100	98	100	100	96	97	98	100	**100**
Median age first used (range)	15 (9-26)	15 (9-22)	15 (10-21)	15 (8-27)	15 (12-22)	15 (11-24)	15 (11-23)	15 (10-22)	**15 (12-21)**
Used last 6 mths (%)	99	91	89	82	68	74	76	72	**67**
Used daily last 6 mths (%)	26	9	17	13	5	8	6	5	**8**
Median days used last 6 mths(range)	48 (1-180)	24 (1-180)	24 (1-180)	25 (1-180)	11 (1-180)	15 (1-180)	15 (1-180)	12 (1-180)	**24 (0-180)**
Median cones last session (range)	n/a	n/a	n/a	n/a	4 (1-40) n=39	3 (.25-50) n=37	4 (.5-30) n=38	4 (.5-20) n=23	**5 (1-24) n=17**
Median joints last session (range)	n/a	n/a	n/a	n/a	1 (.5-4) n=23	1 (.5-3) n=31	1 (.5-6) n=36	1 (.25-9) n=43	**1 (.3-5) n=31**

Source: EDRS interviews

4.6.1 Cannabis use in the general population

In the 2010 National Drug Strategy Household Survey (AIHW, 2011), it was estimated (from the sample of 1,060 participants) that approximately 8.6% (95%CI 7.0-10.4) of Tasmanians (aged 14 years and over) had used cannabis in the year prior to interview (Figure 5), which tended to be lower (p=.09) compared to 2007 (10.8% 95%CI 9.1-12.7). However, nationally recent use (in the last year) of cannabis increased significantly from 9.1% in 2007 to 10.3% in 2010.

Figure 5: Prevalence of cannabis use in Australia and Tasmania (aged 14 years and over), 1993-2010



Source: National Drug Strategy Household Survey 1993-2010

4.7 Other drug use

Summary:

- The entire 2011 REU sample had recently consumed alcohol, on an average of two to three days a week in the last six months. A majority (83%) had used alcohol at least weekly (but not daily), which is substantially higher than the estimate of prevalence in the general population (43.9%, among those aged 20-29 nationally – a comparable age group to the current REU cohort).
- Tobacco had recently been used by four-fifths (83%), with one-third (31%) reporting daily use in the last six months. The proportion of daily smokers is higher than the 2010 population estimate for this age group (20-29) both in Tasmania (25.5%) and nationally (18%).
- Consistent with previous years, less than one-tenth reported recent use of ketamine (8%), or GHB/GBL/1,4B (3%).
- One-fifth had recently used MDA (21%), a significant increase relative to 2010 (5%). Median frequency of use was relatively low at 2 days (range 1-12 days) in the last six months.
- One-quarter (23%) had used psychedelic mushrooms on a median of 3 days (range 1-24 days) in the last six months, with recent use more common among younger than older participants.
- Almost one-third (29%) reported recent use of amyl nitrite which is significantly less than the proportion in 2009 and 2010 (51%). Frequency of use was relatively low at approximately once every two months.
- One-third (36%) reported low frequency (less than monthly) use of nitrous oxide.
- Over two-fifths (45%) of REU had used benzodiazepines during the last six months, compared to a significantly smaller proportion in 2010 (27%). One-third (36%) reported recent illicit use of benzodiazepines, which is higher relative to 2010 (23%) and much higher than recent estimates of prevalence in the general population (1.5%). However, use of illicit benzodiazepines was relatively low in frequency, at 5.5 days (range 1-40 days) in the last six months.
- Less than one-tenth of the sample (8%) had recently used antidepressants; 7% reported recent licit use and 1% reported recent illicit use.
- Over one-tenth (15%) of REU reported recent illicit use of pharmaceutical stimulants (such as dexamphetamine or methylphenidate) in 2011. The median frequency of use was 5 days (range 3-20 days) in the last six months.
- Only small proportions of the 2011 sample had recently used heroin (8%), methadone (4%), and buprenorphine (3%). However, nearly one-fifth (16%) had recently used 'other opioids' (restricted pharmaceuticals and alkaloid poppy derivatives), a significantly greater proportion relative to 2010 (4%).
- Less than one-tenth reported recent use of codeine (9%) or stimulant based (5%) over-the-counter preparations.
- The proportion of REU reporting recent use of mephedrone in 2011 (27%) was significantly fewer relative to the significant increase noted in 2010 (47%). Mephedrone was snorted or swallowed on a median of 3 days (range 1-30 days) in the last six months, indicating a decrease in frequency of use relative to 2010 (6 days).
- Recent use of other emerging psychoactive substances was relatively low; however, one-tenth of the sample reported recent use of capsules of 'unknown contents' (15%) or use of 'herbal highs' (11%).

4.7.1 Alcohol

The entire sample of REU interviewed in 2011 had used alcohol at some stage in their lives (see Table 12). The median age that respondents had first used alcohol was 14 years (range 1-18 years) and there was no significant difference in the mean age of first use for males (13 years) and females (14 years).

The entire 2011 sample (100%) had used alcohol during the six months preceding the interview, with a median frequency of 60 days (range 3-180 days), or two to three days a week on average. There was no significant difference in the median frequency of use for males and females or 'older' and 'younger' participants. Almost two-fifths of those that had recently used alcohol (36%) had done so three times a week or more during the preceding six months.

Participants also completed the Alcohol Use Disorders Identification Test (AUDIT; Saunders, et al., 1993) which is a brief screening scale to identify individuals with alcohol problems, including those in early stages (see Section 7.5).

Based on data from the 2010 National Drug Strategy Household Survey (AIHW, 2011), it was estimated that among those aged between 20 and 29 nationally, 43.9% had used alcohol on a weekly basis and 2.1% had used alcohol on a daily basis in the past 12 months. A large majority (87%) of the 2011 EDRS sample had used alcohol at least weekly (but not daily) during the six months preceding the interview, which is substantially higher relative to those aged 20-29 nationally (43.9%). The proportion of REU reporting recent daily use of alcohol in 2011 was 7% compared to 2.3% among those aged 20-29 nationally.

Table 12: Patterns of alcohol use of REU, 2003-2011

Alcohol	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	100	100	100	100	100	100	100	100	**100**
Median age first used (range)	15 (10-18)	14 (7-18)	14 (8-18)	15 (4-19)	14 (8-18)	14 (7-17)	14 (6-20)	14 (10-17)	**14 (1-18)**
Used last 6 months (%)	98	98	98	95	99	100	99	100	**100**
Median days used (range)	48 (1-180)	48 (6-180)	49 (2-180)	48 (2-180)	48 (1-180)	72 (12-180)	55 (4-180)	48 (2-180)	**60 (3-180)**

Source: EDRS interviews

4.7.2 Tobacco

A large proportion (97%) of the REU sample in 2011 had smoked tobacco at some stage in their lives (Table 13). The median age that tobacco was first used was 15 years (range 7-23 years) and there was no significant difference between the age of first use for males (15 years) and females (15 years).

A large majority (83%) of the sample had smoked tobacco during the six months preceding the interview. A significantly greater proportion of males (90%) relative to females (69%) reported recent use of tobacco, $\chi^2=5.014$, $p<.05$, but was no significant difference in the proportion of 'older' (79%) and 'younger' (86%) participants (based on a median split for age).

Two-fifths (38%, 95%CI 27-50%) of those who had recently smoked (31% of the entire sample) reported smoking tobacco on a daily basis during the six months preceding the interview, which is greater (but not significantly) relative to the proportion in 2010 (28%, 95%CI 20-37) and similar to 2009 (42%, 95%CI 33-52). There was no significant difference in the proportion of female (39%) and male (36%) tobacco users who reported recent daily use. One-third (33%) of those that had recently smoked tobacco had done so once a week or less during the six months preceding the interview.

In the 2010 National Drug Strategy Household Survey (AIHW, 2011), it was estimated that approximately 15.9% of Tasmanians (aged 14 years and over) smoked tobacco on a daily basis in the year prior to interview, a significant decrease compared to 2007 (22.6%). There was also a significant decrease nationally from 16.6% in 2007 to 15.1% in 2010. Among those aged 20-29, 25.5% of Tasmanians had smoked tobacco on a daily basis, compared to 18% nationally.

In 2011, almost one-third (31%) of the REU sample had smoked on a daily basis, which is higher than the 2010 population estimate for this age group (20-29) both in Tasmania (25.5%) and nationally (18%).

Table 13: Patterns of tobacco use of REU, 2003-2011

Tobacco	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	96	89	89	94	90	96	92	96	**97**
Median age first used (range)	15 (3-23)	14 (7-22)	15 (8-20)	15 (7-23)	15 (7-21)	15 (6-22)	15 (9-25)	15 (7-22)	**15 (7-23)**
Used last 6 mths (%)	81	77	83	81	74	86	77	80	**83**
Used daily last 6 mths (%)	44	40	51	51	36	32	32	22	**31**
Of those used last 6 mths (%)	n=81	n=77	n=83	n=81	n=74	n=86	n=76	n=80	**n=62**
Used daily	54	57	61	63	49	37	42	28	**38**
Used weekly or less	22	25	18	19	14	33	40	45	**33**

Source: EDRS interviews

4.7.3 Ketamine

One-third (32%) of the 2011 REU sample had used ketamine at some stage of their life (Table 14), higher than the proportions between 2005 and 2010 (19%-24%). The median age of first use was 21 years (range 16-29 years).

Less than one-tenth (8%) of the REU sample had used ketamine in the six months preceding the interview in 2011, which is consistent with the low level of use among the cohort since 2004 (see Table 14). The median frequency of ketamine use was 2.5 days (range 2-30 days) in the six months preceding the interview.

The median quantity of ketamine used in a typical session of use was 1.5 points (range 1-20, n=2), with an average of 3 points (range 2-4, n=2) used in the biggest session of use. Other participants (n=4) reported use of 1-2 grams (n=2) or 3-5 lines (n=2) of ketamine in an average session. Estimates of use should be interpreted with caution due to small sample sizes.

In the 2010 National Drug Strategy Household Survey (AIHW, 2011) it was estimated that approximately 0.2% of Tasmanians had used ketamine in the year prior to interview, compared with 0.3% in 2007. Nationally, there was a significant increase in past yearly use between the 2007 (1.1%) and 2010 (1.4%) surveys.

Table 14: Patterns of ketamine use among REU, 2003-2011

Ketamine	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	38	18	24	23	23	26	21	19	**32**
Median age first used (range)	21 15-36	21 18-24	22 16-28	22 19-30	20 18-30	21 18-26	21 15-35	20 17-24	**21** **16-29**
Used last 6 mths (%)	24	5	11	6	14	6	5	6	**8**
Of those used last 6 mths									
Median days used (range)	2.5 1-24	2* 1-5*	3 1-5	2* 1-3	1 1-30	1* 1-5	2* 1-2	1* 1-5	**2.5*** **2-30**
Route of admin.									
Snorted (%)	63	60	45	50	50	50	60	33	**100**
Swallowed (%)	67	80	91	50	57	50	40	67	**-**
Injected (%)	17	-	-	-	-	17	-	-	**17**
Smoked (%)	-	-	-	-	-	-	-	-	**17**
Median points used typical session (range)	-	-	-	-	1.5* 1.5	2* 2-2	1.5* 1-2	3* 1-5	**1.5*** **1-2**
Median points used biggest session (range)	-	-	-	-	1.75* 1.5-2	2* 2-2*	1.5* 1-2	3* 1-5	**3*** **2-4**

Source: EDRS interviews
* n<10

4.7.4 GHB/GBL/1,4B

GHB (gamma-hydroxybutyrate) may also be known as 'GBH', 'grievous bodily harm', 'fantasy', 'liquid ecstasy', 'liquid E' and 'blue nitro' in Australia. GHB has received unfavourable mentions in the media due to GHB-related deaths and overdose and its suspected use in the facilitation of sexual assaults. A study investigating GHB overdose (Degenhardt, Darke & Dillon, 2003) found that over half of GHB users interviewed had overdosed at some stage, and that frequency of use and use of alcohol and other drugs in combination with GHB were significant risk factors. A retrospective study of GHB-related deaths in Australasia from 2000 to 2003 (Caldicott, Chow, Burns, Felgate & Byard, 2004) reported ten confirmed GHB-related deaths during this period, two of which were also associated with use of alcohol.

Several substances such as GBL (gamma-butyrolactone) and 1,4B (1,4 butanediol) are metabolised to GHB following ingestion and may be used as substitutes for GHB (Australian Crime Commission, 2003). There were no reports of use of 1,4B or GBL among the Tasmania sample between 2004 and 2006. In 2007, GBL and 1,4B were incorporated into the category of GHB due to their similarities and low individual levels of use.

Data in relation to GHB/GBL/1,4B should be interpreted with caution due to small sample sizes. Four participants in the 2011 sample had used GHB/GBL/1,4B at some stage of their lives (Table 15). The median age of first use of GHB was 25.5 years (range 23-28 years). Two participants reported use of 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 (1%-6%). The median frequency of use was 1.5 days (range 1-2 days) during this time. Estimates of use should be interpreted with caution due to small sample sizes.

In the 2010 National Drug Strategy Household Survey, none of the Tasmanians sampled had used GHB in the year prior to interview, compared with 0.1% of Australians nationally (Australian Institute of Health and Welfare, 2011).

Table 15: Patterns of GHB/GBL/1,4B use among REU, 2003-2011

GHB	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007# n=100	2008# n=100	2009# n=100	2010# n=100	**2011# n=75**
Ever used (%)	10	7	7	9	4	7	11	9	**5**
Median age first used (range)	22 (16-27)	20* (17-32)	21* (18-30)	23* (21-31)	24* (20-31)	22* (18-30)	22 (17-35)	22* (18-28)	**25.5* (23-28)**
Used last 6 months (%)	6	3	2	3	1	1	3	2	**3**
Median days used last 6 months (range)*	1 (1-1)	1 (1-3)	2 (2-2)	2 (1-3)	6 (n=1)	1 (n=1)	1 (1-2)	1 (1-1)	**1.5 (1-2)**
Route of administration* Swallowed (%)	100	100	100	100	100	100	100	100	**100**
Median quantity (ml)*		n=1	n=1		n=1		n=3		**n=2**
Typical session (range)	-	300	25	-	9	-	10 (1-50)	-	**16 (2-30)**
Biggest session (range)	-	300	50	-	36	-	10 (1-50)	-	**16 (2-30)**

Source: EDRS interviews
Includes GBL and 1,4B
* n<10

4.7.5 MDA

One-third (32%) of the 2011 sample had ever used MDA (Table 16) which is higher than the proportion of the cohorts between 2005 and 2010 (8%-15%). The median age of first use was 19 years (range 17-28 years). Two REU commented that there had been a recent increase in the use of MDA.

One-fifth of participants (21%, 95%CI 14-32) had used MDA during the six months preceding the interview (Table 16), which is significantly greater relative to 2010 (5%, 95%CI 2-11%) and the five years prior to this (3-8%). There was no significant difference in the proportion of males (27%) and females (12%) who reported recent use; however, recent use was significantly more common among younger (33%) relative to older (6%) participants, χ^2=8.19, p<.01

MDA was typically swallowed (75%) or snorted (3%) on a median of two days (range 1-12 days) in the preceding six months, with a median of 1.5 capsules (range 0.5-5 capsules) consumed in a typical session, and 3 capsules (range 1-9 capsules) consumed in the biggest session of use.

Table 16: Patterns of MDA use among REU, 2003-2011

MDA	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	32	20	8	14	8	15	10	14	**32**
Median age first used (range)	20 (16-32)	20 (16-21)	23 (17-28)	22 (15-30)	20 (18-27)	21 (18-26)	21 (14-35)	19 (15-25)	**19 (17-28)**
Used in last 6 mths (%)	21	15	3	3	5	3	8	5	**21**
Median days used last 6 mths (range)	2 (1-20)	2 (1-4)	2* (1-2)	1* (1-1)	4* (1-12)	1* (1-3)	2* (1-24)	2* (1-3)	**2 (1-12)**
Route use (%)									
Smoked	-	-	-	-	-	-	13	-	**6**
Snorted	43	20	-	33	-	-	25	60	**63**
Swallowed	95	100	100	67	100	100	88	40	**75**
Injected	-	-	-	-	-	-	13	-	**-**
Median caps. used typical session (range)	0.5 (0.5-1)	1 (1-5)	1* (1-1)	1* (1-1)	2* (1-3)	2* (1-4)	2* (.75-4)	1* (0.4-2)	**1.5 (.5-5)**
Median caps. used biggest session (range)	1.25 (0.5-2)	1.5 (1-8)	1.5* (1-2)	1* (1-1)	2* (1-5)	2* (1-8)	2* (.75-7)	1* (0.4-2)	**3 (1-9)**

Source: EDRS interviews
* n<10

4.7.6 Psychedelic mushrooms

Over three-fifths (64%) of the 2011 REU sample had ever used psychedelic mushrooms (Table 17). The median age of first use for mushrooms was 18.5 years (range 14-25 years).

One-quarter (23%) of the 2011 sample had used mushrooms in the preceding six months (Table 17). There was no significant difference in the proportion of males (27%) and females (15%) reporting recent mushroom use; however, a significantly greater proportion of younger (33%) relative to older (9%) participants reported recent use (based on a median split for age), χ^2=6.20, p<.05.

All of those that had recently used mushrooms (100%) had ingested them. The median frequency of mushroom use was 3 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, 2003-2011

Psychedelic mushrooms	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	58	60	63	74	66	61	56	58	**64**
Median age of first use (range)	20 (14-37)	20 (14-25)	20 (14-28)	20 (11-29)	19 (15-26)	20 (14-43)	19 (12-31)	19 (14-30)	**18.5 (14-25)**
Used in last 6 mths (%)	38	41	40	55	39	31	21	18	**23**
Used LSD & mushrooms (%)	13	17	16	21	13	19	14	7	**20**
Used LSD or mushrooms (%)	49	56	55	63	46	53	41	38	**45**
Median days use last 6 mths (range)	3 (1-180)	3 (1-48)	3 (1-12)	3 (1-19)	3 (1-20)	2 (1-12)	2 (1-30)	2 (1-6)	**3 (1-24)**

Source: EDRS interviews

4.7.7 Inhalants

Amyl nitrate

Three-quarters (76%) of the 2011 REU sample had ever used amyl nitrite (Table 18). The median age of first use was 20 years (range 15-26 years).

Nearly one-third (29%, 95%CI 20-40) of the sample reported recent use of amyl nitrite which is significantly less than the proportion in 2009-2010 (51%, 95%CI 41-61%). There was no statistically significant difference in the proportion of males (35%) relative to females (19%) or 'younger' (43%) relative to 'older' (12%) participants who had recently used amyl nitrite.

The median frequency of use was 4 days (range 1-20) during the six months preceding the interview or approximately once every two months.

Table 18: Patterns of amyl nitrite use of REU, 2003-2011

Amyl nitrite	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	78	52	49	41	43	38	67	76	**76**
Median age first used (range)	20 (16-43)	20 (14-31)	19 (14-25)	20 (14-55)	20 (15-37)	20 (12-24)	21 (14-26)	20 (16-28)	**20 (15-26)**
Used last 6 mths (%)	43	23	16	10	20	15	51	51	**29**
Median days used last 6 mths (range)	3 (1-72)	5 (1-120)	3.5 (1-20)	3 (1-10)	1.5 (1-10)	2 (1-96)	5 (1-72)	6 (1-48)	**4 (1-20)**

Source: EDRS interviews

Nitrous oxide

Three-fifths of the 2011 sample (59%) had ever used nitrous oxide (Table 19). The median age of first use was 19 years (range 12-28 years).

One-third (36%) of the sample had used nitrous oxide during the six months preceding the interview, which is similar relative to 2009 and 2010 (32%). There was no significant difference in the proportion of males (41%) and females (27%) reporting recent use, or the proportion of younger (43%) relative to older (27%) participants.

The median frequency of use during the last six months was 5 days (range 1-24 days), or just less than once per month. The median number of bulbs used in a typical session was 5.5 (range 1-20 bulbs) and the median number used in a heavy session of use was 10 (range 1-40 bulbs).

Table 19: Patterns of nitrous oxide use of REU, 2003-2011

Nitrous oxide	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	47	57	69	69	64	62	54	57	**59**
Median age first used (range)	19 (12-30)	19 (12-28)	18 (15-29)	19 (11-30)	19 (15-32)	19 (15-28)	19 (12-32)	19 (14-26)	**19 (12-28)**
Used last 6 mths (%)	25	34	41	39	46	29	32	32	**36**
Median days use last 6 mths (range)	4 (1-50)	3 (1-24)	5 (1-24)	5 (1-30)	5 (1-50)	4 (1-60)	5 (1-40)	4 (1-48)	**5 (1-24)**
Bulbs used typical session (range)	6 (1-12)	4 (1-50)	7 (1-40)	5 (1-40)	9 (1-60)	10 (1-50)	10 (1-25)	6 (1-20)	**5.5 (1-20)**
Bulbs used biggest session (range)	10 (1-24)	6 (1-20)	9 (1-60)	10 (1-140)	15 (1-180)	20 (1-100)	17 (1-80)	10 (2-55)	**10 (1-40)**

Source: EDRS interviews

4.7.8 Benzodiazepines

Three-fifths (61%) of the 2011 sample had used benzodiazepines at some stage of their life (Table 20). The median age of first use was 20 years (range 12-35 years). Over two-fifths (45%, 95%CI 35-57%) of the sample had used benzodiazepines during the six months preceding the interview, which is significantly greater than the proportion of the 2010 sample (27%, 95%CI 19-36) and most other years prior to this (23-35%).

The median frequency of recent benzodiazepine use was 7 days (range 1-180 days) during the six months preceding the interview which is higher than the median frequency of use in previous years (3-6 days). One-half (50%) of those who had recently used benzodiazepines had done so on six or less occasions in the last six months which is fewer relative to 2010 (73%).

One-tenth (12%) of the sample reported recent licit (prescribed) use. Licit benzodiazepines had been used on a median frequency of 20 days (range 2-180 days) during the six months preceding the interview.

One-third (36%, 95%CI 26-47%) reported recent illicit (non-prescribed) use of benzodiazepines which is higher (*p*=.09) relative to 2010 (23%, 95%CI 16-32%). Illicit benzodiazepines had been used on a median 5.5 days (range 1-40 days) during this time compared to a median of 3 days (range 1-60 days) in 2010.

Of the Tasmanians surveyed in the 2010 National Drug Strategy Household Survey (AIHW, 2011), 1.3% of the sample had used benzodiazepines for non-medical purposes in the past year, compared to 1% in 2007. Nationally, 1.5% of the population reported past year use compared to 1.4% in 2007. The proportion of the 2011 REU sample reporting recent use (during the last six months) of illicit benzodiazepines (36%) is considerably higher than these estimates of prevalence in the general population.

Table 20: Patterns of benzodiazepine use of REU, 2003-2011

Benzodiazepin-es	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	52	34	40	48	41	51	36	44	**61**
Ever injected (%)	7	2	3	4	2	1	4	2	**3**
Median age first used (range)	20 (10-40)	20 (8-24)	19 (10-28)	21 (14-35)	20 (13-34)	21 (13-29)	20 (14-28)	20 (14-27)	**20 (12-35)**
Used last 6 mths (%)	35	23	25	33	25	37	24	27	**45**
Injected last 6 mths (%)	2	1	-	-	1	-	1	-	**-**
Median days use last 6 mths (range)	6 (1-180)	6 (1-96)	3 (1-50)	5 (1-180)	4 (1-30)	4 (1-180)	4 (1-60)	4 (1-80)	**7 (1-180)**
Licit use last 6 mths (%)	n/a	n/a	n/a	n/a	9	10	6	6	**12**
Illicit use last 6 mths (%)	n/a	n/a	n/a	n/a	20	31	19	23	**36**

Source: EDRS interviews

4.7.9 Antidepressants

One-fifth (23%) of the 2011 sample had used antidepressants at some stage of their life (Table 21). The median age of first use was 17 years (range 14-27 years).

Less than one-tenth of the sample (8%) had used antidepressants in the six months preceding the interview, with 7% reporting recent licit use and 1% reporting recent illicit use.

Licit antidepressants had been used orally on a median frequency of 180 days (range 75-180 days) during the six months preceding the interview. Illicit antidepressants had been used orally on 3 days by a single participant.

Table 21: Patterns of antidepressant use of REU, 2003-2011

Anti-depressants	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	32	14	21	20	24	22	16	16	**23**
Median age first used (range)	18 (13-44)	20 (17-23)	18 (16-27)	20 (14-35)	20 (14-35)	18 (10-27)	21 (14-42)	18 (12-26)	**17 (14-27)**
Used last 6 mths (%)	14	4	12	9	11	6	10	5	**8**
Median days used (range)	90 (14-180)	6 (1-180)	180 (1-180)	34 (3-180)	180 (1-180)	135 (30-180)	105 (2-180)	15 (1-180)	**135 (3-180)**
Licit use last 6 mths (%)	n/a	n/a	n/a	n/a	6	5	9	3	**7**
Illicit use last 6 mths (%)	n/a	n/a	n/a	n/a	5	1	1	2	**1**

Source: EDRS interviews

4.7.10 Pharmaceutical stimulants

In 2007 a distinction was made between illicit (non-prescribed) and licit (prescribed) use of pharmaceutical stimulants. Prior to this, data may include illicit and licit use. However, it is likely that the majority of this use was illicit; given the low median frequency of use (pharmaceutical stimulants are typically prescribed for daily administration long-term). In 2011, four participants reported past use of licit pharmaceutical stimulants with two participants reporting licit use in the preceding six months.

Two-fifths (39%) of the 2011 sample had ever used illicit pharmaceutical stimulants (Table 22). The median age of first use was 17 years (range 13-30 years). Over one-tenth of the sample (15%) had used pharmaceutical stimulants in the six months preceding the interview, similar to the proportion among the cohorts between 2004 and 2010 (9-19%). There was no significant difference in the proportion of males (12%) relative to females (19%) or younger (21%) and older (6%) participants who had recently used illicit pharmaceutical stimulants.

The majority of those who had recently used pharmaceutical stimulants had taken the drug orally (91%), and smaller proportions had recently snorted (46%) these drugs in the preceding six months. The median frequency of use was 5 days (range 3-20 days) in the six months preceding the interview. The median number of tablets used in a typical session was 3.5 (range 2-10 tablets) and the median number used in a heavy session of use was 5 (range 3-15 tablets).

Table 22: Patterns of pharmaceutical stimulant use of REU, 2004-2011

Pharmaceutical stimulants	2004 n=100	2005 n=100	2006 n=100	2007* n=100	2008* n=100	2009* n=100	2010* n=100	**2011* n=75**
Ever used (%)	39	44	50	40	41	30	21	**39**
Median age of first use (range)	19 (7-31)	19 (15-28)	19 (11-31)	18 (14-31)	19 (13-47)	19 (11-28)	18 (14-25)	**17 (13-30)**
Used last 6 mths (%)	14	16	12	19	16	10	9	**15**
Median days used last 6 mths (range)	3 (1-180)	3.5 (1-30)	2 (1-60)	2 (1-90)	2 (1-10)	2 (1-15)	1 (1-58)	**5 (3-20)**
Median tablets typical session (range)	4 (1-15)	4 (2-10)	5 (1-8)	3 (2-20)	3 (1-10)	4 (1-15)	5 (1-15)	**3.5 (2-10)**
Median tablets biggest session (range)	4 (1-15)	6 (2-25)	6 (1-32)	5 (2-20)	6 (2-25)	5 (1-20)	5 (1-15)	**5 (3-15)**

Source: EDRS interviews
* Data includes only illicit use; data from previous years may include both illicit and licit use

4.7.11 Over-the-counter preparations

Around one-tenth (9%) reported use of over the counter codeine-based products (e.g, Nurofen plus, Panadeine) for non-medical purposes during the last six months compared to similar proportions in 2009 (9%) and 2010 (5%) (Table 23). The median frequency of this use was four days (range 1-64 days) in the last six months.

Two-fifths (39%) reported lifetime use of over the counter stimulant-based products (e.g., pseudoephedrine-based cold and flu tablets) for non-medical purposes (Table 23). Less than one-tenth (5%) reported ingesting stimulant-based products on a median frequency of five days (range 3-20 days) during the last six months.

Table 23: Use of over-the-counter preparations for non-medical purposes among REU, 2009-2011

	Codeine-based			**Stimulant-based**		
	2009 n=100	2010 n=100	**2011 n=75**	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	17	12	**n/a**	10	13	**39**
Median age of first use (range)	20 (14-32)	18 (16-25)	**n/a**	20 (17-26)	22 (15-35)	**17 (13-30)**
Used last 6 mths (%)	9	5	**9**	6	3	**5**
Injected last 6 mths (%)	-	-	**-**	-	-	**-**
Median days used (range)	2 (1-90)	n/a	**4 (1-64)**	5 (2-12)	3 (2-4)	**5 (3-20)**

Source: EDRS interviews

4.7.12 Heroin and other opiates

Heroin

Less than one-fifth (17%) of the 2011 REU sample had ever used heroin (Table 24). The median age of first heroin use was 21 years (range 16-23 years). Less than one-tenth (8%) had used heroin intravenously on a median of 13 days (range 2-31 days) 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 in relation to injecting drug use (see Bruno, 2005, 2006; de Graaff & Bruno, 2007, 2008, 2009, 2010, 2011, 2012).

Table 24: Patterns of heroin use of REU, 2003-2011

Heroin	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	20	4	8	10	5	6	6	8	**17**
Median age of first use (range)	19 (14-30)	20 (16-26)	22 (16-26)	18 (15-32)	19 (16-21)	20 (16-27)	20 (15-29)	19 (14-25)	**21 (16-23)**
Used in last 6 mths (%)	6	-	-	2	-	1	3	2	**8**
Injected last 6 mths (%)	6	-	-	2	-	-	-	2	**8**
Median days last 6 mths (range)	16 (3-48)	-	-	7 (3-10)	-	1 (n=1)	1 (1-48)	9 (2-15)	**13 (2-31)**

Source: EDRS interviews

Methadone

Less than one-tenth (8%) of the 2011 REU sample had ever used methadone, which is consistent with the low levels of lifetime use reported in previous years (Table 25). The median age of first methadone use was 22 years (range 18-25 years). Three participants (4%) had used methadone during the six months preceding the interview. Only 3% of the sample had recently injected methadone. The median frequency of use was 180 days (range 6-180 days) in the last six months.

Table 25: Patterns of methadone use of REU, 2003-2011

Methadone	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**	**2011 n=75**
Ever used (%)	14	2	5	9	6	3	8	**10**	**8**
Median age of first use (range)	22 (16-36)	18 (17-19)	20 (16-22)	21 (16-34)	22 (14-30)	20 (19-22)	21 (14-25)	**21 (17-25)**	**22 (18-25)**
Used in last 6 mths (%)	13	2	1	5	1	2	4	**5**	**4**
Injected last 6 months (%)	11	2	1	3	-	1	-	**-**	**3**
Median days use last 6 mths (range)	10 (1-24)	90 (2-180)	180 n=1	20 (1-180)	1 n=1	90 (1-180)	24 (2-180)	**4 (2-24)**	**180 (6-180)**

Source: EDRS interviews

Buprenorphine

Consistent with the low levels of buprenorphine use among the REU cohorts in previous years, six participants had ever used buprenorphine among the 2011 sample (Table 26), and only two participants had taken buprenorphine orally on a median of 9.5 occasions (range 4-15 days) during the last six months.

Table 26: Patterns of buprenorphine use of REU, 2003-2011

Buprenorphin	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	5	-	2	3	1	2	2	5	**8**
Median age of first use (range)	25 (22-37)	-	21 (20-22)	32 (22-35)	22	28 (22-33)	24 (20-28)	20 (19-25)	**28.5 (23-33)**
Used last 6 mths (%)	3	-	1	1	1	1	1	1	**3**
Injected last 6 mths (%)	2	-	-	-	1	-	-	-	**1**
Median days used last 6 mths (range)	30 (2-180)	-	6 n=1	180 n=1	1 n=1	15 n=1	90 n=1	14 n=1	**9.5 (4-15)**

Source: EDRS interviews

Other opioids

'Other 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-third (29%) of the 2011 REU sample had ever used 'other opioids' for not-as-prescribed (or non-licit) purposes (Table 27), which is similar to the proportions in previous years (19-35%). The median age of first use was 19.5 years (range 16-25 years).

Almost one-fifth (16%, 95%CI 9-26%) of the sample had recently used 'other opioids' for non-medical purposes, which is significantly greater than the proportion in 2010 (4%, 95%CI 2-10%). The median frequency of 'other opioid' use was 6 days (range 1-40 days) during the six months preceding the interview. For those who had recently used 'other opioids', the most common routes of administration were injecting (58%), swallowing (42%), and smoking (25%).

Table 27: Patterns of illicit 'other opioid' use among REU, 2003-2011

Other opioids	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	35	19	25	33	23	29	19	19	**29**
Median age of first use (range)	20 (14-44)	19 (16-27)	18 (16-27)	20 (14-29)	19 (13-25)	20 (15-27)	19 (13-27)	18 (14-27)	**19.5 (16-25)**
Used last 6 mths (%)	13	8	13	14	8	17	6	4	**16**
Injected last 6 mths (%)	8	-	-	4	1	3	1	-	**9**
Median days used (range)	6 (1-120)	11 (3-48)	8 (1-48)	3 (1-121)	8 (1-72)	4 (1-96)	3 (1-24)	4 (1-12)	**6 (1-40)**

Source: EDRS interviews

4.8 Emerging psychoactive substance (EPS) use

4.8.1 Mephedrone

Mephedrone (4-methylmethcathinone) is a synthetic stimulant (common names: 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 over the past two years, particularly in the UK and Europe (see Brunt, Poortman, Niesink, & Van den Brink, 2010; Winstock, 2010).

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, 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, 2010). There are also several less popular synthetic cathinones available such as methylone, and butylone (James et al., 2010; Winstock, 2010). For more information on mephedrone use in Australia (see Matthews & Bruno, 2010).

In Tasmania mephedrone is typically sold in capsule or powder form and purchased locally or online. Mephdrone first appeared in Tasmania as capsules known as 'neodoves' or 'Israelis' in 2008 and 2009, but was commonly marketed as mephedrone in 2010 and 2011. Over one-third (37%) of the 2011 sample reported lifetime use of mephedrone and one-quarter (27%, 95%CI 18-38%) reported use of mephedrone in the last six months (Table 28), which is significantly fewer relative to 2010 when almost one-half of the sample reported recent use (47%, 95%CI 38-57%) compared to just over one-tenth in 2009 (15%, 95%CI 9-23%). Mephedrone was typically snorted or swallowed and was used on a median frequency of 3 days in the last six months (range 1-30) or approximately once every two months. Of those who commented on the last source of mephedrone (n=19), a majority had last obtained mephedrone from a friend (58%) or dealer (32%), with only very few (11%) obtaining the drug from the internet.

Several KE (n=6) noted some use of mephedrone among the drug consumers that they were familiar with, with some (n=2) commenting that there was less use of mephedrone relative to 2010. KE working in treatment settings indicated that mephedrone was not typically the primary drug of concern or that it caused few issues (n=5). A capsule of mephedrone was reported to cost $35-40 (n=2). There were no KE comments relating to increased use and availability of mephedrone in 2011 compared to the large number of comments observed in 2010. This is generally consistent with the decreased use of mephedrone by REU in 2011 relative to the peak in recent use observed in 2010. Several REU also commented anecdotally that the use and availability of mephedrone had recently increased (n=3), but again the number of REU to comment on this trend was far fewer relative to 2010 (n=24).

Table 28: Patterns of mephedrone use of REU, 2008-2011

	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever used (%)	1	15	65	**37**
Used last 6 months (%)	1	15	47	**27**
Route of administration	n/a	n/a		
Swallow (%)			62	**68**
Snort (%)			66	**74**
Smoke (%)			2	**-**
Inject (%)			-	**5**
Median days used (range)	30 (n=1)	2 (1-90)	6 (1-36)	**3 (1-30)**
Median price per capsule (range)	n/a	n/a	$30 (20-40)	**n/a**

Source: EDRS interviews

4.8.2 Other EPS

Table 29 shows the proportion of the EDRS cohorts reporting recent use of other 'emerging psychoactive substances' or 'research chemicals' 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 of using these drugs. In many countries, these chemicals are not controlled substances and can often be purchased through chemical supply companies for 'research' purposes. Also included as EPS are substances which have been around for many years (e.g., mescaline, DMT) but which have the potential to emerge as popular substances among this group.

Of particular note in 2011 was the use of mephedrone (27%) (see Section 4.8.1) and related substances such as methylone (also known as bk-MDMA) (4%). Small proportions of the sample reported recent use of psychedelics such as 2CI (4%), DMT (4%), 5-MEO-DMT (3%), 2CE (1%), and mescaline (1%). Despite recent media and legislative action with regard to synthetic cannabinoids, few (1%) reported recent use of these substances. Consistent with this, few KE commented on synthetic cannabinoids and those who did reported limited use.

For the first time in 2011, 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% (n=11) of the sample. These had typically been swallowed or snorted on a median of 2 days (range 1-30 days) in the last six months. Those who commented indicated that the capsules had been sourced through friends (40%), dealers (40%), or had been given as a gift (20%).

Recent use of 'herbal highs' was reported by around one-tenth (11%, n=8) of the sample on a median frequency of 2.5 days (1-30 days) in the last six months. Herbal highs had been swallowed (63%), smoked (50%) or snorted (13%) during this time. Those who commented indicated that 'herbal highs' had been sourced through a shop (25%) or through friends (25%), dealers (25%), or the internet (25%). Few participants specified which herbal highs they had consumed, however, euphoria, damiana, bliss, and herbal ecstasy were mentioned by single participants.

Table 29: Use of emerging psychoactive substances in last six months among REU, 2003-2011

% used in last 6mths	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Stimulants									
Mephedrone	-	-	-	-	-	1	14	47	**27**
Methylone	-	-	-	-	-	-	1	4	**4**
Methcathinone (khat) #	-	-	-	-	-	1	-	1	**-**
BZP	-	-	-	1	2	-	-	2	**-**
MDPV	-	-	-	-	-	-	1	2	**1**
Psychedelic phenethylamines									
2CB	1	1	1	-	2	2	1	2	**-**
2CI	-	5	1	23	12	2	9	4	**4**
2CE	-	-	-	-	1	1	3	7	**1**
2C-T-7	-	1	-	-	-	-	-	1	**-**
DOI	-	-	-	-	-	-	-	3	**-**
Mescaline #	-	1	-	-	-	1	-	1	**1**
Psychedelic tryptamines									
DMT #	-	-	-	1	1	3	-	7	**4**
5-MEO-DMT #	-	-	-	-	-	1	-	-	**3**
PMA	-	-	-	-	-	-	-	1	**-**
Plant derivatives									
Datura	-	-	-	-	-	-	1	1	**-**
Salvia divinorum	-	-	1	-	-	1	1	1	**-**
LSA (woodrose seeds)	-	-	-	-	1	2	-	-	**3**
Inhalants									
Butane	-	-	-	-	-	1	-	-	**-**
Synthetic cannabinoids									
K2/Spice	-	-	-	-	-	-	-	-	**-**
Other synthetic cannabinoid	-	-	-	-	-	-	-	-	**1**
Other									
DXM*	-	2	-	-	-	2	-	-	**3**
Ephedrine	-	-	-	-	-	-	1	-	**-**
5-HTP	-	-	1	-	-	-	-	-	**-**
PCP	-	1	-	-	-	-	-	-	**-**
Melanotan	-	-	-	-	-	-	-	-	**1**
Capsule (contents unknown)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**15**
Herbal highs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**11**

Source: EDRS interviews

* Dextromethorphan (a common ingredient in over-the-counter cough medicines)

Can also be derived from plants

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

5.1 Ecstasy

Summary:

- The median last purchase price for one tablet of ecstasy was $30 (range $15-$40) reflecting a decrease relative to 2010 ($35). The median last purchase price for a capsule of ecstasy was also $30. No recent price changes were evident with three-fifths (65%) indicating that price had recently remained stable.
- Relative to 2009 (10%) a significantly greater proportion of the 2010 (41%) and 2011 (47%) samples indicated that ecstasy was currently low in purity.
- The proportion reporting that ecstasy was 'easy' or 'very easy' to obtain was significantly lower in 2010 (61%) and 2011 (70%) relative to 2009 (83%). While a recent decrease in availability was noted in 2010, recent availability was reported to be relatively stable in 2011.
- Ecstasy was typically purchased from friends and obtained from a friend's home, the respondent's own home or a nightclub/pub.
- Three-fifths (62%) indicated they typically purchased ecstasy both for themselves and others, with a median of three tablets (range 1-100 tablets) purchased per occasion.

5.1.1 Price

The median last purchase price for one ecstasy tablet was $30 (range $15-30) in 2011 compared to $35 (range $24-35) in 2010 (Table 30). The median last purchase price for one capsule of ecstasy was also $30. Three-fifths (65%) indicated that the price of ecstasy had recently remained stable.

KE comments on the price of ecstasy were varied. The price for one ecstasy pill was reported to range from $10 to $50 (n=5), with an average price of $40-50 (n=2) and a price of $10-20 (n=3) reported for poor quality ecstasy.

Table 30: Price of ecstasy purchased by REU and price variations, 2003-2011

Median price (range)	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Pill/Tablet									
Market price (range)	$50 (30-50) n=65	$40 (30-50) n=100	$45 (35-50) n=100	$40 (30-60) n=100	$40 (26-50) n=99	$35 (20-40) n=100	$35 (25-50) n=92	$35 (20-50) n=95	**$35 (20-40) n=65**
Last purchase price	$45 (15-68) n=98	$40 (30-50) n=100	$40 (20-50) n=95	$35 (20-50) n=97	$40 (15-50) n=99	$35 (15-40) n=96	$35 (18-40) n=98	$35 (24-35) n=91	**$30 (15-40) n=61**
10 ecstasy tablets (range)	$375* (350-400) n=2	-	$350 (250-400) n=12	$350* (350-350) n=2	$300* n=1	$320 (170-400) n=73	$320 (100-400) n=78	$300 (180-400) n=30	**$300 (150-350) n=26**
Powder									
Last price per gram (range)	-	-	-	-	$350* n=1	-	$250* (100-300) n=3	$200* (120-250) n=8	**$300* n=1**
Capsule									
Last price per capsule (range)	-	-	-	-	-	$35* (30-50) n=9	$30 (20-40) n=25	$30 (20-50) n=70	**30 (10-40) n=46**
Price change									
% Don't know	-	2	-	-	2	-	8	9	**5**
% Increased	5	6	7	5	18	14	10	38	**14**
% Stable	72	64	67	54	65	55	52	40	**65**
% Decreased	15	15	10	28	7	18	12	4	**5**
%Fluctuated	8	13	16	13	8	13	17	9	**11**

Source: EDRS interviews
*n<10

The price of ecstasy reported by Tasmania Police has varied substantially over the past decade (Table 31). A price range of $35-50 was reported in 2009/10 which is slightly higher than the median price of $30 reported by REU in 2011. At the time of publication, data werw not available for the 2010/11 financial year.

Table 31: Price per tablet of ecstasy reported by Tasmania Police 2000/01-2009/10

	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	**08/09**	**09/10**
Price per pill ($)	50-60	50-70	30-70	30-70	40-50	25-40	40	30-45	**35-40**	**35-50**

Source: Australian Bureau of Criminal Intelligence (2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011)

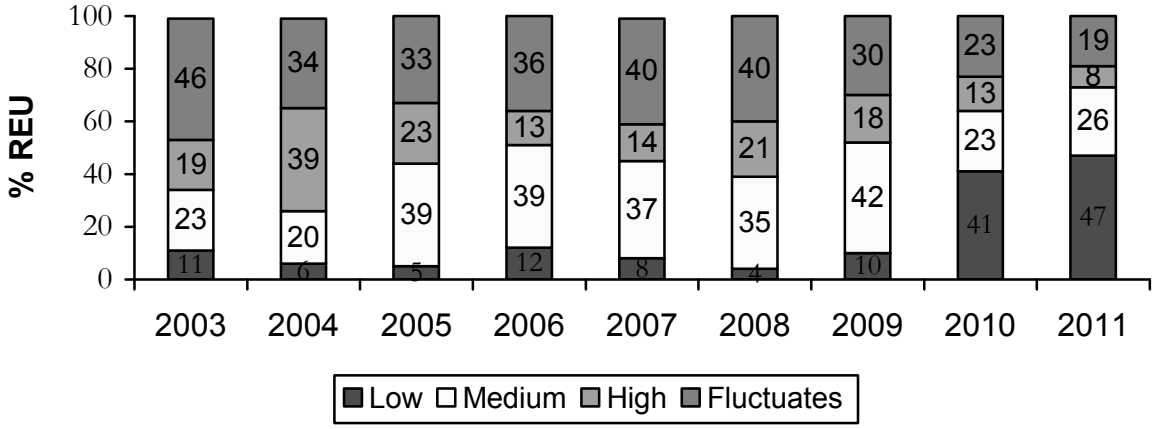
5.1.2 Purity

In previous years, the purity of ecstasy was typically reported to be medium or fluctuating in the last six months (Figure 6). In both 2010 (41%, 95%CI 32-52) and 2011 (47%, 95%CI 36-58) a significantly greater proportion of the sample reported that ecstasy was currently low in purity relative to 2009 (10%, 95%CI 6-17) and the years prior to this.

REU reports on recent changes in purity were mixed in 2011 with a majority indicating that ecstasy had either remained stable (36%), decreased (24%) or fluctuated (31%) during the six months preceding the interview (Figure 7).

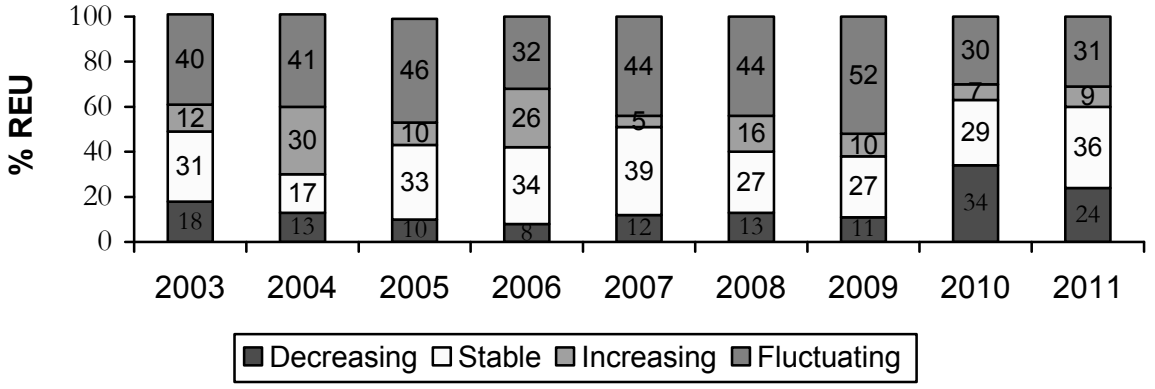
Few KE commented on ecstasy purity with two KE noting that purity was currently low. Several REU also commented anecdotally on the low purity of ecstasy (n=4).

Figure 6: Reports of current ecstasy purity among REU who commented, 2003-2011



Source: EDRS interviews

Figure 7: Reports of change in ecstasy purity in the last six months among REU who commented, 2003-2011



Source: EDRS interviews

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 22.9% to 34.2% between 2001/02 and 2009/10 (see Table 32). Data for the 2010/11 reporting period was not available at the time of publication.

Table 32: Median purity of phenethylamine seizures 2000/01-2009/10

	2000/ 01	2001/ 02	2002/ 03	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	**2008/ 09**	**2009/ 10**
Median % Purity	3.4 n=1	22.9 n=1	28.5 n=3	26.0 n=33	-	-	27.1 n=4	24.6 n=3	**-**	**34.2 n=1**

Source: Australian Bureau of Criminal Intelligence (2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011)

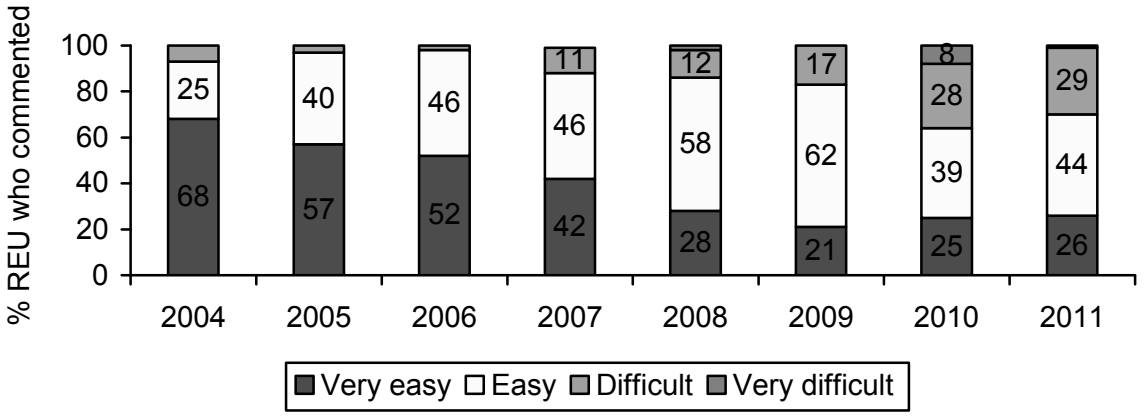
5.1.3 Availability

The majority of REU interviewed in 2011 indicated that ecstasy was 'very easy' or 'easy' to obtain (70%, 95%CI 59-79). This is similar to the proportion in 2010 (63%, 95%CI 54-73) (Figure 8) where a marked decrease in availability was noted relative to 2009 (83%, 95%CI 74-89). In addition, over one-quarter reported that ecstasy was currently difficult to obtain in 2010 (28%) and 2011 (29%) which is greater than previous years (3-17%).

While the proportion reporting a recent decrease in availability was significantly higher in 2010 relative to 2009 (39% vs. 15%), in 2011 a majority of the sample indicated that recent availability had remained stable (69%) in 2011 (See Figure 9).

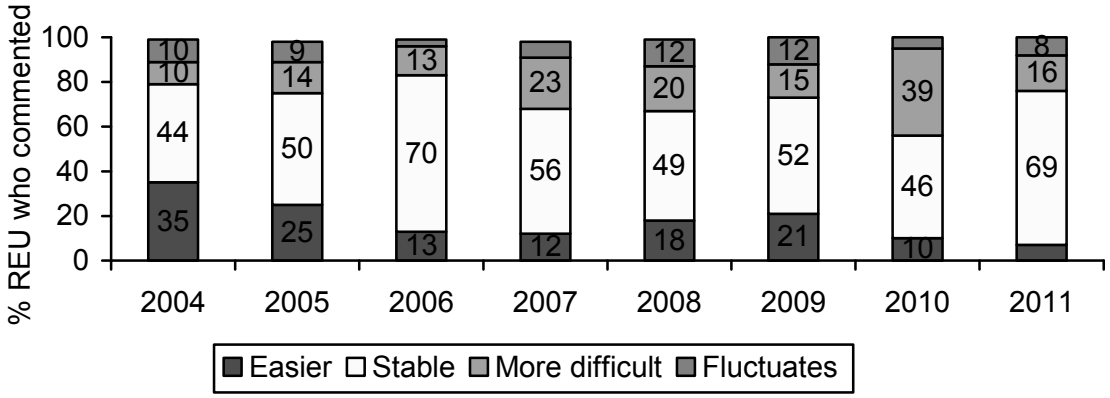
Several KE (n=4) commented that there was currently low use and availability of ecstasy in Hobart.

Figure 8: REU reports of current availability of ecstasy, 2004-2011



Source: EDRS interviews

Figure 9: REU reports of change in ecstasy availability in the last six months, 2004-2011



Source: EDRS interviews

The sample of REU was asked who they had last obtained ecstasy from and the location where they had last obtained the drug in the six months preceding the interview (Table 33). A large majority indicated that they last obtained ecstasy from friends (76%), most typically from a friend's home (29%), the respondent's own home (18%), a nightclub (14%) or a public bar (14%).

Table 33: REU reports of ecstasy last source and location in the preceding six months, 2009-2011

	2009	2010	**2011**
Person last scored ecstasy from*	n=100	n=100	**n=72**
Friends (%)	80	73	**76**
Known dealers (%)	7	18	**15**
Acquaintances (%)	7	7	**8**
Workmates (%)	2	-	**-**
Unknown people (%)	1	2	**-**
Street/Mobile dealers (%)	3	-	**-**
Location last scored ecstasy*	n=99	n=100	**n=72**
Friend's home (%)	37	39	**29**
Dealer's home (%)	2	5	**6**
Home (%)	19	18	**18**
Nightclub (%)	21	13	**14**
Rave/doof/dance party	2	1	**3**
Private party (%)	2	3	**3**
Pub (%)	6	13	**14**
Street (%)	2	1	**4**
Agreed public location (%)	6	6	**3**
Work (%)	1	-	**-**
Acquaintance's house (%)	1	-	**3**

Source: EDRS interviews

5.1.4 Ecstasy markets and patterns of purchasing ecstasy

REU interviewed in 2011 reported purchasing ecstasy from a median of 3 people (range 1-10 people) in the preceding six months (Table 34). Three-fifths of the sample (62%) indicated that they typically purchased ecstasy for themselves and others, and one-third (34%) typically purchased ecstasy only for themselves. Most commonly, ecstasy was purchased monthly or less frequently (62%) or fortnightly to monthly (27%) during this time, with a median of 3 tablets (range 1-100 tablets) purchased in a single transaction.

Table 34: Patterns of purchasing ecstasy in the last six months, 2005-2011

	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Median no. of people purchased from (range)	4 (1-25)	4 (1-30)	3 (1-15)	4 (1-15)	3 (1-20)	3 (1-10)	**3 (1-10)**
Purchased for (%)							
Didn't purchase	-	2	-	3	-	1	**3**
Self only	34	44	35	31	36	36	**34**
Self and others	66	54	65	66	61	60	**62**
Others only	-	-	-	-	3	3	**1**
No. times purchased (%)							
1-6	38	43	44	34	49	54	**62**
7-12	36	42	36	45	38	36	**27**
13-24	25	10	18	15	9	9	**10**
25 +	-	4	2	5	4	1	**1**
Median no. of pills usually purchased (range)	3 (1-100)	3 (1-100)	3 (1-50)	5 (1-100)	5 (1-100)	3 (1-30)	**3 (1-100)**

Source: EDRS interviews

5.2 Methamphetamine

Summary:

- The median last purchase price for one 'point' (0.1 g) of methamphetamine powder was $35 (range $20-$50) which is lower than previous years ($40). The median last purchase price for one gram of methamphetamine powder ($250) was consistent with prices reported over the past two years and remained lower than that reported prior to 2009 ($300-350).
- Methamphetamine powder was reported to be medium to high in purity and was considered to be 'easy' or 'very easy' to obtain among those who commented.
- Small sample sizes in relation to crystal and base and low levels of recent use among the current cohort both indicate very low availability of these forms in 2011.

5.2.1 Price

REU participants were asked to indicate the last purchase price for the three major forms of methamphetamine (see Table 35). A greater number of respondents were able to report confidently on the price of methamphetamine powder relative to methamphetamine base and crystal methamphetamine. As such, prices reported for the latter two methamphetamine forms should be interpreted with caution.

The median last purchase price for one point (0.1 of a gram) of methamphetamine powder was $35 (range $20-50), which is lower than the median price of $40 reported among previous samples. The last purchase price for one gram of methamphetamine powder was $250 (range $100-300), which is similar to purchase prices reported in 2009 and 2010. The majority (95%) of those who commented on recent changes in methamphetamine powder (Figure 10) indicated that the price had recently been stable. Few participants were able to comment on recent price changes in relation to base and crystal.

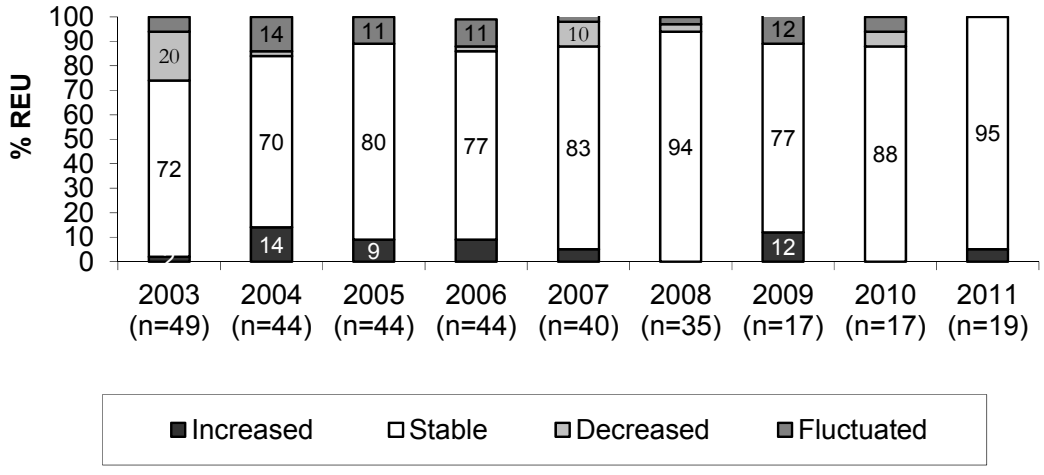
Several KE (n=5) commented that the price for 0.1 of a gram of methamphetamine was $50, while others noted that one point could be as much as $70.

Table 35: Last purchase price of methamphetamine forms purchased by REU, 2003-2011

Median last price (range)	2003	2004	2005	2006	2007	2008	2009	2010	**2011**
Powder									
Point	$40 (3-65) n=47	$40 (20-50) n=41	$40 (25-50) n=36	$40 (30-50) n=27	$40 (30-60) n=23	$40 (25-50) n=20	$40 (20-60) n=16	$40* (30-50) n=6	**$35* (20-50) n=9**
Gram	$300* (30-320) n=9	$300 (50-400) n=11	$300 (200-400) n=14	$350 (45-400) n=11	$350 (200-380) n=16	$300 (200-350) n=13	$255 (170-300) n=12	$250 (150-300) n=13	**$250* (100-300) n=9**
Base									
Point	$40 (20-50) n=14	$50 (30-55) n=14	$45* (30-50) n=8	$40 (10-300) n=25	$40 (30-50) n=21	$40* (35-50) n=9	$60* (50-80) n=5	$50* n=1	**$50* (50) n=2**
Gram	$275* (200-300) n=4	$300* (250-350) n=3	$300* (250-400) n=3	$350* (300-350) n=7	$375* (350-400) n=4	$300* (300-300) n=3	$400* n=1	$163* (25-300) n=2	**$150* n=1**
Crystal									
Point	$50 (35-100) n=22	$50* (40-50) n=6	$50* (50-60) n=3	$50* (40-50) n=8	$45* (35-50) n=4	$40* n=1	$50* n=1	-	**$50* (50) n=2**
Gram	$450* (400-450) n=3	$350* (350-350) n=2	$375* (350-400) n=2	$150* n=1	$300* n=1	$300* (300-300) n=2	$450* (300-600) n=2	-	**$275* (250-300) n=2)**

Source: EDRS interviews
* n<10

Figure 10: Recent changes in price of methamphetamine powder purchased among REU who commented, 2003-2011



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 Australian Bureau of Criminal Intelligence (ABCI), now the Australian Crime Commission (ACC) (Table 36). During the 2009/10 financial year, Tasmania Police reported methamphetamine prices as $50 per 'point' (0.1 g) and $300 per gram (Table 36). Data for the 2010/11 reporting period was unavailable at the time of publication.

Table 36: Methamphetamine prices in Tasmania reported by Tasmania Police Drug Investigation Services, 2003/04-2009/10

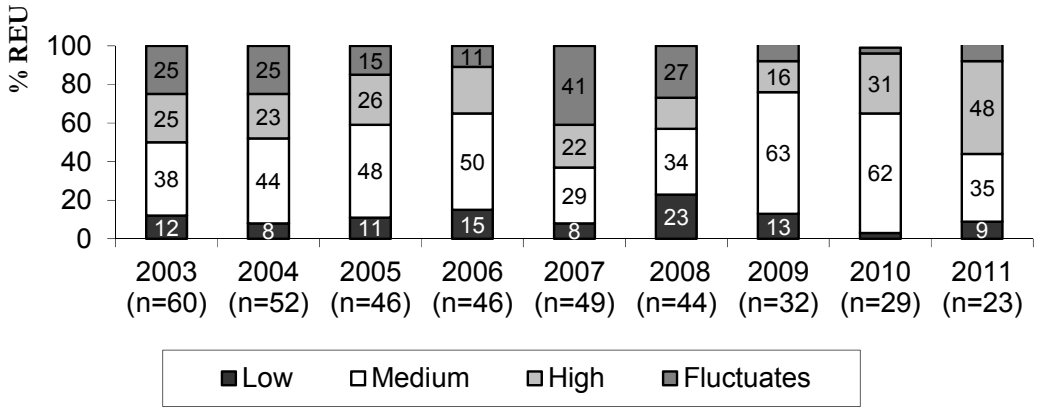
	Point (~0.1 g)	Full gram (1.0 g)	Ounce (28 g)
2003/04	$50-60	$200-400	$3,500-6,000
2004/05	$50	*price not reported*	$5,000
2005/06	*price not reported*	*price not reported*	$5,000
2006/07	$50	$270-380	$4,000-5,000
2007/08	$30-50	$200-300	$5,000-8,000
2008/09	$50	$300	*price not reported*
2009/10	**$50**	**$300**	$4,000-6,000

Source: Australian Crime Commission
Note: Data for 2010/11 financial year were not available at the time of publication

5.2.2 Purity

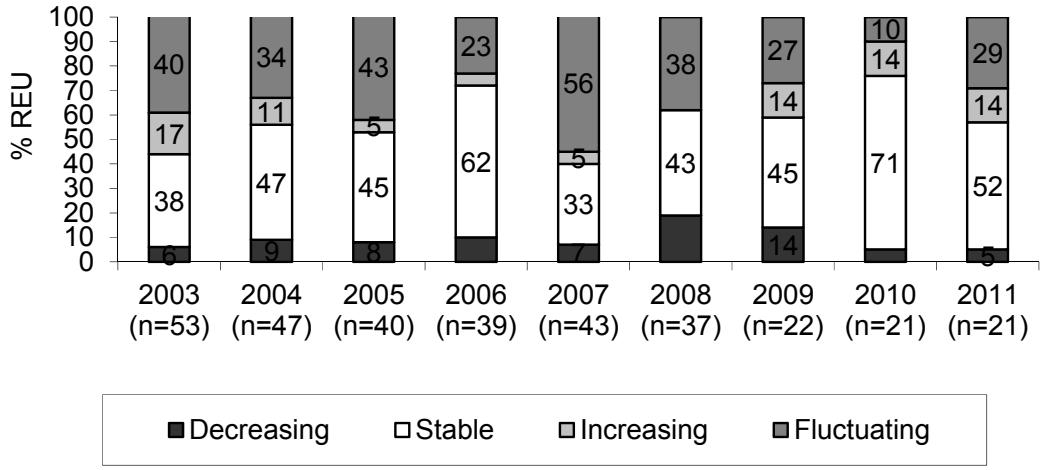
Due to the small number of REU who commented on methamphetamine base and crystal methamphetamine, trends in purity are examined over time for methamphetamine powder only. The majority of REU who commented in 2011 indicated that methamphetamine powder was high (48%) or medium (35%) in purity (Figure 11). While 52% of the sample reported the purity as stable in the last six months, 29% reported the purity as fluctuating (Figure 12).

Figure 11: Reports of methamphetamine powder purity among REU who commented, 2003-2011



Source: EDRS interviews

Figure 12: Reports of changes in methamphetamine powder purity in the past six months among REU who commented, 2003-2011



Source: EDRS interviews

Table 37 shows purity of methamphetamine seizures received at Tasmanian police analytical laboratories for the 1998/99 to 2009/10 financial years. Data for the 2010/11 financial period were not available at the time of publication. All amphetamine-type stimulants tested for purity between 2003/04 and 2008/09 were methylamphetamine rather than amphetamine. 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 2009/10 reporting period, the total average purity of analysed methamphetamine seizures was relatively low (4.4%), and lower than the average purity of seizures analysed in the previous three reporting periods (8.5%-13%). While it is difficult to make inferences from small numbers of analysed seizures, it is notable that the upper-bound purity range of analysed seizures, which had been steadily increasing between 2000/01 and 2003/04, has declined in recent years. The particularly high-purity seizures in previous years are also uncommon by national standards (ACC, 2005) and may reflect the selection of particularly unusual seizures of the drug for analysis by police.[5]

[5]Anecdotal reports from Tasmania Police in previous IDRS surveys have suggested that these particularly high-purity samples may have been seizures of small amounts of crystal methamphetamine.

Table 37: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 1998/99-2009/10

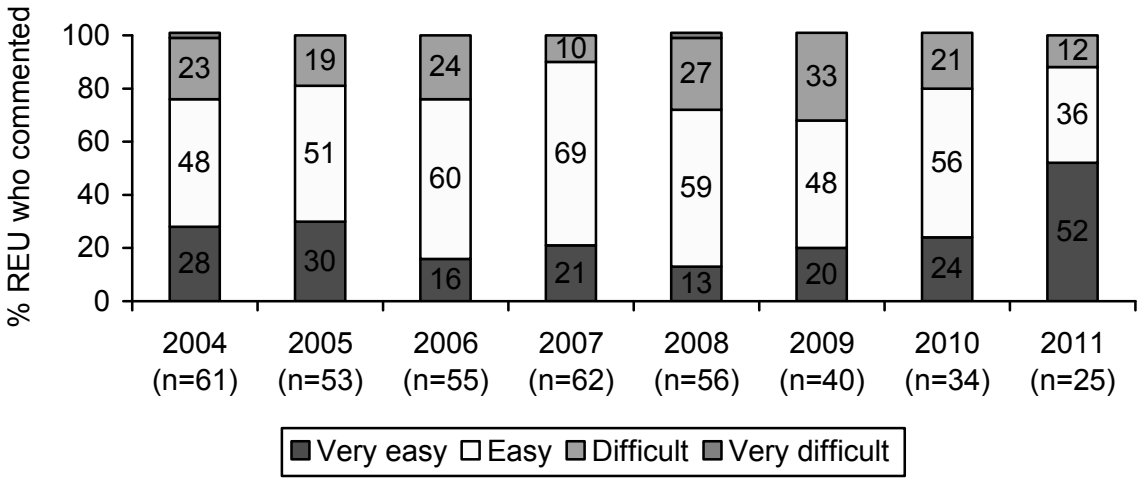
	1998 /99	1999 /00	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06	2006 /07	2007 /08	2008 /09	**2009 /10**
≤2 g												
n	*31*	*9*	*10*	*20*	*30*	*9*	*10*	*6*	*15*	*7*	*11*	**-**
Avg % purity	5	7.4	10.4	26.6	12.7	25.6	32.3	15	24.6	7.6	12.6	
> 2 g												
n	*8*	*11*	*14*	*28*	*13*	*14*	-	*3*	*23*	*32*	*9*	***5***
Avg % purity	21	6.6	3.6	19.2	11.2	9.8	-	6.9	6.5	8.5	7.8	**4.4**
Total												
n	*39*	*20*	*24*	*48*	*43*	*23*	*10*	*9*	*38*	*39*	*20*	***5***
Avg % purity	8	7	6.4	22.2	12.2	16.9	32.3	13	12.4	8.5	9.2	**4.4**
Range	2-59	2-26	0.5-50	0.1-70.6	1.9-78.5	2.4-80.5	18.5-35.5	1.7-58.7	2.4-27.7	1.9-39.5	3.2-14.1	**1.3-6.7**

Source: Australian Bureau of Criminal Intelligence; Australian Crime Commission; Tasmania Police State Intelligence Services.
Note: No seizures made by the Australian Federal Police in the state were analysed during these reporting periods. Data for the 2010/11 period were unavailable at time of publication

5.2.3 Availability

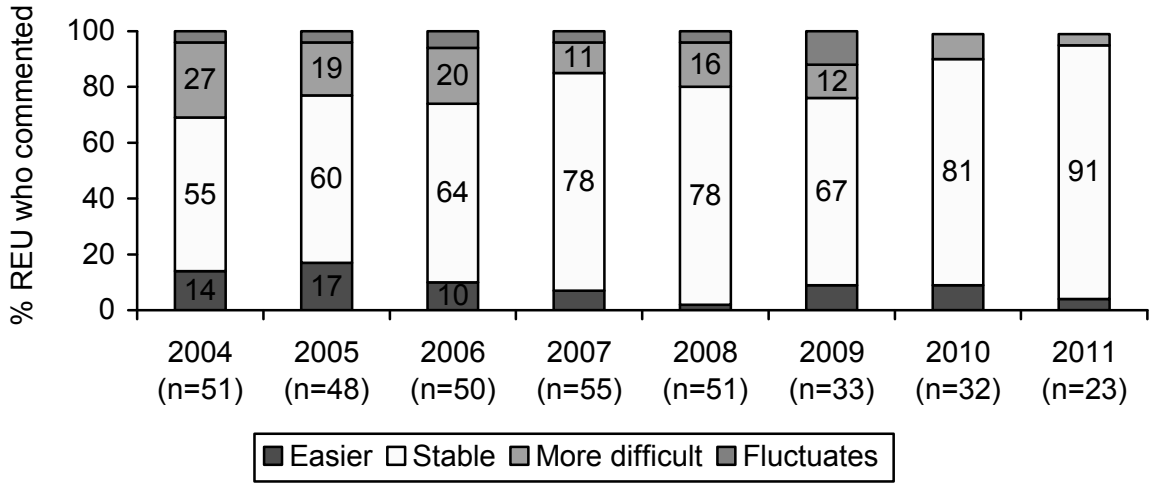
Few REU were able to comment on the availability and changes in availability for methamphetamine base and crystal methamphetamine. Methamphetamine powder was typically reported to be 'very easy' (52%) or 'easy' (36%) to obtain (Figure 13) and this availability had remained stable during the last six months (Figure 14). Figure 15 shows the proportion of the REU sample who indicated that each methamphetamine form was 'very easy' or 'easy' to obtain across the nine years of the study. The majority of those who commented on powder (88%) indicated that these forms were 'easy' or 'very easy' to obtain.

Figure 13: REU reports of current availability of methamphetamine powder, 2004-2011



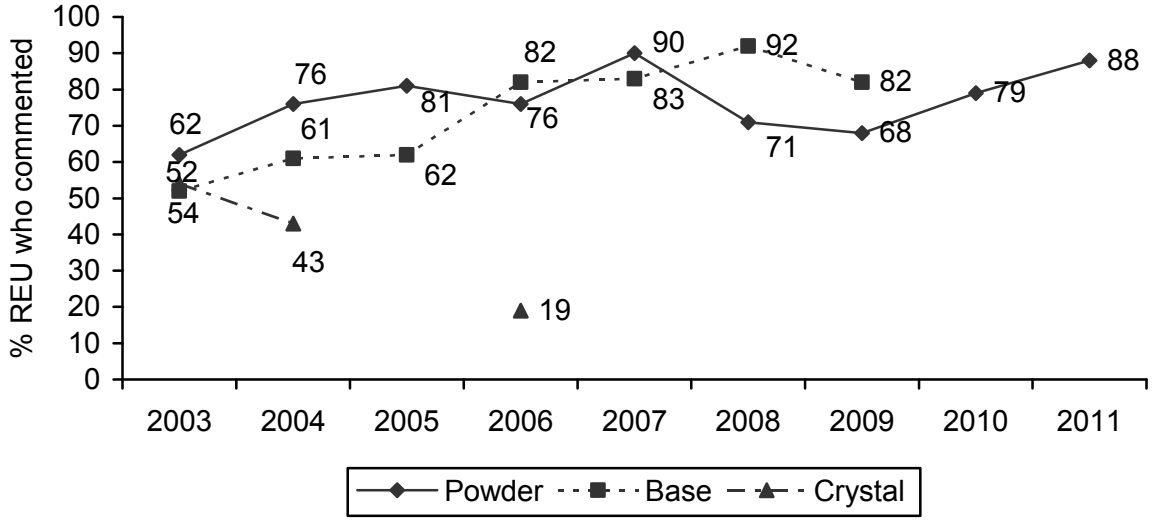
Source: EDRS interviews

Figure 14: REU reports of change in methamphetamine powder availability in the last six months, 2004-2011



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, 2003-2011

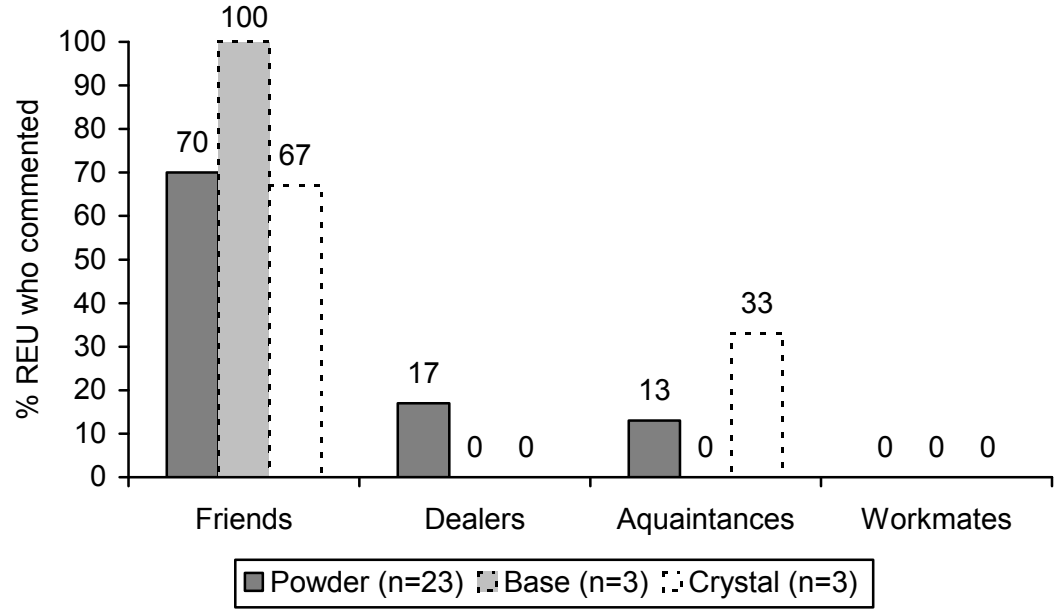


Source: EDRS interviews
Note: Data not reported where n<10

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). These data are based on small sample sizes for methamphetamine base and crystal methamphetamine and should be interpreted with caution.

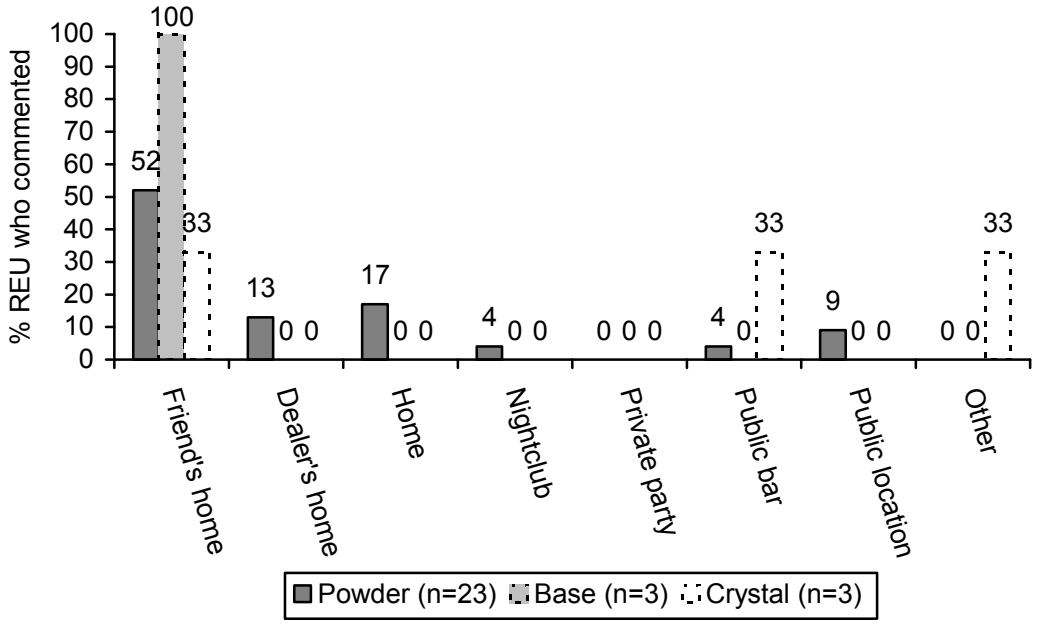
For all forms of methamphetamine, participants were most likely to have last obtained the drug from friends (70% powder, 100% base, 67% crystal) (Figure 16). The most common locations for the last purchase of methamphetamine powder (Figure 17) were a friend's home (52%), the respondent's own home (17%), a dealer's home (13%) or a public location (9%).

Figure 16: People from whom methamphetamine powder, base and crystal were last purchased in the preceding six months, 2011



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, 2011



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 $300 (range $200-400) and no consistent price trends were noted.
- Cocaine was primarily reported to be 'medium' in purity and this purity was reported to have remained 'stable' in the last six months.
- The majority of those who commented on the availability of cocaine indicated that it was currently 'difficult' or 'very difficult' to obtain, and availability was reported to have remained stable in the last six months.
- Cocaine had been purchased last from friends or dealers either at private residences or public bars.

5.3.1 Price

Table 38 shows median prices and price variations reported by REU for cocaine between 2003 and 2011. The median last purchase price for one gram of cocaine in 2011 was $300 (range $200-400). Three-quarters (77%) indicated that the price had remained stable in the last six months. Several KE (n=2) also reported that the price for a gram of cocaine was $300.

Table 38: Last purchase price of cocaine and perceptions of price changes in the last six months among REU who commented, 2003-2011

	2003	2004	2005	2006	2007	2008	2009	2010	**2011**
Median last price									
Point (range)	$60* n=1	-	$65* (60-70)	$45* (40-50)	$30* (20-60)	$90* (n=1)	$100* (n=1)	$35* (n=1)	**-**
Gram (range)	$270* (200-400)	$300* (200-400)	$350* (180-400)	$310 (250-400)	$320* (250-380)	$350 (200-450)	$300* (300-600)	$350 (80-350)	**$300 (200-400)**
Price change (%)	n=10	n=8	n=4	n=11	n=12	n=17	n=9	n=17	**n=13**
Increased	10	13	25	-	25	18	33	6	**15**
Stable	50	75	75	73	25	59	56	71	**77**
Decreased	10	-	-	27	17	24	11	12	**-**
Fluctuated	30	13	-	-	33	-	-	12	**8**

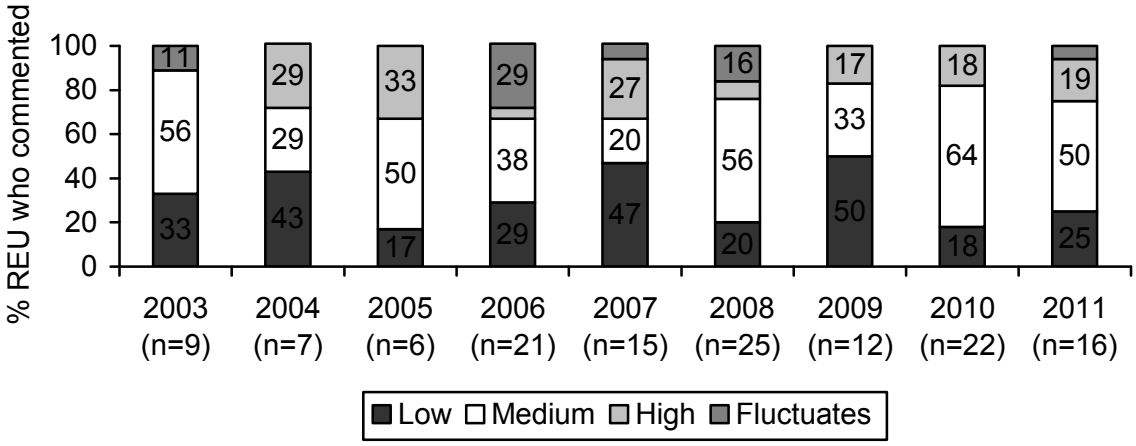
Source: EDRS interviews
* n<10

Cocaine prices were reported by Tasmania Police for the 2009/10 ACC report (ACC, 2011). The price for one gram of cocaine in Tasmania was reported to be $300-400, which is relatively consistent with price reported by REU in 2011. Data for the 2010/11 financial year was unavailable at the time of publication.

5.3.2 Purity

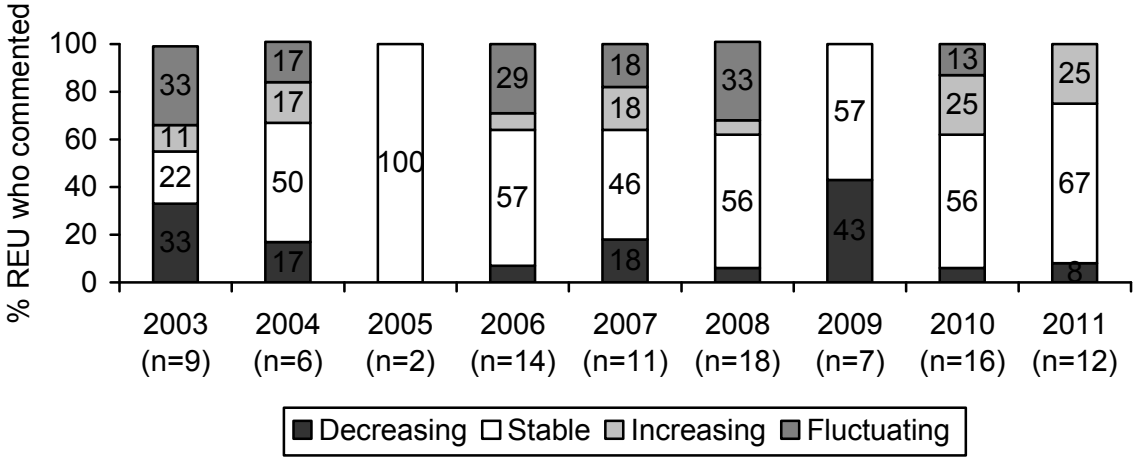
REU were asked about the current purity of cocaine (Figure 18) and any changes in purity in the last six months (Figure 19). One-half of those who commented in 2011 indicated that cocaine was currently medium in purity (50%). Those that commented on changes in purity in the last six months indicated that it had remained stable (67%) or had recently increased (25%) (Figure 19).

Figure 18: REU reports of current purity of cocaine, 2003-2011



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, 2003-2011



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

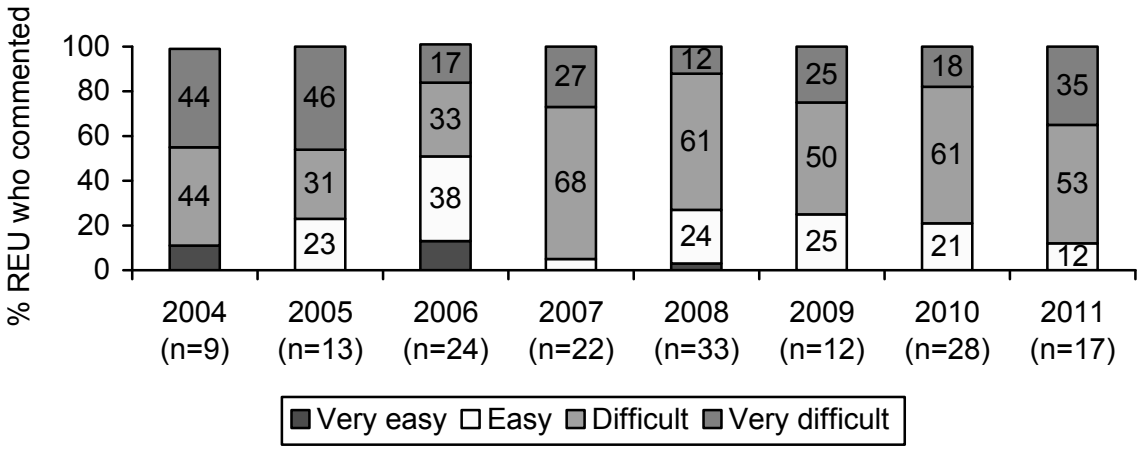
One sample of cocaine seized within the state by Tasmania Police was reported by the ACC for the 2009/10 period (ACC, 2011). This was an amount of greater than two grams and was 71.7% purity. Data for the 2010/11 financial year was unavailable at the time of publication.

5.3.3 Availability

The majority of those who commented on the current availability of cocaine (see Figure 20) indicated that cocaine was currently difficult (53%) or very difficult (35%) to obtain. Availability was reported to have remained stable (85%) during the preceding six months (Figure 21).

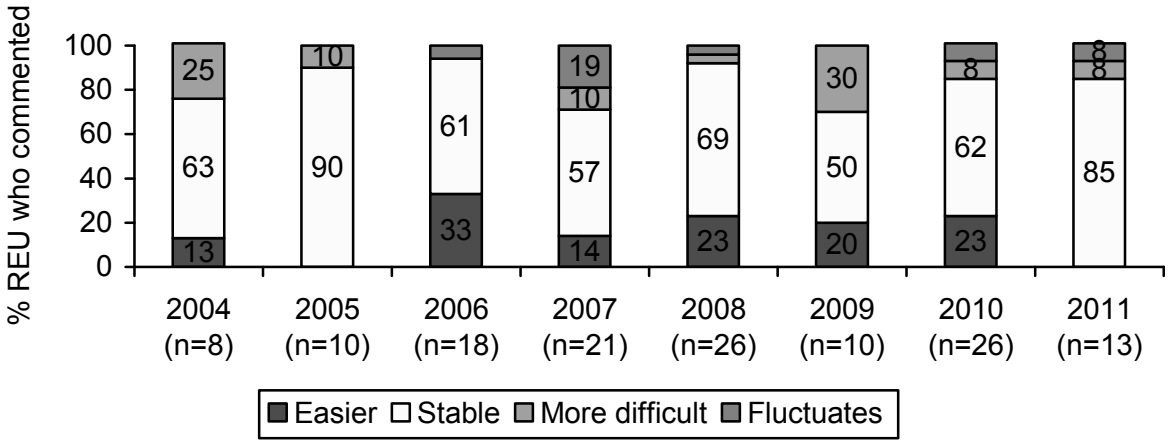
Cocaine had last been purchased from friends (47%) or dealers (31%), and had been last obtained from a friend's home (37%), a public bar (21%), or the respondent's own home (11%) (Table 39).

Figure 20: REU reports of current availability of cocaine, 2004-2011



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, 2004-2011



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

Table 39: REU reports of last cocaine source in the preceding six months, 2009-2011

Cocaine	2009	2010	**2011**
Person last scored from	n=11	n=23	**n=19**
Used not scored (%)	-	-	**11**
Friends (%)	73	78	**47**
Dealers (%)	18	17	**26**
Acquaintances (%)	9	4	**5**
Unknown dealers (%)	-	-	**5**
Work mates (%)	-	-	**5**
Location last scored	n=11	n=23	**n=19**
Used not scored (%)	-	-	**11**
Home (%)	36	13	**5**
Friend's home (%)	55	48	**37**
Dealers' home (%)	9	9	**5**
Rave/dance party (%)	-	-	**-**
Nightclub (%)	-	4	**-**
Public bar (%)	-	17	**21**
Private party (%)	-	4	**-**
Agreed public location (%)	-	-	**5**
Live music event (%)	-	-	**5**
Acquaintance's home (%)	-	4	**-**
Other (%)	-	-	**10**

Source: EDRS interviews

5.4 LSD

Summary:

- The median last price for one tab/drop of LSD in 2011 was $20 (range $10-35) which is lower relative to the median price of $25 reported in 2010 but relatively consistent with the years prior to this ($15-20).
- The purity of LSD was considered by REU to be 'high' (59%) or 'medium' (35%) and to have remained stable during the last six months.
- A large majority of those commenting indicated that LSD was 'very easy' (44%) or 'easy' (34%) to obtain and that availability had recently been stable (61%).
- LSD was typically last obtained from friends and was most commonly last obtained from private residences, live music events, and nightclubs.

5.4.1 Price

The last purchase price for one tab of LSD and perceived price changes over the six months preceding the interview are shown in Table 40. The median last purchase price for one tab of LSD was $20 (range $10-35) in 2011, which is lower relative to the median price of $25 reported in 2010 but relatively consistent with the years prior to this ($15-20). The majority (79%) of those who commented on the price of LSD indicated that it had remained stable during the six months preceding the interview.

Table 40: Prices of LSD purchased by REU, 2003-2011

LSD	2003	2004	2005	2006	2007	2008	2009	2010	**2011**
Median last price	n=21	n=24	n=30	n=29	n=14	n=27	n=27	n=18	**n=26**
Tab (range)	$20 (2-40)	$20 (5-40)	$25 (10-40)	$20 (10-50)	$15 (10-25)	$20 (12-60)	$20 (10-45)	$25 (10-25)	**$20 (10-35)**
Price change (%)	n=39	n=31	n=31	n=30	n=19	n=28	n=26	n=21	**n=29**
Increased	13	10	13	10	11	14	-	14	**14**
Stable	79	77	68	53	74	68	77	81	**79**
Decreased	-	3	10	13	16	11	12	-	**3**
Fluctuated	8	10	10	23	-	7	12	5	**3**

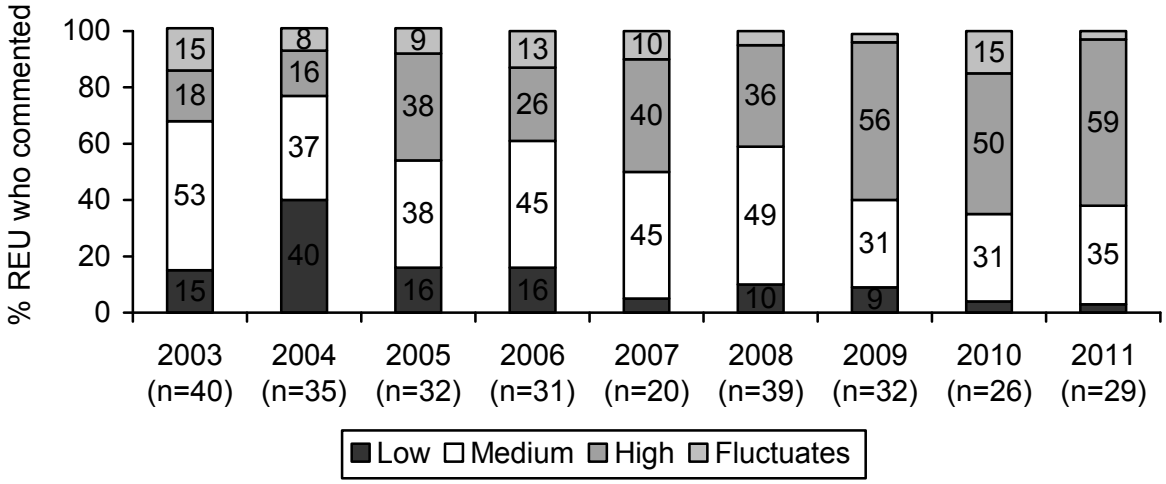
Source: EDRS interviews

Tasmania Police reported a price of $25 for one tab of LSD in 2009/10 (ACC, 2011) which is consistent with the price of $25 reported by REU in 2010. Data for the 2010/11 reporting period were unavailable at the time of publication.

5.4.2 Purity

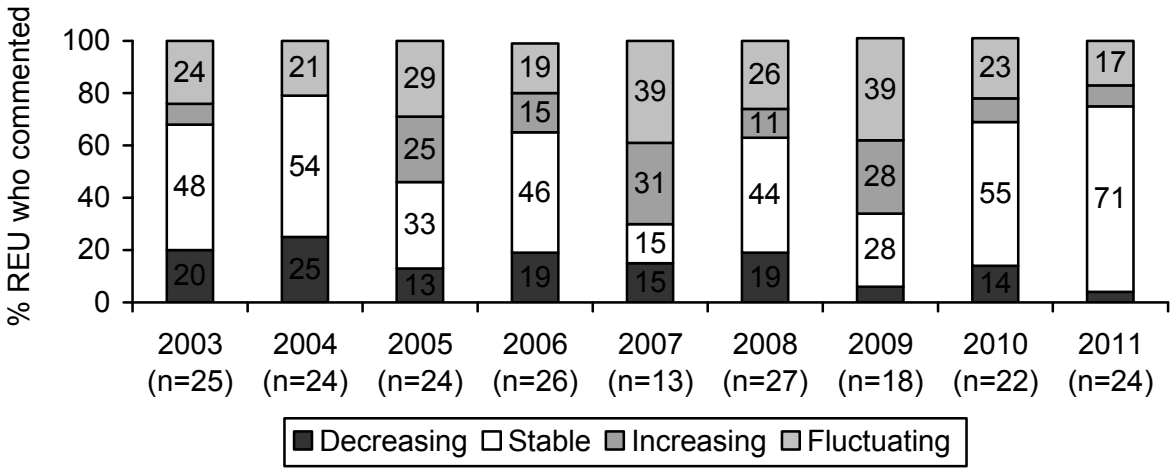
LSD was typically reported to be high (59%) or medium (35%) in purity (Figure 22), and this purity was reported to have remained stable (71%) during the six months preceding the interview (Figure 23).

Figure 22: Current purity of LSD, 2003-2011



Source: EDRS interviews

Figure 23: Recent change in purity of LSD, 2003-2011



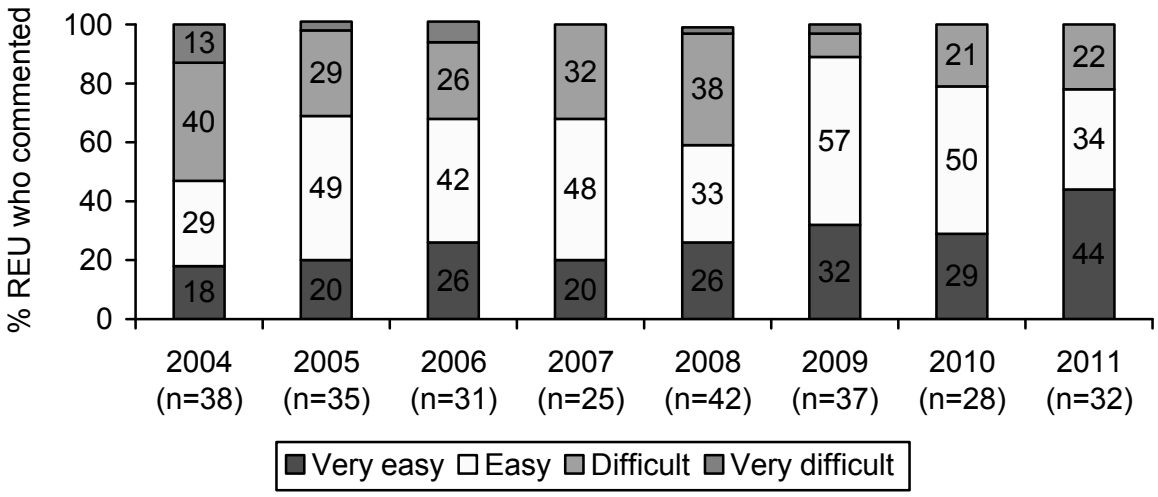
Source: EDRS interviews

5.4.3 Availability

A large majority of those who commented in 2011 reported that LSD was currently 'very easy' (44%) or 'easy' (34%) to obtain (see Figure 24), with the majority (61%) of those who commented indicating that the availability of LSD had recently remained stable (Figure 25).

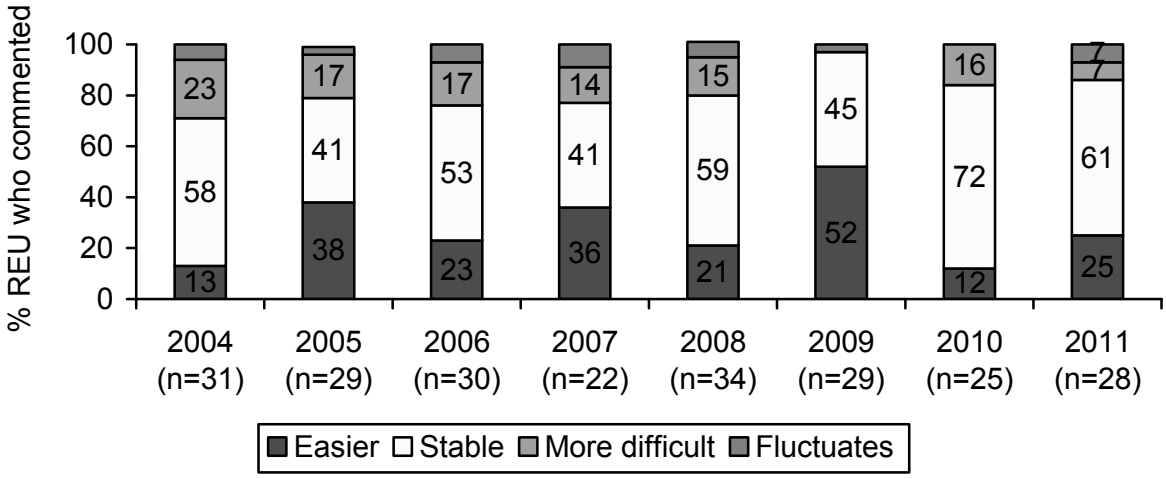
A majority of the sample indicated that LSD had last been obtained from friends (68%), most commonly at private residences, but also at live music events and nightclubs (Table 41).

Figure 24: REU reports of current availability of LSD, 2004-2011



Source: EDRS interviews

Figure 25: REU reports of change in LSD availability in the last six months, 2004-2011



Source: EDRS interviews

Table 41: REU reports of availability of LSD in the preceding six months, 2009-2011

LSD	2009	2010	**2011**
Person last scored*	n=30	n=23	**n=27**
Used not scored (%)	6	-	**-**
Friends (%)	77	78	**74**
Dealers (%)	7	9	**11**
Workmates (%)	-	-	**-**
Acquaintances (%)	7	13	**11**
Unknown persons (%)	3	-	**4-**
Location last scored*	n=30	n=23	**n=27**
Used not scored (%)	3	-	**-**
Home (%)	30	17	**26**
Friend's home (%)	27	39	**33**
Dealer's home (%)	7	4	**-**
Rave/ dance party (%)	13	9	**-**
Nightclub (%)	10	9	**7**
Pub (%)	-	-	**4**
Agreed public location (%)	-	13	**-**
Private party (%)	10	4	**4**
Acquaintance's home (%)	-	-	**7**
Live music event (%)	-	4	**11**
Other (%)	-	-	**7**

Source: EDRS interviews

5.5 Cannabis

Summary:

- Few participants commented on the market characteristics of cannabis in 2011 and these data should therefore be interpreted with caution.
- The median last purchase price for one ounce of 'hydro' was $287.50 (range $225-350) and $225 for 'bush'. The median weight for one $25 bag of hydro was 1.75 grams (range 1.1-2.5 grams), compared to 2.25 grams (1.5-3 grams) for bush.
- The potency of 'hydro' was reported to be high (63%) and the potency of 'bush' was reported to be medium (60%).
- 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.

5.5.1 Price

REU reported last purchase prices for both hydroponically-grown ('hydro') cannabis (Table 42) and bush-grown ('bush') cannabis (Table 43). Many of these price estimates for cannabis were based on small sample sizes and should be interpreted with caution.

The median last purchase price for one ounce (28 g) of hydro was $287.50 (range $225-350) compared to $225 for bush. The median last purchase price for a quarter of an ounce (7 g) was $70 (range $50-100) for hydro and $70 (range $65-90) for bush. All those who commented on recent price changes indicated that the price of hydro (100%) and bush (100%) had recently remained stable.

Table 42: Price and weights of hydro cannabis purchased by REU, 2006-2011

Last purchase price	2006	2007	2008	2009	2010	**2011**
One gram (range)	$15* (10-25)	$25* (25-25)	$15* ($10-20)	$20* (15-25)	$15* n=1	**-**
1/4 ounce (range)	$85 (70-100)	$80 (70-90)	$90 (80-270)	$80 (25-110)	$90 (75-100)	**$70* (50-100)**
1/2 ounce (range)	$155* (140-180)	$145* (125-180)	$180* (170-180)	$150 (50-300)	$180* (170-180)	**$162.50* (125-200)**
One ounce (range)	$250 (200-300)	$250 (230-300)	$250 (250-350)	$280 (100-350)	$275 (250-350)	**$287.50* (225-350)**
Grams per $25 bag (range)	n/a	1.55* (1.5-1.6)	1.6* (1.3-2)	1.4 (1-2)	1.6 (1.2-2)	**1.75 (1.1-2.5)**
Grams per $50 bag (range)		-	3.1 (2.5-4)	3 (2-3.5)	3.5* (3-7)	**3* (2.5-5)**
Price change	n=48	n=30	n=34	n=39	n=36	**n=7**
Increased (%)	4	17	24	15	17	**-**
Stable (%)	81	67	53	74	72	**100**
Decreased (%)	6	3	9	3	3	**-**
Fluctuated (%)	8	13	15	8	8	**-**

Source: EDRS interviews
*n<10

The median last purchase weight for one $25 bag of hydro was 1.75 grams (range 1.1-2.5 g), compared to a median of 2.25 grams (1.5-3 g) for bush. The median weight for one $50 bag of hydro or bush was 3 (range 2.5-5 g) and 3.5 (range 3-5 g) grams respectively.

Table 43: Price and weights of bush cannabis purchased by REU, 2006-2011

Last purchase price	2006	2007	2008	2009	2010	**2011**
One gram (range)	$15* (10-25)	$10* (10-10)	$15* (10-20)	$15* (10-25)	-	**$10***
1/4 ounce (range)	$65 (40-80)	$60 (50-85)	$70 (35-80)	$67.50 (50-90)	$70* (65-90)	**$70***
1/2 ounce (range)	$100* (70-150)	$100* (100-120)	$150* (150-150)	$115* (50-140)	$125* (80-160)	**$125***
One ounce (range)	$200 (50-350)	$190 (150-260)	$200* (180-250)	$225 (150-250)	$235* (200-300)	**$225***
Grams per $25 bag (range)	n/a	1.6* (1.5-1.7) -	1.8 * (1.3-2)	1.5* (1-3)	1.7* (1.5-2.5)	**2.25* (1.5-3)**
Grams per $50 bag (range)			3.6* (2.5-4.5)	4 (2-5)	3.5* (3.4-10)	**3.5* (3-5)**
Price change	n=53	n=32	n=27	n=35	n=30	**n=8**
Increased (%)	-	-	11	9	7	**-**
Stable (%)	81	88	67	83	73	**100**
Decreased (%)	8	13	7	6	20	**-**
Fluctuated (%)	11	-	15	3	7	**-**

Source: EDRS interviews
*n<10

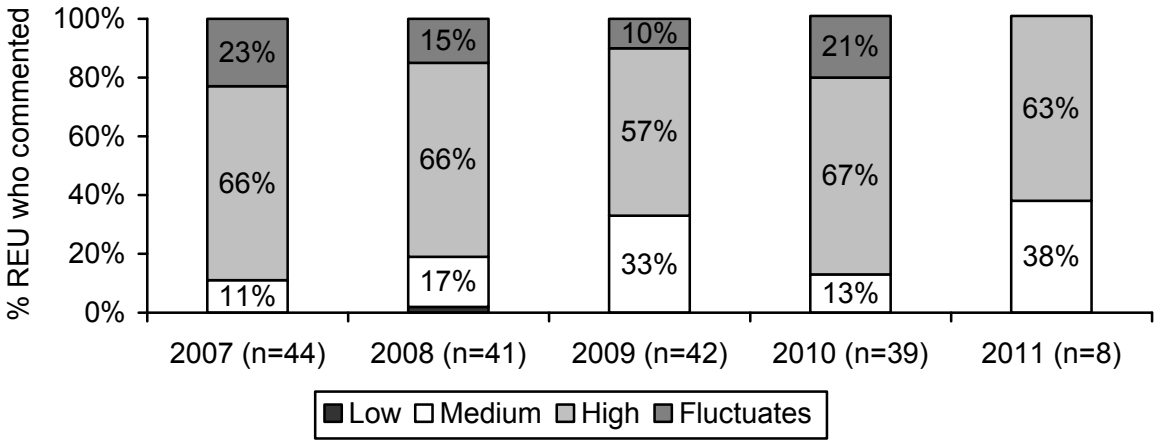
There were no data reported by REU in relation to recent purchases of hashish.

In 2009/10 Tasmania Police reported that the price for one deal (approximately 1 gram) of hydro cannabis was $25, and the price for one ounce of hydro cannabis was $250 (ACC, 2011). There were no data reported for bush cannabis. Data for the 2010/11 financial year was unavailable at the time of publication.

5.5.2 Potency

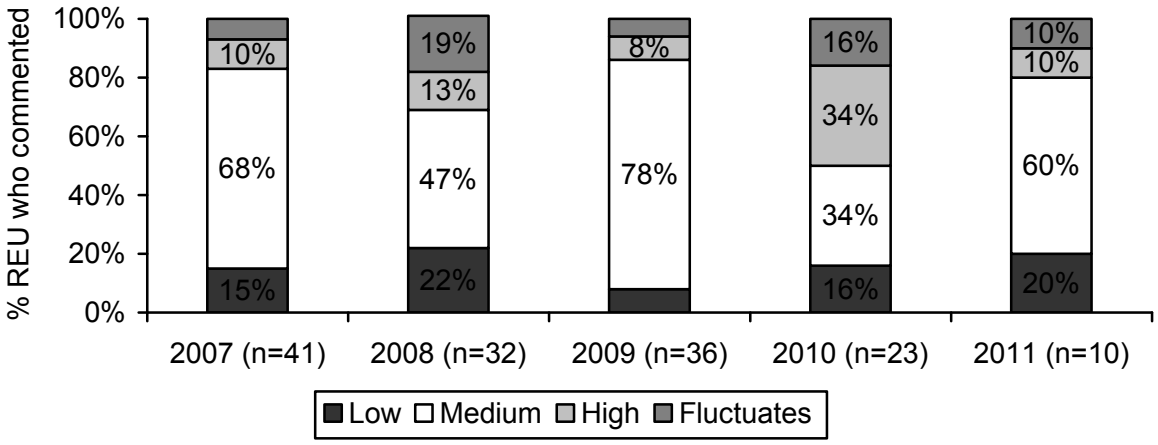
Participants were asked to comment on the current potency of hydroponic (Figure 26) and bush cannabis (Figure 27) and changes in potency during the six months preceding the interview (Figure 28). Hydroponically-grown cannabis was reported to be currently 'high' (63%) or fluctuating (38%) in potency, while bush was reported to be medium (60%) or low (20%) in potency. The majority of those who commented indicated that the potency of both bush and hydro had remained stable during the preceding six months.

Figure 26: Current potency of hydro cannabis, 2007-2011



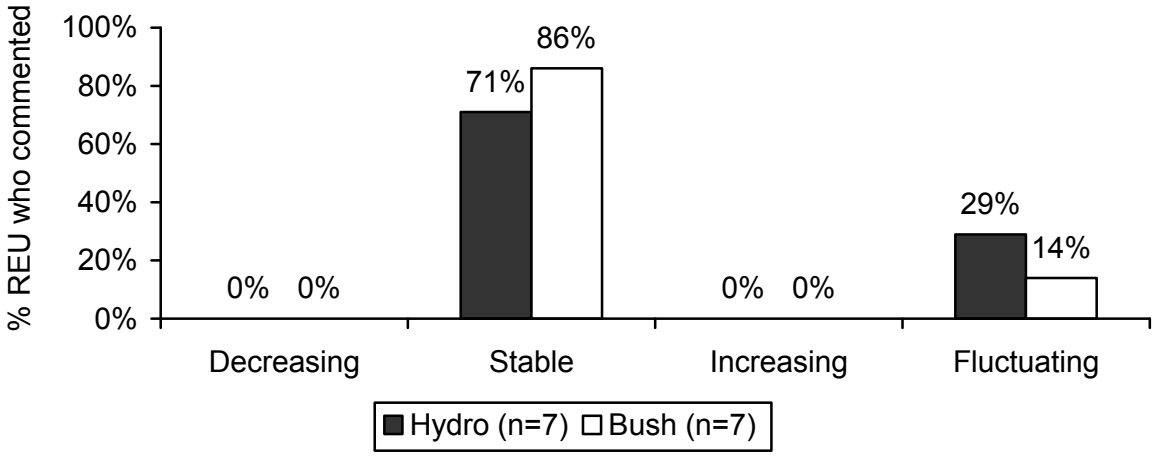
Source: EDRS interviews

Figure 27: Current potency of bush cannabis, 2007-2011



Source: EDRS interviews

Figure 28: Recent change in potency of cannabis, 2011



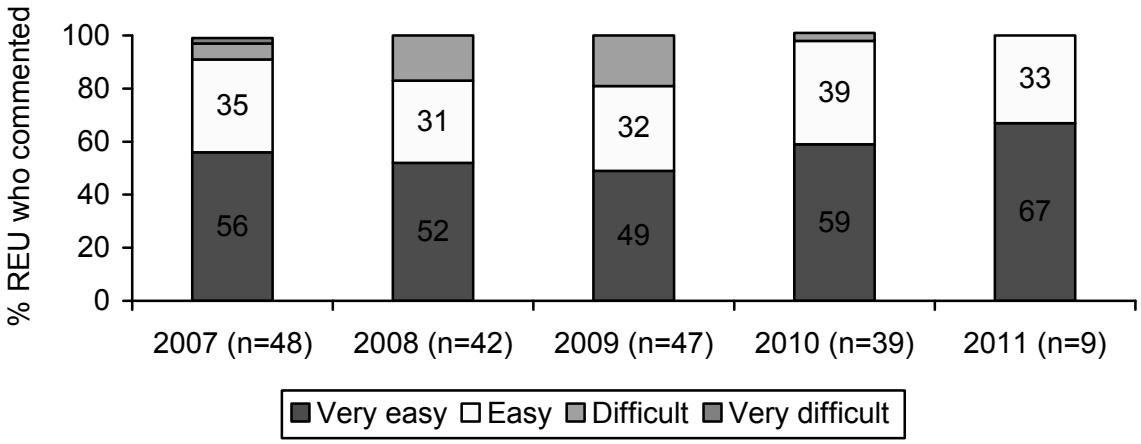
Source: EDRS interviews

5.5.3 Availability

REU were asked to comment on the current availability of 'hydro' and 'bush' cannabis (Figure 29 and 30 respectively) and changes in this availability (Figure 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' (67%) or 'easy' (33%) to obtain, and that this availability had been 'stable' (100%) during the preceding six months. Similarly, 'bush' was reported to be 'very easy' (64%) or 'easy' (27%) to obtain with availability 'stable' (89%) during the last six months.

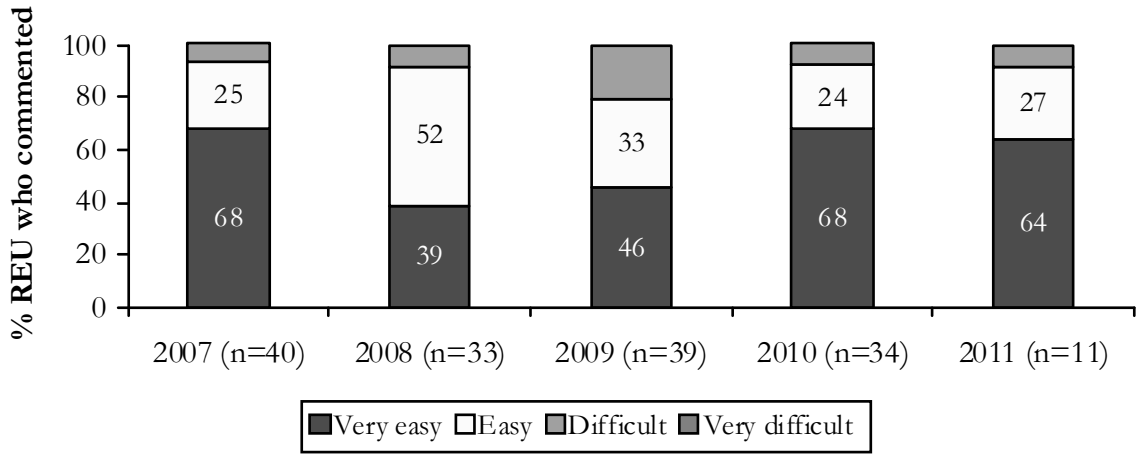
REU were asked who they had last obtained cannabis from, and the location that they had last scored the drug in the preceding six months (Table 44). 'Hydro' was most commonly last obtained through purchases from friends (56%) or dealers (44%) at private residences, most typically a friend's home, dealer's home, or the respondent's own home. Similarly, 'bush' was last obtained from friends (64%) or dealers (27%), and was most typically last obtained at private residences.

Figure 29: REU reports of current availability of hydro cannabis, 2007-2011



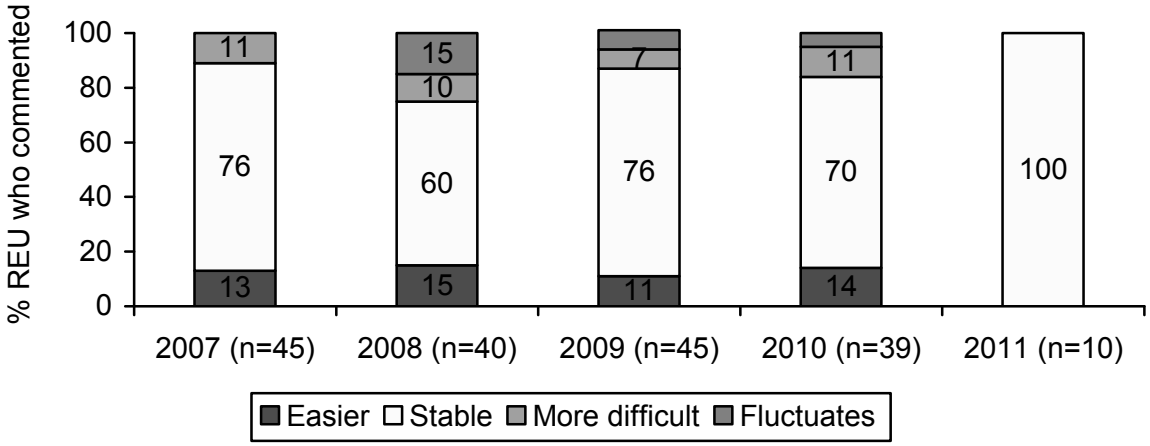
Source: EDRS interviews

Figure 30: REU reports of current availability of bush cannabis, 2007-2011



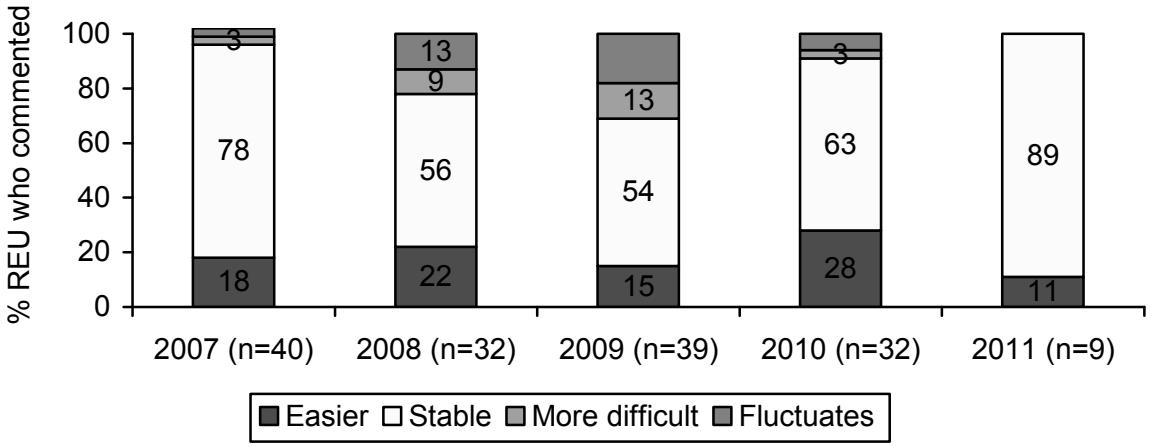
Source: EDRS interviews

Figure 31: REU reports of change in hydro cannabis availability in the last six months, 2007-2011



Source: EDRS interviews

Figure 32: REU reports of change in bush cannabis availability in the last six months, 2007-2011



Source: EDRS interviews

Table 44: REU reports of last cannabis source in the preceding six months, 2009-2011

	Hydro			Bush		
	2009	2010	**2011**	2009	2010	**2011**
Person last scored*	n=45	n=38	**n=9**	n=36	n=29	**n=11**
Used not scored (%)	9	-	**-**	8	-	**-**
Friends (%)	51	82	**56**	61	79	**64**
Dealers (%)	33	5	**44**	22	17	**27**
Workmates (%)	4	3	**-**	-	-	**-**
Acquaintances (%)	2	3	**-**	8	3	**-**
Unknown persons (%)	-	3	**-**	-	-	**-**
Last location scored*	n=45	n=37	**n=10**	n=36	n=29	**n=11**
Used not scored (%)	9	-	**-**	8	-	**-**
Home delivery (%)	16	27	**27**	11	31	**27**
Friend's home (%)	40	51	**36**	44	48	**36**
Dealer's home (%)	24	5	**27**	22	10	**27**
Acquaintance's home (%)	7	3	**-**	8	3	**-**
Agreed public location (%)	2	8	**-**	3	3	**-**
Street market (%)	-	-	**-**	3	-	**-**
Work (%)	-	3	**-**	-	-	**-**
Other (%)	-	3	**-**	-	3	**9**

Source: EDRS interviews

6.0 HEALTH-RELATED TRENDS

Summary:

- **Overdose.** Two-fifths (41%) of the 2011 REU sample reported an overdose episode in the last six months. While this is substantially higher than previous years (6-18%), 2011 data is not directly comparable to previous years due to a broadening of the definition of overdose. In 2011, 13% reported a recent overdose episode on a stimulant drug (e.g., methamphetamine, ecstasy and other stimulants) and 32% reported a recent overdose on a depressant drug (e.g., alcohol and other opioids). While these symptoms of overdose were not medically trivial, most participants had not received any formal medical treatment in relation to an overdose episode.
- **Ecstasy dependence.** One-tenth (12%) of REU reported experiencing significant symptoms of dependence in relation to ecstasy.
- **Methamphetamine dependence.** Less than one-tenth (5%) of those who had recently used methamphetamine had experienced significant symptoms of dependence in relation to methamphetamine.
- **Access to health services.** Despite regular substance use, just over one-tenth (13%) 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 (50%), a counsellor (17%) or an emergency department (17%). Participants were most likely to access services in relation to the use of alcohol (42%), polydrug use (17%), or opioid use (17%).
- **Mental health problems.** One-quarter (27%) of the 2011 REU sample reported experience of mental health problems during the six months prior to the interview, most commonly anxiety (60%) and/or depression (50%). Over two-thirds (70%) of those who had experienced mental health problems had attended a health professional in relation to these problems during this time.
- **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 sample with scores categorised as ‘very high’ was similar to the general Australian population; however, the proportion of REU with scores classified as ‘high’ was significantly greater than the general population. Those classified in the ‘high’ range have increased rates of experience of mental health problems and may benefit from interventions with health professionals.
- **Other problems.** Over one-half (59%) of the 2011 sample reported a recurrent drug-related problem, suggestive of possible substance abuse, a significant increase relative to 2010. This overall increase was largely due to an increase in the proportion who reported that they had recurrently put themselves or others at risk (40% vs. 22%). In addition, one-quarter (27%) reported that drug use had recurrently interfered with their responsibilities at home, work, or school during the six months preceding the interview and smaller proportions had experienced recurrent social/relationship (15%) problems or legal/police problems (5%) in relation to drug use. Problems were most commonly attributed to ecstasy, cannabis, and alcohol.

- **Tasmanian drug treatment data.** While a number of calls have been made to the Tasmanian Alcohol and Drug Information Service over the last few years in relation to ecstasy (4-17 calls), these account for a small percentage (between 0.7% and 2.6%) of the calls made to this service.
  Data from the National Minimum Data Set (NMDS) for alcohol and other drug treatment services in Tasmania show that ecstasy was the principal drug of concern in only 1.9% of all treatment episodes in the 2009/10 period (equating to approximately 28 treatment episodes out of a total of 1,452).
- **Tasmania hospital admission data**. There has been a substantial reduction in Tasmanian cannabis-related hospital admissions over the last two reporting periods with 32 cases reported in 2008/09. This marks a return to admission rates that are more comparable to the national rates (per million population), as Tasmanian admission rates were substantially higher than the national rates in the 2006/07 reporting period.
- Tasmanian and national hospital admission rates for methamphetamine increased steadily between 1999/00 and 2002/03, followed by a plateau between 2003/04 and 2005/06. In 2006/07 there was a substantial increase in Tasmanian rates, to a level considerably higher than the national figure reported in both 2006/07 and 2007/08. In 2008/09 there was a substantial reduction in Tasmanian admissions, with a rate well below the national admission rate observed for this period (76 vs. 157 admissions per million population).
- There has been very few hospital admissions recorded in Tasmania in relation to cocaine.

6.1 Overdose

Over one-half (53%) of REU had overdosed on any drug at some stage of their life (Table 45). Of those who had ever overdosed on any drug, the median number of times was 6.5 (range 1-122). Two-fifths (41%) of the 2010 REU sample had overdosed on a drug in the preceding six months. While this is substantially higher than previous years (6-18%), 2011 data is not directly comparable to previous years due to a broadening of the definition of overdose.

Table 45: Overdose (OD) on both stimulants and depressants among REU, 2004-2011

	2004 n=100	2005 n=99	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever OD any drug (%)	n/a	30	24	27	23	24	16	**53**
Median times ever OD (range)*	n/a	2 (1-50)	1 (1-5)	2 (1-20)	3 (1-30)	2 (1-10)	2 (1-40)	**6.5 (1-122)**
OD on any drug last 6 mths (%)	18	16	8	11	12	7	6	**41**
OD on stimulant drug last 6 mths (%)	n/a	n/a	n/a	2	6	1	2	**13**
Median times ever OD on stimulant (range)	n/a	n/a	n/a	2 (1-12)	1 (1-10)	1 (1-5)	2 (1-3)	**2 (1-100)**
OD on depressant drug last 6 mths (%)	n/a	n/a	n/a	9	7	6	4	**32**
Median times ever OD on depressant (range)	n/a	n/a	n/a	2 (1-20)	2 (1-30)	2 (1-10)	2 (1-40)	**7.5 (1-120)**

Source: EDRS interviews
* Of those reporting overdose episode

Participants were asked to distinguish between stimulant and depressant drug overdose episodes (Table 46). 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, and seizure. For a depressant overdose, these symptoms included reduced level of consciousness, respiratory depression, turning blue, and collapsing.

One-quarter (27%) of the 2011 sample had ever overdosed on a stimulant drug, and 13% of the sample had overdosed on a stimulant drug in the last six months preceding the interview. The main drugs involved in the last stimulant overdose were methamphetamine (40%) and ecstasy (20%) and other drugs involved in the stimulant overdose episode in included alcohol and cannabis. In 70% of cases this overdose episode occurred at a private location and in 70% of cases there was a sober person present to assist. In a majority of cases REU received no treatment (90%) or were watched by friends (10%) on this occasion.

Two-fifths (44%) of the sample had ever overdosed on a depressant drug and 32% of the sample had overdosed on a depressant drug in the six months preceding the interview. The main drug involved in the last depressant overdose in the last six months was alcohol (92%) and other drugs involved in the depressant overdose episode included cannabis (33%) and ecstasy (8%). In 54% of cases this overdose episode occurred at a private location and in 42% of cases there was a sober person present to assist. In a majority of cases REU received no treatment (71%) or were watched by friends (17%) on this occasion.

Table 46: Characteristics of last overdose (OD) on stimulant and depressant drugs among REU, 2007-2011

	Stimulant overdose					Depressant overdose				
	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
% main drug*	n=2	n=6	n=1	n=2	**n=10**	n=9	n=7	n=6	n=4	**n=24**
Ecstasy	-	67	-	50	**20**	-	-	-	-	**-**
Meth powder	50	-	-	-	**40**	-	-	-	-	**-**
Meth base	-	17	-	-	**-**	-	-	-	-	**-**
Crystal meth	-	17	100	-	**-**	-	-	-	-	**-**
Mushrooms	50	-	-	-	**-**	-	-	-	-	**-**
Alcohol	-	-	-	-	**-**	89	71	67	75	**92**
Benzodiazepines	-	-	-	-	**-**	11	29	-	-	**-**
Cannabis	-	-	-	-	**-**	-	-	17	-	**-**
GHB	-	-	-	-	**-**	-	-	17	-	**-**
Pharm. stimulants	-	-	-	50	**10**	-	-	-	-	**-**
Other opioids	-	-	-	-	**-**	-	-	-	25	**-**
Capsule (unknown)	-	-	-	-	**10**	-	-	-	-	**-**
Mephedrone	-	-	-	-	**10**	-	-	-	-	**-**
2CI	-	-	-	-	**10**	-	-	-	-	**-**
Heroin	-	-	-	-	**-**	-	-	-	-	**8**
% other drugs*	n=2	n=6	n=1	n=2	**n=10**	n=9	n=7	n=6	n=4	**n=24**
Ecstasy	-	17	-	50	**10**	22	43	33	50	**8**
Meth powder	-	17	-	-	**-**	-	14	-	-	**-**
Meth base	-	-	-	-	**-**	-	-	-	-	**-**
Crystal meth	-	17	-	-	**-**	-	-	-	-	**-**
Alcohol	-	67	-	50	**70**	-	14	17	25	**8**
Cannabis	-	50	-	50	**40**	22	29	-	25	**33**
Antidepressants	-	-	-	-	**-**	11	14	-	-	**-**
Benzodiazepines	-	17	-	-	**10**	-	14	-	-	**4**
Pharm. stimulants	-	17	-	-	**-**	-	-	-	-	**-**
Amyl nitrite	-	17	-	-	**-**	-	-	-	-	**4**
LSD	-	-	-	-	**-**	-	14	-	-	**-**
Other opioids	-	-	-	-	**-**	-	14	-	-	**-**
Cocaine	-	-	-	-	**-**	-	-	17	-	**-**
Methadone	-	-	-	-	**-**	-	-	-	25	**-**
Energy drinks	-	-	-	-	**10**	-	-	-	-	**-**
% last location*	n=2	n=6	n=1	n=2	**n=10**	n=9	n=6	n=6	n=4	**n=24**
Home										
Friend's home	100	17	100	100	**10**	33	17	33	-	**33**
Pub	-	33	-	-	**50**	22	50	-	50	**21**
Live music event	-	17	-	-	**10**	-	-	-	-	**17**
Nightclub	-	-	-	-	**10**	11	17	33	25	**4**
Public place	-	17	-	-	**10**	11	-	17	-	**25**
Rave/dance party	-	17	-	-	**-**	22	-	-	-	**-**
Outdoors	-	-	-	-	**-**	-	-	-	-	**-**
Private party	-	-	-	-	**-**	-	17	-	-	**-**
Other	-	-	-	-	**10**	-	-	17	25	**-**
	-	-	-	-	**-**	-	-	-	-	**-**
% last treatment*	n=7	n=6	n=1	n=2	**n=10**	n=9	n=7	n=6	n=4	**n=24**
None	50	-	-	50	**90**	-	-	83	25	**71**
Watched by friends	50	100	-	-	**10**	78	71	-	50	**17**
Onsite help	-	-	-	-	**-**	-	29	-	25	**-**
Hospital/ambulance	-	-	-	-	**-**	11	-	17	-	**4**
Taken to doctor	-	-	100	-	**-**	11	-	-	-	**-**
Other	-	-	-	50	**-**	-	-	-	-	**4**
Dont know	-	-	-	-	**-**	-	-	-	-	**4**
Median hours partying before OD (range)*	0.25 (0-0.5)	8 (3-16)	120 n=1	10 n=1	**6.75 (3-24)**	5 (0-12)	8 (2-30)	n/a	18 (6-24)	**6 (3-72)**

Source: EDRS interviews

* Of those reporting overdose episode in last 6 months

6.2 Help-seeking behaviour

Just over one-tenth (13%; n=10) of the 2011 REU sample had accessed a health or medical service in relation to their drug use in the six months preceding interview (Table 47). Two participants had accessed two services during this time, giving a total of 12 treatment episodes. Among those who had recently accessed health services, the most commonly accessed services were a GP (50%), a counsellor (17%) or the emergency department (17%) followed by psychologist (8%), counsellor (8%), and drug and alcohol worker (8%).

Services had typically been accessed primarily in relation to alcohol (42%), polydrug use (17%), opioids (8% heroin, 8% other opioids) or cannabis (8%). The main issues involved in these treatment episodes were mental health problem (25%) and cutting down use (17%), acute treatment (8% acute physical problems, 8% physical accident) and dependence/addiction (8%).

Table 47: Access to health services in relation to drug use among REU, 2004-2011

	2004 n=100	2005 n=99	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Accessed health service last 6 months (%)	10	17	22	15	14	13	14	**13**
Services accessed (%)*	n=10	n=17	n=22	n=15	n=14	n=13	n=14	**n=12**
GP	30	59	45	40	50	69	29	**50**
First aid	10	12	23	7	21	15	14	**-**
Ambulance	-	-	27	-	7	8	7	**-**
Emergency	-	12	18	-	21	15	7	**17**
Hospitalisation	20	6	14	-	-	15	-	**-**
Counsellor	20	18	14	27	21	23	21	**17**
Drug and alcohol worker	10	-	14	7	7	23	15	**8**
Psychologist	10	6	14	13	7	15	39	**8**
Psychiatrist	-	6	9	-	7	15	17	**-**
Telephone counselling	-	-	-	-	-	-	8	**-**
Internet counselling	-	-	-	7	-	8	-	**-**
Other	-	6	-	-	-	-	7	**-**
Main drug involved (%)*							n=23	**n=12**
Alcohol							39	**42**
Ecstasy							13	**-**
Methamphetamine							4	**-**
Cannabis							22	**8**
Methadone							-	**-**
Polydrug							9	**17**
Mephedrone							9	**-**
Heroin							-	**8**
Other opioids							4	**8**
Main issue involved (%)*							n=23	**n=12**
Dependence/addiction							39	**8**
Cutting down drug use							-	**17**
Mental health problems							13	**25**
First aid/acute physical							13	**8**
Court diversion							4	**-**
Self-harm							30	**-**
Aggression/violent behaviour							-	**8**
Physical accident							-	**8**
Liver function test							-	**8**
Other							-	**17**

Source: EDRS interviews

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

6.3 Mental health problems and psychological distress

6.3.1 Mental health problems

One-quarter (27%) of the 2011 REU sample reported that they had experienced mental health problems during the six months prior to the interview (Table 48). Of those who had experienced mental health problems, the most common problems experienced were anxiety (60%), depression (50%), panic (20%), and bipolar disorder (15%).

One-fifth of the sample (19%) and over two-thirds (70%) of those who reported experiencing mental health problems had attended a health professional in relation to these problems during the last six months.

Less than one-tenth of the sample reported being prescribed antidepressants (7%), benzodiazepines (7%) or antipsychotics (3%) for psychological conditions during this time.

Table 48: Self-reported mental health problems, 2007-2011

	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Experienced mental health problem last 6 mths (%)	35	27	30	30	**27**
Type of mental health problem*	n=35	n=27	n=30	n=30	**n=20**
Depression (%)	66	70	67	60	**50**
Anxiety (%)	54	70	73	60	**60**
Paranoia (%)	14	15	20	17	**10**
Panic (%)	9	-	7	10	**20**
Psychosis (%)	6	11	-	3	**5**
Obsessive compulsive disorder (%)	6	15	3	3	**-**
Bipolar disorder (%)	3	11	-	10	**15**
Eating disorder (%)	3	-	-	-	**-**
Self-harm (%)	3	-	-	-	**-**
Schizophrenia (%)	-	4	-	-	**-**
Mania (%)	-	4	-	-	**-**
Personality disorder (%)	-	4	-	-	**5**
Phobia (%)	-	-	3	-	**-**
Post-traumatic stress disorder (PTSD) (%)	-	-	-	-	**-**
Seen mental health professional last 6 mths (%)	34	48	53	33	**19**
Prescribed antidepressants in last 6 mths (%)	17	19	30	3	**7**
Prescribed benzodiazepines in last 6 mths (%)	9	22	20	3	**7**
Prescribed antipsychotics in last 6 mths (%)	3	7	-	3	**3**

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). 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 5-point Likert scale.

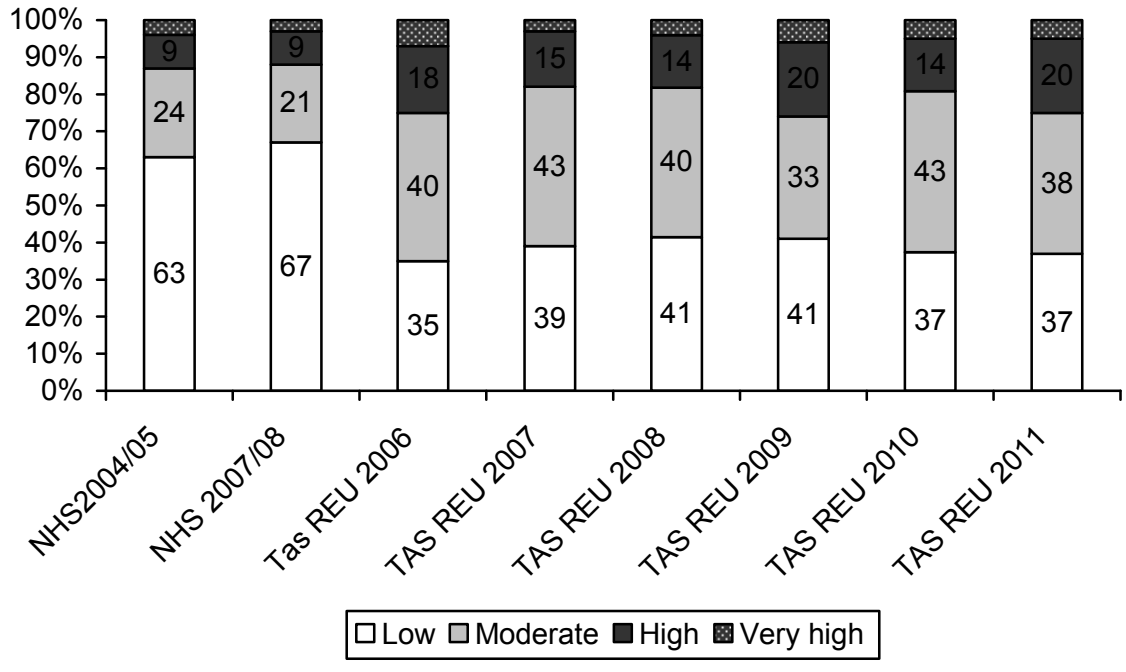
Among a normative Australian population sample, the mean K10 score was 14.2 with a median of 12 (range 0-50) (Andrews & Slade, 2001). Among the REU interviewed in 2011, the mean K10 score was higher at 18.1 (SD=6.3) and the median was 18 (range 10-36) out of a possible score of 50.

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). K10 scores of 30 or more (the 'very high' category) have a specificity of 0.99 (correct rejection rate) and sensitivity of 0.24 (hit rate) for the identification of a current anxiety or affective disorder meeting DSM-IV criteria (Andrews and Slade, 2001). 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). Individuals with 'high' levels of psychological distress have increased rates of experience of mental health problem and may benefit from interventions with a health professional (Andrews & Slade, 2001).

In the current sample, only four REU participants (5%) had a score of 30 and above and therefore 'very high' levels of psychological distress. One-fifth scored in the 'high' category (20%), and over one-third each scored in the 'moderate' category (38%) or 'low' (37%) category.

Figure 33 shows a comparison between the EDRS sample with data from the 2004/05 and 2007/08 National Health Surveys which were based on large normative samples (n=19,501 and n=15,751 respectively) from the general Australian adult population (18-85+) (ABS, 2006, 2010). The proportion of the 2011 EDRS sample with scores categorised as 'very high' is similar to the 2007/08 NHS sample (5%, 95%CI 2.1-12.9% vs. 3.5%, 95%CI 3.2-3.8%, $p>.05$). However, the proportion with scores categorised as high is significantly greater than that of the 2007/08 NHS sample (20%, 95%CI 12.5-30% vs. 8.5%, 95%CI 8.1-9.0, $p<.001$).

Figure 33: Responses to the K10 questionnaire in the National Health Survey 2004/05-2007/08 and EDRS, 2006-2011



Source: EDRS interviews, 2006-2011 and National Health Survey, 2004/05 & 2007/08

6.4 Other self-reported problems associated with 'ERD' use

6.4.1 Recurrent drug-related problems

REU were asked if their drug use had caused recurrent problems during the six months preceding the interview (Table 49). These questions were chosen to be consistent with diagnostic criteria for substance abuse disorders, and based on the Comprehensive International Diagnostic Interview (CIDI). Over one-half (59%, 95%CI 47-69%) reported any recurrent drug-related problem, suggestive of possible substance abuse, which is significantly greater relative to 2010 (35%, 95%CI 26-45%). Just over one-quarter of the sample (27%) indicated that their drug use had recurrently interfered with their responsibilities at home, at work, or at school. Two-fifths (40%, 95%CI 30-51%) had recurrently found themselves in a situation where they were under the influence of a drug and could have put themselves or others at risk, which is significantly greater than the proportion of the 2010 sample (22%, 95%CI 15-31). Over one-tenth of the sample (15%) reported that their drug use caused them to have repeated problems with family, friends, or people at work or school. A very small proportion of the EDRS sample (5%) reported that they had experienced recurrent drug-related legal problems.

Table 49: Self-reported recurrent drug-related problems in last six months, 2007-2011

	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Any recurrent drug problem (%)	57	53	42	35	**59**
Responsibility problems (home/work/school) (%)	39	39	26	23	**27**
Risk problems (risk to self or others) (%)	26	28	19	22	**40**
Relationship/social problems (%)	25	14	15	13	**15**
Legal/police problems (%)	3	2	5	3	**5**

Source: EDRS interviews

Table 50 shows the main drug attributed to the problems experienced by REU during the six months preceding the interview. Whereas many participants attributed drug-related problems to ecstasy use, this is likely to reflect the purposive sampling of participants that regularly use ecstasy in the present study, rather than indicating that ecstasy has a greater impact in comparison to other drugs. Other drugs in which participants typically attributed problems to included cannabis and alcohol.

Table 50: Main drug attributed to problems experienced in the last six months, 2011

	Responsibility problems	**Risk problems**	**Social problems**	**Legal problems**
	n=20	n=30	n=11	n=4
Ecstasy	25	7	9	-
Cannabis	30	20	18	-
Meth. powder	-	3	-	-
Meth. base	-	-	-	-
Crystal meth.	-	-	-	25
Alcohol	40	60	55	50
Benzodiazepines	-	3	-	25
LSD	-	3	9	-
Other opioids	5	-	-	-
Heroin	-	3	-	-
Methadone	-	-	-	-
Mephedrone	-	-	9	-

Source: EDRS interviews

6.4.2 Self-reported symptoms of ecstasy dependence

REU were asked about how they had felt about their ecstasy use during the 12 months preceding the interview using a version of the Severity of Dependence Scale (SDS; Gossop et al., 1995) adapted for ecstasy use. The scale consisted of 5 multiple choice questions that were rated on a scale of 0 to 3, resulting in a range of possible scores from 0-15 where high scores suggest greater psychological dependence. Participants were asked if they thought that their ecstasy 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 use, if they had wished they could have stopped, and if they would find it difficult to stop, or go without ecstasy.

Findings in relation to ecstasy dependence should be interpreted with caution due to the fact that there has been limited research of this syndrome (see Topp, Hall, & Hando, 1997; Degenhardt, Bruno & Topp, 2010). The properties of the SDS are discussed in Bruno et al. (2009) and Bruno, Gomez, and Matthews (2009). Another consideration is the fact that many ecstasy pills also include methamphetamine as well as, or instead of, MDMA, and there is well documented evidence that methamphetamine is associated with symptoms of dependence.

The median ecstasy SDS score was 0 (range 0-7). Two-thirds of participants (66%) obtained a score of zero on the ecstasy SDS, and one-tenth (10%) obtained a score of 1 on the scale: thus, three-quarters of respondents reported no or few symptoms of dependence in relation to ecstasy use. A score of 3 or more on the SDS provides a good balance between sensitivity and specificity for identifying problematic ecstasy use (Bruno, Gomez, & Matthews, 2009). One-tenth (12%) of the 2011 REU sample had a score of 3 or above on the ecstasy SDS and 5% had a score of 4 or more.

6.4.3 Self-reported symptoms of methamphetamine dependence

REU participants that had used methamphetamine during the six months preceding the interview (n=40) 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 0 (range 0-8). A majority of those who completed the methamphetamine SDS received a score of 0 (77%), 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). Only 5% (n=2) of those REU who completed the methamphetamine SDS had a score of 4 or more, and while none of these people reported recent drug-related treatment, it is reasonable to assume that they had experienced significant psychological symptoms of dependence.

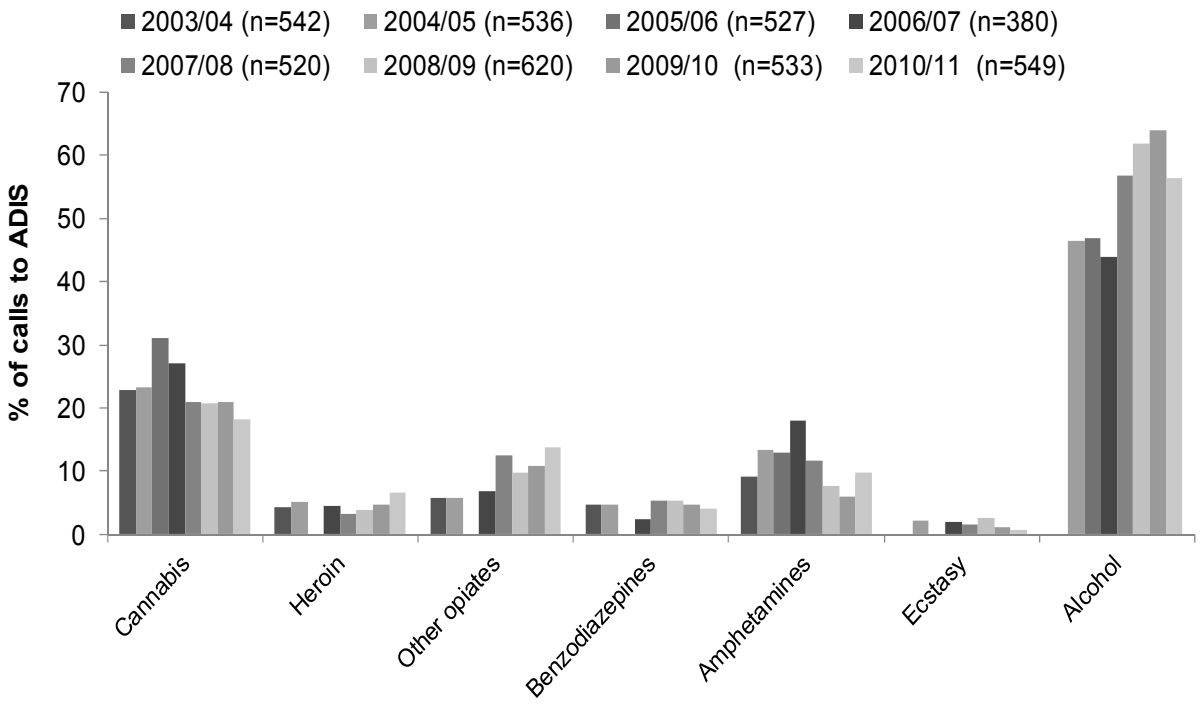
6.5 Drug treatment indicator data

6.5.1 Alcohol and Drug Information Service data

The Tasmanian Alcohol and Drug Information Service (ADIS) is a telephone information and referral service that is administered by Turning Point Alcohol and Drug Centre in Victoria (Turning Point, 2001-2009). Detailed information in regard to drugs used was not included in the 2003/04, 2005/06 and 2007/08 ADIS reports, thus calls pertaining to ecstasy (along with cocaine and hallucinogens) are not available for these reporting periods. Calls in relation to cocaine are not available after the 2000/01 reporting period.

A small but consistent number of calls (4-17 calls) have been recorded in relation to ecstasy between the 2000/01 and the 2010/11 reporting periods (Figure 34), with just four calls (0.7% of all calls) recorded in 2010/11.[6] Figures 34 and 35 show that calls in relation to ecstasy account for a very small percentage (between 0.7% and 2.6%) of the total calls made to the service. For the 2010/11 reporting period, over one-half (56%) of all calls related to alcohol, followed by cannabis (18%), and opioids (6.6% heroin, 13.7% other), a pattern in keeping with the overall trends in previous years (Figure 34).

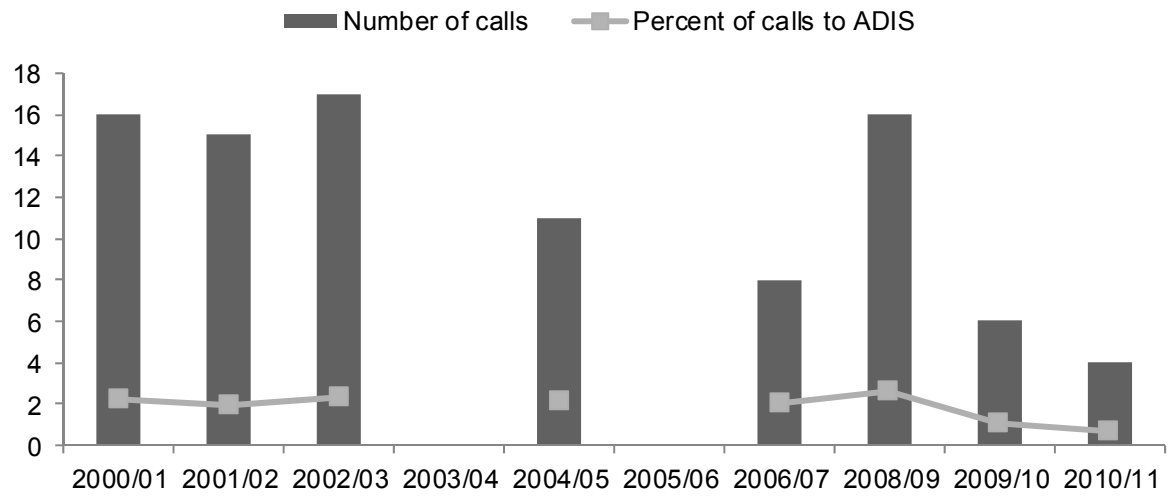
Figure 34: Percentage of inquiries to ADIS for each drug type, 2003/04-2010/11



Source: ADIS Tasmania reports, Turning Point Alcohol and Drug Centre
Note: 2005/06 data were only provided for amphetamines, cannabis, and alcohol. Calls in relation to alcohol are not reported prior to 2004/05. Calls referring to ecstasy were not specified in the 2003/04 and 2005/06 reports.

[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 35: Number of calls and percentage of inquiries to ADIS with regard to ecstasy, May 2000-June 2011



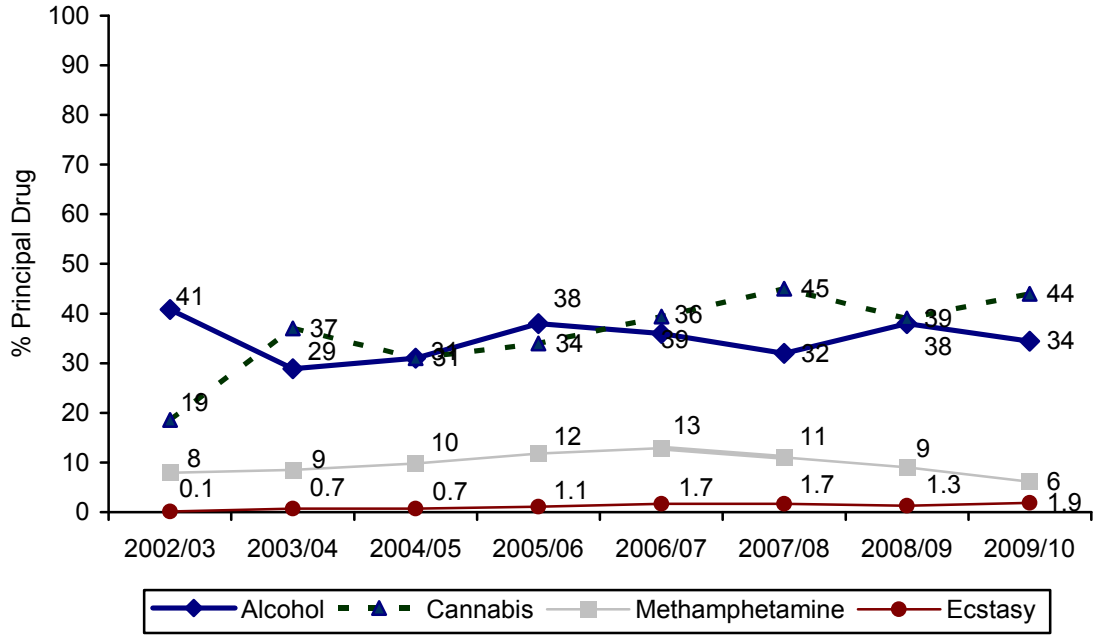
Source: ADIS Tasmania reports, Turning Point Alcohol and Drug Centre
Note: Calls referring to ecstasy were not specified in the 2003/04 and 2005/06 reports.

6.5.2 National Minimum Data Set (NMDS) treatment episode data

Figure 36 shows the proportion of treatment episodes in which the principal drug of concern was alcohol, cannabis, methamphetamine or ecstasy, based on findings from the National Minimum Data Set (NMDS) for alcohol and other drug treatment services in Tasmania (AIHW). Data for the 2010/11 financial year were not available at the time of publication.

Of all drug treatment episodes reported to the NMDS in Tasmania during 2009/10, two-fifths (44%) involved cannabis as the principal drug of concern, one-third (44%) involved alcohol and less than one-tenth (6%) involved meth/amphetamine. Treatment episodes in which ecstasy was the principal drug of concern accounted for 1.9% of all episodes (equating to approximately 28 treatment episodes out of a total of 1,452).

Figure 36: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set: Closed treatment episodes by principal drug of concern, 2000/01-2009/10



Source: Australian Institute of Health and Welfare

6.6 Hospital admission indicator data

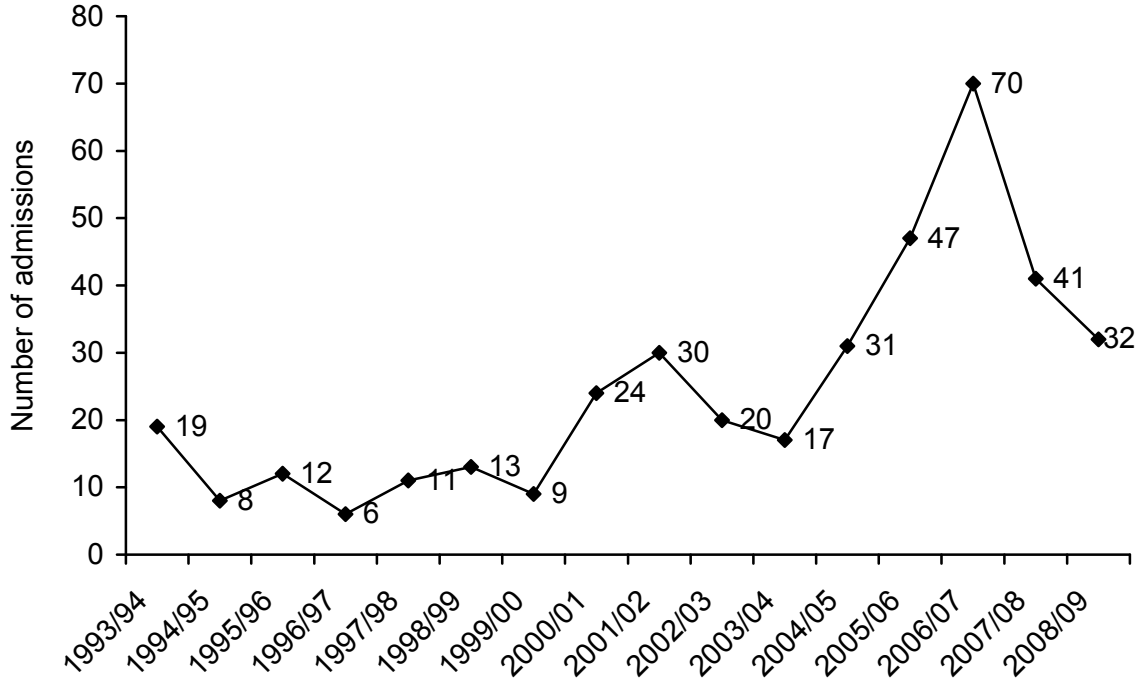
Hospital morbidity data in relation to use of drugs have been provided by the Australian Institute of Health and Welfare for the 1993/04 to 2008/09 financial year periods. Data for the 2009/10 period was unavailable at the time of publication. These data relate to Tasmanian public hospital admissions, for individuals aged between 15 and 54 years, where use of each substance was recorded as the 'principal diagnosis' – namely, where the effect of the substance 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 important to note that data from the state's single public specialist detoxification centre are 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 2011 IDRS report (de Graaff & Bruno, 2012). 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 are presented in Figure 37. The number of cases per annum has increased in recent years: between 1993/04 and 1999/00 there were around 11 cases per annum (6-19) but this doubled to an average of 24 cases per annum between 2000/01 and 2004/05 (range 24-31). In the 2005/06 and 2006/07 reporting periods there were further notable increases to 47 and 70 cases per annum respectively. However, there has been a substantial reduction in cases in the 2007/08 (41 cases) and 2008/09 (32 cases) reporting periods.

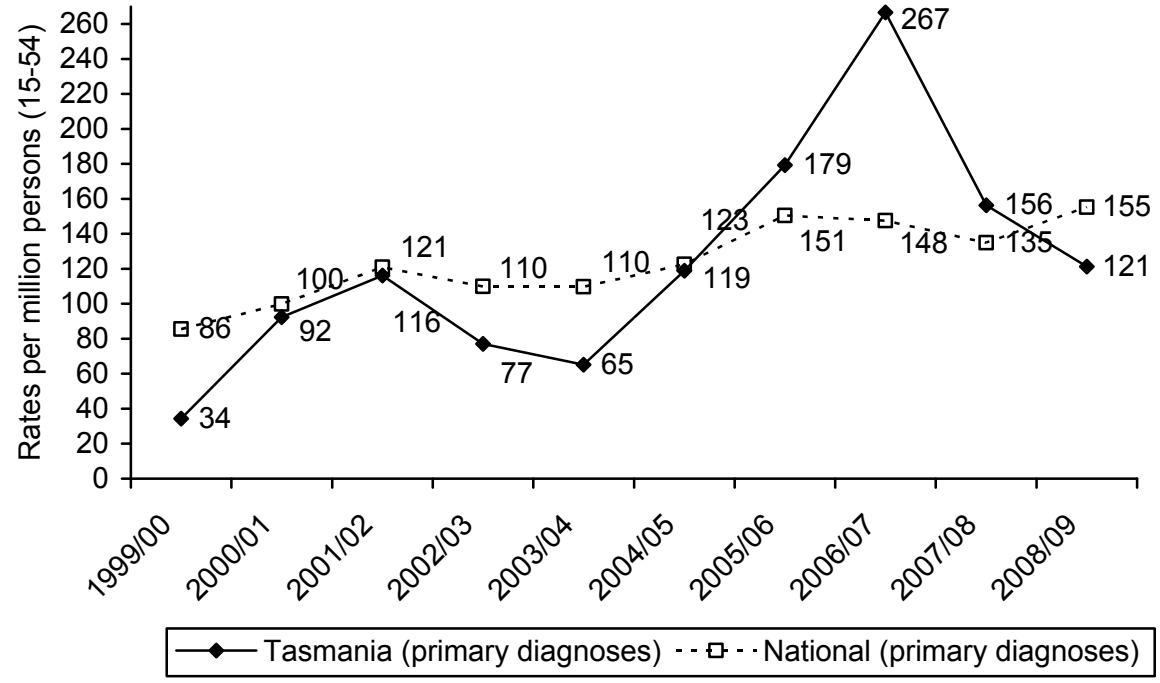
When the population-adjusted rates of Tasmanian admissions are compared with those nationally (Figure 38), it is clear that Tasmanian admission rates in 2008/09 are slightly lower than those seen nationally (121 vs. 155 admissions per million). The last two reporting periods have marked a return to admission rates that are more comparable to the national rates, as Tasmanian admission rates were substantially higher than the national rates in 2006/07.

Figure 37: Public hospital admissions (aged 15-54) in Tasmania where cannabis use was noted as the primary factor contributing to admission, 1993/94-2008/09



Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2012)
Note: 2009/10 data not available at the time of publication

Figure 38: Public hospital admissions (aged 15-54) where cannabis was noted as the primary contribution to admission, rates per million population for Tasmania and Australia, 1999/00-2008/09

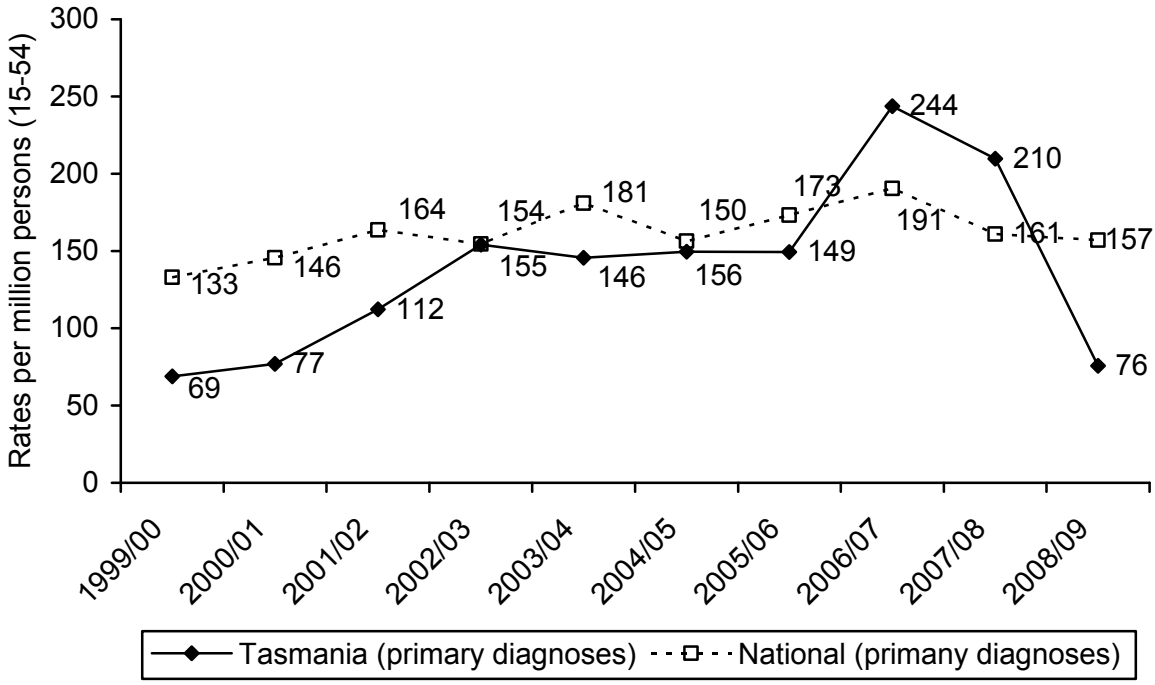


Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2012)
Note: 2009/10 data not available at the time of publication

6.6.2 Methamphetamine

Tasmanian public hospital admissions where methamphetamine use was noted as the principal diagnosis (rates per million population) are presented in Figure 39 below. Both local and national admission rates were increased steadily between 1999/00 and 2001/02, began to plateau in 2002/03 (national) and 2003/04 (Tasmania), and remained relatively stable up until the 2005/06 period. In 2006/07 there was a substantial increase in the Tasmanian admission rate, with a level considerably higher than the national figure reported in both the 2006/07 and 2007/08 reporting periods. In 2008/09 there was a substantial reduction in Tasmanian admissions, with a rate well below the national admission rate observed for this period (76 vs. 157 admissions per million population).

Figure 39: 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 1999/00-2008/09

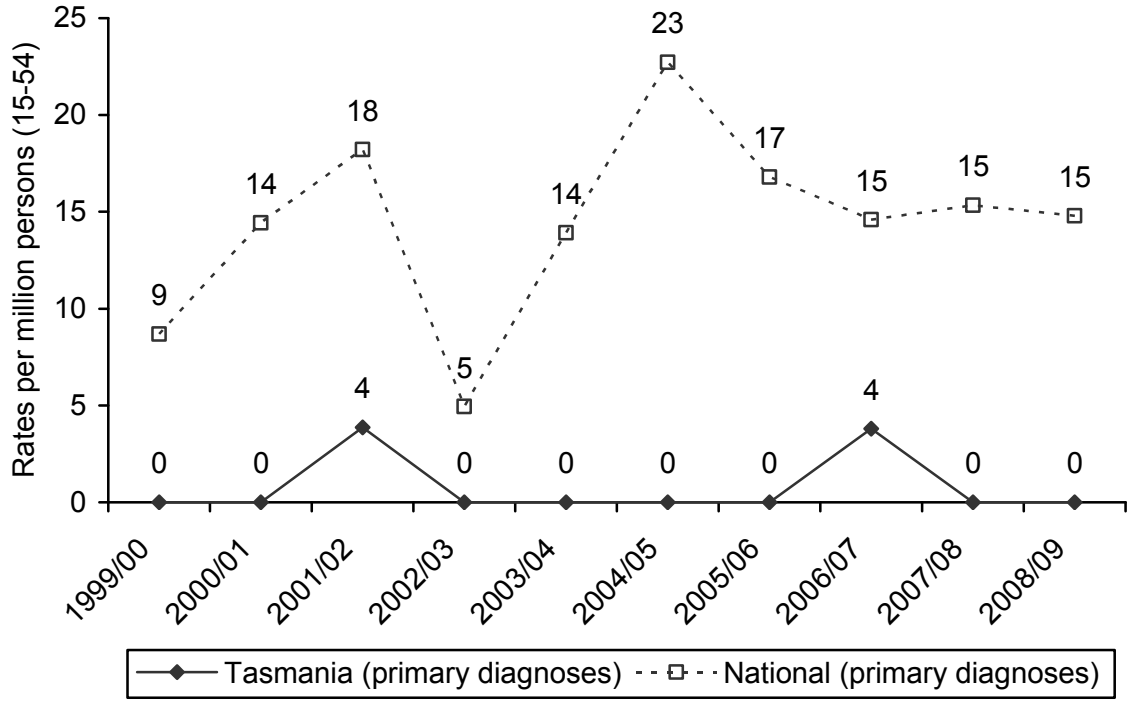


Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2012)
Note: 2009/10 data not available at the time of publication

6.6.3 Cocaine

When the local rates of cocaine-related public hospital admissions amongst those aged between 15 and 54 years are compared to the national Australian rate (Figure 40), local cases where cocaine was noted as the primary factor contributing to the admission remain substantially less than that of the national rate between 1999/00 and 2008/09, with no cases noted in the 2008/09 reporting periods.

Figure 40: 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, 1999/00-2008/09



Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2012)
Note: 2009/10 data not available at the time of publication

7.0 RISK BEHAVIOUR

Summary:

- **Injecting drug use.** Over one-tenth (13%) of the 2011 REU sample had recently used substances intravenously. Heroin, methamphetamine, and other opioids were typically the first drug ever injected and the most common drug ever and recently injected. Sharing of needles and equipment was not common.
- **Blood-borne viral infections.** Three-fifths (60%) of the 2011 REU sample had been vaccinated for hepatitis B, over half (54%) had been tested for hepatitis C, and three-fifths (60%) had been tested for HIV.
- **Sexual risk behaviour.** Over three-fifths (64%) of REU reported penetrative sex with a casual partner during the six months preceding the interview and three-fifths (59%) reported sex with a casual partner while under the influence of drugs, most commonly alcohol, ecstasy, or cannabis. When under the influence of ERDs, only around one-fifth reported 'always' using protective barriers with a casual partner and approximately one-quarter 'never' used protective barriers. Over one-half (57%) 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.
- One-fifth of the sample (20%) had never had a sexual health check-up. A majority (81%) of the sample had never been diagnosed with a STI and the remainder had been diagnosed in the last year (1%) or more than a year ago (18%). The most commonly diagnosed STIs were Chlamydia (93%) and herpes (21%).
- **Drug driving.** Of those who had driven a car, over one-third (37%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months, and two-fifths (40%) reported driving within an hour of taking illicit drugs in the last six months. Most commonly, participants reported driving under the influence of cannabis, ecstasy or methamphetamine powder.
- The proportion of REU reporting DUI of ecstasy and methamphetamine has gradually declined over the last six years while DUI of cannabis has remained relatively stable. In addition, DUI of ecstasy was perceived to be more risky in terms of crash risk and to some extent risk of apprehension (being 'caught' by police) in 2011 when compared to attitudes among the 2007 sample. DUI of cannabis was perceived to be more risky in terms of risk of apprehension in 2011.
- **Alcohol Use Disorders Identification Test (AUDIT).** One-third (36%) 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 significantly greater than the proportion categorised in zone 4 among the 2010 sample (21%, 95%CI 14-30%). A further 26% scored in zone 3 (harmful or hazardous drinking), one-third (32%) scored in zone 2 (alcohol use in excess of low-risk guidelines[7]), and just 6% scored in zone 1 (a level reflecting low-risk drinking or abstinence).
- **Binge drug use.** One-fifth (22%) had recently 'binged' on ecstasy or related drugs (a continuous period of use for more than 48 hours without sleep), on a median of 2 occasions (range 1-60) in the last six months. Substances most commonly used in a binge session of use were ecstasy, alcohol, cannabis, methamphetamine, energy drinks, LSD, or cocaine.

[7] It should be noted that this threshold for low-risk is based on standards employed in the 2007 National Drug Strategy Household Survey, 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 (22%) of the 2011 REU participants had used substances intravenously at some stage of their lives (Table 51), which is similar to the proportion among previous REU cohorts (10-26%). The median age of first injection was 19 years (range 16-23). There was no significant difference in the proportion of males (25%) and females (15%) or younger (19%) or older (25%) participants who had ever injected.

Over one-tenth (13%) of the 2011 sample (8% of females and 16% of males, p>.05) had used substances intravenously during the six months preceding the interview, relatively similar to the proportions observed in the 2004-2010 REU samples (3-12%).

Table 51: Injecting drug use among REU, 2003-2011

	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Ever injected (%)	26	15	19	18	10	15	14	8	**22**
Age first injected (range)	n/a	n/a	18 (16-29)	18 (15-33)	18 (14-29)	20 (16-31)	20 (17-28)	19 (17-23)	**19 (16-23)**
Injected last 6 months	22	9	8	9	6	7	12	3	**13**

Source: EDRS interviews

7.1.1 Lifetime injecting drug use and context to initiation

Table 52 shows the drugs ever injected and drug first injected for those reporting intravenous use of drugs at some stage of their life (n=16).

Two-fifth (38%) of lifetime injectors had first injected heroin, two-fifth (38%) had first injected methamphetamine (31% powder, 6% base), and one-quarter (25%) had first injected other opioids.

Lifetime injection of methamphetamine (69% any form, 56% powder, 25% base, 31% crystal), heroin (69%), and other opioids (56%) was most common, followed by ecstasy (13% pills, 19% powder, 13% capsules), methadone (25%), buprenorphine (19%), cocaine (19%), and LSD (13%).

Table 52: Injecting drug use history among REU injectors, 2011

	Ever injected (%) n=16	First drug injected (%) n=16
Methamphetamine (any form)	69	38
Methamphetamine powder	56	31
Methamphetamine base	25	6
Crystal methamphetamine	31	-
Pharmaceutical stimulants	6	-
Ecstasy pills	13	-
Ecstasy powder	19	-
Ecstasy capsules	13	
Heroin	69	38
Methadone	25	-
Buprenorphine	19	-
Cocaine	19	-
LSD	13	-
Ketamine	6	-
MDA	-	-
Other opioids*	56	25
Benzodiazepines	13	-
Other	-	-

Source: EDRS interviews
* Includes codeine, morphine, and pethidine

7.1.2 Recent injecting drug use and injecting risk behaviours

Over one-tenth (13%) of the 2011 sample had injected a drug in the six months prior to the interview. Table 53 shows that the most commonly injected drugs in the last six months were methamphetamine (60% powder, 30% base), other opioids (70%), and heroin (60%). The frequency of injection for each drug was variable and ranged from two occasions to once every two days within the preceding six months.

Table 53: Recent injecting drug use patterns (recent injectors) among REU, 2011

	% injected last 6 months n=10	Median days injected last 6 months* (range)	Last drug injected n=10 (%)
Methamphetamine powder	60	6 (1-48)	30
Methamphetamine base	30	2 (2-4)	10
Crystal methamphetamine	-	-	-
Ecstasy	30	5.5 (1-24)	-
Methadone	20	102 (24-180)	-
Buprenorphine	10	2 (2-2)	-
Pharmaceutical stimulants	-	-	-
Ketamine	10	2 (2-2)	-
Heroin	60	13 (2-31)	30
Other opioids	70	5 (1-40)	20
Benzodiazepines	-	-	-
Alcohol	-	-	-
MDA	-	-	-
Cocaine	-	-	-
LSD	10	2 (2-2)	-

Source: EDRS interviews
* Of those who had injected in the preceding six months

Those who had recently injected had done so on a median of 17.5 occasions (range 6-90 times) in the six months preceding the interview, or three times a month on average (Table 54). Recent injectors had typically injected with close friends (50%) or a regular sex partner (30%) and had last injected at their own home (60%) or a friend's home (30%) during this time.

Table 54: Context and patterns of injection during the last six months among REU, 2004-2011

	2004 n=9	2005 n=8	2006 n=9	2007 n=6	2008 n=7	2009 n=12	2010 n=3	**2011 n=10**
Median times injected (range)	20 (1-72)	58 (1-350)	120 (1-400)	81 (4-150)	15 (1-90)	5 (1-120)	6 (2-40)	**17.5 (6-90)**
Usually inject with*								
Close friends (%)	56	63	44	67	57	58	67	**50**
Regular sex partner (%)	11	38	33	17	-	25	-	**30**
Casual sex partner (%)	11	-	11	17	-	-	33	**-**
Acquaintances (%)	11	13	22	33	14	-	33	**-**
No-one (%)	11	13	-	17	43	25	33	**10**
Relative (%)	-	-	11	17	-	-	-	**-**
Location last injected*	n/a	n/a	n/a	n/a	n/a			
Home (%)						50	100	**60**
Friend's home (%)						42	-	**30**
Car (%)						8	-	**-**
Dealer's home (%)						-	-	**10**
Street (%)						-	-	**-**
Public toilet (%)						-	-	**-**
Venue toilet (%)						-	-	**-**
Work (%)						-	-	**-**

Source: EDRS interviews
* Question not asked prior to 2009

The majority (80%) had recently injected whilst under the influence of and/or coming down from ecstasy and related drugs during the six months preceding the interview on a median of 5 days (range 1-20 days) during this time (Table 55).

No recent injectors reported sharing of needles but one participant reported sharing tourniquets in the last six months, a practice which increases the risk of exposure to blood-borne viral infections.

The majority of recent injectors reported obtaining needles from a NSP in the last six months, with single participants obtaining needles from a pharmacy or from an outreach service.

Table 55: Recent injecting risk behaviour and obtaining needles in last six months, 2004-2011

	2004 n=9	2005 n=8	2006 n=9	2007 n=6	2008 n=7	2009 n=12	2010 n=3	**2011 n=10**
Injected under influence or coming down from ERDs (%)	67	76	89	67	43	33	67	**80**
Median times injected under influence (range)*	n=6 5 (2-13)	n=6 5 (2-120)	n=8 8 (2-120)	n=4 18 (4-50)	n=3 15 (3-20)	n=4 13 (1-120)	n=2 1.5 (1-2)	**n=7 5 (1-20)**
Used needle after someone (%)	11 (n=1)	13 (n=1)	-	17 (n=1)	14 (n=1)	8 (n=1)	-	**-**
Shared equipment								
None (%)	44	38	56	50	43	83	67	**89**
Spoons/containers (%)	44	13	22	17	14	8	33	**-**
Tourniquets (%)	33	38	33	-	43	-	33	**11**
Filters (%)	22	-	-	-	29	-	-	**-**
Water (%)	11	38	11	17	29	8	-	**-**
Needle source								
NSP (%)	100	88	89	50	43	33	-	**90**
Chemist (%)	11	25	56	67	71	50	100	**10**
Friend (%)	11	25	44	50	-	17	-	**-**
Dealer (%)	-	25	22	-	29	8	-	**-**
Partner (%)	-	-	11	-	-	-	-	**-**
Outreach (%)	-	-	-	-	-	-	-	**10**

Source: EDRS interviews
* Of those that had injected under the influence

7.2 Blood-borne viral infections (BBVI)

Three-fifths (60%) of the 2011 REU sample had been vaccinated for hepatitis B (Table 56). The main reason reported for hepatitis B vaccination was childhood vaccination (36%), followed by overseas travel (33%) and work requirements (13%).

Over half (54%) of the 2011 REU sample had ever been tested for hepatitis C, with 31% of the sample having been tested in the last year (Table 56).

Three-fifths (60%) of the REU sample had been tested for HIV at some stage, and 37% of the sample had been tested during the last year (Table 56).

Table 56: BBVI vaccination, testing and self-reported status, 2004-2011

	2004	2005	2006	2007	2008	2010	**2011**
Hepatitis B vaccination (%)	n=96	n=99	n=97	n=100	n=99	n=100	**n=75**
No	44	41	44	33	35	34	**23**
Yes (didn't complete schedule)	10	14	6	7	9	4	**11**
Yes (completed schedule)	44	30	38	49	51	50	**49**
Don't know	2	14	11	11	5	12	**17**
If yes, reason (%)	n=51	n=42	n=41	n=53	n=59	n=54	**n=45**
Risk (sexual)	2	12	7	9	4	-	**2**
Risk (IDU)	2	-	2	-	-	4	**7**
Going overseas	33	67	59	47	59	52	**33**
Vaccinated as a child	14	5	5	11	15	28	**36**
Don't know/can't remember	12	5	2	8	3	2	**7**
Working in a health setting	11	-	2	-	1	-	**-**
Work requirement	26	5	12	17	9	11	**13**
Relative's advice	16	7	5	4	-	2	**-**
GP's advice	11	-	-	-	1	2	**-**
Precautionary	26	-	2	-	1	-	**-**
Other	11	5	-	2	-	-	**2**
Tested for hepatitis C (%)	n=96	n=99	n=97	n=100	n=99	n=100	**n=74**
No	67	62	57	65	63	68	**34**
Yes (in the last year)	18	18	17	19	20	18	**31**
Yes (more than one year ago)	16	12	23	14	16	9	**23**
Don't know/didn't get result	-	8	4	2	1	5	**12**
If yes, what was the result (%)	n=32	n=29	n=36	n=32	n=36	n=27	**n=40**
Positive	-	3	8	3	6	-	**5**
Negative	97	90	86	97	92	100	**93**
Don't know/didn't get result	3	7	6	-	3	-	**3**
Tested for HIV (%)	n=96	n=99	n=97	n=100	n=98	n=100	**n=74**
No	64	65	60	64	63	59	**39**
Yes (in the last year)	22	19	20	21	20	22	**37**
Yes (more than one year ago)	15	15	20	13	15	18	**23**
Don't know/didn't get result	-	1	1	2	-	1	**1**
If yes, what was the result (%)	n=35	n=33	n=37	n=34	n=36	n=40	**n=44**
Positive	3	-	-	-	-	-	**-**
Negative	97	94	100	100	97	98	**98**
Don't know/didn't get result	-	6	-	-	3	3	**2**

Source: EDRS interviews
Note: BBVI questions were not asked in 2009

7.3 Sexual risk behaviour

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

Over three-fifths (64%) of the 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 one to five partners during this time.

Three-fifths (59%) of the sample had engaged in penetrative sex with a casual partner while under the influence of ecstasy and related drugs during the last six months (Table 57), with almost two-thirds (63%) doing so on six or more occasions. These respondents most commonly reported having sex under the influence of alcohol (89%), followed by ecstasy (48%), cannabis (34%), or methamphetamine powder (14%).

Of those who had sex with a casual partner under the influence of drugs in the preceding six months, one-fifth (19%) reported that they never used protective barriers (Table 57). One-quarter reported that they always used protective barriers (26%) and the remainder reported inconsistent use of protective barriers.

Over one-half (57%) of those who reported sex with a casual partner 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: it was not mentioned (52%), too intoxicated (20%), lack of availability (4%), personal preference (4%), confidence in lack of risk (4%), problems with intercourse (4%), and on contraceptive pill (4%).

Whereas three-quarters (80%) of the 2011 REU sample had ever been for a sexual health check, one-fifth (20%) had never had a sexual health check-up (Table 57). The majority of the sample (81%) had never been diagnosed with a sexually transmitted infection (STI) and smaller proportions had been diagnosed with an STI in the last year (1%) or more than a year ago (18%). The most commonly diagnosed STI was Chlamydia (93%) followed by herpes (21%).

Table 57: Prevalence of sexual activity, protective barrier use, and sexual health among REU, 2004-2011

	2004 n=100	2005 n=100	2006 n=100	2007 n=98	2008 n=99	2009 n=99	2010 n=100	**2011 n=75**
Casual sex last 6 mths (%)	61	69	45	54	60	54	60	**64**
No. casual partners*	n/a	n/a	n/a	n/a	n=59	n=54	n=60	**n=48**
One partner (%)					18	33	25	**23**
Two partners (%)					23	20	28	**21**
Three-five partners (%)					41	35	35	**38**
Six-ten partners (%)					14	9	8	**15**
More than ten partners (%)					3	2	3	**4**
Casual sex with drugs/alcohol (%)	47	49	34	40	47	49	55	**59**
Number of times#	n/a	n/a	n/a	n/a	n=52	n=49	n=55	**n=44**
Once (%)					10	18	9	**2**
Twice (%)					19	14	15	**18**
Three-five times (%)					40	16	38	**16**
Six-ten times (%)					12	29	16	**27**
More than ten times (%)					19	22	22	**36**
Drugs used last time#	n/a	n/a	n/a	n/a	n=52	n=49	n=55	**n=44**
Ecstasy (%)					65	67	53	**48**
Cannabis (%)					19	20	24	**34**
Alcohol (%)					98	90	91	**89**
Meth. powder (%)					10	6	4	**14**
Meth. base (%)					-	4	-	**-**
Crystal meth (%)					-	4	-	**-**
Cocaine (%)					2	6	7	**2**
LSD (%)					-	2	4	**9**
GHB (%)					-	-	-	**-**
Amyl nitrite (%)					6	4	-	**2**
Nitrous oxide (%)					-	4	2	**-**
Methadone (%)					-	4	-	**5**
Benzodiazepines (%)					2	4	-	**-**
Mushrooms (%)					-	4	-	**-**
Pharm. stimulants (%)					-	2	-	**2**
MDA (%)					-	-	2	**5**
Mephedrone (%)					-	-	13	**-**
Methylone (%)					-	-	2	**-**
Heroin					-	-	-	**2**
Protective barrier use#	n=43	n=48	n=32	n=37	n=52	n=49	n=55	**n=43**
Always (%)	35	44	34	24	31	20	22	**26**
Never (%)	12	19	9	22	15	37	33	**19**
Inconsistent or rare use (%)	65	56	66	76	69	43	46	**56**
Ever sex health check (%)		n=96	n=100	n=95	n=99	n=99	n=100	**n=75**
No		53	51	37	38	33	29	**20**
Yes (in the last year)		33	32	40	40	45	52	**56**
Yes (more than 1 year ago)		14	17	22	21	21	19	**24**
Don't know		-	-	1	-	-	-	**-**
Ever diagnosed STI (%)			n=98	n=95	n=99	n=98	n=100	**n=74**
No		n/a	92	90	85	81	78	**81**
Yes (in the last year)		n/a	5	6	6	8	6	**1**
Yes (more than 1 year ago)		n/a	2	4	9	11	16	**18**
Don't know		n/a	1	-	-	-	-	**-**

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

7.4 Driving risk behaviour

Sixty-five of the 75 REU interviewed in 2011 had driven a car during the six months preceding the interview (Table 58). Over one-third (37%) of recent drivers had driven while they perceived themselves to be over the legal alcohol limit during this time. The median frequency of driving over the limit was 2 times (range 1-20) in the last six months. Half (50%) had been random breath tested (once or more) during the previous six months; however none had been found to be over the legal blood alcohol limit during this time.

Two-fifths (40%) of those that had recently driven a car had driven soon after taking a drug in the last six months, which is similar to 2010 (39%). Of those who had driven under the influence (DUI) of drugs, the median number of times in the last six months was 6 (range 1-180). No participants had been tested for drug driving by police during the last six months. Of those that had driven under the influence, the drugs most commonly used were cannabis (81%), ecstasy (27%), and methamphetamine (powder 23%, base 4%, crystal 4%).

To account for any changes in the prevalence of drug use in the general population and among EDRS cohorts, trends in DUI of drugs can be examined by comparing the proportion reporting DUI among those who had recently used each substance in the last six months (see Figure 41). There has been a significant decline in the proportion reporting DUI of ecstasy and methamphetamine since 2006, while DUI of cannabis has remained fairly stable.

The most common reasons cited for DUI of alcohol on the last occasion were: did not want to use public transport (54%), thought unlikely to get caught (33%), unplanned alcohol use (17%), could not use public transport (15%), felt driving would not be affected (8%), and did not want to leave vehicle in current location (4%).

The most common reasons cited for DUI of drugs on the last occasion were: felt driving would not be affected (54%), thought unlikely to get caught (31%), unplanned drug use (12%), was the most sober among friends (12%), could not use public transport (13%), and did not want to use public transport (8%).

Those that had recently driven under the influence of ecstasy, cannabis or methamphetamine were asked further questions in regard to their perceived level of impairment on the last occasion that they had driven under the influence. Those who had last driven under the influence of cannabis (n=17) had done so on an average of 1 hour after taking the drug (range 0.1-6). A majority perceived that that their driving had been ‘slightly impaired’ (59%) or that it had had ‘no impact’ on their driving (35%). Sample sizes in relation to ecstasy and methamphetamine were too small for meaningful interpretation.

Table 58: Driving under the influence (DUI) of alcohol and other drugs among REU who had driven a car in the last six months, 2005-2011

Variable	2005 n=80	2006 n=81	2007 n=76	2008 n=86	2009 n=87	2010 n=88	**2011 n=65**
Driven over legal alcohol limit last 6 mths (%)	58	48	37	49	59	48	**37**
Median times driven over legal limit last 6 mths (range)#	n=46 4 (1-24)	n=39 3 (1-60)	n=28 2 (1-56)	n=42 3 (1-24)	n=51 4 (1-30)	n=42 3 (1-24)	**n=24 2 (1-20)**
Breath tested last 6 mths (%) If tested, over limit (≥1) (%)	n/a	n/a	38 7	40 -	56 15	61 7	**50 -**
Driven soon after taking any drug in last 6 mths (%)	55	78	51	63	51	39	**40**
Median times DUI of drugs last 6 mths (range)*	n/a	n=63 5 (1-180)	n=39 2 (1-180)	n=54 6 (1-150)	n=44 3 (1-180)	n=34 3 (1-180)	**n=26 6 (1-180)**
Saliva tested last 6 mths (%) If tested, tested positive (%)	n/a	n/a	n/a	2 -	2 -	5 n=1	**- -**
Drugs DUI last 6 mths (%)*^	n=44	n=63	n=39	n=54	n=44	n=34	**n=26**
Cannabis	68	52	46	52	48	59	**81**
Ecstasy	91	89	85	83	71	62	**27**
Methamphetamine powder	34	27	33	13	7	12	**23**
Methamphetamine base	9	24	8	4	7	6	**4**
Crystal methamphetamine	2	10	-	2	9	-	**4**
Benzodiazepines	2	5	3	6	5		**4**
Psychedelic mushrooms	-	8	8	6	5	6	**4**
LSD	5	2	10	13	11	9	**8**
Amyl nitrite	2	-	3	4	-	-	**-**
Nitrous oxide	16	5	5	4	7	-	**-**
Cocaine	5	6	5	2	2	3	**-**
Ketamine	2	-	3	-	-	-	**-**
Other opioids	-	-	3	2	2	3	**12**
Pharmaceutical stimulants	-	2	-	2	-	-	**-**
GHB	2	2	-	-	-	-	**-**
Methadone	-	2	-	2	-	3	**-**
2CI/2CB/2CE	-	2	-	-	2	-	**-**
Mephedrone	-	-	-	-	-	12	**-**
Methylone	-	-	-	-	-	3	**-**
Heroin	-	-	-	-	-	-	**8**

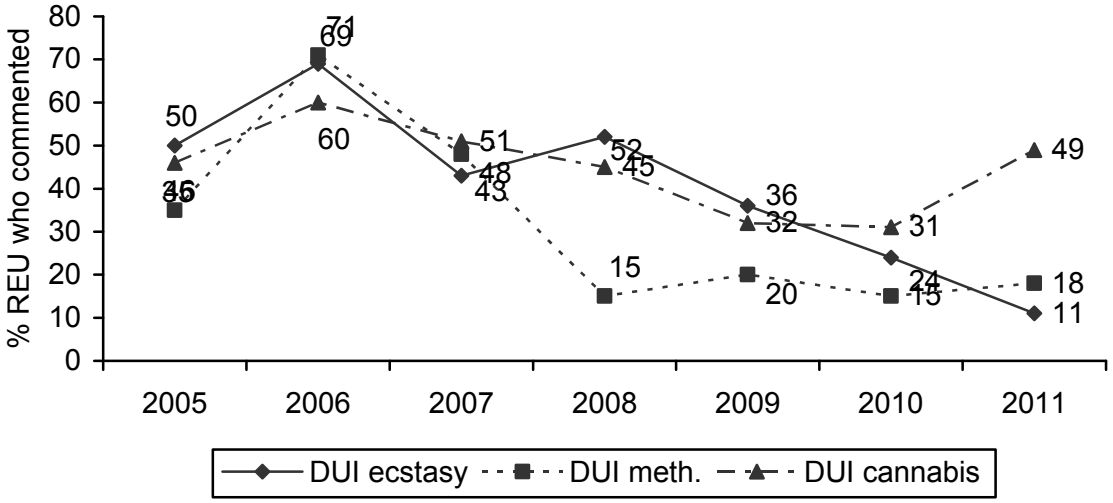
Source: EDRS interviews

Of those who had driven while over the legal limit of alcohol in the last 6 months

* Of those who had driven under the influence of drugs in the last 6 months

^Drugs used on any occasion of DUI of drugs, not necessarily simultaneously

Figure 41: Proportion of REU who had DUI of ecstasy, methamphetamine and cannabis among those who had used each substance in the last six months, 2005-2011



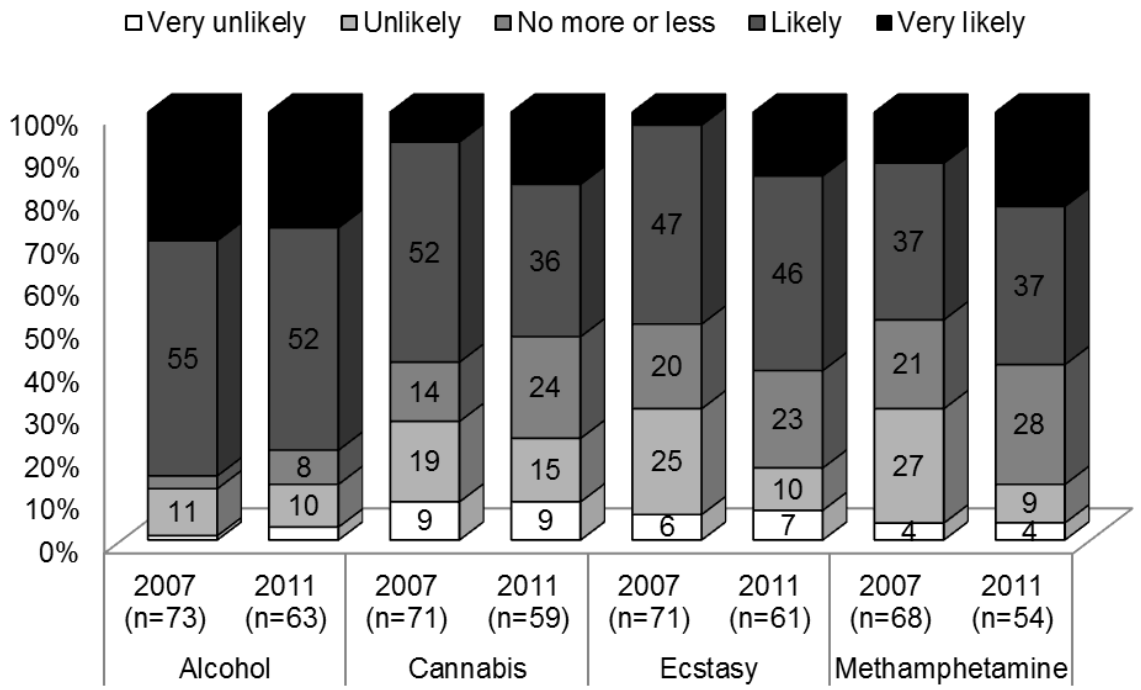
Source: EDRS interviews

Previous research has shown that risk perceptions of the likelihood of accident and the risk of apprehension are significant predictors of DUI (see Matthews et al. 2008). In 2007 and again in 2011, REU were asked about their perceptions of the risk of having a motor vehicle crash and the risk of being apprehended by police while driving under the influence of particular substances.

Figure 42 shows the perceived likelihood of a road crash occurring if one was to drive under the influence of alcohol (over legal limit), ecstasy, methamphetamine and cannabis. In 2011, DUI of alcohol was perceived as most risky, with 79% reporting that having a road crash was 'likely' or 'very likely'. This was followed by ecstasy (61%), methamphetamine (59%), and cannabis (53%). When compared to the 2007 data, attitudes towards alcohol and cannabis were similar, but DUI of ecstasy and methamphetamine were perceived as more risky in terms of having a road crash. This difference in proportions was statistically significant for ecstasy only, χ^2=10.17, p<.05.

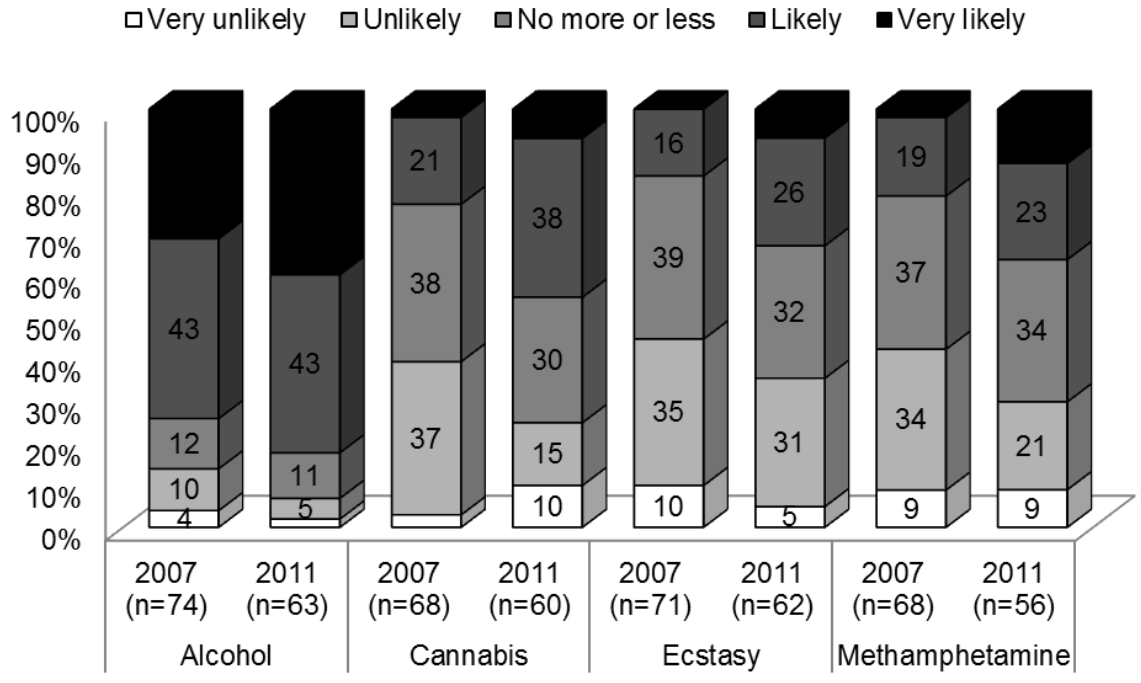
Figure 43 shows the perceived likelihood of being apprehended by police (legal risk) if one was to drive under the influence of alcohol (over legal limit), ecstasy, methamphetamine and cannabis. In 2011, DUI of alcohol was perceived as most risky, with 83% reporting that being apprehended was 'likely' or 'very likely'. This was followed by cannabis (45%), methamphetamine (36%), and ecstasy (33%). When compared to the 2007 data, attitudes towards alcohol and methamphetamine were similar, but DUI of cannabis (χ^2=14.53, p<.01) and ecstasy (χ^2=8.12, p=.088) were perceived as more risky in terms of being 'caught' by police.

Figure 42: Perceptions of the likelihood of crash risk among REU, 2007 and 2011



Source: EDRS interviews

Figure 43: Perceptions of the likelihood of being apprehended by police among REU, 2007 and 2011



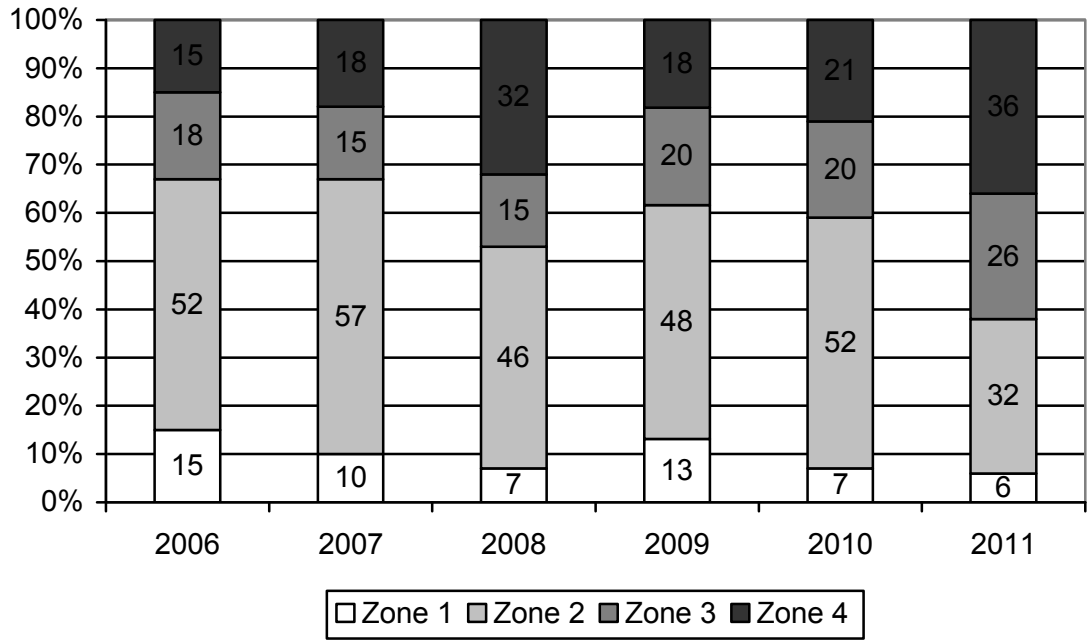
Source: EDRS interviews

7.5 Alcohol Use Disorders Identification Test (AUDIT)

REU completed the Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993). 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. 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 17.4 (median=17.5; range 4-31, SD=6.5). Of those REU who completed the AUDIT (n=72), a large majority (94%) 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 44 shows the proportion of REU categorised within each of the AUDIT risk categories between 2006 and 2011. In 2011, just 6% of the REU that completed the AUDIT scored in zone 1 (a level reflecting low-risk drinking or abstinence). One-third (32%) scored in zone 2 (alcohol use in excess of low-risk guidelines[8]), a further 26% scored in zone 3 (harmful or hazardous drinking) and 36% (95%CI 26-48%) scored in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence) which is significantly greater than the proportion categorised in zone 4 among the 2010 sample (21%, 95%CI 14-30%).

Figure 44: Proportion of REU categorised with each AUDIT risk zone, 2006-2011



Source: EDRS interviews

[8] It should be noted that this threshold for low-risk is based on standards employed in the 2007 National Drug Strategy Household Survey, 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.

7.6 Binge drug use

Table 59 shows that almost one-quarter (22%) of the 2011 REU sample had recently 'binged' on ERDs (used for more than 48 hours continuously without sleep) which is similar to the proportion in 2010 (24%). Those that had recently binged had done so on a median of 2.5 occasions (range 1-60) during the six months preceding the interview. The median length of the longest period of continuous use during this time was 2 days (range 2-4 days). Of those who had recently 'binged', the substances used most commonly during any one binge session of use were ecstasy (63%), alcohol (81%), cannabis (55%), methamphetamine (powder 38%; base 6%; crystal 6%), energy drinks (38%), LSD (25%), and cocaine (13%). Two-thirds (69%) reported use of tobacco in a binge session of use. Among those who had used alcohol in a binge session of use, a majority (92%) reported typical use of more than five standard drinks in a binge session.

Table 59: Binge drug use among REU, 2006-2011

Variable	2006 n=98	2007 n=100	2008 n=96	2009 n=100	2010 n=100	**2011 n=72**
Binged on any stimulant drug last 6 mths (%)#	46	38	38	27	24	**22**
Median times binged in last 6 mths (range)*	3 (1-24)	3 (1-24)	2 (1-15)	2 (1-48)	2 (1-20)	**2.5 (1-60)**
Median length (days) biggest binge last 6 mths (range)*	2.5 (2-6)	2.5 (2-6)	2.3 (2-5)	2 (2-5)	2 (2-3)	**2 (2-4)**
Drugs used in binge session last 6 mths (%)*						
Ecstasy	93	100	92	96	79	**63**
Meth. powder	49	58	47	26	29	**38**
Meth. base	36	21	11	11	8	**6**
Crystal meth.	36	5	14	19	-	**6**
Pharm. stimulants	2	8	3	4	8	**-**
Cocaine	27	11	19	19	33	**13**
LSD	16	13	31	11	21	**25**
Ketamine	-	5	3	-	-	**6**
MDA	-	-	-	4	-	**6**
GHB	4	3	-	4	-	**-**
Amyl nitrite	2	8	3	4	4	**-**
Nitrous oxide	20	32	17	11	4	**6**
Cannabis	53	45	50	41	42	**56**
Alcohol	60	76	81	85	83	**81**
Benzodiazepines	-	-	-	-	8	**6**
Mushrooms	27	16	17	11	8	**6**
2CI	11	3	-	-	-	**6**
Other opioids	-	-	3	-	-	**6**
Mephedrone	-	-	-	-	33	**-**
Methylone	-	-	-	-	4	**-**
DOI	-	-	-	-	4	**-**
BZP	-	-	-	-	4	**-**
OTC codeine	-	-	-	-	-	**6**
Energy drinks	n/a	n/a	n/a	n/a	25	**38**

Source: EDRS interviews

Used for 48 hours continuously without sleep

* Among those who had binged

8.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

Summary:

- **Criminal activity.** The self-reported level of criminal activity among the 2011 REU sample was relatively low. With the exception of property crime (15%), around one-tenth of the REU interviewed had committed other criminal offences during the one month preceding the interview. Almost one-fifth (16%) had been arrested during the preceding 12 months, generally for reasons unrelated to drug use.
- **Police activity.** One-tenth of the REU sample (13%) perceived that there had been an increase in police activity towards ecstasy users in the last six months.
- **Arrests and seizures by Tasmania Police.** There had been a substantial increase in the number of both consumer and provider arrests and seizures in relation to ecstasy between 2006/07 and 2009/10 relative to any previous years. In 2010/11 a substantial reduction in both the number of arrests and the number of seizures was noted relative to recent years.

  It is possible that the decrease in ecstasy seizures is related to the changes in the ecstasy market reported by REU (e.g., decreased price, purity, and availability of the drug in Hobart) and the recent increase in the use and availability of capsules containing substances such as mephedrone or 'unknown substances' among REU.

  While the number of methamphetamine-related arrests substantially increased in the 2006/07 and 2007/08 periods, there have been reductions in recent years with a substantial reduction in arrests between the 2009/10 and 2010/11 reporting periods (128 vs. 95). The number of methamphetamine-related seizures increased gradually between 1999/00 and 2006/07. Since this time there has been a reduction; however, an increase in both the weight and number of seizures was noted in 2010/11 relative to 2009/10.

  Since 2006/07 the number of cannabis-related arrests has remained relatively stable while the weight and number of seizures have increased gradually. This upward trend has continued, with an increase in both the weight and number of seizures observed in 2010/11 relative to 2009/10.

  The total number of drug diversions or cautions and the number diverted to health interventions were substantially lower in 2010/11 compared to 2009/10. However, this was in part due to policy changes made in relation to offenders under the age of 18 in accordance with the *Youth Justice Act 1997*.
- **Drug-related charges in Tasmanian courts.** The number of individuals before the Hobart Magistrates Court and the number of individuals incarcerated at Hobart Prison in relation to drug offences were greater in 2010/11 relative to 2009/10. However, in 2010/11, the Magistrates Court introduced a new data coding system (ASOC, 2008), which means direct comparisons with data from previous years should be made with caution.

8.1 Reports of criminal activity among REU

Just over one-quarter (28%) of the 2011 REU sample self-reported engaging in some type of crime within the last month (Table 60).

The most common crime reported by over one-tenth of the REU sample was property crime (15%). The majority of those that had recently committed property crime had done so on a less than weekly basis (n=7), with few committing property crime weekly (n=1) or more frequently (n=3). Participants typically specified that the property crimes that they had committed had been shoplifting episodes (73%) A single participant reported being under the influence of alcohol and ecstasy when they last committed a property crime.

One-tenth (11%) reported dealing drugs for cash profit, with the majority doing so on a less than weekly basis in the last month (n=6), and few (n=2) doing so on a weekly basis. Smaller proportions of the sample reported committing fraud (5%) or violent crime (3%) during the last month. The single participant who had committed a violent crime indicated that they had been under the influence of alcohol (but not other drugs) on the last occasion.

More than one-tenth of the sample (16%) had been arrested during the 12 months preceding the interview. These participants had been arrested for a variety of offences (see Table 60). Only a small proportion had been arrested for drug-related offences, with only two REU being arrested for use/possession, and no arrests for dealing/trafficking.

Table 60: Criminal activity reported by REU, 2004-2011

	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Any criminal activity in last month (%)	19	15	26	28	28	24	24	**28**
Drug dealing	16	8	21	24	24	18	15	**11**
Property crime	6	4	5	11	6	11	8	**15**
Fraud	-	3	3	1	2	1	-	**5**
Violent crime	-	2	1	5	2	1	5	**3**
Arrested last 12 months (%)	3	9	8	10	6	10	13	**16**
Property crime	3	1	1	1	-	3	-	**4**
Drug use/possession	-	1	1	1	1	3	2	**3**
Violent crime	-	1	1	2	-	1	-	**1**
Dealing/trafficking	-	2	-	-	-	1	1	**-**
Driving offence	-	-	-	-	-	2	-	**1**
DUI alcohol	-	2	2	3	2	3	4	**1**
DUI drugs	-	1	-	-	-	1	-	**-**
Other reason	-	2	2	5	4	4	8	**9**

Source: EDRS interviews

8.2 Perceptions of police activity towards REU

REU were asked if there had been any changes in police activity towards ecstasy users during the six months preceding the interview (Table 61). Just over one-tenth (13%) perceived a recent increase in police activity.

Table 61: Perceptions of police activity by REU, 2004-2011

Perception	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	2010 n=100	**2011 n=75**
Any recent changes in police activity?								
Decreased (%)	4	1	1	4	1	-	1	**-**
Stable (%)	35	43	24	29	33	42	42	**43**
Increased (%)	31	27	30	23	26	15	21	**13**
Don't know (%)	30	29	45	43	40	43	36	**44**

Source: EDRS interviews

8.3 Drug-related arrests and seizures made by Tasmania Police

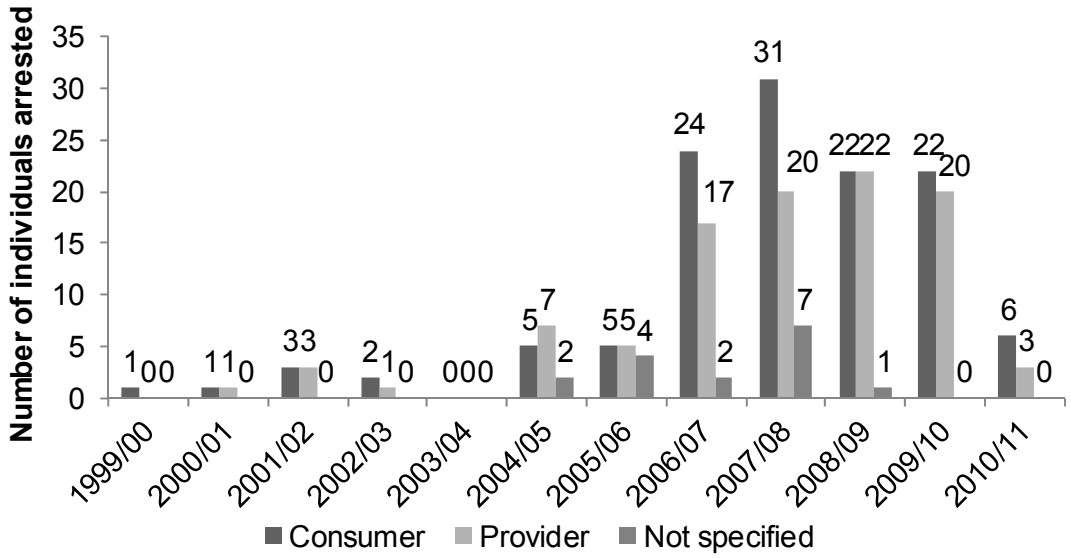
8.3.1 Ecstasy

Figure 45 shows the number of police incidents recorded by Tasmania Police for ecstasy possession and use (consumers) and for dealing or trafficking of ecstasy (providers) from 1999/00 to 2010/11. There were few ecstasy-related police incidents between the 1999/00 and 2005/06 financial years. A substantial increase in the number of ecstasy-related arrests can be seen between 2006/07 and 2009/10 relative to all previous years. In 2010/11 there was a substantial decrease in the number of both consumer and provider arrests relative to recent years, with just 9 ecstasy-related arrests reported in total.

Figure 46 shows that there were no ecstasy tablets seized by Tasmania Police prior to the 1999/00 financial year. Since this time the number of tablets and the number of seizures have increased, with a considerable increases observed in the number and total weight of seizures in the 2003/04 and 2006/07 reporting periods and a substantial increase in the total number of tablets seized during the 2008/09 period (4,478 tablets). In 2009/10 there was a considerable decrease in both the number of seizures (n=45) and the total number of tablets seized (619 tablets), and number of seizures continued to reduce substantially in 2010/11, with 852 tablets seized across just 17 seizures. There was also one seizure totalling 10.7 grams of tablets in 2010/11.

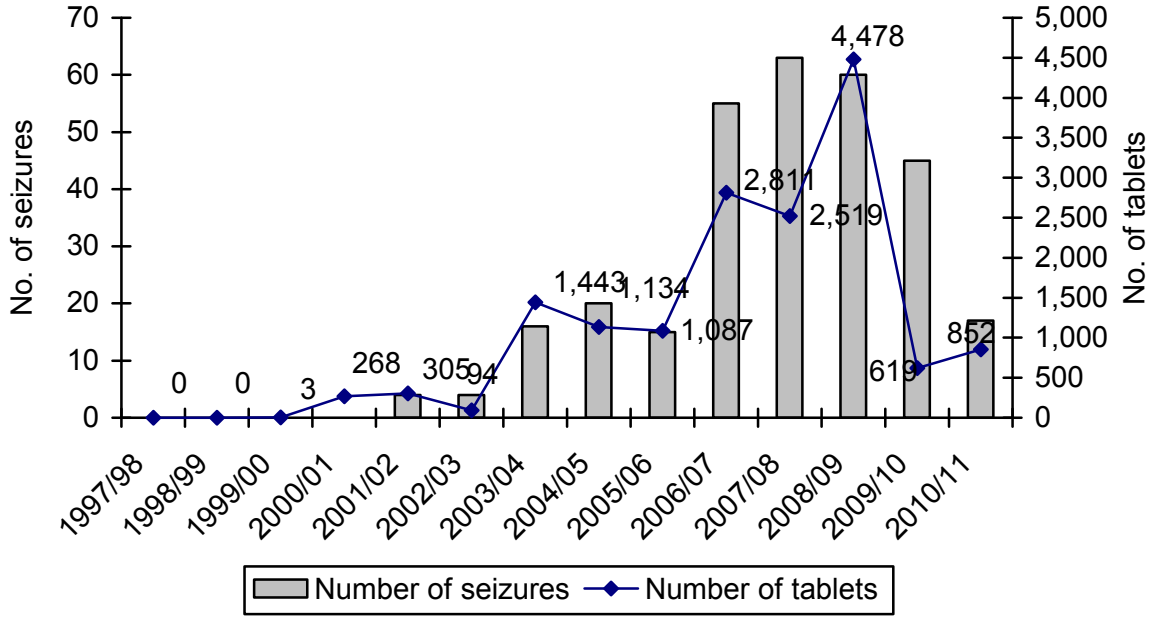
It is possible that the decrease in ecstasy seizures is at least partially related to the changes in the ecstasy market reported by REU (e.g., decreased price, purity and availability of the drug in Hobart) and the recent increase in the use and availability of mephedrone capsules and capsules of unknown content among REU (See section 4.8). In addition to seizures which were coded as ecstasy by Tasmania Police, there were thirty seizures totalling 393 capsules in which the drug type was not coded. It is possible that some of these seizures pertain to ecstasy or mephedrone.

Figure 45: Number of police incidents recorded for ecstasy possession/use (consumers) and deal/traffic (providers), 1999/00-2010/11



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 46: Total number of tablets suspected to contain ecstasy seized by Tasmania Police, 1997/98-2010/11



Source: State Intelligence Services, Tasmania Police
Note: Number of seizures was not available for the 1999/00 and 2000/01 periods; 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 annual report due to differences in counting rules.

8.3.2 Methamphetamine

Arrest data for methamphetamine-related offences indicate a marked increase in the number of both consumer and provider arrests between 2004/05 and 2007/08 (Table 62). Since this time there has been a reduction in the number of consumer and provider arrests, with a total of 95 arrests reported in 2010/11, compared to 128 in 2009/10.

Table 62: Consumer and provider arrests for methamphetamine and related substances, 1999/00-2010/11

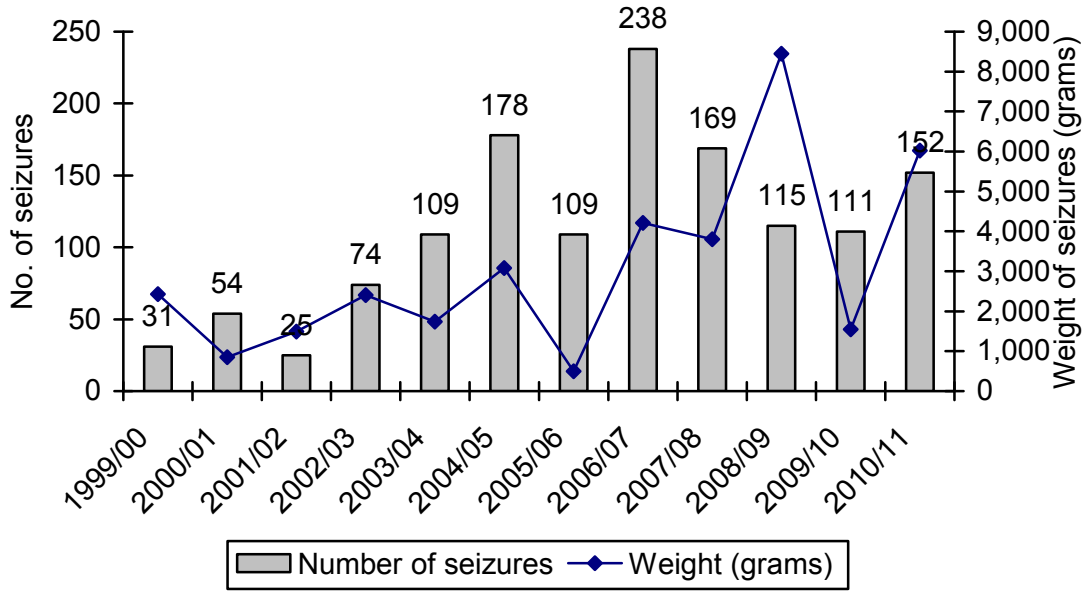
	1999 /00	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06	2006 /07	2007 /08	2008 /09	2009 /10	**2010/ 11**
Consumer	**n**	**n**	**n**	**n**	**n**	**n**	n	**n**	**n**	**n**	n	**n**
Female	4	9	18	8	10	9	10	24	26	10	16	**11**
Male	14	51	53	34	21	34	33	84	81	37	61	**39**
Unknown	2	0	0	0	0	0	0	0	0	0	0	**0**
Total	20	60	71	42	31	43	43	108	107	47	77	**50**
Provider												
Female	0	1	6	2	1	3	9	14	13	7	9	**5**
Male	7	9	12	17	7	23	25	55	57	61	42	**37**
Unknown	1	0	0	0	0	0	0	0	0	0	0	**0**
Total	8	10	18	19	8	26	34	69	70	68	51	**42**
Total Arrests	28	70	89	66	39	69	83	179	177	117	128	**95**

Source: Australian Crime Commission and State Intelligence Services, Tasmania Police

Note: 2010/11 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. Cases here 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 within a category, that person is only counted once. The sum of consumer and provider arrests may not equal total arrests due to missing data.

Tasmania Police seizures (Figure 47) of drugs suspected to be methamphetamine have varied somewhat in recent years. There were notable increases in both the weight and number of seizures between 2001/02 and 2006/07 (seizures for 2005/06 were only reported to ACC for part of the financial year). In recent years, there were decreases in the number of methamphetamine seizures, but in 2010/11 there was an increase in both the weight and number of seizures relative to 2009/10. In addition to the 2010/11 seizures shown in Figure 47, there were 2 seizures totalling 657.6 grams of tablets, and 1 seizure totalling 22.1 grams of capsules.

Figure 47: Seizures of methamphetamine by Tasmania Police, 1999/00-2010/11

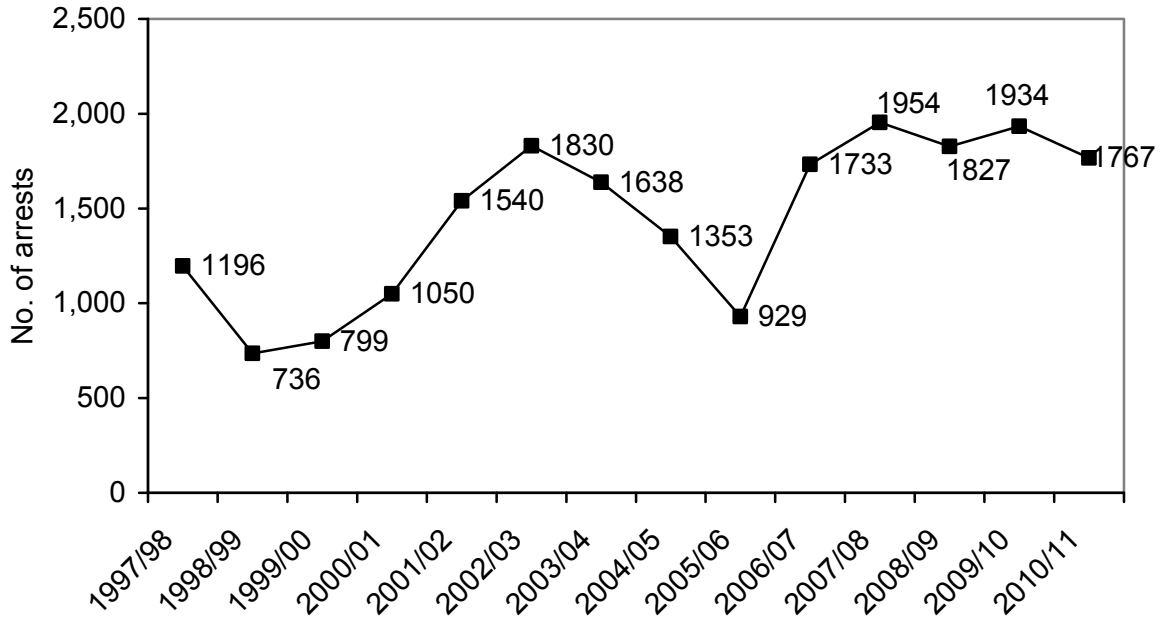


Source: Australian Crime Commission and State Intelligence Services, Tasmania Police
Note: Seizures for 2005/06 were only reported to the ACC for part of the financial year. 2010/11 data were provided by Tasmania Police State Intelligence Service, include only seizures weighed in grams, and are preliminary 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.

8.3.3 Cannabis

Figure 48 shows the number of cannabis-related arrests made by Tasmania Police between 1997/98 and 2010/11. Cautions and arrests relating to cannabis increased steadily from 736 in 1998/99 to 1,830 in 2002/03. This trend reversed in 2003/04, declining to 929 cases in 2005/06 (although arrests for 2005/06 were only reported to the ACC for part of the financial year). A substantial increase in cannabis-related arrests was observed in 2006/07 and this upward trend has continued or remained stable since this time with 1,767 cases reported in 2010/11. It is likely that much of the gradual increase in cannabis-related arrests over the years reflects the increase in utilisation of 'official' cautions and diversions by Tasmania Police (which are included in these statistics) over 'unofficial' warnings, which would not be recorded in these statistics in preceding years.

Figure 48: Number of arrests (including cautions and diversions) for cannabis-related offences in Tasmania, 1997/98-2010/11



Source: Australian Crime Commission and State Intelligence Services, Tasmania Police
Note: 2010/11 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. *Arrests for 2005/06 were only reported to the ACC for part of the financial year.

The Tasmanian Illicit Drug Diversion Initiative, which primarily but not exclusively relates to cannabis consumer offences, has been well supported by police, with well in excess of 1,000 diversions made per annum between 2002/03 and 2006/07 (Table 63). A notable increase in diversions was apparent in 2007/08 (1,681 diversions) with this level maintained in the subsequent reporting periods (1,528-1,609). There was a reduction in the total number of diversions in 2010/11 relative to 2009/10 reporting period (1,132 vs. 1,609). A reduction was also found in the number of second- and third-level diversions (to health interventions) (413 vs. 615). There were 8 diversions in relation to ecstasy in the 2010/11 reporting period compared to 25 diversions in 2009/10. These reductions were in part due to a change in the way IDDI cautions and diversions were made: at the end of 2010, following advice from the Solicitor General, Tasmania Police made a policy decision that minor drug offenders under the age of 18 years would be dealt with in accordance with the *Youth Justice Act 1997* and encouraged to access appropriate health interventions, but would not be included in IDDI. As a result, data from the second half of the 2010/11 does not include persons less than 18 years of age.

Table 63: Drug diversions or cautions issued state-wide by Tasmania Police, 2000/01-2010/11

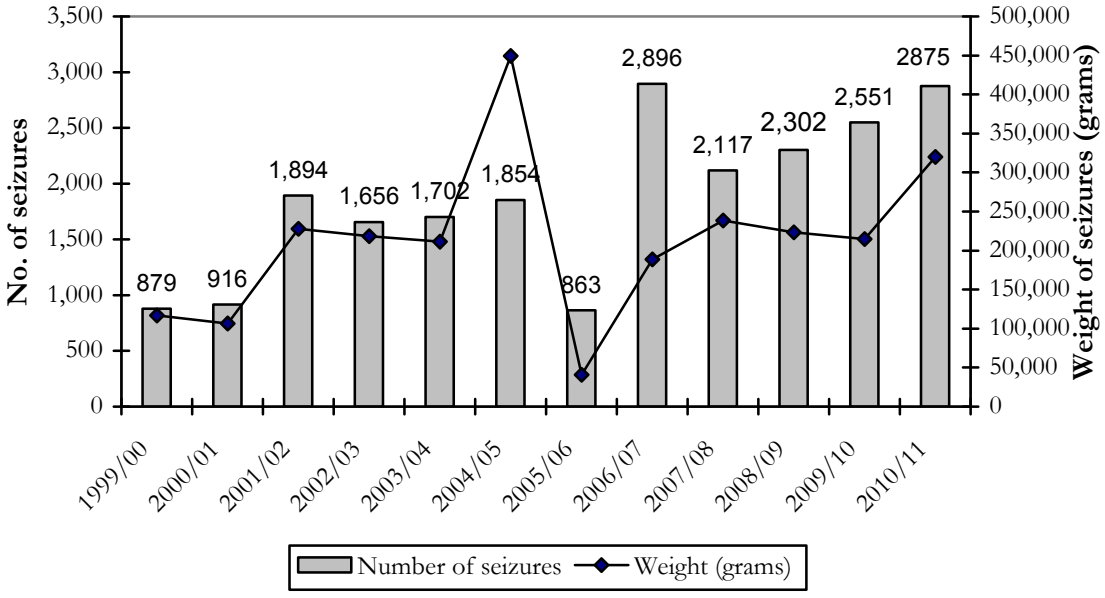
	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06*	2006 /07	2007 /08	2008/ 09	2009/ 10	**2010/ 11**
Number cautions/ diversions	612	978	1,337	1,398	1,330	1,158	1,361	1,681	1,528	1,609	1,132
No. diverted to health intervention	151	n/a	263	179	365	236	369	634	536	615	413

Source: Department of Police & Emergency Management Corporate Reporting Services, Annual Corporate Performance Reports – Total District Drug Diversions; Alcohol & Drug Service

Note: These figures may differ from data submitted to the Australian Crime Commission if the decision to charge persons was altered to a caution after the figures were forwarded to State Intelligence Services; *Arrests and cautions for 2005/06 were only reported for part of the financial year; 'n/a' refers to cases where the relevant data were not provided to the authors.

Figure 49 shows cannabis seizures made by Tasmania Police, between 1999/00 and 2010/11. The volume of cannabis seized and the number of seizures has either remained stable or increased over time with notable peaks observed in 2004/05 and 2006/07. There has been a gradual increase in the weight of seizures between 2007/08 and 2010/11 with a further increase in both the weight and number of seizures in the 2010/11 reporting period relative to 2009/10 In addition to the seizures shown in Figure 49 for 2009/10, Tasmania Police reported 703 seizures of plants (totalling 6,983 plants).

Figure 49: Seizures of cannabis by Tasmania Police, 1999/00-2010/11



Source: Australian Crime Commission and State Intelligence Services, Tasmania Police

Note: Seizures for 2005/06 were only reported to the ACC for part of the financial year.

Data in 2010/11 were provided by Tasmania Police State Intelligence Service, include only plant-related seizures that were weighed in grams, 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.

8.3.4 Cocaine

Tasmania Police have reported few seizures or arrests in relation to cocaine between the 1999/00 and 2008/09 financial years (Table 64). In 2010/11 reporting period there was one arrest for a cocaine offence and 3 seizures totalling 28.3 grams. Some KE also indicated that there had recently been a small increase in the number of cocaine seizures.

Table 64: Consumer and provider arrests for cocaine, 1999/00-2010/11

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	**2010/11**
Arrests (n)												
Consumer	0	2	1	0	0	0	0	0	0	1	1	**0**
Provider	0	0	0	0	0	0	0	1	0	0	2	**0**
Total	0	2	1	0	0	0	0	1	0	1	3	**0**
Seizures (n)	0	1	0	0	0	0	1	2	0	2	3	**3**
Weight (g)	0	1	0	0	0	0	1	7	0	7	46	**28.3**

Source: Australian Crime Commission and State Intelligence Services, Tasmania Police
Note: 2010/11 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.

8.3.5 Hallucinogens

ACC 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 1999/00 and 2010/11 (Table 65). In the 2010/11 period Tasmania police reported six consumer and two provider arrests in relation to LSD and three consumer arrests in relation to mushrooms. There were 3 seizures of mushrooms totalling 102.9 grams, 1 seizure of LSD totalling 138 tabs (Table 65). In addition there were 12 seizures of tryptamines totalling 85 tabs/tablets. (Tasmania Police State Intelligence Services).

Table 65: Consumer and provider arrests for hallucinogens, 1999/00-2010/11

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	**2010/11**
Arrests (n)												
Consumer	1	1	0	0	1	0	1	1	1	2	7	**6**
Provider	0	0	1	1	0	1	2	1	2	0	1	**2**
Total	1	1	1	1	0	1	3	2	3	2	8	**8**
Seizures (n)	0	0	0	0	1	3	0	2	1	2	1	**4**

Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police
Note: 2010/11 data was 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.

8.3.6 Ketamine

There are few objective data on seizures and arrests in relation to ketamine in Tasmania as it is not listed as a separate drug in the illicit drug data reports (ACC). However, drug-specific data provided by Tasmania Police indicates that there was one seizure of 1.5 grams of ketamine in 2005/06.

8.3.7 GHB

There are no objective data on seizures and arrests in relation to GHB in Tasmania, as it is not listed as a separate drug in the illicit drug data reports (ACC). In 2010/11, a single seizure of 1,000 mls of GHB was reported by Tasmania police.

8.3.8 MDA

The ACC reports seizures and arrests for drugs classed as phenethylamines which includes MDMA (ecstasy) as well as 3,4-methylendioxyethylamphetamine (MDEA), 3,4-methylendioxyamphetamine (MDA) and paramethoxyamphetamine (PMA). Thus, there are no data from Tasmania Police that relate specifically to MDA, though it is possible that some MDA-related seizures and arrests are inadvertently reported in relation to ecstasy.

12.4.9 Drug-related charges in Tasmanian courts

The number of individuals before the Magistrates Court for drug-related matters has remained relatively stable between 2003/04 and 2007/08 with notable increases observed in both 2008/09 and 2010/11 (Table 66, Figure 50). In 2010/11 there were increases in the number of individuals before the court for dealing/trafficking offences (217 vs. 125), manufacturing/growing offences (140 vs. 112), possession and use offences (772 vs. 637), and other drug offences (239 vs. 0). However, in 2010/11, the Magistrates Court introduced a new data coding system (ASOC, 2008), which means direct comparisons with data from previous years should be made with caution.

There was also an increase in the number of individuals incarcerated at Hobart Prison in relation to drug offences (80 vs. 53 individuals) and the number of offences among those incarcerated (183 vs. 121 offences) in 2010/11 compared to 2009/10 (Table 66).

Data relating to drug-related offences before the Supreme Court were not available for inclusion in the present report.

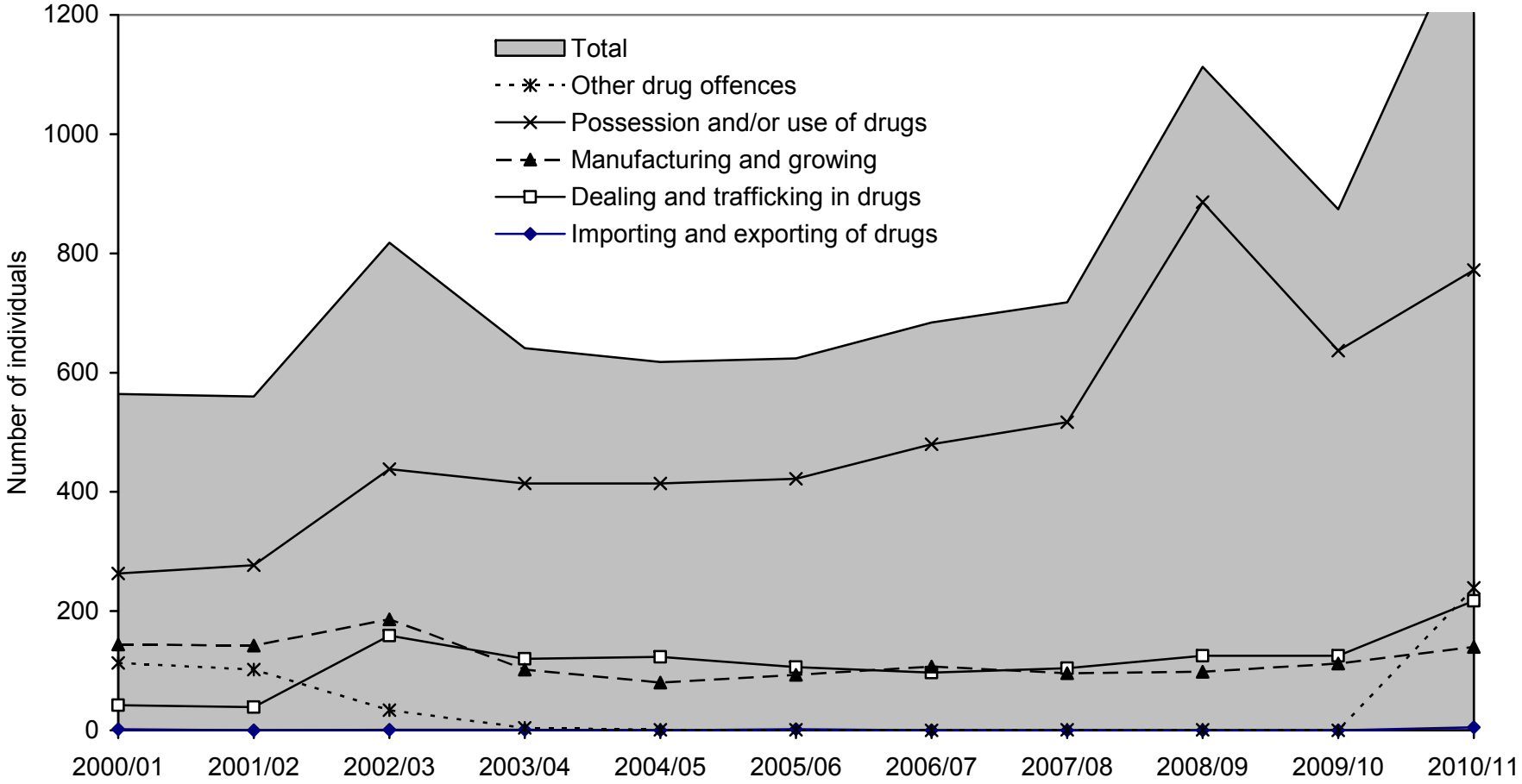
Table 66: Number of individuals before Tasmanian courts or imprisoned on drug charges, 1998/99-2010/11

	1998 /99	1999 /00	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06	2006 /07	2007 /08	2008 /09	2009 /10	**2010 /11[#]**
HOBART MAGISTRATES COURT													
No. individuals (alleged no. of offences):													
Dealing/trafficking drugs	28 (33)	23 (28)	42 (47)	39 (48)	159 (180)	120 (138)	123 (130)	106 (118)	97 (106)	104 (114)	128 (130)	125 (132)	**217 (247)**
Importing/exporting drugs	7 (8)	5 (8)	2 (2)	0 (0)	1 (1)	1 (1)	0 (0)	2 (3)	0 (0)	0 (0)	0 (0)	0 (0)	**5 (8)**
Manufacturing/growing	164 (189)	101 (124)	144 (163)	142 (194)	186 (202)	102 (105)	80 (81)	93 (96)	107 (114)	96 (102)	98 (102)	112 (113)	**140 (147)**
Possession and/or use	342 (654)	195 (428)	263 (544)	277 (542)	438 (896)	414 (829)	414 (800)	422 (823)	480 (996)	517 (982)	886 (1056)	637 (1171)	**772 (1164)**
Other drug offences*	178 (251)	105 (169)	113 (155)	102 (104)	34 (38)	4 (6)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	**239 (276)**
HOBART PRISON*													
No. individuals incarcerated	26	29	n/p	16	35	36	55	57	56	n/p	84	53	**80**
No. of offences among those incarcerated	50	44	25	27	78	83	101	117	128	144	165	121	**183**

Sources: Magistrates Court (Magistrates Court data); Corrective Services (Prison data), Department of Justice and Industrial Relations

*This includes all indictable charges under the *Misuse of Drugs Act 2001*, which includes manufacturing a controlled drug for sale, cultivating a controlled plant for sale, possession of thing used in manufacture of a controlled substance for sale, possession of thing used for cultivation of a controlled plant for sale, manufacturing a controlled precursor intended for use in manufacture of controlled drugs for sale, selling a controlled precursor for use in manufacturing a controlled drug, trafficking in controlled substances and controlled drugs. Numbers of incarcerations refer to cases presented before both the Supreme and Magistrates courts; 'n/p' refers to cases where data were not provided to the authors; [#] In 2010/11, Magistrates Court data are not directly comparable due to a change in coding practices, which now utilises ASOC 2008

Figure 50: Number of individuals before the Hobart Magistrates Court for drug-related offences, 2000/01-2010/11



Source: Hobart Magistrates Court
Note: In 2010/11, Magistrates Court data are not directly comparable due to a change in coding practices, which now utilises ASOC 2008

9.0 SPECIAL TOPICS OF INTEREST

Summary:

- **Online drug-related activity.** A large majority of REU (88%) had been online during the last six months. Among those who had been online during this time, 35% had been online to get information about drugs (most commonly ecstasy, LSD and mushrooms) but none reported posting information about drugs during this time. One-half of REU who sought online information reported engaging in a range of behaviours due to information they had accessed online. These included: trying a drug not used before (33%), altering a drug dose (8%), stopping use of drug (8%), and using a new combination or route of administration (4%).
- **Sleep patterns.** Almost one-third (31%) of REU reported problems with sleep and over-one quarter (28%) reported that their current drug use had impacted negatively on sleep. One-quarter (27%) of the sample reported that they had used sleep medication in the past month (most typically less than once a week) with Valium (diazepam) most commonly used.
- **Heavy Smoking Index.** Over one-quarter (27%) of daily smokers reported smoking their first cigarette within 5 minutes of waking and one-third (32%) between 5 to 30 minutes of waking. One-half (50%) of daily smokers reported smoking 10 or less cigarettes per day with the remainder smoking more than this. One-third of daily smokers (32%) scored 4 or above, indicating moderate to high nicotine dependence.

9.1 Online drug-related activity

In 2011 participants were asked questions in relation to online drug-related activity (Table 67). A large majority of REU (88%) had been online during the last six months. Among those who had been online during this time, 35% had been online to get information about drugs but none reported posting information about drugs during this time.

Among those who had sought drug information online in the last six months (n=22), the most common drugs were ecstasy (32%), LSD (10%) and mushrooms (10%). The most common 'favourite' websites for seeking drug information (n=24) were www.pillreports.com (46%), www.erowid.org (17%), and www.google.com (8%).

Over one-half (54%) of participants who sought online information reported that they had not changed their behaviour/activities due to online information. Others reported engaging in a range of behaviours due to information they had accessed online. These included: trying a drug not used before (33%), altering a drug dose (8%), stopping use of drug (8%), and using a new combination or route of administration (4%).

Table 67: Online drug-related activity in the last six months among REU, 2011

	2011
How often gone online in last six months (including email) in last 6 mths (%)	n=75
Never	12
At least monthly	1
At least fortnightly	7
At least weekly	5
Daily	75
How often gone online to get information about drugs in last 6 mths (%)*	n=66
Never	65
Less than monthly	20
At least monthly	9
At least fortnightly	4
At least weekly	2
How often gone online to post information about drugs in last 6 mths (%)*	n=66
Never	100
Less than monthly	-
At least monthly	-
At least fortnightly	-
At least weekly	-

Source: EDRS interviews
* among those who had been online in the last six months

9.2 Sleep patterns

Table 68 shows self-reported sleep patterns among REU. Ratings of quality of sleep in the last month were varied, with a majority rating sleep quality as 'fair' to 'very good' and 19% rating sleep quality as 'poor' or 'very poor' during this time. REU had generally obtained a median of 8 hours sleep on both week nights and weekends. Almost one-third (31%) reported problems with sleep and over-one quarter (28%) reported that their current drug use had impacted negatively on sleep. One-quarter (27%) of the sample reported that they had used sleep medication in the past month (most typically less than once a week) with Valium (diazepam) most commonly used.

Table 68: Sleep patterns reported by REU, 2011

	2011
Quality of sleep past month (%)	n=75
Very poor	3
Poor	16
Fair	18
Good	37
Very good	24
Excellent	3
Median sleep satisfaction ratings (out of 10)	
Week nights	7
Weekends	7
Median hours of sleep (range)	
Week nights	8 (4-10)
Weekends	8 (2-11)
Median hours of sleep needed not to feel sleepy (range)	8 (4-10)
Self-reported problem with sleep (%)	31
Drug use impacted negatively on sleep (%)	28
How often taken sleep medication in past month (%)	
Not in past month	73
Less than once a week	15
Once or twice a week	8
Three or more times a week	4
Medication used last time (%)*	n=20
Valium (diazepam)	55
Dozile (doxylamine)	10
Seroquel (quetiapine)	5
Mirtazepine (generic)	5
Other	25

Source: EDRS interviews
*among those who had taken sleep medication in the last month

9.3 Heavy Smoking Index (Fagerstrom test for nicotine dependence)

In 2011, EDRS participants who smoked daily (n=22) were asked two questions from the Fagerstrom test for nicotine dependence. These questions were 'How soon after waking do you smoke your first cigarette?' and 'How many cigarettes a day do you smoke?' with scores on each item ranging from 0 to 3. Summed scores on these two items provide a Heavy Smoking Index (HSI) ranging from 0 to 6, with a score of 4 or more indicating moderate to high dependence (Heatherton et al., 1989).

Table 68 shows that over one-quarter (27%) of daily smokers reported smoking their first cigarette within 5 minutes of waking and one-third (32%) between 5 to 30 minutes of waking. One-half (50%) of daily smokers reported smoking 10 or less cigarettes per day with the remainder smoking more than this. The mean HSI score was 2.36 (SD=1.84). One-third of daily smokers (32%) scored 4 or above, indicating moderate to high nicotine dependence.

Table 69: Online drug-related activity in the last six months among REU, 2011

	2011
Time until first cigarette after waking (%)	n=22
Within 5 mins	27
5-30 mins	32
31-60 mins	14
60+ mins	27
Number of cigarettes smoked a day (%)	
10 or less	50
11-20	27
21-30	18
31 or more	5
High dependence (HSI ≥4) (%)	32

Source: EDRS interviews

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