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TASMANIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2005
Findings from the Party Drugs Initiative (PDI)

NDARC Technical Report No. 251

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NDARC Technical Report No. 251

ISBN 0 7334 2354 X

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ACKNOWLEDGEMENTS

This research 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, and coordinated by the National Drug and Alcohol Research Centre, University of New South Wales. The authors wish to thank these organizations for their support.

The authors wish to thank the following people for their contributions to this project:

Jennifer Stafford, Dr Louisa Degenhardt, Courtney Breen, Bethany White, Amanda Roxburgh, and Matthew Dunn from the National Drug and Alcohol Research Centre for their assistance throughout the project.

The members of the 2004 IDRS Steering Committee: John Eldridge (Australian Customs Service), Lianne Barden (The Link Youth Health Service), Stephen Biggs, Glen Ball and Jack Johnston (Tasmania Police), Paul DeBomford (Department of Justice), Sylvia Engels (Alcohol and Drugs Service, Department of Health and Human Services), Tania Hunt (Tasmanian Council on AIDS and Related Diseases), Garrath Cooper (Population Health, Department of Health and Ageing), Dr Geoff Chapman (Southern Tasmanian Division of General Practice), Mary Sharpe and Jim Galloway (Pharmaceutical Services, Department of Health and Human Services), David Clements (Alcohol, Tobacco and Other Drugs Council of Tasmania) and Anne Sheehan (Public Health, Department of Health and Human Services). In particular, also to Associate Professor Stuart McLean (Tasmanian School of Pharmacy, University of Tasmania) for his stewardship and guidance of the IDRS project in Tasmania over the years of the project.

Olivia Powell, Zoe Perry, Joanna Burbury and Dominic Parker who conducted the interviews with regular ecstasy users and key experts.

The key experts who willingly provided their time, effort, and experience to contribute to the project.

The following local organisations and persons who generously provided indicator data: Tasmania Police (Stephen Biggs, Jessica Reidy); Tasmanian Department of Health and Human Services divisions of: Sexual Health (Amanda McNair) and Alcohol and Drug Services (Sylvia Engels and Andrew Foskett).

The authors would also like to extend their thanks to the regular ecstasy users who gave their time and trust to provide us with the information contained in this report.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ABCI	Australian Bureau of Criminal Intelligence
ACC	Australian Crime Commission
ADF	Australian Drug Foundation
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
DHHS	Department of Health and Human Services
AIHW	Australian Institute of Health and Welfare
A&TSI	Aboriginal and/or Torres Strait Islander
BBVI	Blood-borne viral infections
DXM	Dextromethorphan
ERD	Ecstasy and related drugs(s)
GHB	Gamma-hydroxy-butyrate
GLTB	Gay lesbian bisexual transgender
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user
KE	Key expert(s) (previously 'key informant')
KI	Key informant
LSD	*d*-lysergic acid
N	(or n) Number of participants
NAP	Needle Availability Program
NSP	Needle and Syringe Program
NDS	National Drug Strategy
NDSHS	National Drug Strategy Household Survey
M	Mean
MAOI	Monoamine oxidase inhibitor
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDEA	3,4-methylenedioxyethamphetamine
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
PDI	Party Drugs Initiative
PCP	Phencyclidine
REU	Regular ecstasy user(s) (previously 'party drug user')
SD	Standard deviation
SIS	State Intelligence Services, Tasmania Police
SPSS	Statistical Package for the Social Sciences
SSRI	Specific serotonin reuptake inhibitor
TASPOL	Tasmania Police
TCA	Tricyclic anti-depressant
TAS	Tasmania

EXECUTIVE SUMMARY

Demographic characteristics of regular ecstasy users (REU)

The sample of 100 REU interviewed in the present study were typically in their early- to mid-twenties with ages ranging from 18 to 44 years. Participants were generally well educated and either employed on a full-time or part-time/casual basis or currently engaged in full time study. 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 two years of the study. However, there was less unemployment, injecting drug use and current drug treatment among the 2004 and 2005 samples, in comparison to the 2003 sample, possibly reflecting less overlap between the IDU and REU populations in the latter two years of the study.

Patterns of drug use among REU

While the participants were selected on the basis of ecstasy use, and over half nominated ecstasy as their drug of choice, polydrug use was the norm among the REU interviewed. Participants had used a median of nine drug types (out of 20 drug types) at some stage of their lives and a median of six drug types in the six months preceding the interview. Recent use of alcohol, cannabis, tobacco, and methamphetamine powder was common, and one-fifth had recently used methamphetamine base, benzodiazepines, and cocaine. Less than one-fifth had recently used amyl nitrite, pharmaceutical stimulants, anti-depressants, ketamine, and crystal methamphetamine. The recent use of GHB, MDA, methadone, opium, buprenorphine, and other opiates, was low, and there was no recent use of heroin, 1,4B, and GBL among the sample.

Over the three years of the study there have been trends in the use of some drug types. The proportion reporting recent use of crystal methamphetamine decreased from over one-half of the sample in 2003 (52%) to one-tenth (10%) in 2005. Similarly, the proportion reporting recent use of MDA (21% vs. 3%) and amyl nitrate (43% vs. 16%) have also decreased, whereas recent use of cocaine (7% vs. 20%), and nitrous oxide (25% vs. 41%) have increased. Consistent levels of use of most other drug types were observed, though slight increases in the use of methamphetamine powder, anti-depressants, and ketamine were observed between 2004 and 2005.

Ecstasy

The participants interviewed in the present study had first started to use ecstasy on a regular basis at 20 years on average, and a large majority had been using ecstasy for two years or more at the time of interview. The entire sample had recently used ecstasy in tablet form and one-tenth had recently used ecstasy capsules or powder. The frequency of ecstasy use was varied and ranged from monthly to several times a week. On average, ecstasy had been used slightly more than fortnightly with a median of two tablets taken orally in a typical session. Snorting of ecstasy was also common, with three-quarters of the sample recently snorting the drug. This may be an issue of concern due to potential damage to mucous membranes, a steeper dose-response curve, and the increased risk of blood-borne viral infections. There was an increase in the number of people that reported recently shelving/shafting (refers to vaginal/anal administration) ecstasy in comparison to 2004. This route of administration is potentially more harmful than ingestion, as detoxification by the liver is less for substances absorbed in the large intestine.

There were some concerning patterns of use among the sample. One-quarter (29%) had used ecstasy on a weekly basis or more frequently, two-thirds (67%) typically used more than one tablet in a typical session of use, and one-third (37%) had recently used ecstasy in a 'binge session' (continuous 48 hour period of drug use without sleep). Whereas the long-term effects and risks of extended ecstasy use are largely unknown, evidence from toxicology studies in rats and neuropsychological studies in humans indicate that the safest pattern of use for minimising harm 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.

Ecstasy was typically consumed in combination with other drugs. Alcohol, cannabis, and tobacco were commonly used in a typical session of ecstasy use. One-tenth (12%) typically used methamphetamine powder when under the influence of ecstasy compared to one-quarter among the 2003 (25%) and 2004 samples (24%). The use of benzodiazepines and cannabis when 'coming down' from ecstasy was also reduced slightly in comparison to 2004. The high (78%) and increasing proportion of respondents reporting concomitant ecstasy and binge alcohol use has been a key issue of concern over the past three years of the study. Larger quantities of alcohol can be consumed when under the influence of psychostimulants without experiencing immediate effects of intoxication; however, the harms associated with this use still occur (both in terms of the harms from alcohol use and exacerbation of dehydration from ecstasy use). Additionally, most of the overdose episodes reported by REU in the current study involved alcohol and/or polydrug use.

Ecstasy was typically used at music-related venues including dance parties, nightclubs and live music events, but was also used at a range of other locations including private parties and private residences. REU reports and anecdotal comments of KE suggest an increase in the use of ecstasy at locations other than dance/events and nightclubs, in particular private residences and public bars. Qualitative comments of both KE and REU suggest that the use of ecstasy in has become more 'mainstream' or 'socially acceptable', with a broadening demographic of people consuming the drug locally, including younger and older people. Despite this, data from the National Drug Strategy Household Survey (NDSHS) indicate that the estimated prevalence of ecstasy use in Tasmania has remained at least half that of the national average in recent years.

Price, purity and availability of ecstasy

Whereas there was evidence for an expanding ecstasy market in 2004 – marked by decreased price, increased purity, and increased availability of the drug relative to 2003 (Matthews & Bruno, 2005) – the market appears to have tightened in 2005, with a slight increase in price and decrease in purity and availability observed relative to 2004.

The median price for one tablet of ecstasy was $45 compared to $40 in 2004 and $50 in 2003, and this price was considered to have remained stable during the preceding six months. The median price reported by KE was $40. Both REU and KE indicated that the price per pill was less when bought in larger quantities.

REU reports on the purity of ecstasy in 2005 were varied, with purity considered to be medium, fluctuating, or high. However, a greater proportion indicated that ecstasy was medium rather than high in purity among the 2005 sample in comparison to 2004. KE typically indicated that the purity of ecstasy fluctuated.

Both KE and REU indicated that ecstasy is 'easy' or 'very easy' to obtain and that recent availability had remained stable. Reports of both KE and REU indicate an increase in availability

of ecstasy in 2004 when compared to 2003 and a slight decrease in the proportion reporting that ecstasy was 'very easy' to obtain in 2005.

There has been a substantial increase in the number of ecstasy tablets seized by Tasmania Police over the last two financial years, and, whereas this had minimal impact on the number of arrests made in relation to ecstasy in the 2003/04 reporting period, there were a greater number of consumer (5) and provider (7) arrests reported in the 2004/05 reporting period relative to previous years (although these numbers remain low).

Ecstasy markets and patterns of purchasing

Consistent with previous years, ecstasy was typically purchased from friends and obtained from friends' homes. A large majority (89%) reported paying for ecstasy using money earned through paid employment. One-quarter (25%) reported dealing drugs for ecstasy profit (offsetting the cost of their own use of the drug) compared to 15% among the 2004 sample. Two-thirds (66%) indicated that they typically purchased ecstasy for themselves and others, and the remainder (34%) typically purchased ecstasy only for themselves. 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.

Methamphetamine

Consistent with previous years, the use of methamphetamine was common among the group or REU sampled in 2005. A large majority had ever used some form of methamphetamine and three-quarters had used some form of methamphetamine in the preceding six months. The median frequency of methamphetamine use was relatively low at six days in the preceding six months (approximately monthly) and it was typically swallowed or snorted and consumed in small quantities (0.1g).

Three-quarters had recently used methamphetamine powder, one-fifth had recently used methamphetamine base, and one-tenth had recently used the more potent crystal methamphetamine form. The frequency of methamphetamine powder use was slightly lower in 2005 when compared to the 2004 sample. The lifetime (29%) and recent (10%) use of crystal methamphetamine among the 2005 sample was considerably lower in comparison to 2003 when over half (52%) had recently used the drug. Those that had recently used crystal methamphetamine in 2005 had typically injected or swallowed the drug, whereas the most common route of administration in the first two years of the study was smoking. Whereas methamphetamine powder and base were typically used at venues such as dance events or nightclubs, crystal methamphetamine was more likely to be used at private residences.

Less respondents were able to confidently comment on the price, purity and availability of methamphetamine base and crystal methamphetamine in comparison to methamphetamine powder. The median price for one 'point' (0.1 g) of methamphetamine powder was $40, which is consistent with the price reported in 2004 and less in comparison to the price of $50 reported in 2003. This price was considered to have remained stable in the preceding six months. Consistent with previous years, the median price for 0.1 gram of methamphetamine base and crystal methamphetamine was higher at $50.

Consistent with previous years, the purity of methamphetamine base and crystal methamphetamine was considered to be higher than methamphetamine powder. There was little evidence for any recent changes in the purity of any methamphetamine form.

Methamphetamine powder was considered to be 'easy' or 'very easy' to obtain, reports on the availability of methamphetamine base were varied, and crystal methamphetamine was typically considered to be 'difficult' or 'very difficult' to obtain. The current and previous year's data, as well as anecdotal reports of KE, suggest that the availability of crystal methamphetamine to REU in Hobart has decreased substantially since 2003.

Cocaine

There was evidence for a slight increase in the use of cocaine among the 2005 REU sample compared to previous years of the study. Two-fifths (43%) of the 2005 REU sample had ever used cocaine, compared to one-third (32%) among the 2004 cohort. A greater proportion of males had ever used cocaine in comparison to females. One-fifth (20%) had used cocaine during the six months preceding the interview compared to one-tenth among the 2004 (10%) and 2003 (7%) cohorts. Cocaine had been used relatively infrequently with a median frequency of one day in the preceding six months. Cocaine was typically snorted and a median of 0.2 to 0.5 grams used in a typical session.

Few respondents were able to confidently comment on the price, purity, and availability of cocaine in Hobart and as such these estimates should be interpreted with caution. The price for a gram of cocaine ranged from $220 to $500 and this price was considered to have remained stable during the last six months. Reports on the purity of cocaine were varied but it was typically considered to be medium or high and to have remained stable in recent months. Both REU and KE considered the availability of cocaine to be low in Tasmania, which is consistent with indicator data suggesting a low level of cocaine-related harms and low prevalence of cocaine use among the Tasmanian population. However, considering the slight increase in the recent use of cocaine among the 2005 REU sample, continued monitoring of cocaine markets in Tasmania is warranted.

Ketamine

One-quarter of the 2005 REU sample (24%) had ever used ketamine and one-tenth (11%) had used the drug in the six months preceding the interview. Ketamine was used on an average of three occasions in the preceding six months in relatively small amounts. This, along with anecdotal reports of KE, suggests predominately experimental use by a small number of people amongst this REU cohort. Ketamine was typically swallowed or snorted at private residences and could be purchased in tablet or powder form.

Due to the small number of respondents commenting, estimates of the price, purity and availability of the drug in Hobart should be interpreted with caution. The median price for a ketamine tablet was $20 (range $20-35) and the median price for a gram of ketamine was $190 (range $150-280) and this was thought to have remained stable during the preceding six months. The purity of ketamine was considered to be high or medium and to have remained stable in recent months. Ketamine was typically considered by those that commented to be difficult to obtain.

The availability and use of ketamine among REU in Hobart appears to have decreased since 2003, with a substantial reduction observed in lifetime and recent use of ketamine, and fewer respondents able to confidently report on the price, purity and availability of the drug between the 2003 and 2004 samples. While ketamine was used relatively infrequently by a small proportion of people among the 2005 sample, there was a slight increase in use and number of people commenting on the drug in 2005 when compared to the 2004 cohort, indicating a need for future monitoring of ketamine markets in Tasmania.

GHB

Consistent with the low level of use reported among the 2003 and 2004 REU cohorts, less than one-tenth of respondents interviewed in 2005 had ever used GHB and only two males had used GHB (orally in liquid form) on two occasions during the six months preceding the interview. There was no lifetime or recent use of GHB-like substances such as 1,4B or GBL among the 2005 REU cohort. A single participant reported on the price, purity or availability of GHB in Hobart, making it difficult to delineate clear trends. Patterns of use among REU and anecdotal comments of key experts indicate low availability of GHB in Tasmania and predominantly experimental use by few people. However, considering the potentially harmful nature of GHB, future monitoring of GHB markets in Tasmania is important.

LSD and other psychedelics

Over half of the 2005 REU sample had used LSD at some stage of their lives and one-third had used LSD in the six months preceding the interview, which is slightly greater in comparison to the 2003 sample. A significantly greater proportion of males had ever and recently used LSD in comparison to the proportion of females. One tab or drop of liquid of LSD was taken orally in a typical session of use, and LSD had been used on a median of 1 day in the preceding six months, which is lower than the frequency of use of 2.5 days among the 2004 sample.

The median price for one tab/drop of LSD was $25, compared to a median of $20 reported among the 2003 and 2004 samples. The purity of LSD was perceived by REU to be 'medium' or 'high' and there was some indication for an increase in the perceived purity of the drug relative to 2004. LSD was typically considered to be 'easy' or 'very easy' to obtain and the perceived availability of LSD seems to have increased when compared to the previous two years of the study.

Three-fifths of respondents had ever used psilocybin mushrooms and two-fifths had used mushrooms during the six months preceding the interview. A greater proportion of males had ever used mushrooms in comparison to females. Mushrooms had been used on a median of three days in the preceding six months or approximately every two months. Both REU and KE noted a recent increase in the use of mushrooms at the time of the interview, often attributed to a seasonal increase in their availability. Over half of the sample, and a greater proportion of males than females, had used some form of psychedelic (either LSD or mushrooms) in the last six months.

Whereas an increase in the experimental use and availability of the hallucinogen 2-CI was noted among the 2004 sample, just a single participant had recently used the drug among the 2005 sample.

MDA

The lifetime and recent use of MDA among the 2005 sample was considerably lower in comparison to that reported among the 2004 and 2005 samples. Less than one-tenth of the 2005 REU sample had used MDA at some stage of their lives and only three males recently used MDA. Use of MDA was more common among males and 'older' respondents in comparison to females and 'younger' respondents. MDA had typically been used twice or less in the six months preceding the interview, with one capsule consumed orally in a typical session of use. Few respondents were able to confidently comment on the price, purity or availability of MDA, making it difficult to delineate clear trends. However, based on the decline in the use of MDA since 2003, and the comments of several KE, the local availability of MDA in Tasmania appears to be relatively low.

Patterns of other drug use

A majority of participants had recently used alcohol, cannabis, and tobacco. Alcohol had been used on median of two days per week in the six months preceding the interview. Cannabis had been used on a median of one day per week and the frequency of use was greater for males in comparison to females. Tobacco had recently been used by four-fifths of the sample and over half the sample had smoked tobacco on a daily basis in the last six months, with others smoking tobacco less frequently. The proportion of daily smokers among the REU interviewed in the present study is greater in comparison to both national and Tasmanian estimates of prevalence, suggesting a greater prevalence of this risky health behaviour among this population.

There has been a reduction among REU in the recent use of amyl nitrite from two-fifths (43%) in 2003 to less than one-fifth (16%) in 2005. Three-quarters of those that had inhaled amyl nitrite, had done so less than once a month during the last 6 months. The proportion of the sample reporting recent use of nitrous oxide has increased from one-quarter (25%) to two-fifths (43%) in 2005. On average, nitrous oxide had been used less than monthly.

One-quarter of the sample had recently used benzodiazepines, on a median of three days per month in the last six months. Recent use of benzodiazepines was more common among 'younger' in comparison to 'older' participants. One-tenth of the sample had recently used anti-depressants, compared to only four participants among the 2004 sample. Seven out of the twelve participants that had recently used anti-depressants had used them on a daily basis.

The use of other pharmaceuticals and opioid drugs was relatively rare among the REU interviewed in the current study, and those that had recently used these drugs had generally done so infrequently. Sixteen percent had recently used pharmaceutical stimulants (such as dexamphetamine or methylphenidate), with a median frequency of approximately once every two months. Only small proportions of the sample had recently used methadone (1%), and there was no recent use of heroin or buprenorphine. The recent use of pharmaceutical opiates (9%) and alkaloid poppy derivatives (6%) was slightly more common but relatively infrequent.

Drug information-seeking behaviour

Two-thirds (67%) of the REU sample indicated that they had 'sometimes' bought a drug and it turned out to have different effects than they expected, in the last six months. Whereas one-third (36%) of the REU interviewed in 2005 actively sought information about the content/purity of 'batches' of ecstasy pills 'most times' or 'always', the remainder did so half the time or less (37%) or 'never' (27%). Participants typically obtained this information from friends, dealers, and other people, as well as websites and personal experience. Five REU reported recent use of pill testing kits. Three out of these five respondents were aware of some limitations of testing kits, and there was evidence that some participants would not take a pill if testing revealed that it contained ketamine (n=2) or if there was no reaction (n=3).

The majority of the REU sample was receptive to harm reduction information. Three-quarters (72%) indicated that they would find pill testing kits personally useful if available locally. Other information resources that were considered useful by REU were information pamphlets, websites, health outreach workers at events, and posters. Whereas the qualitative comments of some KE suggested a reduction in drug information-seeking behaviour and an increase in high risk behaviours among REU, several REU commented on the lack of information available to them on the effects of drugs and ways in which to consume them more safely. REU were particularly interested in finding out more information on the long-term effects of drug use

(physical, psychological, neuropsychological, and neurological) and also considered it to be important that new consumers were aware of the acute effects of drug use and ways in which to use drugs more safely.

Risk behaviour

Less than one in ten regular ecstasy users (8%) had recently used substances intravenously compared to a similar proportion among the 2004 cohort and one in 5 among the 2003 cohort. Methamphetamine was typically the first drug ever injected and the most common drug ever and recently injected. The sharing of needles was relatively rare; however, three out of five had recently shared other injecting equipment such as spoons, tourniquets, and water. One-third of these recent injectors had always required others to inject them in the last six months. All recent injectors had obtained injecting equipment from NSP outlets in the preceding six months and none reported difficulty in obtaining needles during this time.

A large majority (97%) of REU had been sexually active during the six months preceding the interview and most of these (83%) reported recent penetrative sex under the influence of ecstasy and related drugs. Participants were more likely to report some use of protective barriers with a casual partner (81%) in comparison to a regular partner (68%). Participants were slightly less likely to use protective barriers with a regular partner when under the influence of party drugs (68% vs. 58%), but were just as likely to use protective barriers with a casual partner (81% vs. 81%) when under the influence of party drugs. Whereas one-third of participants (32%) had been for a sexual health check up in the last year, one-half (51%) had never had a sexual health check up. Two-thirds of the sample had never been tested for hepatitis C or HIV. A single participant reported testing positive for hepatitis C.

Of those that had driven a car, over half (58%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months. Over half (55%) also reported driving within an hour of taking ERDs in the last 6 months. Most commonly, participants reported driving under the influence of ecstasy, cannabis and methamphetamine powder. Based on a median split for age, a greater proportion of 'older' participants had recently driven under the influence of drugs in comparison to 'younger' participants, and those who had driven under the influence of drugs had also been using ecstasy longer and had recently used ecstasy and cannabis more frequently. On average, the risks associated with drug driving were considered by REU to be 'low' for cannabis, 'moderate' for ecstasy and methamphetamine, and 'high' for alcohol and LSD.

Health-related issues

Less than one-fifth of the sample (16%) reported that they had overdosed (passed out or fallen into a coma) on any drug in the six months preceding the interview. The main drugs involved in recent overdoses were alcohol (25%), cannabis (25%) and benzodiazepines (19%). Two participants (13%) reported ecstasy to be the main drug involved in an overdose episode. The majority of overdose episodes (81%) were associated with the use of more than one drug, most typically alcohol (63%), cannabis (50%) and ecstasy (25%).

Close to half (47%) of the REU sample had recently experienced no or few psychological symptoms of dependence in relation to their ecstasy use, as measured by the ecstasy Severity of Dependence Scale (SDS). However, over one-tenth (14%) reported experiencing significant symptoms of dependence in relation to ecstasy. High ecstasy SDS scores were associated with greater frequency and quantity of ecstasy use, binge drug use, methamphetamine use and high methamphetamine dependence scores.

Three-fifths of those who had recently used methamphetamine had experienced no symptoms of psychological dependence in relation to methamphetamine as measured by the methamphetamine SDS. However, over one-tenth (12%) reported experiencing significant symptoms of dependence in relation to methamphetamine. High methamphetamine SDS scores were associated with greater frequency of methamphetamine use, use of methamphetamine in combination with ecstasy, recent binge drug use, and recent injecting drug use.

Close to one-fifth (17%) of the 2005 REU sample had accessed health services in relation to drug use in the preceding six months, compared to one-tenth (10%) among the 2004 cohort. The most commonly accessed service was a GP (n=10). Five participants reported accessing first aid or emergency services in relation to drug use. Participants were most likely to access services in relation to the use of ecstasy (n=9), polydrug use (n=8), or cannabis (n=4).

Two-thirds of the sample (68%) had recently experienced work/study problems in relation to drug use, two-fifths had recently experienced financial (43%) or social/relationship (43%) problems, and less than one-tenth (6%) had recently experienced legal/police problems in relation to drug use. Problems were most commonly attributed to ecstasy, alcohol, cannabis, and methamphetamine powder. Whereas the majority of these problems were relatively minor, small proportions experienced more serious problems such as ending a relationship, being kicked out of home, leaving school, being sacked/quitting work, or having no money to pay for food or rent.

Criminal activity, policing and market changes

Consistent with previous years, the self-reported criminal activity among the 2005 REU sample was relatively low. With the exception of dealing drugs, less than one-tenth (9%) of the REU interviewed had committed criminal offences during the one month preceding the interview and less than one-tenth (9%) had been arrested during the preceding 12 months. Key experts generally indicated that there was no or little crime among the group of REU that they were familiar with. Less than one-tenth (8%) of the 2005 REU sample reported dealing drugs for cash profit during the month preceding the interview, compared to greater proportions among the 2003 (25%) and 2004 (16%) samples. In contrast, a larger proportion indicated that they had paid for ecstasy through dealing drugs for ecstasy profit (to offset the cost of their own use) among the 2005 (25%) in comparison to the 2004 sample (15%). One-quarter of the REU sample (27%) and several KE perceived that there had been an increase in police activity towards ecstasy users in the last six months. The perceived increase in activity was generally related to covert surveillance, particularly at events and venues, as well as an increase in the number of 'busts' of both consumers and providers. However, the majority of REU indicated that police activity had not recently made it more difficult for them to obtain drugs.

Conclusion

The REU interviewed for the current study were generally young, employed or studying, and not currently in drug treatment or legal trouble. While ecstasy was the preferred drug of most, polydrug use was the norm and the use of alcohol, cannabis, tobacco and methamphetamine common. The current harm reduction messages in regard to ecstasy suggest that use of the drug infrequently and in small amounts may assist in minimising the risk of neurological and neuropsychological harm. This is of concern as a notable proportion of those interviewed were using ecstasy more than weekly, using multiple tablets on an occasion of use, and using for extended periods (more than 48 hours) without sleep. Moreover, the rate of binge alcohol consumption in combination with ecstasy has been increasing since 2003 and may also exacerbate health harms. However, the level of harm experienced by the majority of participants was relatively low, with few recent overdose episodes, few people accessing health services in relation

to drug use, only relatively minor work/study, financial, and social problems experienced by most users, and most not experiencing significant symptoms of dependence in relation to either ecstasy or methamphetamine. The use of alcohol and polydrug use were associated factors for most of those that had recently overdosed on any drug. Those that had accessed health services in relation to drug use had typically seen a GP. While many consumers actively sought harm reduction information about the risks and effects of the drugs that they chose to use, these messages were not necessarily reaching other consumers.

Implications

It is important to remember that the aim of the PDI 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 users of ecstasy and related drugs and the prevalence of ecstasy and other drug use can not be directly inferred. However, the study is designed to identify emerging trends and important issues and the findings of the 2005 PDI suggest five key areas for 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 half of the REU interviewed in the current study were actively seeking harm reduction information in relation to the substances that they chose to use, these messages were not necessarily reaching other consumers. Despite this, the majority of REU indicated that that they were receptive to such information. Considering that drug information was typically sought from peers or peer-run organisations 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. Such a peer-led service would be extremely well-placed to target the following specific risk behaviours identified in the current study: polydrug and binge drug use, binge drinking, safe sex, sharing of injecting equipment and the potential risks of snorting and shafting as routes of administration. The provision of sharps containers and condoms at nightclubs and venues, as well as simple reminders in poster form, may help to reduce risky behaviours among this population. However, these practices are most likely to be implemented effectively if a non-selective minimum standard for providing harm reduction information and equipment was adopted in nightclubs and other entertainment venues.

2. Further monitoring and investigation of drug driving amongst REU

Over half of participants reported driving under the influence of ecstasy and related drugs, indicating the need for future monitoring and research in this area. Specifically, research into the actual degree of risk associated with driving under the influence of these drugs, as well as factors associated with the decision to drive and the characteristics of these individuals, may be particularly important, so that they may be better targeted for education campaigns. The REU interviewed in the present study considered the risks associated with driving under the influence of cannabis, ecstasy, and methamphetamine to be lower than that of alcohol. In light of recent legislation with regard to drug testing on Tasmanian roads, the PDI offers a unique opportunity to monitor changes in the incidence of drug driving among regular ecstasy consumers as well as their perceptions of the risks associated with driving under the influence of drugs.

3. Monitoring and dissemination of party drug trend information

The use and availability of the more potent crystal methamphetamine form, and substances such as ketamine and MDA, seems to have decreased since 2003, and the use of potentially harmful substances such as GHB are currently relatively low in Tasmania. Whereas the use and availability of cocaine is also relatively low, there were indications for an increase in the proportion reporting infrequent use of cocaine among the 2005 REU sample. It is imperative that the use and availability of such drugs is continually monitored in future years in order to identify any emerging trends in a timely fashion. It is also important that health and emergency services and venue and event staff are informed of such emerging trends in illicit drug markets.

4. The provision of pill testing kits

While there are some limitations to the use of commercially available ecstasy 'testing kits', currently there is often very little information available to consumers in regard to the substances contained within the tablets that are sold on the local market, and two-thirds of the participants in the current study indicated that they had sometimes bought a drug and it turned out to have different effects than expected. Limitations aside, use of these kits may allow consumers to be more informed about the tablets that they choose to use, and it was apparent that the consumers interviewed would act on information from testing kits – not taking a pill if it appeared to have an unexpected or unwanted content. Testing kits can be purchased over the internet but are currently not available from any local source. There may be some benefit in making these available locally on a not-for-profit or cost-recovery basis, or facilitating provision of testing at dance and related events. The use and/or supply of testing kits under these circumstances would also allow for the limitations of these kits to be conveyed more thoroughly and effectively to consumers.

5. Pragmatic drug education programs

Several KE noted an increase in the use of ecstasy by younger people, with some suggesting that high risk behaviours were more common among younger users of the drug. Cohesive education programs within schools may allow younger users to make informed and safer choices in relation to drug use. To maximise the credibility of the information provided, education programs are likely to be most effective if they peer-delivered, accurate, and explore issues that are of local relevance. By contrast, illicit drug education programs 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, and associated sensationalised reporting of drug use in the media, have the real potential to undermine the credibility of this and other research, as well as detracting from the potential for successful harm reduction to occur from such endeavours.

1.0 INTRODUCTION

The Party Drugs Initiative (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 jointly funded by the Australian Government Department of Health and Ageing and the National Drug Law Enforcement Research Fund (NDLERF) 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 inform policy where appropriate. 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 the survey of people who regularly inject illicit drugs, survey of 'key experts' (KE) who have regular contact with injecting drug users, and examination of 'indicator data' or available existing data sources.

The PDI uses the same triangulated methodology as the IDRS, bur aims to examine emerging trends in the use, price, purity and availability of 'ecstasy and related drugs' (ERD) in Australia. For the purpose of the present study, 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, MDA, and GHB. The feasibility of the PDI was assessed with a two state trial funded by NDLERF in 2000 (Breen, Topp, & Longo, 2002). It was clear from the feasibility study that the existing IDRS was not adequate to capture the emerging population of ecstasy and related drug users in Australia, and NDLERF provided additional funding for a two year project in every Australian state and territory beginning in 2003. The PDI 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. The current report contains data collected in 2005. Tasmanian trends in 2003 (Bruno & McLean, 2004b) and 2004 (Matthews & Bruno, 2005) and state comparisons (Breen et al., 2004; Stafford et al., 2005) are available as technical reports from the National Drug and Alcohol Research Centre, University of New South Wales.

1.1 Aims

The aims of 2005 PDI were: 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 in 2005; to examine and identify trends in the price, purity, and availability of ERDs in Hobart; to examine perceptions of the incidence of the risks and benefits of ecstasy use; to examine the nature and incidence of risk behaviours among the group of REU (e.g. injecting drug use, driving risk, sexual risk, blood-borne viral infections and vaccination); to examine health-related harms associated with ERD use including, overdose, help-seeking behaviour, dependence, and other potential problems (occupational, social, financial, legal); to investigate emerging trends in local ERD markets that may warrant further investigation or monitoring; to examine the incidence of drug information-seeking behaviour; and where possible 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 data collected in Hobart in 2003 (Bruno & McLean, 2004b) and 2004 (Matthews & Bruno, 2005).

2.0 METHODS

The PDI uses a convergent validity methodology involving the triangulation of three different sources. The three components include a survey of regular ecstasy users in Hobart, a survey of key experts 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 May and July 2005. Interviews were conducted at locations such as cafes, bars, the University of Tasmania, and private residences such as participants' and interviewers' homes where appropriate. 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).

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. Upon initial contact, participants were asked questions to establish their eligibility for the study and were provided with information about the aims and rationale for the study, the interview content and process, and the confidentiality and anonymity of the information that they may provide. Following informal consent to participate, interviewers arranged to meet participants at a mutually acceptable time and place. Prior to commencing the interview, participants were given further information about the study through a written information sheet describing the study and the interview content and process in more detail. Participants were also informed that the information they gave 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. Participants signed a consent form to indicate that they had read and understood the information given to them and that any questions had been answered to their satisfaction. Interviews generally took between 45 to 60 minutes to complete and participants were reimbursed a sum of $30 for their time and out of pocket expenses.

2.1.3 Measures

The structured interview focused on the six months preceding the interview and assessed information in regard to demographic characteristics; patterns of ecstasy and other drug use including frequency, quantity and routes of administration; the price, purity, and availability of different drugs; the perceived benefits and risks associated with ecstasy use; symptoms of dependence; risk behaviours such as injecting drug use, overdose, driving, and safe sex; other problems associated with ecstasy use such as work/study, financial, social and legal problems; self-reported criminal activity; and general trends in party drug markets, such as use of new drug types and perceptions of police activity.

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 were used to analyse categorical variables. A categorical variable for age was created using a median split for age, resulting in a 'younger' group (aged 23 and below, n=55) and an 'older' group (aged over 23 years, n=45). All statistical analyses were conducted using SPSS 12.0.1 for Windows (SPSS Inc., 2003).

2.2 Survey of key experts (KE)

Key experts who had regular contact with ecstasy users in the six months preceding the interview were eligible to participate in the study. Twenty two key experts 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 May and August 2005. Half of the KE were familiar with ecstasy users through both work and social/personal contact (n=10), others though only work (n=10) or personal/social (n=2) contact. Key experts had contact with regular ecstasy users on a median of 4 days a week during the preceding six months, ranging from once a week to daily (n=18). Most KE (n=13) had meaningful contact with over fifty regular ecstasy users during this time, with all but one having contact with more than ten users. KE indicated that the information that they provided was sourced through contact with users (n=16) as well as observation (n=9) and talking with colleagues (n=9).

Key experts included youth/health promotion workers (n=4), law enforcement personnel (n=2), Ambulance/Emergency workers (n=3), drug counsellors (n=2), venue/event owners or managers (n=3), venue/event bar staff or security personnel (n=3), DJs/party promoters (n=2), and ecstasy suppliers (n=2). Several key experts had also had contact with regular ecstasy users through their secondary role as a party promoter (n=1), DJ (n=1), or ecstasy provider (n=1). Seventeen of the key experts were male and five were female. Several KE indicated that they had regular contact with special populations including youth (n=5), GLBT (n=2), drug users (n=2) and HIV+ (n=1) individuals.

The semi-structured key expert 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 using Excel and are included in the text of the report. Information from single a KE was 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 12.0.1 for Windows (SPSS Inc., 2003).

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 regular ecstasy users and key experts. The pilot study for the IDRS (Hando et al., 1997) 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 PDI), 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 attention is drawn to relevant limitations in the text.

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

National Drug Strategy Household Surveys (1998, 2001, 2004)
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) (Australian Institute of Health and Welfare, 1999, 2002, 2005). 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
Tasmania has two 24-hour alcohol- and drug-related telephone information services. In mid-May 2000, Turning Point Alcohol and Drug Centre in Victoria took over responsibility for administration of the Tasmanian Alcohol and Drug Information Service (ADIS), a confidential drug and alcohol counselling, information and referral service. Turning point systematically record data for each call received, which comprised 2,208 during the 2000/01 financial year; 2,129 in 2001/02; 1,984 calls in 2002/03; 1,554 during 2003/04; and 1,332 calls in the 2004/05 financial year.

Police data
Information on drug seizures, charges, price and purity were obtained from Australian Illicit Drug Reports (1997/98, 1998/99, 1999/00, 2000/01, 2001/02) produced by the Australian Bureau of Criminal Intelligence (ABCI) and Illicit Drug Data Reports (2002/03, 2003/04, 2004/05) provided by the Australian Crime Commission (ACC). The Tasmanian data in these reports are provided by Tasmania Police State Intelligence Services. The ABCI and ACC reports do not necessarily report seizure and arrest data separately for drugs such as ecstasy. Therefore, where possible, these data have been obtained directly from Tasmania Police State Intelligence Services and are reported in the text of the report. Data on the purity of drugs seized are also provided through the ACC; however, drugs are only analysed by Tasmania Police Forensic Services in seizures where the person involved denies that the seizure in question contains illicit substances. Hence, for the 2004/05 financial year, a very small number of drug seizures were analysed for purity.

Public hospital admission data – Australian Institute of Health and Welfare
The Australian Institute of Health and Welfare has provided hospital morbidity data in relation to drug use from the year 1999/00 to 2003/04. 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 is important to note that data from Tasmania's only public detoxification centre were included from June 2002 onwards. Hospital admissions are reported separately for amphetamines, opioids, cannabis, and alcohol and are included in the text of the report where appropriate.

3.0 OVERVIEW OF REGULAR ECSTASY USERS

3.1 Demographic characteristics of the REU sample

Table 1 shows the demographic characteristics of the sample of 100 regular ecstasy users interviewed for the PDI in 2005. Over half of the sample was male (55%). The mean age of the sample was 24 years (range 18-44 years, *SD*=4.2 yrs), and there was no significant difference between the mean age of males (24.4 years) and females (23.3 years). All participants spoke English as their main language, and a minority (2%) were of Aboriginal and/or Torres Strait Island (A&TSI) descent. The majority (93%) of participants nominated their sexual identity as heterosexual, although gay males (1%) and bisexuals (5%) were also represented. Participants resided in a number of different suburbs across the greater Hobart area. A great majority lived in the inner Hobart suburbs (including north, south, west Hobart and Sandy Bay) (79%), with smaller proportions living in northern suburbs (11%), on the eastern shore (6%), or in suburbs surrounding Kingston (2%) or Sorrell (2%). The majority lived in their own (owned or rented) accommodation (73%) and the remainder lived in their parents' or family's home (17%).

The mean number of years of school education completed by participants was 12 (range 10-12 years, *SD* = 0.49 years), and the majority of participants (84%) had completed year 12. Over half of the sample (51%) had completed courses after school, one-quarter had completed a university degree (26%) and one-quarter (25%) had completed a trade or technical qualification. Two-fifths of participants were employed on a full-time basis (41%), one-third (31%) were currently full-time students, and one-fifth were employed on a part-time/casual basis (19%). Only small proportions of the sample were currently unemployed (5%), were currently receiving drug treatment (2%) or had received a custodial sentence for a previous criminal conviction (3%). These demographic characteristics are generally similar to those reported amongst the 2003 and 2004 cohorts. However, there was less unemployment and current drug treatment among the samples in 2004 and 2005 in comparison to 2003. One-third of the regular ecstasy users interviewed in 2005 (30%) had previously participated in the PDI study, either in 2003 (4%) or 2004 (27%), and a single participant had participated in the IDRS IDU study in 2003.

Demographics of regular ecstasy consumers described by KE

Key expert descriptions of the ecstasy users with whom they had regular recent contact were consistent with the characteristics of the REU sample. Most experts described groups as being 60-70% male (n=8) or of an even gender balance (n=6). Key experts estimated that the age of these groups ranged between 12 and 50 years, with most being in their early- to mid-20s. Most key experts described the groups as being from an English-speaking background, and to be mainly heterosexual. Key experts noted contact with individuals that lived in a wide range of suburbs but in particular inner city suburbs and surrounding areas. Due to the nature of their role, some key experts had regular contact with people from particular areas in Hobart, including the northern suburbs (n=1), and eastern shore (n=1).

Key experts noted that the majority of ecstasy users that they were familiar with were well educated and either employed or currently studying at university. Four KE noted that a proportion of the group that they were familiar with were still at school (< year 12). Two KE noted that the group that they had regular contact with were generally unemployed, probably reflecting the nature of their role within government health services rather than being characteristic of regular ecstasy users per se. Few KE were aware of any drug treatment among the groups that they were familiar with. Five KE estimated that some proportion of the group (1%-30%) were currently in drug treatment, and two KE with roles in health services noted that a higher proportion of the group were currently in drug treatment. The majority of KE indicated

low levels of criminal activity among the group that they were familiar with, with four KE noting that a small proportion of the groups that they were familiar with had come into contact with the criminal justice system.

Table 1: Demographic characteristics of REU sample, 2003-2005

	2003 n=100	2004 n=100	**2005 n=100**
Mean age (years)	24 (18-45)	23 (18-32)	**24 (18-44)**
Sex (% male)	61	61	**55**
English speaking background (%)	100	100	**100**
A&TSI (%)	6	2	**2**
Accommodation			
Own accommodation (includes rented) (%)	75	82	**73**
Live with parents / family (%)	22	17	**27**
Boarding house / hostel (%)	2	1	**-**
Refuge (%)	1	-	**-**
Location of residence			
Inner Hobart suburbs (%)	70	87	**79**
Northern suburbs (%)	12	2	**11**
Eastern shore (%)	7	11	**6**
Kingston area (%)	6	0	**2**
Sorrell (%)	4	1	**2**
No fixed address (%)	1	0	**0**
Education			
Mean number school years*	12 (8-12)	12 (10-12)	**12 (10-12)**
Trade / technical qualifications (%)	23	21	**25**
University qualifications (%)	21	35	**26**
Employment			
Full-time employment (%)	27	28	**41**
Part-time / casual employment (%)	17	26	**19**
Full-time student (%)	40	37	**31**
Part-time student (%)	0	1	**2**
Home duties (%)	-	-	**2**
Not employed (%)	16	8	**5**
Sexual identity			
Heterosexual (%)	85	93	**94**
Gay male (%)	2	2	**1**
Bisexual (%)	13	5	**5**
Current drug treatment (%)	10	1	**2**
Previous prison conviction (%)	3	1	**3**

Source: PDI regular ecstasy user 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

Ecstasy was the preferred or favourite drug for over half of the participants (52%). Smaller proportions preferred alcohol (16%), cocaine (11%), cannabis (10%), followed by methamphetamine (5%: powder 4%, crystal 1%), ketamine (2%), other opiates (2%), LSD (1%), and heroin (1%). The sample of regular ecstasy users were asked about the types of drugs (out of 20 drug types) that they had used in their lifetime and during the six months preceding the interview (see Table 2). Participants had used a median of 8 drug types (range 4-17) at some stage of their life and a median of 6 drug types (range 2-12) in the six months preceding the interview, which is similar to that reported among the 2004 cohort. Less than one-fifth (19%) of the sample had injected any drug at some stage of their life, which is similar to the proportion reported in 2004 (15%), but fewer in comparison to the 2003 sample (26%). One-tenth of the sample (8%) had injected a drug in the six months preceding the interview, which is similar to the proportion reported in 2004 (9%), but is fewer in comparison to the 2003 sample (22%).

The majority of the REU interviewed had used alcohol (100%), cannabis (100%), tobacco (89%) and methamphetamine powder (89%) at some stage of their lives. Over half of the sample had ever used psychedelic mushrooms (63%), LSD (54%), nitrous oxide (69%) or amyl nitrite (49%). Two-fifths of the sample had ever used pharmaceutical stimulants (44%), cocaine (43%), and benzodiazepines (40%), and approximately one-third had ever used methamphetamine base (35%) or crystal methamphetamine (29%). One-fifth or less had ever used ketamine (24%), anti-depressants (21%), opium (17%), and other opiates (17%), and smaller proportions had ever used MDA (8%), heroin (8%), GHB (7%), methadone (5%), and buprenorphine (2%). There were no reports of lifetime use of GBL or 1,4B.

In the six months preceding the interview, the majority of the regular ecstasy users interviewed had used alcohol (98%), cannabis (89%), and tobacco (83%), and three-quarters had used methamphetamine powder (75%). One-third of the sample or more had used psychedelic mushrooms (40%), nitrous oxide (41%), and LSD (31%), and between one-quarter and one-tenth had recently used benzodiazepines (25%), methamphetamine base (23%), and cocaine (20%). Less than one-fifth had recently used amyl nitrite (16%), pharmaceutical stimulants (16%), anti-depressants (12%), ketamine (11%), or crystal methamphetamine (10%). Smaller proportions had used other opiates (9%), opium (6%), MDA (3%), GHB (2%), methadone (1%), and buprenorphine (1%). None of the participants had recently used heroin, 1,4B or GBL.

Over the last three years of the study there has been a decrease in the proportion reporting recent and lifetime use of crystal methamphetamine, MDA, and amyl nitrite, and a slight increase in the lifetime and recent use of cocaine and nitrous oxide. Compared to the 2004 sample there was slightly greater reported recent use of methamphetamine powder (68% vs. 77%), anti-depressants (4% vs. 12%) and ketamine (5% vs. 11%) in 2005, and compared to 2003 there has been less recent use of heroin, methadone, and buprenorphine among the latter two cohorts.

Table 2: Lifetime and recent polydrug use of REU, 2003-2005

Variable	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Median drug types ever used	9 (4-18)#	8 (2-18) #	**9 (4-18)^**
Median drug types used last 6 mths	7 (3-12) #	6 (1-14) #	**6 (2-12)^**
Ever inject any drug (%)	26	15	**19**
Injected any drug in last 6 mths (%)	22	9	**8**
Alcohol			
Ever used (%)	100	100	**100**
Used last 6 months (%)	98	98	**98**
Cannabis			
Ever used (%)	100	98	**100**
Used last 6 months (%)	90	91	**89**
Tobacco			
Ever used (%)	96	89	**89**
Used last 6 months (%)	81	77	**83**
Methamphetamine powder (speed)			
Ever used (%)	90	82	**89**
Used last 6 months (%)	67	68	**77**
Methamphetamine base (base)			
Ever used (%)	36	32	**35**
Used last 6 months (%)	24	20	**23**
Crystal methamphetamine (crystal)			
Ever used (%)	58	36	**29**
Used last 6 months (%)	52	16	**10**
Pharmaceutical stimulants#			
Ever used (%)	n/a	39	**44**
Used last 6 months (%)	n/a	14	**16**
Cocaine			
Ever used (%)	44	32	**43**
Used last 6 months (%)	7	10	**20**
LSD			
Ever used (%)	62	51	**54**
Used last 6 months (%)	24	32	**31**
MDA			
Ever used (%)	32	20	**8**
Used last 6 months (%)	21	15	**3**
Ketamine			
Ever used (%)	38	23	**24**
Used last 6 months (%)	24	5	**11**
GHB			
Ever used (%)	10	7	**7**
Used last 6 months (%)	6	3	**2**
1,4 B			
Ever used (%)	2	-	**-**
Used last 6 months (%)	1	-	**-**
GBL			
Ever used (%)	-	-	**-**
Used last 6 months (%)	-	-	**-**

Source: PDI Regular ecstasy user interviews

Pharmaceutical stimulants were not included prior to 2004

out of 19 drug types

^ out of 20 drug types

Table 2: Lifetime and recent polydrug use of REU, 2003-2005 (continued)

Variable	2003 **(n=100)**	2004 **(n=100)**	**2005** (n=100)
Amyl nitrite			
Ever used (%)	78	52	**49**
Used last 6 months (%)	43	23	**16**
Nitrous oxide			
Ever used (%)	47	57	**69**
Used last 6 months (%)	25	34	**41**
Benzodiazepines			
Ever used (%)	52	34	**40**
Used last 6 months (%)	35	23	**25**
Anti-depressants			
Ever used (%)	32	14	**21**
Used last 6 months (%)	14	4	**12**
Heroin			
Ever used (%)	20	4	**8**
Used last 6 months (%)	6	0	**-**
Methadone			
Ever used (%)	14	2	**5**
Used last 6 months (%)	13	2	**1**
Buprenorphine			
Ever used (%)	5	-	**2**
Used last 6 months (%)	3	-	**1**
Other opiates			
Ever used (%)	35	19	**25**
Used last 6 months (%)	13	8	**13**
Psychedelic mushrooms			
Ever used (%)	54	60	**63**
Used last 6 months (%)	38	41	**40**

Source: PDI Regular ecstasy user interviews

3.3 Summary of polydrug use trends in REU

- The sample of 100 regular ecstasy users tended to be in their early- to mid-twenties, with ages ranging from 18 to 44 years. There were slightly more males than females (55%). Most of the participants were well educated, with the majority having completed year 12 and one-half having completed tertiary qualifications (university or trade/technical). Two-thirds were employed either full-time or part-time/casual and one-third were full-time students. Few participants had come into contact with the criminal justice system or drug treatment agencies.
- Polydrug use was the norm among the regular ecstasy users interviewed, with most having used a range of drugs. Recent use of alcohol, cannabis, and methamphetamine powder was common. Over one-third had recently used psychedelic mushrooms, LSD, and nitrous oxide, and one-fifth had recently used methamphetamine base, benzodiazepines and cocaine. Less than one-fifth had recently used amyl nitrite, pharmaceutical stimulants, anti-depressants, ketamine, and crystal methamphetamine. The recent use of GHB, MDA, methadone, opium, buprenorphine, and other opiates was low, and there was no recent use of heroin, 1,4B, and GBL among the sample.
- Between 2003 and 2005 there have been consistent trends in the use of some drug types. The proportion reporting recent use of crystal methamphetamine has decreased from over one-half of the sample in 2003 (52%) to one-tenth (10%) in 2005. Similarly, the proportion reporting recent use of MDA (21% vs. 3%) and amyl nitrate (43% vs. 16%) has also decreased, whereas recent use of cocaine (7% vs. 20%), and nitrous oxide (25% vs. 41%) has increased.
- Consistent and stable trends in the use of most other drug types were observed, though slight increases in the use of methamphetamine powder, anti-depressants and ketamine were observed between 2004 and 2005.
- There was less unemployment, recent injecting drug use, current drug treatment, and recent use of heroin, buprenorphine, and methadone use among the 2004 and 2005 samples in comparison to 2003, possibly reflecting less overlap between the IDU and REU samples in the latter two years of the study.

4.0 ECSTASY

Over a half of the regular ecstasy users (52%) indicated that ecstasy was their drug of choice. The mean age of first ecstasy use was 20 years (range 14-42, *SD*=3.5). There was no significant difference between the mean age of first use for females (19.76 years, *SD*=2.7) and for males (19.73 years, *SD*=4.0). The median age at which participants had first started to use ecstasy on a regular (at least monthly) basis was 21 years (range 14-43, *SD*=3.7) and there were no significant sex differences. Ecstasy had been used by this group for a median of 3 years (range 0-12 years), and the majority of the sample (88%) had been using ecstasy for two years or more, compared to three-quarters of the sample (76%) in 2004. Overall the males in the 2005 cohort had been using ecstasy for a greater number of years (M=4.67, SD=3.3) in comparison to females (*M*=3.56, *SD*=2.24), t(98)=-1.93, p=.057, though this failed to reach statistical significance.

The entire 2005 REU sample (100%) had ever used ecstasy in tablet form, one-quarter (28%) had ever used ecstasy capsules and a two-fifths (18%) had ever used ecstasy powder. Ecstasy powder had typically been snorted (78%) or swallowed (61%) and a small proportion had ever injected (11%,n=2) or smoked (6%, n=1) ecstasy powder. Ecstasy capsules had typically been swallowed (89%) or snorted (46%) and a small proportion had ever injected ecstasy capsules (7%, n=2). Ecstasy tablets had typically been swallowed (100%) or snorted (80%) and smaller proportions had smoked (15%), shelved/shafted (15%) or injected (9%) ecstasy tablets. Among the 2005 REU sample, a greater proportion had ever smoked (4% vs. 15%) or shelved/shafted (4% vs. 15%) ecstasy tablets.

4.1 Ecstasy use among REU

When REU were asked which form they had mainly used in the preceding six months, the majority had mainly used ecstasy tablets (98%) and a small proportion (2%) had mainly used ecstasy capsules. Consistent with this, all of the participants had recently used ecstasy in tablet form (100%), and one-tenth had used ecstasy capsules (12%) or ecstasy powder (11%).
Ecstasy powder had recently been snorted (73%) or swallowed (73%) on a median of two days (range 1-30) during the six months preceding the interview. Ecstasy capsules had recently been snorted (83%) or swallowed (75%) on a median of 2.5 days (range 24-61) during the last six months.

Ecstasy tablets had recently been swallowed (99%) or snorted (75%) and smaller proportions had recently shafted/shelved (12%), smoked (8%) or injected (4%) ecstasy tablets. The proportion of the sample reporting recent shelving/shafting of ecstasy was greater among the 2005 (12%) in comparison to the 2004 (2%) cohort. Participants were asked how they had 'mainly' used ecstasy (more than half the time) in the six months preceding the interview. The majority of ecstasy users had mainly swallowed ecstasy (96%) and small proportions had mainly snorted (3%) or injected (1%) ecstasy in the last six months. None of the REU reported that they had mainly shelved/shafted ecstasy.

The comments of key experts were generally consistent with reports of REU. The majority of KE who commented noted that ecstasy was typically swallowed in tablet form (n=15). However, a single KE noted that small proportions of the group (4-10%) used ecstasy in either capsule form or powder form. It was noted by KE that some proportions of these groups snort ecstasy (5%- 60%, n=6) or use the drug intravenously (1%-5%, n=3). One KE noted that REU often snort ecstasy 'to get a quick start' and then swallow the drug later. Estimates of the proportion of the groups who shelve/shaft ecstasy were generally low-ranging from 10-25% (n=4) compared to 1% to 5% (n=4) among the 2004 sample. While there were some anecdotal indications of an

increase in the amount of REU shelving/shafting ecstasy among the 2004 sample, several KE (n=3) noted an increase in the shelving/shafting of ecstasy among the 2005 sample and this is consistent with the increase in this route of administration seen among the 2005 REU sample (Table 3). One KE noted that it had become 'cool' to shelve/shaft in recent months.

Ecstasy (tablets, powder, capsules) had been used by REU on a median of 15 days (range 6-52 days), or slightly more than fortnightly in the six months preceding the interview. There was no significant difference between the frequency of use for males and females in the current cohort. Over one-quarter of the sample (29%) had used ecstasy weekly or more frequently in the six months preceding the interview. The remainder of the sample had used ecstasy either less than weekly to fortnightly (46%), or less than fortnightly to monthly (25%), compared to 37% and 39% respectively in 2004.

The median number of ecstasy tablets consumed in a typical session of use in the past six months was 2 tablets (range 1-6), which is similar to the median dosage reported in 2004 (2 tablets) and 2003 (1.5 tablets). The number of tablets consumed in a typical session of use was significantly greater for males (median = 2 tablets) in comparison to females (median = 1 tablets); Mann-Whitney $U = 818.0$, $p<.01$. This is consistent with a trend observed in the 2004 data. Two-thirds of the sample (67%) typically used more than one tablet per session in 2005, which is comparable to the 2004 cohort (69%) but greater than the proportion observed among the 2003 cohort (54%).

The median number of ecstasy tablets used in the heaviest session of use in the past six months was 4 tablets (range 1-15), which is slightly greater than the median of 3 tablets observed in 2003 and 2004. Half of the sample had used 4 or more tablets in the heaviest session of use compared to 37% in 2004 and 40% in 2003. Males reported using a significantly greater number of tablets in the biggest session of use (4 tablets, SD=2.84) in comparison to females (3 tablets, SD=2.68); Mann-Whitney $U = 908.0$, $p<.05$. Over one-third of the sample (37%) had recently 'binged' on ecstasy (used ecstasy for more than 48 hours continuously without sleep), which is similar to the proportion that had recently binged on ecstasy in 2004 (34%) and slightly less in comparison to 2003 (41%).

Key expert comments on the frequency of ecstasy use were varied and ranged from 2-3 times a week to sporadic use restricted to special occasions, but several KE indicated that some proportion of these groups use ecstasy on a weekly (n=8), or fortnightly basis (n=5). Estimates of the amount of ecstasy used in a typical session of use were also varied, but typically ranged from 1-3 tablets on average (n=8). Binge use of ecstasy among some proportion of REU (10-25%, n=3) was also noted by several KE (n=5), with one KE noting that some REU take more than eight tablets per session. One KE suggested that older users were more likely to have longer sessions of use in comparison to younger users, and that the length of sessions of female users had increased to become similar to that of male users. Five KE indicated that the frequency of use had increased among the group of REU that they were familiar with. Three KE noted an increase in the quantity used by groups of REU and three KE specifically noted an increase in 'double dropping', or taking more than one pill at a time, particularly among younger users (n=2). One KE noted that the quantity and frequency of ecstasy use fluctuated depending on the seasonal variation.

The REU sample was asked to comment on the locations that they had usually used ecstasy to be under the influence of the drug (rather than the location of ingestion). Table 3 shows that ecstasy was most commonly used at dance- or music-related venues such as raves/doofs/dance parties (81%), nightclubs (86%), and live music events (54%). Ecstasy use was also common at private

residences including private parties (60%), friend's home (58%), and own home (48%). Other locations included the pub (32%), outdoors (13%), public place (7%), dealer's home (5%), work (4%) or car (3%). The last location of ecstasy use was relatively consistent with the usual locations used. Over half of the sample reported last using ecstasy at a nightclub (40%) or dance related event (16%). Smaller proportions reported last using ecstasy at a friend's home (13%), private party (8%), own home (13%), pub (3%), outdoors (1%), and live music event (4%).

Over the last three years of the study, there are trends among REU for increased use at own home, friend's home, and public bars. This finding is consistent with the comments of two KE. One KE noted more use in homes and in conjunction with other recreational activities rather than just dance event/nightclub-based use. Another KE noted an increase in the use of ecstasy at pubs and mainstream events rather than dance-related events and nightclubs.

Table 3: Patterns of ecstasy use among REU, 2003-2005

Variable	2003 n=100	2004 n=100	**2005 n=100**
Mean age first used ecstasy (range)	20 years (14-40)	20 years (15-32)	**20 years (14-42)**
Ecstasy drug of choice (%)	50	58	**52**
Frequency of use			
Median days used ecstasy last 6 months#	14	12	**15**
Use ecstasy weekly or more frequently (%)	38	24	**29**
Dose			
Median ecstasy tablets used in 'typical' session (range)	1.5 (0.5-7.5)	2 (0.5-12)	**2 (1-6)**
Typically use > one tablet per session (%)	54	69	**67**
Recently binged on ecstasy* (%)	41	34	**37**
Median ecstasy tablets used in 'biggest' session (range)	3 (1-60)	3 (1-30)	**4 (1-15)**
Main route of administration in last 6 mths			
Swallowed (%)	89	94	**96**
Snorted (%)	6	6	**3**
Injected (%)	5	0	**1**
Shelved/shafted (%)	n/a	0	**0**
Main form used last 6 mths (%)			
Tablets (pills)	n/a	n/a	**98**
Powder	n/a	n/a	**-**
Capsules	n/a	n/a	**2**
Injecting drug use			
Ever injected any drug (%)	26	15	**19**
Ever injected ecstasy (%)	18	6	**9**
Injected ecstasy in the last 6 months (%)	11	1	**4**
Locations typically used ecstasy in the last 6 mths			
Home (%)	30	39	**48**
Dealer's home (%)	5	7	**5**
Friend's home (%)	29	56	**58**
Raves/doofs/dance parties	82	89	**81**
Nightclub (%)	73	82	**86**
Pub (%)	10	21	**32**
Restaurant/cafe	n/a	6	**-**
Private party (%)	32	64	**60**
Public place (street/park) (%)	5	5	**7**
Outdoors (%)	n/a	17	**13**
Car (%)	5	7	**3**
Live music event (%)	n/a	53	**54**
Work (%)	-	-	**4**
Acquaintance' home (%)	n/a	n/a	**3**
Location last used ecstasy in the last 6 months			
Home (%)	8	10	**13**
Dealer's home (%)	3	-	**-**
Friend's home (%)	11	15	**13**
Rave/doof/dance party	33	37	**16**
Nightclub (%)	37	22	**40**
Pub (%)	4	2	**3**
Private party (%)	4	10	**8**
Outdoors (%)	-	1	**1**
Live music event (%)	n/a	1	**4**
Other (%)	-	2	**2**

Source: PDI Regular ecstasy user interviews

* Binged defined as the use of stimulants for more than 48 hours continuously without sleep

Includes pills, powder and capsules

Polydrug use among REU

Table 4 shows that the majority of the REU sample had typically used other drugs when under the influence of ecstasy (99%) and when coming down from ecstasy (85%) during the six months preceding the interview. Drugs most commonly used when under the influence of ecstasy were alcohol (90%), tobacco (73%) and cannabis (35%). One-tenth (12%) had typically used methamphetamine powder in combination with ecstasy and smaller proportions had typically used anti-depressants (4%), amyl nitrite (2%), nitrous oxide (2%), methamphetamine base (8%), pharmaceutical stimulants (1%), methadone (1%) and mushrooms (1%). The drugs most commonly used when coming down from ecstasy were cannabis (52%), alcohol (54%), and tobacco (67%). Smaller proportions had typically used nitrous oxide (4%), anti-depressants, (4%), methamphetamine powder (3%), benzodiazepines (3%), methamphetamine base (2%), pharmaceutical stimulants (1%), methadone (1%), and other opiates (1%).

There was less use of methamphetamine powder in combination with ecstasy in 2005 compared to the 2004 cohort (24% vs. 12%) and less use of benzodiazepines (13% vs. 3%) and cannabis (62% vs. 52%) when coming down from ecstasy. The proportion of participants that usually drink alcohol when under the influence of ecstasy was greater among the 2004 and 2005 samples compared to the 2003 sample (93% and 90% vs. 72%). Three-quarters of those who usually drink when under the influence of ecstasy in 2004 (76%) and 2005 (78%) reported that they typically consumed more than five standard drinks when under the influence of ecstasy, compared to less than half (45%) among the 2003 cohort. The proportion of participants that had used alcohol when coming down from ecstasy in 2004 (57%) and 2005 (54%) was also greater in comparison to the 2003 sample (39%), as was the number who had typically used more than five standard drinks when coming down from ecstasy (39% and 46% vs. 23%).

Several KE indicated that polydrug use was common among the group of regular ecstasy users that they had recent regular contact with, and three KE noted a recent increase in polydrug use among these groups. Typical drug combinations included the use of ecstasy with alcohol, cannabis and methamphetamine, which is consistent with the patterns of use of the REU interviewed in the present study. One KE noted that REU have become more 'careless' about mixing different drug types. Consistent with the high levels of binge drinking in combination with ecstasy among the REU sample, several KE commented on the use of alcohol in combination with ecstasy. Three KE noted a recent increase in binge drinking, and three KE commented that younger users typically drank more than older users and were 'less responsible' in their approach to alcohol.

Table 4: Polydrug use among REU, 2003-2005

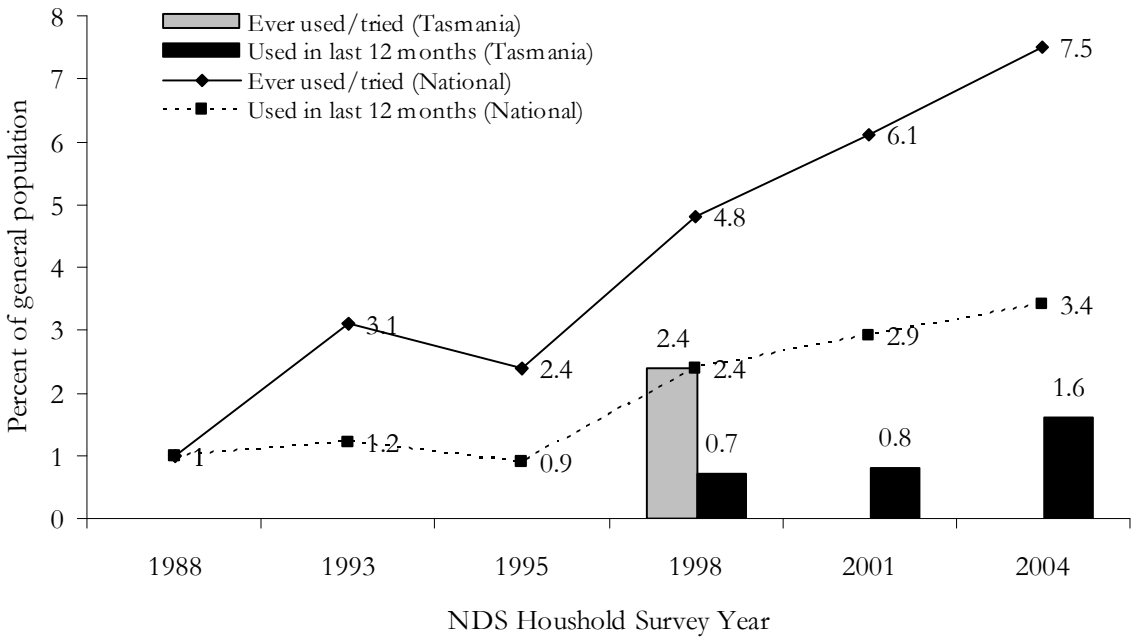
%	Drugs typically used with ecstasy in last six mths (%)			Drugs typically used to come down from ecstasy in last six mths (%)		
	2003 n=100	2004 n=100	**2005 n=100**	2003 n=100	2004 n=100	**2005 n=100**
None	2	1	**1**	11	11	**15**
Meth. powder	25	24	**12**	3	2	**3**
Meth. base	9	3	**8**	3	-	**2**
Crystal meth.	8	-	**-**	3	-	**-**
Pharm. stimulants	1	-	**1**	-	-	**1**
LSD	2	1	**-**	-	-	**-**
Ketamine	3	-	**-**	2	-	**-**
Amyl nitrate	12	6	**2**	2	2	**-**
Nitrous oxide	4	4	**2**	1	2	**4**
Cannabis	44	41	**35**	63	62	**52**
Alcohol						
Usually drink	72	93	**90**	39	57	**54**
> 5 std drinks	45	71	**78**	23	39	**46**
Methadone	4	1	**1**	4	1	**1**
Other opiates	5	1	**-**	10	1	**1**
Tobacco	72	66	**73**	56	51	**67**
Anti-depressants	1	-	**4**	1	-	**4**
Benzodiazepines	2	-	**-**	17	13	**3**
Mushrooms	-	1	**1**	-	-	**-**

Source: PDI regular ecstasy user interviews

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 2004 (Australian Institute of Health and Welfare, 1999, 2002a, 2002b, 2005a, 2005b). The lifetime prevalence of ecstasy use among the general population has increased from 1% in 1988 to 7.5% in 2004. The proportion of the national sample that had used ecstasy in the preceding 12 months has also increased from 1% in 1988 to 3.4% in 2005. The greatest increase in the prevalence of ecstasy use among the national sample occurred between 1995 and 1998, with steady but more gradual increases seen between 1998 and 2004. In 1998, the proportion of the Tasmanian sample that had ever used ecstasy was 2.4% (n=28), which was half the national average of 4.8%. Less than 1% of the Tasmanian population reported recent use of ecstasy in both 1998 (0.7%) and 2001 (0.8%) which is also lower than the national average of 2.4% and 4.8% respectively. The proportion of the Tasmanian sample reporting lifetime use of ecstasy was not included in the 2001 and 2004 reports due to a change in the way this question was asked between surveys, which may have influenced its reporting. The proportion reporting recent use of ecstasy among the 2004 Tasmanian sample was (1.6%) which is still at least half that of the national average (3.4%) suggesting a lower prevalence of ecstasy use in Tasmania. Although the estimated prevalence of recent ecstasy use in Tasmania has increased from 0.8% in 2001 to 1.6% in 2004, this change is within the bounds of error measurement for the survey. Thus it is not possible to infer that this suggests an increased prevalence of ecstasy use locally.

Figure 1: Prevalence of ecstasy use in Australia and Tasmania among those aged 14 years and over, 1988-2004



Source: National Drug Strategy Household Survey 1988-2004

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. Three-fifths of the REU interviewed (60%) indicated that most of their friends use ecstasy, and one-third (31%) indicated that about half of their friends use ecstasy. Smaller proportions indicated that only a few (4%) or all (5%) of their friends used ecstasy. Half of the respondents (50%) indicated that there had been some recent change in drug use among themselves or friends. Key experts were asked to comment on any changes or trends in ecstasy and other drug use among the group of users they were familiar with. The qualitative comments of both REU and KE in relation to recent changes and trends in ecstasy use are discussed below.

Whereas the present study is not designed to provide indications of the prevalence of ecstasy use among the population, there is anecdotal evidence from both REU and KE for changes in the types and number of people that use of ecstasy in Hobart. Several KE (n=5) and REU (n=5) indicated that the use of ecstasy had become more 'normalised', 'socially acceptable' or 'mainstream' in society and less 'underground'. Ecstasy use was thought to have become less associated with 'clubbing' and to have been increasingly used by new demographic groups such as 'football players', 'bogans', and people of low socio-economic status (SES). KE noted that there had been a general increase in the number of people using ecstasy (n=6) and a broadening of the age range of users, due to an increase in the number of 'younger' (n=5) and 'older' users (n=6). REU comments on the changes in the use of ecstasy among themselves and their friends were varied. Whereas some REU noted increases in the number of people using ecstasy (n=8), and in the frequency (n=5) and quantity (n=4) of use, others noted less use of ecstasy (n=7) or an increase in frequency and decrease in the quantities used (n=3).

A substantial and increasing proportion of REU reported that they typically binge drink in conjunction with using ecstasy (see Table 4, Section 4.1). Consistent with this, several KE commented on the use of alcohol in combination with ecstasy, with three KE noting a recent

increase in binge drinking, and three KE commented that younger users typically drank more than older users and were 'less responsible' in their approach to alcohol. Three REU also noted an increase in the use of alcohol in combination with ecstasy, with two participants noting that this had typically been considered dangerous in the past. Ecstasy was also often compared and contrasted to alcohol. Ecstasy was perceived by several REU to have fewer negative effects and to create a safer and friendly environment in comparison to alcohol (n=8). Whereas several KE (n=2) noted that REU generally imposed few problems at venues, others noted that violence and other problems generally stem from people who have consumed a lot of alcohol. These comments are relatively consistent with those noted in 2004 and may indicate that both alcohol and ecstasy are perceived to be drugs used within the context of social settings such as music and entertainment venues and, as such, ecstasy has become more enmeshed in drinking culture.

4.4 Summary of patterns of ecstasy use

- Most participants had first used ecstasy at around 20 years of age and a large majority (88%) had been using ecstasy for two years or more.
- The entire sample had recently used ecstasy in tablet form and one-tenth had recently used ecstasy capsules (12%) or powder (11%).
- On average, ecstasy had been used slightly more than fortnightly with an average of two tablets taken orally in a typical session. Snorting of ecstasy was also common and there was an increase in the number of people that reported recently shelving/shafting ecstasy in comparison to 2004.
- One-quarter (29%) had used ecstasy on a weekly basis or more frequently, two-thirds (67%) used more than one tablet in a typical session of use, and one-third (37%) had recently used ecstasy in a 'binge session' (continuous 48 hour period of drug use without sleep).
- Whereas the frequency of ecstasy use was slightly lower among the 2004 relative to the 2003 sample, there was a slight increase in frequency in 2005 relative to 2004. Several KE also noted a recent increase in the frequency of use of some REU. There were no sex differences in the frequency of use.
- The number of ecstasy tablets used in a typical session of use was greater among the 2004 and 2005 samples relative to 2003. The amount of ecstasy used in the biggest session of use was greater among the 2005 sample (4 tablets) in comparison to 2003 and 2004 samples (3 tablets), but the frequency of 'binge' ecstasy use is lower among the latter two years of the study. Males used significantly larger amounts in a typical and in the biggest session of use in comparison to females. Several KE noted a recent increase in the quantities used by REU, particularly among younger users.
- Ecstasy was typically used at music-related venues including dance parties, nightclubs and live music events but was also used at a range of other locations including private parties and private residences. REU reports and anecdotal comments of KE suggest an increase in the use of ecstasy at locations other than dance/events and nightclubs, in particular private residences and public bars.
- The majority of REU had typically used other drugs when under the influence (99%) and when coming down form ecstasy (85%). Alcohol, cannabis, and tobacco were the drugs most commonly used. One-tenth (12%) typically used methamphetamine powder when under the influence of ecstasy compared to one-quarter among the 2003 (25%) and 2004 samples (24%). The use of benzodiazepines and cannabis when coming down from ecstasy was also reduced in comparison to 2004.
- The majority of participants (90%) reported drinking alcohol when under the influence of ecstasy and three-quarters of these (78%) typically consumed more than five standard drinks. The proportion reporting binge drinking when under the influence and coming down from ecstasy is greater among the 2004 and 2005 samples compared to 2003. KE also noted a recent increase in the use of alcohol in combination with ecstasy, particularly among younger users of the drug.
- Data from the NDSHS suggests a steady increase in the national prevalence of ecstasy use in Australia between 1995 and 2004. The prevalence of recent ecstasy use among the Tasmanian sample has remained at least half that of the national estimate during this time.

4.5 Price

Table 5 shows ecstasy prices reported by REU from 2003 to 2005. The median reported market price for one ecstasy tablet in 2005 was $45 (range $35-50), which is slightly greater in comparison to 2004 ($40) and slightly less compared to 2003 ($50). The median price of the last ecstasy tablet purchased was $40 (range $30-50), which is consistent with the last reported price in 2004 ($40) and less in comparison to 2003 ($45). The median reported price for 10 ecstasy tablets was $350 (range $250-400, n=12). The median reported price for one ecstasy capsule was $43 (range $35-50, n=2) and one respondent indicated that one point (0.1 of a gram) of ecstasy powder could be purchased for $45. Consistent with previous years, over two-thirds of the 2005 cohort (67%) indicated that the price of ecstasy had been stable in the six months preceding the interview and smaller proportions indicated that the price of ecstasy had either decreased (10%), fluctuated (16%), or increased (7%).

Table 5: Price of ecstasy purchased by REU and price variations, 2003-2005

Variable	2003 n=100	2004 n=100	**2005 n=100**
Median price ecstasy tablet (range)	$50 ($30-$50) n=65	$40 ($30-50) n=100	**$45 ($35-50) n=100**
Median price of last tablets purchased (range)	$45 ($15-68) n=98	$40 ($30-50) n=100	**$40 ($20-50) n=95**
Price change			
Don't know (%)	-	2	**-**
Increased (%)	5	6	**7**
Stable (%)	72	64	**67**
Decreased (%)	15	15	**10**
Fluctuated (%)	8	13	**16**

Source: PDI Regular ecstasy user interviews

Key experts' comments on the price of ecstasy were generally consistent with those of regular ecstasy users. The median price for one ecstasy pill was reported to be $40 (n=11), or to range from $30-50 (n=4). Five KE noted that the price per pill was less when bought in larger quantities, with estimates ranging from $12.50 to $45 per pill when purchased in this manner. Seventeen KE commented on changes in the price of ecstasy in the preceding six months, with the majority indicating that the price of ecstasy had remained stable over the preceding six months (76%, n=13), and smaller proportions indicating that the price of ecstasy had recently decreased (18%, n=3) or fluctuated (6%, n=1). One KE noted that the price paid may be dependent on the quality of the pill. One KE noted that the price had decreased during the previous 12 months.

The price of ecstasy reported by Tasmania Police (based on reports from informants) has varied from $60-80 in 1997/98 down to $15-25 in the following two years up to $50-60 and $50-70 respectively in the 2000/01 and 2001/02 reporting periods. The price of $30-70 per tablet in 2002/03 and 2003/04 indicates a decrease in the lower price range in comparison to the previous two years. It should also be noted that during the last quarter of the 2002/03 period there was, a price range of $30-50. In 2005, a price range of $40-50 was reported by Tasmania police, which is commensurate with the prices reported by REU and KE above.

Table 6: Price of ecstasy reported by Tasmania Police 1997/98-2004/05

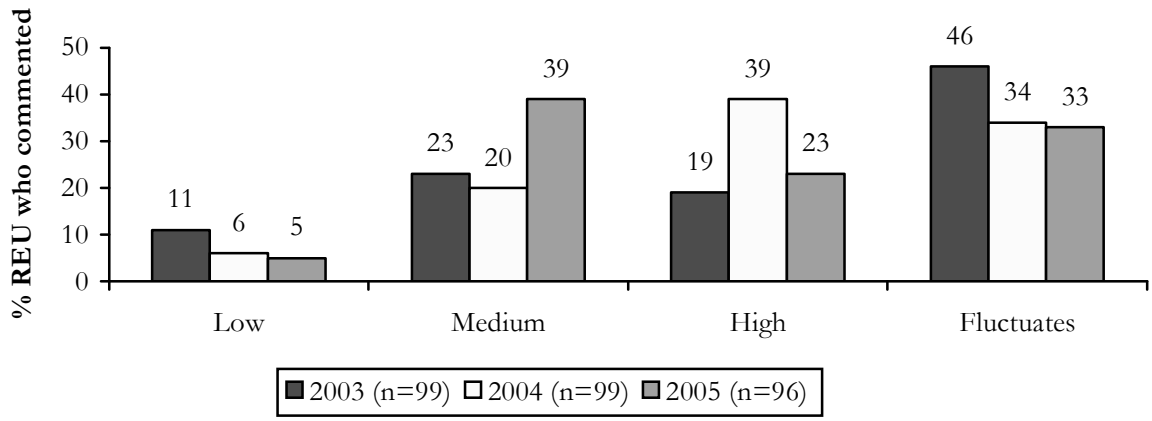
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Price per tablet	$60-80	$15-25	$15-25	$50-60	$50-70	$30-70	$30-70	$40-50

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

4.6 Purity

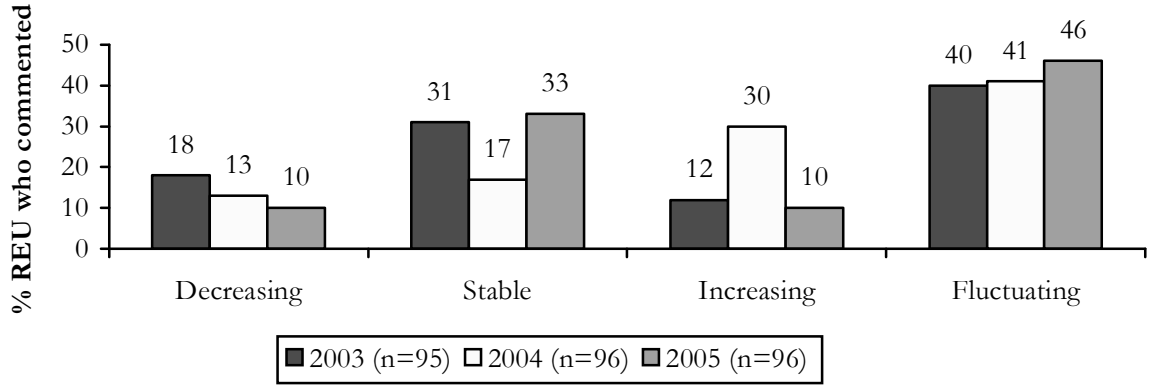
Regular ecstasy users were asked to estimate the purity of ecstasy in the six months preceding the interview (Figure 2). Over one-third of the 2005 sample indicated that ecstasy was medium in purity (39%), one-third indicated that it had fluctuated in purity (33%), one-fifth indicated that ecstasy was high in purity (23%), and a small proportion reported that ecstasy was low in purity (5%). The proportion of REU who reported that ecstasy was high in purity was greater among the 2004 sample in comparison to 2003 cohorts (39% vs. 19%); however, in 2005 a greater proportion indicated that ecstasy was medium in purity in comparison to 2004 (39% vs. 20%). Regular ecstasy users were asked if there had been any changes in the purity of ecstasy in the six months preceding the interview (Figure 3). Over one-third of respondents indicated that ecstasy had either fluctuated (41%) or was stable (33%) in purity during this time. Smaller proportions reported that the purity had increased (10%) or decreased (10%). There was a trend for an increase in the reported purity of ecstasy among the 2004 cohort, with 30% indicating that ecstasy had recently increased in purity; however, among the 2005 cohort, ecstasy was considered to be stable or fluctuating.

Figure 2: REU reports of current ecstasy purity, 2003-2005



Source: PDI regular ecstasy user interviews

Figure 3: REU reports of change in purity of ecstasy in the preceding six months, 2003-2005



Source: PDI regular ecstasy user interviews

Fifteen out of the twenty two KE were able to comment on the purity of ecstasy within the preceding six months, with over two-thirds of those commenting that the purity of ecstasy fluctuated (n=11) and smaller proportions indicating that ecstasy was medium (n=2), high (n=1), or low (n=1) in purity. When asked if this purity had changed in the six months preceding the interview, most KE indicated that purity had 'fluctuated' (n=10), or remained stable (n=3), and single KE indicated that it had increased (n=1) or decreased (n=1). Another KE noted that there was some local production of poor quality recompressed ecstasy pills but that this had been stable during the last six months. Three KE noted an increase in the purity of ecstasy during the twelve months preceding the interview and one KE noted an increase in the number of poor quality pills available during the preceding 12 months.

There is little objective data on the purity of phenethylamines (the class of drugs that ecstasy, or MDMA, and drugs such as MDA, MDEA and mescaline belong to) from Tasmania Police, due to the small number of ecstasy seizures, and particularly those in which a formal laboratory analysis was conducted to establish the content of the drug seized. Only seizures in which the illicit nature of the drug is contested are formally analysed in Tasmania. Table 7 shows the median purity and number of phenethylamine seizures analysed, reported by Tasmania Police from 1999/00 to 2003/04. A greater number of seizures were analysed in the 2003/04 period; however, median purity appears to have been relatively stable from 2001/02 to 2003/04, ranging from 22.9% to 26%. The purity of the 33 samples analysed during the 2003/04 period ranged from 10.4% to 44.5% with a median purity of 26.0%. There were no purity estimates reported by Tasmania Police in the 2004/05 reporting period.

Table 7: Median purity of phenethylamine* seizures 1990/00 to 2004/05

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Median % purity	n/a	3.4 n=1	22.9 n=1	28.5 n=3	26.0 n=33	n/a

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

4.7 Availability

The sample of regular ecstasy users were asked how easy it had been to obtain ecstasy and whether there had been any changes in the availability of ecstasy in the six months preceding the interview (Table 8). Over half of the 2005 sample (57%) indicated that ecstasy was 'very easy' to obtain and two-fifths (40%) indicated that it was 'easy' to obtain. A small proportion (3%) indicated that ecstasy was 'difficult' to obtain. Half of the 2005 cohort (50%) indicated that the availability of ecstasy had remained stable in the preceding six months, with smaller proportions indicating that ecstasy had recently become more difficult (14%) or had fluctuated (9%) in availability. A greater proportion of the 2004 sample (68%) reported that ecstasy was 'very easy' to obtain in comparison to the 2003 sample (43%), though this proportion decreased slightly in 2005 (57%). One-quarter of the 2005 sample (25%) indicated that ecstasy had recently become easier to obtain compared to one-third among the 2004 cohort (35%) and one-fifth among the 2003 sample (20%).

Seventeen out of the twenty two KE were able to comment on the current availability of ecstasy. The majority of key experts indicated that ecstasy was 'easy' (n=13), or 'very easy' (n=3) to obtain, and a single KE indicated that it was 'difficult' to obtain. Fewer KE indicated that ecstasy was currently 'very easy' to obtain in 2005 (n=3) in comparison to 2004 (n=15). Fifteen KE were able to comment on changes in the availability of ecstasy in the preceding months. Over half indicated that availability had been stable (n=9), and smaller proportions indicated that availability had fluctuated (n=2) or become easier (n=2) or more difficult (n=2) to access in the preceding six months. KE were also asked to comment on changes in availability over the last twelve months preceding the interview. Single KE noted that the availability of ecstasy had decreased, increased, or remained stable in the preceding 12 months.

The sample of REU was asked who they had obtained ecstasy from and at which locations they had typically obtained the drug in the six months preceding the interview. A large majority indicated that they typically obtained ecstasy from friends (95%), followed by dealers (63%), and acquaintances (39%). Smaller proportions typically purchased ecstasy from unknown people (19%) and workmates (17%). Ecstasy was typically obtained from a friend's home (73%) followed by dance-related events (57%) and nightclubs (59%). Over one-third of the respondents had obtained ecstasy from other private venues such as own home (38%) and dealer's home (37%). Smaller proportions obtained ecstasy from an agreed public location (20%), pub (22%), work place (7%), or street (1%). These findings are relatively consistent with the data from previous years.

Some key experts also noted that that ecstasy was typically purchased from friends and/or people dealing for no profit, to reduce the price of their own tablets or to swap for other drugs. It was noted by single KE that ecstasy could be obtained from a diverse range of people and that dealers were typically less informed than they were previously. Several KE noted an increase in the amount of drug dealing during the six months preceding the interview (n=3), and an increase in the number of younger people dealing drugs (n=4). One KE indicated that REU tended to be buying in larger quantities.

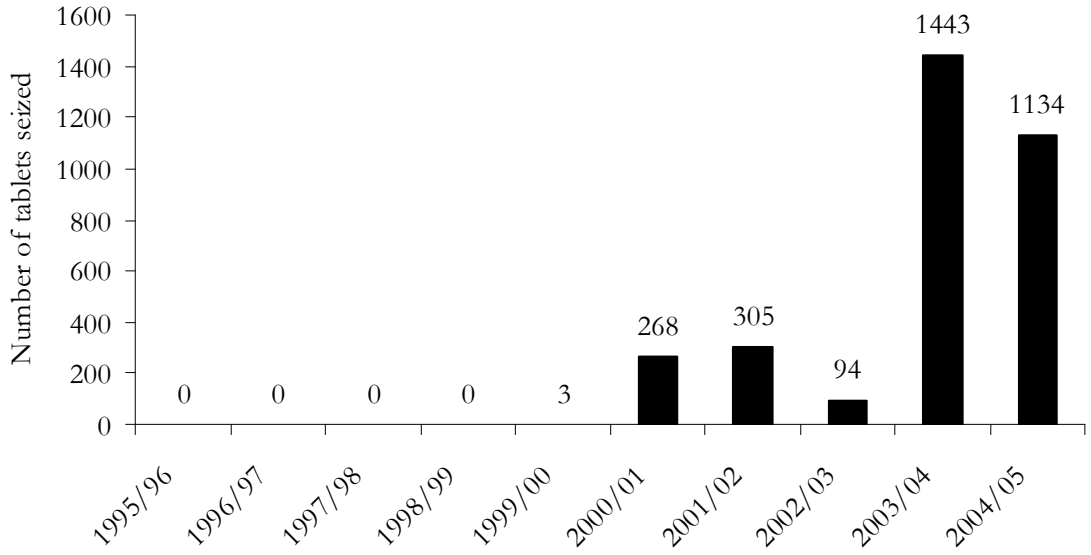
Table 8: REU reports of availability of ecstasy in the preceding six months, 2000-2005

Ecstasy	2003	2004	2005
Ease of obtaining ecstasy	n=100	n=100	**n=100**
Very easy (%)	43	68	**57**
Easy (%)	29	25	**40**
Moderately easy (%)	26	n/a	**n/a**
Difficult (%)	2	7	**3**
Very difficult (%)	-	-	**-**
Changes in availability in the last six months	n=99	n=97	**n=98**
Stable (%)	53	44	**50**
Easier (%)	20	35	**25**
More difficult (%)	19	10	**14**
Fluctuates (%)	7	10	**9**
Persons scored from in the last six months #	n=100	n=100	**n=100**
Used not scored (%)	n/a	1	**-**
Friends (%)	90	92	**95**
Known dealers* (%)	66	62	**63**
Acquaintances (%)	34	34	**39**
Workmates (%)	12	12	**17**
Unknown people (%)	7	19	**19**
Mainland contact / dealer (%)	9	n/a	**n/a**
Locations scored from in the last six months #	n=100	n=100	**n=99**
Used not scored (%)	n/a	1	**-**
Friend's home (%)	56	77	**73**
Dealer's home (%)	47	35	**37**
At own home (%)	30	44	**38**
Nightclub (%)	40	53	**59**
Rave /doof /dance party	37	59	**57**
Pub (%)	15	15	**22**
Street (%)	7	3	**1**
Agreed public location (%)	-	17	**20**
Work (%)	-	10	**7**
Educational institute (%)	n/a	n/a	**-**
Other (%)	-	2	**1**

Source: PDI regular ecstasy user interviews
*changed from dealers to known dealers in 2004 **question asked for the first time in 2004
participants able to give more than one answer

Figure 4 shows that there were no ecstasy tablets seized by Tasmania Police prior to the 1997/00 financial year. Since this time the number of tablets has increased, with a considerable increase observed in the 2003/04 reporting period in comparison to the previous three years. In 2005, this number is slightly reduced but is still higher than the years prior to 2003/04. However, it should be noted that the number of tablets seized depends on the size and number of individual seizures, and the 2004/05 data are based on a greater number of seizures. For example, the 2002/03 reporting period data are based on four seizures, three of which were less than 5 tablets. The 2003/04 data are based on 16 seizures, two of which were over 500 tablets and six of which were less than two tablets. The 2005/05 data are based on 20 seizures, 5 of which were over 50 tablets, and nine of which were under 10 tablets. Two law enforcement KE also noted a recent increase in the number of ecstasy seizures.

Figure 4: Number of seizures of tablets suspected to contain ecstasy by Tasmania Police 1995/96-2004/05



Source: Tasmania Police

4.8 Ecstasy markets and patterns of purchasing ecstasy

Regular ecstasy users were asked how they had paid for ecstasy in the six months preceding the interview (see Table 9). A large majority paid for ecstasy through paid employment (89%), over one-third had been 'shouted' or received ecstasy as a gift from friends (68%), and one-third had paid for ecstasy through a government allowance (30%). Smaller proportions had borrowed money from friends (35%), received credit from dealers (29%), received money from parents (15%) or had bartered drugs/goods (10%) or pawned items (4%) to pay for the ecstasy that they had recently used. One-quarter (25%) reported dealing drugs for ecstasy profit or to reduce the cost of own use and one-tenth (10%) reported dealing drugs for cash profit. Few people had used other illicit means to pay for ecstasy, with a single participant reporting property crime (such as shoplifting or stealing) (1%) and no reports of sex work or fraud to pay for ecstasy in the preceding six months. Compared to the sample of REU interviewed in 2004, a greater proportion of REU reported paying for ecstasy through credit from dealers (18% vs. 29%), gifts from friends (44% vs. 68%), borrowing money from friends (26% vs. 35%) and dealing ecstasy for ecstasy profit (15% vs. 25%).

Ecstasy had been purchased from a median of 4 people (range 1-25 people) in the preceding six months (Table 9). Just over one-half of the sample (54%) were able to obtain other drugs from the person they had most often purchased ecstasy from in the last six months compared to three-quarters (74%) of the sample in 2004. Among those who could purchase other drugs from their main ecstasy source, the most commonly available drugs were cannabis (80%), methamphetamine powder (69%), LSD (37%), cocaine (22%) and methamphetamine base (17%). Other drugs included ketamine (13%), crystal methamphetamine (7%), pharmaceutical stimulants (7%), opium (6%), MDA (2%), and morphine (2%). Although less participants were able to purchase other drugs form their main source in 2005, a greater proportion were able to purchase cannabis, cocaine, and LSD in comparison to 2004.

In 2005, REU were asked whether they purchased ecstasy for themselves or others and how many times they had purchased ecstasy in the 6 months preceding the interview (Table 9). Two-thirds of the sample (66%) indicated that they typically purchased ecstasy for themself and others, and the remainder (34%) typically purchased ecstasy only for themselves. The number of times that ecstasy was purchased in the preceding six months was varied, ranging from monthly or less (38%), fortnightly to monthly (36%), or weekly to fortnightly (25%).

For the first time, in 2005, REU were asked about their perceptions on the factors influencing the price of ecstasy they obtained (Table 10) and their own ecstasy use (Table 11). Factors perceived by the majority of participants to decrease the price of ecstasy included buying a larger quantity (97%), knowing the supplier (91%), and the supplier being close to the source (80%). Factors that the majority thought would increase the price of ecstasy included a decrease in availability (73%), buying in a public venue (67%), and not pre-planning purchase (58%). Factors that were not thought to influence the price of ecstasy included an increase in police activity (79%), high MDMA content (69%) and decreased availability of a particular brand or logo (69%). Special times of the year were thought to increase the price of ecstasy for some participants (41%) and not for others (41%).

Market factors that a majority thought would decrease their use of ecstasy included a decreased purity (63%), and decreased availability (70%) of ecstasy. However, increased availability of ecstasy was not thought to influence ecstasy use (78%). Negative effects on physical health (84%), mental health (94%), work/study (86%), or relationships (86%) were also perceived as factors that would decrease the use of ecstasy for most. Increased availability of crystal methamphetamine was not thought to influence the ecstasy use for a majority of participants (79%). Increased availability of cocaine was not thought to influence the ecstasy use for just over half of the sample (51%), but one-third indicated that increased availability of cocaine would decrease their use of ecstasy (37%). Ecstasy use was not perceived to be affected if the chances of being caught by police were lower (94%), and whether or not the penalties for being caught were decreased (78%) or increased (95%). A high chance of being caught would decrease the ecstasy use of some participants (43%), but not for over half of the sample (56%). Whereas the majority of REU indicated that if friends stopped using this would decrease their own use (66%), increased frequency of use by friends was not thought to influence the use of ecstasy for the majority (72%).

Table 9: Patterns of purchasing ecstasy, 2005

	2004 (n=100)	**2005 (n=100)**
Forms used to pay for ecstasy tablets (%)		
Paid employment	87	**89**
Credit from dealers	18	**29**
Government allowance	36	**30**
Gift from friend	44	**68**
Borrowed from friends	26	**35**
Money from parents	11	**15**
Dealing drugs (ecstasy profit)	15	**25**
Dealing drugs (cash profit)	8	**10**
Bartering drugs	11	**10**
Fraud	-	**-**
Property crime	-	**1**
Pawning	-	**4**
Sex work	-	**-**
Median no. of people purchased from (range)	4 (1-15)	**4 (1-25)**
Purchased for (%)		
Self only	n/a	**34**
Self and others		**66**
Others only		**-**
No. of times purchased in the last 6 months (%)		
1-6	n/a	**38**
7-12		**36**
13-24		**25**
25 +		**-**
Median no. of ecstasy tablets purchased (range)		**3 (1-100)**
Able to purchase other drugs from main dealer (%)	74	**54**
Drugs able to purchase*	n=74	**n=54**
Cannabis	64	**80**
Speed	70	**69**
Base	8	**17**
Ice	4	**7**
Cocaine	11	**22**
LSD	26	**37**
Ketamine	5	**13**
Pharmaceutical stimulants	1	**7**
GHB	1	**-**
MDA	1	**2**
Heroin	9	**-**
Opium	3	**6**
Morphine	1	**2**
2CI	1	**-**

Source: PDI regular ecstasy user interviews

* among those who reported they had been able to purchase other drugs from main dealer

Table 10: Factors influencing the price of ecstasy, 2005

	2005 (n=97)
Knowing supplier	
Don't know	**1**
Increase	**1**
Decrease	**91**
No change	**7**
Supplier close to source	
Don't know	**7**
Increase	**1**
Decrease	**80**
No change	**11**
High MDMA content	
Don't know	**13**
Increase	**23**
Decrease	**1**
No change	**63**
Decreased availability in brand/logo of ecstasy	
Don't know	**3**
Increase	**25**
Decrease	**3**
No change	**69**
Decrease in availability	
Don't know	**3**
Increase	**73**
Decrease	**2**
No change	**22**
Special time of year	
Don't know	**2**
Increase	**41**
Decrease	**5**
No change	**41**
Not pre-planning purchase	
Don't know	**1**
Increase	**58**
Decrease	**1**
No change	**40**
Buying larger quantity	
Don't know	**1**
Increase	**-**
Decrease	**97**
No change	**2**
Increased police activity	
Don't know	**11**
Increase	**9**
Decrease	**-**
No change	**79**
Buying in public venue	
Don't know	**1**
Increase	**67**
Decrease	**-**
No change	**32**

Source: PDI regular ecstasy user interviews

Table 11: Factors influencing the use of ecstasy, 2005

	2005 (n=97)
Price went up	
Don't know	-
Increase	-
Decrease	42
No change	58
Purity went down	
Don't know	1
Increase	6
Decrease	63
No change	30
Harder to get	
Don't know	1
Increase	-
Decrease	70
No change	29
Easier to get	
Don't know	-
Increase	22
Decrease	-
No change	78
Ice easier to get	
Don't know	4
Increase	4
Decrease	12
No change	79
Cocaine easier to get	
Don't know	8
Increase	4
Decrease	37
No change	51
Chances of being caught by police higher	
Don't know	1
Increase	-
Decrease	43
No change	56
Chances of being caught by police reduced	
Don't know	-
Increase	6
Decrease	-
No change	94
Penalties for ecstasy use increased	
Don't know	-
Increase	-
Decrease	22
No change	78
Penalties for ecstasy use decreased	
Don't know	-
Increase	5
Decrease	-
No change	95

Source: PDI regular ecstasy user interviews

Table 11: Factors influencing the use of ecstasy, 2005 (continued)

	2005 (n=97)
Negative effects on: Physical health	
Don't know	1
Increase	-
Decrease	84
No change	16
Mental health	
Don't know	1
Increase	-
Decrease	94
No change	5
Work/study	
Don't know	-
Increase	-
Decrease	86
No change	14
Relationships	
Don't know	2
Increase	-
Decrease	86
No change	12
Friends stopped use	
Don't know	1
Increase	-
Decrease	66
No change	33
Friends increased use	
Don't know	1
Increase	27
Decrease	-
No change	72

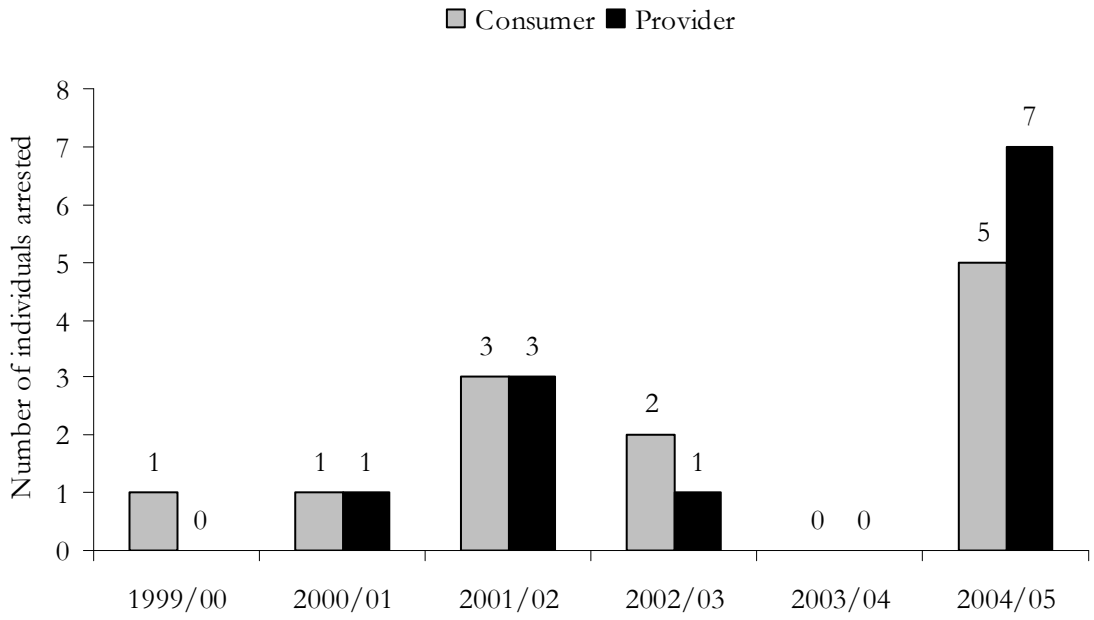
Source: PDI Regular ecstasy user interviews

4.9 Ecstasy-related harms

4.9.1 Law enforcement

Figure 5 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 2004/05. Consistent with the small number of regular ecstasy users that report coming into contact with the criminal justice system, the number of ecstasy-related police incidents are relatively few between the 1999/00 and 2003/04 financial years.. Despite the fact that at least 16 seizures were made during the 2003/04 period (see Figure 4 above), there were no arrests reported by Tasmania Police during this time. It is possible that this discrepancy reflects matters that are still before the courts, offences that were recorded as pertaining to 'amphetamine type stimulants' if multiple drugs were seized, or that those involved in seizures received diversionary sentences or cautions. A considerable increase in the number of ecstasy-related arrests can be seen during the 2004/05 financial year relative to previous years. However, it is possible that some of these were arrests still before the court from the previous year.

Figure 5: Number of police incidents recorded for ecstasy possession/use (consumers) and deal/traffic (providers), 1999/00-2004/05



Source: Tasmania Police

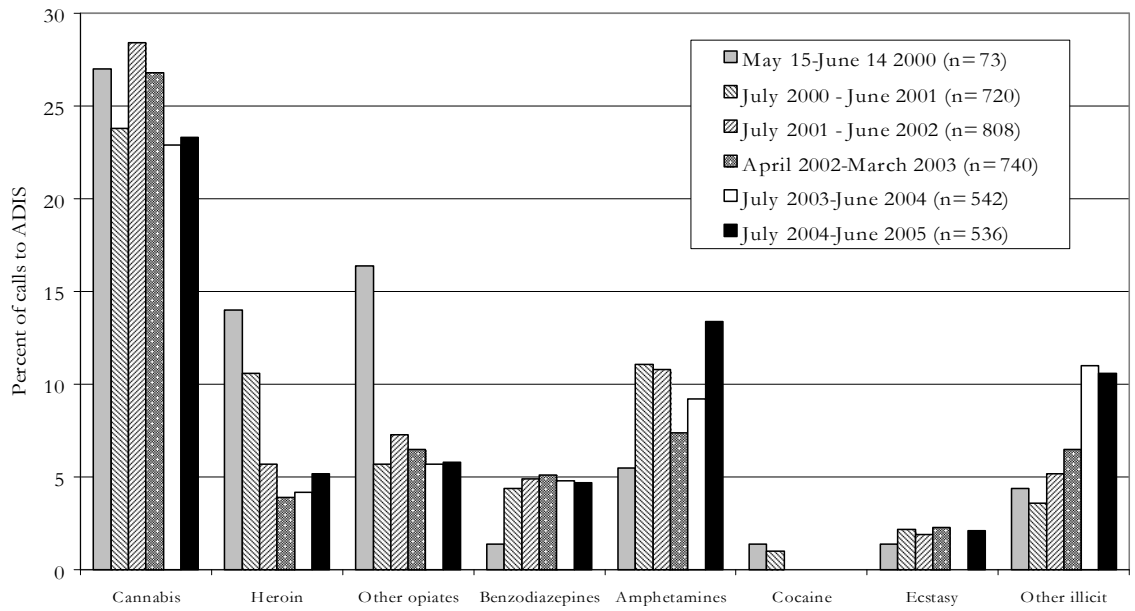
4.9.2 Health

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. A small but consistent number of calls have been recorded in relation to ecstasy during the 2000/01 (16 calls), 2001/02 (15 calls), 2002/03 (17 calls), and 2004/05 (11 calls) reporting periods[1]. Figures 6 and 7 show that calls in relation to ecstasy account for a small percentage (between 1.9% and 2.3%) of the total calls made to the service when compared to other drug types, particularly cannabis, opiates and methamphetamine. It should also be noted that calls pertaining to ecstasy use were not specified in the 2003/04 period, and this information (along with cocaine and hallucinogens) may have been collapsed into the apparently increased 'other illicits' category.

[1] Data from calls made to the Turning Point-administered ADIS has 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. There were 2,422 calls made to ADIS between May 15, 2000 and June 30, 2001; 2,208 in the 2000/01 financial year; 1,827 in 2001/02; 1984 during the period April 2002-March 2003; 1,837 during 2003/04 and 1,498 in 2004/05.

Figure 6: Percentage of inquiries to ADIS with regard to each drug type, May 2000-June 2005.



Source: ADIS Tasmania reports, Turning Point Alcohol and Drug Centre
Note: calls referring to ecstasy were not specified in the 2004 report, and may have been collapsed into the 'other' column.

Figure 7: Percentage of inquiries to ADIS with regard to ecstasy, May 2000-June 2005.

Source: ADIS Tasmania reports, Turning Point Alcohol and Drug Centre
Note: calls referring to ecstasy were not specified in the 2004 report, and may have been collapsed into the 'other' column.

4.10 Benefit and risk perception

4.10.1 Perceived benefits

The sample of regular ecstasy users were asked to name the three biggest benefits associated with their own ecstasy use (see Table 12). A large majority of the sample (98%) indicated that there were benefits associated with taking ecstasy. The biggest social benefits of ecstasy use were perceived to be enhanced closeness with others (56%), having fun (enjoyable night or good time) (46%), and enhanced communication (18%). Sensory benefits such as enhanced appreciation of music/dance (31%) were also commonly reported as were acute effects of ecstasy such as enhanced mood (37%), experiencing a high/rush/buzz (36%), increased energy (24%), and other drug effects (8%). Other benefits included the relax/escape/release (17%), increased confidence/decreased inhibitions (9%), a favourable experience in comparison to alcohol (8%), feeling in control/focused (1%) and enhanced sexual experience (4%).

Table 12: Perceived benefits of ecstasy use among REU, 2004-2005

Benefit	2004 n=100	**2005 n=98**
Fun (enjoyable night/good time) (%)	50	**46**
Enhanced closeness/bonding/empathy with others (%)	39	**56**
Enhanced mood (euphoria/wellbeing/happiness) (%)	39	**37**
Enhanced appreciation of music/dance (%)	36	**31**
Enhanced communication/talkative/more social (%)	33	**18**
Increased energy/stay awake (%)	29	**24**
The high/rush/buzz (%)	28	**36**
Relax/escape/release (%)	13	**17**
Drug effects (e.g. hallucinations/insight/clarity/creativity/heightened senses) (%)	10	**8**
Different to alcohol (e.g., non-violent/safer environment/no hangover) (%)	8	**8**
Increased confidence/decreased inhibitions (%)	4	**9**
Feeling in control/focused (%)	4	**1**
Enhanced sexual experience (%)	4	**4**
Other benefit (%)	-	**3**

Source: PDI regular ecstasy user interviews

Note: participants could report up to three perceived benefits

4.10.2 Perceived risks

Participants were asked to name the three biggest risks that they perceived to be associated with their own ecstasy use (Table 13). The majority of the sample (97%) perceived that there were some risks associated with ecstasy use. The greatest risks were depression (35%), damage to brain function or neurological damage (31%), long-term physical problems (22%), memory impairment (21%), lack of motivation (20%), and unknown contaminants or cutting agents (20%). Other perceived psychological risks included anxiety/panic (10%), addiction/dependence (12%), paranoia (4%), psychosis (4%), personality changes (1%) and feeling bad during comedown (1%). Other perceived neuropsychological risks included general cognitive impairment (10%), and other harms related to the illicit status of ecstasy including unknown drug strength and purity (9%).

Less than one-tenth of participants considered acute physical harms such as vomiting, headache and sleeping problems (9%), dehydration (7%), body temperature regulation (3%), over-hydration (0%), fatal overdose (6%) and non-fatal overdose (3%) to be major risks of ecstasy use. Similarly, less than one-tenth considered effects of intoxication such as impaired decision making/risk taking (8%), driving risk (2%), sexual risk (1%), aggression/violent behaviour (1%), increased vulnerability (1%) and accidents (1%) to be major risks.

Consistent with the fact that few REU had recently experienced legal or police problems in relation to their ecstasy use (see Section 14.4), just one-tenth (11%) perceived legal/police problems to be a major risk associated with their ecstasy use. However, whereas between one-fifth and one-third had recently experienced financial, employment, or relationship/social problems in relation to their ecstasy use (see Section 14.4), small proportions perceived these problems to be the biggest risk associated with their use (8%, 10%, and 4% respectively).

Table 13: Perceived risks of ecstasy use among REU, 2004-2004

Risk	2004# n=95	**2005 n=97**
Psychological harms	%	**%**
Depression	32	**35**
Anxiety/panic	13	**10**
Addiction/dependence	11	**12**
Lack of motivation	12	**20**
Paranoia	6	**4**
Psychosis	2	**4**
General lack of emotional wellbeing	2	**-**
Personality changes	2	**1**
Feeling bad during comedown	1	**1**
Other psychological harm	5	**7**
Neuropsychological harms		
Damage to brain function (brain cells/neurological damage)	36	**31**
Memory impairment	13	**21**
Cognitive impairment	4	**10**
Physical harms		
Acute physical harms (e.g. vomiting/headache/sleeplessness/weight loss)	18	**9**
Long-term physical problems (e.g. cardiac/lungs/respiratory/nasal)	16	**22**
Dehydration	11	**7**
Body temperature regulation	8	**3**
Over-hydration	2	**-**
Fatal OD (death)	4	**6**
Non-fatal OD (passing out, coma)	2	**3**
Other physical harm	4	**9**
Harms related to illicit status		
Unknown drug strength/purity	18	**9**
Unknown drug contaminants cutting agents	12	**20**
Other harms related to illicit status	2	**-**
Effects of intoxication		
Impaired decision-making/risk taking	9	**8**
Increased vulnerability	-	**1**
Aggression/violent behaviour	-	**1**
Driving risk	3	**2**
Sexual risk	-	**1**
Taking more than intended	3	**-**
Accidents	-	**1**
Combined effects of polydrug use	3	**-**
Other effects of intoxication	1	**-**
Other harms		
Legal/police problems	23	**11**
Financial problems	14	**8**
Unknown long-term harm	7	**10**
Work/study problems	2	**4**
Relationship/social problems	1	**4**
Lack of knowledge	-	**1**
Other harm (general)	11	**4**

Source: PDI regular ecstasy user interviews

Note: participants could report up to three perceived risks

* 2004 data differ to that reported by Matthews and Bruno (2005) as percentage of those that commented is reported in 2005.

4.11 Summary of ecstasy trends

- The median price reported by REU for one tablet of ecstasy was $45 compared to $40 in 2004 and $50 in 2003, and this price was considered to have remained stable during the preceding six months. The median price reported by KE was $40. Both REU and KE indicated that the price per pill was less when bought in larger quantities.
- REU reports on the purity of ecstasy in 2005 were varied, with purity considered to be medium, fluctuating or high. Whereas a greater proportion of the sample indicated that ecstasy was high in purity in 2004 in comparison to 2003, a greater proportion indicated that ecstasy was medium in purity among the 2005, in comparison to the 2004 sample. KE indicated that the purity of ecstasy typically fluctuated.
- Both key experts and REU indicated that ecstasy is 'easy' or 'very easy' to obtain and that recent availability had remained stable. Reports of both KE and REU indicate an increase in availability of ecstasy in 2004 when compared to 2003 and a slight return or decrease in the proportion reporting that ecstasy was 'very easy' to obtain in 2005.
- Whereas there was evidence for an expanding ecstasy market in 2004, marked by decreased price, increased purity, and increased availability relative to 2003, the market appears to have tightened in 2005, with a slight increase in price and decreased purity and availability relative to 2004.
- Ecstasy was typically purchased from friends and obtained from friends' homes. A large majority (89%) reported paying for ecstasy using money earned through paid employment. One-quarter (25%) reported dealing drugs for ecstasy profit compared to 15% among the 2004 sample. Two-thirds (66%) indicated that they typically purchased ecstasy for themself and others, and the remainder (34%) typically purchased ecstasy only for themselves.
- There has been a substantial increase in the number of ecstasy tablets seized by Tasmania Police over the last two financial years, and whereas this has had minimal impact on the number of arrests made in relation to ecstasy, there were a greater number of arrests reported in the 2004/05 reporting period relative to previous years.
- While a small and consistent number of calls have been made to the Tasmanian Alcohol and Drug Information Service over the last few of years in relation to ecstasy, these account for a small percentage of the calls made to this service, particularly when compared to the percentage of calls that relate to cannabis and amphetamines.

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. Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine[2] (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 2003/04 financial year, of the 4,182 seizures of (non-phenethylamine) amphetamine-type seizures analysed for purity in Australia, 94.5% (by number) were methamphetamine rather than amphetamine (ACC, 2005).

As methamphetamine markets across the country have expanded over the past few years, it has become apparent that there is a diversity of forms 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 users and researchers as to the nature of these forms, it is clear that these are marketed differently to 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 PDI to refer to the drugs available in this class

With the exception of amphetamine-based tablets marketed as 'ecstasy', and pharmaceutical stimulants such as dexamphetamine and methylphenidate, it appears that there are three dominant 'preparations' of methamphetamine used within the Tasmanian (and Australian) drug market – each falling at three points along a continuum of form, but all of which are essentially the same substance.

Powder form methamphetamine[3] 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 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 2005 IDRS survey commonly reported that methamphetamine powder was often 'claggy', a little 'wet' in appearance and sometimes contained small crystals amongst the powder, ranging from clear to white, pink or brown in colour (Bruno, 2006).

The two other 'forms' of methamphetamine are traditionally higher in potency (due to being more difficult to 'cut') and have been increasing in availability across all Australian jurisdictions in the past few years (Topp et al., 2002). The first, referred to in some jurisdictions as 'base' or 'paste' is commonly a gluggy, 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 injectable form (methamphetamine hydrochloride crystals, which may take the appearance of powder, or, when

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

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 2005 IDRS survey, participants that had recently purchased this form of the drug locally commonly described it as 'milky', 'sticky', 'waxy' and 'wet' in appearance, with specific examples of it as 'clear, jelly-like', 'brown – like soggy brown sugar' or 'golden syrup', or 'pinky – like wet fairy floss' (Bruno, 2006).

The final form of methamphetamine, often referred to as 'ice' or 'crystal meth(amphetamine)' is the product of a careful production process, and is believed to chiefly be imported into Australia from Asian countries (Topp & Churchill, 2002), although there are also indications of local production in recent years (ACC, 2003). It commonly appears as clear, ice-like, crystals, and, as such, is difficult to 'cut' (dilute), resulting in a relatively high-purity/potency product. Consumers in previous IDRS studies have commonly described this form as white/clear crystals or rocks, looking like crushed glass or rock salt (with crystals commonly larger than sugar crystals).

For the purposes of the PDI, regular ecstasy users were asked to differentiate between methamphetamine powder, 'base/paste' and crystalline methamphetamine.

5.1 Methamphetamine use among REU

A large majority of the regular ecstasy users interviewed in 2005 (90%) had used methamphetamine at some stage during their lives, and there was no significant difference between the proportion of males (93%) and of females (87%) that had ever used the drug, or between the proportion of 'younger' (91%) or 'older' (89%) participants (based on a median split for age). Over three-quarters of the sample (78%) had used some form of methamphetamine in the six months preceding the interview. There were no sex differences in the proportion of males (76%) and females (80%) that had recently used any form of methamphetamine and no significant difference between the proportion of 'older' (73%) and 'younger' (81%) participants that had recently used methamphetamine. The median frequency of use of any methamphetamine form over the last six months was 6 days (range 1-140), or approximately once a month, and this tended to be greater for males (6 days, range 1-140) in comparison to females (4 days, range 1-72); Mann-Whitney U=570.0, p=.061. Of those that had recently used any form of methamphetamine, the most common route of administration in the last six months was swallowing (91%), followed by snorting (56%), smoking (10%) injecting (9%) and shafting (1%). Just over one-tenth of the REU sample (14%) had ever injected some form of methamphetamine, and less than one-tenth (7%) had injected any form of methamphetamine in the last six months.

5.1.1 Methamphetamine powder (speed)

The majority of regular ecstasy users interviewed in 2005 (89%) had used methamphetamine powder at some stage of their lives, which is similar to the proportion among the 2003 (90%) and 2004 (82%) samples. There was no significant difference between the proportion of males (91%) and females (87%) that had ever used methamphetamine powder in 2005 and no differences on any other demographic variables (see Section 3.1). The median age of first use was 20 years (range 13-44 years), and there was no significant difference between the age of first use for males and females. The majority of those who had ever used methamphetamine powder had swallowed (80%) or snorted (61%) the drug, and smaller proportions had ever injected (15%) or smoked (16%) the drug.

Three-quarters of the REU sample (77%) had used methamphetamine powder in the six months preceding the interview, which is slightly more in comparison to 2003 (67%), and 2004 (68%).

There was no significant difference between the proportion of the males (75%) and the proportion of the females (80%) reporting recent use of methamphetamine powder. Those that had recently used methamphetamine powder tended to have been using ecstasy for a fewer number of years (1 year, 0-11 years) in comparison to those that hadn't recently used methamphetamine powder (2 years, range 0-9); Mann-Whitney U=683.5, p=.085. The majority of those who had recently used methamphetamine powder had swallowed (86%) or snorted (56%) the drug during the six months preceding the interview, and smaller proportions reported injecting (6%) or smoking (8%) the drug during this time.

The median frequency of methamphetamine powder use was 4 days (range 1-90 days), or less than once a month, during the six months preceding the interview (Table 11). The median frequency of use for males (5 days) tended to be greater in comparison to females (3.5 days), though this failed to reach conventional levels of statistical significance: Mann-Whitney U = 563.0, p=.071. Over three-quarters of those that had recently used the methamphetamine powder (78%) had done so monthly or less, compared to two-thirds in 2004 (66%), suggesting a lower frequency of use among the sample in 2005. The remainder had used the drug more than monthly but less than weekly (16%), or weekly or more often (6%) in the six months preceding the interview. The typical amount of methamphetamine powder used by REU was a median of one point (0.1 of gram) in a typical session (range 0.2-5 points), and 1.5 points (range 0.2-5 points) in the biggest session of use in the last six months.

The majority of key experts were able to comment on the use of methamphetamine powder among the regular ecstasy users that they were familiar with. Estimates of the proportion of the groups that used methamphetamine powder ranged from 'none' (n=4), to 'a few' (n=7), and 'half' (n=4). Whereas methamphetamine powder was thought to be swallowed or snorted, five KE indicated some intravenous use of methamphetamine powder among the groups. One KE commented that methamphetamine powder is typically taken in combination with ecstasy and another noted that it is often used as a cheaper substitute for ecstasy.

Table 14: Patterns of methamphetamine powder (speed) use among REU, 2003-2005

Methamphetamine powder	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	90	82	**89**
Median age of first use (range)	19 years (16-31)	20 years (15-27)	**20 years (13-44)**
Used preceding six months (%)	67	68	**77**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	4 (1-120)	5 (1-48)	**4 (1-90)**
Route of administration in last 6 mths			
Smoked (%)	4	4	**8**
Snorted (%)	63	63	**56**
Swallowed (%)	79	85	**86**
Injected (%)	16	9	**6**
Shafted/shelved (%)	-	-	**-**
Median quantities used in preceding 6 mths (range)			
Points used typical session	1 (0.5-5)	1 (.25-3)	**1 (0.2-5)**
Points used biggest session	1 (0.5-40)	1 (.25-6)	**1.5 (0.2-5)**

Source: PDI regular ecstasy user interviews

5.1.2 Methamphetamine base

Table 12 shows that one-third of the sample (35%) had used methamphetamine base at some stage of their lives, which is similar to the proportion reporting lifetime use among the 2003 (36%) and 2004 (32%) cohorts. A greater proportion of the male sample (42%) reported lifetime use of methamphetamine base in comparison to the female sample (27%), χ^2=2.50, p=.085, though this did not reach conventional levels of statistical significance. The median age of first use of methamphetamine base was 20 years (range 17-29 years) and there was no significant difference of the average age of first use for males and females. The majority of those that had ever used methamphetamine base had swallowed the drug (91%), over half had snorted the drug (57%), and smaller proportions reported injecting (22%), smoking (17%) and shelving/shafting (4%) the drug.

One-fifth of the sample (23%) had used methamphetamine base in the six months preceding the interview, which is similar to the proportion of the sample that reported recent use of methamphetamine base among the 2003 (24%) and 2004 samples (20%). A greater proportion of males (42%) had recently used methamphetamine base in comparison to the proportion of females (27%), though this was not statistically significant. The majority of those who had recently used methamphetamine base had swallowed the drug (91%), one-third had snorted (39%) and smaller proportions had injected (22%), or shelved/shafted (4%) the drug. The median frequency of use in the six months preceding the interview was four days (range 1-70), or just over once every two months during this time. Two-thirds of those who had recently used methamphetamine base (61%), had used the drug less than monthly in the preceding six months, and the remainder had used the drug between monthly and weekly (26%) or more frequently (13%). The median amount of methamphetamine base used in the preceding six months was one point (0.1 of a gram) in both a typical session of use (range 0.25-5 points) and in the biggest session of use (range 0.25-10).

The majority of KE were able to comment on the use of methamphetamine base among the group of regular ecstasy users that they had regular contact with (n=16). Most indicated that

methamphetamine base was generally not used (n=8) or not available (n=3). However, others commented that 'a few' (n=4) or 'most' (n=1) REU that they were familiar with used methamphetamine base.

Table 15: Patterns of methamphetamine base use among REU, 2003-2005

Methamphetamine base	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	36	32	**35**
Median age of first use (range)	21 years (16-31)	22 years (16-29)	**20 years (17-29)**
Used preceding six months (%)	24	20	**23**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	3 (1-96)	3 (1-24)	**4 (1-70)**
Route of administration in last 6 mths			
Smoked (%)	-	5	**-**
Snorted (%)	50	15	**39**
Swallowed (%)	71	85	**91**
Injected (%)	38	30	**22**
Shafted/shelved (%)	-	-	**4**
Median quantities used in preceding 6 mths (points)			
Points used typical session	1 (0.5-5)	1 (0.25-2.5)	**1 (0.25-5)**
Points used biggest session	1 (1-40)	1 (0.25-2.5)	**1 (0.25-10)**

Source: PDI regular ecstasy user interviews

5.1.3 Crystal methamphetamine

Table 13 shows that one-quarter (29%) of the REU interviewed in 2005 had ever used crystal methamphetamine compared to one-third of the sample in 2004 (36%) and over half of the sample in 2003 (56%). There was no significant difference in the proportion of males (33%) and females (24%) reporting lifetime use of crystal methamphetamine. Those that had used crystal methamphetamine tended to be older (M=25.1, SD=4.0) than those that had not (M=23.4, SD=4.2), $t(98)$=-1.89, p=.061, and also tended to have been using ecstasy for a greater number of years than those that hadn't; Mann-Whitney U.= 805.5, p=.076. Whereas these comparisons did not reach conventional levels of statistical significance, based on a median split for age, a significantly greater proportion of 'older' (40%) participants had ever used crystal methamphetamine in comparison to the proportion of 'younger' participants (20%), χ^2=4.81, p<.05. The median age of first use of crystal methamphetamine was 23 years (range 15-29 years), and there was no significant difference between males and females in terms of the age of first use. The majority of those who had ever used the crystal methamphetamine had swallowed (66%) or smoked the drug (41%), and smaller proportions had ever snorted (41%), or injected (17%) the drug.

One-tenth (10%) of the 2005 sample had recently used crystal methamphetamine compared to less than one-fifth (16%) among the 2004 sample and one-half (52%) of the 2003 sample. There was no significant difference between the proportion of the male sample (13%) and the proportion of the female sample (21%) that had recently used crystal methamphetamine, and no other differences on other demographic variables. The majority of those who had recently used crystal methamphetamine had injected (50%, n=5) or swallowed (40%, n=4) the drug and smaller proportions had recently smoked the drug (20%, n=2), or snorted (20%, n=2) the drug.

The median frequency of use in the preceding six months was 3.5 days (range 1-30) compared to just 1 day among the 2004 sample (range 1-18 days). The majority of those who had recently used crystal methamphetamine (90%) had used the drug monthly or less during this time, with a single respondent (10%) reporting more than weekly use of the drug. There were no significant sex or age differences in the median frequency of crystal methamphetamine use. The average amount used in a typical session of use in the six months preceding the interview was one point or 0.1 of a gram (range 0.5-3 points), and in the biggest session of use the median amount used was also one point, with a greater range of 0.5 to 10 points. These quantities are similar to those reported in 2003 and 2004.

Most key experts that commented on the use of crystal methamphetamine indicated that there was no use of the drug among the REU group that they were familiar with (n=10). However, other KE indicated that that 'a few' (n=5) or 'most' (n=1) REU used crystal methamphetamine.

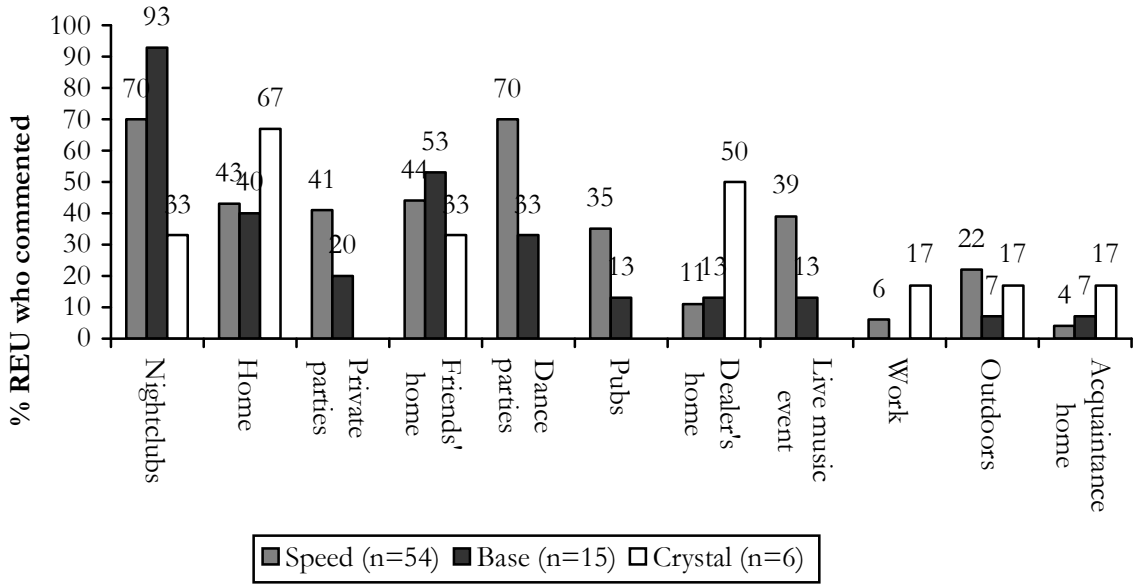
Table 16: Patterns of crystal methamphetamine use among REU, 2003-2005

Crystal methamphetamine	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	58	36	**29**
Median age of first use (range)	22 years (17-45)	22 years (16-29)	**23 years (15-29)**
Used preceding six months (%)	52	16	**10**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	3 (1-72)	1 (1-18)	**3.5 (1-30)**
Route of administration in last 6 mths			
Smoked (%)	62	69	**20**
Snorted (%)	14	13	**20**
Swallowed (%)	38	31	**40**
Injected (%)	25	6	**50**
Shafted/shelved (%)	-	-	**-**
Median quantities used in preceding 6 mths (range)			
Points used typical session	0.5 (0.2-2)	1 (0.25-2)	**1 (0.5-3)**
Points used biggest session	1 (0.25-10)	1 (0.25-2.5)	**1 (0.5-10)**

Source: PDI regular ecstasy user interviews

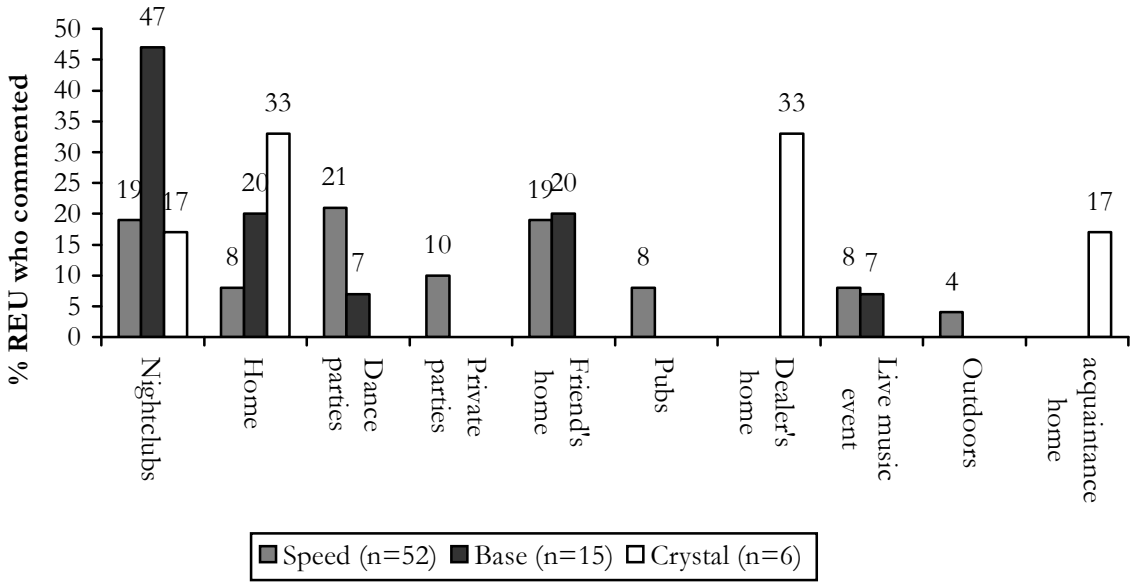
Regular ecstasy users were asked to comment on the locations that they had typically used each form of methamphetamine to be under the drugs influence (rather than the place of ingestion) during the last six months preceding the interview (see Figure 8). Methamphetamine powder was typically used at venues such as dance events (70%), nightclubs (70%), live music events (39%), and pubs (35%), as well as private residences such as friend's home (44%), own home (43%), and private parties (41%). Methamphetamine base was most commonly used at nightclubs (93%) as well as dance parties (33%), and private residences such as a friend's home (53%), the respondent's own home (40%), and private parties (20%). In comparison to the other forms, crystal methamphetamine was more likely to be used at private residences such as own home (67%), dealer's home (50%) and friend's home (33%), and less likely to be used at night clubs (33%) and dance events (0%). The last location of methamphetamine use was generally consistent with the usual locations of use (see Figure 9). Methamphetamine powder was most commonly last used at dance events (21%) and nightclubs (19%), followed by a friend's home (19%), private parties (10%), the respondent's own home (8%), pubs (8%) and live music events (8%). Almost half of those that had recently used methamphetamine base had done so at a nightclub (47%), followed by a friend's home (20%), and own home (20%). In contrast, crystal methamphetamine was most commonly last used at own home (33%), dealer's home (33%) or acquaintance's home (17%), with a small proportion having last used at a nightclub (17%).

Figure 8: Location of usual methamphetamine use by form, 2005



Source: PDI regular ecstasy user interviews

Figure 9: Location of most recent methamphetamine use by form, 2005



Source: PDI regular ecstasy user interviews

5.2 Price

Regular ecstasy users were asked to indicate the market price and the price of last purchase for the three major forms of methamphetamine (see Table 13). A greater number of respondents were able to report confidently on the price of methamphetamine powder, in comparison to methamphetamine base and crystal methamphetamine. As such the prices reported for the latter two methamphetamine forms should be interpreted with caution.

The median market price and last purchase price for one point (0.1 of a gram) of methamphetamine powder was $40 (range $25-50), which is consistent with the prices reported in 2004 ($40, range $25-$50), but is $10 less in comparison to the market price reported by the 2003 REU sample ($50, range $40-$50). The market price and last purchase price for a gram of methamphetamine was $325 (range $200-400) and $300 (range $200-400) respectively, which is relatively consistent with the prices reported in 2004. One KE noted that the price of methamphetamine powder had recently decreased, but this is not substantiated by the present data.

The median market price and last purchase price for one point of methamphetamine base in 2005 was $50 (range $40-60) and $45 (range $30-50) respectively, which is relatively consistent with the prices reported in 2003 and 2004. The median market price and last purchase price for a gram of methamphetamine base was $350 (range $300-$400) and $300 (range $250-400) respectively. Whereas these figures are largely consistent with previous years of the study, they are all based on relatively small sample sizes and should be interpreted with caution. One KE noted a recent decrease in the price of methamphetamine base, but this is not substantiated by the present data.

The median reported market price and last purchase price of one point of crystal methamphetamine was $50 (range $50-$60) and $50 (range $50-60) respectively in 2005. Whereas these prices are consistent with the figures reported in both 2003 and 2004, it should be noted that less REU were able to confidently comment on the price of crystal methamphetamine in 2004 and 2005 relative to the 2003 sample. Consistent with previous years, the median market price ($400, range $350-500) and last purchase price ($375, range $350-400) for a gram of crystal methamphetamine was higher than the other two methamphetamine forms. However, these findings should be interpreted with caution due to the smaller number of people commenting.

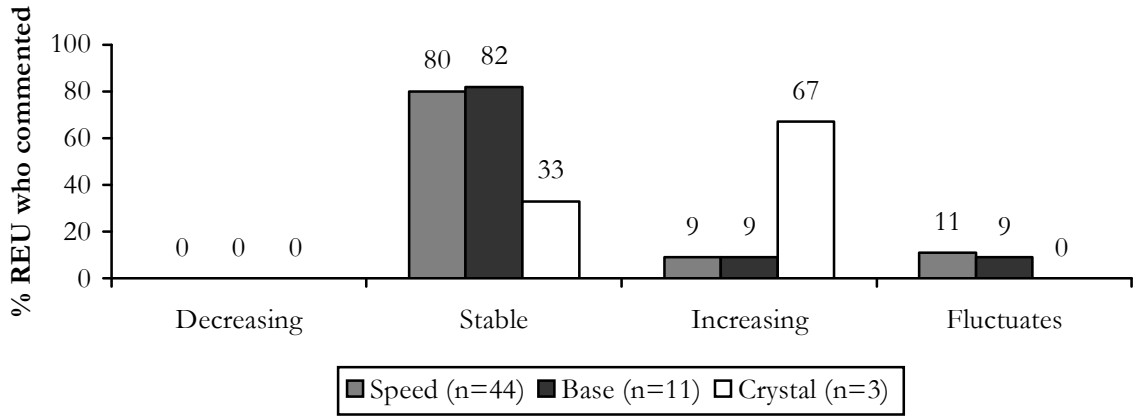
Table 17: Price of various methamphetamine forms purchased by REU, 2001-2005

Median price ($)	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Speed			
Point	$50 ($40-$50) n=41	$40 ($25-55) n=49	**$40 ($25-50) n=37**
Gram	$200 ($30-300) n=11	$300 ($50-400) n=18	**$325 ($200-400) n=22**
Base			
Point	$50 ($35-300) n=16	$50 (40-200) n=14	**$50 ($40-60) n=11**
Gram	$300 ($250-375) n=5	$300 ($50-350) n=7	**$350 ($300-400) n=3**
Crystal			
Point	$50 ($35-100) n=31	$50 ($40-75) n=11	**$50 ($50-60) n=3**
Gram	$400 ($300-500) n=8	$350 ($250-400) n=4	**$400 ($350-500) n=3**
Last purchase price			
Speed			
Point	$40 ($3-65) n=47	$40 ($20-50) n=41	**$40 ($25-50) n=36**
Gram	$300 ($30-320) n=9	$300 ($50-400) n=11	**$300 ($200-400) n=14**
Base			
Point	$40 ($20-50) n=14	$50 ($30-55) n=14	**$45 ($30-50) n=8**
Gram	$275 ($200-300) n=4	$300 ($250-350) n=3	**$300 ($250-400) n=3**
Crystal			
Point	$50 ($35-100) n=22	$50 ($40-50) n=6	**$50 ($50-60) n=3**
Gram	$450 ($400-450) n=3	$350 ($350-350) n=2	**$375 ($350-400) n=2**

Source: PDI regular ecstasy user interviews

Figure 10 shows that a greater proportion of the REU sample was able to comment on recent price changes of methamphetamine powder (44%), in comparison to both methamphetamine base (11%) and crystal methamphetamine (3%). The majority of regular ecstasy users who commented on methamphetamine powder (80%) and methamphetamine base (82%) in the preceding six months indicated that the price had remained stable. Whereas two-thirds (67%) of those that commented on crystal methamphetamine indicated that the price of the drug had increased in the last six months, this was based on an extremely small sample size (n=3).

Figure 10: Recent changes in price of various methamphetamine forms purchased by REU, 2005



Source: PDI regular ecstasy user interviews

Tasmania Police area drug bureaux gather regular information regarding current prices of illicit drugs, both through informant reports and covert drug purchases. Since July 1999, this has been provided to the authors through the Tasmanian Police State Intelligence Services and prior to this, such information has been attained through the Australian Bureau of Criminal Intelligence (ABCI, now the Australian Crime Commission). During the 2004/05 financial year, Tasmania Police reported prices as being $50 per 'point' (0.1g) of methamphetamine, $400-500 per two grams, and $5000 per ounce (Table 15). While consumers did not typically purchase methamphetamine in large amounts, the prices reported by police for 'street deal' purchases (0.1g) were consistent with REU and KE reports of prices in the current survey – although over a longer time period – providing support for IDU and KE suggestions that the price of methamphetamine had remained stable in the preceding six months. It should be noted that the prices reported in Table 18 for the 2003/04 financial year are substantially greater than those reported for the 2001/02 financial year. It is likely that this change is due to a shift in focus in that the earlier reported prices were primarily reflective of the prices of methamphetamine powder, which was the form that Tasmania Police were primarily identifying at this time.

Table 18: Methamphetamine prices in Tasmania reported by the Tasmania Police drug bureaux, 1996-2005

		Point (~0.1g)	Street gram (0.6-0.8g)	Full gram (1.0g)	Ounce (28g)
July-Sept	1996	*price not reported*	$50-80	$100-120	$1400
Oct-Dec	1996	*price not reported*	$50-80	$100-120	$1400
Jan-Mar	1997	*price not reported*	$50-80	$100-120	$1400
April-June	1997	*price not reported*	$70-80	$100-120	$1400
July-Sept	1997	*price not reported*	$50	$100-120	$1200-1400
Oct-Dec	1997	*price not reported*	$50	$100-120	$1400-1600
Jan-Mar	1998	*price not reported*	$50	$70-100	$1400-1600
April-June	1998	*price not reported*	$50	$70	$1400-1600
July-Sept	1998	*price not reported*	*price not reported*	*price not reported*	*price not reported*
Oct-Dec	1998	*price not reported*	$50	$70-80	$1200-1400
Jan-Mar	1999	*price not reported*	$50	$70-80	$1200-1400
April-June	1999	*price not reported*	$50	$70-80	$1200-1400
July-Sept	1999	$50	*price not reported*	*price not reported*	*price not reported*
Oct-Dec	1999	$50	$50	$70-80	$1200-1400
Jan-Mar	2000	$40-50	$40-50	$70-80	$1200-1400
April-June	2000	$40-50	$40-50	$70-80	$1200-1400
July-Sept	2000	$40-50	$40-50	$70-80	$1200-1400
Oct-Dec	2000	*price not reported*	$40-50	$70-80	$1200-1400
Jan-Mar	2001	$40-50	$40-50	$70-80	$1200-1400
April-June	2001	$40-50	$40-50	$70-80	$1200-1400
July-Sept	2001	$40-50	$40-50	$70-80	$1200-1400
Oct-Dec	2001	$40-50	$40-50	$70-80	$1200-1400
Jan-Mar	2002	$40-70	$40-50	$70-80	$1200-1400
April-June	2002	$40-70	$40-50	$70-80	$1200-1400
July-Sept	2002	$50-60	*price not reported*	*price not reported*	*price not reported*
Oct-Dec	2002	$50-60	*price not reported*	*price not reported*	$3500-5000
Jan-Mar	2003	$50	$100-300	$200-300	$5000
April-June	2003	$50	$150	$400	$5000-6000
July-Sept	2003	$50-70*	$100-300	$300-600*	$3000-10000*
Oct-Dec	2003	$50-70*	$100-300	$300-600*	$3000-10000*
Jan-Mar	2004	$50-70*	$100-300	$300-600*	$3000-10000*
April-June	2004	$50-70*	$100-300	$300-600*	$3000-10000*
July-Sept	2004	$50†	*price not reported*	*price not reported*	$5000
Oct-Dec	2004	$50†	*price not reported*	*price not reported*	$5000
Jan-Mar	2005	$50†	*price not reported*	*price not reported*	$5000
April-June	2005	$50†	*price not reported*	*price not reported*	$5000

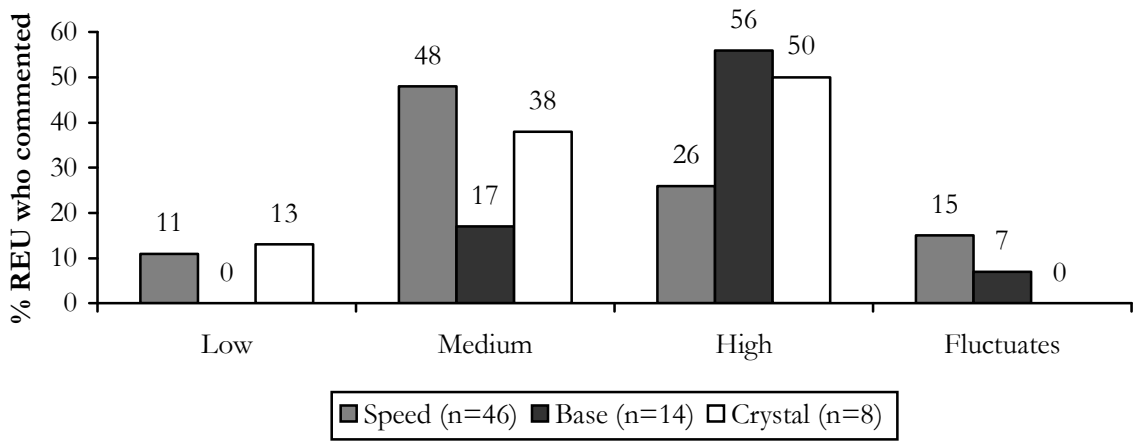
Source: Australian Crime Commission; Tasmania Police State Intelligence Services; *Note: these prices are those reported by Tasmania Police State Intelligence Services. For this period, the Australian Crime Commission reported the following prices: $50-60 per 0.1g; $200-400 per 1.0g; $3500-6000 per ounce. †Note: in the 2004/05 report, financial year prices only were reported, but are displayed in the above table in quarters for consistency with previous years. Additionally, in the 2004/05 financial year period, the Australian Crime Commission reported the following prices not included in the table: $400-500 per 2 grams; $800 per 3.5 grams; $1600 per 7 grams.

5.3 Purity

Figure 11 shows that a greater proportion of the REU sample was able to comment on the strength or purity of methamphetamine powder (46%), in comparison to methamphetamine base (14%) and crystal methamphetamine (8%). As such, the purity estimates of the latter two forms should be interpreted with caution. The majority of those who commented on the purity of methamphetamine powder indicated that it was medium (48%) in purity, with smaller proportions reporting that it was high (26%) or that it fluctuates (15%) in purity. In comparison, half of those who commented on the purity of methamphetamine base perceived it to be high in purity (56%) with a smaller proportion indicating that it was medium (17%) or fluctuating (15%). Similarly, half of those who commented on crystal methamphetamine indicated that it was high in purity (50%, n=4) and one-third (38%) indicated that it was medium in purity. Two KE commented that the purity of methamphetamine base had increased during the six months preceding the interview and one KE commented that the purity of crystal methamphetamine had recently increased.

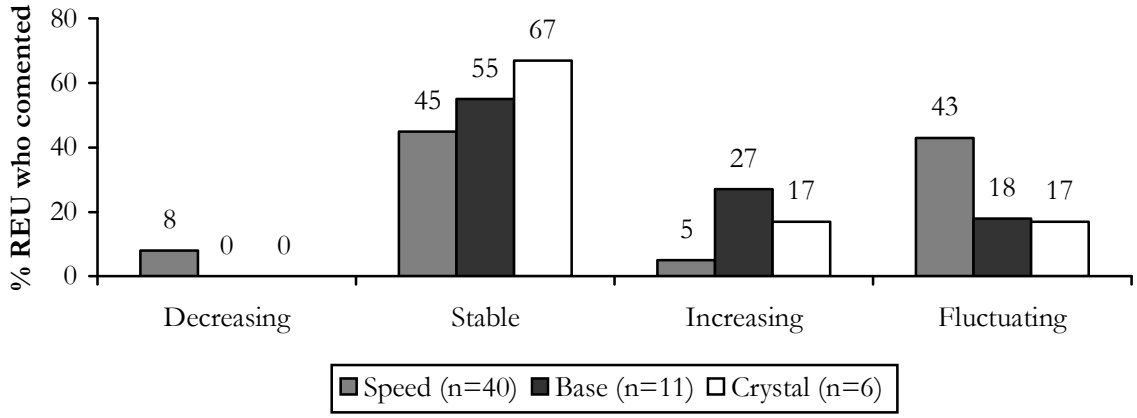
Figure 12 shows that a greater proportion of REU respondents were able to comment on changes in the purity of methamphetamine powder (40%) in comparison to methamphetamine base (11%) and crystal methamphetamine (6%). Methamphetamine powder was considered to be stable (45%) or fluctuating (43%) in purity during the six months preceding the interview. The majority of those who commented on methamphetamine base and crystal methamphetamine indicated that the purity of these forms had recently remained stable (55% and 67% respectively) with smaller proportions indicating that purity had increased (27% and 17%) or fluctuated (18% and 17%) in the last six months (Figure 12).

Figure 11: User reports of current methamphetamine purity, 2005



Source: PDI Regular ecstasy user interviews

Figure 12: User reports of changes in methamphetamine purity in the past six months, 2005



Source: PDI Regular ecstasy user interviews

Data for purity of methamphetamine received at police analytical laboratories have been provided for the 1997/98 to 2004/05 financial years (Table 19, Table 20). All amphetamine-type stimulants tested for purity during 2003/04 and 2004/05 were methylamphetamine rather than amphetamine. Drugs seized by Tasmania Police are only tested for composition and purity if the alleged offender pleads not guilty to the associated charge. Hence, purity data for drug seizures in the state are minimal. This very restricted sample size renders it difficult to make inferences about trends in purity of methamphetamine. However, the data do seem to suggest that the level of purity of consumer-type amounts of methamphetamine seized in Tasmania had remained relatively stable over the period 1997/98 to 2000/01. The apparent sharp 'jump' in purity of analysed methamphetamine samples between 2000/01 and 2001/02 related to samples analysed in the October-December 2001 and January-March 2002 period (Table 20). This increase in purity may have simply reflected the analysis of a more representative sampling of methamphetamine seizures (afforded by the greater sample size) rather than being indicative of changes in market purity, particularly given the decline in both number and purity of analysed seizures in subsequent months (Table 19).

Overall purity data in 2004/05 represent an increase in purity (32.3%) when compared to those analysed in the previous year (16.9%: Table 19), and are in line with REU reports of 'medium' purity levels overall for methamphetamine powder, the most commonly used form of the drug. This is tempered, however, by the analysis of a very small number of seizures in 2004/05 (n=10), and that they were all of small seizures of the drug (two grams or less), which have, in previously years, been higher in purity than seizures of larger amounts (purity range of 2-81% for seizures of 2 grams or less, and 4-22% for larger seizures analysed in 2003/04). While, again, it is difficult to make inferences from such a small number of analysed seizures, it is notable that the purity range of analysed seizures, which has been steadily increasing in recent years (0.5-50% in 2000/01; 0.1-70.6% in 2001/02; 1.9-78.5% in 2002/03; 2.4-80.5% in 2003/04) had declined in 2004/05 (18.5-35.5%). The particularly high-purity seizures in previous years are unusual by national standards (ACC, 2005) and may reflect the selection of particularly unusual seizures of the drug for analysis by police[4].

[4]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 19: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 1997/98-2004/05

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
<=2 g								
n	*4*	*31*	*9*	*10*	*20*	*30*	*9*	*10*
avg % purity	5 %	5 %	7.4 %	10.4%	26.6%	12.7%	25.6%	32.3%
> 2g								
n	*2*	*8*	*11*	*14*	*28*	*13*	*14*	-
Avg % purity	7 %	21 %	6.6 %	3.6 %	19.2%	11.2%	9.8%	-
Total								
n	*6*	*39*	*20*	*24*	*48*	*43*	*23*	*10*
avg % purity	**6 %**	**8 %**	**7 %**	**6.4 %**	**22.2%**	**12.2%**	**16.9%**	**32.3%**
Range in % purity	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%

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 this period. All analysed seizures of amphetamines in this period revealed methylamphetamine rather than amphetamine.

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Table 20: Purity of Tasmanian seizures of methamphetamine made by Tasmania Police received for laboratory testing, by quarter, Jan 2001-June 2005

	Jan-Mar 2001	Apr-Jun 2001	Jul-Sep 2001	Oct-Dec 2001	Jan-Mar 2002	Apr-Jun 2002	Jul-Sep 2002	Oct-Dec 2002	Jan-Mar 2003	Apr-Jun 2003	Jul-Sep 2003	Oct-Dec 2003	Jan-Mar 2004	Apr-Jun 2004	Jul-Sep 2004	Oct-Dec 2004	Jan-Mar 2005	Apr-Jun 2005
<=2 g																		
n	*9*	*1*	*1*	*6*	*12*	*1*	*3*	*4*	*4*	*19*	*2*	*2*	*4*	*1*	*10*	-	-	-
median % purity	3.2%	5.2%	9.0%	31.1%	26.0%	6.7%	6.4%	5.9%	13.1%	13.1%	40.0%	28.4%	50.6%	16.9%	32.3%	-	-	-
> 2g																		
n	*12*	*2*	*6*	*7*	*13*	*2*	*1*	*4*	*7*	*1*	*8*	*1*	*5*	-	-	-	-	-
median % purity	3.8%	3.1%	5.5%	30.1%	20.0%	18.5%	6.3%	10.4%	12.8%	7.6%	17.4%	15.4%	4.1%	-	-	-	-	-
Total																		
n	*21*	*3*	*7*	*13*	*25*	*3*	*4*	*8*	*11*	*20*	*10*	*3*	*9*	*1*	*10*	-	-	-
avg % purity	3.4%	4.3%	6.8%	30.1%	24.9%	6.7%	6.4%	10.4%	12.8%	13.0%	17.4%	25.6%	4.1%	16.9%	32.3%	-	-	-

Source: Australian Bureau of Criminal Intelligence; Australian Crime Commission; Tasmania Police State Intelligence Services. Note: No seizures made by the Australian Federal Police in Tasmania were submitted for purity testing in this period. All analysed seizures of amphetamines in this period revealed methylamphetamine rather than amphetamine. Figures represent the purity of seizures received at the laboratory within the relevant quarter, and the interim between the date of seizure by police and the date of receipt at the laboratory may vary between one day and several months.

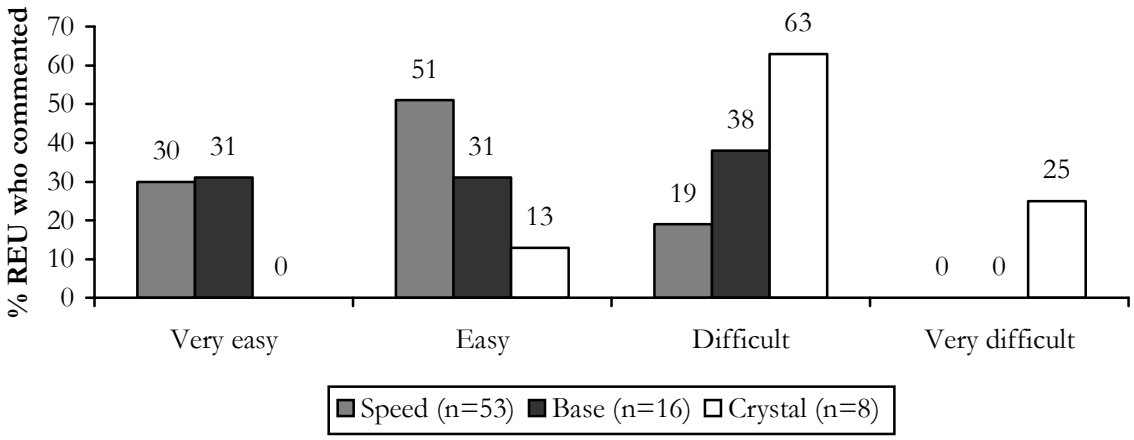
5.4 Availability

Figure 13 shows that a greater proportion of the REU sample was able to comment on the availability of methamphetamine powder (53%), in comparison to methamphetamine base (16%) and crystal methamphetamine (8%). The majority of those who commented on methamphetamine powder indicated that it was 'easy' (51%) or 'very easy' (30%) to obtain, and two-fifths reported that it was 'difficult' to obtain (19%). The reports on the availability of methamphetamine base were varied, with one-third indicating that it was 'very easy' (30%), 'easy' (31%) or 'difficult' (38%) to obtain. In contrast, crystal methamphetamine was reported to be 'difficult' (63%) or 'very difficult' (29%) to obtain.

Figure 14 shows REU comments on changes in the availability of methamphetamine in the six months preceding the interview. Over half of those who commented on the changes in the availability of methamphetamine powder indicated that it had remained 'stable' (60%), while smaller proportions indicated that the drug had become 'easier' (17%) or 'more difficult' (19%) to obtain. Similarly, over half of those who commented on the availability of methamphetamine base (57%) indicated that it had recently remained 'stable'. The small number of participants (n=5) that commented on changes in the availability of crystal methamphetamine indicated that it had remained 'stable' (40%, n=2) or become 'more difficult' to obtain (40%, n=2) in the six months preceding the interview.

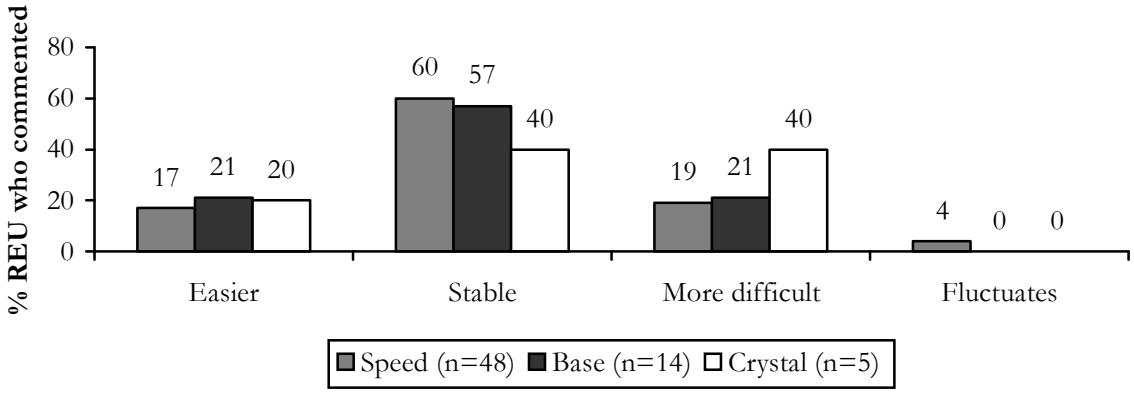
The comments of key experts on the availability of each methamphetamine form were varied. Two KE commented that the availability of methamphetamine powder had decreased and one KE commented that the availability of methamphetamine had increased. Whereas three KE indicated that the availability of methamphetamine base was currently low in Hobart, two KE commented that there had been a recent increase in the availability of methamphetamine base. Similarly, whereas three KE commented that crystal methamphetamine was typically difficult to obtain, single KE indicated that there had been a recent increase or decrease in the availability of crystal methamphetamine, and another noted that there was more crystal methamphetamine around in 2004.

Figure 13: Current availability of methamphetamine forms, 2005



Source: PDI regular ecstasy user interviews

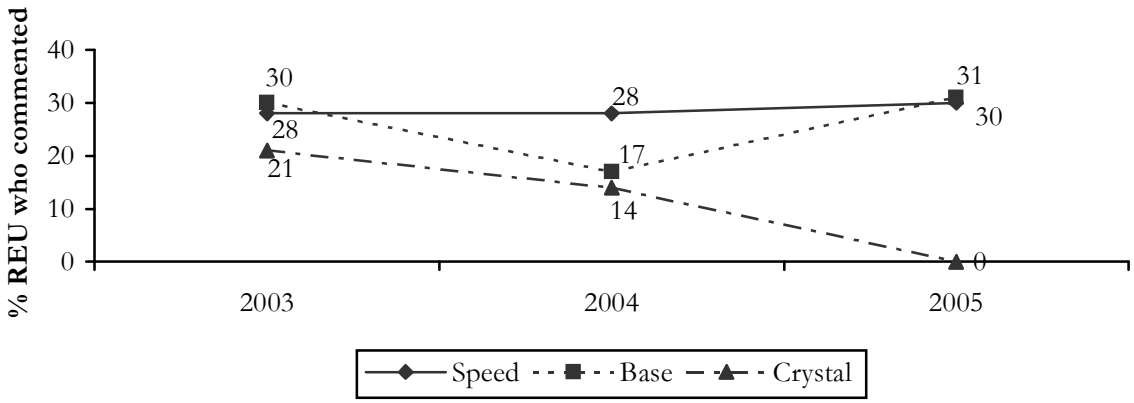
Figure 14: Change in the availability of various forms of methamphetamine in the preceding six months, 2005



Source: PDI Regular ecstasy user interviews

Figure 15 shows the proportion of the REU sample who indicated that each methamphetamine form was 'very easy' to obtain across the three years of the study. The proportion of the sample that indicated that methamphetamine powder was 'very easy' to obtain has remained relatively stable across the three cohorts (28%, 28%, and 30%). A similar pattern was found in relation to methamphetamine base (30%, 17%, and 31%), though less participants indicated that base was 'very easy' to obtain in 2004 compared to 2003 and 2005. There has been a steady decrease in the proportion reporting that crystal methamphetamine is 'very easy' to obtain across the three years of the study (21%, 14% and 0%).

Figure 15: Changes to current availability over time: proportion of REU who report various forms of methamphetamine as 'very easy' to obtain in the six months preceding interview, 2003–2005

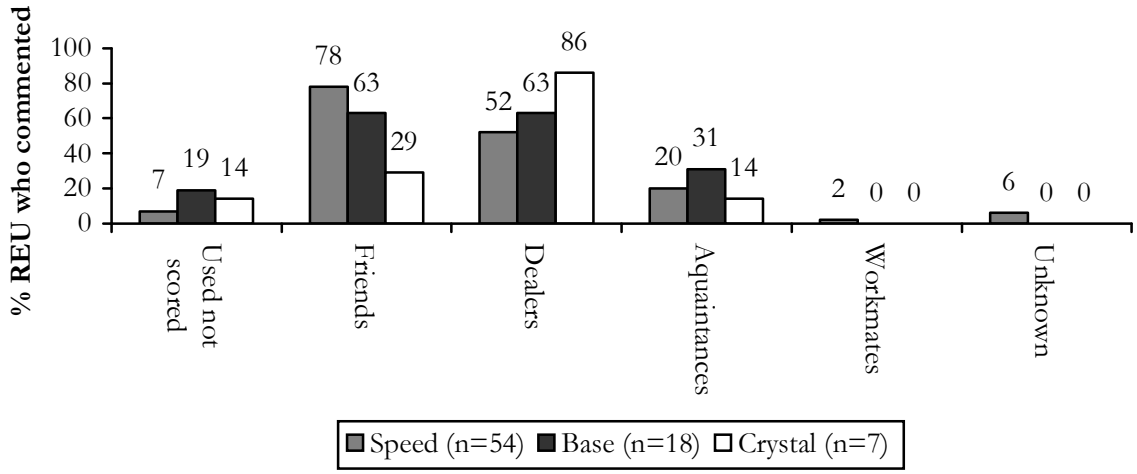


Source: PDI Regular ecstasy user interviews

REU were asked who they had obtained each methamphetamine from in the last six months and at which venues they had normally obtained the drug (see Figure 16 and Figure 17). Methamphetamine powder was typically obtained from friends (78%), and dealers (52%) or acquaintances (20%). Consistent with this, methamphetamine powder was typically obtained from private residences such as a friend's home (59%), their own home (30%), or a dealer's home (26%), with smaller proportions obtaining the drug at nightclubs (20%), dance-related events (19%), or private parties (13%). Methamphetamine base was typically obtained from dealers (63%), friends (63%), or acquaintances (31%), and was typically obtained from a friend's home

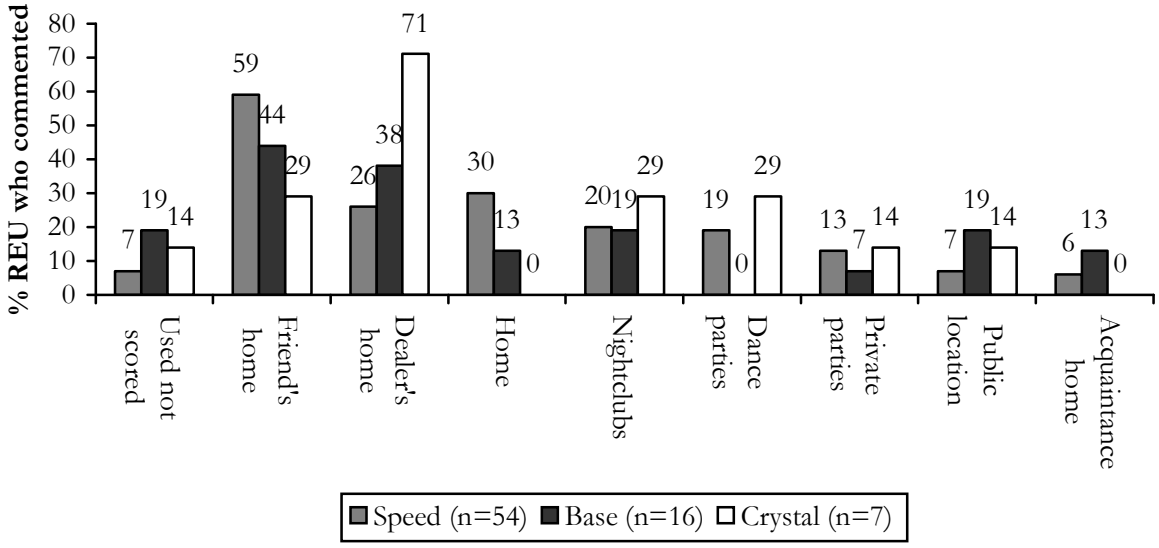
(59%) or dealer's home (38%), with smaller proportions obtaining the drug at nightclubs (19%) or public locations (19%). Crystal methamphetamine was most commonly obtained from dealers (86%), followed by friends (29%) and acquaintances (14%), and was typically obtained from a dealer's home (71%), friend's home (29%), nightclub (29%) or dance party (29%). The latter findings in relation to methamphetamine base and crystal methamphetamine should be interpreted with caution as few people had purchased these forms among the 2005 cohort.

Figure 16: People from whom methamphetamine powder, base and crystal were purchased in the preceding six months, 2005



Source: PDI regular ecstasy user interviews

Figure 17: Locations where methamphetamine powder, base and crystal were purchased in the preceding six months, 2005



Source: PDI regular ecstasy user interviews

Tasmania Police seizures (Table 21) of drugs suspected to be methamphetamine have varied somewhat in recent years, following a reasonably stable level of seizures in the 2000/01 and 2001/02 and financial years (3,303g and 3,041g respectively), falling to 2,022g in 2002/03 and 1,182g in 2003/04, but increasing again in 2004/05 to 2,283g[5]. These has been a more steady increase in the number of tablets seized believed to be methamphetamine (or pharmaceutical stimulants) in recent years, increasing from 23 in 2000/01, 44 in 2001/02, 70 in 2002/03, 192 in 2003/04 and 261 in 2004/05 (Table 21).

Table 21: Tasmania Police data for methamphetamine: July 2000-June 2005

	Jul-Dec 2000	Jan-Jun 2001	Jul-Dec 2001	Jan-Jun 2002	Jul-Dec 2002	Jan-Jun 2003	Jul-Dec 2003	Jan-Jun 2004	Jul-Dec 2004	Jan-Jun 2005
*Methamphetamine powder seized (g)**										
South	1113	330	469	1077	882	457	96	495	489	1472
North	17	86	70	1	196	27	23	44	36	114
West	1073	411	822	602	144	316	469	55	9	163
Total	2203g	827g	1361g	1680g	1222g	800g	588g	594g	534g	1749g
% within southern region	*51%*	*40%*	*34%*	*64%*	*72%*	*57%*	*16%*	*83%*	*92%*	*84%*
Methamphetamine tablets seized										
South	2	0	1	1	24	21	146	0	0	8
North	4	17	0	0	13	11	43	3	12	206
West	0	0	0	42	1	0	0	0	0	35
Total	6	17	1	43	38	32	189	3	12	249
% within southern region	*33%*	*0%*	*100%*	*2%*	*63%*	*66%*	*77%*	*100%*	*0%*	*3%*

Source: Tasmania Police State Intelligence Services

**This row includes powder seized and verified as containing methamphetamine, and unknown powder seized, believed to be methamphetamine.*

5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Arrest data for methamphetamine-related offences indicate a marked increase in the number of arrests between 1998/99 and 2000/01, with this upward trend sustained into 2001/02 (Table 20). The main increase over this period related to those charged with 'consumer'-type offences (such as use and possession), consistent with reports of increased availability and use of methamphetamines, although there was a concomitant, albeit less marked, increase in the number of supply-type arrests in this period. The 2002/03 financial year saw a decline in the number of arrests, with this reduction relating to a decline in the number of arrests for consumer-type offences rather than that of providers. In the 2003/04 financial year there was a continued reduction in the numbers of methamphetamine-related arrests, with both consumer- and provider arrest rates affected; however, arrest rates increased in the 2004/05 financial year for both offence types. While there have been some slight variations in the number of arrests in recent years, it is clearly apparent that there has been a marked and sustained increase in arrests in

[5] Data reported by the Australian Crime Commission (ACC) differs to that provided by Tasmania Police State Intelligence Services (SIS), with the ACC reporting 109 seizures, totalling 1,737g of 'amphetamine-type stimulants' made in Tasmania during the 2003/04 financial year. As the other data reported in Table 21 represent SIS figures, SIS figures for 2003/04 and 2004/05 are reported for consistency.

relation to methamphetamine in recent years, with arrest rates for both consumer and provider offences being substantially greater than those seen prior to 2000/01.

Table 22: Consumer and provider arrests for methamphetamine and related substances, 1996/97-2004/05

	1996 /97 n	1997 /98 n	1998 /99 n	1999 /00 n	2000 /01 n	2001 /02 n	2002 /03 n	2003 /04 n	2004 /05 n
Consumers									
Female	3	5	0	4	9	18	8	10	20
Male	15	9	4	14	51	53	34	21	57
Unknown	0	1	2	2	0	0	0	0	0
Total	18	15	6	20	60	71	42	31	77
Providers									
Female	0	0	0	0	1	6	2	1	2
Male	2	0	1	7	9	12	17	7	27
Unknown	0	0	0	1	0	0	0	0	0
Total	2	0	1	8	10	18	19	8	29
Total Arrests	20	15	7	28	70	89	66	39	124*

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

Note: '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 in these statistics.

*includes 18 cases related to methamphetamine or related drugs (dexamphetamine, pseudoephedrine) where consumer/provider status and gender was not recorded

5.5.2 Health

Alcohol and Drug Information Service data

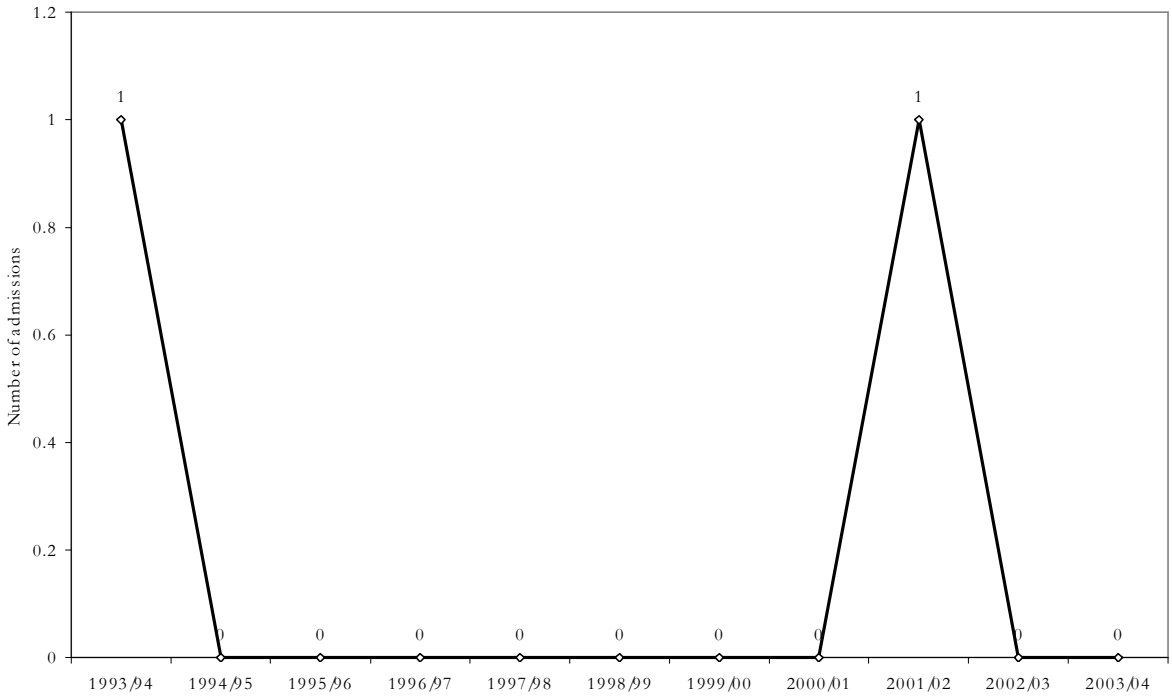
The Tasmanian Alcohol and Drug Information Service (ADIS) is a telephone information and referral service that is administered by Turning Point Alcohol and Drug Centre in Victoria. Figure 6 in Section 4.7.2 shows that calls in relation to amphetamine account for between 6% and 13% of all calls made to the service between the 2000/01 and 2004/05 reporting periods. The percentage of calls received in relation to methamphetamine has increased slightly over the last three financial years.

Hospital admissions

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 2003/04 financial year periods (Roxburgh & Degenhardt, 2006). These data relate to Tasmanian public hospital admissions, for individuals aged between 15 and 54 years, where methamphetamine use was recorded as the 'principal diagnosis' – namely, where the effect of methamphetamine was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre are only included in this dataset from June 2002.

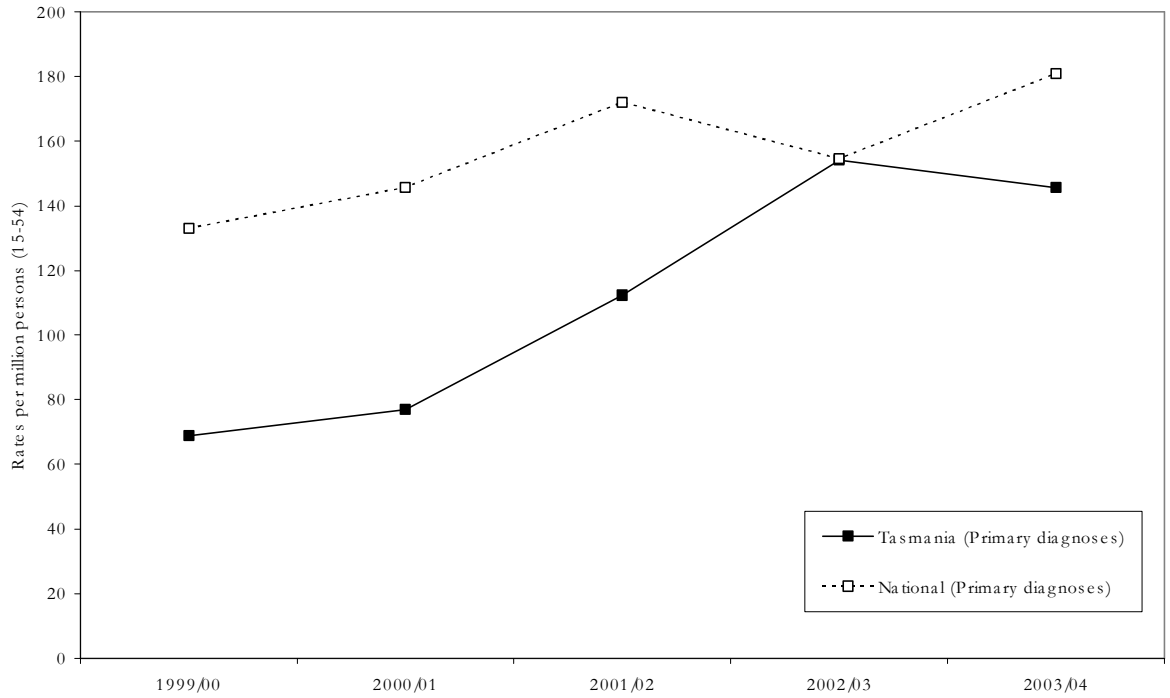
Tasmanian public hospital admissions where methamphetamine use was noted as the principal diagnosis are presented in Figure 18 below. It is clear that, following a relatively stable period between 1993/94 and 1998/99, where there were less than 15 such cases per annum, the number of admissions where methamphetamine use was the principal diagnosis steadily increased between 1999/00 and 2002/03, approximately doubling during this period, with rates appearing to stabilise between 2002/03 and 2003/04. When the population-adjusted rates of Tasmanian admissions are compared with those nationally (Figure 19), two trends are notable: firstly, that both local and national admission rates were increasing steadily between 1999/00 and 2001/02, although local population-adjusted rates were substantially lower than the national figures during this period (with Tasmanian admission rates half that of the national figures in 1999/00 and 2000/01, and two-thirds of the national level in 2001/02). Secondly, the national admission rates for methamphetamine-related primary diagnoses began to plateau after steady increases in previous years in 2001/02, a trend which occurred in the Tasmanian context a year later (possibly reflective of the inclusion of data from the detoxification service for the first time in 2002/03). As such, in the 2002/03 and 2003/04 periods, the local admission rates have been very similar to those seen nationally: in 2002/03, Tasmanian and national admission rates were consistent at 154 per million persons, and in 2003/04 the Tasmanian rate was 81% that of the national average, at approximately 146 admissions per million population in the 15-54 year age group.

Figure 18: Public hospital admissions amongst persons aged 15-54 in Tasmania where methamphetamine use was noted as the primary factor contributing to admission 1993/04-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

Figure 19: Public hospital admissions among persons aged 15-54 where methamphetamine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia 1999/00-2003/04



Source: Australian Institute of Health and Welfare (Roxburgh & Degenhardt, 2006)

5.6 Summary of methamphetamine trends

- Consistent with previous years, use of methamphetamine was common among the 2005 REU sample. Over three-quarters (78%) had used some form of methamphetamine in the preceding six months. Methamphetamine was typically swallowed or snorted and was used on a median frequency of six times during this period (approximately monthly). The frequency of use tended to be greater for males in comparison to females.
- Recent use of methamphetamine powder was most common (77%) followed by methamphetamine base (23%) and crystal methamphetamine (10%).
- Methamphetamine powder was typically swallowed or snorted less than once a month in small amounts (0.1g). The frequency of methamphetamine powder use was slightly lower in 2005 when compared to the 2004 sample.
- The lifetime (29%) and recent (10%) use of crystal methamphetamine among the 2005 sample is considerably lower in comparison to 2003 when over half (52%) of the sample had recently used the drug. Those that had recently used crystal methamphetamine typically injected or swallowed the drug, whereas the most common route of administration among the 2003 and 2004 samples was smoking.
- Methamphetamine powder and base were typically used at venues such as dance events or nightclubs, whereas crystal methamphetamine was more likely to be used at private residences.
- The median price for 0.1 g of methamphetamine powder was $40 which is consistent with the price reported in 2004 and less in comparison to the price of $50 reported in 2003. This price was considered to have remained stable in the preceding six months. Consistent with previous years, the median price for 0.1 gram of methamphetamine base and crystal methamphetamine was $50.
- Consistent with previous years, the purity of methamphetamine base and crystal methamphetamine was considered to be higher than methamphetamine powder. There was little evidence for any recent changes in the purity of any methamphetamine form.
- Methamphetamine powder was considered to be 'easy' or 'very easy' to obtain, reports on the availability of methamphetamine base were varied, and crystal methamphetamine was typically considered to be 'difficult' or 'very difficult' to obtain. The current and previous year's data, as well as anecdotal reports of KE, suggest that the availability of crystal methamphetamine to REU in Hobart has decreased substantially since 2003.

6.0 COCAINE

According to the findings of the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999) 2.4% of surveyed Tasmanian residents (n=29) reported ever trying cocaine, while only 0.1% (n=3) had used it in the 12 months prior to interview. Findings of the 2001 survey (Australian Institute of Health and Welfare, 2002) were very similar, with 0.2% of those sampled reporting using the drug in the preceding year, compared to 1.3% nationally. In the 2004 National Drug Strategy Household Survey, it was similarly estimated (from the sample of 1,208 participants) that approximately 0.2% of Tasmanians had used cocaine in the year prior to interview, compared with 1.0% of Australians nationally (Australian Institute of Health and Welfare, 2005). This is consistent with the stable, low level of use of cocaine amongst local consumers interviewed in the IDRS and PDI studies.

Among the 2005 REU sample, two-fifths (43%) had used ever used cocaine, compared to one-third among the 2004 sample (32%) and a similar proportion among the 2003 sample (44%) (see Table 23). A significantly greater proportion of the male sample (53%) had ever used cocaine in comparison to the proportion of the female sample (31%); χ^2=4.72, p<.05. There were trends for the mean age of those who had ever used cocaine to be older (*M*=24.8, *SD*=4.2) than those that hadn't (*M*=23.2, *SD*=4.2), *t*(98)=-1.84, *p*=.068, and, based on a median split for age, a greater proportion of 'older' participants to have ever used cocaine in comparison to 'younger' participants (53% vs. 35%); χ^2=6.46, p<.05. The median age of first use of cocaine was 20 years (range 15-30 years) and there was no significant difference between the average age of first use for females (*M*=20.6, *SD*=3.1) and males (*M*=21.4, *SD*=3.6). The majority of those who had ever used cocaine had snorted the drug (81%), and smaller proportions reported swallowing (23%), smoking (21%), and injecting (5%, n=2) the drug.

6.1 Cocaine use among REU

One-fifth (20%) of the 2005 REU sample had used cocaine in the six months preceding the interview compared to one-tenth or less among the 2003 (7%) and 2004 (10%) samples (see Table 23). There was no significant difference in the proportion of males (26%) and females (13%) that had recently used cocaine and no significant age differences between those that had recently used cocaine and those that had not. The median frequency of cocaine use was 1 day (range 1-5 days) in the preceding six months compared to a median of 2 days among the 2003 and 2004 samples. Over half of those that had recently used cocaine (55%) had done so on only one occasion in the preceding six months. There was no significant difference between the median frequency of use for males (2 days, range 1-5) and females (1 day, range 1-2), or that of 'younger' or 'older' participants. Those that had recently used cocaine reported using a median of 0.5 grams (range 0.5-1 gram) or a median of 2 points (0.25-3) in a typical session, and 0.5 grams (range 0.5-1 grams) or 2 points (range 0.25-4) in the biggest session of use in the six months preceding the interview. The majority of those who had used cocaine in the preceding six months had snorted the drug (90%), with small proportions reporting swallowing (10%) or smoking (15%) the drug.

Those who had recently used cocaine were asked about the locations that they had typically used the drug (to be under the influence of its effects). Cocaine was used at a range of locations but most commonly at a nightclub (36%), own home (36%), or pub (18%). Other locations included dance-related events, a dealer's home, friend's home, private party, or public place (all 9%). The most common locations for last use of cocaine were at a nightclub (18%), pub (18%), own home (18%), friend's home (9%), dance-related event (9%), public place (9%) or work (9%). Whereas the locations of cocaine use are relatively consistent with those observed among the 2003 and 2004 samples, sample sizes are too small to make meaningful comparisons.

Half of the KE interviewed (n=11) indicated that they weren't aware or couldn't comment on cocaine use among the regular ecstasy users that they were familiar with. However, several KE (n=8) indicated that small proportions of the regular ecstasy-using group also use cocaine. Three KE indicated that the availability of cocaine is relatively low in Hobart, but Two KE commented that there had been increased use and availability of cocaine during the six months preceding the interview.

Table 23: Patterns of cocaine use among REU, 2003-2005

Cocaine	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	44	32	**43**
Median age first used cocaine	21 years (range 15-30)	21 years (range 16-32)	**20 years (range 15-30)**
Used preceding six months (%)	7	10	**20**
Of those who had used in last 6 mths			
Median days used last 6 mths (range)	2 (1-10)	2 (1-20)	**1 (1-5)**
Route of administration in last 6 mths			
Smoked (%)	14	-	**15**
Snorted (%)	71	70	**90**
Swallowed (%)	14	30	**10**
Injected (%)	-	10	**-**
Shafted/shelved (%)	-	-	**-**
Median quantities used in last six months			
Median grams used typical session	0.1 (0.1-0.5)	0.5 (0.5-1.5) n=4	**0.5 (0.5-1) n=3**
Median grams used biggest session	0.5 (0.1-0.5)	1.0 (0.5-5.0) n=5	**0.5 (0.5-1) n=3**
Median points used typical session	-	1.0 (0.5-2) n=5	**2 (0.25-3) n=14**
Median points used biggest session	-	0.75 (0.5-1) n=4	**2 (0.25-4) n=14**
Locations typically used in the last 6 mths	n=7	n=6	**n=11**
Home (%)	14	17	**36**
Dealer's home (%)	-	-	**9**
Friend's home (%)	28	67	**9**
Raves/doofs/dance parties	29	17	**9**
Nightclub (%)	42	50	**36**
Pub (%)	-	33	**18**
Restaurant/cafe	-	17	**-**
Private party (%)	14	17	**9**
Public place (street/park) (%)	-	-	**9**
Outdoors (%)	-	17	**-**
Car (%)	-	-	**-**
Live music event	n/a	50	**-**
Work	-	-	**9**
Location last used cocaine	n=5	n=6	**n=11**
Home (%)	20	17	**18**
Dealer's home (%)	-	-	**-**
Friend's home (%)	40	33	**9**
Rave/doof/dance party	20	17	**9**
Nightclub (%)	20	33	**18**
Pub (%)	-	-	**18**
Private party (%)	-	-	**-**
Outdoors (%)	-	-	**-**
Live music event (%)	-	-	**-**
Public place (%)	-	-	**9**
Work (%)	-	-	**9**
Other	-	-	**9**

Source: PDI regular ecstasy user interviews

6.2 Price

Table 24 shows that the median price for one gram of cocaine in 2005 was $350 (range $220-500, n=9) and the median price for one point of cocaine was $65 (range $60-70, n=2). The median price for the last purchase of cocaine was also $350 (range $180-400, n=3). Although the median price and last purchase price for a gram of cocaine has increased since 2003, these estimates are based on small sample sizes and should be interpreted with caution. Three out of the four participants who commented (75%) indicated that the price of cocaine had remained stable in the six months preceding the interview.

Table 24: Price of cocaine purchased by REU and price variations 2003-2005

Median Price	2003	2004	**2005**
Point (0.1 gram)	$65 ($50-80) n=2	$70 n=1	**$65 ($60-70) n=2**
Gram	$250 ($200-400) n=9	$325 (200-400) n=8	**$350 (220-500) n=9**
Last purchase price			
Point (0.1 gram)	$60 n=1	-	**$65 ($60-70) n=2**
Half gram	$125 n=1	-	**$180 n=1**
Gram	$270 ($200-400) n=9	$300 (200-400) n=4	**$350 (180-400) n=3**
Price change last 6 mths	n=10	n=8	**n=4**
Increased (%)	10	13	**25**
Stable (%)	50	75	**75**
Decreased (%)	10	-	**-**
Fluctuated (%)	30	13	**-**

Source: PDI regular ecstasy user interviews

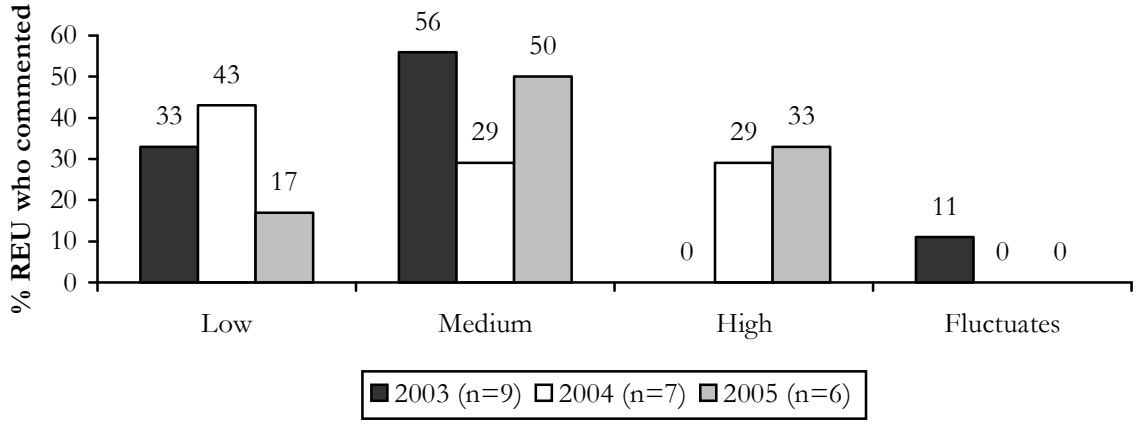
Tasmania Police had been unable to report prices of cocaine from either informant reports or covert bust operations between 1995/96 and 1999/00; however, in 2001 Southern Drug Investigation Services estimated the price of cocaine as $250 per gram, on the basis of an informant report, and the price reported by Tasmania Police remained stable during the remainder of the 2001/02 financial year. Price information for cocaine has not been provided to the Australian Crime Commission between 2002/03 and 2004/05, reflecting the lack of a local market of the drug.

6.3 Purity

Few participants (n=6) were able to comment on the current purity of cocaine (Figure 20). Half of those who commented (50%) indicated that cocaine was medium in purity, and the remainder indicated that cocaine was currently high (33%) or low (17%) in purity. Only two REU were able to comment on changes in the purity of cocaine during the six months preceding the interview, both indicating that it had remained stable (Figure 21).

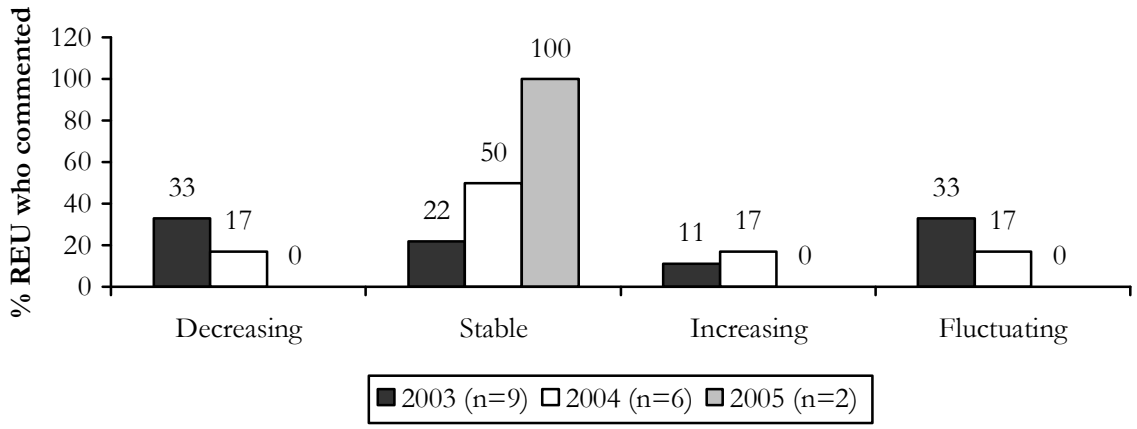
The last analysed sample of cocaine seized within the state by Tasmania Police was from the first quarter of 2001. This was an amount of less than two grams, and was analysed during the first quarter of 2002 at 44.0% purity.

Figure 20: User reports of current purity of cocaine, 2003-2005



Source: PDI Regular ecstasy user interviews

Figure 21: User reports of changes in cocaine purity in the past six months, 2003-2005



Source: PDI Regular ecstasy user interviews

6.4 Availability

Around one-tenth of the REU sample was able to comment on the current availability of cocaine in 2005 (see Table 25). The majority of those who commented indicated that cocaine was currently 'difficult' (31%) or 'very difficult' (46%) to obtain and that the availability of cocaine had remained stable (63%) in the six months preceding the interview. Of the 11 respondents who commented on scoring cocaine, one-third (36%) had used but not scored the drug. The remaining respondents had typically obtained cocaine from a dealer (27%), friend (18%) or acquaintance (9%) in the last six months. Cocaine was typically purchased at a friend's home (18%) and various other locations including dance events (9%), nightclubs (9%), pubs, (9%), public locations (9%), and work (9%).

Table 25: REU reports of availability of cocaine in the preceding six months, 2003-2005

Cocaine	2003	2004	**2005**
Ease of obtaining cocaine	n=32	n=9	**n=13**
Very easy (%)	3	11	**-**
Easy (%)	3	-	**23**
Moderately easy (%)	16	n/a	**n/a**
Difficult (%)	34	44	**31**
Very difficult (%)	44	44	**46**
Changes in availability in the last six months	n=23	n=8	**n=10**
Stable (%)	83	63	**90**
Easier (%)	4	13	**-**
More difficult (%)	9	25	**10**
Fluctuates (%)	4	-	**-**
Persons scored from in the last six months	n=5	n=6	**n=11**
Used not scored (%)	-	33	**36**
Friends (%)	80	67	**18**
Dealers (%)	40	17	**27**
Acquaintances (%)	-	-	**9**
Unknown dealers (%)	-	-	**9**
Locations scored from in the last six months	n=5	n=6	**n=11**
Used not scored (%)	-	33	**36**
Own home (%)	-	17	**-**
Friend's home (%)	80	67	**18**
Dealers' home (%)	20	17	**-**
Raves/doofs/dance parties (%)	-	-	**9**
Nightclubs (%)	-	-	**9**
Pubs (%)	-	-	**9**
Agreed public location (%)	-	-	**9**
Work (%)	-	-	**9**
Other (%)	-	-	**9**

Source: PDI regular ecstasy user interviews

6.5 Cocaine-related harms

6.5.1 Law enforcement

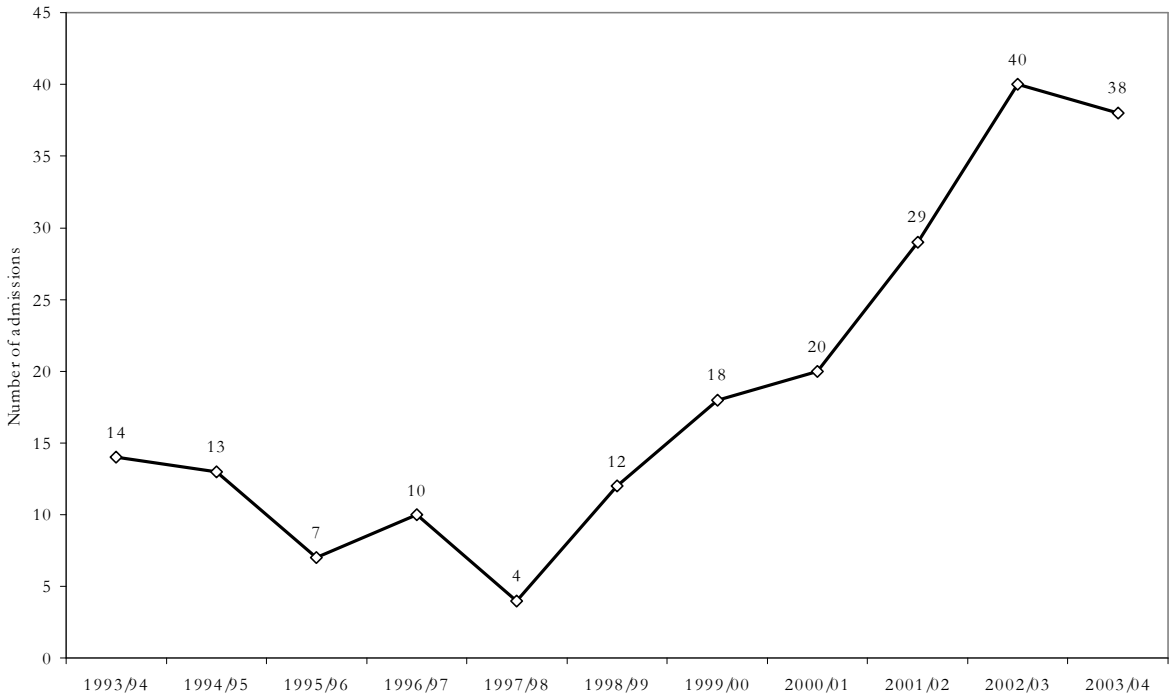
Tasmania Police have reported few seizures or arrests in relation to cocaine between the 1995/96 and 2003/04 financial years apart from two consumer arrests made during the 2000/01 period and one recorded seizure of 1g. (Australian Bureau of Criminal Intelligence, 1996, 1997, 1998, 1999, 2000, 2001, 2002; Australian Crime Commission, 2003, 2004, 2005, 2006).

6.5.2 Health

There is little objective data available on mortality or access to treatment providers in relation to cocaine in Tasmania. However, the Australian Institute of Health and Welfare has provided hospital morbidity data in relation to drug use for the 1993/94 to 2003/04 financial year periods (Roxburgh & Degenhardt, 2006). Diagnoses were coded based on the International Classification of Diseases (ICD) 10, second edition. These data are based on Tasmanian public hospital admissions in which cocaine was recorded as the 'principal diagnosis'. 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. It is important to note that data from Tasmania's only public detoxification centre were included from June 2002 onwards.

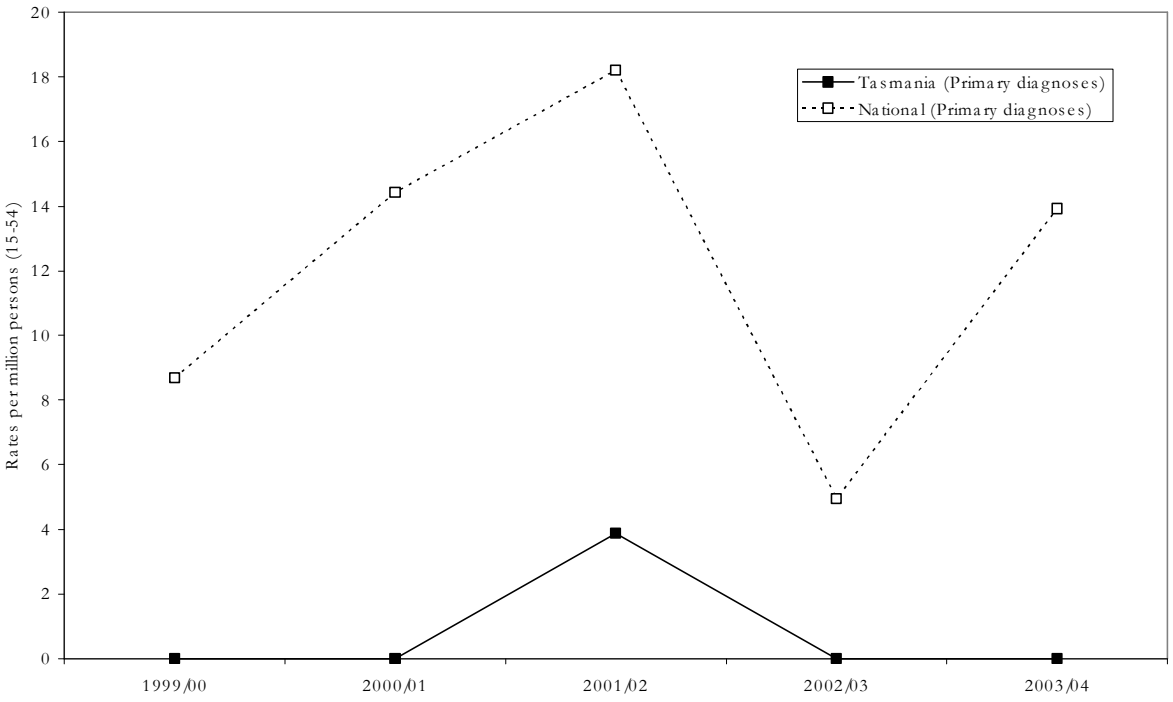
Consistent with the relatively low level of availability and use of cocaine locally, cocaine-related hospital admissions in Tasmania are very low (see Figure 22) with only two instances of admission where cocaine was the principal diagnosis between 1993/04 and 2003/04. Further, the rate of cocaine-related hospital admissions per million of population are consistently and substantially lower in comparison to the national rate between 1999/00 and 2003/04 (Figure 22).

Figure 22: Public hospital admissions among persons aged 15-54 where cocaine use was noted as the primary factor contributing to admission in Tasmania 1993/04-2003/04



Source: Australian Institute of Health and Welfare

Figure 23: Public hospital admissions among persons aged 15-54 where cocaine was noted as the primary factor contributing to admission, rates per million population for Tasmania and Australia 1999/00-2003/04



Source: Australian Institute of Health and Welfare

6.6 Summary of cocaine trends

- Two-fifths (43%) of the 2005 REU sample had ever used cocaine, compared to one-third (32%) among the 2004 cohort. One-fifth (20%) had used cocaine during the six months preceding the interview compared to one-tenth among the 2004 (10%) and 2003 (7%) samples.
- A greater proportion of males (67%) had ever used cocaine in comparison to females (33%) and those that had ever used cocaine tended to be older than those that hadn't. There were no age or sex differences between those that had recently used cocaine and those that hadn't.
- Cocaine was typically snorted and was used only once (range 1-5 days) on average in the preceding six months with an average of 0.2 to 0.5 grams used in a typical session.
- Consistent with the relatively low reported use of cocaine among REU, few participants were able to comment on the price, purity and availability of the drug and these estimates should therefore be interpreted with caution.
- The price for a gram of cocaine ranged from $220-500 which is relatively consistent with the price range of $200-400 reported among the 2004 sample, and this was considered to have remained stable in the preceding six months.
- Reports on the purity of cocaine were varied but it was typically considered to be medium or high and to have recently remained stable by the small number of people that commented.
- Both REU and KE considered the availability of cocaine to be low in Tasmania, which is consistent with the situation reported among the 2003 (Bruno & McLean, 2004b) and 2004 (Matthews & Bruno, 2005) PDI samples and among the IDU samples surveyed by the IDRS in Tasmania (e.g. Bruno, 2005, 2006). This is also consistent with the small number of arrests and seizures reported by Tasmania Police and the number of hospital admissions reported by the Australian Institute of Health and Welfare in relation to cocaine.
- Whereas the frequency of use and the reported availability of cocaine are still relatively low, the proportion reporting recent use of cocaine appears to have increased among the PDI sample in 2005, indicating a need for continued monitoring of cocaine markets in Tasmania.

7.0 KETAMINE

Table 26 shows that one-quarter of the 2005 REU sample (24%) had used ketamine at some stage of their life compared to less than one-fifth (18%) in 2004 and over one-third proportion in 2003 (38%). There was no significant difference between the proportion of the male sample (29%) and proportion of the female sample (18%) that had ever used ketamine or between the proportion of 'younger' and 'older' participants reporting lifetime use (based on a median split for age). The median age of first use was 22 years (range 16-28 years, *SD*=2 years), and there was no significant difference between the average age of first use for males and females. The majority of those that had ever used ketamine had swallowed (71%) or snorted (46%) the drug, and smaller proportions had ever injected (17%, n=4), or smoked (8%, n=2) the drug.

7.1 Ketamine use among REU

One-tenth of the REU sample (11%) had used ketamine in the six months preceding the interview in 2005, compared to only a small proportion (5%) of the 2004 sample and almost one-quarter (24%) of the 2003 sample (see Table 26). There was no significant difference between the proportion of males (13%) and females (9%) that had recently used ketamine or between the proportions of 'older' or 'younger' participants. The majority of those that had recently used ketamine reported either swallowing (91%) or snorting (45%) the drug. There were no reports of recent injection of ketamine.

The median frequency of ketamine use was 3 days (range 1-5 days) in the six months preceding the interview or approximately once every two months. There were no significant sex or age differences in the median frequency of ketamine use. Those who had recently used ketamine reported using a median of 1 bump[6] (range 1-2) or 2 pills in a typical session of use and a median of 2 bumps or 2 pills in the biggest session of use in the preceding six months. Whereas these quantities are relatively consistent with data from previous years, these figures should be interpreted with caution due to the small number of participants reporting ketamine use among the 2004 and 2005 cohorts.

Eight out of the eleven respondents that had recently used ketamine commented on the locations that they had typically been when under the influence of the drug (rather than the place of ingestion) in the last six months. Ketamine was typically used at a friend's home (75%), own home (38%) private party (25%) or other location (25%). Similarly, the last location of ketamine use was at private residences such as a friend's home (50%), own home (13%), private party (13%) or other location (25%).

Eight of the key experts interviewed (n=8) were aware of some use of ketamine among the group of regular ecstasy users that they were familiar with. KE indicated that ketamine is generally available in pill (n=3) or powder form (n=3). Two KE indicated that use of ketamine is typically experimental and, whereas people may try it, use of the drug has never really taken off in Tasmania.

[6] Ketamine powder may be used in devices known as 'bump bottles' that facilitate snorting in small amounts of the drug. A single snort, or 'bump', is difficult to quantify, but may approximate 0.05-0.2g.

Table 26: Patterns of ketamine use among REU, 2003-2005

Ketamine	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	38	18	**24**
Median age of first ketamine use (range)	21 years (15-36)	21 years (18-24)	**22 (16-28)**
Used preceding six months (%)	24	5	**11**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	2.5 (1-24)	2 (1-5)	**3 (1-5)**
Route of administration in last 6 months			
Snorted (%)	63	60	**45**
Swallowed (%)	67	80	**91**
Injected (%)	17	-	**-**
Median quantities used in last 6 mths (range)			
Median bumps used typical session	5 (2-5)	1 (1-1)	**1 (1-2) n=4**
Median pills used typical session	1.25 (0.5-2)	1 (1-1)	**2 (2-2) n=2**
Median bumps used biggest session	10 (2-20)	3 (1-5)	**2 (2-2) n=4**
Median pills used biggest session	5 (2-8)	1.25 (1-1.5)	**2 (2-2) n=2**
Locations typically used ketamine in last 6 months	n=21	n=4	**n=8**
Home (%)	19	75	**38**
Dealer's home (%)	14	-	**-**
Friend's home (%)	29	50	**75**
Raves/doofs/dance parties	19	50	**-**
Nightclub (%)	48	25	**-**
Pub (%)	5	25	**-**
Restaurant/cafe	-	-	**-**
Private party (%)	14	25	**25**
Public place (street/park) (%)	-	-	**-**
Outdoors (%)	n/a	-	**-**
Car (%)	-	-	**-**
Live music event (%)	n/a	25	**-**
Other (%)	-	-	**25**
Location last used ketamine	n=21	n=4	**n=8**
Home (%)	19	50	**13**
Dealer's home (%)	5	-	**-**
Friend's home (%)	24	50	**50**
Rave/doof/dance party	10	-	**-**
Nightclub (%)	25	-	**-**
Pub (%)	-	-	**-**
Private party (%)	14	-	**13**
Outdoors (%)	n/a	-	**-**
Live music event (%)	n/a	-	**-**
Other (%)	-	-	**25**

Source: PDI regular ecstasy user interviews

7.2 Price

Regular ecstasy users were asked to estimate the market price of ketamine (Table 27). The median market price and last purchase price for one ketamine tablet was $20 (range $20-35). The median market price for one gram of ketamine was $190 (range $180-280) and the median last purchase price was $200 (range $180-280). These figures should be interpreted with caution due to small sample sizes, and meaningful comparisons to prices reported in 2003 and 2004 are not possible. Whereas only five participants were able to comment on recent changes in the price of ketamine, most (80%) indicated that the price had remained stable during the six months preceding the interview.

Table 27: Price of ketamine purchased by REU, 2003-2005

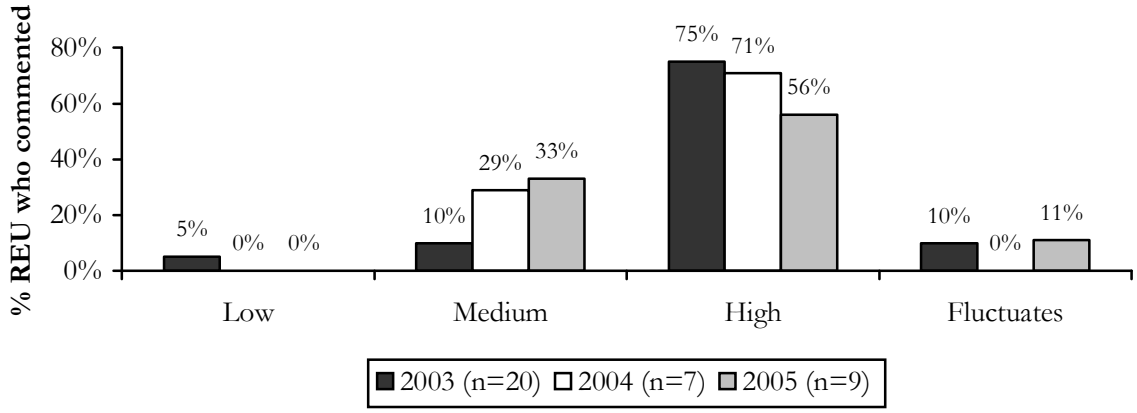
Median Price	2003	2004	**2005**
Tablet	$45 ($25-50) n=11	$27.50 ($25-30) n=2	**$20 ($20-35) n=3**
Point (0.1 gram)	$50 ($25-60) n=3	$50 n=1	**-**
Gram	$100 ($50-150) n=2	$50 n=1	**$190 ($180-280) n=4**
Vial	-	$300 n=1	**-**
Vial (100ml)	-	$150 n=1	**-**
Last purchase price			
Tablet	$47.50 ($25-50) n=8	$25 n=1	**$20 ($20-35) n=3**
Point (0.1 gram)	-	-	**-**
Half gram	-	-	**-**
Gram	-	-	**$200 ($180-280) n=3**
Vial	$60 (50-120) n=3	-	**-**
Vial (100ml)	-	$150 (n=1)	**-**
Price change	n=14	n=3	**n=5**
Increased (%)	7	-	**20**
Stable (%)	79	100	**80**
Decreased (%)	7	-	**-**
Fluctuated (%)	7	-	**-**

Source: PDI Regular ecstasy user interviews

7.3 Purity

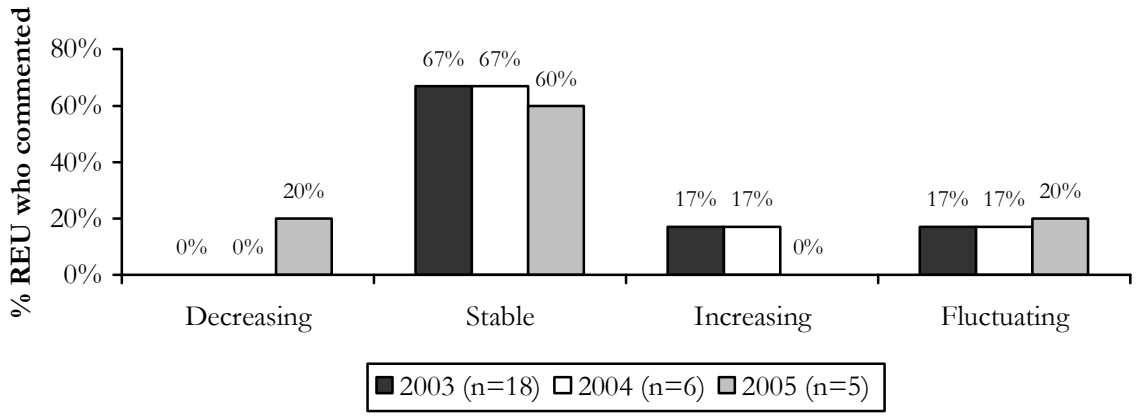
REU were asked to comment on the current purity of ketamine (Figure 24) and any changes in purity during the six months preceding the interview (Figure 25). Less than one-tenth of the sample (9%) was able to comment on the purity of ketamine. Those who commented indicated that ketamine was currently high (56%) or medium (33%) in purity or that it fluctuates in purity (11%). Whereas only five participants were able to comment on recent changes in ketamine purity (n=5), three-fifths indicated that the purity of ketamine had been stable in the six months preceding the interview (60%).

Figure 24: User reports of current purity of ketamine, 2003-2005



Source: PDI regular ecstasy user interviews

Figure 25: User reports of changes in ketamine purity in the past six months, 2003-2005



Source: PDI regular ecstasy user interviews

7.4 Availability

Less than one-tenth (9%) of the REU sample were able to comment on the availability of ketamine in 2005 (see Table 28). The majority of those who commented (78%) indicated that ketamine was 'difficult' to obtain, and smaller proportions indicated that ketamine was 'very difficult' (11%) or 'easy' (11%). Of those that commented on changes in availability of ketamine during the six months preceding the interview (n=6), half indicated that the availability of ketamine had recently remained stable (50%), one-third indicated that it had become more difficult (33%) and the remainder indicated that availability had fluctuated (17%).

Regular ecstasy users were asked who they had obtained ketamine from and which locations they had obtained the drug. Out of the eight people who commented, ketamine had typically been purchased from friends (38%), dealers (38%), acquaintances (13%), and unknown persons (13%) or had been used but not scored (13%). Ketamine was typically obtained from private residences, including a dealer's home (50%), friend's home (38%), the respondent's own home (13%), or an agreed public location (13%).

Table 28: REU reports of availability of ketamine in the preceding six months, 2003-2005

Ketamine	2003	2004	2005
Ease of obtaining ketamine	n=24	n=8	**n=9**
Very easy (%)	8	13	**-**
Easy (%)	29	25	**11**
Moderately easy (%)	46	n/a	**n/a**
Difficult (%)	17	50	**78**
Very difficult (%)	-	13	**11**
Changes in availability in the last six months	n=24	n=6	**n=6**
Stable (%)	67	67	**50**
Easier (%)	21	-	**-**
More difficult (%)	5	33	**33**
Fluctuates (%)	-	-	**17**
Persons scored from in the last six months	n=25	n=4	**n=8**
Used not scored (%)	-	25	**13**
Friends (%)	56	50	**38**
Dealers (%)	52	25	**38**
Workmates (%)	4	-	**-**
Acquaintances (%)	-	25	**13**
Unknown persons (%)	-	-	**13**
Locations scored from in the last six months	n=25	n=4	**n=8**
Used not scored (%)	-	25	**13**
Home (%)	20	25	**13**
Friend's home (%)	36	50	**38**
Dealer's home (%)	40	25	**50**
Rave/doof/dance party (%)	16	-	**-**
Nightclub (%)	24	-	**-**
Pub (%)	4	-	**-**
Agreed public location (%)	-	-	**13**
Other (%)	-	-	**13**

Source: PDI regular ecstasy user interviews

7.5 Ketamine-related harms

7.5.1 Law enforcement

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 (Australian Crime Commission, 2004, 2005, 2006). However, drug-specific data provided by Tasmania Police suggests no ketamine seizures or arrests were made during the 2003/04 or 2004/05 reporting periods.

7.5.2 Health

There are no objective data on hospital admissions, or access to treatment providers, in relation to ketamine in Tasmania.

7.6 Summary of ketamine trends

- One-quarter of the 2005 REU sample (24%) had ever used ketamine compared to a smaller proportion among the 2004 sample (18%) and a greater proportion among the 2003 sample (38%). Similarly, one-tenth of the 2005 sample (11%) had recently used ketamine compared to only a small proportion (5%) among the 2004 sample and almost one-quarter (24%) among the 2003 sample.
- Ketamine was used on an average of three occasions in the preceding six months in relatively small amounts. This, along with anecdotal reports of key experts, suggests predominately experimental use by a small number of people amongst this regular ecstasy consuming cohort. Ketamine was typically swallowed or snorted at private residences and could be purchased in tablet or powder form.
- Consistent with the relatively low use of ketamine among the 2005 REU sample, few participants were able to comment on the price, purity and availability of the drug and these estimates should therefore be interpreted with caution.
- The median price for a ketamine tablet was $20 (range $20-35) and the median price for a gram of ketamine was $190 (range $150-280) and this was thought to have remained stable during the preceding six months. The purity of ketamine was considered to be high or medium and to have remained stable in recent months. Ketamine was typically considered by those that commented to be difficult to obtain.
- The availability and use of ketamine appeared to have decreased from 2003 to 2004, with a substantial reduction observed in lifetime and recent use of ketamine between the two samples, and less respondents able to confidently report on the price, purity and availability of the drug. While ketamine was used relatively infrequently by a small proportion of people among the 2005 sample, the slight increase in use and number of people commenting on the drug in 2005 when compared to the 2004 cohort indicates a slight market fluctuation and the need for future monitoring of ketamine markets in Tasmania.

8.0 GHB

GHB (gamma-hydroxybutyrate) was initially developed for use as an anaesthetic, and has also been utilised in the treatment of sleep disorders and trialled as a treatment for alcohol and opioid withdrawal. GHB was commonly used in the 1980s by bodybuilders in order to promote growth hormone release and has since become popular as a recreational drug in the dance/club scene in a number of countries. In Australia, GHB may also known as 'GBH', 'grievous bodily harm', 'fantasy', 'liquid ecstasy', 'liquid E' and 'blue nitro'. GHB has received unfavourable mention in the media due to its suspected use in the facilitation of sexual assaults and a recent anecdotal increase in the number of GHB-related deaths and overdose. A recent 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 in GHB overdose. A recent 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. Whereas GHB is considered to be particularly dangerous in combination with alcohol, only two GHB-related deaths in this study were also associated with use of alcohol.

Less than one-tenth (7%) of the 2005 REU sample had used GHB at some stage of their lives, which is similar to the proportion reported among the 2003 (10%) and 2004 (7%) cohorts (Table 29). There was no significant difference between the proportion of males (9%) and females (4%) that had ever used GHB. All of those who had ever used GHB had swallowed the drug. The median age of first use of GHB was 21 years (range 18-30 years), and there was no significant sex differences in the age of first use. 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 2004 or 2005 samples, and a single participant had recently used 1,4B and two had ever tried the drug among the 2003 sample (Bruno & McLean, 2004b).

8.1 GHB use among REU

Only two male REU reported use of GHB in the six months preceding the interview in 2005, which is similar to the proportion that had recently used the drug among the 2004 sample (3%) (Table 29). All of those who reported recent use of GHB had swallowed the drug and had done so on two occasions in the preceding six months. Only one of the respondents who had recently used GHB commented on the quantities used in the preceding six months, indicating that they had used 25mls of GHB solution in a typical session and 50mls in the biggest session of use. The locations at which respondents had been under the influence of GHB included a friend's home (n=1) and a car (n=1).

The majority of key experts did not comment or were not aware of the use of GHB among the group of REU that they were familiar with. Four KE commented that a small proportion of the group of REU used GHB. One KE noted that the availability of GHB was sporadic and another indicated that the availability of GHB was low in Tasmania.

Table 29: Patterns of GHB use among REU, 2003-2005

GHB	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	10	7	**7**
Median age of first use of GHB	22 years (16-27)	20 years (17-32)	**21 years (18-30)**
Used preceding six months (%)	6	3	**2**
Of those that had used in the preceding 6 mths			
Median days used last 6 mths (range)	1 (1-1)	1 (1-3)	**2 (2-2)**
Route of administration in the last 6 months			
Swallowed (%)	100	100	**100**
Median quantities used in last 6 mths (ml)		n=1	**n=1**
Typical session	-	300ml	**25 ml**
Biggest session	-	300ml	**50 ml**
Locations typically used GHB in the last 6 months	n=4	n=1	**n=2**
Home (%)	-	100 (n=1)	**-**
Dealers home (%)	-	-	**-**
Friend's Home (%)	50 (n=2)	-	**50 (n=1)**
Rave/doof/dance party (%)	25 (n=1)	-	**-**
Nightclub (%)	-	-	**-**
Private party (%)	25 (n=1)	-	**-**
Car (%)	-		**50 (n=1)**
Location last used GHB	n=4	n=1	**n=2**
Home (%)	-	100 (n=1)	**-**
Dealer's home (%)	-	-	**-**
Friend's home (%)	25 (n=1)	-	**50 (n=1)**
Rave/doof/dance party (%)	50 (n=2)	-	**-**
Nightclub (%)	-	-	**-**
Private party (%)	25 (n=1	-	**-**
Car (%)	-	-	**50 (n=1)**

Source: PDI Regular ecstasy user interviews

8.2 Price

A single respondent reported that the price of GHB was $150 for 75mls of solution (Table 30). None of the REU among the 2004 sample could confidently comment on whether the price of GHB had changed in the preceding six months. Due to small sample sizes, price estimates of GHB across the three years of the study should be interpreted with caution.

Table 30: Price of GHB purchased by REU, 2001-2005

Median price	2003	2004	**2005**
100 ml solution	-	$5* n=1	-
75 ml solution	-	-	$150* n=1
30 ml solution	$10* n=1	-	-
Price change			
Increased (%)	-	-	-
Stable (%)	100* n=1	-	-
Decreased (%)	-	-	-
Fluctuated (%)	-	-	-

Source: PDI regular ecstasy user interviews
*n=1

8.3 Purity

Only two REU among the 2005 sample were able to confidently comment on the purity of GHB. Both participants indicated that GHB was high in purity. Only one of these participants was able to comment on changes in purity of GHB in the preceding six months, indicating that it had remained stable during this time.

8.4 Availability

Only two REU were able to confidently comment on the availability of GHB, with one participant indicating that it was difficult to obtain, but had become easier to obtain in the last six months, and the other indicating that it was very difficult to obtain and that this had remained stable in the last six months. Participants that had recently used GHB were asked from whom they had typically obtained the drug. One participant indicated that they had used but not scored GHB and the other indicated that had obtained GHB from an acquaintance and had scored the drug from a car.

8.5 GHB-related harms

8.5.1 Law enforcement

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 (Australian Crime Commission, 2004, 2005). However, one law enforcement KE noted anecdotally in 2004 that there had been one recent seizure of GHB that had been intercepted on its way into Tasmania and another indicated in 2005 that there had been some recent information on GHB.

8.5.2 Health

There are no objective data on hospital admissions, or access to treatment providers, specifically in relation to GHB in Tasmania.

8.6 Summary of GHB trends

- Less than one in ten (7%) of the REU sample had ever used GHB, and only two male participants (2%) had used GHB during the six months preceding the interview. This is consistent with the low levels of use reported among the 2003 and 2004 REU samples.
- GHB was taken orally in liquid form and on only two occasions during this time.
- There was no lifetime or recent use of GHB-like substances such as 1,4B or GBL among the 2005 REU cohort.
- A single participant reported on the price, purity or availability of GHB in Tasmania, and therefore these estimates should be interpreted with caution.
- Patterns of use among REU and anecdotal comments of key experts indicate low availability of GHB in Tasmania and predominantly experimental use by few people. However, considering the potentially harmful nature of GHB, future monitoring of GHB markets in Tasmania is important.

9.0 LSD

In the 2004 National Drug Strategy Household Survey, it was estimated (from the sample of 1,208 participants) that approximately 0.6% of Tasmanians had used hallucinogens in the year prior to interview, compared with 0.7% Australians nationally (Australian Institute of Health and Welfare, 2005).

Table 31 shows that half of the 2005 REU sample (54%) had used LSD at some stage of their lives, which is similar to the proportion among the 2004 sample (51%). A significantly greater proportion of the male sample (66%) had ever used LSD in comparison to the proportion of the female sample (40%), $\chi^2=6.46$, $p<.05$, and, based on a median split for age, a significantly greater proportion of 'older' participants (67%) had ever used LSD in comparison to 'younger' participants (44%), $\chi^2=5.29$, $p<.05$. All of those who had ever used LSD had taken the drug orally and a single participant had ever injected LSD. The median age of first use for LSD was 18 years (range 15-31 years, SD=3 years), and there was no significant difference between the age of first use for males (19 years, range 15-31) and females (18 years, range 15-24).

9.1 LSD use among REU

One-third (31%) of the 2005 REU sample had used LSD during the six months preceding the interview, compared to a similar proportion among the 2004 sample (32%) (Table 31). There was no significant difference between the proportion of the male (36%) and female (24%) sample or between the proportion of 'younger' (36%) and 'older' (24%) participants that had recently used LSD (based on a median split for age). 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 1 day (range 1-15 days), which is less than the median frequency 2.5 days (range 1-12) among the 2004 sample and similar to the median frequency of 1 day (range 1-15) reported among the 2003 sample. The median number of tabs/drops of LSD used in a typical session was 1 (range 0.5-3), which is similar to the median quantity observed among the 2003 and 2004 cohorts. The number of tabs/drops used in the biggest session of use in the preceding six months was also 1 (range 0.5-6).

REU were asked which locations they had typically used LSD (under the influence of the drug though not necessarily the location of ingestion) during the 6 months preceding the interview (Table 31). LSD was typically used at private residences such as a friend's home (50%), or own home (33%), as well as dance-related events (23%), outdoor locations (23%), nightclubs (17%), live music events (13%), private parties (13%) and public places (10%). The most commonly reported location of last use included: friend's home (40%), own home (13%), nightclub (13%), dance-related events (10%), outdoor locations (10%), live music event (7%), and public place (3%). These findings are relatively consistent with the locations of use reported among the 2003 and 2004 cohorts.

All but six of the key experts were able to comment on the use of LSD in the group of regular ecstasy users that they were familiar with. Most indicated that 'a few' REU used LSD (n=10) and others indicated that 'half' (n=1) or 'most' (n=2) of the REU group used LSD. The majority of those who commented indicated that the paper form of the drug was most often used (n=8), and three KE commented that the liquid LSD was also used. KE were asked to comment on any changes in the use of LSD in the six months preceding the interview. Several KE commented that there had been a decrease in the use (n=2) and availability of LSD (n=1) in the preceding six months (n=5). However, increased use (n=1) and availability (n=2) of LSD was noted by other

KE. Two KE noted that the price of LSD had decreased during the preceding six months and two KE noted a recent increase in the purity of LSD.

Table 31: Patterns of LSD use among REU, 2003-2005

LSD	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	62	51	**54**
Median age of first use of LSD (range)	18 years (14-25)	19 years (14-32)	**18 years (15-31)**
Used preceding six months (%)	24	32	**31**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	1 (1-15)	2.5 (1-12)	**1 (1-15)**
Route of administration in the preceding 6 months			
Smoked (%)	-	3	**-**
Snorted (%)	-	-	**-**
Swallowed (%)	100	100	**100**
Injected (%)	-	-	**-**
Median tabs/drops used in preceding 6 mths			
Typical session (range)	1.25 (1-2)	1 (0.25-2.5)	**1 (0.5-3) n=31**
Biggest session (range)	3 (1-4)	1.25 (0.25-3.0)	**1 (0.5-6) n=31**
Locations usually used LSD in the last 6 months	n=27	n=30	**n=30**
Home (%)	28	43	**33**
Dealer's home (%)	-	3	**-**
Friend's home (%)	24	40	**50**
Raves/doofs/dance parties	33	40	**23**
Nightclub (%)	-	17	**17**
Pub (%)	-	3	**-**
Restaurant/café (%)	-	3	**-**
Private party (%)	21	13	**13**
Public place (street/park) (%)	7	3	**10**
Outdoors (%)	n/a	30	**23**
Car (%)	3	-	**-**
Live music event (%)	n/a	17	**13**
Other (%)	-	3	**-**
Location last used LSD	n=27	n=30	**n=30**
Home (%)	22	17	**13**
Dealer's home (%)	4	-	**-**
Friend's home (%)	19	17	**40**
Rave/doof/dance party	22	17	**10**
Nightclub (%)	26	17	**13**
Pub (%)	-	3	**-**
Restaurant/café (%)	-	3	**-**
Private party (%)	7	3	**-**
Outdoors (%)	n/a	13	**10**
Live music event (%)	n/a	7	**7**
Public place (%)	-	-	**3**
Other (%)	-	3	**-**

Source: PDI regular ecstasy user interviews

9.2 Price

The estimated market price for one tab of LSD and perceived price changes over the six months preceding the interview are shown in Table 32. The median market price and last purchase price for one tab of LSD was $25 (range $15-40) and $25 (range $10-40) respectively. This is higher than the median price of $20 reported among both the 2003 and 2004 REU samples. Two-thirds (68%) of those who commented on the price of LSD in 2005 indicated and that it had remained stable during the six months preceding the interview, with smaller proportions reporting that the price had increased (13%), decreased (10%) or fluctuated (10%) during this time.

Table 32: Prices of LSD purchased by REU, 2003-2005

LSD	2003	2004	**2005**
Median market price	n=39	n=40	**n=36**
Tab (range)	$20 ($5-50)	$20 ($10-50)	**$25 ($15-40)**
Median last purchase price			
Tab (range)	$20 ($2-40) n=21	$20 ($5-40) n=24	**$25 ($10-40) n=30**
Drop (range)	$20 ($10-20) n=6	-	**-**
Price change	n=39	n=31	**n=31**
Increased (%)	13	10	**13**
Stable (%)	79	77	**68**
Decreased (%)	-	3	**10**
Fluctuated (%)	8	10	**10**

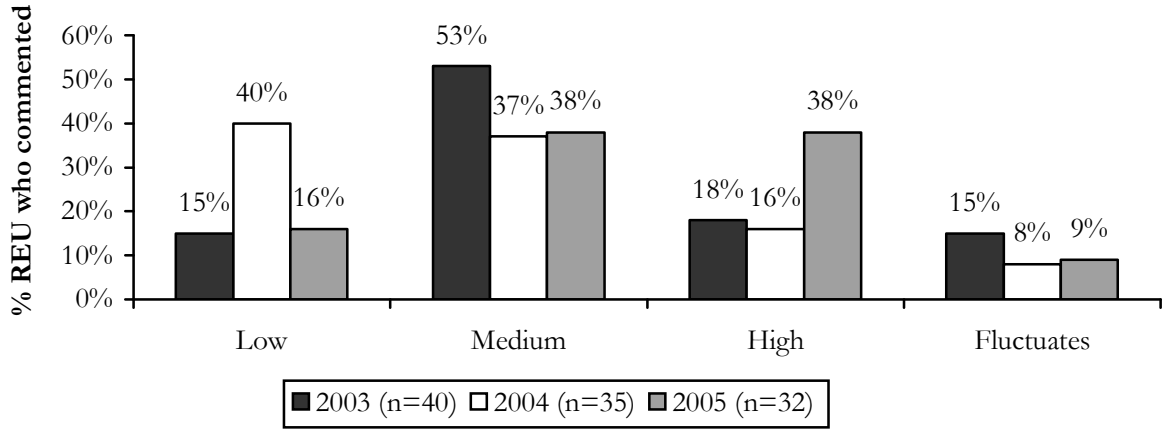
Source: PDI Regular ecstasy user interviews

Tasmania Police reported prices of LSD tabs as $20-$25 during the 2001/02 and 2000/01 financial years, a potential decrease on the $15-$30 reported during 1999/00 (ABCI, 2001, 2002; ACC, 2003). Price information in regard to LSD is no longer reported by the ACC in their annual reports.

9.3 Purity

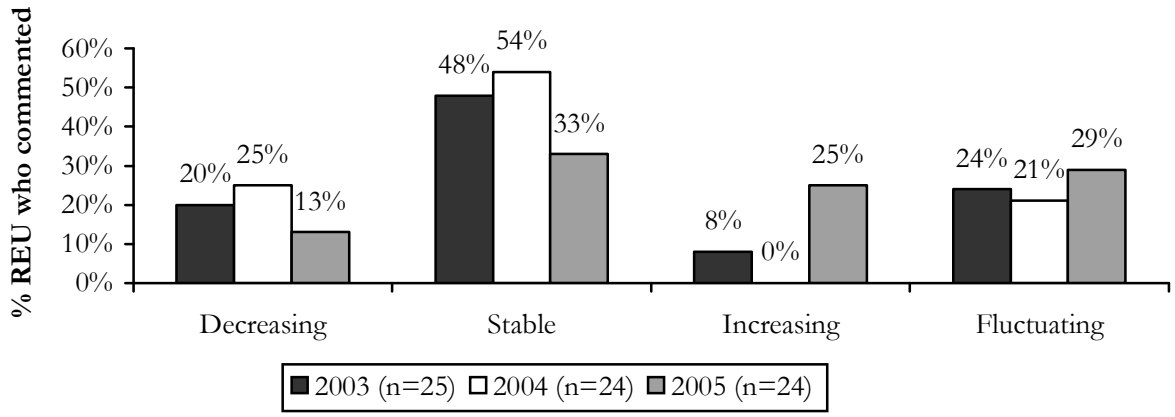
One-third of the 2005 sample (n=32) was able to comment on the purity of LSD in the six months preceding the interview (see Figure 26). Over one-third of those who commented indicated that LSD was either medium (38%) or high (38%) in purity and smaller proportions indicated that LSD was low (16%) or fluctuating (9%) in purity. The proportion indicating that LSD was high in purity was greater among the 2005 sample (38%) in comparison to the 2004 (16%) and 2003 (18%) samples and a smaller proportion reporting that LSD was low in purity among the 2005 (16%) in comparison to the 2004 (40%) sample. One-quarter of the 2005 sample (n=24) were able to comment on changes in the purity of LSD in the last six months (see Figure 27). These reports were variable, with over one-third indicating that purity had remained stable, one-quarter indicating that the purity of LSD had fluctuated (29%) or increased (25%) and the remainder indicating that purity had decreased (13%).

Figure 26: Current purity of LSD, 2003-2005



Source: PDI regular ecstasy user interviews

Figure 27: Recent change in purity of LSD, 2003-2005



Source: PDI regular ecstasy user interviews

9.4 Availability

One-third of the 2005 REU sample were able to comment on the availability (n=35) and changes in availability (n=29) of LSD in the six months preceding the interview (see Table 33) Almost half of those who commented on the availability of LSD indicated that it was 'easy' (49%) to obtain, and smaller proportions indicated that it was 'difficult' (29%), 'very easy' (20%) or 'very difficult' (3%) to obtain. The proportion of the 2005 REU sample reporting that LSD was 'easy' to obtain was greater in comparison to the 2004 (29%) and 2003 (13%) samples.

Two-fifths (41%) of those who commented on changes in the availability of LSD in 2005 indicated that availability had remained 'stable'. However, over one-third indicated that LSD had recently become easier to obtain (38%), which is a greater proportion in comparison to the proportion among the 2004 (13%) and 2003 (7%) cohorts. Small proportions indicated that LSD had become 'more difficult' (17%) or had fluctuated (3%) in availability in 2005.

The persons and locations from which LSD was obtained are shown in Table 33. LSD was typically obtained from friends (80%), or known dealers (40%), followed by acquaintances (10%), and workmates (3%). LSD was typically obtained from a friend's home (43%), dealer's home (23%), own home (20%), or from a dance-related events (17%), nightclub (13%), private party (10%), public location (3%) or acquaintance's home (3%). These findings are relatively consistent with those observed among the 2003 and 2004 cohorts.

Table 33: REU reports of availability of LSD in the preceding six months

LSD	2003	2004	**2005**
Ease of obtaining LSD	n=54	n=38	**n=35**
Very easy (%)	4	18	**20**
Easy (%)	13	29	**49**
Moderately easy (%)	24	n/a	**n/a**
Difficult (%)	46	40	**29**
Very difficult (%)	13	13	**3**
Change in availability in the last six months	n=45	n=31	**n=29**
Stable (%)	49	58	**41**
Easier (%)	7	13	**38**
More difficult (%)	36	23	**17**
Fluctuates (%)	9	6	**3**
Persons scored from in the last six months	n=27	n=30	**n=30**
Used not scored (%)	-	10	**3**
Friends (%)	74	67	**80**
Dealers (%)	30	33	**40**
Workmates (%)	4	-	**3**
Acquaintances (%)	11	23	**10**
Unknown persons (%)	-	7	**-**
Locations scored from in the last six months	n=22	n=30	**n=30**
Used not scored (%)	-	10	**3**
Home (%)	20	23	**20**
Friend's home (%)	36	53	**43**
Dealer's home (%)	40	20	**23**
Rave/doof/dance party (%)	8	17	**17**
Nightclub (%)	24	-	**13**
Pub (%)	4	-	**-**
Street (%)	-	7	**-**
Agreed public location (%)	-	3	**3**
Private party (%)	-	-	**10**
Acquaintance's home (%)	-	-	**3**
Other (%)	-	3	**-**

Source: PDI regular ecstasy user interviews

9.5 LSD-related harms

9.5.1 Law enforcement

Tasmania Police seized 5 tabs of LSD during 2001/02 (all during December, 2001), and 8 tabs during 2000/01 (all during August 2000), compared to 109 tabs during the 1999/00 financial year, all during the summer October-December 1999 quarter. During 2002/03, Tasmania Police (Western District) seized 488 tabs believed to be LSD (and sold as such by the 'dealer') but forensic tests of the seized tabs indicated negative results for any drug. During 2003/04, 31 tabs of LSD, 10.5 grams of psychedelic mushrooms (psilocybin) and 6 'tablets' defined as hallucinogenic were seized by Tasmania Police. In 2004/05, 1,289 tabs of LSD and 565 grams of psychedelic mushrooms were seized. The quantities seized are so variable that it is difficult to infer any clear trends in availability for this class of drugs from these figures.

9.5.2 Health

There are no objective data in terms of hospital admissions, mortality, or access to treatment providers specifically in relation to LSD in Tasmania.

9.6 Summary of LSD trends

- Over half (54%) of the 2005 REU sample had used LSD at some stage of their lives and one-third (31%) had used LSD in the six months preceding the interview. Whereas these figures are relatively consistent with the proportions reported among the 2004 sample, a slightly greater proportion of REU reported recent use of LSD among the 2004 (32%) and 2005 (31%) samples in comparison to 2003 (24%).
- A significantly greater proportion of males had ever and recently used LSD in comparison to the proportion of females and a significantly greater proportion of 'older' participants had ever used LSD in comparison to 'younger' participants.
- One tab or one drop of liquid LSD (range 1-2) was taken orally in a typical session of use and LSD had been used on a median of 1 day (range 1-15 days) in the preceding six months compared to 2.5 days (range 1-12) among the 2004 cohort.
- LSD was typically used at private residences such as own home and friend's home as well as dance-related events, outdoor locations and nightclubs.
- The median price for one tab of LSD in 2005 was $25 compared to the median of $20 reported among the 2003 and 2004 samples. This price was considered to have remained stable in the last six months.
- The purity of LSD was considered by REU to be 'medium' or 'high' and the reports on changes in this purity were varied. A greater proportion of REU perceived that LSD was 'high' in purity and a smaller proportion perceived that LSD was 'low' in purity in comparison to 2004, which is consistent with anecdotal reports of two KE who noted a recent increase in purity of LSD.
- LSD was typically considered to be 'easy' or 'very easy' to obtain by REU in 2005 and the reported availability of LSD seems to have increased when compared to the previous two years of the study. A recent increase in availability was also noted by two KE.

10.0 MDA

Less than one-tenth (8%) of the 2005 REU sample had ever used MDA compared to one-fifth (20%) of the 2004 cohort and one-third (32%) of the 2003 cohort (Table 34). There was a trend indicating that a greater proportion of the male sample (13%) had ever used MDA in comparison to the proportion of the female sample (2%) in 2005, χ^2=3.71, *p*=.056, but this did not reach conventional levels of statistical significance. The mean age of those that had ever used MDA was significantly greater (*M*=28.5, *SD*=3.7) than those that had not ever used MDA (*M*=23.5, *SD*=4.0), *t*(98)=-3.39, p<.01, and those that had used MDA had been using ecstasy for a greater number of years (*M*=3.0, *SD*=1.9) than those that had not (*M*=1.5, *SD*=2.1); Mann-Whitney *U*=155.5, p<.01. Similarly, based on a median split for age, a greater proportion of 'older' participants (16%) had ever used MDA in comparison to 'younger' participants (2%), χ^2=6.35, p<.05. The median age of first use was 23 years (range 16-21, *SD*=3 years), and there was no significant difference between the age of first use for males and females. All of those that had ever used MDA had ever swallowed the drug (100%), one half had ever snorted the drug (50%), and two participants (25%) had ever injected MDA.

10.1 MDA use among REU

Only three male participants among the 2005 REU sample (3%) had used MDA during the six months preceding the interview, compared to larger proportions among the 2004 (15%) and 2005 (21%) samples (Table 34). All of those who had recently used MDA were older rather than younger (based on a median split) and all had recently taken the drug orally. The median frequency of MDA use was 2 days (range 1-2 days) in the preceding six months. Two participants had used MDA on two occasions and a single participant had used MDA on a single occasion. A median of one MDA capsule had been consumed in a typical session of use and a median of 1.5 MDA capsules (range 1-2) in the biggest session of use in the last six months. Two REU were able to comment on the locations that they had used MDA (to be under the influence of the drug, not necessarily the location of ingestion) in the six months preceding the interview. MDA had typically been used at dance-related events (n=1) and nightclubs (n=1).

The majority of key experts indicated that there was none (n=16) or very little use (n=1) of MDA or were not aware of the use of MDA (n=4) among the group of ecstasy users that they were familiar with. One KE indicated that MDA was difficult to obtain and another indicated that they had not heard of any use of MDA in the past year.

Table 34: Patterns of MDA use among REU, 2003-2005

MDA	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	32	20	**8**
Median age first used MDA (range)	20 years (16-32)	20 years (16-21)	**23 years (17-28)**
Used preceding six months (%)	21	15	**3**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	2 (1-20)	2 (1-4)	**2 (1-2)**
Route of administration in the preceding 6 months			
Smoked (%)	-	-	**-**
Snorted (%)	43	20	**-**
Swallowed (%)	95	100	**100**
Injected (%)	-	-	**-**
Median capsules used in preceding 6 mths			
Typical session (range)	0.5 (0.5-1)	1 (1-5)	**1 (1-1) n=2**
Biggest session (range)	1.25 (0.5-2)	1.5 (1-8)	**1.5 (1-2) n=2**
Locations usually used MDA in the last 6 months	n=21	n=7	**n=2**
Home (%)	14	71	**-**
Dealer's home (%)	5	-	**-**
Friend's home (%)	24	43	**-**
Raves/doofs/dance parties	71	57	**50**
Nightclub (%)	43	14	**50**
Pub (%)	-	14	**-**
Restaurant/cafe	-	-	**-**
Private party (%)	14	43	**-**
Public place (street/park) (%)	-	-	**-**
Car (%)	-	-	**-**
Live music event (%)	n/a	14	**-**
Location last used MDA	n=21	n=7	**n=2**
Home (%)	14	14	**-**
Dealer's home (%)	-	-	**-**
Friend's home (%)	10	29	**-**
Rave/doof/dance party	48	57	**50**
Nightclub (%)	19	-	**50**
Pub (%)	-	-	**-**
Private party (%)	5	-	**-**
Public place (street/park) (%)	5	-	**-**
Live music event (%)	-	-	**-**

Source: PDI regular ecstasy user interviews

10.2 Price

A single respondent among the 2005 REU sample indicated that the price for one MDA capsule was $45 which is relatively consistent with prices reported among the 2004 ($40) and 2003 ($50) samples (see Table 35). None of the participants were able to comment on recent changes in the price of MDA.

Table 35: Price of MDA purchased by REU, 2003-2005

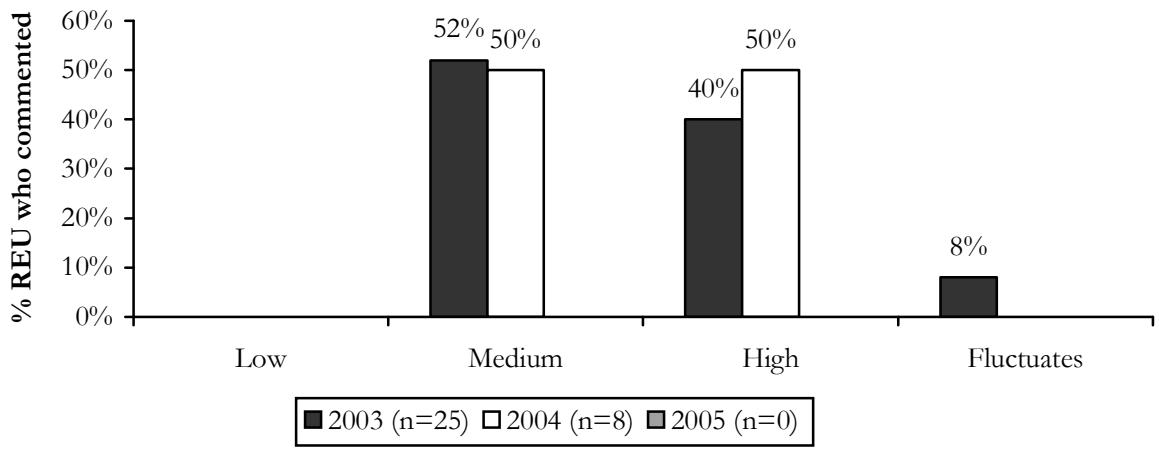
MDA	2003	2004	**2005**
Median market price	n=15	n=9	**n=1**
Capsule	$50 ($35-60)	$40 ($35-60)	**$45**
Last purchase price	n=11	n=7	**n=0**
Capsule	$50 ($40-50)	$40 ($40-50)	**-**
Price change	n=20	n=9	**n=0**
Increased (%)	-	-	**-**
Stable (%)	100	100	**-**
Decreased (%)	-	-	**-**
Fluctuated (%)	-	-	**-**

Source: PDI regular ecstasy user interviews

10.3 Purity

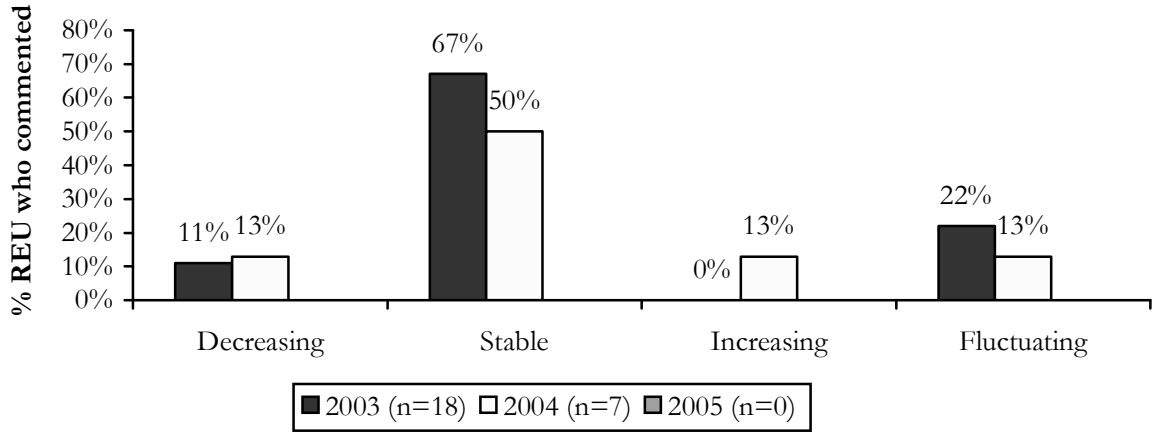
None of the regular ecstasy users interviewed in 2005 were able to confidently comment on the current purity or changes in the purity of MDA in the six months preceding the interview, compared to approximately one-tenth of participants in 2004 and two-fifths of participants in 2003. Figures 28 and 29 show current purity and changes in purity of MDA reported in 2003 and 2004.

Figure 28: Current purity of MDA, 2003-2005



Source: PDI regular ecstasy user interviews

Figure 29: Recent change in purity of MDA, 2003-2005



Source: PDI regular ecstasy user interviews

10.4 Availability

Only one participant was able to confidently comment on the currently availability of MDA, indicating that it was currently difficult to obtain and that this had remained stable during the six months preceding the interview. Two out of the three participants that had recently used MDA in 2005 commented on how they had obtained the drug. One participant had used but not scored the drug and the other participant had recently obtained MDA from a friend at a nightclub. The decrease in the number of participants able to comment on the availability of MDA since 2003 suggests a decrease in the availability of MDA in Hobart since this time.

10.5 MDA-related harms

10.5.1 Law enforcement

The Australian Crime commission 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 relates specifically to MDA, though it is possible that some MDA-related seizures and arrests are inadvertently reported in Section 4.7.1 in relation to ecstasy.

10.5.2 Health

There are no objective data available in terms of hospital admissions, mortality, or access to treatment providers specifically in relation to MDA in Tasmania.

Table 36: REU reports of availability of MDA in the preceding six months, 2003-2005

MDA variable	2003	2004	2005
Ease of obtaining MDA	n=24	n=9	**n=1**
Very easy (%)	8	-	**-**
Easy (%)	25	56	**-**
Moderately easy (%)	29	n/a	**n/a**
Difficult (%)	38	44	**100**
Very difficult (%)	-	-	**-**
Changes in availability in the last six months	n=19	n=7	**n=1**
Stable (%)	95	100	**100**
Easier (%)	-	-	**-**
More difficult (%)	-	-	**-**
Fluctuates (%)	5	-	**-**
Persons scored from in the last six months	n=21	n=7	**n=2**
Used not scored (%)	-	-	**50**
Friends (%)	71	86	**50**
Dealers (%)	57	43	**-**
Workmates (%)	-	-	**-**
Acquaintances (%)	10	-	**-**
Unknown persons (%)	-	14	**-**
Locations scored from in the last six months	n=21	n=7	**n=2**
Used not scored (%)	-	-	**50**
Home (%)	24	29	**-**
Friend's home (%)	48	86	**-**
Dealer's home (%)	48	-	**-**
Rave/doof/dance party (%)	24	14	**-**
Nightclub (%)	10	-	**50**
Pub (%)	-	-	**-**
Street (%)	5	-	**-**
Agreed public location (%)	-	-	**-**

Source: PDI Regular ecstasy user interviews

10.6 Summary of MDA trends

- Less than one-tenth (8%) of the 2005 REU sample had used MDA at some stage of their lives and only three male participants (3%) had recently used MDA. The lifetime and recent use of MDA among the 2005 sample is considerably lower in comparison to that reported among the 2004 and 2005 samples.
- Those that had used MDA were more likely to be male and older in comparison to those that had not.
- MDA had typically been used on two occasions or less in the six months preceding the interview, with a median of one capsule consumed orally in a typical session of use.
- Few respondents were able to confidently comment on the price, purity or availability of MDA and thus it is difficult to delineate clear trends. However, based the decline in the use of MDA since 2003 and the comments of several KE, the local availability of MDA in Tasmania appears to be relatively low.

11.0 OTHER DRUGS

11.1 Alcohol

In the 2004 National Drug Strategy Household Survey, it was estimated (from the sample of 1,208 participants) that approximately 39.4% of Tasmanians had used alcohol on a weekly basis in the year prior to interview, compared with 41.2% Australians nationally (Australian Institute of Health and Welfare, 2005).

The entire sample of REU interviewed in 2005 had used alcohol at some stage in their lives (see Table 37). The median age that respondents had first used alcohol was 14 years (range 8-18 years, *SD*=1.8). A large majority of the sample (98%) had used alcohol during the six months preceding the interview and there was no difference between the proportion of males (100%) and females (96%). The median frequency of alcohol use was 49 days (range 2-180 days, *SD*=39), or approximately twice a week, during the six months preceding the interview. There were no significant differences between males and females in terms of the age that they had first used alcohol or the median days consumed in the preceding six months.

Table 37: Patterns of alcohol use of REU

Alcohol	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	100	100	**100**
Median age first used alcohol (range)	15 years (10-18)	14 years (7-18)	**14 years (8-18)**
Used preceding six months (%)	98	98	**98**
Of those who had used in the preceding 6 mths Median days used last 6 mths (range)	48 (1-180)	48 (6-180)	**49 (2-180)**

Source: PDI Regular ecstasy user interviews

The majority of key experts commented that most (n=8) or all (n=10) of the group of REU that they were familiar with drank alcohol. Several KE noted that REU typically combined alcohol with ecstasy pills (n=4) and that the proportion using alcohol in combination with ecstasy had recently increased (n=3). One KE noted an increase in the use of alcohol at organised dance events instead of REU drinking water as they had in the past. Others noted that whereas drinking in combination used to be considered dangerous by REU, this is no longer the case. The increase in the use of alcohol in combination with ecstasy was thought by another KE to be related to the fact that ecstasy has become more 'mainstream' in society. Three KE that worked in emergency services indicated that a large majority of presentations to their services were associated with the use of alcohol rather than the use of illicit drugs such as ecstasy, cannabis or methamphetamine. One of these indicated a recent increase in callouts to alcohol-related incidents, particularly among younger people (18-20) at nightclubs. Another noted an increase in the number of alcohol-related incidents in the preceding festive season in comparison to previous years.

11.2 Cannabis

In the 2004 National Drug Strategy Household Survey, it was estimated (from the sample of 1,208 participants) that approximately 10.9% of Tasmanians (aged 14 years and over) had used cannabis in the year prior to interview, compared with 11.3% Australians nationally (Australian Institute of Health and Welfare, 2005).

The entire sample of regular ecstasy users surveyed in 2005 had used cannabis at some stage of their lives (Table 38). All participants (100%) had smoked cannabis at some stage of their lives and two-thirds (66%) had ever used cannabis orally. The median age of first cannabis use was 15 years (range 10-21 years, SD=1.9) and there was no significant difference between the median age of first use for males (15 years) and females (15 years). A majority of respondents (89%) had used cannabis during the six months preceding the interview, and this proportion was similar for males (93%) and females (84%). All had recently smoked cannabis and one-quarter of the sample had recently used cannabis orally. The median frequency of cannabis use during this six month period was 24 days (range 1-180 days), or approximately once a week. The median frequency of cannabis use was significantly greater for males in comparison to females (50 vs. 10 days) in the preceding six months; Mann-Whitney $U = 638.0$, $p<.01$.

Table 38: Patterns of cannabis use of REU

Cannabis	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	100	98	**100**
Median age first used cannabis (range)	15 years (9-26)	15 years (9-22)	**15 years (10-21)**
Used preceding six months (%)	99	91	**89**
Of those who had used in the preceding 6 mths Median days used last 6 mths (range)	48 (1-180)	24 (1-180)	**24 (1-180)**

Source: PDI regular ecstasy user interviews

KE typically commented that a large proportion of the REU that they had regular contact with used cannabis, with several KE indicating that 'most' (n=9), 'half' (n=6) or 'all' (n=3) of the group used the drug. Several KE (n=3) commented that the potency of cannabis had recently increased and two KE noted a recent increase in the availability of cannabis. Two other KE noted a recent increase in the number of people smoking 'bush' rather than hydroponically grown cannabis. Three KE that worked in emergency and ambulance services perceived the use of cannabis to be related to psychological issues.

Price, purity and availability estimates for cannabis among a cohort of injecting drug users, and examination of the harms associated with cannabis use in Tasmania, can be found in the companion Tasmanian IDRS report (Bruno, 2006).

11.3 Tobacco

A large proportion (89%) of the REU sample in 2005 had smoked tobacco at some stage in their lives (Table 39). A greater proportion of the male sample (95%) had ever used tobacco in comparison to the female sample (82%), χ^2=3.84, p=.05. The median age that tobacco was first used was 15 years (range 8-20 years, *SD*=2.2 years) and there was no significant difference between the age of first use for males and females. Three-fifths (83%) of the sample had smoked tobacco during the six months preceding the interview. There was a trend for a greater proportion of the male sample (89%) to have recently smoked tobacco in comparison to the female sample (76%), χ^2=3.21, p=.073. Almost two-thirds (61%) of those who had recently smoked, and over half (51%) of the sample, reported smoking tobacco on a daily basis during the six months preceding the interview. Two-fifths (18%) of those that had recently smoked tobacco (15% of the entire sample) had smoked tobacco once a week or less during the six months preceding the interview. There was no significant difference between males or females in terms of the age that they first used tobacco, the number of days that they had smoked tobacco in the preceding six months, or the proportion that had smoked on a daily basis. The proportion that reported smoking tobacco on a daily basis was greater among the 2005 sample (51%) in comparison to the 2003 (44%) and 2004 (40%) samples.

In the 2004 National Drug Strategy Household Survey, it was estimated (from the sample of 1,208 participants) that approximately 21.5% of Tasmanians (aged 14 years and over) smoked tobacco on a daily basis in the year prior to interview, compared with 17.4% Australians nationally (Australian Institute of Health and Welfare, 2005). Over half (51%) of participants had smoked on a daily basis in the current study, which is substantially greater than the estimate of prevalence among the general population both nationally and in Tasmania.

Table 39: Patterns of tobacco use of REU

Tobacco	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	96	89	**89**
Median age first used tobacco	15 years (3-23)	14 years (7-22)	**15 years (8-20)**
Used preceding six months (%)	81	77	**83**
Used on a daily basis in the last six months (%)	44	40	**51**
Of those who had used in the preceding 6 mths	n=81	n=77	**n=83**
Used on a daily basis (%)	54	57	**61**
Used once a week or less (%)	22	25	**18**

Source: PDI regular ecstasy user interviews

Most key experts noted recent tobacco use among the group of regular ecstasy users that they were familiar with. Estimates of the proportion of these groups that use tobacco ranged from 'a few' (n=1), 'half' (n=5), 'most' (n=8) to 'all' (n=1). One KE noted that the use of tobacco among this group is slightly higher than the general population. Another KE noted that a greater proportion of females smoked tobacco. However, this is not substantiated among the current cohort, as males were more likely to have recently smoked tobacco. While there were no changes noted in the recent use of tobacco, future monitoring of this situation may reveal changes in the use of tobacco in accordance with recent changes in legislation regarding smoking in bars and nightclubs in Tasmania.

11.4 Benzodiazepines

Of the Tasmanians surveyed in the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999), 7.9% (n=75) indicated that they had ever tried benzodiazepines for non-medical purposes, and 2.9% (n=28) reported use in the year prior to the survey. However, in the 2001 National Drug Household Survey (n=1,349: Australian Institute of Health and Welfare, 2002), only 1.0% (n=13) of respondents reported using benzodiazepines for non-medical purposes in the year prior to interview. In the 2004 survey, just 0.7% (n=8) of the 1,208 local participants sampled (Australian Institute of Health and Welfare, 2005) reported using benzodiazepines (referred to as 'tranquilizers/sleeping pills' in the study) in the year prior to interview. While these are low base rates of reported benzodiazepine users, this does seem to indicate a slight reduction in the prevalence of benzodiazepine (mis)use between the 1998 and 2001/2004 studies.

Two-fifths (40%) of the 2005 REU sample had used benzodiazepines at some stage of their life (Table 40). The median age that respondents had first used benzodiazepines was 19 years (range 10-28 years, *SD*=3.4 years) and there was no difference between the age of first use for males (19 years) and females (21 years). All of those that reported ever using benzodiazepines had done so orally and three participants had injected benzodiazepines at some stage of their life.

One-quarter (25%) of the 2005 REU sample had used benzodiazepines during the six months preceding the interview, which is similar to the proportion that had recently used benzodiazepines among the 2004 sample (23%). There was no significant difference between the proportion of the male (27%) and female (22%) samples that had recently used benzodiazepines. On average those that had recently used benzodiazepines were younger (22 vs. 24 years), Mann-Whitney U=683, $p<.05$; had first used ecstasy at an earlier age (18 vs. 20 years), Mann-Whitney U=615.5, $p<.01$; and had started using ecstasy more regularly at an earlier age (19 vs. 22 years), Mann-Whitney U=489.5, $p<.001$, in comparison to those that hadn't recently used benzodiazepines. All of those that had recently used benzodiazepines had done so orally and there were no reports of recent injection among the 2005 cohort.

The median frequency of recent benzodiazepine use was 3 days (range 1-50 days, *SD*=11 days) during the six months preceding the interview, which is less than the median frequency of 6 days reported among the 2003 and 2004 REU samples. Three-quarters (76%) 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. There was no difference in the frequency of recent benzodiazepine use for males and females.

Table 40: Patterns of benzodiazepine use of REU

Benzodiazepines	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	52	34	**40**
Ever injected (%)	7	2	**3**
Median age first used benzodiazepines (range)	20 years (10-40)	20 years (8-24)	**19 years (10-28)**
Used preceding six months (%)	35	23	**25**
Injected in preceding six months (%)	2	1	**-**
Of those who had used in the preceding 6 mths Median days used last 6 mths (range)	6 (1-180)	6 (1-96)	**3 (1-50)**

Source: PDI regular ecstasy user interviews

Whereas six KE indicated that there was no use of benzodiazepines among the REU that they were familiar with, ten KE noted that a small proportion among the group use benzodiazepines. Both licit (as prescribed, n=4) and illicit (use without a prescription, n=3) use of benzodiazepines was noted among these groups, and Valium (n=4) and Normison (n=1) were mentioned specifically. Four KE commented that benzodiazepines were often used to 'come down' or to 'get to sleep' following a session of ecstasy use. However, only three participants reported that they typically used benzodiazepines when coming down from ecstasy among the 2005 REU sample, compared to larger proportions among the 2003 (17%) and 2004 (13%) samples (see Table 4, Section 4.1). One KE noted that benzodiazepines were often sourced from someone who had a licit prescription for the drug and another noted an increase in the availability of benzodiazepines during the six months preceding the interview.

11.5 Anti-depressants

Two-fifths (21%) of the 2005 REU sample had used anti-depressants at some stage of their life (Table 41). The median age of first use was 18 years (range 16-27 years, SD=3.1 years). All of those who had used anti-depressants had taken them orally. There were no sex differences in the proportion of males and females who had ever used anti-depressants, or the age of first use. On average those that had ever used anti-depressants were younger (22 vs. 24 years), Mann-Whitney U=645.5, $p<.05$; had first used ecstasy at an earlier age (18 vs. 20 years), Mann-Whitney U=552.5, $p<.05$; and had started using ecstasy more regularly at an earlier age (19 vs. 22 years), Mann-Whitney U=433.5, $p<.01$, in comparison to those that hadn't ever used anti-depressants.

One-tenth of the 2005 REU sample (12%) had recently used anti-depressants, which is greater in comparison to the proportion among the 2004 sample (4%) and similar to the proportion among the 2003 sample (14%). All of those that had used anti-depressants among the 2005 sample had taken them orally. The median frequency of anti-depressant use was 180 (range 1-180 days) in the preceding six months, or daily. Seven out of the twelve participants (58%) that had recently used anti-depressants had used them on a daily basis. A single participant had used anti-depressants on fourteen occasions, and four participants had used anti-depressants on single occasion. There were no significant sex differences in terms of the proportion that had recently used or the median frequency of use.

Table 41: Patterns of anti-depressant use of REU

Anti-depressant s	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	32	14	**21**
Median age first used anti-depressants (range)	18 years (13-44)	20 years (17-23)	**18 years (16-27)**
Used preceding six months (%)	14	4	**12**
Of those who had used in the preceding 6 mths Median days used last 6 mths (range)*	90 (14-180)	6 (1-180)	**180 (1-180)**

Source: PDI regular ecstasy user interviews

Eight KE were not aware of or did not know of any anti-depressant use among the group of regular ecstasy users that they were familiar with. Several KE (n=8) reported that they were aware that 'a few' REU took anti-depressants either as prescribed (n=6) or illicitly (n=2). One KE noted a slight increase in the licit use of anti-depressants. Another KE noted that a small proportion of REU use anti-depressants when coming down from ecstasy or used them in combination with alcohol.

11.6 Inhalants

Amyl nitrite

Just under half (49%) of the 2005 REU sample had ever used amyl nitrite compared to just over half (52%) of the 2004 sample, and a much larger proportion (78%) among the sample in 2003 (Table 42). A greater proportion of the male sample (60%) had ever used amyl nitrite in comparison to the proportion of the female sample (36%), χ^2=5.92, p<.05. A greater proportion of those that were GLBT (100%) had ever used amyl nitrite in comparison to the proportion of heterosexuals (46%), χ^2=6.64, p<.05. The median age of first use was 19 years (range 14-25 years, *SD*=2.7 years) and there was no difference between the first age of use for males and females.

Less than one-fifth of the 2005 sample (16%) had recently used amyl nitrite in comparison to over one-fifth among the 2004 sample (23%) and over two-fifths among the 2003 sample (43%). There was no significant difference between the proportion of males and females that had recently used amyl nitrite. Those that were unemployed were more likely (60%) to have recently used amyl nitrite in comparison to others (14%), χ^2=7.58, p<.01, and those currently employed full-time (7%) were less likely to have recently used amyl nitrite in comparison to others (22%), χ^2=3.90, p<.05. Those that were GLBT (67%) were more likely to have recently used amyl nitrite in comparison to heterosexuals (13%), χ^2=12.19, p<.001.

The median frequency of use was 3.5 days (range 1-20, *SD*=5), or approximately once every two months, compared to a median frequency of 5 days (range 1-120) among the 2004 sample. Three-quarters (75%) of those that had recently used amyl nitrite had done so on six occasions or less, or less than once a month, compared to just over half (52%) among the 2004 sample. There were no sex differences in the frequency of recent amyl nitrite use. The median number of amyl nitrite snorts used in a typical session was 5 (range 1-30 snorts) and the median number of snorts in a heavy session of use was 10 (range 1-50 snorts).

Few key experts commented on the use of amyl nitrite among the group of REU that they had regular contact with. Four KE indicated that 'a few' (n=2) or 'half' (n=2) of the group used amyl nitrite. Two KE noted that the use of amyl nitrite was more common among gay males and another noted that it was more common among younger users.

Table 42: Patterns of amyl nitrite use of REU

Amyl nitrite	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	78	52	**49**
Median age first used amyl nitrite (range)	20 years (16-43)	20 years (14-31)	**19 years (14-25)**
Used preceding six months (%)	43	23	**16**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	3 (1-72)	5 (1-120)	**3.5 (1-20)**
Number of snorts used in a typical session in last 6 mths	5 (1-40)	3 (1-10)	**5 (1-30)**
Number of snorts used in biggest session in last 6 mths	5 (1-300)	5 (1-20)	**10 (1-50)**

Source: PDI regular ecstasy user interviews

Nitrous oxide

Two-thirds of the 2005 REU sample (69%) had ever used nitrous oxide compared to over half (57%) among the 2004 sample and less than half (47%) among the 2003 sample (Table 43). There was a trend for a greater proportion of the male sample (76%) to have ever used nitrous oxide in comparison to the proportion of the female sample (60%), χ^2=3.10, p=.078. A significantly greater proportion of 'older' REU (82%) had ever used nitrous oxide in comparison to 'younger' REU (58%), χ^2=6.69, p<.05. The median age of first use was 18 years (range 15-29 years, *SD*=3 years), which was similar for males and females.

Two-fifths of the 2005 sample (41%) had used nitrous oxide during the six months preceding the interview compared to a third of the respondents among the 2004 sample (34%) and one-quarter among the 2003 sample (25%). The median frequency of use during this time was 5 days (range 1-24, *SD*=6.3 days), or approximately less that once a month, compared to a median frequency of 3 days (range 1-24) among the 2004 sample. Over two-thirds of those who had recently used nitrous oxide (70%) had done so on six or less occasions, or less than monthly. There were no significant sex differences in the proportion reporting recent nitrous oxide use or in the median frequency of recent use. The median number of bulbs used in a typical session was 7 (range 1-40 bulbs) and the median number used in a heavy session of use was 9 (range 1-60 bulbs), which is slightly greater than the median amounts reported among the 2004 sample.

Few key experts commented on the use of nitrous oxide among the group of REU that they had regular contact with. Four KE indicated that 'a few' (n=2) or 'half' (n=2) of the group used nitrous oxide.

Table 43: Patterns of nitrous oxide use of REU

Nitrous oxide	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	47	57	**69**
Median age first used nitrous oxide (range)	19 years (12-30)	19 years (12-28)	**18 years (15-29)**
Used preceding six months (%)	25	34	**41**
Of those who had used in the preceding 6 mths			
Median days used last 6 mths (range)	4 (1-50)	3 (1-24)	**5 (1-24)**
Number of bulbs used in a typical session (range)	6 (1-12)	4 (1-50)	**7 (1-40)**
Number of bulbs used in biggest session (range)	10 (1-24)	6 (1-20)	**9 (1-60)**

Source: PDI regular ecstasy user interviews

11.7 Pharmaceutical stimulants

Two-fifths of the 2005 REU sample (44%) had ever used pharmaceutical stimulants, which is similar to the proportion that had ever used among the 2004 sample (39%) (Table 44). There was no significant difference between the proportion of the male sample (49%) and the proportion of the female sample (38%) that had ever used pharmaceutical stimulants. The median age of first use was 19 years (range 15-28 years), and there was no significant difference between the age of first use for males (18 years) and females (20 years). The majority of those that had ever used pharmaceutical stimulants had swallowed the drug (98%), and smaller proportions had ever snorted (41%), smoked (9%) or injected (5%) these drugs.

More than one-tenth of the 2005 REU sample (16%) had used pharmaceutical stimulants in the six months preceding the interview, compared to a similar proportion among the 2004 sample (14%) (Table 44). There was no significant difference in the proportion of the male (18%) and female (13%) samples that had recently used pharmaceutical stimulants. The majority of those who had recently used pharmaceutical stimulants had taken the drug orally (94%), and smaller proportions had snorted (25%), or injected (6%, n=1) the drug. The median frequency of use was 3.5 days (range 1-30), and there was no significant sex differences in terms of the median frequency of use. The median number of tablets used in a typical session was 4 (range 2-10 tablets) and the median number used in a heavy session of use was 6 (range 2-25 tablets), which is slightly greater than the median amounts reported among the 2004 sample.

Although key experts were not specifically asked about the use of pharmaceutical stimulants, one KE with a youth outreach role noted that pharmaceutical stimulants were often used by younger people (15-20 years) instead of ecstasy and that they were also often used in combination with other drugs including alcohol, cannabis and ecstasy.

Table 44: Patterns of pharmaceutical stimulant use of REU

Pharmaceutical stimulants	2004 (n=100)	**2005 (n=100)**
Ever used (%)	39	**44**
Median age of first use (range)	19 years (7-31)	**19 years (15-28)**
Used preceding six months (%)	14	**16**
Injected in the preceding six months (%)	2	**1**
Of those who had used in the preceding 6 mths		
Median days used last 6 mths (range)	3 (1-180)	**3.5 (1-30)**
Median number of tablets used in a typical session (range)	4 (1-15)	**4 (2-10)**
Median number of tablets used in biggest session (range)	4 (1-15)	**6 (2-25)**

Source: PDI Regular ecstasy user interviews

11.8 Psychedelic mushrooms

Three-fifths (63%) of the 2005 REU sample had ever used psychedelic mushrooms which is similar to the proportion among the 2004 (60%) and 2003 (58%) samples (see Table 45). There was a trend for a greater proportion of the male sample (71%) to have ever used psychedelic mushrooms in comparison to the female sample (53%), χ^2=3.28, p=.07. The median age that mushrooms had first been used was 20 years (range 14-28 years, SD=3.6 years), and this was similar for males (19 years) and females (21 years). All of those who had ever used psychedelic mushrooms had used them orally, and nine participants (14%) had ever smoked mushroom preparations.

Two-fifths of the 2005 sample (40%) had used mushrooms in the preceding six months, which is similar to the proportion among the 2004 (41%) and 2003 (38%) samples (Table 45). There was no significant difference in the proportion of the male (47%) and female (31%) samples that had recently used psychedelic mushrooms. All of those who had used mushrooms in the last six months had done so orally, and two participants (5%) had recently smoked mushrooms. The median frequency of mushroom use was 3 days (range 1-12 days, *SD*=2.8) in the preceding 6 months, or approximately once every two months. There was no significant difference between the frequency of mushroom use of males and females.

It is noteworthy that the proportion of the sample reporting recent mushroom use (40%) is greater than the proportion reporting recent use of LSD, and just over one-tenth of the sample (16%) had recently used both LSD and mushrooms. Thus, consistent with previous years, over half of the sample (55%) had used some form of psychedelic during the six months preceding the interview. A greater proportion of males (24%) had recently used both LSD and mushrooms in comparison to females (7%), χ^2=5.30, p<.05.

Several key experts (n=6) commented on recent use of psychedelic mushrooms among the group of REU that they had regular contact with. Mushrooms were thought to be either eaten dried or boiled into a liquid. Five KE noted that here had been a recent increase in the use of mushrooms but, because of the timing of the interviews, this is likely to be due to a seasonal increase in their availability. Two KE commented that mushrooms are popular because they are free. One KE indicated that mushrooms are not seen as dangerous by REU as there are no warnings on their use. However, one KE with a role in emergency services noted a recent overdose episode associated with the use of mushrooms. Eight REU also noted an anecdotal increase in the use of mushrooms, with several (n=4) attributing this to a seasonal increase in availability. Some REU

noted a recent increase in the use of mushrooms in combination with ecstasy (n=2), instead of ecstasy (n=1), or in combination with speed and alcohol (n=1).

Table 45: Patterns of psychedelic mushroom use of REU

Psychedelic mushrooms	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	58	60	**63**
Median age of first use (range)	20 years (14-37)	20 years (14-25)	**20 years (14-28)**
Used preceding six months (%)	38	41	**40**
Injected in the preceding six months (%)	-	-	**-**
Used both LSD and mushrooms in last 6 mths (%)	13	17	**16**
Used either LSD or mushrooms in last 6 mths (%)	49	56	**55**
Of those who had used in the preceding 6 mths	n=38	n=41	**n=40**
Median days used last 6 mths (range)	3 (1-180)	3 (1-48)	**3 (1-12)**

Source: PDI regular ecstasy user interviews

11.9 Heroin

Less than one-tenth (8%) of the 2005 REU sample had ever used heroin, which is similar to the small proportion (4%) among the 2004 sample. All of those that had ever used heroin were male. Two-thirds (63%, n=5) of those that had ever used heroin had injected the drug, over one-third (38%, n=3) had ever smoked the drug, and a single participant (13%, n=1) had ever snorted heroin. The median age of first heroin use was 22 years (range 16-26 years, *SD*=3). There were no reports of heroin use during the six months preceding the interview among the 2005 REU sample.

The majority of key experts were not aware of any heroin use among REU that they were familiar with and three key experts commented that heroin is currently difficult to obtain in Hobart. Only two key experts were aware of heroin use among a small proportion (2-5%) of the REU that they had regular contact with. The low reported use and availability of heroin among REU in Hobart is consistent with data reported by the IDRS in relation to injecting drug users (see Bruno, 2005, 2006).

11.10 Methadone

Only a small proportion (5%) of the 2005 REU sample (2 females, 3 males) had ever used methadone, which is similar to the proportion reporting lifetime use (2%) among the 2004 sample (Matthews & Bruno, 2005). The median age of first methadone use was 20 years (range 16-22). Methadone had been either injected (60%, n=3) or swallowed (60%, n=3). A single male participant among the 2005 REU sample was currently in methadone treatment and reported using methadone every day and injecting on 72 occasions (three times a week) during the six months preceding the interview.

The majority of key experts were not aware of any use of methadone among the group of REU that they had regular contact with. Three key experts commented that a small proportion of the regular ecstasy users that they were familiar with (1%-10%) regularly swallowed a maintenance dose of licit (prescribed) methadone (n=2) or injected illicit methadone (n=1).

11.11 Buprenorphine

Two REU among the 2005 sample had ever used buprenorphine. One male participant had injected buprenorphine in the past but not in the last six months and one female participant had swallowed buprenorphine six times during the six months preceding the interview. There were no reports of recent buprenorphine use among the 2004 REU sample (Matthews & Bruno, 2005) and only a small proportion had recently used the drug among the 2003 sample (Bruno & McLean, 2004b). A single KE indicated that a small proportion of the REU (1-2%) that they had contact with used buprenorphine.

11.12 Other opiates

'Other opiates' comprised 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'. Table 46 shows that one-quarter (25%) of the 2005 REU sample had ever used other opiates, compared to one-fifth (19%) among the 2004 sample and one-third (35%) among the 2003 sample. A greater proportion of the male sample (33%) had ever used other opiates in comparison to the proportion of the female sample (16%), χ^2=3.89, p<.05. The median age of first opium use was 18 years (16-27 years) and this was similar for males (19 years) and females (19 years). The most common route of administration was swallowing (72%) and smoking (64%), followed by injection (24%), snorting (4%) and shelving/shafting (4%, n=1).

One-tenth of the 2005 REU sample (13%) had recently used other opiates compared to similar proportions among the 2004 (8%) and 2003 (13%) samples. There was no significant difference in the proportion of males and females that had recently used other opiates, but those that had recently used other opiates tended to be younger (22 vs. 24 years), Mann-Whitney *U*=380.0, *p*=.056, and were significantly younger when they first started using ecstasy (17 vs. 20 years), Mann-Whitney *U*=228.50, p<.05, and started using ecstasy regularly (19 vs. 21 years), Mann-Whitney *U*=315.5, p<.05 in comparison to those that hadn't recently used other opiates. The median frequency of other opiate use was 8 days (range 1-48) during the six months preceding the interview , or slightly more than monthly, and there was no significant difference in the median frequency of use for males and females. Other opiates had typically been swallowed (92%) during the preceding six months and smaller proportions had recently smoked (31%), snorted (8%) or shelved/shafted (8%, n=1) other opiates.

Table 46: Patterns of other opiate use of REU

Other opiates	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever used (%)	35	19	**25**
Median age of first use (range)	20 years (14-44)	19 years (16-27)	**18 years (16-27)**
Used preceding six months (%)	13	8	**13**
Injected in the preceding six months (%)	8	-	**-**
Of those who had used in the preceding 6 mths	n=13	n=8	**n=13**
Median days used last 6 mths (range)	6 (1-120)	11 (3-48)	**8 (1-48)**

Source: PDI regular ecstasy user interviews

In 2005, REU participants were asked to specify the use of pharmaceutical opiates and alkaloid poppy plant derivatives separately. One-tenth (9%) of the sample had ever used both pharmaceutical opiates and poppy derivatives and a small proportion of the sample (4%) had recently used both pharmaceutical opiates and poppy derivatives.

Close to one-fifth (17%) of the 2005 REU sample had ever used pharmaceutical opiates and there was no significant difference between the proportion of males (22%) and females (11%). The median age of first opiate use was 18 years (range 16-27 years, *SD*=3 years), and this was similar for males (18 years) and females (17 years). Most participants had ever swallowed pharmaceutical opiates (82%), and smaller proportions had injected (35%), smoked (29%), snorted (24%) or shelved/shafted (6%, n=1) pharmaceutical opiates.

A small proportion (9%) of the sample had used pharmaceutical opiates during the six months prior to the interview. All of those that had recently used pharmaceutical opiates had taken them orally and smaller proportions reported smoking (33%), snorting (11%, n=1) or shelving (11%, n=1). There were no reports of recent intravenous use of pharmaceutical opiates. The median frequency of use was 10 days (range 1-48 days, *SD*=15). Three-quarters of those who had recently used pharmaceutical opiates (78%) had done so on 12 days or less (fortnightly or less) during this period. Those that had recently used pharmaceutical opiates were significantly younger when they first started using ecstasy (17 vs. 19 years), Mann-Whitney U=215.0, $p<.05$, and when they first started using ecstasy regularly (19 vs. 21 years), Mann-Whitney U=236.5, $p<.05$, in comparison to those that hadn't recently used pharmaceutical opiates. One KE noted that 'a few' of the REU that they were familiar used morphine. Other KE that worked in emergency and ambulance services noted that pharmaceutical opiates were often involved in overdose episodes but they were not necessarily referring to use of opiates among REU populations.

Close to one-fifth of the sample (17%) had ever used alkaloid poppy plant derivatives and there was no significant difference between the proportion of males (22%) and females (11%) that had ever used poppy derivatives. Poppy derivatives had typically been swallowed (59%) or smoked (65%). Less than one-tenth of the sample (6%) had used poppy derivatives during the six months preceding the interview and there was no significant difference between the proportion of males (7%) and females (4%). The median age of first use was 17 years (range 16-24, *SD*=2 years). The median frequency of use was 1.5 days (range 1-15) during the six months preceding the interview. Most had recently swallowed (83%, n=5) and a single participant had recently smoked poppy derivatives. One KE that worked as an ambulance officer noted anecdotally that there had been a few deaths due to opium overdose in the last few years but did not note any recent episodes. Two REU noted an increase in the use of opium among their friends.

11.13 Other drugs

Several respondents indicated that they had recently used other hallucinogenic phenethylamines during the six months preceding the interview, in particular the chemicals 2CB and 2C-I. There was no reported lifetime or recent use of trypstasy (2,5-dimrthoxy-4-(n)-propylthiophenethylamine) or mescaline (3,4,5-trimethoxy-ß-phenethylamine) among the 2005 REU sample compared to single participants among the 2004 sample (see Matthews & Bruno, 2005).

2CB is a synthetic chemical in that is related structurally to mescaline and distantly to MDMA. 2CB first gained popularity as a legal ecstasy replacement in the US in the mid-1980s. It is generally considered to provide a psychedelic experience which is somewhat 'gentler' than LSD or mushrooms, being less prone to producing 'bad trips' or anxiety at recreational use levels (Erowid, 2005). Two participants reported lifetime use of 2CB among the 2005 REU sample and a single participant had snorted and swallowed the drug on one occasion during the six months preceding the interview. One KE with a role in accident and emergency services noted that two people recently presented in distress having taken 2CB in combination with cocaine and speed.

There was also some use of 2CB among the 2003 and 2004 samples, with single participants having recently used the drug. (Bruno & McLean, 2004b; Matthews & Bruno, 2005).

There was also some use of the research chemical 2C-I (2, 5-dimethoxy-4-iodophenethylamine) among the participants interviewed. Research chemicals or 'experimental chemicals' refer to relatively new substances that have not necessarily been formally studied and are still being researched. As such, very little is known about the effects and risks of using these drugs and there have been few animal or human toxicology studies or studies looking at issues such as long-term problems, side effects, addiction/dependence, allergic reactions, acute overdose, and interactions with other drugs. In many countries, research chemicals are not controlled substances and can often be purchased through chemical supply companies for 'research' purposes (Erowid, 2005). 2C-I has only been available as a research chemical since 2002. It belongs to the phenethylamine class of chemicals and is structurally related and has similar effects to 2CB, but may be more potent. As with MDMA, 2C-I should not be taken with MAOI anti-depressants. 2C-I is not currently a controlled substance in Australia but may be scheduled sometime in 2005 (Erowid, 2005).

Five participants among the 2004 REU cohort had recently used 2C-I and there were anecdotal reports by both REU and KE of an increase in the use and availability of the drug in 2004. Among the 2005 sample, two respondents had ever used the drug and a single respondent had used the drug on one occasion during the six months preceding the interview.

There were some reports of the lifetime recreational use of 'over-the-counter' medications such as cough medicine (n=2), cold and flu tablets (n=1), and travel sickness medications (n=1) and a single participant had used cold and flu tablets recreationally on 5 occasions during the six months preceding the interview. One KE indicated that a few REU that they were familiar with had recently taken Sudafed for recreational purposes. Whereas two participants had used cough syrup or dextromethorphan (DXM) for 'non-medicinal' purposes at some stage of their lives, there was no recent use reported among the 2005 sample compared to two respondents among the 2004 sample (Matthews & Bruno, 2005).

Two respondents had swallowed a preparation made from the plant Datura (*Solanaceae Datura spp.*) at some stage of their lives among the 2004 sample (Matthews & Bruno, 2005). A KE with a role in ambulance services noted a recent case of Datura overdose in Hobart, bur there was no lifetime or recent use of the plant among the 2005 REU sample.

A single REU indicated that they had injected ephedrine hydrochloride at some stage of their life. A single participant had snorted Tramil during the six months preceding the interview on 2 occasions. A single REU had swallowed Prednisolome (a corticosteroid) on 15 occasions during the last six months. Two participants reported lifetime use of *Salvia divinorum*, and one participant had recently smoked the drug on one occasion. One KE noted recent recreational use of herbal preparations guarana and Kava among REU in order to 'go up and come down' respectively. One KE reported recent experimental use of DMT (N,N-dimethyltryptamine) among the REU that they were familiar with.

One KE noted use of 5-HTP (5-hydroxytryptophan) among 5% of the REU group that they were familiar with. A single REU also indicated that they typically used 5-HTP when coming down from ecstasy. 5-HTP is a supplement that can be used to treat the 'come down' from ecstasy as it is a chemical precursor to the neurotransmitter serotonin (Erowid, 2006). It is not medically listed in Australia but can be ordered on the internet from America.

11.14 Summary of other drug use

- The majority of REU had recently consumed alcohol on an average of two days per week in the six months preceding the interview.
- A large proportion of REU had recently used cannabis on a median of one day per week during the six months preceding the interview. The frequency of cannabis use was greater for males in comparison to females.
- Tobacco had recently been used by four-fifths (83%) of the sample. Over half had smoked tobacco on a daily basis in the last six months, and others had smoked tobacco less frequently. The proportion of daily smokers among REU interviewed in the present study is greater in comparison to both national and Tasmanian estimates of prevalence.
- One-quarter of the sample had recently used benzodiazepines, with the drug used on a median of three days in the last six months. Recent use of benzodiazepines was more common among 'younger' in comparison to 'older' respondents. There was less reported use of benzodiazepines when 'coming down' from ecstasy among the current sample in comparison to 2004.
- There has been a reduction among REU in the recent use of amyl nitrite from two-fifths (43%) in 2003 to less than one-fifth (16%) in 2005. Three-quarters of those that had inhaled amyl nitrite had done so less than once a month during the last 6 months.
- The proportion of the sample reporting recent use of nitrous oxide has increased from one-quarter (25%) to two-fifths (43%) in 2005. On average, nitrous oxide had been used less than monthly.
- Sixteen percent had recently used pharmaceutical stimulants (such as dexamphetamine or methylphenidate), at a median frequency of approximately once every two months.
- One-tenth (12%) of REU had recently used anti-depressants and this proportion was greater in comparison to 2004 (4%). Seven out of the twelve participants that had recently used anti-depressants had used them on a daily basis.
- Only small proportions of the sample had recently used methadone (1%). and there was no recent use of heroin or buprenorphine. The recent use of pharmaceutical opiates (9%) and alkaloid poppy derivatives (6%) was slightly more common but relatively infrequent.
- Two-fifths of the sample had recently used psychedelic mushrooms. Mushrooms had been used on a median of once every two months during the last six months Both REU and KE indicated a recent increase in the use of mushrooms due to seasonal increase in availability at the time of the interviews. Consistent with previous years, over one-half of the sample (55%) had recently used some form of psychedelic drug (either LSD and/or mushrooms) in the last six months.
- While there was an increase noted in the experimental use of hallucinogenic phenethylamines among the 2004 sample, single participants had recently but infrequently used 2CB or 2C-I among the 2005 sample.

12.0 DRUG INFORMATION-SEEKING BEHAVIOUR

The regular ecstasy users interviewed in the present study were asked how often they found out about the content or purity of different drug types and batches of ecstasy pills (Table 47). Two-fifths (44%) of the sample indicated that they 'never' found out about the content or purity of different drugs (excluding ecstasy) that they had taken. The remaining participants attempted to access this information 'sometimes' (24%), 'about half the time' (13%), 'most times' (8%) or 'always' (10%). One-quarter of the sample (27%) indicated that they 'never' found out about the content/purity of ecstasy tablets before they took them. The remaining participants either 'sometimes' (28%), 'about half the time' (9%), 'most times' (27%) or 'always' (9%) found out about the content/purity of ecstasy tablets prior to taking them.

Of those who did find out about the content/purity of ecstasy tablets, this was typically through friends (88%), dealers (45%), websites (45%), personal experience (41%), or other people (38%). Five participants (7%) reported using testing kits compared to a single participant among the 2004 sample (Matthews & Bruno, 2005) and eight participants (8%) among the 2003 sample (Bruno & McLean, 2004b). Not surprisingly, few participants had accessed information pamphlets to find out about batches of ecstasy pills (1%). The most commonly accessed website was www.pillreports.com (23%). Other participants had accessed websites such as www.ravesafe.org, www.erowid.org and www.shroomery.net.

Of the five REU that reported using testing kits, the majority (80%, n=4) only 'sometimes' used testing kits, and a single participant (20%, n=1) reported that they always used testing kits. Three out of the five participants that had recently used testing kits indicated that they were aware of the limitations associated with their use. These limitations were typically associated with the fact that testing only indicates the dominant ingredient contained in the pill (n=3). All participants that had used testing kits (100%) indicated that they would still take a pill if testing indicated that it contained an ecstasy-like or amphetamine substance, three-fifths (60%) would still take the pill if it contained ketamine, and only two-fifths (40%) would take the pill if there was no reaction.

Two-thirds of the 2005 REU sample (67%) indicated that they had 'sometimes' bought a drug in the last six months and it had turned out to have a different content or purity than they expected. Close to one-third indicated that this had 'never' occurred and smaller proportions indicated that this had occurred 'about half the time' (5%) or 'most times' (1%).

The REU sample was asked which information resources they would find personally useful if available locally (Table 48). The most commonly endorsed information resources were testing kits (72%), information pamphlets (53%), and a local website (50%), followed by outreach workers at events (23%), posters (18%), video/DVDs (10%), postcards (8%), and music CDs (7%). Other suggested information resources included peer education (1%) and a health information hotline (1%).

Table 47: Content and testing of ecstasy tablets, 2005

	2005 n=100
Find out the content/purity of other drugs (not including ecstasy) (%)	
Never	44
Sometimes	24
Half the time	13
Most times	8
Always	10
Find out the content/purity of ecstasy (%)	
Never	27
Sometimes	28
Half the time	9
Most times	27
Always	9
Find out content/purity of ecstasy via (%)	n=73
Friends	88
Dealers	45
Other people	38
Personal experience	41
Testing kits	7
Information pamphlets	1
Websites	45
Ecstasy different content/purity than expected (%)	
Never	27
Sometimes	67
Half the time	5
Most times	1
Always	-
Use testing kits* (%)	n=5
Always	20
Sometimes	80
Half the time	-
Most times	-
Are aware of limitations of testing kits* (%)	60
Would still take pill if contained* (%)	
Ecstasy-like substance	100
Amphetamine substance	100
Ketamine substance	60
No reaction	40
Information resources believed to be/would be personally useful (%)	
None	10
Pamphlets	53
Posters	18
Postcards	8
Music CDs	7
Video/DVDs	10
Local website	50
Testing kits	72
Outreach worker	23
Other	3

Source: PDI regular ecstasy user interviews

* among those who used testing kits (n=5)

REU were asked to make qualitative comments about the specific types of harm reduction information that they would find personally useful and also information that they considered to be useful for new consumers. These were coded according to underlying themes and are presented in Table 48. Information on the long-term effects of drugs was considered to be most useful from a harm reduction perspective for the current regular users of ecstasy that were interviewed. This included information on long-term physical effects (44%), effects on mental/emotional/psychological health (24%), neurological/neuropsychological effects/harms (14%), and general harms (6%). This is consistent with the fact that the greatest perceived risks of ecstasy use among REU were depression, neurological damage and long-term physical problems, among other psychological and neuropsychological risks (see Table 13, Section 4.9.2).

One-quarter of the sample (24%) indicated that information on the content/purity/contaminants contained in drugs would be useful for them, with many participants referring to testing kits within this context. Other REU indicated that general information on how to use drugs more safely would be useful (4%), and more specifically taking measures to assist in 'coming down' such as eating particular foods (5%) and awareness about the effects of particular combinations of drugs (2%). Other information that was considered useful included greater knowledge of short term effects (8%) and legal ramifications (1%). One-fifth of the sample did not comment on the specific aspect of harm reduction information that they would find personally useful.

When asked which type of information would be most useful for new consumers, comments were typically centred on either gathering information about ERDs or managing their acute effects. Information that that was considered important for new consumers to know included awareness of short-term effects (28%), long-term effects (14%), how to use more safely (13%), effects of different drug combinations (10%), what to expect when 'coming down' (8%), effects on mental/emotional/psychological health (7%), other general risks/harms (5%), psychological dependence (3%), and legal information (1%). It was also recommended that new consumers consult existing resources such as information pamphlets and websites (9%).

Several REU recommended that new consumers should have knowledge of specific practices when taking ecstasy. These including issues to do with hydration such as drinking water and not drinking too much water (17%), knowing how much to consume (15%), finding out about content/purity of substances (10%), consuming the drug in a safe/friendly environment (8%), knowing what to do in an emergency (5%), practices related to temperature regulation such as staying cool and taking breaks (4%), not drinking alcohol (3%) and how to assist in 'coming down' (e.g. eating particular foods) (1%).

Some REU also made spontaneous qualitative comments in relation to harm reduction information. Several noted a lack of information locally on drug-related effects and how to use drugs safely (n=6), as well as a need for increased accessibility to such information (n=3), and others indicated a need for more services (n=2), peer education in schools (n=3), and more research on the long-term effects of drug use (n=3). Seven REU expressed their dissatisfaction with the portrayal of drug use by the media and by government advertising campaigns, noting in particular the use of 'scare tactics', 'scare mongering', and 'preaching'. These comments are not surprising as some research shows that illicit drug education programs that are based around 'fear arousal' are ineffective and may even have contradictory effects (Ashton, 1999; Skiba, Monroe & Wodarski, 2004; West & O'Neal, 2004),

Some KE that were interviewed noted changes in drug information-seeking behaviour among REU. Two KE indicated that REU have recently become less likely to research specific pills before they take them. Others noted an increase in high risk patterns of use and less regard for the potential damage associated with high risk behaviours (n=3), particularly among younger REU (n=1). A single KE noted a recent increase in the use of testing kits among a small proportion (5-10%) of the REU group that they were familiar with. One KE with a role in the provision of harm reduction information noted that, in response to information that their service distributed, a lot more people asked for information and accessed help during and after the Falls Festival (January, 2005).

Table 48: Types of harm reduction considered to be useful by REU, 2005

	2005 n=100
Harm reduction information that would be personally useful (%)	
None	18
Long-term physical effects	44
Effects on mental/emotional/psychological health	24
Content/purity/ingredients/contaminants	18
Neurological/neuropsychological effects/harms	14
Short-term effects	8
General risks/harms	6
How to assist comedown (e.g. pre-/post-loading)	5
General information on how to use more safely	4
Drug combinations/polydrug use	2
Legal information	1
Harm reduction information that would be useful for new consumers (%)	
None	3
Short-term effects (e.g. what to expect, side effects)	28
Hydration (e.g. drinking water, not drinking too much water, going to toilet)	17
How much to take (e.g. starting with ½ a tablet)	15
Long term effects (e.g. neuropsychological/physical side effect)	14
General harm reduction information (e.g., how to use more safely)	13
Drug combinations/polydrug use	10
Purity/content (e.g. contaminants/ingredients/use of testing kits)	10
Accessing existing information resources (e.g. pamphlets, websites, documentaries)	9
Taking in a safe/friendly environment (e.g. among friends, sticking together)	8
What to expect when coming down	8
Effects on mental/emotional/psychological health	7
What to do in an emergency (e.g. what to look out for if things go wrong)	5
General risks/harms	5
Temperature regulation (e.g. staying cool, taking breaks)	4
Not to drink alcohol	3
Psychological dependence	3
Mood dependence (e.g. take when in a good mood)	3
Legal information	1
How to assist comedown (e.g. pre-/post-loading)	1

Source: PDI Regular ecstasy user interviews

Participants were asked about their perceptions of ecstasy pills and ecstasy markets (Table 49). Perceptions about whether a logo is a good indication of what a pill is like were varied. Over two-thirds (70%) indicated that a logo was sometimes (41%) or never (29%) a good indication and less than one-third (30%) of the sample indicated that logos are 'always' (6%) or 'often' (24%) a good indication. Logos or designs on pills were considered by one KE to have become less important in determining the quality of a pill, as the same logos are put on pills of different strength or purity.

Close to half of the sample (45%) indicated that ecstasy pills 'sometimes' contain little or no MDMA and close to one-third (29%) indicated that this was never the case. Similarly two-fifths (43%) indicated that ecstasy pills 'sometimes' contains MDMA, and one-fifth (21%) indicated that this was 'often' the case. When asked if they didn't care about the content of ecstasy pills as long as they have a good time, participants' responses varied from 'always' (26%), 'often' (32%), 'sometimes' (24%), to 'never' (18%).

Table 49: Drug information relating to ecstasy tablets, 2005

	2005 n=100
Logo believed to be a good indication of what pill is like (%)	
Always	6
Often	24
Sometimes	41
Never	29
Don't know	-
'Ecstasy' pills contain little or no MDMA (%)	
Always	1
Often	11
Sometimes	45
Never	29
Don't know	14
'Ecstasy' pills contain MDMA (%)	
Always	12
Often	21
Sometimes	43
Never	10
Don't know	14
Don't care about content of pills as long I have a good time (%)	
Always	26
Often	32
Sometimes	24
Never	18
Don't know	-

Source: PDI regular ecstasy user interviews

12.1 Summary of drug information-seeking behaviour

- Whereas one-third (36%) of the regular ecstasy users interviewed in 2005 actively sought information about the content/purity of 'batches' of ecstasy pills 'most times' or 'always', the remainder did so half the time or less (37%) or 'never' (27%).
- Participants typically obtained this information from friends, dealers, and other people as well as websites and personal experience.
- Five REU reported recent use of pill testing kits. Three out of these five respondents were aware of some limitations of testing kits, and there was evidence that some would not take a pill if testing revealed that it contained ketamine (n=2) or if there was no reaction (n=3).
- Two-thirds of the sample (67%) indicated that they had 'sometimes' bought a drug and it turned out to have different effects than they expected in the last six months.
- The majority of the REU sample was receptive to harm reduction information. Three-quarters (72%) indicated that they would find pill testing kits personally useful if available locally. Other information resources that were considered useful by REU were information pamphlets, a local website, outreach workers at events, and posters.
- REU were particularly interested in finding out more information on the long-term effects of drug use (physical, psychological, neuropsychological, and neurological) and also considered it to be important that new consumers were aware of the acute effects of drug use and ways in which to use drugs more safely.
- Whereas the qualitative comments of some KE suggested a reduction in drug information-seeking behaviour and an increase in high risk behaviours among REU, several REU commented on the lack of information available to them on drug-related effects and ways to use drugs more safely.

13.0 RISK BEHAVIOUR

13.1 Injecting risk behaviour

Close to one-fifth of the 2005 REU sample (19%) had used substances intravenously at some stage of their lives, which is slightly more compared to the 2004 sample (15%) and fewer compared to the 2003 (26%) sample (Table 50). In the current cohort, a median of 2 drug types (range 1-5) had ever been injected. Less than one-tenth (8%) of the 2005 sample had used substances intravenously during the six months preceding the interview, compared to a similar proportion among the 2004 sample (9%) and a greater proportion among the 2003 sample (22%). A median of 1.5 (range 1-3) drug types had been injected (out of 20 drug types) by the 2005 cohort during the six months preceding the interview.

Table 50: Injecting risk behaviour among REU, 2003-2005

	2003 (n=100)	2004 (n=100)	**2005 (n=100)**
Ever injected (%)	26	15	**19**
Median number of drugs ever injected* (range)	5 (1-12) #	2 (1-9) #	**2 (1-8)^**
Injected last 6 months*	22	9	**8**
Median number of drugs injected last 6 months* (range)	2 (1-6) #	1 (1-4) #	**1.5 (1-3)^**

Source: PDI regular ecstasy user interviews
*Among those that had injected
out of 19 drug types
^ out of 20 drug types

13.1.1 Lifetime injectors

Patterns of injecting drug use

Table 51 shows that those drugs that had ever been injected (n=19) were methamphetamine (79% powder, 32% base, 26% crystal), ecstasy (47%), 'other opiates' (37%), heroin (26%), ketamine (21%), methadone (16%), benzodiazepines (16%), MDA (11%), cocaine (11%), pharmaceutical stimulants (11%), LSD (5%), and buprenorphine (5%).

There was a trend for a greater proportion of the male sample to have ever injected (26%, n=14) in comparison to the female (11%, n=5) sample, χ^2=3.31, p=.069. The mean age of lifetime injectors (26 years, *SD*=4.5) was significantly greater than those that had never injected (23 years, *SD*=4.0), $t(98)$=-.08, p<.05, and based on a median split for age there was a trend for a greater proportion of 'older' users to have ever injected in comparison to 'younger' users (27% vs. 13%), χ^2=3.13, p=.077. A significantly greater proportion of those that were unemployed (60%, n=3) had ever injected compared to those that were heterosexual (17%, n=16), χ^2=5.75, p<.05, and a greater proportion of those that were GLBT (50%, n=3) had ever injected compared to those that were not (17%, n=16), χ^2=3.99, p<.05. Those who had recently injected had completed fewer mean years of formal education (11.6 vs. 11.9); Mann-Whitney *U*=577.5, p<.01. Those who reported lifetime injecting drug use had been using ecstasy for a significantly greater number of years (2.8 vs. 1.3), Mann-Whitney *U,* =471.00, p<.01, and had used a significantly greater number of drug types ever (14 vs. 8 drug types), Mann-Whitney *U*=273.5, p<.001, and in the preceding six months (8 vs. 6 drug types), Mann-Whitney *U*=491.0, p<.05, in comparison to non

injectors. A greater proportion of lifetime injectors (32%) had ever used heroin in comparison to non-injectors (3%), χ^2=17.72, p<.001.

Table 51: Injecting drug use history among REU injectors, 2005

	Ever injected (%) (n=19)	First drug injected (%) (n=19)
Methamphetamine powder	79	74
Methamphetamine base	32	5
Crystal methamphetamine	26	-
Pharmaceutical stimulants	11	
Heroin	26	5
Methadone	16	5
Buprenorphine	5	
Ecstasy	47	-
Cocaine	11	-
LSD	5	
Ketamine	21	
MDA	11	
Other opiates*	37	11
Benzodiazepines	16	-

Source: PDI regular ecstasy user interviews
* Includes codeine, Physeptone tablets, morphine, and pethidine.

Context of initiation to injecting

Three-quarters of those who had ever injected had first injected methamphetamine (74% powder, 5% base), followed by other opiates (11%), heroin (5%), methadone (5%) (Table 51). Almost three-quarters (74%) of those who had ever injected (33%, n=5) were under the influence of other drugs the first time that they had injected. The drug types used preceding first injection were alcohol (53%, n=10), cannabis (32%, n=6), ecstasy (16%, n=3), and LSD (5%, n=1). Close to half of those that had ever injected did not inject themselves (47%), and others learnt how to inject from a friend/partner (47%), other user (5%), website (5%), indirectly (5%) or through observation (5%).

13.1.2 Recent injectors

Patterns of injecting drug use

Less than a tenth of the sample (8%) had injected a drug in six months prior to the interview. The median number of drug types injected (out of 20 drug types) in this six month period was 1.5 (range 1-3), and half of those who had injected in the preceding six months (50%) had injected only one drug type (Table 50). The proportion of males that had recently injected (13%, n=7) tended to be greater than the proportion of females (2%, n=1), χ^2=3.71, p=.054. The mean age of recent injectors tended to be greater than those that had not recently injected (26 vs. 24 years), t(98)=-1.75, p=.083, and, based on a median split for age, the proportion of 'older' users (13%, n=6) that had recently injected tended to be greater than the proportion of 'younger users' (4%), χ^2=3.16, p=.075. A significantly greater proportion of those that were unemployed (40%, n=2) had recently injected compared to those that were not. (6%, n=6), χ^2=7.32, p<.01, and none of the recent injectors were full-time students. Those who had recently injected had completed fewer years of formal education (11.5 vs. 12), Mann-Whitney U=240.0, p<.05, and had used a significantly greater number of drug types ever (14 vs. 8), Mann-Whitney U =63.50, p<.001, and in the last six months (10 vs. 6), Mann-Whitney U =137, p<.01, compared to those that had not.

Table 52 shows that the most frequently injected drug in the last six months was methamphetamine (63% powder, 63% base, 63% crystal), followed by ecstasy (50%), methadone (13%), and pharmaceutical stimulants (13%). Over three-quarters of those who had recently injected (76%) had last injected methamphetamine (13% powder, 50% base, 13% crystal), followed by ecstasy (13%) and methadone (13%). The frequency of injection for each drug was variable and ranged from single occasions to every second day within the preceding six months. Overall, recent injectors had injected any drug a median of 58 times (range 1-350 times) in the six months preceding the interview, or approximately twice a week. One-third (38%, n=3) had injected once or twice during the preceding six months and the remaining participants had injected at least weekly during this time (Table 54).

Table 52: Recent injecting drug use patterns (recent injectors) among REU, 2005

	% injected last 6 months n=8	Median days injected last 6 months* (range)	Last drug injected n=8
Methamphetamine powder (%)	63	5 (1-90)	13
Methamphetamine base (%)	63	50 (2-70)	50
Crystal methamphetamine (%)	63	4 (2-30)	13
Ecstasy (%)	50	3 (2-6)	13
Methadone (%)	13	72 (72-72)	13
Pharmaceutical stimulants (%)	13	1 (1-1)	-

Source: PDI Regular ecstasy user interviews

* Of those who had injected in the preceding six months

Context of injecting

Three-fifths of recent injectors (63%) had always injected themselves in the last six months, a small proportion had injected themselves often (13%), and one-third (33%) always required others to inject them during this period of time (Table 53). Three-fifths of recent injectors (63%) had typically injected with close friends in the six months preceding the interview, one-third had typically injected with a regular sex partner (38%), and one-tenth (13%) had typically injected with acquaintances. The majority of those that had recently injected had done so at private residences including their own home (75%), a friend's home (50%) and dealers' home (63%). Other locations included a public toilet (38%), car (33%) and venue (nightclub) toilet (25%).

Table 53: Context and patterns of recent injection among REU, 2005

	2004 (n=9)	**2005 (n=8)**
Frequency of self-injection		
Every time (%)	56	**63**
Often (%)	11	**13**
Sometimes (%)	-	**-**
Rarely (%)	-	**-**
Never (%)	33	**25**
People usually inject with*		
Close friends (%)	56	**63**
Regular sex partner (%)	11	**38**
Casual sex partner (%)	11	**-**
Acquaintances (%)	11	**13**
No one (%)	11	**13**
Locales where injected*		
Own home (%)	89	**75**
Friend's home (%)	76	**50**
Car (%)	33	**38**
Dealer's home (%)	11	**63**
Street (%)	-	**-**
Public toilet (%)	-	**38**
Venue toilet (%)	11	**25**
Work (%)	2	**-**

Source: PDI Regular ecstasy user interviews
*could nominate more than one response

Injecting risk behaviour

Overall, recent injectors had injected any drug a median of 58 times (range 1-350 times) in the six months preceding the interview, or approximately twice a week. One-third (38%, n=3) had injected once or twice during the preceding six months and the remaining participants had injected at least weekly during this time. Half of recent injectors (50%, n=4) had injected both under the influence of and coming down from ecstasy, and others had injected either under the influence (13%) or while coming down (13%) during the six months preceding the interview. Those who had injected while under the influence and when coming down from ecstasy had done so a median of 5 times (range 2-120 times) during this time.

A single participant had used a needle after a regular sex partner twice during the last month and 6-10 times in the last six months. Another participant reported that someone had used a needle after they had used it 6-10 times in the last six months. Sharing of other injecting equipment was more common, with almost two-thirds (63%) of recent injectors reporting sharing of equipment during the last six months. Equipment that was shared during this time included tourniquets (38%, n=3), water (38%, n=3), and spoons (13%, n=1). This is of concern as sharing equipment increases the risk of exposure to blood-borne viral infections.

Obtaining needles

The majority of recent injecting drug users (88%, n=7) had obtained needles from NSP outlets during the last six months and smaller proportions had obtained needles from a chemist (25%, n=2), friend (25%, n=2) or dealer (25%, n=2). None of those that had recently injected reported difficulty in obtaining needles in the last six months.

Table 54: Injecting risk behaviour of recent injectors, 2004-2005

	2004 (n=9)	**2005 (n=8)**
Median times injected any drug last 6 mths (range)	20 (1-72)	**58 (1-350)**
Injected under the influence (%)	-	**13**
Injected while coming down (%)	-	**13**
Injecting while under the influence and coming down (%)	67	**50**
Median times injected any drug under the influence last 6 mths (range)*	n=6 5 (2-13)	**n=6** **5 (2-120)**
Used needle after someone in last month	-	**13 (n=1)**
Used needle after someone in last 6 months (%)	11 (n=1)	**13 (n=1)**
Used needle before someone in last 6 months (%)	-	**13 (n=1)**
Shared other injecting equipment		
None (%)	44	**38**
Spoons (%)	44	**13**
Tourniquets (%)	33	**38**
Filters (%)	22	**-**
Water (%)	11	**38**

Source: PDI regular ecstasy user interviews
* Of those that had injected under the influence

13.2 Blood-borne viral infections (BBVI)

Two-fifths of the 2005 REU sample (44%) had been vaccinated for hepatitis B, compared to over half among the 2004 sample (54%) (Table 55). However, among recent injectors, only one-quarter (26%) had been vaccinated for hepatitis B. Among the 2005 REU sample, the main reasons for hepatitis B vaccination included overseas travel (67%), sexual risk (12%), advice of a relative (7%), childhood vaccination (5%), work requirements (5%), don't know/can't remember (5%) and other (5%).

One-third of the 2005 REU sample (30%) had been tested for hepatitis C, and 18% of the sample had been tested in the last year. Among recent injectors three-fifths (63%) had been tested for hepatitis C. A single participant reported testing positive to hepatitis C and two participants who were recent injectors did not know or did not obtain the result of the test. Similarly one-third of participants (34%) had been tested for HIV at some stage and 19% of the sample had been tested during the last year. Among recent injectors, three-quarters (75%) had been tested for HIV. None of the participants indicated that the result of the HIV test was positive and two participants who were recent injectors did not know the result of the test.

Whereas one-third of this group (32%) had been for a sexual health check up in the last year, one-half (51%) had never had a sexual health check up. The majority of the sample (92%) had never been diagnosed with an STI and small proportions had been diagnosed with an STI in the last year (5%) or more than a year ago (2%). Among recent injectors, three-fifths (63%) had never had a sexual health check up and three-quarters (75%) had never been diagnosed with an STI.

Table 55: BBVI vaccination, testing and self-reported status, 2004-2005

	REU sample 2004	**REU sample 2005**	**Recent Injectors 2005**
HBV vaccination (%)	n=96	**n=99**	**n=8**
No	44	**41**	**63**
Yes (didn't complete schedule)	10	**14**	**13**
Yes (completed schedule)	44	**30**	**13**
Don't know	2	**14**	**13**
If yes, reason	n=51	**n=42**	**n=2**
Risk (sexual)	2	**12**	**-**
Risk (IDU)	2	**-**	**-**
Going overseas	33	**67**	**50**
Vaccinated as a child	14	**5**	**-**
Don't know/can't remember	12	**5**	**-**
Working in a health setting	11	**-**	**-**
Work requirement	26	**5**	**50**
Relative's advice	16	**7**	**-**
GP's advice	11	**-**	**-**
Precautionary	26	**-**	**-**
Other	11	**5**	**-**
HCV test last year (%)	n=96	**n=99**	**n=8**
No	67	**62**	**38**
Yes (in the last year)	18	**18**	**50**
Yes (more than one year ago)	16	**12**	**13**
Don't know	-	**8**	**-**
If yes	n=32	**n=29**	**n=5**
Positive	-	**3 (n=1)**	**-**
Negative	97	**90**	**60**
Don't know	3 (n=1)	**7**	**40**
HIV test last year (%)	n=96	**n=99**	**n=8**
No	64	**65**	**25**
Yes (in the last year)	22	**19**	**50**
Yes (more than one year ago)	15	**15**	**25**
Don't know	-	**1**	**-**
If yes	n=35	**n=33**	**n=5**
Positive	3 (n=1)	**-**	**-**
Negative	97	**94**	**60**
Don't know	-	**6**	**40**
Ever had a sexual health check up (%)	n=96	**n=100**	**n=8**
No	53	**51**	**63**
Yes (in the last year)	33	**32**	**13**
Yes (more than one year ago)	14	**17**	**25**
Don't know	-	**-**	**-**
Ever diagnosed with STI		**n=98**	**n=8**
No	n/a	**92**	**75**
Yes (in the last year)	n/a	**5**	**13**
Yes (more than one year ago)	n/a	**2**	**-**
Don't know	n/a	**1**	**13**

Source: PDI regular ecstasy user interviews

13.3 Sexual risk behaviour

A large majority of the regular ecstasy-using sample (97%) reported having penetrative sex during the six months preceding the interview (Table 56). 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 sensitive nature of the questions.

Recent sexual activity

Of those who had penetrative sex in the preceding six months, the number of sexual partners varied between one (38%), two (26%), three to five (30%) and six to ten partners (6%). Of those that had recently had penetrative sex, three-quarters (76%) reported having sex with a regular partner and over half (69%) reported having sex with a casual partner during this time. Participants were asked about their use of protective barriers (condoms, dams, gloves) during the preceding six months. Of those who had sex with a regular partner in the preceding six months, two-thirds reported use of protective barriers. One-fifth (18%) had used protective barriers every time and one-third had never used protective barriers (32%). Participants were more likely to use protection when having sex with a casual partner, with a majority (81%) reporting some use of protective barriers. Almost half (45%) of those that had sex with a casual partner used protective barriers 'every time' and one-fifth (18%) 'never' used protective barriers. Approximately one-tenth of the sample (13%) reported having anal sex in the six months preceding the interview. The majority of those who had anal sex (92%) had done so monthly or less.

Drug use during sex

A large majority of the participants that had been sexually active in the six months preceding the interview (83%) had engaged in penetrative sex under the influence of ecstasy and related drugs during this time (Table 57). Of those that had recently engaged in penetrative sex under the influence of ERDs, the number of occasions varied from once (14%), twice (15%), three to five times (29%), six to ten times (19%) to more than ten times (24%). These respondents most commonly reported having sex under the influence of ecstasy (88%), alcohol (69%), cannabis (33%), and/or methamphetamine powder (19%). Smaller proportions reported having had sex under the influence of methamphetamine base (4%), amyl nitrite (1%), cocaine (1%), LSD (4%), other opiates (3%), nitrous oxide (3%), mushrooms (1%), and pharmaceutical stimulants (1%).

Of those who had sex under the influence of ERDs with a regular partner in the preceding six months (n=57), over half (58%) reported some use of protective barriers, one-fifth used protective barriers 'every time' (18%) and two-fifths (42%) never used protective barriers. Participants were more likely to use protective barriers with a casual partner. Of those who had sex under the influence of ERDs with a casual partner in the preceding six months, a large majority (81%) reported some use of protective barriers, two-fifths had always used protective barriers (44%), and one-fifth (19%) never used protective barriers.

Those who had sex with a regular partner were slightly less likely to use protection under the influence of drugs (Table 57) compared to when having sex generally (Table 56). For example, 68% reported some use of protective barriers generally and 58% reported use of protective barriers when under the influence of ERDs. Those who had sex with a casual partner were just as likely to use protection regardless of whether they were under the influence of drugs. For example, 81% reported some use of protective barriers generally and 81% reported some use of protective barriers when under the influence of drugs.

Table 56: Prevalence of sexual activity and protective barrier use in the preceding six months, 2004-2005

	2004 n=100	**2005** **n=100**
Penetrative sex in last six months (%)	92	**97**
Number of sexual partners in the last six months*	n=92	**n=97**
One partner (%)	44	**38**
Two partners (%)	16	**26**
Three to five partners (%)	34	**30**
Six to ten partners (%)	5	**6**
More than ten partners (%)	1	**-**
Sex with regular partner(s) (%)*	85	**76**
Use protective barriers with regular partner	n=78	**n=74**
Always use protective barrier (%)	21	**18**
Never use protective barrier (%)	12	**32**
Any protective barrier use (%)	88	**68**
Sex with casual partner(s) (%)*	61	**69**
Use protective barriers with casual partner	n=56	**n=67**
Always use protective barrier (%)	36	**45**
Never use protective barrier (%)	7	**19**
Any protective barrier use (%)	93	**81**
Anal sex in the last six months (%)*	9	**13**
Number of times had anal sex last six months	n=8	**n=13**
Monthly or less (1-6 times)	88	**92**
Fortnightly-monthly (7-12 times)	-	**-**
Weekly-fortnightly (13-24 times)	-	**8**
Three times a week-once a week (25-72)	12	**-**

Source: PDI regular ecstasy user interviews

* of those who had penetrative sex in the last 6 months

Table 57: Sexual activity and protective barrier use under the influence of drugs in the preceding six months, 2004-2005

	2004	**2005**
Of those who had penetrative sex in last six months	n=92	**n=97**
Penetrative sex while on drugs in last 6 months (%)	80	**83**
Of those who had sex under the influence of drugs	n=74	**n=80**
No. times had sex under the influence		
Once (%)	19	**14**
Twice (%)	22	**15**
Three-five times (%)	24	**29**
Six-ten times (%)	19	**19**
More than ten times (%)	16	**24**
Drugs used under the influence		
Ecstasy (%)	93	**88**
Cannabis (%)	42	**33**
Alcohol (%)	64	**69**
Methamphetamine powder (%)	26	**19**
Methamphetamine base (%)	5	**4**
Crystal methamphetamine (%)	1	**-**
Cocaine (%)	4	**1**
LSD (%)	3	**4**
Amyl nitrite (%)	5	**1**
Nitrous oxide (%)	3	**3**
Methadone (%)	1	**1**
Other opiates (%)	3	**3**
Benzodiazepines (%)	3	**-**
Psychedelic mushrooms (%)	1	**-**
Pharmaceutical stimulants (%)	1	**1**
Of those who had sex with regular partner(s) under influence of drugs	n=60	**n=57**
Always use protective barriers (%)	18	**18**
Never use protective barriers (%)	20	**42**
Any protective barrier use (%)	80	**58**
Of those who had sex with casual partner(s) under influence of drugs	n=43	**n=48**
Always use protective barriers (%)	35	**44**
Never use protective barriers (%)	12	**19**
Any protective barrier use (%)	88	**81**

Source: PDI regular ecstasy user interviews

13.4 Driving risk behaviour

Eighty out of the 100 REU interviewed in 2005 had driven a car during the six months preceding the interview (Table 58). Over half of these (58%) 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 4 times (range 1-24) in the last six months, or less than once a month. Over half of those that had recently driven a car (55%) had driven soon after (within an hour of) taking a drug in the last six months. Of those that had driven under the influence, the drugs most commonly used were ecstasy (91%), cannabis (68%), and methamphetamine powder (34%), followed by nitrous oxide (16%), methamphetamine base (9%), LSD (5%), cocaine (5%), ketamine (2%), amyl nitrite (2%), crystal methamphetamine (2%), benzodiazepines (2%), and GHB (2%). Of those that had driven under the influence of ecstasy, the median number of times in the last six months was 3.5 times (range 1-24).

Of those that had recently driven, there were no sex differences between those that had or had not recently driven under the influence of drugs. However, based on a median split for age, a greater proportion of 'older' participants (67%) had recently driven under the influence of drugs in comparison to the proportion of 'younger' participants (44%), χ^2=4.19, p<.05. Those who had driven under the influence of drugs had used a significantly greater number of drug types ever (9 vs. 7 types), Mann-Whitney U = 494.50, p<.01; had recently used ecstasy on a significantly greater number of days (18 vs. 12 days), Mann-Whitney U = 585.50, p<.05; and had recently used cannabis on a significantly greater number of days (27.5 vs. 9 days), Mann-Whitney U =509.50, p<.01, in comparison to those who had not recently driven under the influence of drugs. They also tended to have been using ecstasy for a greater number of years (4 vs. 3 years); Mann-Whitney U=607.50, p=.070. A greater proportion of those who had recently driven under the influence of drugs had recently binged (used for 48 hours without sleep) on ecstasy (46% vs. 22%), χ^2=4.70, p<.05, and had ever injected compared to those who hadn't driven under the influence of drugs (25% vs. 6%), χ^2=5.50, p<.05.

The 2005 sample of Tasmanian REU were asked about their perceptions of the risks associated with driving under the influence of particular drug types (Table 59). Over half of those who commented (56%) perceived that driving under the influence of cannabis was 'low risk', close to half considered driving under the influence of ecstasy (54%) and methamphetamine (47%) to be 'moderate risk', whereas two-thirds of the sample considered driving over the legal alcohol limit (69%) or under the influence of LSD (68%) to be 'high risk'. The risk associated with driving under the influence of ketamine, GHB and benzodiazepines was considered to be either high or participants did not know of any associated risks.

Table 58: Driving under the influence of drugs among REU, 2004-2005

Variable	2004* n=100	**2005** **n=80**
Driven while over the legal alcohol limit in last 6 mths#	n/a	**58**
Of those that had driven over the legal alcohol limit		**n=46**
Median number of times in last six months (range)	n/a	**4 (1-24)**
Driven soon after (within an hour of) taking a drug (%)#	n/a	**55**
Of those who'd driven soon after, drugs used (%)	n=59	**n=44**
Cannabis	85	**68**
Ecstasy	76	**91**
Methamphetamine powder	75	**34**
Methamphetamine base	10	**9**
Crystal methamphetamine	-	**2**
Benzodiazepines	10	**2**
Psychedelic mushrooms	8	**-**
LSD	7	**5**
Amyl nitrite	8	**2**
Nitrous oxide	5	**16**
Cocaine	2	**5**
Ketamine	2	**2**
MDA	2	**-**
Other opiates	2	**-**
Pharmaceutical stimulants	-	**-**
GHB	-	**2**
Of those who had driven soon after taking ecstasy		**n=40**
Median number of times in last 6 mths (range)	n/a	**3.5 (1-24)**

Source: PDI regular ecstasy user interviews

# of those who had driven a car in the last 6 months

Table 59: Perceptions of risk associated with driving under the influence of drugs among REU, 2005

Perceptions of the risk associated with driving under the influence of the following drugs:	2005 n=78
Over legal alcohol limit	
Don't know (%)	-
No risk (%)	-
Low risk (%)	4
Moderate risk (%)	27
High risk (%)	69
Ecstasy	
Don't know (%)	1
No risk (%)	-
Low risk (%)	19
Moderate risk (%)	54
High risk (%)	24
Methamphetamine	
Don't know (%)	6
No risk (%)	1
Low risk (%)	24
Moderate risk (%)	47
High risk (%)	21
Cannabis	
Don't know (%)	-
No risk (%)	14
Low risk (%)	56
Moderate risk (%)	22
High risk (%)	7
Ketamine	
Don't know (%)	38
No risk (%)	1
Low risk (%)	4
Moderate risk (%)	10
High risk (%)	46
GHB	
Don't know (%)	53
No risk (%)	-
Low risk (%)	1
Moderate risk (%)	5
High risk (%)	40
LSD	
Don't know (%)	14
No risk (%)	-
Low risk (%)	-
Moderate risk (%)	18
High risk (%)	68
Benzodiazepines	
Don't know (%)	46
No risk (%)	-
Low risk (%)	8
Moderate risk (%)	18
High risk (%)	28

Source: PDI regular ecstasy user interviews

13.5 Binge drug use

Table 60 shows that over one-third of the 2005 REU sample (39%) had recently 'binged' on ERDs (used for more than 48 hours continuously without sleep), compared to a similar proportion among the 2004 sample (35%). Of those that had recently 'binged', the substances used most commonly during a binge session of use were ecstasy (95%), cannabis (79%), alcohol (77%), methamphetamine powder (64%), followed by LSD (26%), methamphetamine base (23%), nitrous oxide (18%), crystal methamphetamine (13%), cocaine (13%), amyl nitrite (10%), pharmaceutical stimulants (5%), and GHB (3%). The median length of the longest period of continuous use during this time was 2.5 days (range 2-5 days).

There was a trend for greater a proportion of males to have recently 'binged' on ERDs in comparison to females (67% vs. 33%), χ^2= 3.52, p=.0.06. Those that had recently 'binged' had first started using ecstasy at a younger age (19 vs. 20 years), Mann-Whitney *U*=839.0, *p*<.05; had started using ecstasy regularly at an earlier age (20 vs. 22 years), Mann-Whitney *U*=852.5, *p*<.039; had used ecstasy more frequently in the last six months (22 vs. 15 days), Mann-Whitney *U* = 725.5, *p*<.01; and had used greater numbers of ecstasy tablets in a typical (2.2 vs. 1.8 tablets), Mann-Whitney *U* = 676.5, *p*<.01, and largest recent session of use (5.3 vs. 3.7 tablets), Mann-Whitney *U* = 768.5, *p*=.016, in the last six months.

Those that had recently 'binged' on ERDs had also used a significantly greater number of drug types ever (10 vs. 9 drug types), Mann-Whitney *U* = 669.5, p<.001, and tended to have used a greater number of drug types in the last six months (9 vs. 7 drug types), Mann-Whitney *U* = 34.0, p=.052. A greater proportion had used drugs intravenously at some stage of their life (31% vs. 12%), χ^2=5.75, *p*<.05, had used some form of methamphetamine in the last six months, (87% vs. 72%), χ^2=3.14, *p*=.076, and had typically used methamphetamine in combination with ecstasy in the last six months (23% vs. 5%), χ^2=5.75, *p*<.05. They were also more likely to have a high SDS score (greater than 5) for ecstasy (26% vs. 7%), χ^2= 7.43, p<.01, and methamphetamine (23% vs. 0%), χ^2=15.50, p<.001, suggestive of greater psychological symptoms of dependence on these drugs.

Table 60: Binge drug use among REU, 2003-2005

Variable	2003 n=100	2004 n=100	**2005 n=80**
Binged on any drug in the last six months (%)#	45	35	**39**
Of those that had recently binged (%)			
Ecstasy	91	97	**95**
Methamphetamine powder	53	71	**64**
Methamphetamine base	21	-	**23**
Crystal methamphetamine	36	11	**13**
Pharmaceutical stimulants	-	3*	**5**
Cocaine	2	3*	**13**
LSD	9	20	**26**
Ketamine	11	-	**10**
MDA	7	6	**-**
GHB	-	-	**3***
Amyl nitrite	25	9	**10**
Nitrous oxide	11	20	**18**
Cannabis	62	54	**79**
Alcohol	62	80	**77**
Benzodiazepines	2	3	**-**
Psychedelic mushrooms	4	11	**3***
Median length (days) of biggest binge in last six mths (range)	2.5 (2-8)	2.5 (2-5)	**2.5 (2-5)**

Source: PDI regular ecstasy user interviews

13.6 Summary of risk behaviour

- Less than one in ten of the 2005 REU sample (8%) had recently used substances intravenously compared to a similar proportion among the 2004 cohort (9%).
- Methamphetamine was typically the first drug ever injected and the most common drug ever and recently injected. The sharing of needles was relatively rare; however, three out of five had recently shared other injecting equipment such as spoons, tourniquets, and water. One-third of recent injectors had always required others to inject them in the last six months. All recent injecting drug users had obtained injecting equipment from NSP outlets in the preceding six months and none reported difficulty in obtaining needles during this time.
- A large majority (97%) of REU had been sexually active during the six months preceding the interview and most of these (83%) reported recent penetrative sex under the influence of ecstasy and related drugs. Participants were more likely to report some use of protective barriers with a casual partner (81%) in comparison to a regular partner (68%). Participants were slightly less likely to use protective barriers with a regular partner when under the influence of party drugs (68% vs. 58%), but were just as likely to use protective barriers with a casual partner (81% vs. 81%) when under the influence of party drugs.
- Whereas one-third of participants (32%) had been for a sexual health check up in the last year, one-half (51%) had never had a sexual health check up. Two-thirds of the sample had never been tested for hepatitis C or HIV. A single participant reported testing positive for hepatitis C.
- Of those that had driven a car, over half (58%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months. Over half (55%) also reported driving within an hour of taking ERDs in the last 6 months. Most commonly, participants reported driving under the influence of ecstasy, cannabis and methamphetamine powder. Based on a median split for age, a greater proportion of 'older' participants had recently driven under the influence of drugs in comparison to 'younger' participants and those who had driven under the influence of drugs had also been using ecstasy longer and had recently used ecstasy and cannabis more frequently.
- On average, the risks associated with drug driving were considered by REU to be 'low' for cannabis, 'moderate' for ecstasy and methamphetamine, and 'high' for and alcohol and LSD.
- One-third (39%) had recently 'binged' on ecstasy and related drugs (a continuous period of use for more than 48 hours without sleep). Those who had recently 'binged' had first started using ecstasy at an earlier age, had experimented with a greater number of drugs, and had recently used ecstasy more frequently and in larger amounts. They were also more likely to report lifetime injecting drug use, to have used methamphetamine in the last six months, and to have typically used methamphetamine in combination with ecstasy during this time. They also reported higher psychological dependence scores for ecstasy and methamphetamine as measured by the SDS.

14.0 HEALTH-RELATED ISSUES

14.1 Overdose

The REU sample was asked if they had overdosed on any drug at some stage of their life and during the six moths preceding the interview (Table 61). The definition of overdose included passing out or falling into a coma, but does not necessarily indicate that the participant accessed a health service or experienced acute physical problems in relation to overdose. Of the thirty participants that had ever overdosed on any drug, the median number of times that they had overdosed was 2 (range 1-50) and the median length of time since last overdose was six months (range 0.25-144 months). The drugs most commonly involved in the overdose episode were alcohol (60%), followed by cannabis (27%), benzodiazepines (17%), mushrooms (10%), ecstasy (10%), opium (7%), methamphetamine powder (3%), LSD (3%), nitrous oxide (3%) and cold and flu tablets (3%).

Less than one-fifth of the 2005 REU sample (16%) had overdosed on a drug in the preceding six months, which is similar to the proportion among the 2004 sample (18%). Of those that had recently overdosed, the 'main drugs' involved in recent overdose episodes were alcohol (25%, n=4), cannabis (25%, n=4) and benzodiazepines (19%, n=3), followed by ecstasy (13%, n=2), methamphetamine powder (6%, n=1), LSD (6%, n=1), and nitrous oxide (6%, n=1). In thirteen out of the sixteen overdose episodes (81%) participants reported that they were under the influence of other drugs. Other drugs included alcohol (63%, n=10), cannabis (50%, n=8), ecstasy (25%, n=4), methamphetamine powder (13%, n=2), cocaine (6%, n=1), amyl nitrite (6%, n=1), nitrous oxide (6%, n=1), mushrooms (6%, n=1) and opium/cold and flu tablets (6%, n=1).

There was no age difference between those who had and had not recently overdosed. There was a trend for a greater proportion of the male sample (22%) to have recently overdosed in comparison to the proportion of the female sample (9%), χ^2=2.92, p=.087. There was also a trend for a greater proportion of those who had overdosed (56%) to have recently binged on ecstasy (used for more than 48 hours continuously) compared to those that had not overdosed (33%), χ^2=3.26, p=.071. On average, those that had recently overdosed had used cannabis on a significantly greater number of days in comparison to those that had not (81 vs. 12 days); Mann-Whitney U = 410.50, p<.05.

Seven key experts commented on recent overdose episodes that they were aware of. These were typically single accounts of varying severity. Two key experts noted a recent increase in the number of overdoses seen at the venue that they worked at. Three key experts implicated mixing drugs with alcohol in the episodes that they were familiar with and another KE suggested that younger users were more likely to overdose. Two KE with roles in emergency or accident services noted that incidents associated with ERDs are more common at particular times of the year including the end of school/academic year, during warmer weather, the festive season and on special occasions such as AFL grand final and long weekends. One of these KE indicated that such incidents typically involved the use of alcohol and more commonly involved females than males.

Table 61: Overdose among REU, 2004-2005

	2004 n=100	**2005 n=99**
Overdosed on any drug in last 6 months (%)	18	**16**
Which drug (%)*		
Ecstasy	11	**13**
Cannabis	6	**25**
Alcohol	72	**25**
Speed	6	**6**
Ice	-	**-**
Ketamine	-	**-**
GHB	-	**-**
LSD	-	**6**
Nitrous oxide	6	**6**
Benzodiazepines	-	**19**
Ever overdosed on any drug (%)		**30**
Which drug last overdosed on (%)*	n/a	**n=30**
Ecstasy		**10**
Cannabis		**27**
Alcohol		**60**
Speed		**3**
Ice		**-**
Ketamine		**-**
GHB		**-**
LSD		**3**
Nitrous oxide		**3**
Benzodiazepines		**17**
Mushrooms		**10**
Opium		**7**
Cold and flu tablets		**3**

Source: PDI regular ecstasy user interviews
* Percentage of those reporting overdose

14.2 Self-reported symptoms of dependence

14.2.1 Ecstasy

The REU interviewed in 2004 and 2005 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) 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 a the prospect of missing a dose 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.

Close to one-quarter of participants (23%) obtained a score of zero on the ecstasy SDS, and one-quarter (24%) obtained a score of one on the scale: thus, close to half of respondents reported none or few symptoms of dependence in relation to ecstasy use. The median ecstasy SDS score was 2 (range 0-10) compared to a median score of 1 (range 0-7) among the 2004 sample. A score of four on the SDS is considered a reasonable cut-off for predicting DSM-III-R diagnosis of severe amphetamine dependence, and thus the cut-off of five selected in the present study is a more conservative estimate (Topp & Mattick, 1997). Over one-tenth of the 2005 REU sample

(14%) had a score of 5 or above on the ecstasy SDS compared to a similar proportion (11%) among the 2004 sample.

These findings should be interpreted with caution due to the fact that the SDS scale does not have demonstrated reliability or validity in relation to ecstasy use and due to the lack of research in the area of ecstasy dependence (see Topp, Hall & Hando, 1997). Another issue that should be considered 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. One-tenth of regular ecstasy consumers (12%) considered addiction/dependence to be one of the three biggest risks associated with their own ecstasy use (see Section 4.9.2).

The following analyses, examining differences between those with high and low methamphetamine SDS scores, should be interpreted with caution due to small and uneven sample sizes. There was no significant difference between the mean ecstasy SDS scores of males and females or between 'younger' and 'older' participants (based on a median split for age) that had a score of 5 or more on the ecstasy SDS. On average, those with a high ecstasy SDS score had used ecstasy on a significantly greater number of days (26 vs. 16 days or weekly vs. fortnightly); Mann-Whitney U=311.00, p<.01, tended to use a greater number of tablets in a typical session (2.3 vs. 1.9 tablets); Mann-Whitney U=421.50, p=.06, and had used a significantly greater number of tablets in the biggest session of use (6.5 vs.4 tablets), Mann-Whitney U=309.0, p<.01, compared to those with low ecstasy SDS scores. There was also a tendency for them to have used methamphetamine powder on a greater number of days in the preceding six months (8.3 vs. 5.4 days), Mann-Whitney U=424.0, p=.074. Those with high ecstasy SDS scores were more likely to have recently binged on ERDs (used for 48 hours without sleep) compared to those with low scores (26% vs. 7%), χ^2=7.20, p<.01, and were also more likely to have a high score on the methamphetamine SDS (29% vs. 6%), χ^2=7.61, p<.01. Thus, more than one-quarter (29%) of those with a high dependence score on the ecstasy SDS also had a high dependence score on the methamphetamine SDS.

14.2.2 Methamphetamine

REU that had used methamphetamine during the six months preceding the interview (n=75) were asked about how they felt about their use of this drug in the last 12 months, using a version of 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 a prospect of missing a dose 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. Of those who completed the methamphetamine SDS, the majority (87%) were referring to methamphetamine powder (n=65), one-fifth (20%, n=15) were referring to methamphetamine base, and smaller proportions were referring to methamphetamine crystal (3%, n=2) or were not referring to a particular form of methamphetamine (7%, n=5).

The median SDS score for those who had used methamphetamine in the preceding six months was 0 (range 0-11, n=75). Almost two-thirds of those who completed the methamphetamine SDS received a score of zero (61%, n=46), indicated no symptoms of dependence. There was no significant difference between the methamphetamine SDS scores of males and females or 'younger' and 'older' participants (based on a median split for age). A score of four on the SDS in relation to methamphetamine use is considered a reasonable cut-off for predicting DSM-III-R diagnosis of severe amphetamine dependence (Topp & Mattick, 1997). A small proportion of

those who completed the methamphetamine SDS (12%, n=9) had a score of 5 or more on the methamphetamine SDS, and it is reasonable to assume that a proportion of these people had experienced significant psychological symptoms of dependence.

The following analyses examining differences between those with high and low methamphetamine SDS scores should be interpreted with caution due to small and uneven sample sizes. Those with a high methamphetamine SDS score (n=9) had used a greater number of drug types ever (13 vs. 9), Mann-Whitney U=137.5, p<.01, and in the last six months (9 vs. 7), Mann-Whitney U=131.5, p<.01, and had used methamphetamine (any form) on a significantly greater number of days (46 vs. 7), Mann-Whitney U=40.0, p<.01, in comparison to those with a low methamphetamine SDS score. Those with a high methamphetamine SDS score were more likely to have a high ecstasy SDS score than those with a low methamphetamine SDS score (44% vs. 13%) χ^2=5.65, p<.05; were more likely to use typically use methamphetamine in combination with ecstasy (44% vs. 12%), χ^2=6.60, p<.05; more likely to have recently binged on ERDs (used for more than 48hrs without sleep) (100% vs. 36%), χ^2=13.17, p<.01; and more likely to have used drugs intravenously in the six months preceding the interview (33% vs. 7%), χ^2=5.89, p<.05.

14.3 Help-seeking behaviour

Close to one-fifth (17%) of the 2005 REU sample had accessed a health or medical service in relation to their drug use in the six months preceding interview (Table 62), compared to one-tenth (10%) among the 2004 sample (Matthews & Bruno, 2005). The most commonly accessed service was a GP (n=10), followed by counsellor (n=3), emergency (n=2), and first aid (n=2). There were also single reports of respondents accessing hospitalisation, psychologist, psychiatrist, social/welfare worker, and dentist.

There was no significant difference in the proportion of the female (11%) and male (22%) sample that had recently accessed a health service. Those that had recently accessed health services had used a greater number of different drug types at some stage of their lives (12 vs. 8 types), Mann-Whitney U =374.00, p<.01, and tended to have used greater number of drug types in the last six months, (8 vs. 6), Mann-Whitney U =504.5, p=.062, compared to those who had not accessed any health services.

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. Nine participants had accessed a health service in relation to their ecstasy use in comparison to only four among the 2004 sample. Two participants had accessed first aid and a single participant had accessed the emergency medicine department due to acute physical problems. Three participants had accessed a GP due to anxiety, information/advice and teeth grinding/insomnia respectively. Single participants had accessed a counsellor due to anxiety, a social/welfare worker due to dependence/depression, and a dentist due to damage from teeth grinding attributed to ecstasy use.

Eight participants had accessed health services in relation to polydrug use. Five participants had accessed a GP due to the following problems attributed to polydrug use: depression (n=2), addiction/dependence (n=1), acute physical problems (n=1), social/relationship issues (n=1). Single participants had accessed a counsellor due to addiction/dependence or had been hospitalised or accessed the emergency department due to acute physical problems attributable to polydrug use.

Four participants had accessed health services in relation to cannabis use. Single participants had accessed a GP, counsellor, and psychologist all for dependence/addiction related to cannabis use and one participant had accessed a psychiatrist for anxiety/depression attributable to cannabis use. A single participant reported accessing a GP in relation to anxiety attributable to use of methamphetamine base.

KE that worked within treatment-providing organisations typically noted that few of their clients experienced problems that were primarily attributed to the use of ecstasy.

Table 62: Proportion of REU who accessed health services by main drug type, 2005

Service	Any drug	Ecstasy	Alcohol	Metha-done	Cannabis	Meth. powder	Meth. base	Poly drug
GP	**n=10**	n=3			n=1		n=1	n=5
Counsellor	**n=3**	n=1			n=1			n=1
Hospitalisation	**n=1**							n=1
Emergency	**n=2**	n=1						n=1
First aid	**n=2**	n=2						
Psychologist	**n=1**				n=1			
Psychiatrist	**n=1**				n=1			
Social/welfare worker	**n=1**	n=1						
Dentist	**n=1**	n=1						

Source: PDI regular ecstasy user interviews

14.4 Other problems

The sample of regular ecstasy users were asked if their drug use had caused any problems during the six months preceding the interview (Table 63). Two-thirds of the sample (68%) indicated that their drug use had recently caused work/study problems, and two-fifths had recently experienced financial (43%) and relationship/social problems (43%). Consistent with low levels of criminal activity and number of arrests in this group, only six participants (6%) reported that their drug use had caused recent legal/police problems. These figures are relatively consistent with those observed in the previous two years of the study.

Table 63: Self-reported drug-related problems, 2003-2005

	2003 n=100	2004 n=100	**2005 n=100**
Occupational/study problems (%)	47	66	**68**
Financial problems (%)	47	40	**43**
Relationship/social problems (%)	40	37	**43**
Legal/police problems (%)	5	2	**6**

Source: PDI regular ecstasy user interviews

Table 64 shows the main drug attributed to the problems experienced by REU during the six months preceding the interview. Whereas the majority of participants attributed drug-related problems to ecstasy use, this is likely to reflect the 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 attributed problems to included methamphetamine, cannabis, alcohol and methadone.

Those that had recently experienced work/study problems (68% of the sample) mostly attributed them to ecstasy use (57%), followed by cannabis (21%), alcohol (10%), methamphetamine powder (4%), methamphetamine base (4%), polydrug use (1%) and any methamphetamine (1%). Of those experiencing recent work/study problems, the majority of problems were relatively minor, including lack of motivation (41%), reduced work performance (19%) and trouble concentrating (15%). Two-fifths (22%) had taken sick leave or did not attend classes due to drug use and single participants had been sacked/quit (1%) or had left school (1%).

There was no significant difference in the proportion of males (59%) and females (41%) that had recently experienced occupational/study problems in relation to drug use. However, based on a median split for age, a greater proportion of 'older' participants (53%) had experienced work/study problems in relation to drug use in comparison to 'younger' participants (47%), $\chi 2=5.41$, $p<.05$, and the mean age of those that had experienced work/study problems ($M=25$ years, $SD=4.4$) was significantly greater in comparison to those that had not experienced work/study problems in relation to drug use ($M=22$ years, $SD=3.4$), $t(98)=-3.49$, $p<.01$. On average, those that had experienced work/study problems had a higher mean ecstasy SDS score (2.46 vs. 1.59), Mann-Whitney $U=784.0$, $p<.05$ and methamphetamine SDS score (1.75 vs. 0.68), Mann-Whitney $U=409.5$, $p<.05$, in comparison to those that hadn't experienced recent work/study problems.

Of the forty-three participants that had experienced financial problems, two-thirds attributed these to ecstasy use (67%), followed by cannabis (14%), alcohol (7%), methamphetamine base (5%), methamphetamine powder (2%), methadone (2%) and any methamphetamine (2%). Close to half of those who had experienced financial problems (46%) had recently had no money for recreation or luxuries and two-fifths (42%) reported being in debt or owing money. Smaller proportions had experienced more serious financial problems such as having no money for food or rent (7%).

There were no sex or age differences between those that had or hadn't recently experienced financial problems in relation to drug use. Those that had recently experienced financial problems had used a greater number of drug types ever (10 vs. 7 types), Mann-Whitney $U = 557.0$, $p<.01$, and during the six months preceding the interview (7 vs. 6 types), Mann-Whitney $U = 792.5$, $p<.01$, compared to those that hadn't. They had also recently used ecstasy (18 vs. 12 days), Mann-Whitney $U = 1080.0$, $p<.05$, and cannabis (50 vs. 8 days); Mann-Whitney $U = 801.0$, $p<.05$, on a greater number of days during this time. A greater proportion of those that had recently experienced financial problems were lifetime injectors (32% vs. 9%), $\chi^2=9.01$, $p<.01$; had recently used cannabis (98% vs. 83%), $\chi^2=5.80$, $p<.05$; used any form of methamphetamine, (98% vs. 84%), $\chi^2=4.94$, $p<.05$; and had recently binged on ecstasy and related drugs (used continuously for 48 hours without sleep), compared to those that hadn't experienced social problems (51% vs. 30%), $\chi^2=4.69$, $p<.05$.

Of the forty-three participants that had recently experienced relationship/social problems, half attributed these problems to ecstasy use (47%), followed by cannabis (19%), alcohol (7%), methamphetamine powder (9%), methadone (2%) and any methamphetamine (2%). The relationship/social problems experienced by REU were relatively minor, with the majority reporting arguments (42%), or mistrust/anxiety (42%). Smaller proportions reported more serious relationship/social problems such as ending a relationship (14%) or being kicked out of home (2%).

There were no sex or age differences between those that had or hadn't recently experienced social problems in relation to drug use. Those that had recently experienced social problems had used a greater number of drug types ever (10 vs. 8 types), Mann-Whitney $U = 853.5$, $p<.01$, and during the six months preceding the interview (8 vs. 6 types), Mann-Whitney $U = 759.5$, $p<.01$ compared to those that hadn't. They also reported higher frequency of ecstasy use (18 vs. 12 days), Mann-Whitney $U = 927.0$, $p<.05$, methamphetamine (any form) use (4 vs. 3 days), Mann-Whitney $U = 899.0$, $p<.05$, and cannabis use (24 vs. 10 days), Mann-Whitney $U = 896.50$, $p<.05$. Compared to those not reporting social/relationship problems, a significantly greater proportion of those that had experienced social problems had recently used cannabis (100% vs. 81%), $\chi^2=9.32$, $p<.01$, recently binged on ecstasy and related drugs (used continuously for 48 hours without sleep) (62% vs. 39%), $\chi^2= 8.97$, $p<.01$, and had a methamphetamine SDS score of five or more (a reasonable cut-off score suggestive of clinical dependence) (19% vs. 2%), $\chi^2= 8.50$, $p<.01$.

Of the six participants that had experienced legal/police problems due to drug use, two attributed these problems to ecstasy and single participants attributed these problems to methamphetamine powder, cannabis, alcohol and any methamphetamines. Four participants had been arrested in relation to drug use, a single participant had been cautioned by police and a single participant felt like they were under surveillance. Due to the small number of respondents that had recently experienced legal/police problems, demographic analyses were not carried out on these data.

Table 64: Main drug attributed to problems experienced in the last six months, 2005.

	Work/study problems %	Financial problems %	Social problems %	Legal problems %
Any drug	n=68	n=43	n=43	n=6
Ecstasy	57	67	47	33
Methamphetamine powder	4	2*	14	17*
Methamphetamine base	4	5	9	-
Crystal methamphetamine	-	-	-	-
Cannabis	21	14	19	17*
Alcohol	10	7	7	17*
Tobacco	-	-	-	-
Cocaine	-	-	-	-
LSD	-	-	-	-
Methadone	-	2*	-	-
Polydrug use	1*	-	-	
Mushrooms			2*	
Any methamphetamine#	1*	2*	2*	17*

Source: PDI regular ecstasy user interviews
*** n=1**
 # form not specified

14.5 Summary of health-related issues

- Less than one-fifth of the sample (16%) reported that they had overdosed (passed out or fallen into a coma) on any drug in the six months preceding the interview. The main drugs involved in recent overdoses were alcohol (25%), cannabis (25%) and benzodiazepines (19%). Two participants (13%) reported ecstasy to be the main drug involved in overdose. The majority of overdose episodes (81%) were associated with the use of more than one drug, most typically alcohol (63%), cannabis (50%) and ecstasy (25%).
- Close to half (47%) of the REU sample had recently experienced none or few psychological symptoms of dependence in relation to their ecstasy use as measured by the ecstasy Severity of Dependence Scale (SDS). However, over one-tenth (14%) reported experiencing significant symptoms of dependence in relation to ecstasy. High ecstasy SDS scores were associated with greater frequency and quantity of ecstasy use, binge drug use, methamphetamine use and high methamphetamine dependence scores.
- Three-fifths of those who had recently used methamphetamine had experienced no symptoms of psychological dependence in relation to methamphetamine as measured by the methamphetamine SDS. However, over one-tenth (12%) reported experiencing significant symptoms of dependence in relation to methamphetamine. High methamphetamine SDS scores were associated with greater frequency of methamphetamine use, use of methamphetamine in combination with ecstasy, recent binge drug use, and recent injecting drug use.
- Close to one-fifth (17%) of the 2005 REU sample had accessed health services in relation to drug use in the preceding six months, compared to one-tenth (10%) among the 2004 cohort. The most commonly accessed service was a GP (n=10). Five participants reported accessing first aid or emergency services in relation to drug use. Participants were most likely to access services in relation to the use of ecstasy (n=9), polydrug use (n=8), and cannabis (n=4).
- Two-thirds of the sample (68%) had recently experienced work/study problems in relation to drug use, two-fifths had recently experienced financial (43%) and social/relationship (43%) problems, and less than one-tenth (6%) had recently experienced legal/police problems in relation to drug use. Problems were most commonly attributed to ecstasy, alcohol, cannabis, and methamphetamine powder. Whereas the majority of these problems were relatively minor, small proportions experienced more serious problems such as ending a relationship, being kicked out of home, leaving school, being sacked/quitting work, or having no money to pay for food or rent.

15.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

15.1 Reports of criminal activity among REU

Fifteen percent (15%) of the 2005 REU sample had committed a crime within the last month compared to 19% among the 2004 sample and 30% among the 2003 sample (see Table 65). Consistent with previous years, the most common crime was drug dealing (8%). The majority of REU that reported drug dealing for cash profit had done so less than weekly in the last month (n=5) and others had done so at least once a week (n=3). Consistent with these findings, one-tenth (10%) of the 2005 REU sample reported that they had paid for ecstasy through dealing drugs for cash profit during the six months preceding the interview. However, one-quarter of the sample (25%) reported that they had dealt drugs for ecstasy profit (to fund their own use of the drug) during the last six months compared to a smaller proportion (15%) among the 2004 sample.

With the exception of drug dealing, only 9% of the 2005 REU sample had committed a crime during the month preceding the interview. Small proportions reported committing property crime (4%), fraud (3%), and violent crime (2%) during the last month. All of those that had recently committed property crime had done so less than weekly in the preceding month. Three participants had committed fraud less than once a week in the last month and a single participant reported committing fraud on a daily basis. The two participants that had committed violent crime had done so less than weekly in the last month.

Less than one-tenth of the 2005 sample (10%) had been arrested during the 12 months preceding the interview. These participants had been arrested for a variety of offences (see Table 65), with only small proportions having been arrested for drug-related offences including use/possession (1%), dealing/trafficking (2%) and drugs and driving (1%). Small proportions reported that they had received a drug caution or diversion either more than 12 months ago (6%) or in the last 12 months (3%).

The majority of KE did not know or were not aware of any crime among the group of regular ecstasy users that they were familiar with. Six key experts noted that there was some property crime among this group. One KE noted a recent increase in the theft of personal items (phones, handbags) from venues and two KE noted that property crime was generally more common among primary methamphetamine rather than ecstasy users. Other KE noted that violent crime among this group was typically associated with younger users (n=1), alcohol use (n=1) and 'anecdotal' reports of standover tactics (n=2). Several KE noted an increase in the amount of drug dealing during the six months preceding the interview (n=3), and an increase in the number of younger people dealing drugs (n=4).

Table 65: Criminal activity reported by REU, 2003-2005

Criminal activity in the last month	2003 n=100	2004 n=100	**2005 n=100**
Any crime	30	19	**15**
Drug dealing	25	16	**8**
Property crime	4	6	**4**
Fraud	1	-	**3**
Violent crime	-	-	**2**
In the preceding six months:			
Paid for ecstasy through dealing drugs (ecstasy profit)	19#	15	**25**
Paid for ecstasy through dealing drugs (cash profit)		8	**10**
Arrested in the preceding 12 mths	6	3	**9**
Arrested for property crime	1	3	**1**
Arrested for use/possession	-	-	**1**
Arrested for violent crime	-	-	**1**
Arrested for dealing/trafficking	-	-	**2**
Arrested for driving offence	1	-	**-**
Arrested for alcohol and driving	2	-	**2**
Arrested for drugs and driving	-	-	**1**
Arrested for other reason	1	-	**2**
Received drug caution/diversion			
More than 12 months ago*	n/a	n/a	**6**
In the last 12 months*	n/a	n/a	**3**

Source: PDI regular ecstasy user interviews
* Not recorded prior to 2004
# No distinction made between dealing for cash profit and ecstasy profit prior to 2004

15.2 Perceptions of police activity towards REU

The REU sample was asked if there had been any changes in police activity towards ecstasy users during the six months preceding the interview. One-third of the sample (29%) did not know whether there had been any recent changes in police activity, two-fifths (43%) thought that police activity had been stable, one-third thought that police activity had increased (27%), and only a small proportion (1%) thought that police activity had decreased during this time. Those that commented on increased police activity typically noted increased undercover police presence at nightclubs and dance events (n=9), increased number of uniformed police at nightclubs (n=2), and an increased number of 'busts' of both ecstasy users and dealers (n=8). Smaller proportions of respondents noted a recent increase in police activity among the 2004 and 2005 sample in comparison to the 2003 sample. A large majority of the REU sample (85%) indicated that police activity had not made it more difficult for them to score drugs during the six months preceding the interview. Participants responses were varied when they were asked if they thought that using or selling of ecstasy should be legal (see Table 66).

Table 66: Perceptions of police activity by REU, 2003-2005

Perception	2003 n=100	2004 n=100	**2005 n=100**
Recent changes in police activity:			
Decreased	1	4	**1**
Stable	24	35	**43**
Increased	55	31	**27**
Don't know	20	30	**29**
Has police activity made it more difficult for you to score drugs recently?			
Yes	28	17	**15**
No	73	83	**85**
Don't know	-	-	**-**
Using 'ecstasy' should be legal (%)	n/a	n/a	
Always			27
Often			10
Sometimes			25
Never			34
Don't know			4
Selling 'ecstasy' should be legal (%)	n/a	n/a	
Always			18
Often			6
Sometimes			23
Never			48
Don't know			5

Source: PDI Regular ecstasy user interviews

The majority of KE did not comment or did not know of any recent changes in police activity towards ecstasy users. Consistent with user reports, some KE noted an increase in beat police (n=3), an increase in undercover police presence at nightclubs and events (n=2), and a general increase in police presence (n=2). Two law enforcement KE noted a recent increase in the number of searches, seizures and arrests made in relation to ecstasy. Some other KE noted that there was very little police activity in relation to REU (n=3).

15.3 Summary of criminal and police activity

- The self-reported criminal activity among the 2005 REU sample was relatively low. With the exception of dealing drugs only 9% of the REU interviewed had committed criminal offences during the one month preceding the interview and 9% had been arrested during the preceding 12 months. Key experts generally indicated that there was no or little crime among the group of REU that they were familiar with.
- Less than one-tenth (8%) of the 2005 REU sample reported dealing drugs for cash profit during the month preceding the interview compared to greater proportions among the 2003 (25%) and 2004 (16%) samples. In contrast, a larger proportion indicated that they had paid for ecstasy through dealing drugs for ecstasy profit among the 2005 (25%) in comparison to the 2004 sample (15%).
- One-quarter of the REU sample (27%) and several key experts perceived that there had been an increase in police activity towards ecstasy users in the last six months; however, the majority of regular ecstasy users indicated that police activity had not recently made it more difficult for them to obtain drugs.

16.0 SUMMARY

16.1 Demographic characteristics of REU

The sample of 100 regular ecstasy users (REU) interviewed in the present study were typically young, with ages ranging from 18 to 44 years and the majority in their early- to mid-twenties. Participants were generally well educated and either employed on a full-time or part-time/casual basis or currently engaged in full-time study. 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 two years of the study. However, there was less unemployment, injecting drug use and current drug treatment among the 2004 and 2005 samples in comparison to the 2003 sample, possibly reflecting less overlap between the IDU and REU populations in the latter two years of the study.

16.2 Patterns of polydrug use

While the participants were selected on the basis of ecstasy use and over half nominated ecstasy as their drug of choice, polydrug use was the norm among the REU interviewed. Participants had used a median of nine drug types (from an investigation of 20 drug types) at some stage of their lives and a median of six drug types in the six months preceding the interview. Recent use of alcohol, cannabis, tobacco, and methamphetamine powder was common, and one-fifth had recently used methamphetamine base, benzodiazepines and cocaine. Less than one-fifth had recently used amyl nitrite, pharmaceutical stimulants, anti-depressants, ketamine, and crystal methamphetamine. The recent use of GHB, MDA, methadone, opium, buprenorphine, and other opiates was low, and there was no recent use of heroin, 1,4B, and GBL among the sample.

Over the three years of the study there have been trends in the use of some drug types. The proportion reporting recent use of crystal methamphetamine decreased from over one-half of the sample in 2003 (52%) to one-tenth (10%) in 2005. Similarly, the proportion reporting recent use of MDA (21% vs. 3%) and amyl nitrate (43% vs. 16%) has also decreased, whereas recent use of cocaine (7% vs. 20%) and nitrous oxide (25% vs. 41%) has increased. Stable trends in the use of most other drug types were observed, though slight increases in the use of methamphetamine powder, anti-depressants and ketamine were observed between 2004 and 2005.

16.3 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 2004. The prevalence of recent ecstasy use among the Tasmanian sample has remained at least half that of the national estimate during this time, and it is unclear whether there has been any substantial change in the prevalence of ecstasy use in Tasmania over this time.

The participants interviewed in the present study had first started to use ecstasy on a regular basis at 20 years on average and a large majority of the sample had been using ecstasy for two years or more. The entire sample had recently used ecstasy in tablet form and one-tenth had recently used ecstasy capsules or powder. 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 slightly more than fortnightly with a median of two tablets taken orally in a typical session. Snorting of ecstasy was also common, with three-quarters of the sample recently snorting the drug. This may be an issue of concern due to potential damage to mucous membranes, a steeper dose-response curve, and the increased risk of blood-borne viral infections. There was an increase in the number of people that reported recently shelving/shafting ecstasy in comparison to 2004. This

route of administration is potentially more harmful than ingestion, as detoxification by the liver is less for substances absorbed in the large intestine.

There were some concerning patterns of use among the sample. One-quarter (29%) had used ecstasy on a weekly basis or more frequently, two-thirds (67%) typically used more than one tablet in a typical session of use, and one-third (37%) had recently used ecstasy in a 'binge session' (continuous 48 hour period of drug use without sleep). Whereas the long-term effects and risks of extended ecstasy use are largely unknown, 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.

Whereas the average frequency of use of ecstasy was slightly lower among the 2004 relative to the 2003 REU sample, there was a slight increase in frequency in 2005 relative to 2004. The number of ecstasy tablets used in a typical session of use was greater among the 2004 and 2005 samples relative to 2003. The amount of ecstasy used in the biggest session of use was greater among the 2005 (4 tablets) in comparison to 2003 and 2004 samples (3 tablets), but the frequency of 'binge' ecstasy use was lower among the latter two years of the study. Males used significantly larger amounts in a typical and in the biggest session of use in comparison to females. Several KE noted a recent increase in the quantities used by REU, particularly among younger users.

Ecstasy was typically consumed in combination with other drugs. Alcohol, cannabis, and tobacco were commonly used in a typical session of ecstasy use. One-tenth (12%) typically used methamphetamine powder when under the influence of ecstasy compared to one-quarter among the 2003 (25%) and 2004 samples (24%). The use of benzodiazepines and cannabis when 'coming down' from ecstasy was also reduced slightly in comparison to 2004.

The majority of participants (90%) reported drinking alcohol when under the influence of ecstasy and three-quarters of these (78%) typically consumed more than five standard drinks. The proportion reporting binge drinking when under the influence and coming down from ecstasy was greater among the 2004 and 2005 samples when compared to 2003. KE also noted a recent increase in the use of alcohol in combination with ecstasy, particularly among younger users of the drug. The high level of coincident binge alcohol and ecstasy use is an issue of concern due to the increased risk of dehydration when alcohol is combined with ecstasy and the fact that larger quantities of alcohol can be consumed when under the influence of psychostimulants without experiencing immediate effects of intoxication; however, the harms associated with this use still occur. Additionally, most of the overdose episodes reported by REU in the current study involved alcohol and/or polydrug use.

Ecstasy was typically used at music-related venues including dance parties, nightclubs and live music events but was also used at a range of other locations including private parties and private residences. REU reports and anecdotal comments of KE suggest an increase in the use of ecstasy at locations other than dance/events and nightclubs, in particular private residences and public bars.

Qualitative comments of both KE and REU suggest that the use of ecstasy in has become more 'mainstream' and less restricted to dance-related events and nightclubs. There were anecdotal reports of a broadening demographic of people consuming the drug locally, including the use of ecstasy by younger and older people as well as an increase in the social acceptability of the drug. Ecstasy appears to have become enmeshed in drinking culture and is more likely to be used in combination with binge alcohol drinking.

The majority of participants perceived both benefits and risks to be associated with their ecstasy use. Perceived benefits were generally associated with having a fun and enjoyable time, social benefits such as enhanced closeness and enhanced communication with others, the enhanced appreciation of music/dance as well as acute drug effects such as enhanced mood and increased energy. The greatest perceived risks were depression, neurological damage and long-term physical problems among other psychological and neuropsychological risks. Less than one-tenth considered acute physical problems such as vomiting, headaches, dehydration, and body temperature regulation or the acute effects of intoxication, such as risk-taking behaviours, to be major risks.

16.3.1 Price, purity and availability of ecstasy

Whereas there was evidence for an expanding ecstasy market in 2004, marked by decreased price, increased purity, and increased availability of the drug relative to 2003 (Matthews & Bruno, 2005), the market appears to have tightened in 2005, with a slight increase in price and decrease in purity and availability observed relative to 2004.

The median price for one tablet of ecstasy was $45 compared to $40 in 2004 and $50 in 2003, and this price was considered to have remained stable during the preceding six months. The median price reported by KE was $40. Both REU and KE indicated that the price per pill was less when bought in larger quantities.

REU reports on the purity of ecstasy in 2005 were varied, with purity considered to be medium, fluctuating, or high. However, a greater proportion indicated that ecstasy was medium rather than high in purity among the 2005 sample in comparison to 2004. KE typically indicated that the purity of ecstasy fluctuated. There have been limited forensic analyses of the purity of ecstasy tablets seized by Tasmania Police. The median purity of the 33 seizures analysed during the 2003/04 reporting period was 26.0% and ranged from 10.4% to 44.5%. There were no analyses of ecstasy purity reported by Tasmania Police in the 2004/05 reporting period.

Both KE and REU indicated that ecstasy is 'easy' or 'very easy' to obtain and that recent availability had remained stable. Reports of both KE and REU indicate an increase in availability of ecstasy in 2004 when compared to 2003 and a slight decrease in the proportion reporting that ecstasy was 'very easy' to obtain in 2005.

There has been a substantial increase in the number of ecstasy tablets seized by Tasmania Police over the last two financial years, and whereas this had minimal impact on the number of arrests made in relation to ecstasy in the 2003/04 reporting period, there were a greater number of consumer (5) and provider (7) arrests reported in the 2004/05 reporting period relative to previous years (although these numbers remain low).

16.3.2 Ecstasy markets and patterns of purchasing

Consistent with previous years, ecstasy was typically purchased from friends and obtained from friends' homes. A large majority (89%) reported paying for ecstasy using money earned through paid employment. One-quarter (25%) reported dealing drugs for ecstasy profit (offsetting the cost of their own use of the drug) compared to 15% among the 2004 sample. Two-thirds (66%) indicated that they typically purchased ecstasy for themself and others, and the remainder (34%) typically purchased ecstasy only for themselves. 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.

Market factors that were perceived by REU to decrease the price of ecstasy included buying larger quantities, knowing the supplier, and the supplier being close to the source. Factors that were perceived to increase the price of ecstasy included a decrease in availability, buying in a public venue, and not pre-planning purchase. Factors that were not thought to influence the price of ecstasy included an increase in police activity, high MDMA content and decreased availability of a particular brand or logo.

Market factors that were perceived by REU to decrease their use of ecstasy included decreased purity and decreased availability of ecstasy. However, increased availability of ecstasy or crystal methamphetamine was not thought to influence ecstasy use. Negative effects on physical health, mental health, work/study, or relationships were also perceived as factors that would decrease the use of ecstasy for most. Ecstasy use was not perceived to be affected if the chances of being caught by police were lower, and whether or not the penalties for being caught were decreased or increased. Whereas the majority of REU indicated that if friends stopped using this would decrease their own use, increased frequency of use by friends was not thought to influence the use of ecstasy for the majority.

16.4 Methamphetamine

Consistent with previous years, the use of methamphetamine was common among the group of REU sampled in 2005. A large majority had ever used some form of methamphetamine and three-quarters had used some form of methamphetamine in the preceding six months. The median frequency of methamphetamine use was relatively low at six days in the preceding six months (approximately monthly) and it was typically swallowed or snorted and consumed in small quantities (0.1g).

Three-quarters had recently used methamphetamine powder, one-fifth had recently used methamphetamine base, and one-tenth had recently used the more potent crystal methamphetamine form. The frequency of methamphetamine powder use was slightly lower in 2005 when compared to the 2004 sample.

The lifetime (29%) and recent (10%) use of crystal methamphetamine among the 2005 sample was considerably lower in comparison to 2003 when over half (52%) of the sample had recently used the drug. Those that had recently used crystal methamphetamine in 2005 had typically injected or swallowed the drug, whereas the most common route of administration among the

2003 and 2004 samples was smoking. Whereas methamphetamine powder and base were typically used at venues such as dance events or nightclubs, crystal methamphetamine was more likely to be used at private residences.

Less respondents were able to confidently comment on the price, purity and availability of methamphetamine base and crystal methamphetamine in comparison to methamphetamine powder. The median price for one 'point' (0.1 g) of methamphetamine powder was $40 which is consistent with the price reported in 2004 and less in comparison to the price of $50 reported in 2003. This price was considered to have remained stable in the preceding six months. Consistent with previous years, the median price for 0.1 grams of methamphetamine base and crystal methamphetamine was higher at $50.

Consistent with previous years, the purity of methamphetamine base and crystal methamphetamine was considered to be higher than methamphetamine powder. There was little evidence for any recent changes in the purity of any methamphetamine form.

Methamphetamine powder was considered to be 'easy' or 'very easy' to obtain, reports on the availability of methamphetamine base were varied, and crystal methamphetamine was typically considered to be 'difficult' or 'very difficult' to obtain. The current and previous year's data, as well as anecdotal reports of KE, suggest that the availability of crystal methamphetamine to REU in Hobart has decreased substantially since 2003.

16.5 Cocaine

There was evidence for a slight increase in the use of cocaine among the 2005 REU sample compared to previous years of the study. Two-fifths (43%) of the 2005 REU sample had ever used cocaine, compared to one-third (32%) among the 2004 cohort. A greater proportion of males and 'older' respondents had ever used cocaine in comparison to females or 'younger' respondents. One-fifth (20%) had used cocaine during the six months preceding the interview compared to one-tenth (10%) among the 2004 and 2003 (7%) cohorts. Cocaine had been used relatively infrequently with a median frequency of one day in the preceding six months. Cocaine was typically snorted and a median of 0.2 to 0.5 grams used in a typical session.

Few respondents were able to confidently comment on the price, purity, and availability of cocaine in Hobart and as such these estimates should be interpreted with caution. The price for a gram of cocaine ranged from $220 to $500 and this price was considered to have remained stable during the last six months. Reports on the purity of cocaine were varied but it was typically considered to be medium or high and to have remained stable in recent months. Both REU and KE considered the availability of cocaine to be low in Tasmania, which is consistent with indicator data suggesting a low level of cocaine-related harms and low prevalence of cocaine use among the Tasmanian population. However, considering the slight increase in the recent use of cocaine among the 2005 REU sample, continued monitoring of cocaine markets in Tasmania is warranted.

16.6 Ketamine

One-quarter of the 2005 REU sample (24%) had ever used ketamine and one-tenth (11%) had used the drug in the six months preceding the interview. Ketamine was used on an average of three occasions in the preceding six months in relatively small amounts. This, along with anecdotal reports of KE, suggests predominately experimental use by a small number of people amongst this REU cohort. Ketamine was typically swallowed or snorted at private residences and could be purchased in tablet or powder form.

Due to the small number of respondents commenting, estimates of the price, purity and availability of the drug in Hobart should be interpreted with caution. The median price for a ketamine tablet was $20 (range $20-35) and the median price for a gram of ketamine was $190 (range $150-280) and this was thought to have remained stable during the preceding six months. The purity of ketamine was considered to be high or medium and to have remained stable in recent months. Ketamine was typically considered by those that commented to be difficult to obtain.

The availability and use of ketamine among REU in Hobart appears to have decreased since 2003, with a substantial reduction observed in lifetime and recent use of ketamine and fewer respondents able to confidently report on the price, purity and availability of the drug between the 2003 and 2004 samples. While ketamine was used relatively infrequently by a small proportion of people among the 2005 sample, there was a slight increase in use and number of people commenting on the drug in 2005 when compared to the 2004 cohort, indicating a slight market fluctuation and a need for future monitoring of ketamine markets in Tasmania.

16.7 GHB

Consistent with the low level of use reported among the 2003 and 2004 REU cohorts, less than one-tenth of respondents interviewed in 2005 had ever used GHB and only two males had used GHB (orally in liquid form) on two occasions during the six months preceding the interview. There was no lifetime or recent use of GHB-like substances such as 1,4B or GBL among the 2005 REU cohort. A single participant reported on the price, purity or availability of GHB in Hobart making it difficult to delineate clear trends. Patterns of use among REU and anecdotal comments of key experts indicate low availability of GHB in Tasmania and predominantly experimental use by few people. However, considering the potentially harmful nature of GHB, future monitoring of GHB markets in Tasmania is important.

16.8 LSD and other psychedelics

Over half of the 2005 REU sample had used LSD at some stage of their lives and one-third had used LSD in the six months preceding the interview, which is slightly greater in comparison to the 2003 sample. A significantly greater proportion of males had ever and recently used LSD in comparison to the proportion of females. One tab or drop of liquid LSD was taken orally in a typical session of use, and LSD had been used on a median of 1 day in the preceding six months, which is lower than the frequency of use of 2.5 days among the 2004 sample.

The median price for one tab/drop of LSD was $25, compared to a median of $20 reported among the 2003 and 2004 samples. The purity of LSD was perceived by REU to be 'medium' or 'high' and there was some indication for an increase in the perceived purity of the drug relative to 2004. LSD was typically considered to be 'easy' or 'very easy' to obtain and the perceived availability of LSD seems to have increased when compared to the previous two years of the study. A recent increase in availability was also noted by two KE.

Three-fifths of respondents had ever used psychedelic mushrooms and two-fifths had used mushrooms during the six months preceding the interview. A greater proportion of males had ever used mushrooms in comparison to females. Mushrooms had been used on a median of three days in the preceding six months or approximately every two months. Both REU and KE noted a recent increase in the use of mushrooms at the time of the interview that was attributed to the seasonal increase in their availability. Over half of the sample, and a greater proportion of males than females, had used some form of psychedelic (either LSD or mushrooms) in the last six months.

Whereas an increase in the experimental use of the hallucinogenic research chemical 2-CI was noted among the 2004 sample, just a single participant had recently used the drug among the 2005 sample.

16.9 MDA

The lifetime and recent use of MDA among the 2005 sample was considerably lower in comparison to that reported among the 2004 and 2005 samples. Less than one-tenth of the 2005 REU sample had used MDA at some stage of their lives and only three males recently used MDA. Use of MDA was more common among males and 'older' respondents in comparison to females and 'younger' respondents. MDA had typically been used twice or less in the six months preceding the interview, with one capsule consumed orally in a typical session of use. Few respondents were able to confidently comment on the price, purity or availability of MDA, making it difficult to delineate clear trends. However, based on the decline in the use of MDA since 2003 and the comments of several KE, the local availability of MDA in Tasmania appears to be relatively low.

16.10 Patterns of other drug use

A majority of participants had recently used alcohol, cannabis, and tobacco. Alcohol had been used on median of two days per week in the six months preceding the interview. Cannabis had been used on a median of one day per week and the frequency of use was greater for males in comparison to females. Tobacco had recently been used by four-fifths of the sample and over half the sample had smoked tobacco on a daily basis in the last six months, with others smoking tobacco less frequently. The proportion of daily smokers among REU interviewed in the present study is greater in comparison to both national and Tasmanian estimates of prevalence, suggesting a greater prevalence of this risky health behaviour among this population.

There has been a reduction among REU in the recent use of amyl nitrite from two-fifths (43%) in 2003 to less than one-fifth (16%) in 2005. Three-quarters of those that had inhaled amyl nitrite, had done so less than once a month during the last 6 months. The proportion of the sample reporting recent use of nitrous oxide has increased from one-quarter (25%) to two-fifths (43%) in 2005. On average nitrous oxide had been used less than monthly.

One-quarter of the sample had recently used benzodiazepines, on a median of three days per month in the last six months. Recent use of benzodiazepines was more common among 'younger' in comparison to 'older' participants. One-tenth of the sample had recently used anti-depressants, compared to only four participants among the 2004 sample. Seven out of the twelve participants that had recently used anti-depressants had used them on a daily basis.

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. Sixteen percent had recently used pharmaceutical stimulants (such as dexamphetamine or methylphenidate), with a median frequency of approximately once every two

months. Only small proportions of the sample had recently used methadone (1%), and there was no recent use of heroin or buprenorphine. The recent use of pharmaceutical opiates (9%) and alkaloid poppy derivatives (6%) was slightly more common but relatively infrequent.

16.11 Drug information-seeking behaviour

Two-thirds (67%) of the REU sample indicated that they had 'sometimes' bought a drug and it turned out to have different effects than they expected in the last six months. Whereas one-third (36%) of the REU interviewed in 2005 actively sought information about the content/purity of 'batches' of ecstasy pills 'most times' or 'always', the remainder did so half the time or less (37%) or 'never' (27%). Participants typically obtained this information from friends, dealers, and other people as well as websites and personal experience. Five REU reported recent use of pill testing kits. Three out of these five respondents were aware of some limitations of testing kits, and there was evidence that some participants would not take a pill if testing revealed that it contained ketamine (n=2) or if there was no reaction (n=3).

The majority of the REU sample was receptive to harm reduction information. Three-quarters (72%) indicated that they would find pill testing kits personally useful if available locally. Other information resources that were considered useful by REU were information pamphlets, a local website, posters or health outreach workers at events. Whereas the qualitative comments of some KE suggested a reduction in drug information-seeking behaviour and an increase in high risk behaviours among REU, several REU commented on the lack of information available to them on the effects of drugs and ways in which to consume them more safely.

REU were particularly interested in finding out more information about the long-term effects of drug use (physical, psychological, neuropsychological, and neurological) and also considered it to be important that new consumers were aware of the acute effects of drug use and ways in which to use drugs more safely.

16.12 Risk behaviour

Less than one in ten regular ecstasy users (8%) had recently used substances intravenously compared to a similar proportion among the 2004 cohort and one in 5 among the 2003 cohort. Methamphetamine was typically the first drug ever injected and the most common drug ever and recently injected. The sharing of needles was relatively rare; however, three out of five had recently shared other injecting equipment such as spoons, tourniquets, and water. One-third of these recent injectors had always required others to inject them in the last six months. All recent injecting drug users had obtained injecting equipment from NSP outlets in the preceding six months and none reported difficulty in obtaining needles during this time.

A large majority (97%) of REU had been sexually active during the six months preceding the interview and most of these (83%) reported recent penetrative sex under the influence of ecstasy and related drugs. Participants were more likely to report some use of protective barriers with a casual partner (81%) in comparison to a regular partner (68%). Participants were slightly less likely to use protective barriers with a regular partner when under the influence of party drugs (68% vs. 58%), but were just as likely to use protective barriers with a casual partner (81% vs. 81%) when under the influence of party drugs. Whereas one-third of participants (32%) had been for a sexual health check up in the last year, one-half (51%) had never had a sexual health check up. Two-thirds of the sample had never been tested for hepatitis C or HIV. A single participant reported testing positive for hepatitis C.

Of those that had driven a car, over half (58%) reported driving at a time when they perceived themselves to be over the legal alcohol limit during the last six months. Over half (55%) also

reported driving within an hour of taking ERDs in the last 6 months. Most commonly, participants reported driving under the influence of ecstasy, cannabis and methamphetamine powder. Based on a median split for age, a greater proportion of 'older' participants had recently driven under the influence of drugs in comparison to 'younger' participants, and those who had driven under the influence of drugs had also been using ecstasy longer and had recently used ecstasy and cannabis more frequently. On average, the risks associated with drug driving were considered by REU to be 'low' for cannabis, 'moderate' for ecstasy and methamphetamine, and 'high' for alcohol and LSD.

One-third (39%) had recently 'binged' on ecstasy and related drugs (a continuous period of use for more than 48 hours without sleep). Those who had recently 'binged' had first started using ecstasy at an earlier age, had experimented with a greater number of drugs, and had recently used ecstasy more frequently and in larger amounts. They were also more likely to report lifetime injecting drug use, to have used methamphetamine in the last six months, and to have typically used methamphetamine in combination with ecstasy during this time. They also reported higher psychological dependence scores for ecstasy and methamphetamine as measured by the SDS.

16.13 Health-related issues

Less than one-fifth of the sample (16%) reported that they had overdosed (passed out or fallen into a coma) on any drug in the six months preceding the interview. The main drugs involved in recent overdoses were alcohol (25%), cannabis (25%) and benzodiazepines (19%). Two participants (13%) reported ecstasy to be the main drug involved in such overdose experiences. The majority of overdose episodes (81%) were associated with the use of more than one drug, most typically alcohol (63%), cannabis (50%) and ecstasy (25%).

Close to half (47%) of the REU sample had recently experienced none or few psychological symptoms of dependence in relation to their ecstasy use, as measured by the ecstasy Severity of Dependence Scale (SDS). However, over one-tenth (14%) reported experiencing significant symptoms of dependence in relation to ecstasy. High ecstasy SDS scores were associated with greater frequency and quantity of ecstasy use, binge drug use, methamphetamine use and high methamphetamine dependence scores.

Three-fifths of those who had recently used methamphetamine had experienced no symptoms of psychological dependence in relation to methamphetamine as measured by the methamphetamine SDS. However, over one-tenth (12%) reported experiencing significant symptoms of dependence in relation to methamphetamine. High methamphetamine SDS scores were associated with greater frequency of methamphetamine use, use of methamphetamine in combination with ecstasy, recent binge drug use, and recent injecting drug use.

Close to one-fifth (17%) of the 2005 REU sample had accessed health services in relation to drug use in the preceding six months, compared to one-tenth (10%) among the 2004 cohort. The most commonly accessed service was a GP (n=10). Five participants reported accessing first aid or emergency services in relation to drug use. Participants were most likely to access services in relation to the use of ecstasy (n=9), polydrug use (n=8), or cannabis (n=4).

Two-thirds of the sample (68%) had recently experienced work/study problems in relation to drug use, two-fifths had recently experienced financial (43%) or social/relationship (43%) problems, and less than one-tenth (6%) had recently experienced legal/police problems in relation to drug use. Problems were most commonly attributed to ecstasy, alcohol, cannabis, and methamphetamine powder. Whereas the majority of these problems were relatively minor, small proportions experienced more serious problems such as ending a relationship, being kicked out

of home, leaving school, being sacked/quitting work, or having no money to pay for food or rent.

16.14 Criminal activity, policing and market changes

Consistent with previous years, the self-reported criminal activity among the 2005 REU sample was relatively low. With the exception of dealing drugs, less than one-tenth (9%) of the REU interviewed had committed criminal offences during the one month preceding the interview and less than one-tenth (9%) had been arrested during the preceding 12 months. Key experts generally indicated that there was no or little crime among the group of REU that they were familiar with. Less than one-tenth (8%) of the 2005 REU sample reported dealing drugs for cash profit during the month preceding the interview compared to greater proportions among the 2003 (25%) and 2004 (16%) samples. In contrast, a larger proportion indicated that they had paid for ecstasy through dealing drugs for ecstasy profit (to offset the cost of their own use) among the 2005 (25%) in comparison to the 2004 sample (15%). One-quarter of the REU sample (27%) and several key experts perceived that there had been an increase in police activity towards ecstasy users in the last six months. The perceived increase in activity was generally related to covert surveillance, particularly at events and venues, as well as an increase in the number of 'busts' of both consumers and providers. However, the majority of REU indicated that police activity had not recently made it more difficult for them to obtain drugs.

17.0 IMPLICATIONS

It is important to remember that the aim of the PDI 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 users of ecstasy and related drugs and the prevalence of ecstasy and other drug use can not be directly inferred. However, the study is designed to identify emerging trends and important issues, and the findings of the 2005 PDI suggest five key areas for 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 half of the REU interviewed in the current study were actively seeking harm reduction information in relation to the substances that they chose to use, these messages were not necessarily reaching other consumers. Despite this, the majority of REU indicated that that they were receptive to such information. Considering that drug information was typically sought from peers or peer-run organisations, 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. Such a peer-led service would be extremely well-placed to target the following specific risk behaviours identified in the current study: polydrug and binge drug use, binge drinking, unsafe sex, sharing of injecting equipment, and the potential risks of snorting and shafting as routes of administration. The provision of sharps containers and condoms at nightclubs and venues as well as simple reminders in poster form may help to reduce risky behaviours among this population. However, these practices are most likely to be implemented effectively if a non-selective minimum standard for providing harm reduction information and equipment was adopted in nightclubs and other entertainment venues.

2. Further monitoring and investigation of drug driving amongst REU

Over half of participants reported driving under the influence of ecstasy and related drugs, indicating the need for future monitoring and research in this area. Specifically, research into the actual degree of risk associated with driving under the influence of these drugs, as well as factors associated with the decision to drive and the characteristics of these individuals, may be particularly important, so that they may be better targeted for education campaigns. The REU interviewed in the present study considered the risks associated with driving under the influence of cannabis, ecstasy, and methamphetamine to be lower than that of alcohol. In light of recent legislation with regard to drug testing on Tasmanian roads, the PDI offers a unique opportunity to monitor changes in the incidence of drug driving among regular ecstasy consumers, as well as their perceptions of the risks associated with driving under the influence of drugs.

3. Monitoring and dissemination of party drug trend information

The use and availability of the more potent crystal methamphetamine form and substances such as ketamine and MDA seems to have decreased since 2003, and the use of potentially harmful substances such as GHB is currently relatively low in Tasmania. Whereas the use and availability of cocaine is also relatively low, there were indications for an increase in the proportion reporting infrequent use of cocaine among the 2005 REU sample. It is imperative that the use and availability of such drugs is continually monitored in future years in order to identify any emerging trends in a timely fashion. It is also important that health and emergency services and venue and event staff are informed of such emerging trends in illicit drug markets.

4. The provision of pill testing kits

While there are some limitations to the use of commercially available ecstasy 'testing kits', currently there is often very little information available to consumers in regard to the substances contained within the tablets that are sold on the local market, and two-thirds of the participants in the current study indicated that they had sometimes bought a drug and it turned out to have different effects than expected. Limitations aside, use of these kits may allow consumers to be more informed about the tablets that they choose to use, and it was apparent that the consumers interviewed would act on information from testing kits – not taking a pill if it appeared to have an unexpected content. Testing kits can be purchased over the internet but are currently not available from any local source. There may be some benefit in making these available locally on a not-for-profit or cost-recovery basis, or facilitating provision of testing at dance and related events. The use and/or supply of testing kits under these circumstances would also allow for the limitations of these kits to be conveyed more thoroughly and effectively to consumers.

5. Pragmatic drug education programs

Several KE noted an increase in the use of ecstasy by younger people, with some suggesting that high risk behaviours were more common among younger users of the drug. Cohesive education programs within schools may allow younger users to make informed and safer choices in relation to drug use. To maximise the credibility of the information provided, education programs are likely to be most effective if they are peer-delivered, accurate, and explore issues that are of local relevance. By contrast, illicit drug education programs 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, have the real potential to undermine the credibility of this and other research, as well as detracting from the potential for successful harm reduction to occur from such endeavours.

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