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A. Matthews & R. Bruno

TASMANIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2010
Findings from the Ecstasy and Related Drugs Reporting System (EDRS)

Australian Drug Trends Series No. 68

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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 100 regular ecstasy users (REU) interviewed in 2010 were typically in their early- to mid-twenties, with ages ranging from 18 to 42 years. Participants were generally well educated and either employed on a full- or part-time/casual basis or currently engaged in study. The majority of participants had completed year 12, and 60% had completed tertiary qualifications after school (university or trade/technical). Few participants had come into contact with the criminal justice system or drug treatment agencies. These demographic characteristics are generally consistent with those reported among REU in the previous years of the study. However, a significantly greater proportion had completed a university degree in 2010 (41%) relative to 2009 (24%).

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, cocaine, mephedrone and methamphetamine powder was most common. Relative to 2009, a significantly greater proportion of the 2010 sample reported recent use of cocaine (49% vs. 31%) and mephedrone (47% vs. 14%). There were no other changes in the extent of lifetime or recent substance use between the 2009 and 2010 samples.

Ecstasy

Data from the National Drug Strategy Household Survey (NDSHS) suggest a steady increase in the national prevalence of ecstasy use in Australia between 1995 and 2007, where 8.9% of the population are estimated as ever trying the drug, and 3.5% were estimated as using the drug in the preceding 12 month period. The estimated prevalence of recent ecstasy use in Tasmania has increased significantly from 1.6% (95%CI 1.3-1.8%) in 2004 to 2.4% (95%CI 2.2-2.6%) in 2007, but is still significantly lower than the national estimate in 2007 (3.5%, 95%CI 3.4-3.6%).

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 4.5 years. Ecstasy had typically been used in tablet (96%) or capsule (81%) form in the last six months, with use of ecstasy powder less common (21%). The proportion reporting recent use of ecstasy capsules was significantly greater in 2010 relative to 2009 (81% vs. 48%).

Ecstasy was typically swallowed, but snorting of ecstasy was also common, with a significant increase in the snorting of ecstasy tablets (89% vs. 71%) and capsules (82% vs. 38%) noted in 2010 relative to 2009.

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 live music events or private residences.

There were some concerning patterns of use among the sample from a health perspective. Almost one-fifth had used more than two tablets in a typical session of use (15%) or had recently used ecstasy in a 'binge session' (a continuous 48 hour period of drug use without sleep) (19%), and one-tenth reported using ecstasy weekly or more frequently (10%). 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 (94%) reported drinking alcohol when last under the influence of ecstasy and four-fifths of the sample (83%) had consumed more than five standard drinks. High levels of coincident 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).

Price, purity and availability of ecstasy

The median market and last purchase price for one tablet of ecstasy was $35 in comparison to $30 for ecstasy capsules, and $30 per ecstasy tablet for 10 tablets. No price changes were evident but a significantly greater proportion of REU perceived that prices had recently increased in 2010 relative to 2009 (38% vs. 10%).

Relative to 2009 a significantly greater proportion of the 2010 sample indicated that ecstasy was currently low in purity (41% vs. 10%) and that the purity of ecstasy had decreased (34% vs. 11%). KE comments also indicated that ecstasy purity was currently low and/or had recently decreased.

The proportion reporting that ecstasy was 'easy' or 'very easy' to obtain was significantly lower in 2010 relative to 2009 (61% vs. 83%). In addition, a significantly greater proportion of the sample reported that ecstasy had recently become more difficult to obtain (37% vs. 15%).

In summary, while ecstasy prices have remained stable there is some evidence for a reduction in the perceived purity and availability of the drug in Hobart.

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 (60%) 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 2010, with almost one-half (48%) reporting recent use of some form of methamphetamine in the preceding six months.

This is comparable to rates in 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 (NDSHS, 2007).

Methamphetamine was used on a median of two days during this period (once every three months on average) in relatively small amounts (2 points), compared to a median of three days in 2008 and 2009.

Recent use of methamphetamine powder was most common (40%), with low levels of use of methamphetamine base (9%) and crystal methamphetamine (4%).

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

The proportion reporting recent use of methamphetamine powder (40%) was similar to 2009 (46%) but fewer relative to the years prior to this (62-77%). 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 2010.

The median last purchase price for one 'point' (0.1 g) of all methamphetamine forms was $40. These prices are generally consistent with those reported in previous years and no recent price changes were noted. However, the median last purchase price for one gram of methamphetamine powder ($250) was lower than that reported in prior to 2009 ($300-350).

Cocaine

Almost one-half (49%) of the 2010 sample reported recent use of cocaine, which is significantly greater relative to 2009 (31%). Prior to 2006, recent use of cocaine was even less common with less than one-fifth reporting recent use (7-20%). This upward trend is use is consistent with national and Tasmanian population trends (NDSHS, 2007).

Cocaine was typically snorted and was used on a median frequency of three days (range 1-20 days) in the last six months, with an average of 0.2 to 0.5 grams used in a typical session. Cocaine was typically last used at a private residence, or at public bar or nightclub.

The median last purchase price for one gram of cocaine was $350 (range $80-350) and no consistent price trends were noted.

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

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

LSD and other psychedelics

Consistent with data from previous years, almost one-half (46%) of the 2010 sample had used LSD at some stage of their lives and one-quarter (27%) had used LSD in the six months preceding the interview. 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 0.25-2) was taken orally in a typical session of use and LSD had been used on a median of 2.5 days (range 1-24 days) in the preceding six months.

LSD was last used at private residences such as the consumer's own home, a friend's home, or a private party, as well as dance-related events, outdoor locations, nightclubs, or public bars.

The median last price for one tab of LSD in 2010 was $25 (range $10-25) which is higher relative to previous years ($15-20).

The purity of LSD was considered by REU to be 'medium' (31%) to 'high' (50%) and to have remained stable or fluctuated during the last six months.

A large majority of those commenting indicated that LSD was 'easy' or 'very easy' to obtain and that availability had recently been stable.

LSD was typically last obtained from friends and was most commonly last obtained from private residences, nightclubs, dance-related events, or agreed public locations.

One-fifth (18%) of the sample had recently used psychedelic mushrooms. Recent use was more common among males than females. Mushrooms had been used on a median of 2 days in the last six months. Two-fifths (38%) had recently used some form of psychedelic drug (either LSD or mushrooms) in the last six months.

Cannabis

Almost three-quarters (72%) of the 2010 sample had used cannabis during the six months preceding the interview. Cannabis had typically been smoked, with around one-third recently ingesting the drug. Consistent with the decline in cannabis use seen among the general population nationally, there has been less recent use, and a lower median frequency of use among the EDRS cohorts between 2007 and 2010 relative to previous years.

The median frequency of cannabis use was 12 days (range 1-180) or approximately fortnightly. The median quantities used on the last day of use during this time were 4 cones (range 0.5-20) or 1 joint (range 0.25-9). Daily cannabis smoking was relatively uncommon (5%).

The median last purchase price for one ounce of 'hydro' was $275 (range $250-350) compared to $235 ($200-300) for 'bush'. The median weight for one $25 bag of hydro was 1.6 grams (range 1.2-2 grams), compared to 1.7 grams (1.5-2.5 grams) for bush.

The potency of 'hydro' was reported to be high and the potency of 'bush' was reported to be medium to high. A significantly greater proportion of responders indicated that bush was high in purity in 2010 relative to 2009 (34% vs. 8%).

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 2010 REU sample had recently consumed alcohol, on an average of two to three days a week in the last six months. A large majority (90%) had used alcohol at least weekly (but not daily), which is substantially higher than the estimate of prevalence in the general population (47.8%, among those aged 20-29 nationally – a comparable age group to the current REU cohort).

Tobacco

Tobacco had recently been used by four-fifths (80%), with over one-fifth (22%) reporting daily use in the last six months, marking a reduction in daily smokers relative to previous years (32-51%). The proportion of daily smokers is lower than the 2007 population estimate for Tasmania (30.4%) for this age group (20-29 years), but similar to the general population nationally (21.4%). Daily tobacco use was significantly more common among females (39%) relative to males (19%).

Mephedrone (4-methylmethcathinone)

There was a significant increase in the recent use of mephedrone in 2010 (47%) relative to 2009 (14%). There was also reports of recent use of related substances such as methylone (also known as bk-MDMA) (4%), and methcathinone (1%). Mephedrone was typically purchased in capsule form and had been snorted or swallowed on a median of 6 days in the last six months. Anecdotal reports of both REU and KE suggest that there has been a recent increase in the use and availability of mephedrone in Hobart, that mephedrone is currently more available than ecstasy and that mephedrone capsules are often sold as ecstasy. It was also a common perception that the capsules marketed in Hobart contained a range of substances and it is likely that consumers are not necessarily aware of what they are consuming. These trends represent a substantial change in ecstasy and related drug markets in Hobart.

Patterns of other drug use

Consistent with the low levels of use in previous years, less than one-tenth reported recent use of ketamine (6%), MDA (5%), or GHB/GBL/1,4B (2%).

One-quarter (27%) of the 2010 REU sample had used benzodiazepines during the last six months. Almost one-quarter (23%) reported recent illicit (non-prescribed) use of benzodiazepines, much higher than recent estimates of prevalence in the general population (1-1.4%). However, the use of illicit benzodiazepines was relatively low in frequency, at three days in the last six months.

One-half (51%) reported recent use of amyl nitrite which is the same as 2009 (51%) but substantially greater relative to previous years (19-21%). Frequency of use was relatively low at less than once a month in the last six months.

Almost one-third (32%) of the 2010 sample reported low frequency use (less than once a month) of nitrous oxide, with recent use more common among younger relative to older participants.

Less than one-tenth of the sample (5%) had recently used antidepressants (in the six months preceding the interview), 3% reported recent licit use and 2% 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. One-tenth (9%) of REU reported recent illicit use of pharmaceutical stimulants (such as dexamphetamine or methylphenidate) in 2010. The median frequency of

pharmaceutical stimulant use was low, at 1 day in the last six months. Only small proportions of the 2010 sample had recently used heroin (2%), methadone (5%), buprenorphine (1%) or other opioids (pharmaceuticals and alkaloid poppy derivatives) (4%). Similarly, small proportions reported recent use of codeine (5%) or stimulant based (3%) over-the-counter preparations for recreational purposes.

Small proportions reported recent use of emerging psychoactives in the tryptamine family (2CI, 4%; 2CB, 2%; 2CE, 7%; 2C-T-7, 1%), or other emerging substances such as DOI (3%) and MDPV (2%). Almost one-tenth (7%) reported recent use of DMT.

Risk behaviours

Injecting drug use. Consistent with the low levels of intravenous drug use among previous REU cohorts, only a small proportion (3%) of the 2010 REU sample had recently used substances intravenously. Methamphetamine and heroin 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. Over one-half (54%) of the 2010 REU sample had been vaccinated for hepatitis B, one-quarter (27%) had been tested for hepatitis C and two-fifths (40%) had been tested for HIV.

Sexual risk behaviour. Three-fifths (60%) of REU reported penetrative sex with a casual partner during the six months preceding the interview and one-half (55%) reported sex with a casual partner while under the influence of drugs, most commonly alcohol or ecstasy. Regardless of whether under the influence of ERDs, only around one-fifth reported 'always' using protective barriers with a casual partner and approximately one-third 'never' used protective barriers. Almost one-third (29%) had never had a sexual health check-up. A majority (78%) had never been diagnosed with a STI and the remainder had been diagnosed in the last year (6%) or more than a year ago (16%). The most commonly diagnosed STIs were Chlamydia (83%) and herpes (17%).

Drug driving. Of those who had driven a car, one-half (48%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months, and two-fifths (39%) reported driving within an hour of taking illicit drugs in the last 6 months, marking a reduction (though not statistically significant) relative to 2009 (51%). Most commonly, participants reported driving under the influence of ecstasy, cannabis, methamphetamine, and mephedrone.

Alcohol Use Disorders Identification Test (AUDIT). Just 7% of the REU that completed the AUDIT scored in zone 1 (low-risk drinking or abstinence). One-half (52%) scored in zone 2 (alcohol use in excess of low-risk guidelines), a further 20% scored in zone 3 (harmful or hazardous drinking), and 21% scored in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence).

Binge drug use. One-quarter (24%) 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 alcohol, ecstasy, cannabis, mephedrone, cocaine, methamphetamine, and LSD.

Health-related issues

Overdose. Less than one-tenth of the 2010 REU sample (6%) reported an overdose episode in the last six months, with 2% reporting a recent overdose episode on a stimulant drug (e.g., ecstasy and pharmaceutical stimulants) and 4% reporting 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. Over one-tenth (15%) of REU reported experiencing significant symptoms of dependence in relation to ecstasy.

Methamphetamine dependence. Less than one-tenth (4%) 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 one-sixth (14%) of the 2010 REU sample had accessed health services in relation to drug use in the last six months, and when they did so, this was most commonly a psychologist (39%) or a GP (29%). Participants were most likely to access services in relation to the use of alcohol (39%), cannabis (22%), and ecstasy (13%).

Mental health problems. Almost one-third (30%) of the 2010 REU sample reported experience of mental health problems during the six months prior to the interview, most commonly depression (60%) and/or anxiety (60%). Just one-third (33%) of those who had experienced mental health problems had attended a health professional in relation to these problems during this time, possibly suggesting an unmet demand.

Psychological distress. Mean scores on the Kessler psychological distress scale (K10) were slightly higher among the current sample of REU relative to the general Australian population. The proportion of the sample with scores categorised as 'very high' or 'high' was similar to the general Australian population; however, the proportion of REU with scores classified as 'moderate' 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. One-third (35%) of the 2010 sample reported a recurrent drug-related problem, suggestive of possible substance abuse. One-quarter (23%) reported that drug use had recurrently interfered with their responsibilities at home, work, or school during the six months preceding the interview. One-fifth had recurrently put themselves or others at risk (22%) and smaller proportions had experienced recurrent social/relationship (13%) problems or legal/police problems (3%) in relation to drug use. Problems were most commonly attributed to ecstasy, cannabis, alcohol, or mephedrone.

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 (6-17 calls), these account for a small percentage (between 1.2% 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 1.3% of all treatment episodes in the 2008/09 period (equating to approximately 26 treatment episodes out of a total of 1,983).

In 2005/06, Tasmanian hospital admission rates for cannabis were higher than the national rate (179 vs. 151 admissions per million persons respectively), with a further substantial increase seen in 2006/07 (232 vs. 142 admissions per million population). There was a reduction in Tasmanian admission rates in 2007/08 such that they are more comparable with those seen nationally but still slightly higher (156 vs. 135 admissions per million population).

Tasmanian 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 methamphetamine-related admissions, to a level that is considerably higher than the national rate (244 vs. 185 admissions per million persons respectively). There was a reduction in the Tasmanian admission rates in 2007/08 but they still remain above the national admission rate for this period (210 vs. 161 admissions per million population).

There has been very few hospital admissions recorded in Tasmania in relation to cocaine.

Criminal activity, policing and market changes

The self-reported level of criminal activity among the 2010 REU sample was relatively low. With the exception of dealing drugs (15%), around one-tenth of the REU interviewed had committed other criminal offences during the one month preceding the interview and one-tenth (13%) had been arrested during the preceding 12 months, generally for reasons unrelated to drug use. One-fifth of the REU sample (21%) perceived that there had been an increase in police activity towards ecstasy users in the last six months.

Law enforcement data

There was a substantial increase in both number of both consumer and provider arrests and seizures in relation to ecstasy between 2006/07 and 2008/09 relative to any previous years. In 2009/10 the numbers of arrests remained stable but there was a reduction in the weight and number of ecstasy seizures relative to the three previous reporting periods. 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 purity and availability of the drug in Hobart) and the recent increase in the use and availability of mephedrone capsules among REU.

While the number of methamphetamine-related arrests substantially increased in the 2006/07 and 2007/08 periods relative to previous years, there were substantial reductions in arrests in the 2008/09 and 2009/10 reporting periods. The number of methamphetamine-related seizures has also increased over the years, with a large increase in the total number of seizures in the 2006/07 period. Since this time there has been a reduction in the total number of seizures and the total weight of seizures was also reduced in 2009/10. These trends are consistent with the decrease in methamphetamine use observed among both the REU and IDU cohorts in Hobart and among the general population nationally.

The number of cannabis-related arrests and cautions and the weight and number of seizures made by Tasmania police have remained relatively stable since 2006/07, with a slight increase noted in the weight and number of seizures in 2009/10.

The number of individuals before the Hobart Magistrates Court for possession and use offences increased from a range of 414-517 individuals per financial year to 886 individuals in 2008/09. In 2009/10 there was a reduction relative to 2008/09 (637 individuals).

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 can not be inferred from this study. However, the study is designed to identify emerging trends and important issues, and the findings of the 2010 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.

Consistent with this recommendation, a recent parliamentary inquiry into the manufacture, importation and use of amphetamines and other synthetic drugs (AOSD) in Australia recommended that harm-reduction strategies and programs receive more attention and resources in the execution of the National Drug Strategy (Commonwealth of Australia, 2007). The committee also recommended that public education and demand-reduction campaigns for illicit drugs be factual, informative and appropriately targeted, seek input from young people and take account of user experiences (Secretariat of the Parliamentary Joint Committee on the Australian Crime Commission, 2007).

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, around one-fifth reported using ecstasy weekly or more frequently (17%), had used more than two tablets in a typical session of use (15%) or had recently used ecstasy in a 'binge session' (a continuous 48 hour period of drug use without sleep) (19%).

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. Four-fifths of the REU sample (83%) 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 (90%) of the 2010 REU sample had used alcohol at least weekly during the six months preceding the interview, which is substantially higher than both the Tasmanian (40.5%) and national (41.3%) estimates of prevalence for the general population, and among those aged 20-29 nationally (47.8%). A large majority of REU (93%) scored 8 or more on the Alcohol Use Disorders Identification Test (AUDIT), suggestive of hazardous and harmful alcohol use and the possibility of alcohol dependence. Additionally, the majority of overdose episodes reported by REU in the current and previous EDRS cohorts involved alcohol and/or polydrug use.

Tobacco use is very common among the EDRS cohorts with four-fifths (80%) of the 2010 sample reporting use in the last six months and over one-fifth (22%) reporting daily use during this time. While there has been a reduction in daily smokers among the EDRS cohorts in recent years, with daily tobacco use becoming more consistent with national prevalence estimates, 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 were noted among the 2010 sample which indicate significant changes in the ecstasy and related drug markets in Hobart. There were significant increases in the use of ecstasy capsules and in the snorting of ecstasy as a route of administration. In addition, there were was evidence for a perceived reduction in the purity and availability of ecstasy. This finding was coupled by a significant increase in the use of mephedrone capsules, with almost one-half (47%) of the sample reporting use of the drug in a median frequency of six days in the last six months. Anecdotal reports of both REU and KE suggest that mephedrone is currently more available than ecstasy and that mephedrone capsules are often sold as ecstasy. It was also a common perception that the capsules marketed in Hobart contained a range of substances and it is likely 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 and MDPV.

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 a further significant increase in recent use in 2010 (49%) relative to 2009 (31%). While the median frequency of cocaine has remained relatively low (three days 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

One-third of those who had had sex with a casual partner reported that they 'never' used protective barriers when either under the influence or not under the influence of alcohol and drugs, and the majority (around two-fifths) had not consistently used barriers. 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, almost one-third 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 recent overdose episodes, 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. Almost one-third (30%) of the 2010 REU sample reported recent experience of mental health problems (most commonly depression and/or anxiety), but just one-third (33%) of these had attended a health professional in relation to these problems, possibly indicating an unmet demand. This

finding suggests under-recognition of mental health problems in this population and a need to improve recognition and access to treatment for mental health problems in this population.

Similarly, despite regular substance use, just one-sixth (14%) of the sample had recently accessed health services in relation to drug use. The services most commonly accessed by REU were a psychologist or a GP. 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. Less than one-tenth of the sample reported a recent overdose but a majority had not received any formal medical treatment, with most indicating that they 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 (60%) 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 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 2010 reported driving while affected by alcohol (almost one-half of those with access to a vehicle) or drugs (almost 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. In 2010, the proportion reporting recent driving under the influence of drugs (39%) was lower (although not statistically significant) relative to 2009 (51%). It is possible that this reduction is related to the recent introduction of roadside drug testing legislation in Tasmania. However, while examination of this data reveals a slight decrease in driving under the influence of ecstasy, this was accompanied by an increase in the proportion who reported driving under the influence of mephedrone (an emerging substance among Hobart ecstasy consumers).

8. Basic science research in relation to emerging drugs (mephedrone, amyl nitrite, 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 and MDPV. There exists a paucity of information about the physiological or neuropharmacological effects of these drugs, and importantly, 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. Similarly, half of the sample reported recent use of amyl nitrite, which also has a limited research base in regard to its use as an intoxicant. 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 2010 and Tasmanian trends between 2003 and 2009 (Bruno & McLean, 2004b; Matthews & Bruno, 2005, 2006, 2007, 2008, 2009, 2010). National reports including jurisdictional comparisons are available as technical reports 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; 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 in Hobart. 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).

[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

One hundred regular ecstasy users were interviewed using a structured face-to-face interview between April and June 2010. 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 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 2010, REU reported hearing about the study through 'snowballing' methods (peer referral) (67%), followed by flyers (21%), street press (6%) or the internet (4%). One-third (35%) of the 2010 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 60 minutes to complete (range 40-140 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 party drug markets.

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 23 years, n=46) and an 'older' group (aged 23 years and over, n=54). All statistical analyses were conducted using Statistical Package for the Social Sciences (SPSS) 17.0 for Windows (SPSS Inc., 2008).

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. Twenty two 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 2010. KE included youth workers (n=4), law enforcement personnel (n=4), ambulance/emergency workers (n=2), alcohol and drug counsellors/workers/psychologists (n=6), venue/event managers or staff (n=5), 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). The National Drug Strategy Household Survey aimed 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), and 2007 (n=1,143) (Australian Institute of Health and Welfare, 1999, 2000, 2002a,b, 2005a,b, 2008a,b). 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), a confidential drug and alcohol counselling, information and referral service, has been serviced by Turning Point Alcohol and Drug Centre in Victoria since May 2000. Turning Point systematically records data for each call received; however, data have been reported over differing time periods due to the requirements of the Department of Health and Human Services. Thus, for comparative purposes (and since these annual data are the only information available to the authors), these slightly differing reporting periods will each be treated as financial year periods. The number of calls made to ADIS have slowly declined in recent years from 2,422 calls in the 2000/01 reporting period to 1,416 calls in the 2009/10 financial year (Turning Point, 2001-2010).

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). 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 2009/10 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 2007/08. Hospital admission data for the 2008/09 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 2008/09. Data for the 2009/10 financial year were not available at the time of publication.

3.0 OVERVIEW OF REGULAR ECSTASY USERS

3.1 Demographic characteristics of the REU sample

Table 1 shows the demographic characteristics of REU interviewed for the EDRS in 2010. Just over half of the sample was male (55%). The mean age of participants was 24 years (range 17-36 years), and there was no significant difference between the mean age of males (24 years) and females (23 years) ($p>.05$).

The majority of participants nominated their sexual identity as heterosexual (96%), and spoke English as their main language (100%). Few participants (1%) were of Aboriginal and/or Torres Strait Island (A&TSI) descent.

Participants typically lived in their own accommodation (owned or rented) (69%) or lived in their parents' or family's home (31%).

Participants had completed 12 years of school education on average (range 10-12 years), and the majority of participants (85%) had completed Year 12. Three-fifths (60%) had completed tertiary qualifications after school, with two-fifths (41%) having completed a university degree and one-fifth having completed a trade/technical qualification (19%). A significantly greater proportion of participants reported having completed a university degree in 2010 (41%, 95%CI 32-51) compared to 2009 (24% 95%CI 17-33).

One-third of participants were employed on a full-time basis (34%), two-fifths were currently students (27% full-time, 10% part-time), one-fifth were employed on a part-time/casual basis (21%), and around one-tenth were currently unemployed (8%). Almost one-half (48%) of participants reported an annual income between $13,000 and $31,199.

Few REU were receiving drug treatment at the time of interview (1%) or had received a custodial sentence for a previous criminal conviction (1%).

These demographic characteristics are generally similar to those reported among the cohorts between 2003 and 2010.

KE descriptions of the ecstasy users with whom they had regular recent contact were generally consistent with the characteristics of the REU sample. KE described groups as being of both sexes with age estimates ranging between 16 and 30 years, with most being in their late-teens to mid-20s. KE noted contact with individuals from a wide range of backgrounds. The majority of ecstasy users that KE were familiar with were well educated and either employed or currently studying. However, several KE noted high rates of unemployment, contact with the criminal justice system and current drug treatment among the group that they had regular contact with, probably reflecting the nature of their role within government health services rather than being characteristic of REU per se. There were no notable trends noted in the demographics of regular ecstasy users.

Table 1: Demographic characteristics of REU sample, 2003-2010

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

Source: EDRS interviews

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

3.2 Drug use history and current drug use

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 (96%), and tobacco (96%) at some stage of their lives, and substantial proportions had ever used methamphetamine powder (74%), amyl nitrite (76%), cocaine (75%), mephedrone (64%), psychedelic mushrooms (58%), nitrous oxide (57%), and LSD (46%).

During the six months preceding the interview, a majority had used alcohol (100%), tobacco (80%) and cannabis (72%), and substantial proportions had used amyl nitrite (51%), cocaine (49%), mephedrone (47%) and methamphetamine powder (40%). Compared to 2009, a significantly greater proportion of the 2010 sample reported recent use of mephedrone (47% vs.

14%), χ^2=24.15, p<.05, and cocaine (49% vs. 31%), χ^2=6.02, p<.05. There were no other changes in the extent of lifetime or recent substance use between the 2009 and 2010 samples.

Table 2: Lifetime and recent drug use of REU, 2003-2010

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**
Alcohol								
Ever used (%)	100	100	100	100	100	100	100	**100**
Used last 6 months (%)	98	98	98	95	99	100	99	**100**
Cannabis								
Ever used (%)	100	98	100	100	96	97	98	**100**
Used last 6 months (%)	90	91	89	82	68	74	76	**72**
Tobacco								
Ever used (%)	96	89	89	94	90	96	92	**96**
Used last 6 months (%)	81	77	83	81	74	86	77	**80**
Methamphetamine powder								
Ever used (%)	90	82	89	83	74	84	69	**74**
Used last 6 months (%)	67	68	77	62	65	59	46	**40**
Methamphetamine base								
Ever used (%)	36	32	35	49	43	31	25	**19**
Used last 6 months (%)	24	20	23	40	30	16	14	**9**
Crystal methamphetamine								
Ever used (%)	58	36	29	42	23	33	29	**20**
Used last 6 months (%)	52	16	10	27	7	15	7	**4**
Pharmaceutical stimulants[#]								
Ever used (%)	n/a	39	44	50	40	42	31	**22**
Used last 6 months (%)	n/a	14	16	12	19	16	10	**9**
Cocaine								
Ever used (%)	44	32	43	55	54	61	51	**75***
Used last 6 months (%)	7	10	20	33	35	35	31	**49***
LSD								
Ever used (%)	62	51	54	52	40	56	52	**46**
Used last 6 months (%)	24	32	31	29	20	41	34	**27**
MDA								
Ever used (%)	32	20	8	14	8	15	10	**14**
Used last 6 months (%)	21	15	3	3	5	3	8	**5**
Ketamine								
Ever used (%)	38	23	24	23	23	26	21	**19**
Used last 6 months (%)	24	5	11	6	14	6	5	**6**
GHB/GBL/1,4B								
Ever used (%)	11	7	7	9	4	7	11	**9**
Used last 6 months (%)	7	3	2	3	1	1	3	**2**
Amyl nitrite								
Ever used (%)	78	52	49	41	43	38	67	**76**
Used last 6 months (%)	43	23	16	10	20	15	51	**51**
Nitrous oxide								
Ever used (%)	47	57	69	69	64	62	54	**57**
Used last 6 months (%)	25	34	41	39	46	29	32	**32**
Benzodiazepines								
Ever used (%)	52	34	40	48	41	51	36	**44**
Used last 6 months (%)	35	23	25	33	25	37	24	**27**
Antidepressants								
Ever used (%)	32	14	21	20	24	22	16	**16**
Used last 6 months (%)	14	4	12	9	11	6	10	**5**
Heroin								
Ever used (%)	20	4	8	10	5	6	6	**8**
Used last 6 months (%)	6	0	-	2	-	1	3	**2**

Source: EDRS interviews

[#] Pharmaceutical stimulants were not included prior to 2004

Table 2: Lifetime and recent polydrug use of REU, 2003-2010 (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**
Methadone								
Ever used (%)	14	2	5	9	6	3	8	**10**
Used last 6 months (%)	13	2	1	5	1	2	4	**5**
Buprenorphine								
Ever used (%)	5	-	2	3	1	2	2	**5**
Used last 6 months (%)	3	-	1	2	1	1	1	**1**
Other opioids (illicit)								
Ever used (%)	35	19	25	33	23	29	19	**19**
Used last 6 months (%)	13	8	13	14	8	17	6	**4**
Psychedelic mushrooms								
Ever used (%)	54	60	63	74	66	61	56	**58**
Used last 6 months (%)	38	41	40	55	39	31	21	**18**
2CI								
Ever used (%)	-	5	2	25	20	11	11	**15**
Used last 6 months (%)	-	5	1	23	12	2	9	**7**
Mephedrone								
Ever used (%)	-	-	-	-	-	1	14	**64***
Used last 6 months (%)	-	-	-	-	-	1	14	**47***
Over counter codeine								
Ever used (%)	n/a	n/a	n/a	n/a	n/a	n/a	17	**12**
Used last 6 months (%)							9	**5**
Over counter stimulants								
Ever used (%)	n/a	n/a	n/a	n/a	n/a	n/a	10	**13**
Used last 6 months (%)							6	**3**

Source: EDRS interviews

* significant change relative to 2009 ($p<.05$).

Ecstasy was the preferred or favourite drug for over one-third of participants (37%). Smaller proportions preferred cocaine (22%), alcohol (19%), cannabis (7%), LSD (7%), tobacco (3%), methamphetamine (2%), or other drugs (3%).

3.3 Summary of demographic and polydrug use trends in REU

- The sample of 100 REU interviewed in 2010 were typically in their early twenties, with ages ranging from 17 to 36 years. There were slightly more males (55%) than females.
- The majority of participants had completed year 12, and 60% had completed tertiary qualifications after school (university or trade/technical). A significantly greater proportion had completed a university degree in 2010 (41%) relative to 2009 (24%). Over one-half (55%) were employed (either full-time or part-time/casual) and one-third (37%) were currently students.
- Few participants had come into contact with the criminal justice system or drug treatment agencies.
- REU reported using a range of different drugs in the preceding six months. Recent use of alcohol, tobacco, cannabis, amyl nitrite, cocaine, mephedrone and methamphetamine powder was most common.
- Relative to 2009, a significantly greater proportion of the 2010 sample reported recent use of cocaine (49% vs. 31%) and mephedrone (47% vs. 14%).

4.0 ECSTASY

4.1 Ecstasy use among REU

The mean age of first ecstasy use was 19 years (range 13-30). 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 4.5 years (range 1-16 years) and none had been using ecstasy for less than one year.

Ecstasy had typically been used in tablet (96%) or capsule (81%) form in the last six months, with one-fifth (21%) 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%). The majority of REU had mainly ingested ecstasy orally (70%) in the last six months and one-third (30%) reported that they had mainly snorted the drug during this time.

Ecstasy (tablets, powder, capsules) had been used by REU on a median of 11 days (range 6-30 days), or on average, fortnightly in the six months preceding the interview (Table 3). Frequency of use tended to be greater for males (13 days, range 6-30) relative to females (11 days, range 6-30), Mann-Whitney U=946.0, p=.062, and was significantly greater for 'younger' (12 days) relative to 'older' (10 days) participants (based on a median split for age), Mann-Whitney U=902.0, p<.05.

Around one-fifth reported using ecstasy weekly or more frequently (17%) or had used more than two tablets in a typical session of use (15%). One-fifth of the sample (19%) had recently 'binged' on ecstasy (used ecstasy for more than 48 hours continuously without sleep) which is fewer relative to previous years. Binge drug use is explored in further detail in Section 10.6.

Ecstasy tablets had recently been swallowed (99%) or ground up and snorted (89%), while smaller proportions had recently shafted/shelved (2%) or smoked (2%) tablets. The proportion reporting snorting ecstasy tablets was significantly greater in 2010 (89%, 95%CI 81-94) relative to 2009 (71%, 95%CI 61-79). The median frequency of use for ecstasy tablets was 6 days (range 1-20) or approximately monthly during the six months preceding the interview, which is less than the median of 12 days in previous years. The median number of ecstasy tablets consumed in a typical session of use in the past six months (Table 3) was 2 tablets (range 0.5-8), and the median number of ecstasy tablets consumed in the heaviest session of use was 3 tablets (range 1-20).

Ecstasy capsules had been swallowed (90%), snorted (82%), smoked (1%) or injected (1%), on a median of 2 days (range 1-70) during the last six months. The proportion reporting snorting ecstasy capsules was significantly greater in 2010 (82%, 95%CI 73-88%) relative to 2009 (38%, 95%CI 29-48%).

Ecstasy powder had been snorted (86%) or swallowed (62%) on a median of 2.5 days (range 1-10) during the six months preceding the interview.

The most common last locations of ecstasy use (Table 3) were a nightclub (41%), pub (20%), or private residences (11% private party, 10% friend's home, 9% own home).

The comments of KE were generally consistent with reports of REU. The majority who commented noted that ecstasy was typically used in tablet (n=8), capsule (n=10) or powder (n=3) form, with several KE noting increased or predominant use of ecstasy in capsule (n=3) or powder (n=1) form. Those who commented indicated that ecstasy was typically swallowed (n=7) and/or snorted (n=6).

Table 3: Patterns of ecstasy use among REU, 2003-2010

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

4.1.2 Polydrug use among REU

A majority of the 2010 sample (95%) reported use of other drugs when under the influence of ecstasy on the last occasion of use and two-fifths (45%) 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 (94%), tobacco (48%), and cannabis (29%). Notably, over four-fifths (83%) of the sample 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 (29%) alcohol (16%), benzodiazepines (14%), and tobacco (13%).

Table 4: Drugs used when under the influence of ecstasy and when coming down on last occasion in the last six months, 2009-2010

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

Source: EDRS interviews

4.1.3 Benefits of ecstasy use

A large majority of participants (93%) believed that there were benefits associated with the use of ecstasy (Table 5). The most common benefits were to have a fun/enjoyable night, feeling a sense of euphoria/wellbeing, enhanced communication/talkativeness, enhanced closeness/bonding/empathy with others, the high/rush/buzz, and enhanced appreciation of music/dance.

Table 5: Main benefits of ecstasy use, 2010

Variable	2010 n=89
Fun (enjoyable night/good time)	**61**
Euphoria/sense of wellbeing	**54**
Enhanced communication/talkativeness	**43**
Enhanced closeness/bonding/empathy with others	**38**
The high/rush/buzz	**30**
Enhanced appreciation of music and/or dance	**26**
Increased confidence/decreased inhibition	**13**
Relax/escape/release	**9**
Increased energy/stay awake	**8**
Drug effects (e.g., hallucinations/insight/creativity)	**4**
Enhanced sexual experience	**3**
Feeling in control/focused	**1**
Cheap	**1**

Source: EDRS interviews

4.1.4 Use of energy drinks among REU

A large majority (81%, 95%CI 72-87) reported use of energy drinks with alcohol in the last six months, compared to a significantly smaller proportion (64%, 95%CI 54-73) in 2009. A median of 3 energy drinks (range 1-10) had been consumed on the last occasion of use. One-quarter of the sample (26%) had consumed energy drinks in the same episode as ecstasy during the last six months, compared to around one-half (52%) in 2009.

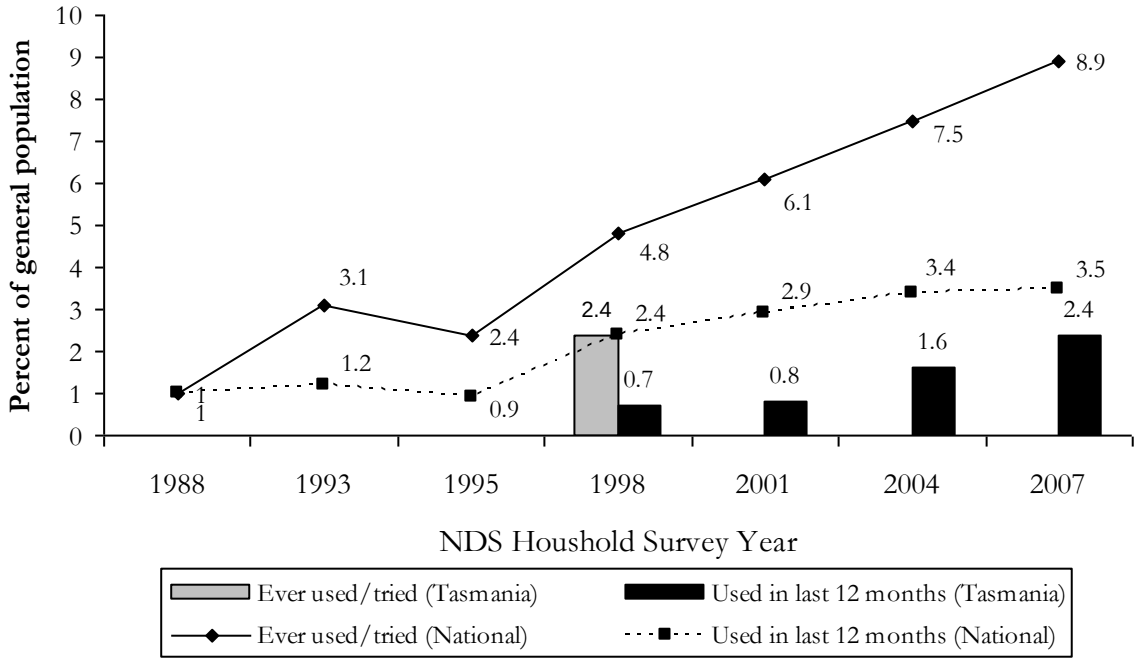
4.2 Use of ecstasy in the general population

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).

The lifetime prevalence of ecstasy use among the general population increased from 1% in 1988 to 8.9% in 2007. 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. The estimated prevalence of recent ecstasy use in Tasmania has increased significantly from 1.6% (95%CI 1.3-1.8%) in 2004 to 2.4% (95%CI 2.2-2.6) in 2007, but is still significantly lower than that seen nationally in 2007 (3.5%, 95%CI 3.4-3.6%).

Figure 1: Prevalence of ecstasy use in Australia and Tasmania among those aged 14 years and over, 1988-2007



Source: National Drug Strategy Household Survey 1988-2007

4.3 Other trends and features of ecstasy use

Ecstasy use was common among the social networks of the regular ecstasy users who participated in the study. Almost one-half of the REU interviewed (48%) indicated that most of their friends used ecstasy, and two-fifths (37%) indicated that about half of their friends used ecstasy. Smaller proportions indicated that only a few (10%) or all (5%) of their friends used ecstasy.

One-half of the respondents (50%) indicated that there had been some recent change in drug use among themselves or friends. Among those who commented on trends in ecstasy use, a majority indicated that there had been a reduction in the use and availability of ecstasy pills (n=7) and an increase in the use and availability of ecstasy capsules (n=6). Large numbers of those who commented indicated that there had been a recent increase in the use and availability of capsules either generally (content not specified) (n=12) or more specifically capsules containing mephedrone (n=24), methylone (n=2), research chemicals (n=1), or methcathinone (n=1). Several REU commented that the capsules available on the market are often called 'party caps' and their specific content is unknown. In addition, it was noted by several REU that capsules containing mephedrone and other substances are often sold as ecstasy (n=4) or are currently more available than ecstasy in Hobart (n=3). The use of mephedrone and other emerging psychoactive substances is discussed in further detail in Sections 9.17 and 9.18.

4.4 Summary of patterns of ecstasy use

- Most participants had first used ecstasy at around 19 years of age. On average the 2009 REU sample had been using ecstasy for 4.5 years.
- Ecstasy had typically been used in tablet (96%) or capsule (81%) form in the last six months, with use of ecstasy powder less common (21%). The proportion reporting recent use of ecstasy capsules was significantly greater in 2010 relative to 2009 (81% vs. 48%).
- Ecstasy was typically swallowed, but snorting of ecstasy was also common, with a significant increase in the snorting of ecstasy tablets (89% vs. 71%) and capsules (82% vs. 38%) noted in 2010 relative to 2009.
- On average, ecstasy had been used fortnightly with a median of two tablets taken in a typical session. Almost one-fifth reported using more than two tablets in a typical session of use (15%) or had recently used ecstasy in a 'binge session' (a continuous 48 hour period of drug use without sleep) (19%) and one tenth had used ecstasy weekly or more frequently (10%).
- Ecstasy was typically last used at music-related venues including nightclubs and live music events; or in private residences.
- The majority of REU (95%) had used other drugs when last under the influence of ecstasy and two-fifths (45%) used other drugs when last coming down from ecstasy. Alcohol, cannabis, and tobacco were the drugs most commonly used.
- A large majority (94%) reported drinking alcohol when last under the influence of ecstasy and four-fifths of the sample (83%) had consumed more than five standard drinks. Around one-quarter (26%) reported use of energy drinks in the same session as ecstasy, compared to one-half (52%) in 2010.
- Data from the NDSHS suggests a steady increase in the national prevalence of ecstasy use in Australia between 1995 and 2007. The estimated prevalence of recent ecstasy use in Tasmania has increased significantly from 1.6% in 2004 to 2.4% in 2007, but is still significantly lower than that seen nationally in 2007 (3.5%).

4.5 Price

The median price for one ecstasy tablet was $35 in 2010 (Table 6), compared to a median of $30 per pill for 10 ecstasy tablets ($300, range $180-400) and a median of $30 for one ecstasy capsule. The median last purchase price for one gram of powder was $200 (range $100-300).

Although there were no notable changes in ecstasy prices, two-fifths of the sample (38%, 95%CI 29-47) indicated that the price of ecstasy had increased in the six months preceding the interview, compared to just 10% (95%CI 5-17) in 2009.

KE comments on the price of ecstasy were generally consistent with those of REU. The price for one ecstasy pill was reported to range from $25 to $50 (n=6), with an average price of $35. Two KE commented that the price per pill was lower if bought in larger amounts. There were no notable price changes noted.

Table 6: Price of ecstasy purchased by REU and price variations, 2003-2010

	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Pill/Tablet								
Median price per ecstasy tablet (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**
Median price of last tablet purchased (range)	$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**
Median price 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**
Powder								
Median last price 1 gram powder (range)	-	-	-	-	$350 n=1*	-	$250 (100-300) n=3*	**$200 (120-250) n=8***
Capsule								
Last price per capsule (range)	-	-	-	-	-	$35 (30-50) n=9*	$30 (20-40) n=25	**$30 (20-50) n=70**
Price change								
Don't know (%)	-	2	-	-	2	-	8	**9**
Increased (%)	5	6	7	5	18	14	10	**38**
Stable (%)	72	64	67	54	65	55	52	**40**
Decreased (%)	15	15	10	28	7	18	12	**4**
Fluctuated (%)	8	13	16	13	8	13	17	**9**

Source: EDRS interviews
*n<10

The price of ecstasy reported by Tasmania Police has varied substantially over the past decade (Table 7). A price range of $35-40 was reported in 2008/09 which is relatively consistent with the median price of $35 reported by REU in 2010. At the time of publication, data was not available for the 2009/10 financial year.

Table 7: Price per tablet of ecstasy reported by Tasmania Police 1997/98-2008/09

	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	**08/09**
Price per pill ($)	60-80	15-25	15-25	50-60	50-70	30-70	30-70	40-50	25-40	40	30-45	**35-40**

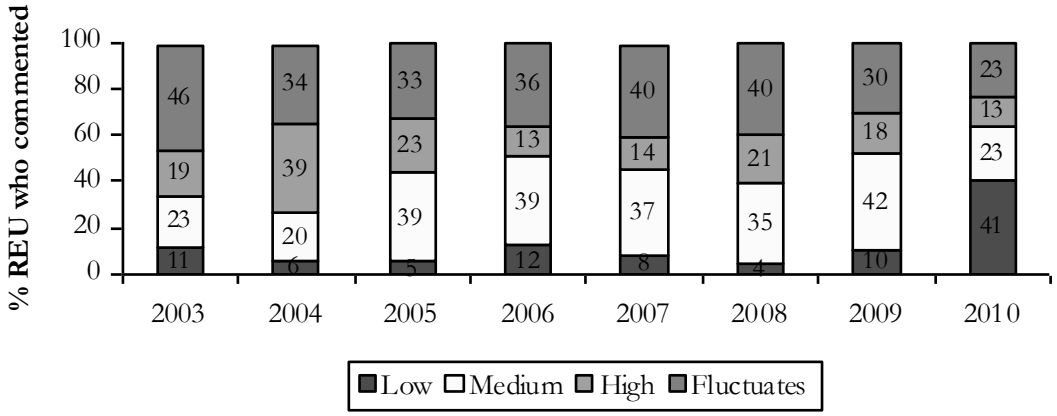
Source: Australian Bureau of Criminal Intelligence (1998, 1999, 2000, 2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010)

4.6 Purity

In previous years, the purity of ecstasy was typically reported to be medium or fluctuating in the last six months (Figure 2). In 2010 a significantly greater proportion of the sample reported that ecstasy was currently low in purity (41% 95%CI 32-52) relative to 2009 (10% 95%CI 6-17). In addition a significantly greater proportion reported that the purity of ecstasy had decreased in the last six months (Figure 3) in 2010 (34% 95%CI 25-44) relative to 2009 (11% 95%CI 6-19).

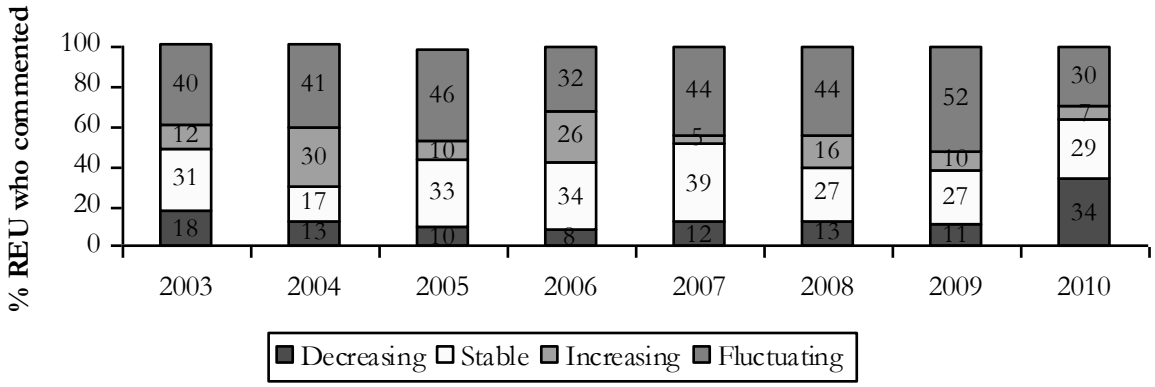
The majority of KE who commented on ecstasy purity reported that it was currently low (n=6) and that the purity of ecstasy had recently decreased (n=4). Several KE (n=5) reported a perception that ecstasy users could not be sure what was in the pills that they ingested and that ecstasy pills and capsules often contained other substances including methamphetamine, mephedrone, caffeine, glucose and training/weight lifting supplements or that they contained no active ingredients.

Figure 2: REU reports of current ecstasy purity, 2003-2010



Source: EDRS interviews

Figure 3: REU reports of change in ecstasy purity in the last six months, 2003-2010



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 28.5% between 2001/02 and 2008/09. Data for the 2009/10 reporting period was not available at the time of publication.

Table 8: Median purity of phenethylamine seizures 1990/00-2008/09

	1999/ 00	2000/ 01	2001/ 02	2002/ 03	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	**2008/ 09**
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	**-**

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

4.7 Availability

The majority of REU interviewed in 2010 indicated that ecstasy was 'very easy' or 'easy' (64% 95%CI 54-73) to obtain (Table 9); however, this proportion was significantly lower relative to 2009 (83%, 95%CI 74-89). One-quarter (26%) reported that ecstasy was currently difficult to obtain which is greater than previous years. In addition, almost one-fifth (39%, 95%CI 30-49) reported that ecstasy had recently become more difficult to obtain, which is significantly greater than the proportion in 2009 (15%, 95%CI 9-23).

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 9). A large majority indicated that they last obtained ecstasy from friends (73%), most typically from a friend's home (39%), the respondent's own home (18%), a nightclub (13%) or a public bar (13%).

KE comments on the availability of ecstasy ranged from low (n=2), to high (n=2), to fluctuating (n=1).

Table 9: REU reports of availability of ecstasy in the preceding six months, 2003-2010

	2003	2004	2005	2006	2007	2008	2009	**2010**
Ease of obtaining ecstasy	n/a	n=100	n=100	n=99	n=99	n=98	n=99	**n=96**
Very easy (%)		68	57	52	42	28	21	**25**
Easy (%)		25	40	46	46	58	62	**39**
Difficult (%)		7	3	2	11	12	17	**28**
Very difficult (%)		-	-	-	-	2	-	**8**
Change in availability last 6 mths	n=99	n=97	n=98	n=97	n=98	n=98	n=97	**n=94**
Stable (%)	53	44	50	70	56	49	52	**46**
Easier (%)	20	35	25	13	12	18	21	**10**
More difficult (%)	19	10	14	13	23	20	15	**39**
Fluctuates (%)	7	10	9	3	7	12	12	**5**
Person last scored ecstasy from*							n=100	**n=100**
Friends (%)							80	**73**
Known dealers (%)							7	**18**
Acquaintances (%)							7	**7**
Workmates (%)							2	**-**
Unknown people (%)							1	**2**
Street/Mobile dealers (%)							3	**-**
Location last scored ecstasy*							n=99	**n=100**
Friend's home (%)							37	**39**
Dealer's home (%)							2	**5**
Home (%)							19	**18**
Nightclub (%)							21	**13**
Rave/doof/dance party							2	**1**
Private party (%)							2	**3**
Pub (%)							6	**13**
Street (%)							2	**1**
Agreed public location (%)							6	**6**
Work (%)							1	**-**
Acquaintance's house (%)							1	**-**

Source: EDRS interviews
*Question was not asked prior to 2009

4.8 Ecstasy markets and patterns of purchasing ecstasy

REU interviewed in 2010 reported purchasing ecstasy from a median of 3 people (range 1-10 people) in the preceding six months (Table 10). Three-fifths of the sample (60%) indicated that they typically purchased ecstasy for themselves and others, and one-third (36%) typically purchased ecstasy only for themselves. Most commonly, ecstasy was purchased monthly or less frequently (54%) or fortnightly to monthly (36%) during this time with a median of 3 tablets (range 1-30) purchased in a single transaction.

Table 10: Patterns of purchasing ecstasy in the last six months, 2005-2010

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

Source: EDRS interviews

4.9 Summary of ecstasy market trends

- The median price for one tablet of ecstasy was $35 in comparison to $30 for ecstasy capsules, and $30 per ecstasy tablet for 10 tablets. No price changes were evident but a significantly greater proportion of REU perceived that prices had recently increased relative to 2009 (38% vs. 10%).
- Relative to 2009 a significantly greater proportion of the 2010 sample indicated that ecstasy was currently low in purity (41% vs. 10%) and that the purity of ecstasy had decreased (34% vs. 11%). KE comments also indicated that ecstasy purity was currently low and/or had recently decreased.
- The proportion reporting that ecstasy was 'easy' or 'very easy' to obtain was significantly lower in 2010 relative to 2009 (61% vs. 83%). In addition, a significantly greater proportion of the sample reported that ecstasy had recently become more difficult to obtain (37% vs. 15%).
- Ecstasy was typically purchased from friends and obtained from a friend's home, the respondent's own home or a nightclub/pub. Three-fifths (60%) indicated they typically purchased ecstasy both for themselves and others, with a median of three tablets purchased per occasion.

5.0 METHAMPHETAMINE

Throughout the 1980s, the form of illicit amphetamine most available in Australia was amphetamine sulphate (Chesher, 1993). Following the legislative controls introduced in the early 1990s on the distribution of the main precursor chemicals for the production of amphetamine sulphate (Wardlaw, 1993), illicit manufacturers were forced to rely on different procedures for the preparation of amphetamine. During the 1990s, the proportion of amphetamine-type substance 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 rather than amphetamine. For example, in the 2006/07 financial year, of the 4,396 seizures of (non-phenethylamine) amphetamine-type seizures analysed for purity in Australia, 97.9% (by number) were methamphetamine rather than amphetamine (ACC, 2008).

As methamphetamine markets across the country have expanded over the past few years, it has become apparent that there is a diversity of forms, or presentations, of methamphetamine sold in the Australian illicit drug market. These more potent forms may be known by terms such as ice, shabu, base, paste and crystal meth, but they are all methamphetamine in basis. 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 in regard to each of these forms will be discussed separately where appropriate, and the term methamphetamine will be used in the EDRS to refer to the drugs available in this class. With the exception of methamphetamine-based tablets marketed as 'ecstasy', and pharmaceutical stimulants such as dexamphetamine and methylphenidate, it appears 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, again, all of which are 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 chemical process used in its production and the quality of that process. 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 2010 IDRS survey reported that methamphetamine powder sometimes contained small crystals in the powder, with the powder generally appearing white in colour, or alternatively yellow, pink, beige or brown. (de Graaff & Bruno, 2011). The presence of crystals in powder methamphetamine may represent higher purity methamphetamine, or alternatively it may be explained by the use of an adulterant (methylsulfonylmethane, MSM) in the late stages of production. This introduction of MSM forms crystals, giving the powder methamphetamine a crystalline appearance (Fetherston & Lenton, 2006).

The two other 'forms' of methamphetamine are traditionally higher in potency (at least partially due to being more difficult to 'cut') and have increased in availability across all Australian jurisdictions in the past decade (Topp & Churchill, 2002). The first, referred to in some jurisdictions as 'base' or 'paste', is commonly a gluggy, waxy, oily, 'wet' powder. This form of the drug appears oily 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

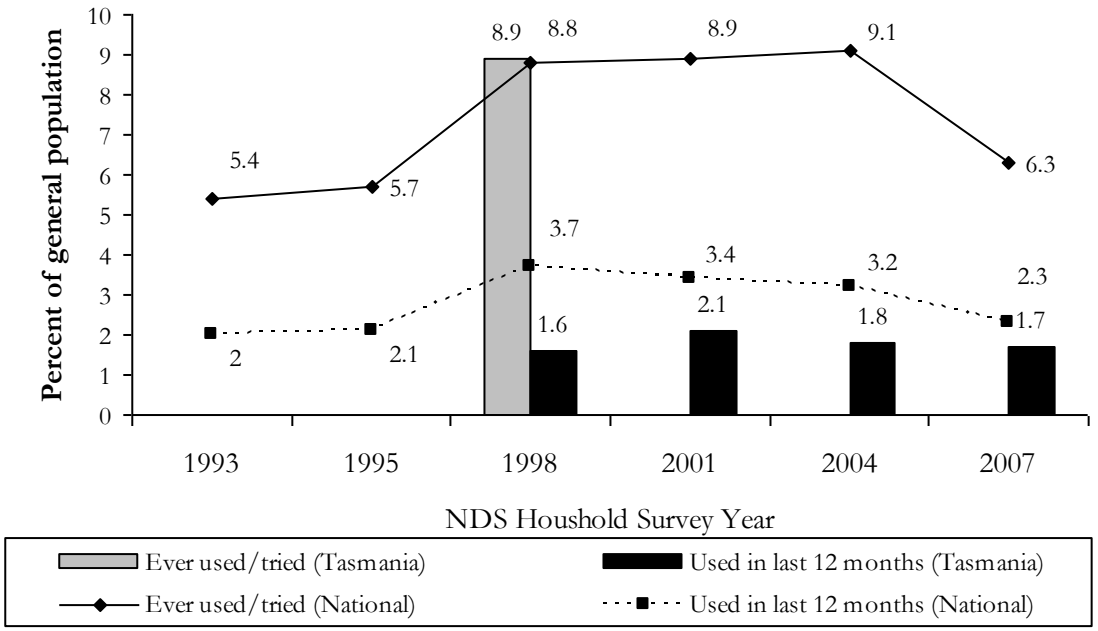
[3] Methamphetamine is an abbreviation of the name methylamphetamine, and, as such, both terms are interchangeable.
[4] Powder form methamphetamine is also referred to in national and other jurisdiction IDRS and EDRS reports as 'speed'.

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 2010 IDRS study, participants that had recently purchased this form of the drug locally commonly described it as 'gluggy', and reported the colour as ranging from white, beige, brown to yellow or pink (de Graaff & Bruno, 2011).

The final form of methamphetamine examined in the current study 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, methylsulfonylmethane (MSM) is an adulterant that can 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 the 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, 2011).

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 4). In 2007, 1.7% of surveyed Tasmanian residents reported using meth/amphetamine in the preceding year, compared to 2.3% nationally (Figure 4).

Figure 4: Prevalence of meth/amphetamine use in Australia and Tasmania among those aged 14 years and over, 1993-2007



Source: National Drug Strategy Household Survey 1993-2007

5.1 Methamphetamine use among REU

Three-quarters of the sample (78%, 95%CI 69-85%) reported lifetime use of methamphetamine in 2010 (Table 11), which is similar to the proportion in 2009 (72%, 95%CI 63-80%). Almost one-half (48%) of the 2010 sample had used methamphetamine during the six months preceding the interview, compared to a similar proportion in 2009 (52%), and significantly higher proportions in previous years (63-82%). There was no significant difference in the proportion of males (53%) and females (42%) or younger (52%) and older (44%) participants that had recently used any form of methamphetamine. The median frequency of use of any form of methamphetamine over the last six months was 2 days compared to 3 days in 2008 and 2009.

Some KE commented on the forms of methamphetamine currently available in Hobart. Base (n=3) was most commonly noted, while crystal was considered rare (n=2). Ingestion was noted as the most common route of administration among this group (n=2). Methamphetamine was considered to be easy to obtain (n=6) with no recent changes in availability noted. KE reports on purity were varied.

Table 11: Patterns of methamphetamine (any form) use among REU, 2003-2010

Methamphetamine (any form)	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Ever used (%)	93	85	90	94	81	85	72	**78**
Used last 6 months (%)	82	76	78	78	70	63	52	**48**
Median days use last 6 months(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)**

5.1.1 Methamphetamine powder (speed)

Three-quarters (74%) of the 2010 sample reported lifetime use of methamphetamine powder (Table 12). The median age of first use was 20 years, and there was no significant difference between the age of first use for males and females.

Two-fifths (40%) had used methamphetamine powder during the six months preceding the interview which is similar to 2009 (46%) but fewer relative to the years prior to this (62-77%). There was no significant difference between the proportion of males (42%) and females (38%), or the proportion of 'older' (35%) and 'younger' (46%) 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 (73%) or snorted (65%) the drug during the six months preceding the interview, and smaller proportions reported injecting (5%), or smoking (3%) the drug.

The median frequency of use during the six months preceding the interview was 2 days (range 1-12 days), or once every three months (Table 12). A majority (92%) 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 and the biggest session of use in the last six months. The frequency of use and amounts used reported among the 2010 sample are similar to 2009, but are lower relative to the years prior to this.

Table 12: Patterns of methamphetamine powder (speed) use among REU, 2003-2010

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**
Ever used (%)	90	82	89	83	74	84	69	**74**
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)**
Used last 6 months (%)	67	68	77	62	65	59	46	**40**
Of those who used last 6 months								
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)**
Route of administration								
Smoked (%)	4	4	8	8	8	9	2	**3**
Snorted (%)	63	63	56	63	49	58	78	**65**
Swallowed (%)	79	85	86	89	85	78	59	**73**
Injected (%)	16	9	6	8	9	10	17	**5**
Shaft/shelved (%)	-	-	-	2	2	-	-	**-**
Median points used								
Typical session (range)	1 (0.5-5)	1 (.25-3)	1 (0.2-5)	1 (0.25-5)	1 (0.25-5)	1 (0.5-4)	2 (0.25-4)	**2 (0.25-4)**
Biggest session (range)	1 (0.5-40)	1 (.25-6)	1.5 (0.2-5)	2 (0.13-6)	2 (0.25-5)	2 (0.5-6)	2 (0.5-6)	**2 (0.25-8)**

Source: EDRS interviews

5.1.2 Methamphetamine base

One-fifth of the 2010 sample (19%) had used methamphetamine base at some stage of their lives (Table 13), which is comparable to 2009 (21%). The median age of first use of methamphetamine base was 20 years. A significantly greater proportion of males (27%) relative to females (9%), χ^2=5.43, p<.05, and 'older' (32%) relative to 'younger' (4%) participants, χ^2=11.88, p<.05, had ever used base.

Less than one-tenth of the 2010 sample (9%) had used methamphetamine base in the six months preceding the interview, which is similar to 2009 (14%). A significantly greater proportion of males (15%) relative to females (2%), had recently used base, χ^2=4.59, p<.05.

The majority of those who had recently used methamphetamine base had swallowed (78%) the drug on a median of two days (range 1-24), or once every three months. The median quantity of methamphetamine base used in the preceding six months was 1.5 points (1.5 of a gram) in a typical session of use and 2 points in the biggest session of use.

5.1.3 Crystal methamphetamine

One-fifth (20%) of the REU interviewed in 2010 reported lifetime use of crystal methamphetamine and just 4% reported use during the six months preceding the interview (Table 14). A significantly greater proportion of males (27%) relative to females (11%), χ^2=4.04, p<.05, and 'older' (32%) relative to 'younger' (7%) participants, χ^2=9.67, p<.05, had ever used crystal methamphetamine. Those who had recently used crystal methamphetamine had smoked the drug on a median of 1.5 days (range 1-3) during the preceding six months.

Table 13: Patterns of methamphetamine base use among REU, 2003-2010

Methamphetamine 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**
Ever used (%)	36	32	35	49	43	31	25	**19**
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)**
Use last 6 mths (%)	24	20	23	40	30	16	14	**9**
Of those who used last 6 months								
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)**
Route of administration								
Smoked (%)	-	5	-	3	3	-	14	**33**
Snorted (%)	50	15	39	15	13	25	14	**33**
Swallowed (%)	71	85	91	88	90	88	79	**78**
Injected (%)	38	30	22	20	7	19	50	**11**
Shaft/shelved (%)	-	-	4	-	-	-	-	**-**
Median points used								
Typical session (range)	1 (0.5-5)	1 (0.25-3)	1 (.25-5)	2 (0.5-3)	2 (0.5-3)	2 (0.5-4)	1 (0.25-5)	**1.5 (0.25-3)**
Biggest session (range)	1 (1-40)	1 (0.25-3)	1 (.25-10)	2 (0.5-10)	2 (0.5-6)	2 (0.5-5)	2 (0.5-5)	**2 (0.25-3)**

Source: EDRS interviews

Table 14: Patterns of crystal methamphetamine use among REU, 2003-2010

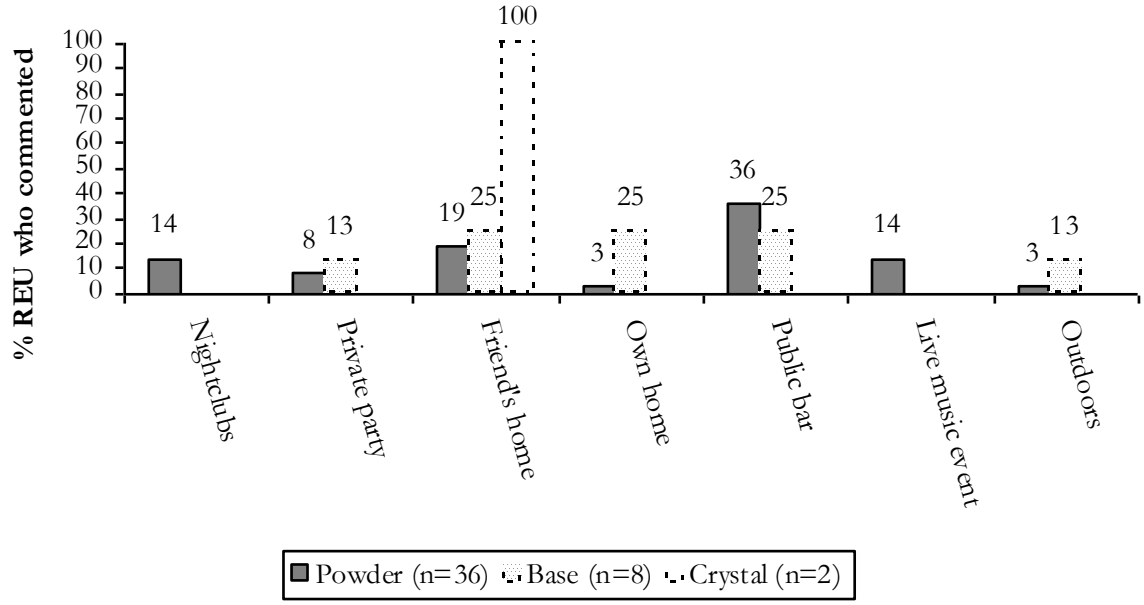
Crystal methamphetamine	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Ever used (%)	58	36	29	42	23	33	29	**20**
Median age of first use (range)	22 (17-45)	22 (16-29)	23 (15-29)	23 (15-34)	23 (16-31)	20 (16-30)	21 (13-35)	**23 (18-36)**
Use last 6 mths (%)	52	16	10	27	7	15	7	**4**
Of those who used last 6 months								
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)**
Route of administration								
Smoked (%)	62	69	20	78	43	53	29	**100**
Snorted (%)	14	13	20	15	14	40	29	**-**
Swallowed (%)	38	31	40	48	71	33	14	**-**
Injected (%)	25	6	50	22	14	13	43	**-**
Shaft/shelved (%)	-	-	-	-	-	-	-	**-**
Median points used								
Typical session (range)	0.5 (0.2-2)	1 (0.25-2)	1 (0.5-3)	1 (.5-3.5)	2 (0.5-3)	1 (1-4)	1.5 (0.2-4)	**5 (n=1)**
Biggest session (range)	1 (.25-10)	1 (0.25-3)	1 (0.5-10)	2 (0.5-10)	2 (1-3)	1 (1-3)	3 (0.2-8)	**5 (n=1)**

Source: EDRS interviews

5.1.4 Locations of methamphetamine use

Figure 5 shows the last location of use for each methamphetamine form for those who had used the drug 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, live music events and private residences.

Figure 5: Location of most recent methamphetamine use by form, 2010



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

5.2 Price

REU participants were asked to indicate the last purchase price for the three major forms of methamphetamine (see Table 15). 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 $40 (range $30-50), which is consistent with the median price of $40 reported among previous samples. The last purchase price for one gram of methamphetamine powder was $250 (range $150-300) which is similar to 2009 but lower relative to previous years ($300-350).

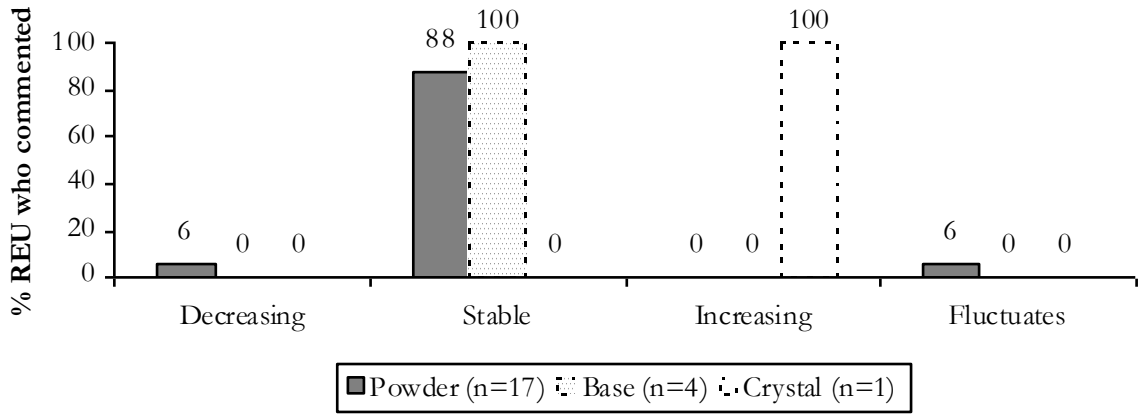
A greater proportion of the REU sample were able to comment on recent price changes of methamphetamine powder (17%) in comparison to methamphetamine base (4%) and crystal methamphetamine (1%). The majority of those who commented on recent changes in methamphetamine powder (Figure 6) indicated that the price had recently been stable (88%).

Table 15: Price of various methamphetamine forms purchased by REU, 2003-2010

Median last purchase price ($)	2003	2004	2005	2006	2007	2008	2009	**2010**
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**
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**
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**
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	**$162.50* (25-300) n=2**
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	**-**
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	**-**

Source: EDRS interviews
* n<10

Figure 6: Recent changes in price of methamphetamine powder purchased by REU, 2010



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

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 16). During the 2008/09 financial year, Tasmania Police reported methamphetamine prices as $50 per 'point' (0.1 g) and $300 per gram (Table 16). Data for the 2009/10 reporting period was unavailable at the time of publication.

Table 16: Methamphetamine prices in Tasmania reported by Tasmania Police Drug Investigation Services, 2003/04-2008/09

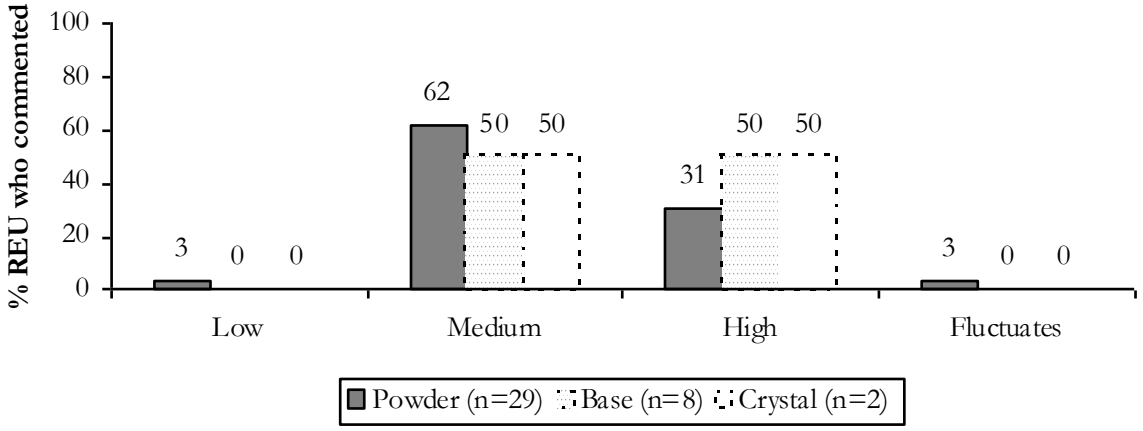
	Point (~0.1 g)	Full gram (1.0 g)	Ounce (28 g)
2003/04	$50-60	$200-400	$3,500-6,000
2004/05	$50	*price not reported*	$5,000
2005/06	*price not reported*	*price not reported*	$5,000
2006/07	$50	$270-380	$4,000-5,000
2007/08	$30-50	$200-300	$5,000-8,000
2008/09	**$50**	**$300**	*price not reported*

Source: Australian Crime Commission
Note: Data for 2008/09 financial year were not available at the time of publication

5.3 Purity

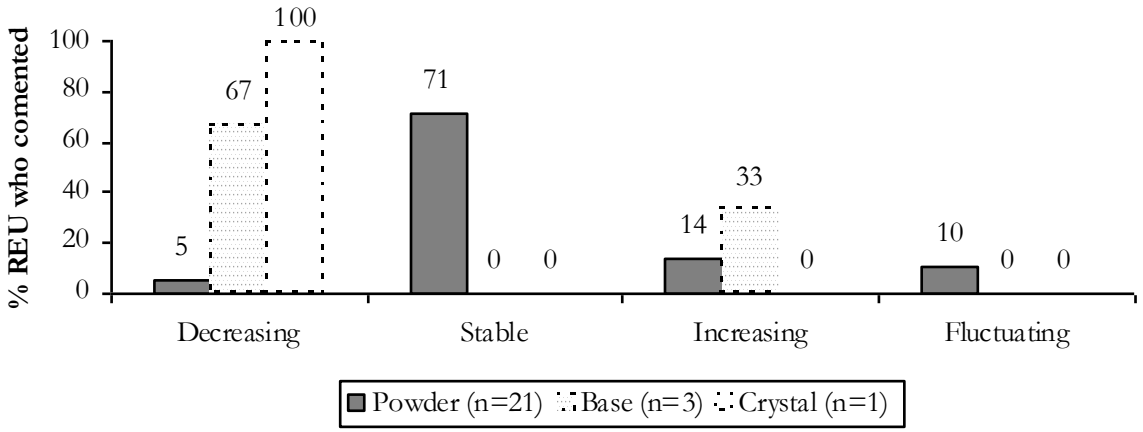
A greater proportion of the 2010 sample was able to comment on the current purity (Figure 7) and changes in purity (Figure 8) for methamphetamine powder relative to methamphetamine base and crystal methamphetamine. As such, the purity estimates of the latter forms should be interpreted with caution. The majority of REU who commented indicated that methamphetamine powder was medium (62%) or high (31%) in purity (Figure 7), and this purity was typically reported to have remained stable (71%) in the last six months (Figure 8).

Figure 7: User reports of current methamphetamine purity, 2010



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

Figure 8: User reports of changes in methamphetamine purity in the past six months, 2010



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

Data for purity of methamphetamine received at police analytical laboratories have been provided for the 1997/98 to 2008/09 financial years (Table 17). Data for the 2009/10 financial period was 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 2008/09 reporting period, the total average purity of analysed methamphetamine seizures was relatively low (9.2%) which is consistent with the low average purity of seizures analysed in the previous three reporting periods (8.5%-13%). While, again, 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 17: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 1997/98-2008/09

	1997 /98	1998 /99	1999 /00	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06	2006 /07	2007 /08	**2008/ 09**
≤2 g												
n	*4*	*31*	*9*	*10*	*20*	*30*	*9*	*10*	*6*	*15*	*7*	***11***
Avg% purity	5 %	5 %	7.4 %	10.4%	26.6%	12.7%	25.6%	32.3%	15%	24.6%	7.6%	**12.6%**
> 2 g												
n	*2*	*8*	*11*	*14*	*28*	*13*	*14*	-	*3*	*23*	*32*	***9***
Avg% purity	7 %	21 %	6.6 %	3.6 %	19.2%	11.2%	9.8%	-	6.9%	6.5%	8.5%	**7.8%**
Total												
n	*6*	*39*	*20*	*24*	*48*	*43*	*23*	*10*	*9*	*38*	*39*	***20***
Avg% purity	6 %	8 %	7 %	6.4 %	22.2%	12.2%	16.9%	32.3%	13%	12.4%	8.5%	**9.2%**
Range	3-8%	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%**

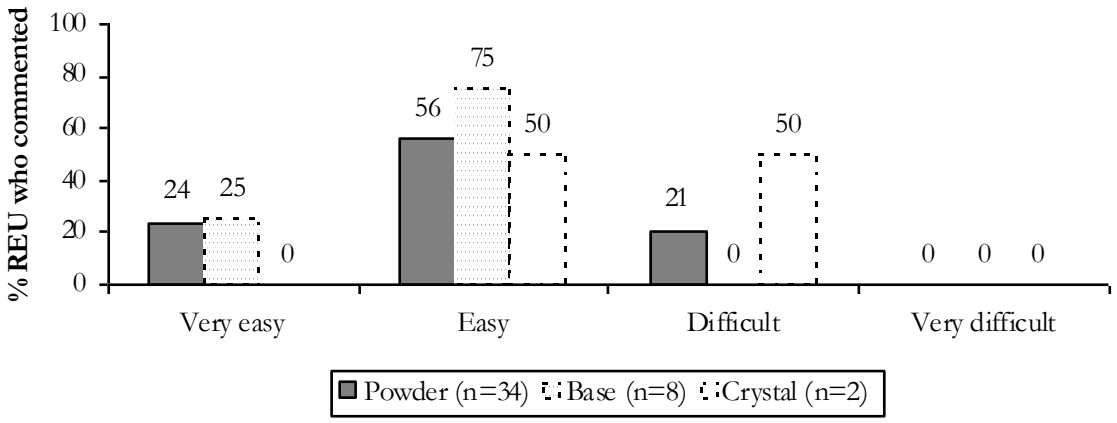
Source: Australian Bureau of Criminal Intelligence; Australian Crime Commission; Tasmania Police State Intelligence Services.

Note: No seizures made by the Australian Federal Police in the state were analysed during these reporting periods. Data for the 2009/10 period were unavailable at time of publication

5.4 Availability

A greater proportion of the REU sample was able to comment on the availability and changes in availability for methamphetamine powder relative to methamphetamine base and crystal methamphetamine (Figures 9 & 10). Methamphetamine powder was typically reported to be 'easy' or 'very easy' to obtain and this availability had remained stable during the last six months. Figure 11 shows the proportion of the REU sample who indicated that each methamphetamine form was 'very easy' or 'easy' to obtain across the eight years of the study. The majority of those who commented on powder (79%) indicated that these forms were easy or very easy to obtain.

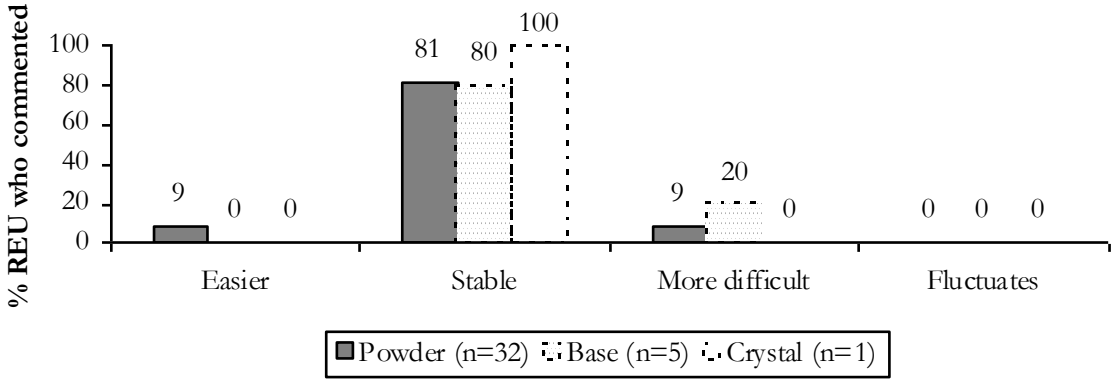
Figure 9: Current availability of methamphetamine forms, 2010



Source: EDRS interviews

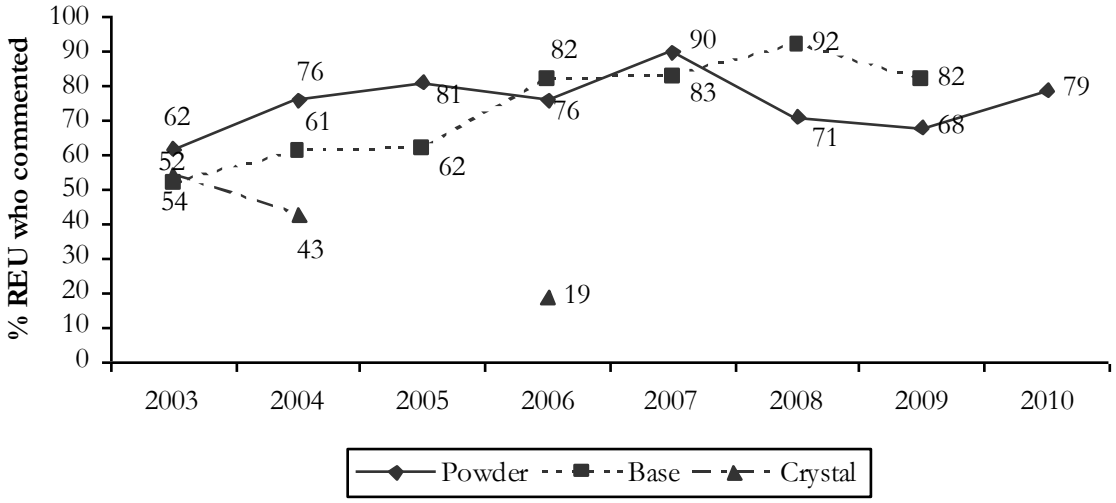
Note: Where n<10 data should interpreted with caution

Figure 10: Change in the availability of various forms of methamphetamine in the preceding six months, 2010



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

Figure 11: Proportion of REU reporting various forms of methamphetamine as 'very easy' or 'easy' to obtain in the six months preceding interview, 2003-2010

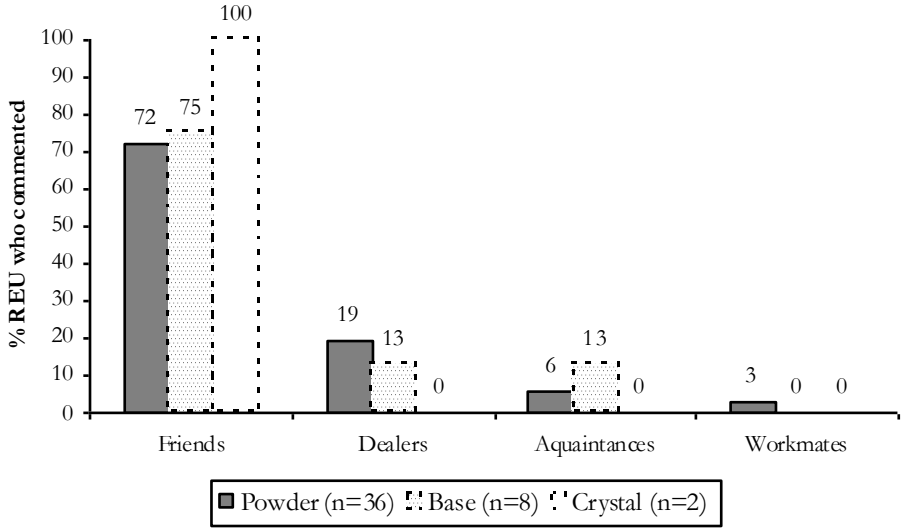


Source: EDRS interviews
Note: Data not reported where n<10

REU were asked who they had obtained each methamphetamine form from on the last occasion in the last six months, and at which locations they had obtained the drug (see Figure 12 and Figure 13). The data are based on small sample sizes for methamphetamine base and crystal methamphetamine and should be interpreted with caution.

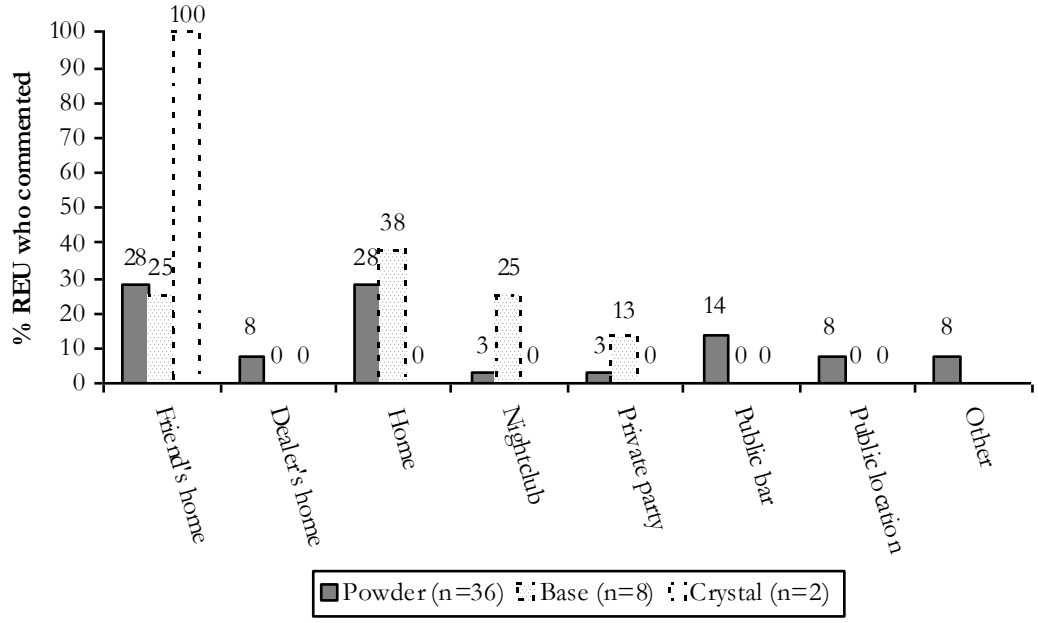
For all forms of methamphetamine, participants were most likely to have last obtained the drug from friends (72% powder, 75% base, 100% crystal) (Figure 12). The most common locations for the last purchase of methamphetamine powder (Figure 13) were a friend's home (28%), the respondent's own home (28%), a public bar (14%), or a public location (8%).

Figure 12: People from whom methamphetamine powder, base and crystal were last purchased in the preceding six months, 2010



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

Figure 13: Locations where methamphetamine powder, base and crystal were last purchased in the preceding six months, 2010



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

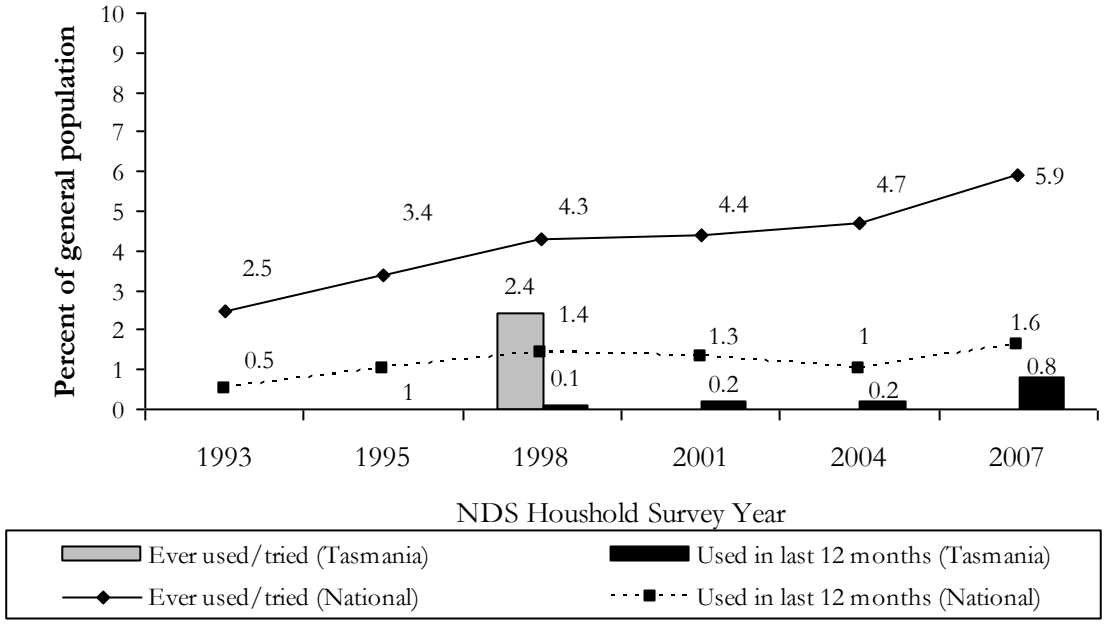
5.5 Summary of methamphetamine trends

- Almost one-half (48%) of REU had used some form of methamphetamine in the preceding six months. This is comparable to rates in 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 (NDSHS, 2007).
- Methamphetamine was used on a median of two days during this period (once every three months on average) in relatively small amounts (2 points), compared to a median of three days in 2008 and 2009.
- Recent use of methamphetamine powder was most common (40%), with low levels of use of methamphetamine base (9%) and crystal methamphetamine (4%).
- The proportion reporting recent use of methamphetamine powder (40%) was similar to 2009 (46%) but fewer relative to the years prior to this (62-77%).
- Methamphetamine powder was typically swallowed or snorted; base was typically swallowed, whereas crystal was typically smoked.
- The median last purchase price for one 'point' (0.1 g) of all methamphetamine forms was $40. These prices are generally consistent with those reported in previous years and no recent price changes were noted. However, the median last purchase price for one gram of methamphetamine powder ($250) was 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 2010.

6.0 COCAINE

According to the findings of the 2007 National Drug Strategy Household Survey (Figure 14; Australian Institute of Health and Welfare, 2008a,b), 0.8% (95%CI 0.6-0.9%) of surveyed Tasmanian residents reported using cocaine in the preceding year, which is significantly greater than the proportion of the 2004 Tasmanian sample (0.2%, 95%CI 0.1-0.3%), but significantly lower relative to the national sample in 2007 (1.6%, 95%CI 1.55-1.64%). A significantly greater proportion of the 2007 national sample also reported lifetime (5.9%) and past year use (1.6%) of cocaine relative to the 2004 sample (4.7% and 1% respectively).

Figure 14: Prevalence of cocaine use in Australia and Tasmania among those aged 14 years and over, 1993-2007



Source: National Drug Strategy Household Survey 1993-2007

6.1 Cocaine use among REU

In 2010, three-quarters of REU (75%) had ever used cocaine (see Table 18). There was no significant difference in the proportion of the male (71%) and female (80%) or younger (74%) and older (76%) participants that had ever used cocaine. The median age of first use of cocaine was 21 years (range 13-30 years) and there was no significant difference between the average age of first use for females (21 years) and males (21 years).

Almost one-half (49%, 95%CI 39-59%) of the 2010 REU sample had used cocaine during the six months preceding the interview (see Table 18), which is significantly greater in comparison to 2009 (31%, 95%CI 23-41%) and all years prior to this (7-35%). There was no significant difference in the proportion of males (53%) and females (48%) or older (50%) and younger (23%) participants who had recently used cocaine.

The median frequency of cocaine use was three days (range 1-20 days) in the preceding six months, which is slightly greater relative to previous years (1-2 days). One-quarter (26%) of those who had recently used cocaine had done so on only one occasion in the preceding six months. There was no significant difference in the median frequency of use for males (4 days) and females (3 days).

Those that had recently used cocaine reported using a median of 0.5 grams (range 0.25-2.5 grams) or a median of 2 'points' (range 0.5-2 points) in a typical session, and 1 gram (range 0.25-4 grams) or 2 'points' (range 0.5-6) 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 two-fifths (40%) had swallowed the drug.

The most common locations for last use of cocaine (Table 18) were at a friend's home (26%), a public bar (26%), nightclub (17%), or at a private party (17%).

Several KE commented that there had been a recent increase in the use of cocaine (n=3) or that cocaine had become more popular (n=2). While some KE noted the availability of cocaine had recently increased (n=2), others indicated that availability was currently low (n=2) or fluctuating (n=1).

Table 18: Patterns of cocaine use among REU, 2003-2010

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**
Ever used (%)	44	32	43	55	54	61	51	**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)**
Use last 6 months (%)	7	10	20	33	35	35	31	**49**
Of those used last 6 months								
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)**
Route of administration	14	-	15	-	3	-	3	**2**
Smoked (%)	71	70	90	94	74	94	94	**100**
Snorted (%)	14	30	10	39	51	31	55	**40**
Swallowed (%)	-	10	-	6	-	-	3	**-**
Injected (%)	-	-	-	-	-	-	-	**-**
Shafted/shelved (%)								
Median amounts used								
Grams typical session (range)	0.1 (.1-.5)*	0.5* (.5-1.5)	0.5* (0.5-1)	0.5 (0.2-2)	0.5 (0.5-1)	0.5 (.25-1)	0.25 (0.1-5)	**0.5 (.25-2.5)**
Grams biggest session (range)	0.5 (.1-.5) *	1.0* (0.5-5)	0.5* (0.5-1)	1 (0.2-4)	0.5 (0.5-4)	0.5 (.25-3)	0.25 (0.1-5)	**1 (0.25-4)**
Points typical session (range)	-	1.0* (0.5-2)	2 (0.25-3)	2 (1-5)	2 (0.25-4)	2 (1-4)*	2* (0.5-2)	**2 (0.5-2)**
Points biggest session (range)	-	0.75* (0.5-1)	2 (0.25-4)	2 (1-7)	2 (0.25-6)	2 (1-4)*	2* (0.5-8)	**2 (0.5-6)**
Location last used	n=5	n=6	n=11	n=21	n=19	n=28	n=11	**n=23**
Home (%)	20	17	18	19	16	7	18	**-**
Dealer's home (%)	-	-	-	5	-	4	-	**-**
Friend's home (%)	40	33	9	33	32	21	9	**26**
Rave/dance party (%)	20	17	9	-	5	4	9	**4**
Nightclub (%)	20	33	18	19	11	25	36	**17**
Public bar (%)	-	-	18	-	-	7	9	**26**
Private party (%)	-	-	-	14	16	29	-	**17**
Outdoors (%)	-	-	-	5	-	-	-	**-**
Live music event (%)	-	-	-	-	11	-	18	**4**
Public place (%)	-	-	9	-	11	4	-	**-**
Work (%)	-	-	9	-	-	-	-	**-**
Other (%)	-	-	9	5	-	-	-	**-**

Source: EDRS interviews

* n<10

6.2 Price

Table 19 shows median prices and price variations reported by REU for cocaine between 2003 and 2010. The median last purchase price for one gram of cocaine in 2010 was $350 (range $80-350). Almost three-quarters (71%) indicated that the price had remained stable in the last six months.

The last cocaine price reported by Tasmania Police was in the 2007/08 ACC report. In this report, the price for one gram of cocaine in Tasmania was reported to be $350 (ACC, 2009), which is the same as the price reported by the REU sample in 2010. Data for the 2009/10 financial year was unavailable at the time of publication.

Table 19: Price of cocaine purchased by REU and price variations, 2003-2010

Median Price	2003	2004	2005	2006	2007	2008	2009	**2010**
Median last price								
Point (0.1 gram)	$60*	-	$65*	$45*	$30*	$90*	$100*	**$35***
(range)	n=1		(60-70)	(40-50)	(20-60)	(n=1)	(n=1)	**(n=1)**
Gram	$270*	$300*	$350*	$310	$320*	$350	$300*	**$350**
(range)	(200-400)	(200-400)	(180-400)	(250-400)	(250-380)	(200-450)	(300-600)	**(80-350)**
Price change last 6 months	n=10	n=8	n=4	n=11	n=12	n=17	n=9	**n=17**
Increased (%)	10	13	25	-	25	18	33	**6**
Stable (%)	50	75	75	73	25	59	56	**71**
Decreased (%)	10	-	-	27	17	24	11	**12**
Fluctuated (%)	30	13	-	-	33	-	-	**12**

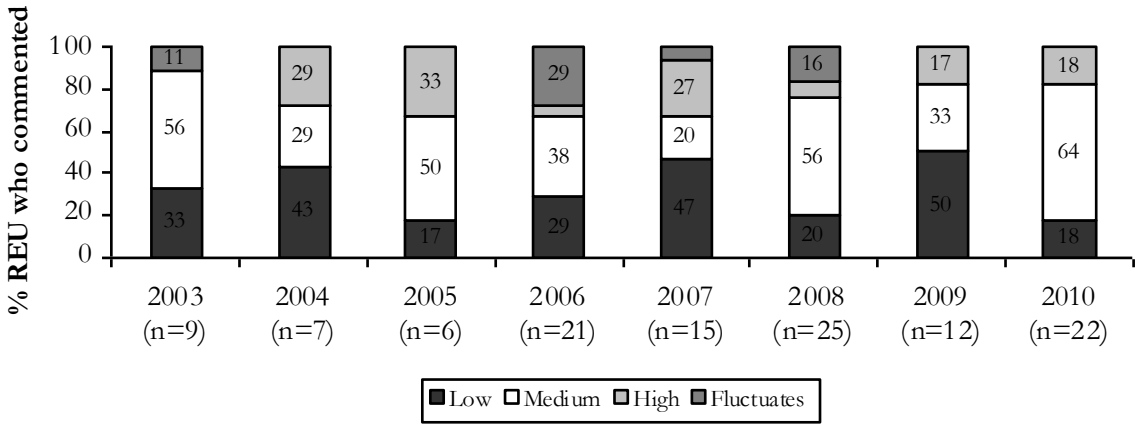
Source: EDRS interviews

* n<10

6.3 Purity

REU were asked about the current purity of cocaine (Figure 15) and any changes in purity in the last six months (Figure 16). Three-fifths of those who commented in 2010 indicated that cocaine was currently medium in purity (64%). Those that commented on changes in purity in the last six months indicated that it had remained stable (56%) or had recently increased (25%).

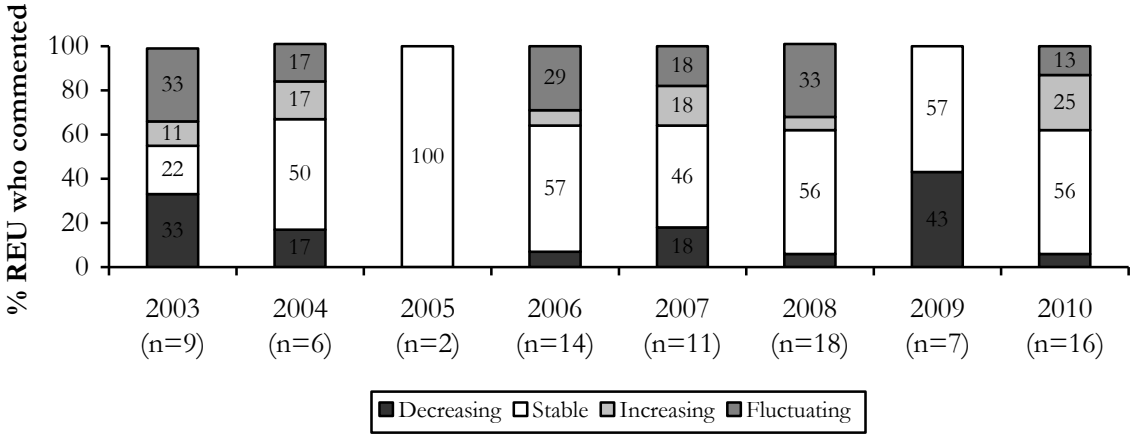
Figure 15: User reports of current purity of cocaine, 2003-2010



Source: EDRS interviews

Note: Where n<10 data should interpreted with caution

Figure 16: User reports of changes in cocaine purity in the past six months, 2003-2010



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

The last analysed sample of cocaine seized within the state by Tasmania Police was from the first quarter of 2001. This was an amount of less than two grams, and was analysed during the first quarter of 2002 at 44.0% purity. Data for the 2009/10 financial year was unavailable at the time of publication.

6.4 Availability

The majority of those who commented on the current availability of cocaine (see Table 20) indicated that cocaine was currently difficult (61%) or very difficult (18%) to obtain. Availability was reported to have remained stable (62%) or to have become easier to obtain (23%) during the preceding six months. Cocaine had last been purchased from friends (78%) or dealers (17%), and had been last obtained from a friend's home (48%), the respondent's own home (13%) or a public bar (17%).

Table 20: REU reports of availability of cocaine in the preceding six months, 2003-2010

Cocaine	2003	2004	2005	2006	2007	2008	2009	**2010**
Ease of access	n/a	n=9	n=13	n=24	n=22	n=33	n=12	**n=28**
Very easy (%)		11	-	13	-	3	-	**-**
Easy (%)		-	23	38	5	24	25	**21**
Difficult (%)		44	31	33	68	61	50	**61**
Very difficult (%)		44	46	17	27	12	25	**18**
Change in access	n=23	n=8	n=10	n=18	n=21	n=26	n=10	**n=26**
Stable (%)	83	63	90	61	57	69	50	**62**
Easier (%)	4	13	-	33	14	23	20	**23**
More difficult (%)	9	25	10	-	10	4	30	**8**
Fluctuates (%)	4	-	-	6	19	4	-	**8**
Person last scored from*							n=11	**n=23**
Used not scored (%)							-	**-**
Friends (%)							73	**78**
Dealers (%)							18	**17**
Acquaintances (%)							9	**4**
Unknown dealers (%)							-	**-**
Location last scored*							n=11	**n=23**
Used not scored (%)							-	**-**
Home (%)							36	**13**
Friend's home (%)							55	**48**
Dealers' home (%)							9	**9**
Rave/dance party (%)							-	**-**
Nightclub (%)							-	**4**
Public bar (%)							-	**17**
Private party (%)							-	**4**
Agreed public location (%)							-	**-**
Acquaintance's home (%)							-	**4**

Source: EDRS interviews
*Question was not asked prior to 2009

6.5 Summary of cocaine trends

- Almost one-half (49%) of the 2010 sample reported recent use of cocaine which is significantly greater relative to 2009 (31%). Prior to 2006, recent use of cocaine was even less common with less than one-fifth reporting recent use (7-20%). This upward trend is use is consistent with national and Tasmanian population trends (NDSHS, 2007).
- Cocaine was typically snorted and was used on a median frequency of three days (range 1-20 days) in the last six months, with an average of 0.2 to 0.5 grams used in a typical session.
- Cocaine was typically last used at a private residence or at public bar or nightclub.
- The median last purchase price for one gram of cocaine was $350 (range $80-350) and no consistent price trends were noted.
- Cocaine was reported to be 'medium' in purity and this purity was reported to have remained 'stable' or 'increased' 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 or to have increased in the last six months.
- Cocaine had been purchased last from friends or dealers either at private residences or public bars.

7.0 LSD

In the 2007 National Drug Strategy Household Survey, it was estimated (from the sample of 1,143 participants) that approximately 1% of Tasmanians had used hallucinogens in the year prior to interview, compared with 0.6% of Australians nationally (Australian Institute of Health and Welfare, 2008).

7.1 LSD use among REU

Table 21 shows that almost one-half (46%) of the 2010 EDRS sample had used LSD at some stage of their lives. A significantly greater proportion of the male sample (60%) had ever used LSD in comparison to the proportion of the female sample (29%), $\chi^2=9.64$, $p<.05$, but there was no significant difference in the proportion of 'younger' (48%) and 'older' (44%) participants. The median age of first use was 19 years (range 15-27 years), and there was no significant difference between the age of first use for males (20 years) and females (19 years).

One-quarter (27%) of the 2010 sample reported use of LSD during the six months preceding the interview (Table 21) which was not significantly different to the proportion in 2009 (34%). There was no significant different in the proportion of males (33%) and females (20%) or the proportion of 'younger' (28%) and 'older' (26%) participants reporting recent use. All of those who had recently used LSD had taken the drug orally.

Of those who had recently used LSD, the median frequency of use was 2.5 days (range 1-24 days) and 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 0.25-2) and the number of tabs/drops used in the biggest session of use was 1 (range 0.25-10). The median frequency and 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 21). LSD was last used at private residences such as the consumer's own home, a friend's home, or a private party, as well as dance-related events, outdoor locations, nightclubs, or public bars.

Table 21: Patterns of LSD use among REU, 2003-2010

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**
Ever used (%)	62	51	54	52	40	56	52	**46**
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)**
Used last 6 months (%)	24	32	31	29	20	41	34	**27**
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)**
Route of administration								
Smoked (%)	-	3	-	3	-	-	-	**-**
Snorted (%)	-	-	-	3	-	-	-	**-**
Swallowed (%)	100	100	100	100	100	100	100	**100**
Injected (%)	-	-	-	-	-	-	3	**-**
Median tabs/drops								
Typical session (range)	1.25 (1-2)	1 (.25-2.5)	1 (0.5-3)	1 (1-3)	1 (0.5-3)	1 (0.5-2.5)	1 (0.5-3)	**1 (0.25-2)**
Biggest session (range)	3 (1-4)	1.25 (0.25-3)	1 (0.5-6)	2 (1-16)	2 (0.5-4)	2 (0.5-5)	2 (0.5-10)	**1 (0.25-10)**
Location last used	n=27	n=30	n=30	n=26	n=15	n=40	n=31	**n=23**
Home (%)	22	17	13	23	27	28	23	**13**
Dealer's home (%)	4	-	-	-	-	-	-	**-**
Friend's home (%)	19	17	40	15	-	20	26	**30**
Rave/dance party (%)	22	17	10	31	27	20	7	**22**
Nightclub (%)	26	17	13	4	13	3	7	**9**
Pub (%)	-	3	-	-	-	-	-	**9**
Restaurant/café (%)	-	3	-	-	-	-	-	**-**
Private party (%)	7	3	-	12	13	3	10	**4**
Outdoors (%)	n/a	13	10	12	20	18	23	**17**
Live music event (%)	n/a	7	7	-	-	8	7	**4**
Public place (%)	-	-	3	4	-	3	-	**-**
Other (%)	-	3	-	-	-	-	-	**-**

Source: EDRS interviews

7.2 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 22. The median last purchase price for one tab of LSD was $25 (range $10-25) in 2010 which is higher relative to previous years ($15-20). A majority (81%) of those who commented on the price of LSD indicated that it had remained stable during the six months preceding the interview.

Table 22: Prices of LSD purchased by REU, 2003-2010

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

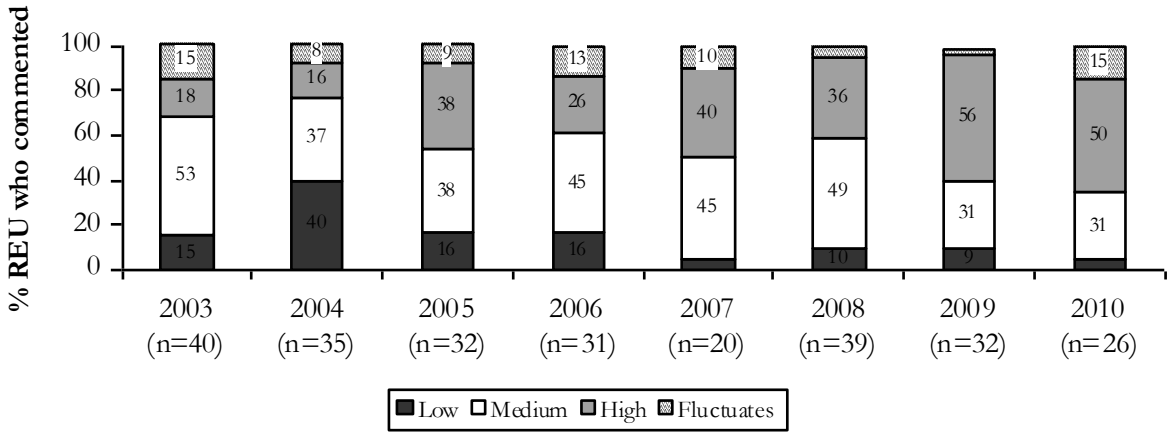
Source: EDRS interviews

Tasmania Police reported a price of $40 for one tab of LSD in 2008/09 (ACC, 2010). Prior to this the last price reported by Tasmania Police was $20-25 during the 2001/02 and 2000/01 financial years (ABCI, 2002; ACC, 2003).

7.3 Purity

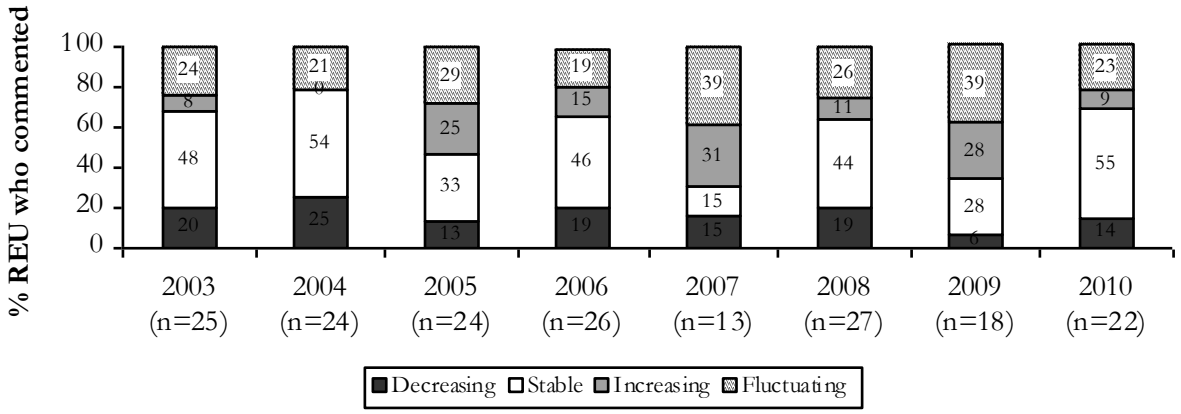
LSD was typically reported to be high (50%) or medium (31%) in purity (Figure 17), and this purity was reported to have remained stable (55%) or fluctuated (23%) during the six months preceding the interview (Figure 18).

Figure 17: Current purity of LSD, 2003-2010



Source: EDRS interviews

Figure 18: Recent change in purity of LSD, 2003-2010



Source: EDRS interviews

7.4 Availability

A large majority of those who commented in 2010 reported that LSD was currently 'easy' (50%) or 'very easy' (29%) to obtain (see Table 23), with the majority (72%) of those who commented indicating that the availability of LSD had recently remained stable.

A majority of the sample indicated that LSD had last been obtained from friends (78%), most commonly at private residences, but also at nightclubs, dance-related events or agreed public locations.

Table 23: REU reports of availability of LSD in the preceding six months, 2003-2010

LSD	2003	2004	2005	2006	2007	2008	2009	**2010**
Ease of obtaining LSD	n=54	n=38	n=35	n=31	n=25	n=42	n=37	**n=28**
Very easy (%)	4	18	20	26	20	26	32	**29**
Easy (%)	13	29	49	42	48	33	57	**50**
Difficult (%)	46	40	29	26	32	38	8	**21**
Very difficult (%)	13	13	3	7	-	2	3	**-**
Change in availability	n=45	n=31	n=29	n=30	n=22	n=34	n=29	**n=25**
Stable (%)	49	58	41	53	41	59	45	**72**
Easier (%)	7	13	38	23	36	21	52	**12**
More difficult (%)	36	23	17	17	14	15	-	**16**
Fluctuates (%)	9	6	3	7	9	6	3	**-**
Person last scored*							n=30	**n=23**
Used not scored (%)							6	**-**
Friends (%)							77	**78**
Dealers (%)							7	**9**
Workmates (%)							-	**-**
Acquaintances (%)							7	**13**
Unknown persons (%)							3	**-**
Location last scored*							n=30	**n=23**
Used not scored (%)							3	**-**
Home (%)							30	**17**
Friend's home (%)							27	**39**
Dealer's home (%)							7	**4**
Rave/ dance party (%)							13	**9**
Nightclub (%)							10	**9**
Pub (%)							-	**-**
Street (%)							-	**-**
Agreed public location (%)							-	**13**
Private party (%)							10	**4**
Acquaintance's home (%)							-	**-**
Live music event (%)							-	**4**

Source: EDRS interviews

*Question was not asked prior to 2009

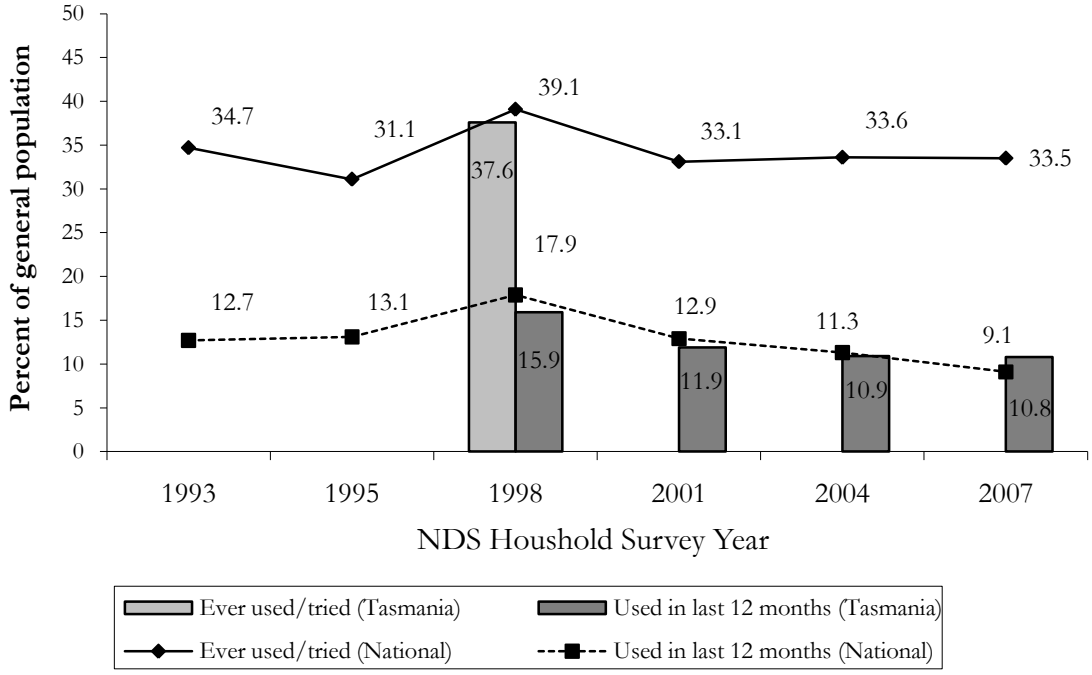
7.5 Summary of LSD trends

- Consistent with data from previous years, almost one-half (46%) of the 2010 sample had used LSD at some stage of their lives and one-quarter (27%) had used LSD in the six months preceding the interview. 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 0.25-2) was taken orally in a typical session of use and LSD had been used on a median of 2.5 days (range 1-24 days) in the preceding six months.
- LSD was last used at private residences such as the consumer's own home, a friend's home, or a private party, as well as dance-related events, outdoor locations, nightclubs, or public bars.
- The median last price for one tab of LSD in 2010 was $25 (range $10-25) which is higher relative to previous years ($15-20).
- The purity of LSD was considered by REU to be 'medium' (31%) to 'high' (50%) and to have remained stable or fluctuated during the last six months.
- A large majority of those commenting indicated that LSD was 'easy' or 'very easy' to obtain and that availability had recently been stable.
- LSD was typically last obtained from friends and was most commonly last obtained from private residences, nightclubs, dance-related events, or agreed public locations.

8.0 Cannabis

In the 2007 National Drug Strategy Household Survey (AIHW, 2008a,b), it was estimated (from the sample of 1,143 participants) that approximately 10.8% of Tasmanians (aged 14 years and over) had used cannabis in the year prior to interview, compared with 10.9% in 2004 (Figure 19). However, nationally recent use (in the last year) of cannabis declined significantly from 11.3% in 2004 to 9.1% in 2007.

Figure 19: Prevalence of cannabis use in Australia and Tasmania among those aged 14 years and over, 1993-2007



Source: National Drug Strategy Household Survey 1993-2007

8.1 Cannabis use among REU

The entire sample of regular ecstasy users surveyed in 2010 had used cannabis at some stage of their lives (Table 24). The median age of first cannabis use was 15 years (range 10-22 years), and there was no significant difference in the age of first use for males and females.

Almost three-quarters of respondents (72%, 95%CI 63%-80%) had used cannabis during the six months preceding the interview, which is similar to the proportion of the sample between 2006 and 2009 (68-82%), but lower relative to that among the 2003-2005 cohorts (e.g., 2005: 89%, 95%CI 81-94%, $\chi^2=4.99$, $p<.05$).

A majority of those reporting recent use had smoked cannabis (97%) 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 12 days (range 1-180 days), or approximately once a fortnight, which is similar to median frequency between 2007 and 2009 (11-15 days). A small proportion of the sample (5%) 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 24). Participants were more likely to have last smoked joints (n=43) relative to cones (n=23). The median number of cones smoked on the last day of use was 4 (range 0.5-20) and the median number of joints was 1 (range 0.25-9).

Table 24: Patterns of cannabis use of REU, 2003-2010

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**
Ever used (%)	100	98	100	100	96	97	98	**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)**
Used last 6 mths (%)	99	91	89	82	68	74	76	**72**
Used daily last 6 mths (%)	26	9	17	13	5	8	6	**5**
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)**
Median cones last session (range)	n/a	n/a	n/a	n/a	4 (1-40) n=39	3 (.25-50) n=37	4 (0.5-30) n=38	**4 (0.5-20) n=23**
Median joints last session (range)	n/a	n/a	n/a	n/a	1 (0.5-4) n=23	1 (0.5-3) n=31	1 (0.5-6) n=36	**1 (0.25-9) n=43**

Source: EDRS interviews

8.2 Price

REU reported last purchase prices for both hydroponically-grown ('hydro') and bush-grown ('bush') cannabis (Table 25). It should be noted that many of the price estimates for cannabis were based on very small sample sizes and should be interpreted with caution

The median last purchase price for one ounce (28 g) of hydro was $275 (range $200-300) compared to $235 (range $200-300) for bush. The median last purchase price for a quarter of an ounce (7 g) was $90 (range $75-100) for hydro and $70 (range $65-90) for bush. Three-quarters of those who commented on recent price changes indicated that the price of hydro (72%) and bush (73%) had recently remained stable.

The median weight for one $25 bag of hydro was 1.6 grams (range 1.2-2 g), compared to a median of 1.7 grams (1.5-2.5 g) for bush. The median weight for one $50 bag of hydro was 3.5 grams for both hydro (range 3-7 g) and bush (3.4-10).

Five REU were able to comment on the price of hashish, indicating that they had bought a gram of hash for a median of $20 (range 20-40) during the six months preceding the interview.

In 2008/09 Tasmania Police reported that the price for one deal (approximately 1 gram) of cannabis was $25 for hydro and $10-25 for bush, and the price for one ounce of cannabis was $300 for hydro and $200-300 for bush. Data for the 2009/10 financial year was unavailable at the time of publication.

Table 25: Price and weights of cannabis purchased by REU, 2006-2010

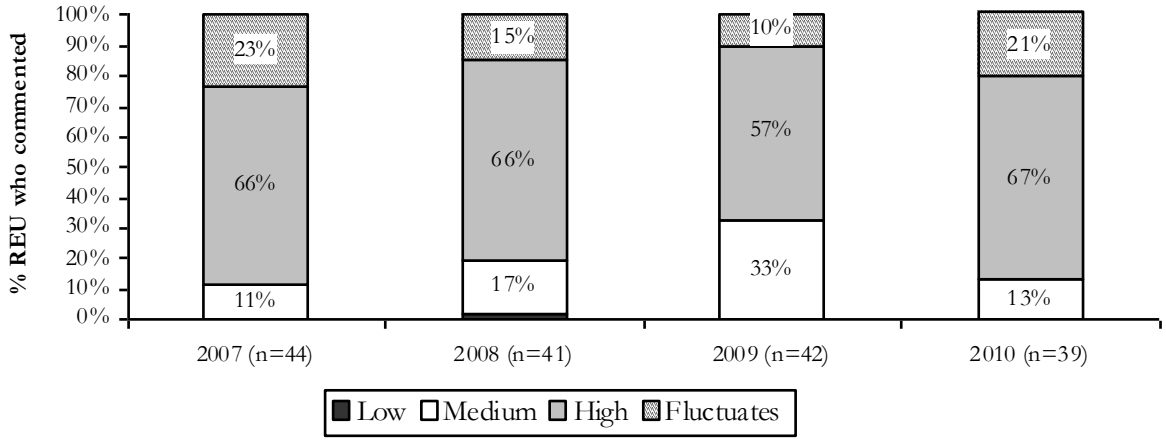
	Hydro					Bush				
Last purchase price	2006	2007	2008	2009	**2010**	2006	2007	2008	2009	**2010**
One gram (range)	$15* (10-25)	$25* (25-25)	$15* ($10-20)	$20* (15-25)	**$15* n=1**	$15* (10-25)	$10* (10-10)	$15* (10-20)	$15* (10-25)	**-**
1/4 ounce (range)	$85 (70-100)	$80 (70-90)	$90 (80-270)	$80 (25-110)	**$90 (75-100)**	$65 (40-80)	$60 (50-85)	$70 (35-80)	$67.50 (50-90)	**$70* (65-90)**
1/2 ounce (range)	$155* (140-180)	$145* (125-180)	$180* (170-180)	$150 (50-300)	**$180* (170-180)**	$100* (70-150)	$100* (100-120)	$150* (150-150)	$115* (50-140)	**$125* (80-160)**
One ounce (range)	$250 (200-300)	$250 (230-300)	$250 (250-350)	$280 (100-350)	**$275 (250-350)**	$200 (50-350)	$190 (150-260)	$200* (180-250)	$225 (150-250)	**$235* (200-300)**
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)**	n/a	1.6* (1.5-1.7)	1.8 * (1.3-2)	1.5* (1-3)	**1.7* (1.5-2.5)**
Grams per $50 bag (range)		-	3.1 (2.5-4)	3 (2-3.5)	**3.5* (3-7)**		-	3.6* (2.5-4.5)	4 (2-5)	**3.5* (3.4-10)**
Price change	n=48	n=30	n=34	n=39	**n=36**	n=53	n=32	n=27	n=35	**n=30**
Increased (%)	4	17	24	15	**17**	-	-	11	9	**7**
Stable (%)	81	67	53	74	**72**	81	88	67	83	**73**
Decreased (%)	6	3	9	3	**3**	8	13	7	6	**20**
Fluctuated (%)	8	13	15	8	**8**	11	-	15	3	**7**

Source: EDRS interviews
*n<10

8.3 Potency

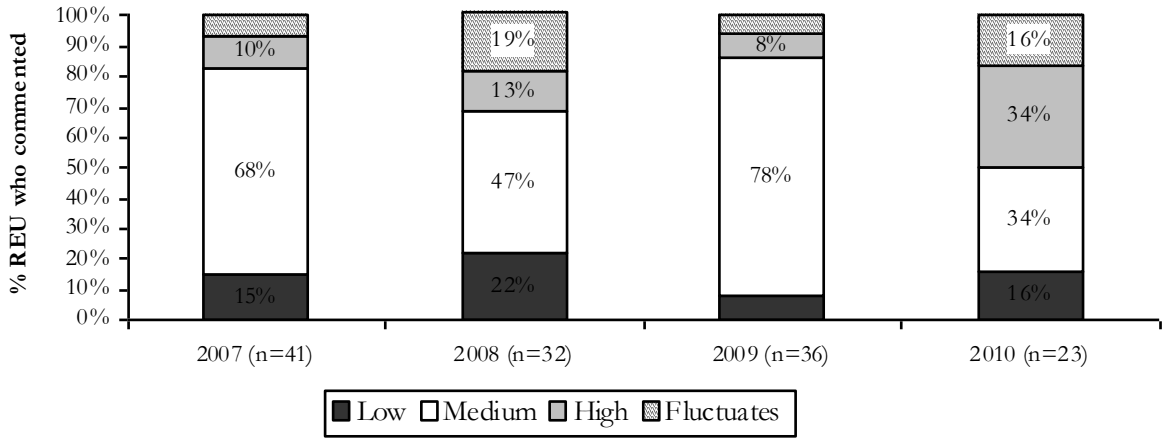
Participants were asked to comment on the current potency of hydroponic (Figure 20) and bush cannabis (Figure 21) and changes in potency during the six months preceding the interview (Figure 22). Hydroponically-grown cannabis was reported to be currently 'high' (67%) or fluctuating (21%) in potency, while bush was reported to be medium (34%) or high (34%) in potency. The proportion reporting that bush was high in purity was significantly greater relative to 2009 (34% vs. 8%), χ^2=18.84, p<.001. The majority of those who commented indicated that the potency of both bush and hydro had remained stable during the preceding six months.

Figure 20: Current potency of hydro cannabis, 2007-2010



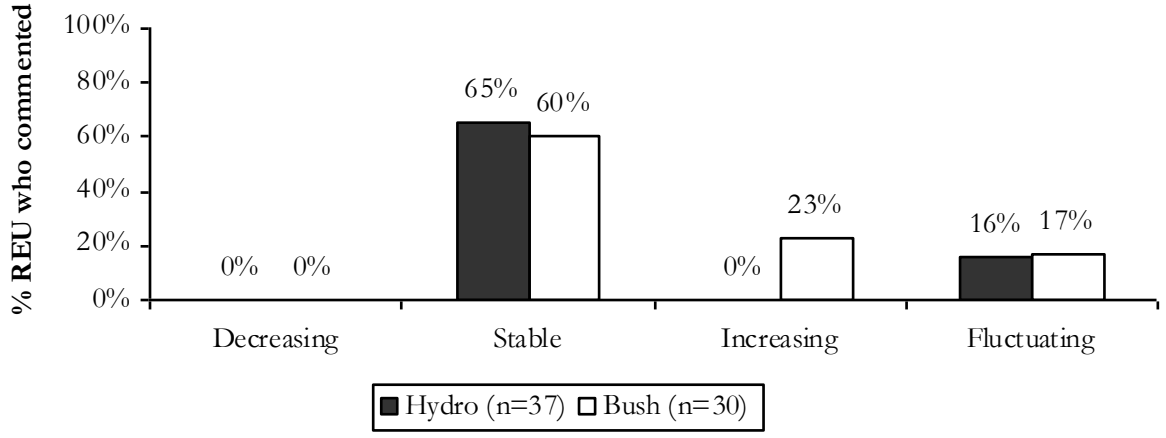
Source: EDRS interviews

Figure 21: Current potency of bush cannabis, 2007-2010



Source: EDRS interviews

Figure 22: Recent change in potency of cannabis, 2010



Source: EDRS interviews

8.4 Availability

REU were asked to comment on the current availability of 'hydro' and 'bush' cannabis and changes in this availability during the six months preceding the interview (Table 26). A majority of those that commented on the current availability of 'hydro' indicated that it was currently 'very easy' (59%) or 'easy' (39%) to obtain, and that this availability had been 'stable' (70%) during the preceding six months. Similarly, 'bush' was reported to be 'very easy' (68%) or 'easy' (24%) to obtain with availability either 'stable' (63%) or having become easier (28%) 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 26). 'Hydro' was most commonly last obtained through purchases from friends (82%) at private residences, most typically a friend's home or the respondents own home. Similarly, 'bush' was last obtained from friends (61%) or dealers (17%), and was most typically last obtained at private residences.

Table 26: REU reports of availability of cannabis in the preceding six months, 2007-2010

	Hydro				Bush			
	2007	2008	2009	**2010**	2007	2008	2009	**2010**
Ease of access	n=48	n=42	n=47	**n=39**	n=40	n=33	n=39	**n=34**
Very easy (%)	56	52	49	**59**	68	39	46	**68**
Easy (%)	35	31	32	**39**	25	52	33	**24**
Difficult (%)	6	17	19	**3**	8	9	21	**9**
Very difficult (%)	2	-	-	**-**	-	-	-	**-**
Change availability	n=45	n=40	n=45	**n=39**	n=40	n=32	n=39	**n=32**
Stable (%)	76	60	76	**70**	78	56	54	**63**
Easier (%)	13	15	11	**14**	18	22	15	**28**
More difficult (%)	11	10	7	**11**	3	9	13	**3**
Fluctuates (%)	-	15	7	**5**	3	13	18	**6**
Person last scored*			n=45	**n=38**			n=36	**n=29**
Used not scored (%)			9	**-**			8	**-**
Friends (%)			51	**82**			61	**79**
Dealers (%)			33	**5**			22	**17**
Workmates (%)			4	**3**			-	**-**
Acquaintances (%)			2	**3**			8	**3**
Unknown persons (%)			-	**3**			-	**-**
Last Location scored*			n=45	**n=37**			n=36	**n=29**
Used not scored (%)			9	**-**			8	**-**
Home delivery (%)			16	**27**			11	**31**
Friend's home (%)			40	**51**			44	**48**
Dealer's home (%)			24	**5**			22	**10**
Acquaintance's home (%)			7	**3**			8	**3**
Agreed public location (%)			2	**8**			3	**3**
Street market (%)			-	**-**			3	**-**
Work (%)			-	**3**			-	**-**
Other (%)			-	**3**			-	**3**

Source: EDRS interviews

*Question was not asked prior to 2009

8.5 Summary of cannabis trends

- Almost three-quarters (72%) 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 12 days (range 1-180) or approximately fortnightly. The median quantities used on the last day of use during this time were 4 cones (range 0.5-20) or 1 joint (range 0.25-9). Daily cannabis smoking was relatively uncommon (5%).
- Consistent with the decline in cannabis use seen among the general population nationally, there has been less recent use, and a lower median frequency of use among the EDRS cohorts between 2007 and 2010 relative to previous years.
- The median last purchase price for one ounce of 'hydro' was $275 (range $250-350) compared to $235 ($200-300) for 'bush'. The median weight for one $25 bag of hydro was 1.6 grams (range 1.2-2 grams), compared to 1.7 grams (1.5-2.5 grams) for bush.
- The potency of 'hydro' was reported to be high and the potency of 'bush' was reported to be medium to high. A significantly greater proportion of responders indicated that bush was high in purity in 2010 relative to 2009 (34% vs. 8%).
- 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.

9.0 OTHER DRUGS

9.1 Alcohol

The entire sample of REU interviewed in 2010 had used alcohol at some stage in their lives (see Table 27). The median age that respondents had first used alcohol was 14 years (range 10-17 years) and there was no difference in the mean age of first use for males and females.

The entire 2010 sample (100%) had used alcohol during the six months preceding the interview. The median frequency of alcohol use was 48 days (range 2-180 days), or two days a week on average, during the six months preceding the interview. There was no significant difference in the median frequency of use for males and females or 'older' and 'younger' participants. Almost one-half of those that had recently used alcohol (43%) had done so three times a week or more during the preceding six months.

Based on data from the 2007 National Drug Strategy Household Survey (AIHW, 2008a,b), it was estimated that among those aged between 20 and 29 nationally, 47.8% had used alcohol on a weekly basis and 2.3% had used alcohol on a daily basis in the past 12 months. A large majority (90%) of the 2010 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 (47.8%). The proportion reporting recent daily use of alcohol in 2010 (2%) is similar to the estimate among those aged 20-29 nationally (2.3%).

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 10.5).

Table 27: Patterns of alcohol use of REU, 2003-2010

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**
Ever used (%)	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)**
Used last 6 months (%)	98	98	98	95	99	100	99	**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)**

Source: EDRS interviews

9.2 Tobacco

A large proportion (96%) of the REU sample in 2010 had smoked tobacco at some stage in their lives (Table 28). The median age that tobacco was first used was 15 years (range 7-22 years) and there was no significant difference between the age of first use for males and females.

A large majority (80%) of the sample had smoked tobacco during the six months preceding the interview, and there was no significant difference in the proportion of males (86%) and females (73%) or 'older' (74%) and 'younger' (87%) participants. The median number of cigarettes smoked per day of use was 5 (range 1-25).

One-quarter (28% 95%CI 20-37) of those who had recently smoked (22% of the entire sample) reported smoking tobacco on a daily basis during the six months preceding the interview, which

is fewer (but not significantly) relative to the proportion in 2009 (42% 95%CI 33-52). Two-fifths (45%) of those that had recently smoked tobacco had done so once a week or less during the six months preceding the interview. Females (39%) were significantly more likely to report recent daily tobacco use relative to males (19%), $\chi^2=3.99$, $p<.05$.

In the 2007 National Drug Strategy Household Survey, it was estimated (from the sample of 1,143 participants) that approximately 22.7% of Tasmanians (aged 14 years and over) smoked tobacco on a daily basis in the year prior to interview, compared with 16.6% of Australians nationally (Australian Institute of Health and Welfare, 2008a,b). Among those aged 20-29, 30.4% of Tasmanians had smoked tobacco on a daily basis, compared to 21.4% nationally.

In 2010, one-fifth (22%) of the EDRS sample had smoked on a daily basis, which is lower than the 2007 population estimate for Tasmania for this age group (30.4%), but similar to estimate of prevalence among the general population nationally (21.4%).

Table 28: Patterns of tobacco use of REU, 2003-2010

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**
Ever used (%)	96	89	89	94	90	96	92	**96**
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)**
Used last 6 months (%)	81	77	83	81	74	86	77	**80**
Used daily last 6 months (%)	44	40	51	51	36	32	32	**22**
Of those used last 6 mths	n=81	n=77	n=83	n=81	n=74	n=86	n=76	**n=80**
Used on a daily basis (%)	54	57	61	63	49	37	42	**28**
Used once a week or less (%)	22	25	18	19	14	33	40	**45**

Source: EDRS interviews

9.3 Ketamine

In the 2007 National Drug Strategy Household Survey, it was estimated (from the sample of 1,143 participants) that approximately 0.3% of Tasmanians had used ketamine in the year prior to interview, compared with 0.2% of Australians nationally (Australian Institute of Health and Welfare, 2008a,b).

Almost one-fifth (19%) of the 2010 REU sample had used ketamine at some stage of their life (Table 29), similar to the proportions between 2005 and 2009 (23%-24%). The median age of first use was 20 years (range 17-24 years).

Less than one-tenth (6%) of the REU sample had used ketamine in the six months preceding the interview in 2010, which is consistent with the low level of use among the cohort since 2004 (see Table 29). The median frequency of ketamine use was 1 day (range 1-5 days) in the six months preceding the interview.

The median quantity of ketamine used in both a typical session and the biggest session during the last six months was 3 points (range 1-5, n=2). Other participants (n=4) reported use of 1-3 bumps of ketamine during this time.

Table 29: Patterns of ketamine use among REU, 2003-2010

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**
Ever used (%)	38	18	24	23	23	26	21	**19**
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)**
Used last 6 months (%)	24	5	11	6	14	6	5	**6**
Of those used last 6 months								
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)**
Route of administration								
Snorted (%)	63	60	45	50	50	50	60	**33**
Swallowed (%)	67	80	91	50	57	50	40	**67**
Injected (%)	17	-	-	-	-	17	-	**-**
Median points (0.1 g) used typical session (range)	-	-	-	-	1.5* (1.5)	2* (2-2)	1.5* (1-2)	**3* (1-5)**
Median points (0.1 g) used biggest session (range)	-	-	-	-	1.75* (1.5-2)	2* (2-2)*	1.5* (1-2)	**3* (1-5)**

Source: EDRS interviews
* n<10

9.4 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 its suspected use in the facilitation of sexual assaults and GHB-related deaths and overdose. 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.

In the 2007 National Drug Strategy Household Survey, none of the 1,143 Tasmanians sampled had used GHB in the year prior to interview, compared with 0.1% Australians nationally (Australian Institute of Health and Welfare, 2008a,b).

One in ten (9%) of the 2010 sample had used GHB/GBL/1,4B at some stage of their lives (Table 30). The median age of first use of GHB was 22 years (range 18-28 years). Two participants reported use of GHB/GBL/1,4B in the six months preceding the interview (Table 30), which is consistent with the low levels of recent use among previous EDRS cohorts (1%-6%). The median frequency of use was 1 day (range 1-2 days) during this time.

Table 30: Patterns of GHB/GBL/1,4B use among REU, 2003-2010

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**
Ever used (%)	10	7	7	9	4	7	11	**9**
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)**
Used last 6 months (%)	6	3	2	3	1	1	3	**2**
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)**
Route of administration Swallowed (%)	100	100	100	100	100	100	100	**100**
Median quantities (ml)		n=1	n=1		n=1		n=3	
Typical session (range)	-	300	25	-	9	-	10 (1-50)	**-**
Biggest session (range)	-	300	50	-	36	-	10 (1-50)	**-**

Source: EDRS interviews
Includes GBL and 1,4B

9.5 MDA

Over one-tenth (14%) of the 2010 sample had ever used MDA (Table 31) which is similar to the proportion of the cohorts between 2005 and 2008 (8%-15%). The median age of first use was 19 years (range 15-25 years).

Only five participants (5%) had used MDA during the six months preceding the interview (Table 31), consistent with the low levels of recent use among the samples between 2005 and 2008 (3-5%).

MDA was typically swallowed on a median of two days (range 1-3 days) in the preceding six months, with a median of 1 capsule consumed in both a typical session and the biggest session (range 0.4-2) of use.

Table 31: Patterns of MDA use among REU, 2003-2010

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**
Ever used (%)	32	20	8	14	8	15	10	**14**
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)**
Used last 6 months (%)	21	15	3	3	5	3	8	**5**
Median days used last 6 months (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)**
Route of administration								
Smoked (%)	-	-	-	-	-	-	13	**-**
Snorted (%)	43	20	-	33	-	-	25	**60**
Swallowed (%)	95	100	100	67	100	100	88	**40**
Injected (%)	-	-	-	-	-	-	13	**-**
Median capsules 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)**
Median capsules 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)**

Source: EDRS interviews

9.6 Benzodiazepines

Two-fifths (44%) of the 2010 sample had used benzodiazepines at some stage of their life (Table 32). The median age of first use was 20 years (range 14-27 years). One-quarter (27%) of the sample had used benzodiazepines during the six months preceding the interview, which is similar to the proportion in 2009 (24%).

The median frequency of recent benzodiazepine use was 4 days (range 1-80 days) during the six months preceding the interview. Three-quarters (73%) of those who had recently used benzodiazepines had done so on six or less occasions in the six months preceding the interview, or less than once a month.

Less than one-tenth (6%) of the sample reported recent licit (prescribed) use and one-quarter (23%) reported recent illicit (non-prescribed) use of benzodiazepines. Licit benzodiazepines had been used on a median frequency of 15 days (range 3-72) during the six months preceding the interview. Illicit benzodiazepines had been used on a median three days (range 1-60) during this time.

Of the Tasmanians surveyed in the 2007 National Drug Strategy Household Survey, 1% of the sample had used benzodiazepines for non-medical purposes in the past year, compared to 1.4% of the population nationally (Australian Institute of Health and Welfare, 2008a,b). The proportion of the 2009 REU sample reporting recent use (during the last six months) of illicit benzodiazepines (23%) is considerably higher than these estimates of prevalence in the general population.

Table 32: Patterns of benzodiazepine use of REU, 2003-2010

Benzodiazepines	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Ever used (%)	52	34	40	48	41	51	36	**44**
Ever injected (%)	7	2	3	4	2	1	4	**2**
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)**
Used last 6 months (%)	35	23	25	33	25	37	24	**27**
Injected last months (%)	2	1	-	-	1	-	1	**-**
Licit use last 6 mths (%)	n/a	n/a	n/a	n/a	9	10	6	**6**
Illicit use last 6 mths (%)	n/a	n/a	n/a	n/a	20	31	19	**23**
Median days used last 6 months (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)**

Source: EDRS interviews

9.7 Antidepressants

Less than one-fifth (16%) of the 2010 sample had used antidepressants at some stage of their life (Table 33). The median age of first use was 18 years (range 12-26 years).

Less than one-tenth of the sample (5%) had used antidepressants in the six months preceding the interview, 3% reported recent licit use and 2% reported recent illicit use.

Licit antidepressants had been used orally on a median frequency of 180 days (range 15-180) during the six months preceding the interview. Illicit antidepressants had been used orally on a median of 2.5 days (range 1-4) during this time.

Table 33: Patterns of antidepressant use of REU, 2003-2010

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**
Ever used (%)	32	14	21	20	24	22	16	**16**
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)**
Used last 6 mths (%)	14	4	12	9	11	6	10	**5**
Licit use last 6 mths (%)	n/a	n/a	n/a	n/a	6		9	**3**
Illicit use last 6 mths (%)	n/a	n/a	n/a	n/a	5	1	1	**2**
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)**

Source: EDRS interviews

9.8 Amyl nitrite

Three-quarters (76%) of the 2010 REU sample had ever used amyl nitrite (Table 34). The median age of first use was 20 years (range 16-28 years).

One-half (51%) reported recent use of amyl nitrite which is the same as the proportion in 2009 (51%) but substantially greater relative to previous years (19-21%). There was no significant difference in the proportion of males (55%) relative to females (47%) or 'younger' (59%) relative to 'older' (44%) participants who had recently used amyl nitrite.

The median frequency of use was 6 days (range 1-48) during the six months preceding the interview or approximately once a month.

Table 34: Patterns of amyl nitrite use of REU, 2003-2010

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**
Ever used (%)	78	52	49	41	43	38	67	**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)**
Used last 6 mths (%)	43	23	16	10	20	15	51	**51**
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)**

Source: EDRS interviews

9.9 Nitrous oxide

Over one-half of the 2010 sample (57%) had ever used nitrous oxide (Table 35). The median age of first use was 19 years (range 14-26 years).

Almost one-third (32%) of the sample had used nitrous oxide during the six months preceding the interview, which is similar relative to 2009 (32%). A significantly greater proportion of younger (44%) relative to older (22%) participants had recently used nitrous oxide, $\chi^2=5.16$, $p<.05$. There was no significant difference in the proportion of males (35%) and females (29%) reporting recent use.

The median frequency of use during the last six months was 4 days (range 1-48), or less than once a month. The median number of bulbs used in a typical session was 6 (range 1-20 bulbs) and the median number used in a heavy session of use was 10 (range 2-55 bulbs).

Table 35: Patterns of nitrous oxide use of REU, 2003-2010

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**
Ever used (%)	47	57	69	69	64	62	54	**57**
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)**
Used last 6 mths (%)	25	34	41	39	46	29	32	**32**
Median days used 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)**
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)**
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)**

Source: EDRS interviews

9.10 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 2010, only one participant reported past use of licit pharmaceutical stimulants and this use was not in the preceding six months.

One-fifth (21%) of the 2010 sample had ever used illicit pharmaceutical stimulants (Table 36). The median age of first use was 18 years (range 14-25 years). One-tenth of the sample (9%) had used pharmaceutical stimulants in the six months preceding the interview, similar to the proportion among the cohorts between 2004 and 2009 (10%-19%). A significantly greater proportion of males (15%) relative to females (2%) had recently used pharmaceutical stimulants, $\chi^2=4.59$, $p<.05$.

The majority of those who had recently used pharmaceutical stimulants had taken the drug orally (89%), and smaller proportions had recently snorted (33%) these drugs in the preceding six months. The median frequency of use was 1 day (range 1-58) in the six months preceding the interview. The median number of tablets used in a typical session was 5 (range 1-15 tablets) and the median number used in a heavy session of use was 5 (range 1-15 tablets).

Table 36: Patterns of pharmaceutical stimulant use of REU, 2004-2010

Pharmaceutical stimulants	2004 n=100	2005 n=100	2006 n=100	2007* n=100	2008* n=100	2009* n=100	**2010* n=100**
Ever used (%)	39	44	50	40	41	30	**21**
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)**
Used last 6 mths (%)	14	16	12	19	16	10	**9**
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)**
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)**
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)**

Source: EDRS interviews

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

9.11 Psychedelic mushrooms

Over one-half (58%) of the 2010 REU sample had ever used psychedelic mushrooms (Table 37). The median age of first use for mushrooms was 19 years (range 14-30 years).

One-fifth (18%) of the 2010 sample had used mushrooms in the preceding six months (Table 37), which is similar to 2009 (21%). A significantly greater proportion of males (26%) in comparison to females (9%) had recently used psychedelic mushrooms, $\chi^2=4.60$, $p<.05$.

All of those that had recently used mushrooms (100%) had ingested them during the preceding six months, and a single participant had smoked mushrooms. The median frequency of mushroom use was 2 days (range 1-6 days) in the preceding six months, or approximately once every three months.

Table 37: Patterns of psychedelic mushroom use of REU, 2003-2010

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**
Ever used (%)	58	60	63	74	66	61	56	**58**
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)**
Used in last 6 mths (%)	38	41	40	55	39	31	21	**18**
Used LSD & mushrooms (%)	13	17	16	21	13	19	14	**7**
Used LSD or mushroom (%)	49	56	55	63	46	53	41	**38**
Median days used last 6 months (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)**

Source: EDRS interviews

9.12 Heroin

Less than one-tenth (8%) of the 2010 REU sample had ever used heroin (Table 38). The median age of first heroin use was 19 years (range 14-25 years). Consistent with the low levels of recent use among the REU cohorts in previous years, two participants had used heroin intravenously on a median of 9 days (range 2-15) 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).

Table 38: Patterns of heroin use of REU, 2003-2010

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**
Ever used (%)	20	4	8	10	5	6	6	**8**
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)**
Used last 6 mths (%)	6	-	-	2	-	1	3	**2**
IV use last 6 mths (%)	6	-	-	2	-	-	-	**2**
Median days last 6 mths (range)	16 (3-48)	-	-	7 (3-10)	-	1 (n=1)	1 (1-48)	**9 (2-15)**

Source: EDRS interviews

9.13 Methadone

One in ten (10%) of the 2010 REU sample had ever used methadone, which is consistent with the low levels of lifetime use reported in previous years (Table 39). The median age of first methadone use was 21 years (range 17-25). Five participants (5%) had used methadone during the six months preceding the interview. There was no recent injection of methadone. The median frequency of use was 4 days in the last six months (range 2-24), or less than monthly.

Table 39: Patterns of methadone use of REU, 2003-2010

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**
Ever used (%)	14	2	5	9	6	3	8	**10**
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)**
Used in last 6 mths (%)	13	2	1	5	1	2	4	**5**
Injected last 6 months (%)	11	2	1	3	-	1	-	**-**
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)**

Source: EDRS interviews

9.14 Buprenorphine

Consistent with the low levels of buprenorphine use among the REU cohorts in previous years, five participants had ever used buprenorphine among the 2010 sample (Table 40), and a single participant had taken buprenorphine orally on 14 occasions during the last six months.

Table 40: Patterns of buprenorphine use of REU, 2003-2010

Buprenorphine	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Ever used (%)	5	-	2	3	1	2	2	**5**
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)**
Used last 6 mths (%)	3	-	1	1	1	1	1	**1**
Injected last 6 mths (%)	2	-	-	-	1	-	-	**-**
Median days used last 6 mths (range)	30 (2-180)	-	6 n=1	180 n=1	1 n=1	15 n=11	90 n=1	**14 n=1**

Source: EDRS interviews

9.15 Other opioids

'Other opioids' comprise a broad drug class including over-the-counter pharmaceuticals such as codeine, restricted pharmaceuticals such as morphine, and alkaloid poppy plant derivatives such as opium or 'poppy wash'. One-fifth (19%) of the 2010 REU sample had ever used 'other opioids' for not-as-prescribed (or non-licit) purposes (Table 41), which is similar to the proportions in previous years (19-35%). The median age of first use was 18 years (range 14-27).

Less than one-tenth (4%) of the sample had recently used 'other opioids' for non-medical purposes, which is similar to the proportion in 2009 (6%). The median frequency of 'other opioid' use was 4 days (range 1-12) during the six months preceding the interview. For those who had recently used 'other opioids', the most common routes of administration were swallowing (75%) and smoking (50%).

Table 41: Patterns of other opioid use of REU, 2003-2010

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**
Ever used (%)	35	19	25	33	23	29	19	**19**
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)**
Used last 6 mths (%)	13	8	13	14	8	17	6	**4**
Injected last 6 mths (%)	8	-	-	4	1	3	1	**-**
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)**

Source: EDRS interviews

9.16 Over-the-counter preparations

Around one-tenth (12%) reported lifetime use of over the counter codeine-based products (e.g, Nurofen plus, Panadeine) for non-medical purposes and five participants (5%) reported ingesting codeine-based products during the last six months compared to a similar proportion in 2009 (9%) (Table 42).

Around one-tenth (12%) reported lifetime use of over the counter stimulant-based products (e.g., pseudoephedrine-based cold and flu tablets) for non-medical purposes (Table 42). Three participants (3%) reported ingesting stimulant-based products on a median frequency of three days (range 2-4) during the last six months, compared to a similar proportion in 2009 (6%).

Table 42: Use of over-the-counter preparations for non-medical purposes among REU, 2010

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

Source: EDRS interviews

9.17 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 and 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. Two-thirds (65%) of the 2010 sample reported lifetime use of mephedrone and almost one-half (47%, 95%CI 38-57) reported use of mephedrone in the last six months (Table 43), which is a significantly greater proportion relative to 2009 (15%, 95%CI 9-23%). Mephedrone was typically snorted or swallowed and was used on a median frequency of 6 days in the last six months (range 1-36) or approximately monthly. The median price for one mephedrone capsule was reported to be $30 (range 20-40).

The anecdotal comments of REU generally indicated that mephedrone was currently very easy to obtain in Hobart (n=8), and that the use and availability of the drug had recently increased (n=24). It was also noted that mephedrone is often sold as ecstasy (n=4), that mephedrone was currently more available than ecstasy (n=3) and that the increase in the use of mephedrone was related to a decrease in the availability of ecstasy (n=2). While some REU commented that mephedrone was strong or high in purity (n=4), others commented that it was low in purity/quality (n=4) and that it was often cut with other substances such as caffeine, multivitamins and Guarana (n=5). In terms of its effects, several REU indicated that mephedrone was associated with bad 'come-downs' or side effects (n=5) and some indicated that the effects of mephedrone were relatively short-lasting (n=3). In addition to the anecdotal comments in relation to mephedrone, a large number of people indicated that there had been a general increase in the use and availability of capsules generally (content not specified) (see Section 4.3)

Several KE (n=8) also commented that there had been a recent increase in the use of mephedrone among the REU that they were familiar with. It was noted that mephedrone was typically sold in capsule (n=8) or less commonly powder form (n=1) with the price per capsule ranging from $15 to $40. Single KE noted that mephedrone was cheaper and more available than ecstasy (n=1) and that it is often bought and sold as ecstasy (n=1). Two KE noted that the price of these capsules had recently increased in Hobart.

Table 43: Patterns of mephedrone use of REU, 2008-2010

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

Source: EDRS interviews

9.18 Other drugs

Table 44 shows the proportion of the EDRS cohorts reporting recent use of '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 (The vaults of Erowid, 2010).

Of particular note in 2010 was the increased use of mephedrone (47%) (see Section 9.17) and related substances such as methylone (also known as bk-MDMA) (4%), and methcathinone (1%).

Small proportions of the sample reported use of chemicals in the tryptamine family such as 2CI (4%), 2CB (2%), 2CE (7%), and 2C-T-7 (1%), and other emerging substances such as DOI (3%) and MDPV (2%). Almost one-tenth (7%) reported recent use of DMT. DMT is a psychedelic tryptamine which causes short acting effects when smoked (The vaults of Erowid, 2010).

Table 44: Use of emerging psychoactive substances in last six months among REU, 2003-2010

	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Mephedrone/Israelis (%)	-	-	-	-	-	1	14	**47**
2CB (%)	1	1	1	-	2	2	1	**2**
2CI (%)	-	5	1	23	12	2	9	**4**
2CE (%)	-	-	-	-	1	1	3	**7**
BZP (%)	-	-	-	1	2	-	-	**2**
Methylone (%)	-	-	-	-	-	-	1	**4**
DMT (%)	-	-	-	1	1	3	-	**7**
DOI (%)	-	-	-	-	-	-	-	**3**
MDPV (%)	-	-	-	-	-	-	1	**2**
Mescaline (%)	-	1	-	-	-	1	-	**1**
PMA (%)	-	-	-	-	-	-	-	**1**
2C-T-7 (%)	-	1	-	-	-	-	-	**1**
Methcathinone (%)	-	-	-	-	-	1	-	**1**
Datura (%)	-	-	-	-	-	-	1	**1**
Salvia divinorum (%)	-	-	1	-	-	1	1	**1**
DXM* (%)	-	2	-	-	-	2	-	**-**
Ephedrine (%)	-	-	-	-	-	-	1	**-**
LSA (%)	-	-	-	-	1	2	-	**-**
Butane (%)	-	-	-	-	-	1	-	**-**
5-MEO-DMT (%)	-	-	-	-	-	1	-	**-**
5-HTP (%)	-	-	1	-	-	-	-	**-**
PCP (%)	-	1	-	-	-	-	-	**-**

Source: EDRS interviews

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

9.19 Summary of other drug use

- The entire 2010 REU sample had recently consumed alcohol, on an average of two to three days a week in the last six months. A large majority (90%) had used alcohol at least weekly (but not daily), which is substantially higher than the estimate of prevalence in the general population (47.8%, among those aged 20-29 nationally – a comparable age group to the current REU cohort).
- Tobacco had recently been used by four-fifths (80%), with over one-fifth (22%) reporting daily use in the last six months, marking a reduction in daily smokers relative to previous years (32-51%). The proportion of daily smokers is lower than the 2007 population estimate for Tasmania (30.4%) for this age group (20-29 years), but similar to the general population nationally (21.4%). Daily tobacco use was significantly more common among females (39%) relative to males (19%).
- Consistent with the low levels of use in previous years, less than one-tenth reported recent use of ketamine (6%), MDA (5%), or GHB/GBL/1,4B (2%).
- One-quarter (27%) of the 2010 REU sample had used benzodiazepines during the last six months. Almost one-quarter (23%) reported recent illicit use of benzodiazepines, much higher than recent estimates of prevalence in the general population (1-1.4%). However, the use of illicit benzodiazepines was relatively low in frequency, at three days in the last six months.
- Less than one-tenth of the sample (5%) had recently used antidepressants (in the six months preceding the interview), 3% reported recent licit use and 2% reported recent illicit use.
- One-half (51%) reported recent use of amyl nitrite which is the same as 2009 (51%) but substantially greater relative to previous years (19-21%). Frequency of use was relatively low at less than once a month in the last six months.
- Almost one-third (32%) of the 2010 sample reported low frequency use (less than once a month) of nitrous oxide, with recent use more common among younger relative to older participants.
- One-tenth (9%) of REU reported recent illicit use of pharmaceutical stimulants (such as dexamphetamine or methylphenidate) in 2010. The median frequency of pharmaceutical stimulant use was low, at 1 day (range 1-58) in the last six months.
- One-fifth (18%) had recently used psychedelic mushrooms. Recent use was more common among males than females. Mushrooms had been used on a median of 2 days in the last six months. Two-fifths (38%) had recently used some form of psychedelic drug (either LSD or mushrooms) in the last six months.
- Only small proportions of the 2010 sample had recently used heroin (2%), methadone (5%), buprenorphine (1%) or other opioids (pharmaceuticals and alkaloid poppy derivatives) (4%).
- Small proportions reported recent use of codeine (5%) or stimulant based (3%) over-the-counter preparations.
- There was a significant increase in the recent use of mephedrone in 2010 (47%) relative to 2009 (14%). Mephedrone was typically purchased in capsule form and had been snorted or swallowed on a median of 6 days in the last six months. Anecdotal reports of both REU and KE suggest that there has been a recent increase in the use and availability of mephedrone in Hobart.
- Small proportions reported use of research chemicals in the tryptamine family (2CI, 4%; 2CB, 2%; 2CE, 7%; 2C-T-7, 1%), or other emerging substances such as DOI (3%) and MDPV (2%). Almost one-tenth (7%) reported recent use of DMT.

10.0 RISK BEHAVIOUR

10.1 Injecting drug use

Almost one-tenth (8%) of the 2010 REU participants had used substances intravenously at some stage of their lives (Table 45), which is similar to the proportion among previous REU cohorts (10-26%). The median age of first injection was 19 years (range 17-23). There was no significant difference in the proportion of males (11%) and females (4%) or younger (7%) or older (9%) participants who had ever injected.

A very small proportion (3%) of the 2010 sample (1 female and 2 males) had used substances intravenously during the six months preceding the interview, similar to the proportions in the 2004-2009 REU samples (6-12%).

Table 45: Injecting drug use among REU, 2003-2010

	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Ever injected (%)	26	15	19	18	10	15	14	**8**
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)**
Injected last 6 months	22	9	8	9	6	7	12	**3**

Source: EDRS interviews

10.1.1 Lifetime injecting drug use and context to initiation

Table 46 shows the drugs ever injected and drug first injected for those reporting intravenous use of drugs at some stage of their life (n=8).

One-half (50%) of lifetime injectors had first injected heroin and one-fifth (38%) had first injected methamphetamine (13% powder, 13% base, 13% crystal).

Lifetime injection of methamphetamine (75% any form, 50% powder, 63% base, 38% crystal) and heroin (75%) was most common, followed by ecstasy (25% pills, 25% powder), methadone (25%), pharmaceutical stimulants (25%), cocaine (25%), and other opioids (25%).

Table 46: Injecting drug use history among REU injectors, 2010

	Ever injected (%) n=14	First drug injected (%) n=8
Methamphetamine (any form)	75	38
Methamphetamine powder	50	13
Methamphetamine base	63	13
Crystal methamphetamine	38	13
Pharmaceutical stimulants	25	-
Ecstasy pills	25	-
Ecstasy powder	25	-
Heroin	75	50
Methadone	25	-
Buprenorphine	13	-
Cocaine	25	-
LSD	13	-
Ketamine	-	-
MDA	13	-
Other opioids*	25	13
Benzodiazepines	-	-
Other	-	-

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

10.1.2 Recent injecting drug use and injecting risk behaviours

Just 3% of the 2010 sample had injected a drug in the six months prior to the interview. Table 47 shows that the most commonly injected drugs in the last six months were methamphetamine (67% powder, 33% base) and heroin (67%). The frequency of injection for each drug was variable and ranged from two occasions to once a week within the preceding six months.

Table 47: Recent injecting drug use patterns (recent injectors) among REU, 2010

	% injected last 6 months n=3	Median days injected last 6 months* (range)	Last drug injected n=3
Methamphetamine powder (%)	67	2.5 (2-3)	33
Methamphetamine base (%)	33	24 (n=1)	-
Crystal methamphetamine (%)	-	-	-
Ecstasy (%)	-	-	-
Methadone (%)	-	-	-
Buprenorphine (%)	-	-	-
Pharmaceutical stimulants (%)	-	-	-
Ketamine (%)	-	-	-
Heroin (%)	67	9 (2-15)	67
Other opioids (%)	-	-	-
Benzodiazepines (%)	-	-	-
Alcohol (%)	-	-	-
MDA (%)	-	-	-
Cocaine (%)	-	-	-
LSD (%)	-	-	-

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 6 occasions (range 2-40 times) in the six months preceding the interview, or once a month on average (Table 48). Recent injectors had typically injected with close friends (67%) and had last injected at their own homes (100%) during this time.

Table 48: Context and patterns of recent injection among REU, 2004-2010

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

Source: EDRS interviews

* Question not asked prior to 2009

Two-thirds (67%) had recently injected under the influence of and/or coming down from ecstasy and related drugs during the six months preceding the interview on a median of 1.5 days (range 1-2) during this time (Table 49).

No recent injectors reported sharing of needles but one participant reported sharing spoons/mixing containers and tourniquets in the last six months, practices which also increase the risk of exposure to blood-borne viral infections.

All participants reported obtaining needles from a pharmacy in the last six months.

Table 49: Recent injecting risk behaviour and obtaining needles in last six months, 2004-2010

	2004 n=9	2005 n=8	2006 n=9	2007 n=6	2008 n=7	2009 n=12	**2010 n=8**
Injected under influence &/or coming down from ERDs (%)	67	76	89	67	43	33	**67**
Median times injected under influence last 6 mths (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)**
Used needle after someone (%)	11 (n=1)	13 (n=1)	-	17 (n=1)	14 (n=1)	8 (n=1)	**-**
Shared other injecting equipment							
None (%)	44	38	56	50	43	83	**67**
Spoons/mixing containers (%)	44	13	22	17	14	8	**33**
Tourniquets (%)	33	38	33	-	43	-	**33**
Filters (%)	22	-	-	-	29	-	**-**
Water (%)	11	38	11	17	29	8	**-**
Needle source							
NSP (%)	100	88	89	50	43	33	**-**
Chemist (%)	11	25	56	67	71	50	**100**
Friend (%)	11	25	44	50	-	17	**-**
Dealer (%)	-	25	22	-	29	8	**-**
Partner (%)	-	-	11	-	-	-	**-**

Source: EDRS interviews

* Of those that had injected under the influence

10.2 Blood-borne viral infections (BBVI)

Over one-half (54%) of the 2010 REU sample had been vaccinated for hepatitis B (Table 50). The main reason reported for hepatitis B vaccination was overseas travel (52%), followed by childhood vaccination (28%), and work requirements (11%).

One-quarter (27%) of the 2010 REU sample had ever been tested for hepatitis C, with 18% of the sample having been tested in the last year (Table 50).

Two-fifths (40%) of participants had been tested for HIV at some stage, and 22% of the sample had been tested during the last year (Table 50).

Table 50: BBVI vaccination, testing and self-reported status, 2004-2010

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

Source: EDRS interviews

Note: BBVI questions were not asked in 2009

10.3 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.

Three-fifths (60%) of the regular ecstasy-using sample reported having penetrative sex with a casual partner during the six months preceding the interview (Table 51). The number of casual sexual partners was typically one to five partners during this time.

Over one-half (55%) 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 51), with almost two-fifths (38%) doing so on six or more occasions. These respondents most commonly reported having sex under the influence of alcohol (91%), followed by ecstasy (53%), cannabis (24%), or mephedrone (13%).

Of those who had sex with a casual partner in the preceding six months, around one-third reported that they never used protective barriers either when not under the influence (32%) or when under the influence of drugs/alcohol (33%) (Table 51). One-fifth reported that they always used protective barriers (30% and 22% respectively) and the remainder reported inconsistent use of protective barriers.

Whereas two-thirds (71%) of the 2010 REU sample had ever been for a sexual health check, almost one-third (29%) had never had a sexual health check-up (Table 52). The majority of the sample (78%) had never been diagnosed with a sexually transmitted infection (STI) and small proportions had been diagnosed with an STI in the last year (6%) or more than a year ago (16%). The most commonly diagnosed STI was Chlamydia (83%) followed by herpes (17%).

Two-thirds (67%) had been for a sexual health check-up in the last two years (Table 52). The main reasons for being tested for STIs in the last two years were having had unprotected sex (36%), starting a new relationship (23%), and having symptoms of an infection. A majority reported having a sexual health check-up at their GP (75%) and the remainder had visited a sexual health clinic (25%).

Female participants were asked about pap smear testing for cervical cancer (Table 52). Almost three-quarters (71%) of females reported having a pap smear in the last two years. The most common reason for not having a pap smear during this time was not having thought of it (50%), though some participants reported that they did not like them (16%) or that they were embarrassed/uncomfortable (17%). A majority reported having a pap smear at their GP (89%) and the remainder had visited a sexual health clinic (11%).

Table 51: Prevalence of sexual activity, protective barrier use in the preceding six months, 2004-2010

	2004 n=100	2005 n=100	2006 n=100	2007 n=98	2008 n=99	2009 n=99	**2010 n=100**
Penetrative sex with casual partner last 6 months (%)	61	69	45	54	60	54	**60**
Number of casual partners*	n/a	n/a	n/a	n/a	n=59	n=54	**n=60**
One partner (%)					18	33	**25**
Two partners (%)					23	20	**28**
Three-five partners (%)					41	35	**35**
Six-ten partners (%)					14	9	**8**
More than ten partners (%)					3	2	**3**
Sex with casual partners under influence drugs/alcohol (%)	47	49	34	40	47	49	**55**
Of those who had sex with casual partner on drugs/alcohol	n/a	n/a	n/a	n/a	n=52	n=49	**n=55**
Number of times	n/a	n/a	n/a	n/a			
Once (%)					10	18	**9**
Twice (%)					19	14	**15**
Three-five times (%)					40	16	**38**
Six-ten times (%)					12	29	**16**
More than ten times (%)					19	22	**22**
Drugs used last time	n/a	n/a	n/a	n/a			
Ecstasy (%)					65	67	**53**
Cannabis (%)					19	20	**24**
Alcohol (%)					98	90	**91**
Methamphetamine powder (%)					10	6	**4**
Methamphetamine base (%)					-	4	**-**
Crystal methamphetamine (%)					-	4	**-**
Cocaine (%)					2	6	**7**
LSD (%)					-	2	**4**
GHB (%)					-	-	**-**
Amyl nitrite (%)					6	4	**-**
Nitrous oxide (%)					-	4	**2**
Methadone (%)					-	4	**-**
Other opioids (%)					-	-	**-**
Benzodiazepines (%)					2	4	**-**
Psychedelic mushrooms (%)					-	4	**-**
Pharmaceutical stimulants (%)					-	2	**-**
MDA (%)					-	-	**2**
Mephedrone (%)					-	-	**13**
Methylone (%)					-	-	**2**
Sex with casual partner not under influence of drugs/alcohol*	n=56	n=67	n=45	n=50	n=56	n=54	**n=53**
Always use protective barrier (%)	36	45	47	38	36	22	**30**
Never use protective barrier (%)	7	19	11	18	20	33	**32**
Inconsistent or no barrier use (%)	64	55	53	62	64	39	**38**
Sex with casual partner under influence of drugs/alcohol*	n=43	n=48	n=32	n=37	n=52	n=49	**n=55**
Always use protective barrier (%)	35	44	34	24	31	20	**22**
Never use protective barrier (%)	12	19	9	22	15	37	**33**
Inconsistent or no barrier use (%)	65	56	66	76	69	43	**46**

Source: EDRS interviews

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

Table 52: STI testing and diagnosis among REU and pap smears among female REU, 2004-2010

	2004	2005	2006	2007	2008	**2010**
Ever had sexual health check (%)	n=96	n=100	n=95	n=99	n=99	**n=100**
No	53	51	37	38	33	**29**
Yes (in the last year)	33	32	40	40	45	**52**
Yes (more than one year ago)	14	17	22	21	21	**19**
Don't know	-	-	1	-	-	**-**
Ever diagnosed with STI (%)		n=98	n=95	n=99	n=98	**n=100**
No	n/a	92	90	85	81	**78**
Yes (in the last year)	n/a	5	6	6	8	**6**
Yes (more than one year ago)	n/a	2	4	9	11	**16**
Don't know	n/a	1	-	-	-	**-**
Tested for STI in past 2 years (%)	n/a	n/a	n/a	n/a	n/a	**n=100**
No (I didn't think of it)						**21**
No (another reason)						**12**
Yes						**67**
Reason for STI test (%)	n/a	n/a	n/a	n/a	n/a	**n=100**
Tested after relationship ended						**9**
Tested before new relationship						**23**
Because had unprotected sex						**36**
Symptoms of infection						**12**
Suggested by health care worker						**6**
Partner had symptoms						**2**
Suggested by ex-partner						**3**
Suggested by friend						**2**
General/annual check-up						**8**
Other						**3**
Had pap smear in last 2 years (%)	n/a	n/a	n/a	n/a	n/a	**n=42**
No						**29**
Yes						**71**
Reason for not having pap smear (%)	n/a	n/a	n/a	n/a	n/a	**n=12**
No symptoms						**8**
Don't like them						**16**
Didn't think of it						**50**
Embarrassed/uncomfortable						**17**
Other						**17**
Reason for last pap smear (%)	n/a	n/a	n/a	n/a	n/a	**n=30**
I had symptoms						**-**
Received reminder letter						**60**
Health care provider suggested						**10**
My friend suggested it						**3**
I know I was due						**37**

Source: EDRS interviews

Note: STI questions were not asked in 2009

10.4 Driving risk behaviour

Eighty-eight of the 100 REU interviewed in 2010 had driven a car during the six months preceding the interview (Table 53). Almost one-half of these (48%) 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 3 times (range 1-24) in the last six months. Three-fifths (61%) had been random breath tested (once or more) during the previous six months, and 7% of these were found to be over the legal blood alcohol limit during this time.

Two-fifths (39%, 95%CI 30-49) of those that had recently driven a car had driven soon after taking a drug in the last six months, which is lower relative to 2009 (51%, 95%CI 41-61%), but not statistically significant (p=.1). Of those that had driven under the influence (DUI) of drugs, the median number of times in the last six months was 3 (range 1-180). Five participants had been tested for drug driving by police during the last six months and a single participant reported testing positive for cannabis on their most recent test during this time. Of those that had driven under the influence, the drugs most commonly used were ecstasy (62%), cannabis (59%), methamphetamine (12% powder, 6% base) and mephedrone (12%).

For a recent study investigating risk factors associated with DUI of alcohol and other drugs among a large national sample of regular ecstasy users in Australia see Matthews et al. (2008).

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 (Table 54).

Those who had last driven under the influence of ecstasy had done so on an average of 3 hours after taking the drug (range 0.1-6). A majority perceived that that their driving had been 'slightly impaired' (69%).

Those who had last driven under the influence of cannabis had done so on an average of 1 hour after taking the drug (range 0.1-5). A majority perceived that that their driving had been 'slightly impaired' (47%) or that it had had 'no impact' on their driving (29%).

Table 53: Driving under the influence of drugs among REU, 2005-2010

Variable	2005 n=80	2006 n=81	2007 n=76	2008 n=86	2009 n=87	**2010 n=88**
Driven over legal alcohol limit last 6 months (%)#	58	48	37	49	59	**48**
Of these, median times driven over legal limit last 6 months (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)**
Random breath tested last 6 months (%)#	n/a	n/a	38	40	56	**61**
Of breath tested, over legal limit (≥1) (%)			7	-	15	**7**
Driven soon after taking drug (%)#	55	78	51	63	51	**39**
Of these, median times DUI of drugs last 6 months (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)**
Tested for drug driving last 6 months (%)#	n/a	n/a	n/a	2	2	**5**
Of those tested, tested positive (%)				-	-	**n=1**
Of these, drug used (%)^	n=44	n=63	n=39	n=54	n=44	**n=34**
Cannabis	68	52	46	52	48	**59**
Ecstasy	91	89	85	83	71	**62**
Methamphetamine powder	34	27	33	13	7	**12**
Methamphetamine base	9	24	8	4	7	**6**
Crystal methamphetamine	2	10	-	2	9	**-**
Benzodiazepines	2	5	3	6	5	
Psychedelic mushrooms	-	8	8	6	5	**6**
LSD	5	2	10	13	11	**9**
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**
Pharmaceutical stimulants	-	2	-	2	-	**-**
GHB	2	2	-	-	-	**-**
Methadone	-	2	-	2	-	**3**
2CI/2CB/2CE	-	2	-	-	2	**-**
Mephedrone	-	-	-	-	-	**12**
Methylone	-	-	-	-	-	**3**

Source: EDRS interviews

Of those who had driven a car in the last 6 months

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

Table 54: Perceived driving impairment associated with last occasion of driving under the influence of drugs among REU, 2007-2010

	2007	2008	2009	**2010**
Last DUI ecstasy	n=23	n=30	n=21	**n=13**
Median hours driven after taking ecstasy (range)	2 (0.2-25)	2 (0.1-12)	3 (0.1-8)	**3 (0.1-6)**
Perceived level of impairment				
Quite impaired	4	13	14	**8**
Slightly impaired	52	60	38	**69**
No impact	35	20	38	**8**
Slightly improved	9	7	5	**15**
Quite improved	-	-	5	**-**
Last DUI cannabis	n=9	n=25	n=19	**n=17**
Median hours driven after taking cannabis (range)	2 (0.1-8)	1 (0.1-12)	1 (0.1-12)	**1 (.1-5)**
Perceived level of impairment				
Quite impaired	11	-	5	**6**
Slightly impaired	67	56	53	**47**
No impact	11	32	37	**29**
Slightly improved	11	12	5	**18**
Quite improved	-	-	-	**-**
Last DUI methamphetamine	n=11	n=3	n=5	**n=2**
Median hours driven after taking cannabis (range)	2 (0.25-9)	1 (0.1-5)^	2 (0.5-4)^	**2 (0.1-4)^**
Perceived level of impairment				
Quite impaired	-	-	20	**-**
Slightly impaired	55	67	20	**-**
No impact	18	-	60	**-**
Slightly improved	27	33	-	**100**
Quite improved	-	-	-	**-**

Source: EDRS interviews
^ n<5

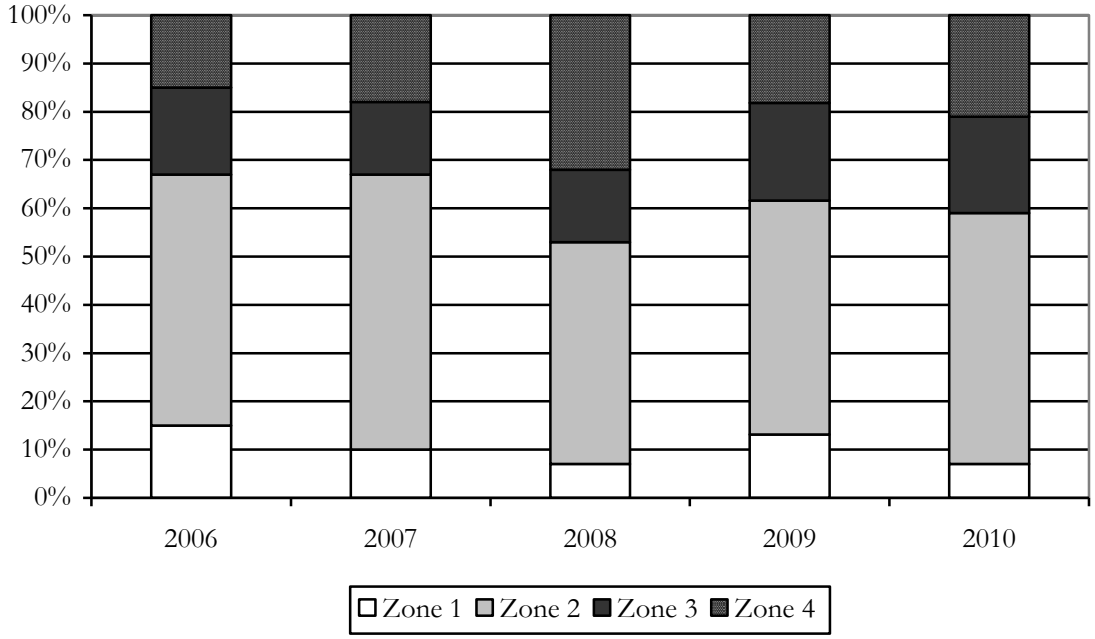
10.5 Alcohol Use Disorders Identification Test (AUDIT)

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 14.6 (median=14; range 1-28, SD=5.4). Of those REU that completed the AUDIT (n=99), a large majority (93%) 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 23 shows the proportion of REU categorised within each of the AUDIT risk categories between 2006 and 2010. In 2010, just 7% of the REU that completed the AUDIT scored in zone 1 (a level reflecting low-risk drinking or abstinence). Over one-half (52%) scored in zone 2 (alcohol use in excess of low-risk guidelines[6]), a further 20% scored in zone 3 (harmful or hazardous drinking) and 21% scored in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence).

[6] 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.

Figure 23: Proportion of REU categorised with each AUDIT risk zone, 2006-2010



Source: EDRS interviews

10.6 Binge drug use

Table 55 shows that one-quarter (24%) of the 2010 REU sample had recently 'binged' on ERDs (used for more than 48 hours continuously without sleep) which is similar to the proportion in 2009 (27%). Those that had recently binged had done so on a median of 2 occasions (range 1-20) during the six months preceding the interview. The median length of the longest period of continuous use during this time was 2 days (range 2-3 days). Of those that had recently 'binged', the substances used most commonly during any one binge session of use were ecstasy (79%), alcohol (83%), cannabis (42%), mephedrone (38%), cocaine (33%), methamphetamine (29% powder, 8% base) and LSD (21%).

Table 55: Binge drug use among REU, 2003-2010

Variable	2003 n=100	2004 n=100	2005 n=80	2006 n=98	2007 n=100	2008 n=96	2009 n=100	**2010 n=100**
Binged on any drug in last six months (%)#	45	35	39	46	38	38	27	**24**
Median times binged in last 6 months (range)*	n/a	n/a	n/a	3 (1-24)	3 (1-24)	2 (1-15)	2 (1-48)	**2 (1-20)**
Median length (days) biggest binge last 6 months (range)*	2.5 (2-8)	2.5 (2-5)	2.5 (2-5)	2.5 (2-6)	2.5 (2-6)	2.3 (2-5)	2 (2-5)	**2 (2-3)**
Drugs used in a binge session in last 6 mths (%)*								
Ecstasy	91	97	95	93	100	92	96	**79**
Methamphetamine powder	53	71	64	49	58	47	26	**29**
Methamphetamine base	21	-	23	36	21	11	11	**8**
Crystal methamphetamine	36	11	13	36	5	14	19	**-**
Pharmaceutical stimulants	-	3*	5	2	8	3	4	**8**
Cocaine	2	3*	13	27	11	19	19	**33**
LSD	9	20	26	16	13	31	11	**21**
Ketamine	11	-	10	-	5	3	-	**-**
MDA	7	6	-	-	-	-	4	**-**
GHB	-	-	3*	4	3	-	4	**-**
Amyl nitrite	25	9	10	2	8	3	4	**4**
Nitrous oxide	11	20	18	20	32	17	11	**4**
Cannabis	62	54	79	53	45	50	41	**42**
Alcohol	62	80	77	60	76	81	85	**83**
Benzodiazepines	2	3	-	-	-	-	-	**8**
Psychedelic mushrooms	4	11	3*	27	16	17	11	**8**
2CI	-	-	-	11	3	-	-	**-**
Other opioids	-	-	-	-	-	3	-	**-**
Mephedrone	-	-	-	-	-	-	-	**33**
Methylone	-	-	-	-	-	-	-	**4**
DOI	-	-	-	-	-	-	-	**4**
BZP	-	-	-	-	-	-	-	**4**
Energy drinks	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**25**

Source: EDRS interviews

Used for 48 hours continuously without sleep

* Among those who had binged

10.7 Summary of risk behaviour

- **Injecting drug use.** Consistent with the low levels of intravenous drug use among previous REU cohorts, only a small proportion (3%) of the 2010 REU sample had recently used substances intravenously. Methamphetamine and heroin 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.** Over one-half (54%) of the 2010 REU sample had been vaccinated for hepatitis B, one-quarter (27%) had been tested for hepatitis C and two-fifths (40%) had been tested for HIV.
- **Sexual risk behaviour.** Three-fifths (60%) of REU reported penetrative sex with a casual partner during the six months preceding the interview and one-half (55%) reported sex with a casual partner while under the influence of drugs, most commonly alcohol or ecstasy. Regardless of whether under the influence of ERDs, only around one-fifth reported 'always' using protective barriers with a casual partner and approximately one-third 'never' used protective barriers. Almost one-third (29%) had never had a sexual health check-up. A majority (78%) had never been diagnosed with a STI and the remainder had been diagnosed in the last year (6%) or more than a year ago (16%). The most commonly diagnosed STIs were Chlamydia (83%) and herpes (17%).
- **Drug driving.** Of those who had driven a car, one-half (48%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months, and two-fifths (39%) reported driving within an hour of taking illicit drugs in the last 6 months, marking a reduction (though not statistically significant) relative to 2009 (51%). Most commonly, participants reported driving under the influence of ecstasy, cannabis, methamphetamine, and mephedrone.
- **Alcohol Use Disorders Identification Test (AUDIT).** Just 7% of the REU that completed the AUDIT scored in zone 1 (low-risk drinking or abstinence). One-half (52%) scored in zone 2 (alcohol use in excess of low-risk guidelines), a further 20% scored in zone 3 (harmful or hazardous drinking), and 21% scored in zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence).
- **Binge drug use.** One-quarter (24%) 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 alcohol, ecstasy, cannabis, mephedrone, cocaine, methamphetamine, and LSD.

11.0 HEALTH-RELATED ISSUES

11.1 Overdose

Less than one-fifth (16%) of REU had overdosed on any drug at some stage of their life (Table 56). Of those who had ever overdosed on any drug, the median number of times was 2 (range 1-40). Less than one-tenth (6%) of the 2010 REU sample (all males) had overdosed on a drug in the preceding six months.

Table 56: Overdose on both stimulants and depressants among REU, 2004-2010

	2004 n=100	2005 n=99	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Ever overdosed on any drug (%)	n/a	30	24	27	23	24	**16**
Median times ever overdosed (range)*	n/a	2 (1-50)	1 (1-5)	2 (1-20)	3 (1-30)	2 (1-10)	**2 (1-40)**
Overdosed on any drug last 6 mths (%)	18	16	8	11	12	7	**6**

Source: EDRS interviews

* Of those reporting overdose episode

Participants were asked to distinguish between stimulant and depressant drug overdose episodes (Table 57). 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.

Less than one-tenth (6%) of the 2010 sample had ever overdosed on a stimulant drug, and 2% of the sample had overdosed on a stimulant drug in the last six months preceding the interview. The main drugs involved were ecstasy and pharmaceutical stimulants and other drugs included alcohol and cannabis.

Over one-tenth (12%) of the sample had ever overdosed on a depressant drug and 6% of the sample had overdosed on a depressant drug in the six months preceding the interview. The main drugs involved in the last depressant overdose in the last six months were alcohol (75%) and 'other opioids' (25%) and other drugs included ecstasy, cannabis, and methadone.

Table 57: Overdose (OD) on stimulants and depressants among REU, 2007-2010

	Stimulant overdose				Depressant overdose			
	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Ever overdosed (%)	7	16	8	6	23	13	18	**12**
OD last 6 mths (%)	2	6	1	2	9	7	6	**4**
Median number times ever OD (range)	2 (1-12)	1 (1-10)	1 (1-5)	2 (1-3)	2 (1-20)	2 (1-30)	2 (1-10)	**2 (1-40)**
Main drug last OD*	n=2	n=6	n=1	n=2	n=9	n=7	n=6	**n=4**
Ecstasy (%)	-	67	-	50	-	-	-	**-**
Meth powder (%)	50	-	-	-	-	-	-	**-**
Meth base (%)	-	17	-	-	-	-	-	**-**
Crystal meth (%)	-	17	100	-	-	-	-	**-**
Mushrooms (%)	50	-	-	-	-	-	-	**-**
Alcohol (%)	-	-	-	-	89	71	67	**75**
Benzodiazepines (%)	-	-	-	-	11	29	-	**-**
Cannabis (%)	-	-	-	-	-	-	17	**-**
GHB (%)	-	-	-	-	-	-	17	**-**
Pharm. Stimulants (%)	-	-	-	50	-	-	-	**-**
Other opioids (%)	-	-	-	-	-	-	-	**25**
Other drugs last OD*	n=2	n=6	n=1	n=2	n=9	n=7	n=6	**n=4**
Ecstasy (%)	-	17	-	50	22	43	33	**50**
Meth powder (%)	-	17	-	-	-	14	-	**-**
Meth base (%)	-	-	-	-	-	-	-	**-**
Crystal meth (%)	-	17	-	-	-	-	-	**-**
Alcohol (%)	-	67	-	50	-	14	17	**25**
Cannabis (%)	-	50	-	50	22	29	-	**25**
Antidepressants (%)	-	-	-	-	11	14	-	**-**
Benzodiazepines (%)	-	17	-	-	-	14	-	**-**
Pharm. stimulants (%)	-	17	-	-	-	-	-	**-**
Amyl nitrite (%)	-	17	-	-	-	-	-	**-**
LSD (%)	-	-	-	-	-	14	-	**-**
Other opioids (%)	-	-	-	-	-	14	-	**-**
Cocaine (%)	-	-	-	-	-	-	17	**-**
Methadone (%)	-	-	-	-	-	-	-	**25**
Location last OD*	n=2	n=6	n=1	n=2	n=9	n=6	n=6	**n=4**
Home (%)	100	17	100	100	33	17	33	**-**
Friend's home (%)	-	33	-	-	22	50	-	**50**
Pub (%)	-	17	-	-	-	-	-	**-**
Live music event (%)	-	-	-	-	11	17	33	**25**
Nightclub (%)	-	17	-	-	11	-	17	**-**
Public place (%)	-	17	-	-	22	-	-	**-**
Rave/doof/dance party	-	-	-	-	-	-	-	**-**
Outdoors (%)	-	-	-	-	-	17	-	**-**
Private party (%)	-	-	-	-	-	-	17	**25**
Other (%)	-	-	-	-	-	-	-	**-**
Treatment last OD*	n=7	n=6	n=1	n=2	n=9	n=7	n=6	**n=4**
None (%)	50	-	-	50	-	-	83	**25**
Watched by friends (%)	50	100	-	-	78	71	-	**50**
Onsite help (%)	-	-	-	-	-	29	-	**25**
Hospital/ambulance (%)	-	-	-	-	11	-	17	**-**
Taken to doctor (%)	-	-	100	-	11	-	-	**-**
Other (%)	-	-	-	50	-	-	-	**-**
Median hours partying before OD (range)*	0.25 (0-0.5)	8 (3-16)	120 n=1	10 n=1	5 (0-12)	8 (2-30)	n/a	**18 (6-24)**

Source: EDRS interviews

* Of those reporting overdose episode in last 6 months

11.2 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 0-12). Over one-half of participants (54%) obtained a score of zero on the ecstasy SDS, and one-fifth (19%) obtained a score of one on the scale: thus, two-thirds of respondents reported no or few symptoms of dependence in relation to ecstasy use. A score of three or more on the SDS provides a good balance between sensitivity and specificity for identifying problematic ecstasy use (Bruno, Gomez & Matthews, 2009). Almost one-fifth (15%) of the 2010 REU sample had a score of 3 or above on the ecstasy SDS. For further information with regard to ecstasy dependence, please contact: Dr Raimondo Bruno (Raimondo.Bruno@utas.edu.au)

11.3 Self-reported symptoms of methamphetamine dependence

REU participants that had used methamphetamine during the six months preceding the interview (n=45) 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 zero (93%), indicating no symptoms of dependence. A score of four 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 4% (n=2) of those REU who completed the methamphetamine SDS had a score of 4 or more, and it is reasonable to assume that some proportion of these people had experienced significant psychological symptoms of dependence.

11.4 Help-seeking behaviour

One-sixth (14%) of the 2010 REU sample had accessed a health or medical service in relation to their drug use in the six months preceding interview (Table 58). Some participants had accessed more than one service during this time. Among those who had recently accessed health services, the most commonly accessed services were a psychologist (39%) and a GP (29%), followed by a counsellor (21%), psychiatrist (17%), drug and alcohol worker (15%), and first aid (14%).

Participants that had accessed health services in relation to their drug use in the last six months were asked to specify the main drug and the main issue involved. Services had typically been accessed in relation to alcohol (39%), cannabis (22%) and ecstasy (13%). The main issues involved in these treatment episodes were dependence/addiction (39%), self-harm (30%). mental health problem (13%), and acute physical symptoms (13%).

Table 58: Access to health services in relation to drug use among REU, 2004-2010

	2004 n=100	2005 n=99	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Accessed health service in last 6 months (%)	10	17	22	15	14	13	**14**
Services accessed*	n=10	n=17	n=22	n=15	n=14	n=13	**n=14**
GP (%)	30	59	45	40	50	69	**29**
First aid (%)	10	12	23	7	21	15	**14**
Ambulance (%)	-	-	27	-	7	8	**7**
Emergency (%)	-	12	18	-	21	15	**7**
Hospitalisation (%)	20	6	14	-	-	15	**-**
Counsellor (%)	20	18	14	27	21	23	**21**
Drug and alcohol worker (%)	10	-	14	7	7	23	**15**
Psychologist (%)	10	6	14	13	7	15	**39**
Psychiatrist (%)	-	6	9	-	7	15	**17**
Telephone counselling (%)	-	-	-	-	-	-	**8**
Internet counselling (%)	-	-	-	7	-	8	**-**
Other (%)	-	6	-	-	-	-	**7**
Main drug involved in treatment episode*							**n=23**
Alcohol (%)							**39**
Ecstasy (%)							**13**
Methamphetamine (%)							**4**
Cannabis (%)							**22**
Methadone (%)							**-**
Polydrug (%)							**9**
Mephedrone (%)							**9**
Opium (%)							**4**
Main issue involved in treatment episode*							**n=23**
Dependence/addiction (%)							**39**
Information/advice (%)							**-**
Mental health problem (%)							**13**
First aid/acute physical symptoms (%)							**13**
Court diversion (%)							**4**
Self-harm (%)							**30**

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

11.5 Mental health problems and psychological distress

11.5.1 Mental health problems

Almost one-third (30%) of the 2010 REU sample reported that they had experienced mental health problems during the six months prior to the interview (Table 59). Of those who had experienced mental health problems, the most common problems experienced were depression (60%), anxiety (60%) and paranoia (17%).

Just over one-third (33%) of those who reported experiencing mental health problems had attended a health professional in relation to these problems during the last six months. Few participants (n=4) reported being prescribed medications for psychological conditions during this time.

Table 59: Self-reported mental health problems, 2007-2010

	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Experienced mental health problem last 6 months (%)	35	27	30	**30**
Of those who experienced mental health problems	n=35	n=27	n=30	**n=30**
Depression (%)	66	70	67	**60**
Anxiety (%)	54	70	73	**60**
Paranoia (%)	14	15	20	**17**
Panic (%)	9	-	7	**10**
Psychosis (%)	6	11	-	**3**
Obsessive compulsive disorder (%)	6	15	3	**3**
Bipolar disorder (%)	3	11	-	**10**
Eating disorder (%)	3	-	-	**-**
Self-harm (%)	3	-	-	**-**
Schizophrenia (%)	-	4	-	**-**
Mania (%)	-	4	-	**-**
Personality disorder (%)	-	4	-	**-**
Phobia (%)	-	-	3	**-**
Seen mental health professional last 6 months (%)	34	48	53	**33**
Prescribed antidepressants in last 6 months (%)	17	19	30	**3**
Prescribed benzodiazepines in last 6 months (%)	9	22	20	**3**
Prescribed antipsychotics in last 6 months (%)	3	7	-	**3**

Source: EDRS interviews

11.5.2 Psychological distress

The Kessler Psychological Distress Scale (K10) is a ten-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 five-point Likert scale.

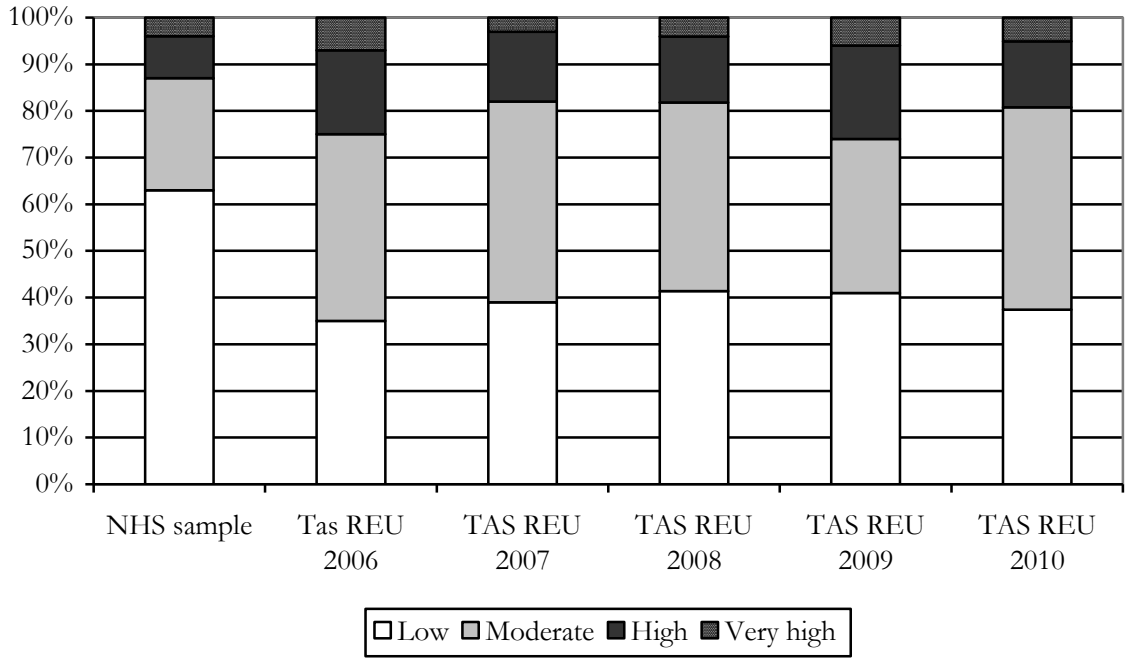
Among a normative Australian population sample, the mean K10 score was 14.2 and the median was 12 (range 0-50) (Andrews & Slade, 2001). Among the REU interviewed in 2010, the mean K10 score was slightly higher at 17 (SD=5.0) and the median score was 17 (range 10-33) of a possible score of 50.

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 five REU participants (5%) had a score of 30 and above and therefore 'very high' levels of psychological distress. Just over one-tenth scored in the 'high' category (14%), and two-fifths each scored in the 'moderate' category (43%) or 'low' (37%) category.

Figure 24 shows a comparison between the EDRS sample with data from the 2004/05 National Health Survey which was based on a large (n=19,501) normative sample from the general Australian adult population (18-85+) (ABS, 2006). The proportion of the 2010 EDRS sample with scores categorised as 'very high' or 'high' is similar to the NHS sample (5%, 95%CI 2.2-11.2% vs. 4%, 95%CI 3.7-4.3%, $p>.05$ and 14%, 95%CI 8.5-22% vs. 9%, 95%CI 8.6-9.4, $p<.001$). However, the proportion of the EDRS sample with scores classified as 'moderate' was significantly greater than the NHS sample (43%, 95%CI 34-53% vs. 24%, 95%CI 23.4-24.6%, $p<.05$) and the proportion of the EDRS sample with scores classified as 'low' was significantly smaller relative to the NHS sample (37%, 95%CI 28-47% vs. 63%, 95%CI 62.3-63.7%, $p<0.001$).

Figure 24: Responses to the K10 questionnaire in the National Health Survey 2004/05 and EDRS, 2006-2010



Source: EDRS interviews, 2006-2010 and National Health Survey, 2004/05

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

REU were asked if their drug use had caused recurrent problems during the six months preceding the interview (Table 60). These questions were chosen to be consistent with diagnostic criteria for substance abuse disorders, and based on the Comprehensive International Diagnostic Interview (CIDI). One-third (35%) reported any recurrent drug-related problem, suggestive of possible substance abuse. One-quarter of the sample (23%) indicated that their drug use had recurrently interfered with their responsibilities at home, at work, or at school. One-fifth (22%) 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. Just over one-tenth of the sample (13%) 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 (3%) reported that they had experienced recurrent drug-related legal problems.

Table 60: Self-reported recurrent drug-related problems in last six months, 2007-2010

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

Source: EDRS interviews

Table 61 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, alcohol, and mephedrone.

Table 61: Main drug attributed to problems experienced in the last six months, 2010

	Responsibility problems	**Risk problems**	**Social problems**	**Legal problems**
	n=23	n=22	n=13	*n=3*
Ecstasy	17	27	23	-
Cannabis	35	18	39	-
Methamphetamine powder	-	-	8	-
Methamphetamine base	-	-	8	-
Crystal methamphetamine	-	-	-	-
Alcohol	30	41	-	*67*
Benzodiazepines	-	-	-	-
LSD	4	5	-	-
Other opioids	-	-	-	-
Heroin	-	5	-	
Methadone	-	5	-	-
Mephedrone	13	-	15	*33*

Source: EDRS interviews

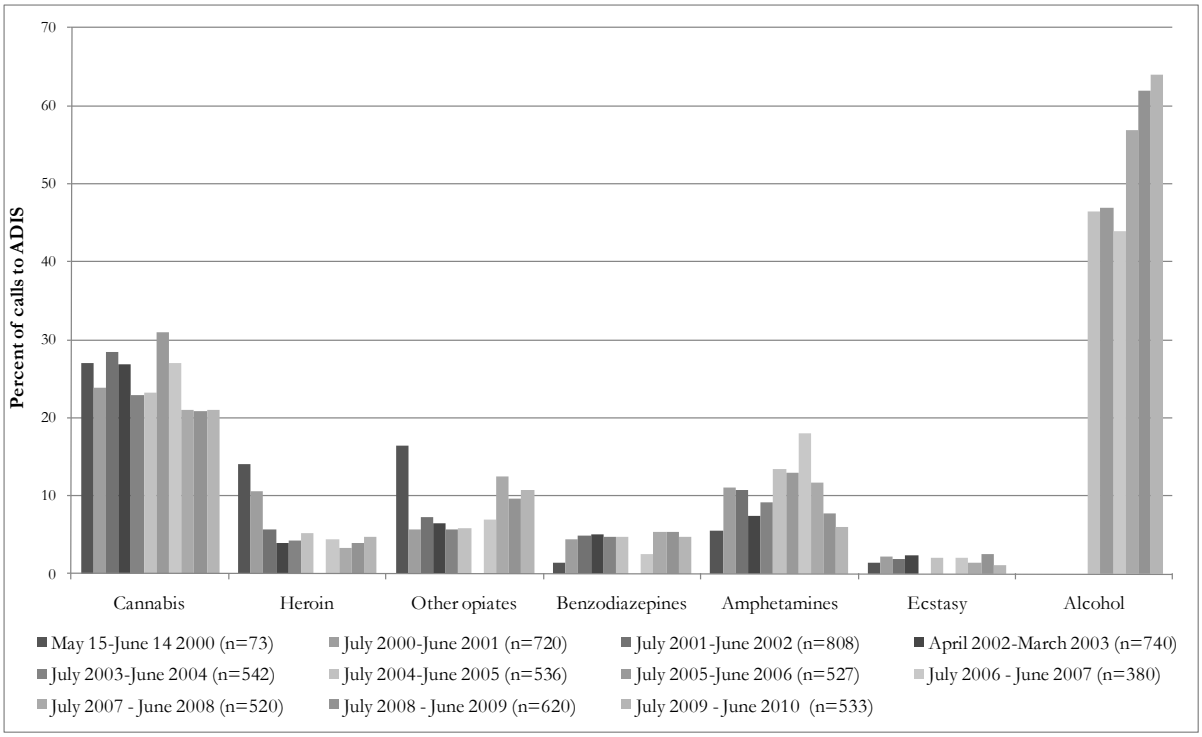
11.7 Drug treatment indicator data

11.7.1 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 (6-17 calls) have been recorded in relation to ecstasy between the 2000/01 and the 2009/10 reporting periods (Figure 26).[7] Figures 25 and 26 show that calls in relation to ecstasy account for a very small percentage (between 1.1% and 2.6%) of the total calls made to the service. For the 2009/10 reporting period, over three-fifths (64%) of all calls related to alcohol, followed by cannabis (21%), and other opiates (11%), a pattern in keeping with the overall trends in previous years (Figure 25).

Figure 25: Percentage of inquiries to ADIS for each drug type, May 2000-June 2010

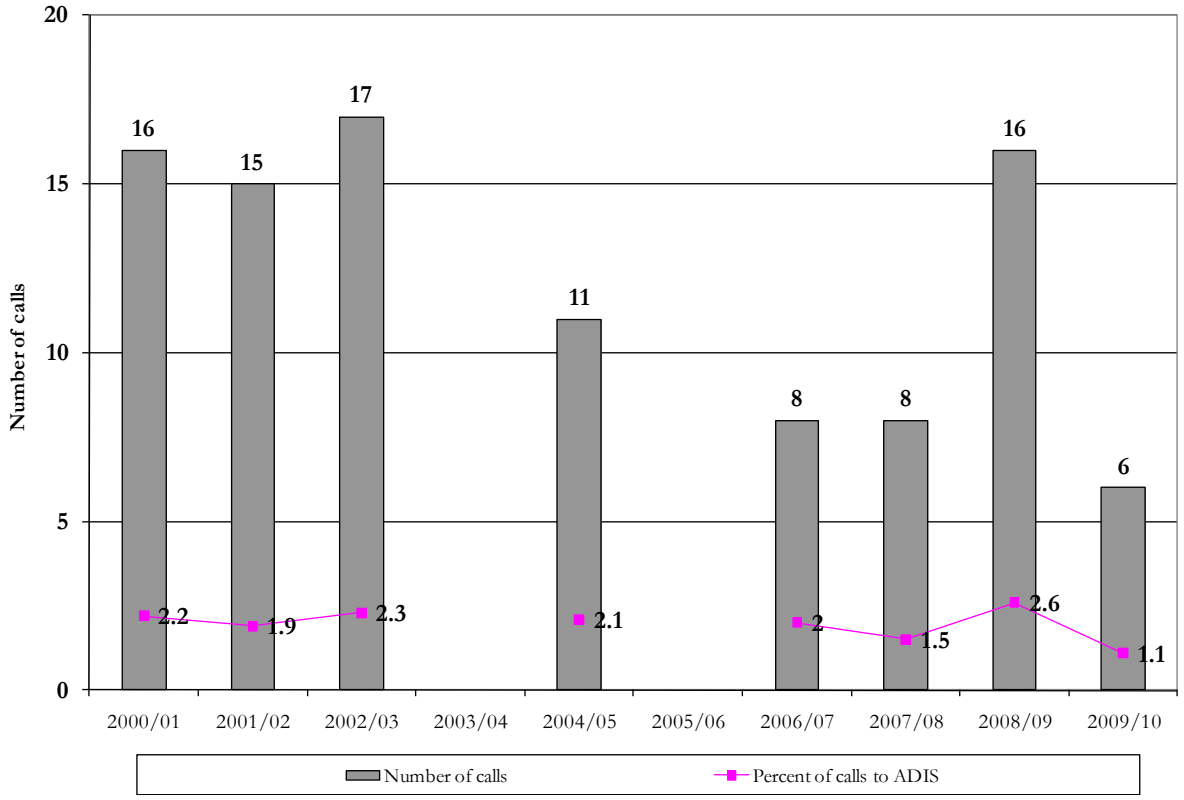


Source: ADIS Tasmania reports, Turning Point Alcohol and Drug Centre

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.

[7] 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 26: Number of calls and percentage of inquiries to ADIS with regard to ecstasy, May 2000-June 2010



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

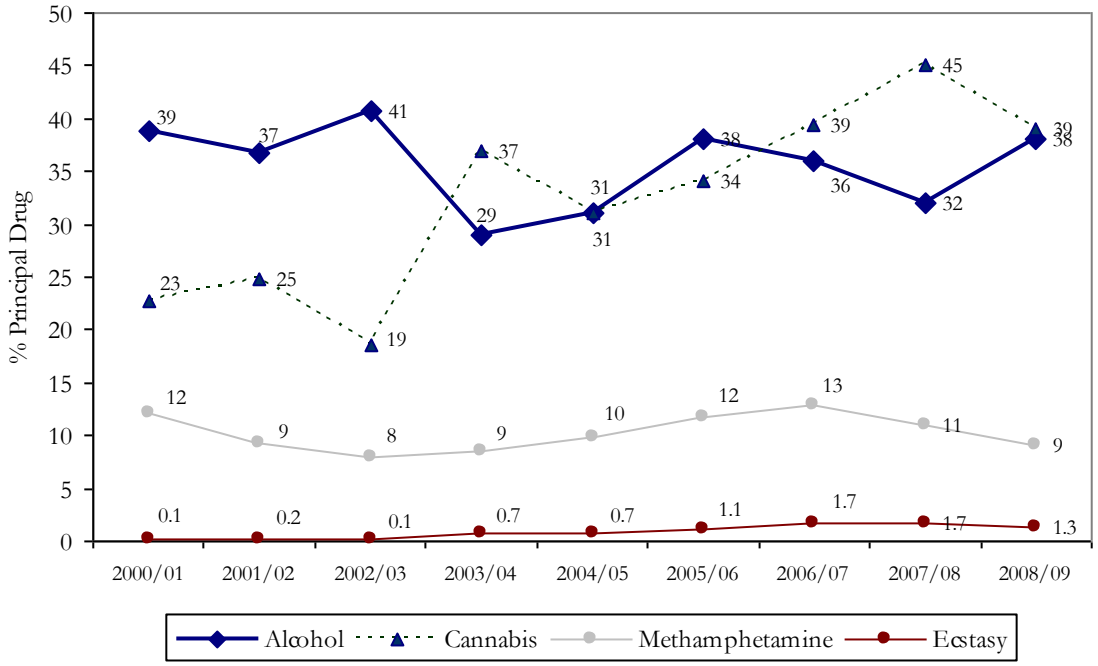
Note: Calls referring to ecstasy were not specified in the 2003/04 and 2005/06 reports.

11.7.2 National Minimum Data Set (NMDS) treatment episode data

Figure 27 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, 2008c). Data for the 2009/10 financial year were not available at the time of publication.

Of all drug treatment episodes reported to the NMDS in Tasmania during 2007/08, almost two-fifths (39%) involved cannabis as the principal drug of concern, two-fifths (38%) involved alcohol and one-tenth (9%) involved meth/amphetamine. Treatment episodes in which ecstasy was the principal drug of concern accounted for 1.3% of all episodes (equating to approximately 26 treatment episodes out of a total of 1,983).

Figure 27: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set: Principal drug of concern, 2000/01-2008/09



Source: Australian Institute of Health and Welfare

11.8 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 2007/08 financial year periods. Data for the 2008/09 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 2010 IDRS report (de Graaff & Bruno, 2011). There are no objective hospital admission data in relation to substances such as ecstasy, ketamine, GHB, LSD, and MDA in Tasmania.

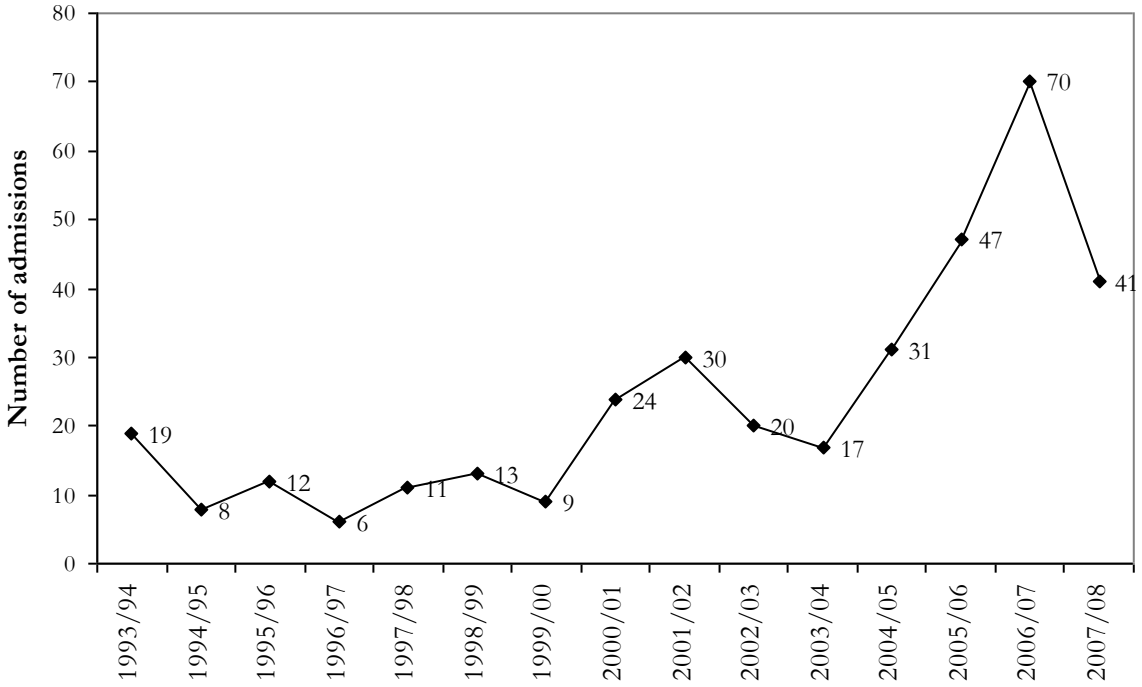
11.8.1 Cannabis

Tasmanian public hospital admissions where cannabis use was noted as the principal diagnosis are presented in Figure 28 below. 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 has 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 was a reduction in 2007/08 relative to 2006/07, with 41 cases reported.

When the population-adjusted rates of Tasmanian admissions are compared with those nationally (Figure 29), it is clear that Tasmanian admission rates in 2007/08 are slightly higher than those seen nationally (156 vs. 135 admissions per million population). However, this marks

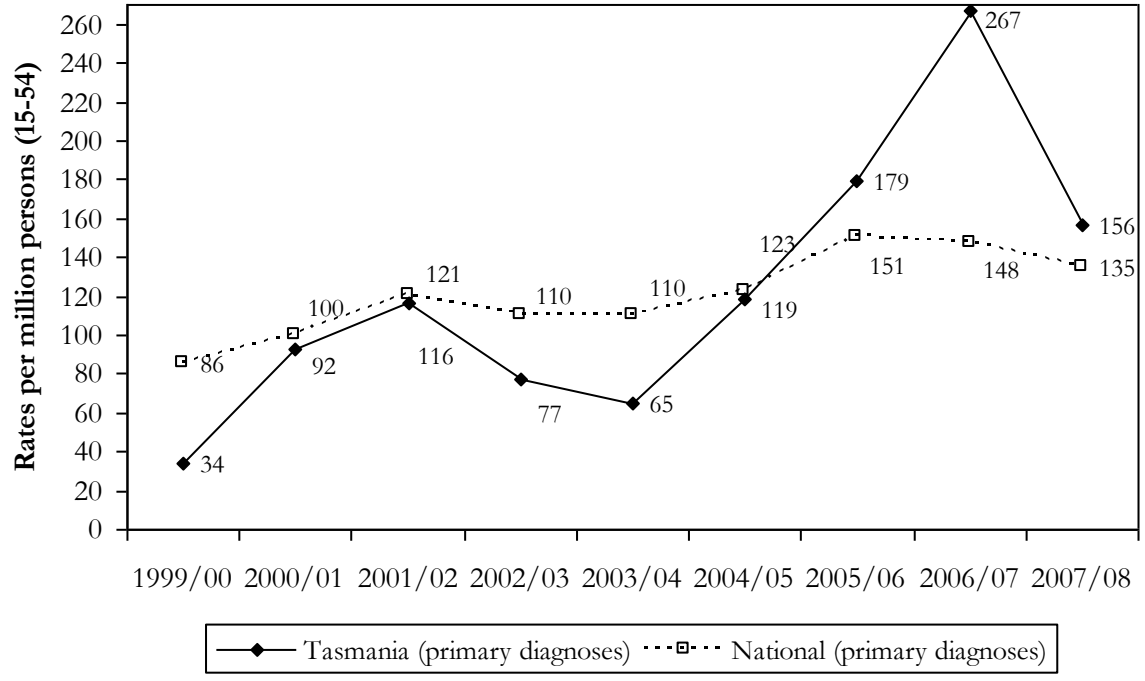
a return to admission rates that are more comparable to the national rates, as Tasmanian admission rates were substantially higher than the national rates in 2006/07.

Figure 28: Public hospital admissions (aged 15-54) in Tasmania where cannabis use was noted as the primary factor contributing to admission, 1993/94-2007/08



Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2010)
Note: 2008/09 data not available at the time of publication

Figure 29: Public hospital admissions (aged 15-54) where cannabis was noted as the primary contribution to admission, rates per million population for Tasmania and Australia, 1999/00-2007/08

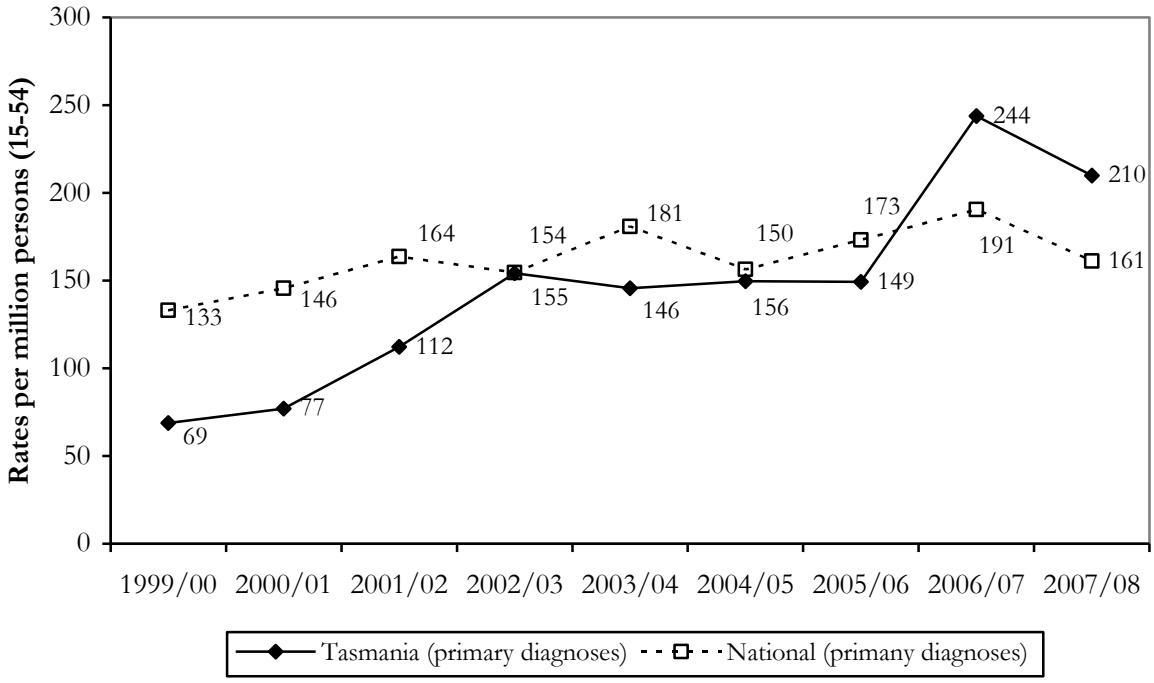


Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2010)
Note: 2008/09 data not available at the time of publication

11.8.2 Methamphetamine

Tasmanian public hospital admissions where methamphetamine use was noted as the principal diagnosis (rates per million population) are presented in Figure 30 below. Both local and national admission rates were increasing steadily between 1999/00 and 2001/02, and began to plateau in 2002/03 (national) and 2003/04 (Tasmania). As such, between the 2002/03 and 2005/06 periods, the Tasmanian admission rates remained relatively stable and were very similar or somewhat lower than those seen nationally. However, in 2006/07 there was a substantial increase in the Tasmanian admission rate, to a level considerably higher than the national figure (244 vs. 191 admissions per million population). There was a reduction in the Tasmanian admission rates in 2007/08 but they still remain above the national admission rate for this period (210 vs. 161 admissions per million population).

Figure 30: 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 1999/00-2007/08

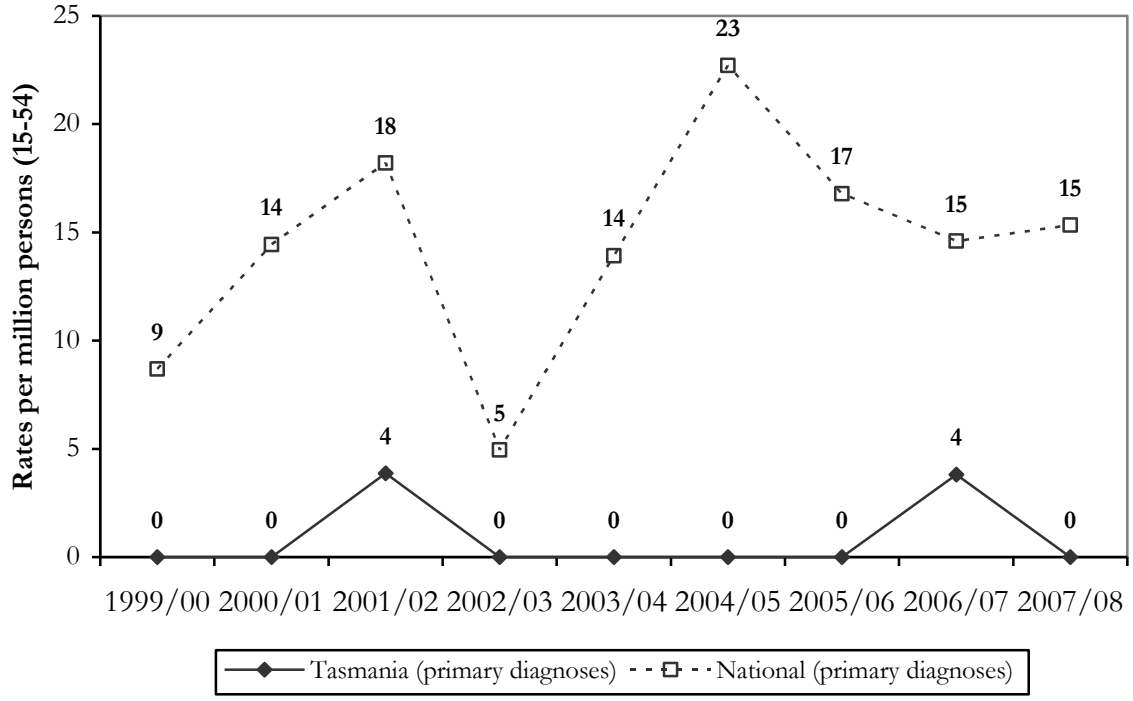


Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2010)
Note: 2008/09 data not available at the time of publication

11.8.3 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 31), these are substantially lower, with the total local cases where cocaine was noted as the primary factor contributing to the admission remaining substantially less than that of the national rate between 1999/00 and 2007/08.

Figure 31: 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, 1999/00-2007/08



Source: Australian Institute of Health and Welfare (Roxburgh & Burns, 2010)
Note: 2008/09 data not available at the time of publication

11.9 Summary of health-related issues

- **Overdose.** Less than one-tenth of the 2010 REU sample (6%) reported an overdose episode in the last six months, with 2% reporting a recent overdose episode on a stimulant drug (e.g., ecstasy and pharmaceutical stimulants) and 4% reporting 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.** Over one-tenth (15%) of REU reported experiencing significant symptoms of dependence in relation to ecstasy.
- **Methamphetamine dependence.** Less than one-tenth (4%) 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 one-sixth (14%) of the 2010 REU sample had accessed health services in relation to drug use in the last six months, and when they did so, this was most commonly a psychologist (39%) and a GP (29%). Participants were most likely to access services in relation to the use of alcohol (39%), cannabis (22%), and ecstasy (13%).
- **Mental health problems.** Almost one-third (30%) of the 2010 REU sample reported experience of mental health problems during the six months prior to the interview, most commonly depression (60%) and/or anxiety (60%). Just over one-third (33%) 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 slightly higher among the current sample of REU relative to the general Australian population. The proportion of the sample with scores categorised as 'very high' or 'high' was similar to the general Australian population; however, the proportion of REU with scores classified as 'moderate' 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.** One-third (35%) of the 2010 sample reported a recurrent drug-related problem, suggestive of possible substance abuse. One-quarter (23%) reported that drug use had recurrently interfered with their responsibilities at home, work, or school during the six months preceding the interview. One-fifth had recurrently put themselves or others at risk (22%) and smaller proportions had experienced recurrent social/relationship (13%) problems or legal/police problems (3%) in relation to drug use. Problems were most commonly attributed to ecstasy, cannabis, alcohol, or mephedrone.

11.9 Summary of health-related issues (continued)

- **Tasmanian 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 (6-17 calls), these account for a small percentage (between 1.2% 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 1.3% of all treatment episodes in the 2008/09 period (equating to approximately 26 treatment episodes out of a total of 1,983).
- **Tasmania hospital admission data**.
- In 2005/06 cannabis admissions were higher than the national rate (179 and 151 admissions per million persons respectively), with a further substantial increase seen in 2006/07 (267 vs. 142 admissions per million population). There was a reduction in Tasmanian admission rates in 2007/08 such that they are more comparable with those seen nationally but still slightly higher (156 vs. 135 admissions per million population).
- Tasmanian 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 the local rate of methamphetamine-related admissions, to a level that is considerably higher than the national rate (244 vs. 185 admissions per million persons respectively). There was a reduction in the Tasmanian admission rates in 2007/08 but they still remain above the national admission rate for this period (210 vs. 161 admissions per million population).
- There has been very few hospital admissions recorded in Tasmania in relation to cocaine.

12.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

12.1 Reports of criminal activity among REU

Almost one-quarter (24%) of the 2010 REU sample self-reported engaging in some type of crime within the last month (Table 62).

Consistent with previous years, the most common crime was drug dealing, with almost one-fifth (15%) reporting dealing drugs for cash profit in the last month. The majority of REU that reported drug dealing for cash profit had done so less than weekly in the last month (n=8) and others had done so at least once a week (n=4), more than once a week (n=1) or daily (n=2).

Smaller proportions of the sample reported committing property crime (8%) or violent crime (5%) during the last month. A majority of those that had recently committed property crime and all of those who had committed violent crime or fraud had done so less than weekly in the preceding month.

One-tenth of the sample (13%) had been arrested during the 12 months preceding the interview. These participants had been arrested for a variety of offences (see Table 62), with only small proportions having been arrested for drug-related offences, such as use/possession (n=2) or dealing/trafficking (n=1).

Table 62: Criminal activity reported by REU, 2003-2010

Criminal activity in the last month (%)	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Any crime	30	19	15	26	28	28	24	**24**
Drug dealing	25	16	8	21	24	24	18	**15**
Property crime	4	6	4	5	11	6	11	**8**
Fraud	1	-	3	3	1	2	1	**-**
Violent crime	-	-	2	1	5	2	1	**5**
Arrested last 12 mths (%)	6	3	9	8	10	6	10	**13**
Property crime	1	3	1	1	1	-	3	**-**
Drug use/possession	-	-	1	1	1	1	3	**2**
Violent crime	-	-	1	1	2	-	1	**-**
Dealing/trafficking	-	-	2	-	-	-	1	**1**
Driving offence	1	-	-	-	-	-	2	**-**
DUI alcohol	2	-	2	2	3	2	3	**4**
DUI drugs	-	-	1	-	-	-	1	**-**
Other reason	1	-	2	2	5	4	4	**8**

Source: EDRS interviews

Note: No distinction made between dealing for cash profit and ecstasy profit prior to 2004.

12.2 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 63). Just over one-fifth (21%) perceived a recent increase in police activity. A majority of the sample (74%) indicated that police activity had not made it more difficult for them to score drugs during the six months preceding the interview.

Those that commented on increased police activity perceived a recent increase in police presence at nightclubs (n=4), an increased likelihood of being approached/searched in the street (n=5), and an increased number of raids/busts (n=6) and drug-related arrests (n=3).

Table 63: Perceptions of police activity by REU, 2003-2010

Perception	2003 n=100	2004 n=100	2005 n=100	2006 n=100	2007 n=100	2008 n=100	2009 n=100	**2010 n=100**
Any recent changes in police activity?								
Decreased (%)	1	4	1	1	4	1	-	**1**
Stable (%)	24	35	43	24	29	33	42	**42**
Increased (%)	55	31	27	30	23	26	15	**21**
Don't know (%)	20	30	29	45	43	40	43	**36**
Police activity made it difficult to score drugs recently?								
Yes (%)	28	17	15	15	29	32	15	**26**
No (%)	73	83	85	85	71	68	85	**74**
Don't know (%)	-	-	-	-	-	-	-	**-**

Source: EDRS interviews

12.3 REU experiences with drug detection 'sniffer' dogs

REU were asked about their responses to police sniffer dogs at events (Table 64). One-half (51%) of REU had seen sniffer dogs in the six months preceding the interview, most typically at festivals or live music events (96%). While the majority of participants did nothing last time they saw a sniffer dog, a small proportion (3%) reported that they had consumed their drugs when they had seen the dogs. No participants had been searched by police due to a positive identification from a sniffer dog.

Table 64: Perception and experience of sniffer dogs by REU, 2007-2010

	2007 n=100	2008 n=100	2009 n=100	**2010 n=98**
Seen sniffer dogs in last 6 months (%)	9	17	41	51
Location seen sniffer dogs last 6 months (%)				
Festival /live music event				96
Nightclub				2
Public transport				6
Public street				6
Reaction last time saw sniffer dog (%)				
No reaction				97
Consumed drugs				3
Searched by police due to positive sniffer dog notification (%)	-	-	2	-

Source: EDRS interviews

12.4 Drug-related arrests and seizures made by Tasmania Police

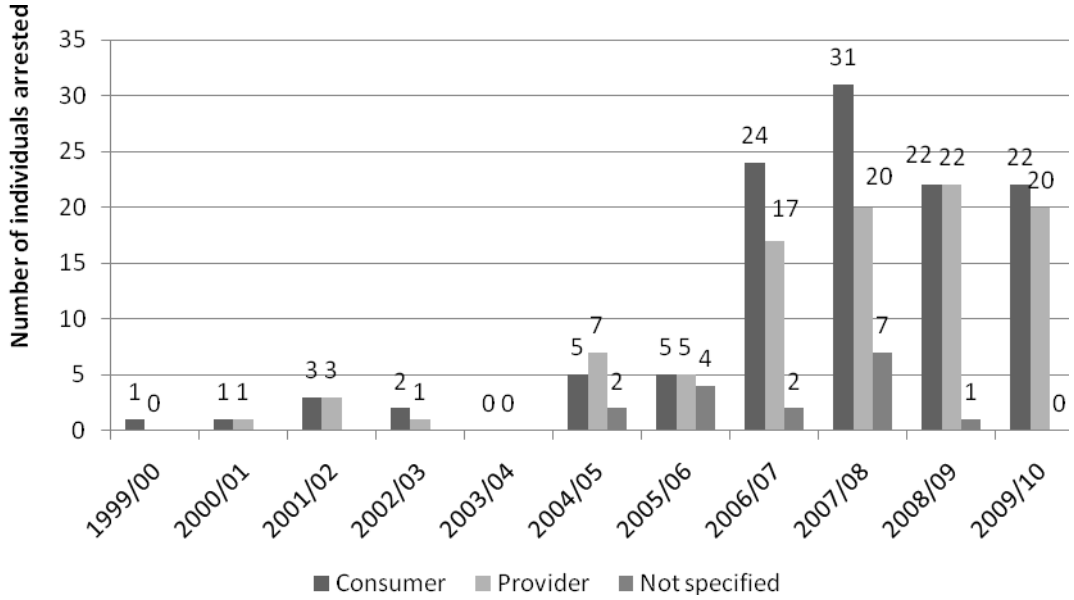
12.4.1 Ecstasy

Figure 32 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 2009/10. There were few ecstasy-related police incidents between the 1999/00 and 2003/04 financial years. An increase in the number of ecstasy-related arrests can be seen during the 2004/05 and 2005/06 financial years relative to previous years, and there were substantially more consumer and provider arrests between 2006/07 and 2009/10 relative to all previous years.

Figure 33 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). In addition, there were two seizures totalling 11 capsules and two seizures totalling 8.9 grams of powder in 2009/10.

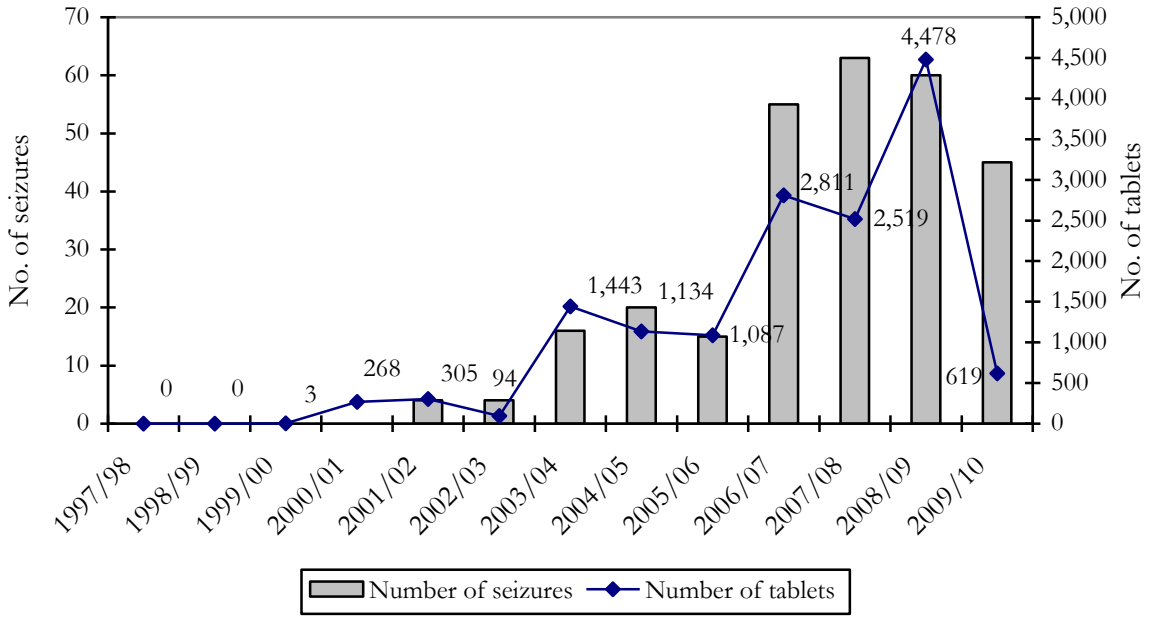
It is possible that the decrease in ecstasy seizures is at least partially related to the changes in the ecstasy market reported by REU (e.g., decreased purity and availability of the drug in Hobart) and the recent increase in the use and availability of mephedrone capsules among REU (See section 9.17). In addition to seizures which were coded as ecstasy by Tasmania Police, there were thirty seizures totalling 415 capsules in which the drug type was not coded. It is possible that some of these seizures pertain to ecstasy or mephedrone. For example, several law enforcement KE noted that there has been a recent increase in the number of drug seizures which pertain to mephedrone.

Figure 32: Number of police incidents recorded for ecstasy possession/use (consumers) and deal/traffic (providers), 1999/00-2009/10



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 33: Total number of tablets suspected to contain ecstasy seized by Tasmania Police, 1997/98-2009/10



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.

12.4.2 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 65). Since this time there has been a reduction in the number of consumer and provider arrests, with a total of 85 arrests reported in 2009/10, compared to 117 in 2008/09, and 177 in 2007/08.

Table 65: Consumer and provider arrests for methamphetamine and related substances, 1996/97-2009/10

	1996 /97	1997 /98	1998 /99	1999 /00	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06	2006 /07	2007 /08	2008 /09	**2009 /10**
Consumer	**n**	**n**	**n**	**n**	**n**	**n**	**n**	**n**	**n**	**n**	**n**	**n**	**n**	**n**
Female	3	5	0	4	9	18	8	10	9	10	24	26	10	**15**
Male	15	9	4	14	51	53	34	21	34	33	84	81	37	**40**
Unknown	0	1	2	2	0	0	0	0	0	0	0	0	0	**0**
Total	18	15	6	20	60	71	42	31	43	43	108	107	47	**55**
Provider														
Female	0	0	0	0	1	6	2	1	3	9	14	13	7	**6**
Male	2	0	1	7	9	12	17	7	23	25	55	57	61	**24**
Unknown	0	0	0	1	0	0	0	0	0	0	0	0	0	**0**
Total	2	0	1	8	10	18	19	8	26	34	69	70	68	**30**
Total Arrests	20	15	7	28	70	89	66	39	69	83	179	177	117	**85**

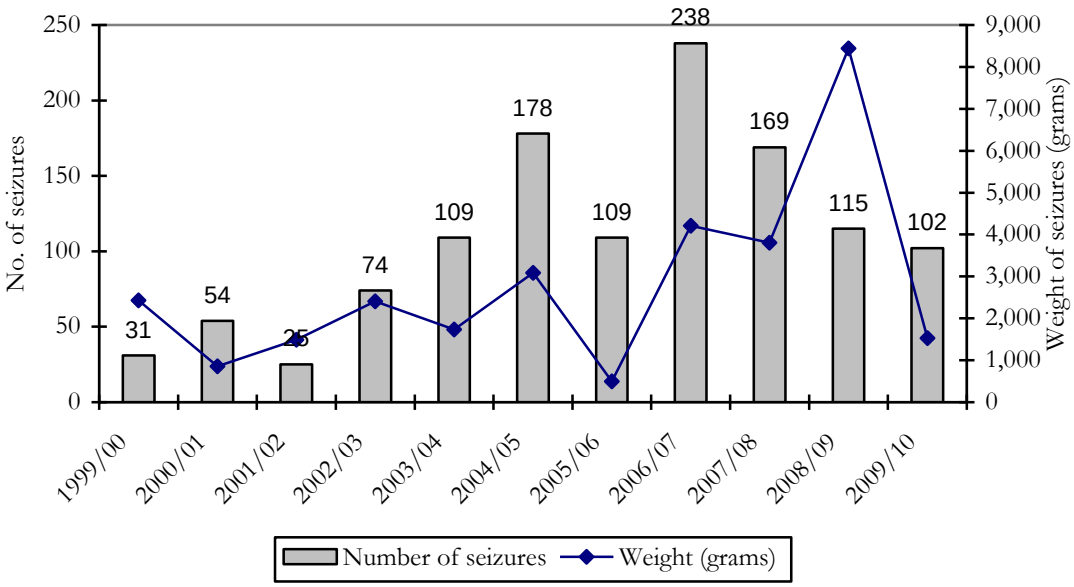
Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police

Note: 2009/10 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.

Tasmania Police seizures (Figure 34) of drugs suspected to be methamphetamine have varied somewhat in recent years. There have been notable increases in both 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 have been slight decreases in the number of methamphetamine seizures between 2006/07 (238 seizures) and 2009/10 (102 seizures) and there was a substantial decrease in the total weight of seizures in 2009/10 (1,531 grams) relative to 2008/09 (8,443 grams). In addition to the seizures shown in Figure 34 for 2009/10, there were 12 seizures totalling 320.5 tablets, 1 seizure totalling 6 grams of tablets and 7 seizures totalling 2,843 capsules (with one of these seizures totalling 2,800 capsules).These trends are consistent with the decrease in methamphetamine use observed among both the REU and IDU cohorts in Hobart and among the general population nationally.

Figure 34: Seizures of methamphetamine by Tasmania Police, 1999/00-2009/10



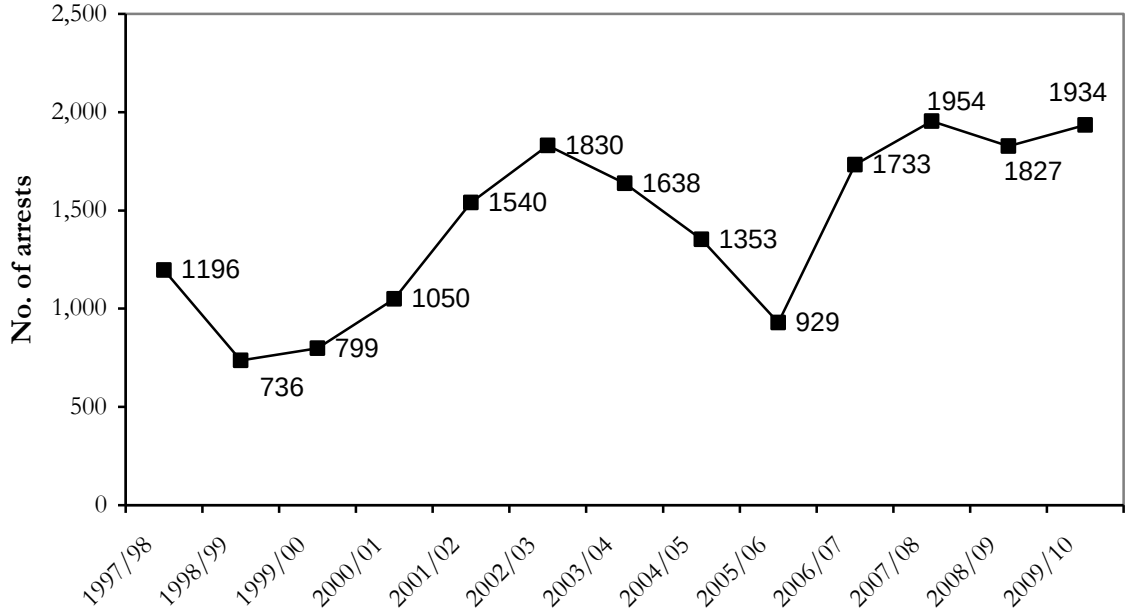
Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police

Note: Seizures for 2005/06 were only reported to the ACC for part of the financial year. 2009/10 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.

12.4.3 Cannabis

Figure 35 shows the number of cannabis-related arrests made by Tasmania Police between 1997/98 and 2008/09. 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 with 1,733 cases reported. This upward trend has continued or remained stable since this time with 1,934 cases reported in 2009-10. 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 35: Number of arrests (including cautions and diversions) for cannabis-related offences in Tasmania, 1997/98-2009/10



Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police

Note: 2009/10 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 66). 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). The number of second- and third-level diversions (to health interventions) have fluctuated in recent years, with the highest number of diversions noted in the 2007/08 (634 diversions) and 2009/10 (615 diversions) reporting periods.

Table 66: Drug diversions or cautions issued by Tasmania Police, 2000/01-2009/10

	2000 /01	2001 /02	2002 /03	2003 /04	2004 /05	2005 /06*	2006 /07	2007 /08	2008 /09	**2009 /10**
Number cautions/diversions state-wide	612	978	1,337	1,398	1,330	1,158	1,361	1,681	1,528	1,609
Number diverted to health intervention state-wide	151	n/a	263	179	365	236	369	634	536	615

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

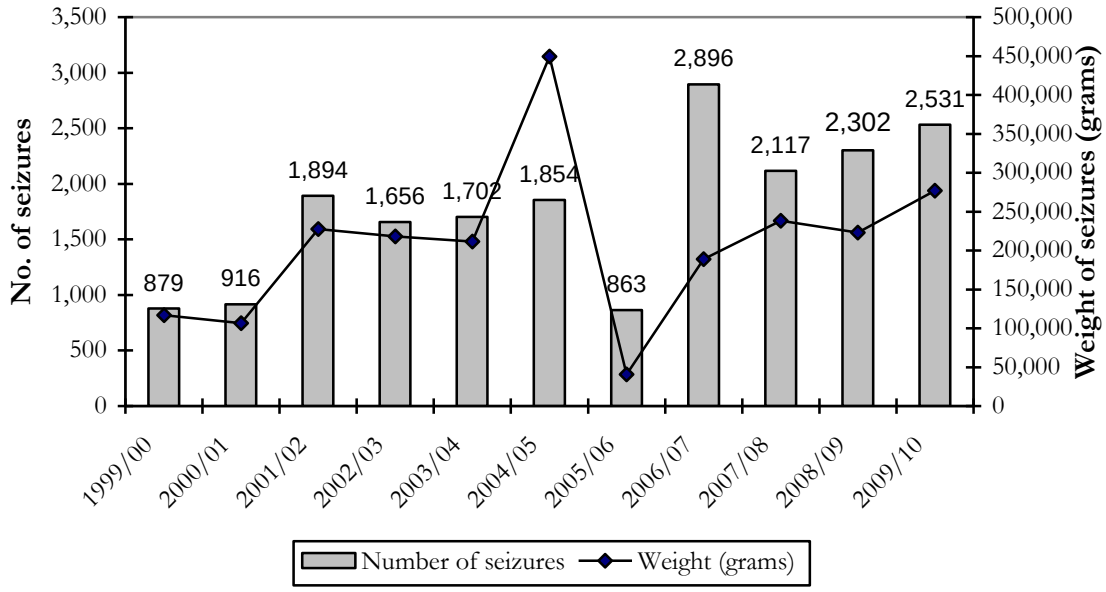
Note: These figures may differ from data submitted to the Australian Crime Commission if the decision to charge persons was altered to a caution after the figures were forwarded to State Intelligence Services.

*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 36 shows cannabis seizures made by Tasmania Police, between 2001/02 and 2009/10. The volume of cannabis seized and the number of seizures has either remained stable or increased over time. There was a notable increase in both the weight and number of seizures in 2001/02, with large increases noted in the volume of seizures in 2004/05 and the number of seizures in 2006/07. While there was a reduction in seizure volume and number in the 2005/06 reporting period, in this case seizure data for Tasmania Police was only reported to the ACC for part of the financial year. Both the volume and number of seizures was relatively stable in 2009/10, with slight increases observed in the total number (2,531 vs. 2,302) and volume (277.1 vs. 223.2 kg) of seizures relative to 2008/09. In addition to the seizures shown in Figure 36 for 2009/10, Tasmania Police reported 549 seizures of plants (totalling 6,456 plants), and 95 seizures of seeds (totalling 3,346 seeds).

Figure 36: Seizures of cannabis by Tasmania Police, 1999/00-2009/10



Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) 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 2009/10 were provided by Tasmania Police State Intelligence Service, include only non-plant 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.

12.4.4 Cocaine

Tasmania Police have reported few seizures or arrests in relation to cocaine between the 1997/98 and 2008/09 financial years (Table 67). In the 2009/10 reporting period Tasmania police reported one consumer and two provider arrests in relation to cocaine and 3 seizures totalling 46.8 grams (Tasmania Police State Intelligence Services).

Table 67: Consumer and provider arrests for cocaine, 1997/98-2009/10

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	**2009/10**
Arrests (n)													
Consumer	0	0	0	2	1	0	0	0	0	0	0	1	**1**
Provider	0	0	0	0	0	0	0	0	0	1	0	0	**2**
Total	0	0	0	2	1	0	0	0	0	1	0	1	**3**
Seizures (n)	0	0	0	1	0	0	0	0	1	2	0	2	**3**
Weight (g)	0	0	0	1	0	0	0	0	1	7	0	7	**46.8**

Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police

Note: 2009/10 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.

12.4.5 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 1997/98 and 2008/09 (Table 68). In the 2009/10 period Tasmania police reported three consumer and one provider arrests, 1 seizure of mushrooms totalling 43.2 grams, four seizures of mushrooms each of one plant, and 10 seizures of LSD totalling 52 tabs (Tasmania Police State Intelligence Services).

Table 68: Consumer and provider arrests for hallucinogens, 1997/98-2009/10

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	**2009/10**
Arrests (n)													
Consumer	2	0	1	1	0	0	1	0	1	1	1	2	**3**
Provider	0	0	0	0	1	1	0	1	2	1	2	0	**1**
Total	2	0	1	1	1	1	0	1	3	2	3	2	**4**
Seizures (n)	5	0	0	0	0	0	1	3	0	2	1	2	**15**
Weight (g)	329	0	0	0	0	0	10	560	0	10	18	28	**43**

Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police

Note: 2009/10 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.

12.4.6 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.

12.4.7 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).

12.4.8 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 Section 12.4.1 in relation to ecstasy.

12.4.9 Drug-related charges in Tasmanian courts

As shown in Table 69, the number of individuals before the Supreme Court for selling or trafficking in drugs has increased from 22 individuals in 1996/97 to 75 in 2007/08. As part of the context of these increases, the *Misuse of Drugs Act 2001* implemented changes to the existing law and may have expanded the number of prosecutions appropriate for presentation to the Supreme Court. The Act was further amended in 2004. It is thus likely that the recent apparent increase in charges (from 20 in 2003/04 to 75 in 2007/08) may largely relate to such legal changes rather than being necessarily reflective of substantial changes in the rate of such offences. Data was not provided in 2008/09 and 2009/10.

The number of individuals before the Magistrates Court for drug-related matters has remained relatively stable between 2003/04 and 2007/08 (Table 69, Figure 37); however, in 2008/09, the number of individuals before the court for possession and use offences increased from a range of 414-517 individuals per financial year to 886. However, in 2009/10 there was a reduction relative to 2008/09 (637 individuals).

In 2009/10 the number of individuals incarcerated at Hobart Prison in relation to drug offences (53 individuals) was lower relative to 2008/09 (84 individuals) but commensurate with the number of individuals in the years prior to this (between 55 and 57 per financial year[8]) (Table 69). Similarly, the number of offences among those incarcerated (121 offences) in 2009/10 was fewer relative to 2008/09 (165 offences) but relatively similar to the four years prior to this.

[8] In 2007/08, the total number of people incarcerated in the Hobart Prison was not provided to the authors.

Table 69: Number of individuals before Tasmanian courts or imprisoned on drug charges, 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**
SUPREME COURT OF TASMANIA:												
No. indictable charges relating to *Misuse of drugs Act**	22	27	14	15	30	20^	33	47	66	75	n/p	**n/p**
HOBART MAGISTRATES COURT												
No. individuals before court (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)**
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)**
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)**
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)**
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)**
HOBART PRISON^												
No. individuals incarcerated	26	29	n/p	16	35	36	55	57	56	n/p	84	**53**
No. of offences among those incarcerated	50	44	25	27	78	83	101	117	128	144	165	**121**

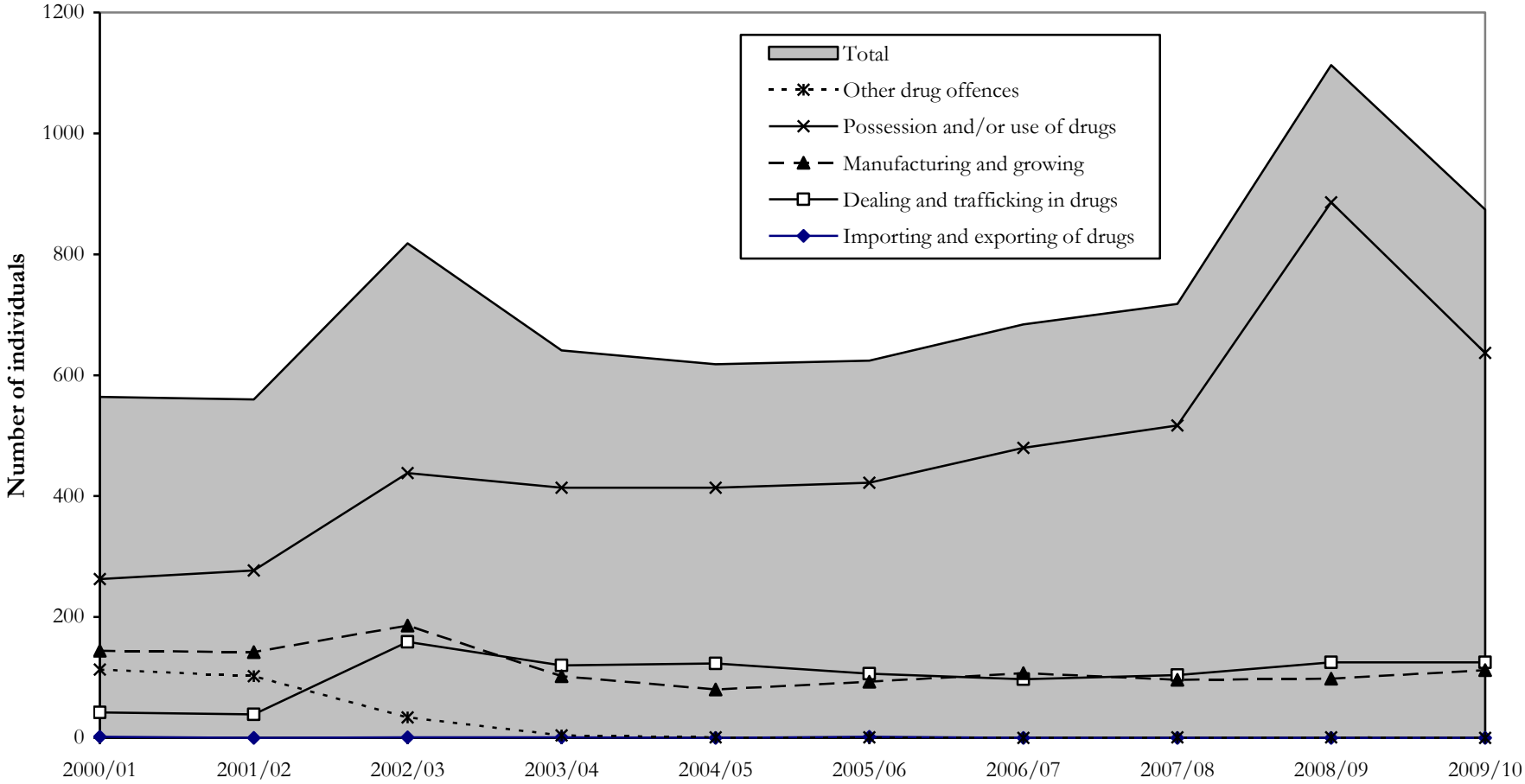
Sources: Department of Public Prosecutions (Supreme Court data); Magistrates Court (Magistrates Court data); Corrective Services (Prison data), Department of Justice and Industrial Relations

*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.

Figure 37: Number of individuals before the Hobart Magistrates Court for drug-related offences, 2000/01-2009/10



Source: Hobart Magistrates Court

12.5 Summary of criminal and police activity

- **Criminal activity.** The self-reported level of criminal activity among the 2010 REU sample was relatively low. With the exception of dealing drugs (15%), around one-tenth of the REU interviewed had committed other criminal offences during the one month preceding the interview and around one-tenth (13%) had been arrested during the preceding 12 months, generally for reasons unrelated to drug use.
- **Police activity.** One-fifth of the REU sample (21%) 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 was a substantial increase in the number of both consumer and provider arrests and seizures in relation to ecstasy between 2006/07 and 2008/09 relative to any previous years. In 2009/10 the numbers of arrests remained stable but there was reduction in the weight and number of ecstasy seizures relative to the three previous reporting periods. It is possible that the decrease in ecstasy seizures is related to the changes in the ecstasy market reported by REU (e.g., decreased purity and availability of the drug in Hobart) and the recent increase in the use and availability of mephedrone capsules among REU.
  While the number of methamphetamine-related arrests substantially increased in the 2006/07 and 2007/08 periods relative to previous years, there were substantial reductions in arrests in the 2008/09 and 2009/10 reporting periods. The number of methamphetamine-related seizures has also increased over the years, with a large increase in the total number of seizures in the 2006/07 period. Since this time there has been a reduction in the total number of seizures and the total weight of seizures was also reduced in 2009/10. These trends are consistent with the decrease in methamphetamine use observed among both the REU and IDU cohorts in Hobart and among the general population nationally.
  The number of cannabis-related arrests and cautions and the weight and number of seizures made by Tasmania police have remained relatively stable since 2006/07, with a slight increase noted in the weight and number of seizures in 2009/10.
- **Drug-related charges in Tasmanian courts.** The number of individuals before the Hobart Magistrates Court for possession and use offences increased from a range of 414-517 individuals per financial year to 886 individuals in 2008/09. In 2009/10 there was a reduction relative to 2008/09 (637 individuals).

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