J. Johnston and R. Jenkinson

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

NDARC Technical Report No. 246

VICTORIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2005

Findings from the Party Drugs Initiative (PDI)

Jennifer Johnston and Rebecca Jenkinson

Turning Point Alcohol and Drug Centre

NDARC Technical Report No. 246

ISBN 0 7334 2349 3

TABLE OF CONTENTS

LIST OF TABLES iv

LIST OF FIGURES v

ACKNOWLEDGEMENTS vii

ABBREVIATIONS viii

EXECUTIVE SUMMARY ix

1.0 INTRODUCTION 1
1.1 Aims 2

2.0 METHODS 3
2.1 Survey of regular ecstasy users (REU) 3
2.2 Survey of key experts (KE) 4
2.3 Other indicators 5

3.0 OVERVIEW OF REGULAR ECSTASY USERS 7
3.1 Demographic characteristics of the REU sample 7
3.2 Drug use history and current drug use 9
3.3 Summary of demographic characteristics and polydrug use trends of REU 12

4.0 ECSTASY 13
4.1 Use of ecstasy in the general population 13
4.2 Ecstasy use among REU 14
4.3 Summary of patterns of ecstasy use 19
4.4 Price 19
4.5 Purity 20
4.6 Availability 22
4.7 Ecstasy markets and patterns of purchasing ecstasy 25
4.8 Ecstasy-related harms 29
4.9 Benefit and risk perception 32
4.10 Summary of ecstasy trends 34

5.0 METHAMPHETAMINE 35
5.1 Methamphetamine use in the general population 35
5.2 Methamphetamine use among REU 35
5.3 Price 40
5.4 Purity 42
5.5 Availability 44
5.6 Methamphetamine-related harms 47
5.7 Summary of methamphetamine trends 50

6.0 COCAINE 51
6.1 Cocaine use in the general population 51
6.2 Cocaine use among REU 51
6.3 Price 53
6.4 Purity 54
6.5 Availability 56
6.6 Cocaine-related harms 57
6.7 Summary of cocaine trends 60

7.0 KETAMINE 61
7.1 Ketamine use in the general population 61
7.2 Ketamine use among REU 61

7.3 Price 63
7.4 Purity 64
7.5 Availability 65
7.6 Ketamine-related harms 67
7.7 Summary of ketamine trends 68

8.0 GHB 69
8.1 GHB use among REU 69
8.2 Price 72
8.3 Purity 73
8.4 Availability 74
8.5 GHB-related harms 76
8.6 Summary of GHB trends 78

9.0 LSD 79
9.1 LSD use among REU 79
9.2 Price 81
9.3 Purity 81
9.4 Availability 82
9.5 Hallucinogen-related harms 84
9.6 Summary of LSD Trends 85

10.0 MDA 86
10.1 MDA use among REU 86
10.2 Price 87
10.3 Purity 88
10.4 Availability 89
10.5 Summary of MDA Trends 90

11.0 OTHER DRUGS 91
11.1 Alcohol 91
11.2 Cannabis 91
11.3 Tobacco 91
11.4 Psilocybin or 'magic' mushrooms 92
11.5 Benzodiazepines 92
11.6 Anti-depressants 92
11.7 Inhalants 92
11.8 Heroin and other opiates 92
11.9 Other drugs 93
11.10 Summary of other drug use 93

12.0 DRUG INFORMATION-SEEKING BEHAVIOUR 94

13.0 RISK BEHAVIOUR 96
13.1 Injecting and injecting-risk behaviour 96
13.2 Blood-borne viral infections (BBVI) 98
13.3 Sexual risk behaviour 99
13.4 Driving risk behaviour 102

14.0 HEALTH-RELATED ISSUES 105
14.1 Overdose 105
14.2 Self-reported symptoms of dependence 105
14.3 Help-seeking behaviour 106
14.4 Other problems 107

15.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES 109
15.1 Reports of criminal activity among REU 109
15.2 Perceptions of police activity towards REU 110
16.0 SUMMARY 112
16.1 Demographic characteristics of REU 112
16.2 Patterns of polydrug use 112
16.3 Ecstasy 112
16.4 Methamphetamine 112
16.5 Cocaine 113
16.6 Ketamine 113
16.7 GHB 113
16.8 LSD 113
16.9 MDA 114
16.10 Patterns of other drug use 114
16.11 Drug information-seeking behaviour 114
16.12 Risk behaviour 114
16.13 Health-related issues 115
16.14 Criminal activity, policing and market changes 115
17.0 IMPLICATIONS 116
REFERENCES 119

LIST OF TABLES

Table 1: Demographic characteristics of REU sample, 2003-2005 7
Table 2: Lifetime and recent polydrug use of REU, 2003-2005 9
Table 3: Patterns of ecstasy use among REU, 2003-2005 16
Table 4: Price of ecstasy purchased by REU and price variations, 2003-2005 19
Table 5: Patterns of purchasing ecstasy, 2005 26
Table 6: Factors influencing the price of ecstasy, 2005 27
Table 7: Factors influencing the use of ecstasy, 2005 28
Table 8: Perceived benefits of ecstasy use among those who commented, 2005 33
Table 9: Perceived risks of ecstasy use among those who commented, 2005 33
Table 10: Patterns of methamphetamine powder (speed) use among REU, 2003-2005 36
Table 11: Patterns of methamphetamine base use among REU, 2003-2005 37
Table 12: Patterns of crystal methamphetamine use among REU, 2003-2005 39
Table 13: Price of various methamphetamine forms purchased by REU, 2001-2005 41
Table 14: Amphetamine-type stimulants: consumer and provider arrests, Victoria and national, 2004-2005 47
Table 15: Patterns of cocaine use among REU, 2003-2005 52
Table 16 Price of cocaine purchased by REU, 2003-2005 53
Table 17: Cocaine: consumer and provider arrests, Victoria and national, 2004-2005 58
Table 18: Patterns of ketamine use among REU, 2003-2005 62
Table 19: Price of ketamine purchased by REU, 2003-2005 63
Table 20: Patterns of GHB use among REU, 2003-2005 69
Table 21: Price of GHB purchased by REU, 2003-2005 72
Table 22: Patterns of LSD use among REU, 2003-2005 79
Table 23: Prices of LSD purchased by REU, 2003-2005 81
Table 24: Hallucinogens: consumer and provider arrests, Victoria and national, 2004-2005 85
Table 25: Patterns of MDA use among REU, 2003-2005 86
Table 26: Price of MDA purchased by REU, 2003-2005 87
Table 27: Content and testing of ecstasy tablets by jurisdiction, 2005 94
Table 28: Injecting behaviour among REU, 2005 96
Table 29: Injecting drug use history among REU injectors, 2005 96
Table 30: Recent injecting drug use patterns (recent injectors) among REU, 2005 97
Table 31: Context and patterns of recent injection among REU, 2005 98
Table 32: BBVI vaccination, testing and self-reported status, 2005 99
Table 33: Prevalence of sexual activity and number of sexual partners in the preceding six months, 2005 100
Table 34: Drug use during sex in the preceding six months, 2005 101
Table 35: Drug driving in the last six months among REU, 2004-2005 102
Table 36: Overdose in the last six months among REU, 2005 105
Table 37: Proportion of REU who accessed health help by main drug type, 2005 107
Table 38: Self-reported drug-related problems and drugs problems attributed to, 2005 108
Table 39: Criminal activity reported by REU, 2003-2005 109
Table 40: Perceptions of police activity by REU, 2003-2005 110

LIST OF FIGURES

Figure 1: Prevalence of ecstasy use among the population aged 14 years and over in Australia, 1988-2004 i
Figure 2: Usual location of ecstasy use, 2003-2005 17
Figure 3: Location of most recent ecstasy use, 2003-2005 18
Figure 4: Recent changes in price of ecstasy purchased by REU, 2003-2005 20
Figure 5: REU reports of current ecstasy purity, 2003-2005 20
Figure 6: REU reports of change in purity of ecstasy in the preceding six months, 2003-2005 21
Figure 7: Purity of ecstasy seizures by Victorian law enforcement, Jul 2004-Jun 2005 22
Figure 8: REU reports of current availability of ecstasy in the preceding six months, 2003-2005 22
Figure 9: REU reports of changes in availability of ecstasy in the preceding six months, 2003-2005 23
Figure 10: People from whom ecstasy was purchased in the preceding six months, 2003-2005 24
Figure 11: Locations where ecstasy was purchased in the preceding six months, 2003-2005 24
Figure 12: DirectLine calls where drug of concern identified as ecstasy, 1999-2004 30
Figure 13: Monthly totals of ambulance attendance where ecstasy was mentioned in Melbourne, Jan 2003-Dec 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004). 31
Figure 14: Location of usual methamphetamine use by form, 2005 40
Figure 15: Location of most recent methamphetamine use by form, 2005 40
Figure 16: Recent changes in price of various methamphetamine forms purchased by REU, 2005 42
Figure 17: User reports of current methamphetamine purity, 2005 42
Figure 19: Average purity of methamphetamine seizures by Victorian law enforcement, July 2004-June 2005 43
Figure 20: Current availability of methamphetamine forms, 2005 44
Figure 21: 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 in Victoria, 2003-2005 45
Figure 22: Change in the availability of various forms of methamphetamine in the preceding six months, 2005 45
Figure 23: People from whom methamphetamine powder, base and crystal was purchased in the preceding six months, 2005 46
Figure 24: Locations where methamphetamine purchased in the preceding six months, 2005 47
Figure 25: DirectLine calls where drug of concern identified as amphetamines and/or other stimulants, 1999-2004 48
Figure 26: Monthly totals of ambulance attendance where amphetamines were mentioned in Melbourne, Jan 2003-Dec 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004) 49
Figure 27: Amphetamine-related hospital admissions, Victoria and Australia, 1999/00-2003/04. 50
Figure 28: Usual location of cocaine use, 2003-2005 52
Figure 29: Location of most recent cocaine use, 2003-2005 53
Figure 30: Recent changes in price of cocaine purchased by REU, 2003-2005 54
Figure 31: User reports of current purity of cocaine, 2003-2005 54
Figure 32: User reports of changes in cocaine purity in the past six months, 2003-2005 55
Figure 33: Average purity of cocaine seizures by Victorian law enforcement, July 2004-June 2005 55
Figure 34: Current availability of cocaine, 2003-2005 56
Figure 35: Changes in cocaine availability in the preceding six months, 2003-2005 56

Figure 36: People from whom cocaine had been purchased the preceding six months, 2003-2005 57
Figure 37: Locations where cocaine had been purchased in the preceding six months, 2003-2005 57
Figure 38: DirectLine calls where drug of concern identified as cocaine, 1999-2004 58
Figure 39: Cocaine-related hospital admissions, Victoria and national, 1999/00-2003/04. 59
Figure 40: Location of usual ketamine use, 2003-2005 62
Figure 41: Location of most recent ketamine use, 2003-2005 63
Figure 42: Recent changes in price of ketamine purchased by REU, 2003-2005 64
Figure 43: Current purity of ketamine, 2003-2005 64
Figure 44: Recent change in ketamine purity, 2003-2005 65
Figure 45: Current ketamine availability, 2003-2005 65
Figure 46: Changes in availability of ketamine over the past 6 months, 2003-2005 66
Figure 47: People from whom ketamine had been purchased in the preceding six months, 2003-2005 66
Figure 48: Locations ketamine had been purchased from in the preceding six months, 2003-2005 67
Figure 49: Usual location of GHB use, 2003-2005 71
Figure 50: Location of most recent GHB use, 2003-2005 72
Figure 51: Recent changes in price of GHB purchased by REU, 2003-2005 73
Figure 52: REU reports of purity of GHB in the preceding six months, 2003-2005 73
Figure 53: REU reports of change in purity of GHB in the preceding six months, 2003-2005 74
Figure 54: Current availability of GHB, 2003-2005 74
Figure 55: Change in GHB availability in the preceding six months, 2003-2005 75
Figure 56: People from whom GHB had been purchased the preceding six months, 2003-2005 75
Figure 57: Locations where GHB had been purchased in the preceding six months, 2003-2005 76
Figure 58: Monthly totals of ambulance attendance where GHB was mentioned in Melbourne, Jan 2003-Dec 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004). 77
Figure 59: Usual location of LSD use, 2004-2005 80
Figure 60: Location of most recent LSD use, 2004-2005 80
Figure 61: Recent changes in price of LSD purchased by REU, 2005 81
Figure 62: REU reports of purity of LSD in the preceding six months, 2003-2005 82
Figure 63: REU reports of change in purity of LSD in the preceding six months, 2003-2005 82
Figure 64: Current LSD availability, 2003-2005 83
Figure 65: Changes in availability of LSD, 2003-2005 83
Figure 66: People from whom LSD had been purchased in the preceding six months, 2004-2005 84
Figure 67: Locations LSD had been purchased from in the preceding six months, 2004-2005 84
Figure 68: Usual location of MDA use, 2004-2005 87
Figure 69: Location of most recent MDA use, 2004-2005 87
Figure 70: Recent changes in price of MDA purchased by REU, 2003-2005 88
Figure 71: REU reports of purity of MDA in the preceding six months, 2003-2005 88
Figure 72: REU reports of change in purity of MDA in the preceding six months, 2003-2005 89
Figure 73: Current MDA availability, 2003-2005 89
Figure 74: Changes in availability of MDA, 2003-2005 89
Figure 75: People from whom MDA had been purchased in the preceding six months, 2003-2005 90
Figure 76: Locations MDA had been purchased from in the preceding six months, 2004-2005 90

ACKNOWLEDGEMENTS

The PDI is 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.

We thank the following individuals and organisations for assisting in access to and the collation of indicator data:

- Mark Stoovè, Stefan Cvetkovski, Sharon Matthews and Susan Clemens, Turning Point Alcohol and Drug Centre;
- Rebecca Monahan, Deborah Stephen and Cate Quinn from Victoria Police, Forensic Services Department;
- Amanda Roxburgh, National Drug and Alcohol Research Centre.

We would like to acknowledge Craig Fry for his involvement in the coordination of the 2005 Melbourne PDI study. We thank Bernadette McGrath, Robyn Dwyer, Monica Barratt and Belinda Grant who provided advice and assisted in recruiting and interviewing study participants.

Thanks go to Paul McElwee from Turning Point Alcohol and Drug Centre for database development and assistance, and to Jennifer Stafford (National Coordinator of the Party Drugs Initiative during 2004) and Matthew Dunn (NSW Coordinator of the Party Drugs Initiative during 2004) at NDARC for assistance.

We are grateful to the key experts who generously donated their time and support to this study. As always, we acknowledge that studies of illicit drug users could not occur without the participation of the users themselves. We thank the 100 ecstasy users who gave their time and trust to provide us with the important information contained in this report.

ABBREVIATIONS

1,4B	1,4-Butanedoil
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
A&TSI	Aboriginal and/or Torres Strait Islander
BBVI	Blood-borne viral infections
ERD	Ecstasy and related drugs
GBL	Gamma butyrlactone
GHB	Gamma-hydroxy-butyrate
HBV	Hepatitis B virus
HCV	Hepatitis C virus
IDRS	Illicit Drug Reporting System
KE	Key expert(s)
LSD	*d*-lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylenedioxymethamphetamine
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NSW	New South Wales
REU	Regular ecstasy user(s)
PDI	Party Drugs Initiative

EXECUTIVE SUMMARY

This report presents the results from the third year of a study monitoring ecstasy and related drug (ERD) trends in Victoria. A feasibility trial of this research was conducted in 2000 and 2001 in NSW, QLD and SA, and in 2002 the study was continued in those jurisdictions. 2003 marked the first year of a two-year national trial of the study, with the addition of capital cities in Western Australia, the Northern Territory, the Australian Capital Territory, Tasmania and Victoria.

The demographic characteristics, patterns of drug use, and perceptions of the price, purity and availability of ERDs among a sample of regular ecstasy users (REU) are described in this report. Their severity of dependence on ecstasy and methamphetamines, perceptions of the effects of drug use (e.g. benefits and risks), health risk behaviours and criminal behaviour are also reported. These findings are triangulated with information from key expert (KE) and secondary indicator data sources in an attempt to minimise biases and weaknesses inherent to each source of data. These methods are employed to gain an understanding of the current ERD markets in Melbourne, Victoria. Where appropriate, 2005 findings are compared to findings from the previous two years and implications of the results and the nature and characteristics of ERD markets are discussed.

Demographic characteristics of regular ecstasy users

The 2005 Victorian REU sample was typically aged in their mid-twenties and lived either in rental accommodation or in their family home. Most had completed high school, a substantial proportion had completed post-secondary qualifications, and participants were typically employed and/or studying full-time.

Patterns of drug use among REU

Polydrug use was the norm among the 2005 PDI participants, a pattern of use confirmed among ERD users more generally by the KE reports. The REU sample reported lifetime use of a median of 11.5 drug types and recent use of eight – levels comparable to those reported by the 2003 and 2004 REU samples. The drugs used by the 2005 sample were also generally comparable to previous years, with both lifetime and recent use of alcohol, cannabis, tobacco and methamphetamine powder commonly reported. There have been some changes over the three years of the Victorian PDI, however, with reductions in reported levels of recent use of crystal methamphetamine and GHB, and lower levels of lifetime and recent methamphetamine base, ketamine and nitrous oxide reported in 2005 than in the previous years. In addition, the levels of recent cocaine use have increased from 2003 to 2005. Just over half (52%) the sample reported bingeing on drugs (defined as continuous use of drugs for more than 48 hours) in the six months prior to interview, most often on ecstasy, methamphetamine powder, cannabis and alcohol. Consistent with the 2004 findings, a small proportion (16%) of the 2005 REU sample reported having ever injected a drug.

Ecstasy

The 2005 REU sample reported first use of ecstasy, on average, in their late teens. Although there was a wide range of frequencies and amounts of ecstasy used by the 2005 REU sample, over half (53%) reported using ecstasy pills fortnightly or less frequently. The median number of ecstasy pills used in a session was reported as two, with a median of three used in a heavy session. Most of the 2005 REU sample reported the use of other drugs in combination with ecstasy (97%) and during the 'comedown' from ecstasy (88%). Ecstasy pills are most commonly used orally. Regular ecstasy users take ecstasy in a wide range of locations, most commonly nightclubs, dance parties/raves/doofs, private homes/parties and at live music events. The perceived (user-defined) benefits of ecstasy use include having fun, enhanced bonding with others, and enhanced

mood and communication. The user-defined risks of ecstasy use include psychological/mental health concerns, physical harms and neuropsychological harms.

Price, purity and availability of ecstasy

The price of ecstasy appears to have remained stable over the previous three years, with ecstasy typically costing $30 per pill (although lower prices tend to be paid for bulk purchases). The purity of ecstasy tends to be rated as medium to high, although many users perceived purity to fluctuate. Ecstasy remains readily available according to user reports, and is predominantly sourced from friends or known dealers in private residences and nightclubs.

Ecstasy markets and patterns of purchasing

Ecstasy is obtained via a range of methods, most commonly by paid employment and being given ecstasy by friends or partner (being 'shouted'). Regular ecstasy users tend to have a number of people they can purchase ecstasy from, typically purchase for themselves and others, and purchase a median of five pills per transaction. In addition to ecstasy, most regular ecstasy users can obtain a range of other drugs from the dealers, most commonly methamphetamine powder and cannabis.

Methamphetamine

Of the three forms of methamphetamine, 'speed' is most widely used by regular ecstasy users (in terms of both lifetime and recent use), followed by 'crystal meth' and then 'base'. Regular ecstasy users commonly use speed in conjunction with ecstasy and during binges. Methamphetamines are used in a variety of locations, predominantly nightclubs, and dance parties and in private homes. The three forms of methamphetamine are used in a range of ways: speed is mostly commonly snorted, whereas base is predominantly swallowed and crystal meth smoked.

The price of the three forms of methamphetamine has remained stable, with crystal meth (median of $385 per gram) more expensive than speed (median of $180 per gram) and base (median of $200 per gram). The purity of base and crystal meth is high and stable, whereas the purity of speed is less consistent. All forms of methamphetamines, however, appear to be readily available (although access to crystal meth has declined), and are most commonly acquired through friends and known dealers.

Methamphetamine use, particularly crystal methamphetamine use, has the potential to be associated with considerable harms (i.e. violence and mental and physical health problems).

Cocaine

A relatively high proportion of regular ecstasy users report lifetime use of cocaine. Levels of recent use reported by the 2005 REU sample (63%) were higher than those reported by both the 2003 (35%) and 2004 (48%) samples. Regular ecstasy users, however, tend to use cocaine infrequently, typically snorting it and using it in nightclubs and private homes.

Perhaps contributing to the relatively low frequency of recent use, cocaine is an expensive drug (median $300 per gram), with its purity typically rated as medium or low. Although there is little consistency in reports of the availability of cocaine, availability was most commonly reported as stable over the past six months. Cocaine is commonly purchased from friends in friends' homes.

Ketamine

Smaller proportions of the 2005 REU sample reported lifetime (56%) and recent (35%) use of ketamine than in 2003 and 2004. Those from the 2005 sample reporting recent ketamine use typically use it infrequently, most commonly in private homes.

The purity of ketamine is generally reported high, with price (median $180 per gram) and purity reported as stable. Reports of ketamine availability are inconsistent, with a recent trend of easy and stable availability. Ketamine is most commonly purchased from friends and known dealers in private homes and dance parties/raves/doofs.

GHB

Reports from the 2005 Victorian PDI suggest moderate prevalence of lifetime and low prevalence of recent GHB use among regular ecstasy users. Indeed, fewer of the 2005 REU sample reported recent GHB use (16%) than the 2004 sample (27%), although those from the 2005 sample reporting recent use reported more GHB frequent use.

GHB is used across a wide range of locations, predominantly private homes, dance parties and nightclubs. GHB is inexpensive (median $2.50 per ml) and the price has remained stable. Current GHB purity is regarded as medium to high, but there is little consensus about recent changes in purity. GHB is readily available and availability has remained stable. GHB appears to be increasingly being purchased from known dealers in their homes.

There remains a considerable level of concern regarding GHB, specifically GHB-related overdose, among professionals working in a range of capacities with regular ecstasy users.

LSD

Evidence suggests a high prevalence of lifetime use of LSD with moderate levels of recent use among regular ecstasy users. Recent users report infrequent use of LSD across a wide range of locations, predominantly 'outdoors', private homes, and at dance parties.

LSD is relatively cheap (median $15 per tab) and the price has remained stable. Current LSD purity is regarded as high, with purity described as stable. There is little consistency in the reported current availability of LSD, although availability tends to be reported as stable over the previous six months. Regular ecstasy users most commonly purchase LSD from friends in private homes.

MDA

Reports suggest low prevalence of lifetime and recent use of MDA among regular ecstasy users. Recent users report infrequent use of MDA across a wide range of locations, predominantly nightclubs and private homes. It is difficult to comment on trends in the price, purity and availability of MDA given the small number of respondents able to comment in 2005.

Patterns of other drug use

Reports from the 2005 Victorian REU sample and KE suggest almost universal lifetime and recent use of alcohol, and high prevalence of alcohol use in conjunction with (73%), and during comedown from ecstasy (35%). Indeed, a larger proportion of the 2005 REU sample reported drinking during the comedown period, drinking larger quantities, and drinking during binges, than of the 2004 REU sample.

High lifetime and recent use was also reported for cannabis, which was also commonly used in conjunction with ecstasy (50%) and during the comedown period (56%). Nearly one-quarter (23%) of recent cannabis smokers reported using it daily during the six months prior to interview. Very high lifetime and recent use was reported for tobacco, with many REU being daily tobacco smokers. Over half the REU sample reported having ever used psilocybin mushrooms, with nearly one in five reporting recent use. Over half of the REU sample report lifetime use of benzodiazepines, with more than one-third reporting recent use. The 2005 Victorian REU reported relatively low levels of lifetime and recent use of anti-depressants, inhalants and heroin and 'other opiates'.

Drug information-seeking behaviour

The majority (91%) of the 2005 REU Victorian sample reported attempting to find out the content and purity of pills sold as ecstasy at least some of the time, most commonly asking friends who had taken it (79%) or asking dealers (63%). Slightly more than one-third (38%) of the sample reported personal use of testing kits. There was a moderate level of awareness of the limitations of testing kits among those who reported having used them, with over half (56%) able to comment on the limitations. The findings also suggest that the results of pill testing may influence the drug use behaviour of regular ecstasy users: nearly two-thirds (62%) of those participants reporting personal use of testing kits indicated that they would not take a pill if test results suggested that it contained ketamine, and over three-quarters (79%) reported that they would not take a pill which produced no reagent test reaction. Participants were also asked what information sources they would find most useful if they were made locally available, with web sites (61%) and testing kits (60%) receiving the most support.

Risk behaviour

Evidence from the current study suggests that there are low levels of injecting drug use by regular ecstasy users, with the sharing of needles rare among those regular ecstasy users reporting injecting. The sharing of other injecting equipment (i.e. spoons or other mixing equipment, water and/or filters) is, however, more common. This population appear not to experience difficulties in accessing injecting equipment, most commonly accessing equipment through Needle and Syringe Programs (NSPs) and chemists. Among regular ecstasy users reporting recent injection, there appears to be low levels of HBV vaccination and low levels of HCV and HIV infection. These findings, however, need to be interpreted with caution, given the small numbers of participants reporting recent injecting behaviour.

Regular ecstasy users appear to be a relatively sexually active group, among whom condom use with regular sex partners is infrequent, but with casual partners relatively frequent. Unsurprisingly, this group tend to report having sex while under the influence of drugs, most commonly ecstasy, cannabis, alcohol and speed. A small proportion of those who had had casual sex under the influence in the past six months reported that they never used condoms when doing so.

The current study also suggests that risky driving practises are relatively common among regular ecstasy users: over half (58%) of the REU sample who reported having driven in the six months prior to interview reported having driven soon after (i.e. within one hour) of taking any illicit drug/s and slightly more than one-third (35%) reported having driven under the influence of alcohol (i.e. over the legal limit). Those reporting driving after using illicit drugs most commonly did so following ecstasy or speed use. It will be of interest to determine the influence of the recently introduced random drug driving tests on the levels of drug driving among this population.

Health-related issues

Although not a commonly reported experience among regular ecstasy users, overdose is a significant harm associated with ERD, and particularly GHB use.

The evidence suggests that small proportions of regular ecstasy users are dependent on ecstasy and/or methamphetamines, as indicated by scores on the Severity of Dependence Scale (SDS).

The participants in the current study reported low rates of health and treatment services utilisation for their ERD use. This appears to be a result of a number of factors including service utilisation not being necessary due to generally infrequent patterns of use and low levels of harms, and, among those experiencing harms, a lack of recognition that such harms are

associated with ERD use. From the reports of both the REU sample and KE, GPs and counsellors appear to be the treatment types most commonly accessed by regular ecstasy users.

The findings suggest that considerable proportions of regular ecstasy users experience occupational/study, financial and relationship/social problems due to their use of ERDs. It is important to note, however, that users may consider the majority of these problems as relatively minor in nature and that few experience legal/police problems associated with their ERD use.

Criminal activity, policing and market changes

The reports of the 2005 REU sample and KE suggest that the majority of regular ecstasy users do not undertake criminal activities and/or experience legal problems. A considerable proportion, however, appear to be involved in dealing drugs, either for ecstasy or cash profit.

Although there was a widespread perception among the 2005 REU sample that police activity had recently increased – as indicated by an increased presence of sniffer dogs, increased police presence at specific events and venues in general and the introduction of drug-driving buses – the majority reported that police activity had not made it more difficult to obtain ERDs.

Conclusions

The results reported here describe trends in the market for ecstasy and related drugs in Victoria, and provide comparisons with the findings of the 2003 and 2004 studies. Many characteristics of ERD use reported in the previous Victorian and national reports (e.g. Breen et al., 2003) are confirmed in the current study, perhaps suggesting a level of stability in this illicit market. Regular ecstasy users are typically aged in their mid-twenties, are well educated and tend to be employed and/or students.

Polydrug use appears to be the norm among regular ecstasy users, with a range of drugs used in conjunction with and during the comedown from ecstasy. Binging on drugs also appears to be common by this population, although few engage in intravenous drug use.

Many of the drugs investigated in this research (e.g. ecstasy, methamphetamine powder) were identified as readily available, although some classes of drug (e.g. cocaine and crystal meth) appear more difficult to access or are highly variable in their availability. Similarly, there was a degree of variability in the frequency with which some drugs were used. Ecstasy, speed and cannabis were used regularly, whereas cocaine was used infrequently and opportunistically.

In general, risk behaviours, health-related problems and criminal activity among REU were relatively uncommon. However, considerable proportions of REU reported driving soon after taking drugs (both ERDs and alcohol) and participating in dealing. Problems associated with ERD use tend to involve work, study and social relationships, and were reported by a substantial proportion of participants.

Implications

This third consecutive year of the Victorian PDI study has provided further indication of the patterns and characteristics of ERD use and related consequences in Melbourne. Patterns of polydrug use, binge drug use, the frequency and locations where some drugs are used, and the availability of many drugs have shown a degree of consistency across the three years of data collection. Other characteristics, such as the prevalence of recent GHB and cocaine use, were inconsistent across time and warrant further exploration.

With increasing community interest in the patterns and characteristics of ERD use, the Victorian PDI represents a key knowledge base from which to further explore these local markets. The primary aim of the national PDI was to provide a 'snapshot' of the characteristics of regular ecstasy use in Australia. Although the data collection methods described in this report have

several limitations, the findings provide information that can be used to inform other research with the capacity to target emergent questions relating to regular ecstasy use (see below).

The findings of the 2005 Victorian PDI study suggest the following recommendations:

1. Polydrug use by REU, associated harms and explorations of harm reduction strategies warrant further investigation.
2. The wide range of settings in which ERDs are used necessitates a broadening of the settings and target audiences of harm reduction messages.
3. Targeted research examining the extent and nature of injecting drug use in ecstasy-using populations is required. Interventions addressing issues including the risks of sharing *any* injecting equipment and increasing awareness of HBV vaccination may usefully be developed.
4. GHB use continues to be associated with increased risk of harm, especially overdose. The influence of the recent anti-GHB campaigns' influence on drug use behaviour and attitudes towards GHB users could usefully be examined.
5. Problems experienced by regular ecstasy users and the perceived risks of ecstasy use, warrant further exploration. Increased understanding of such issues may have implications for the development of both prevention and harm reduction strategies.
6. A notable proportion of regular ecstasy users appear to experience dependence on ecstasy and/or methamphetamines. Levels of dependence on a range of drugs in this polydrug using population need to be explored further.
7. There is evidence of low levels of treatment utilisation among regular ecstasy users. Reasons for this (beyond low levels of use and harms) should be explored. Such research may usefully inform the development of a tool designed to increase recognition of problematic use and encourage treatment utilisation among those experiencing harms.
8. Regular ecstasy users report relatively high levels of driving under the influence of both alcohol and ERDs. Targeted research is needed in this area, particularly in the context of Victoria's new 'drug-driving' testing initiatives and the impact such initiatives may have on behaviour. Attitudes towards these initiatives and drug driving more generally need to be assessed to allow for education and awareness campaigns to be developed.
9. Although experienced by a minority of regular ecstasy users, overdose events are a significant concern. Little is known about the circumstances around overdose, hampering efforts to both prevent and treat such events. Further research examining such factors is a priority.
10. There is a lack of suitable resources for users following adverse events (i.e. overdose) outlining harm reduction strategies, and the signs and symptoms of overdose, to allow early identification. The development of such resources is a priority.
11. Despite relatively high levels of reported dealing, there appears to be a general lack of awareness of the criminality of on-selling and dealing/supplying to friends among regular ecstasy users. These issues need to be examined in greater detail, potentially informing the development of resources designed to raise awareness of such issues and the potential penalties of such behaviour.
12. There is evidence that the majority of regular ecstasy users attempt to determine the content and purity of ecstasy pills prior to taking them, and that, although only a small proportion have used testing kits, many would do so if they were more widely available.

Further, the results of pill tests may influence drug use behaviour. More detailed research examining ways in which pill testing may influence drug use is required to inform evidence-based policy.

1.0 INTRODUCTION

The Illicit Drug Reporting System (IDRS) is an annual study funded by the Australian Government Department of Health and Ageing and the National Drug Law Enforcement Research Fund (NDLERF). It has been conducted on an annual basis in NSW since 1996, Victoria since 1997 and in all states and territories of Australia since 1999.

The IDRS aims to provide a reliable method of monitoring emerging jurisdictional trends in the price, purity, availability and use of opiates, cannabis, cocaine, amphetamines and other drugs. It is intended to serve as a strategic early warning system, identifying emerging trends of local and national concern in various illicit drug markets. The IDRS is designed to be sensitive to such trends, providing data in a timely fashion, rather than to describe phenomena in detail. The drug trends information obtained from this study is intended to inform health and law enforcement sector policy and program responses to illicit drugs, as well as to identify areas and issues requiring further investigation (Darke, Hall & Topp, 2000; Topp, Degenhardt, Kaye, & Darke, 2002).

The IDRS data collection consists of three components: interviews with illicit drug users, KE interviews with individuals who work with illicit drug users, and the collection of secondary indicator data sources (such as surveys of drug use in the general population, data on drug seizures, arrest data, hospital accident and emergency data and so on). These three data sources are triangulated against each other in order to minimise the biases and weaknesses inherent to each one.

The IDRS, however, has historically not provided clear data on party drug use trends. This is because the sentinel group chosen for study purposes has been injecting drug users (IDU) recruited mostly through Needle and Syringe Programs. The majority of these IDU have been primary heroin users whose polydrug use extended to other opiates and CNS depressants, but not to ecstasy and related drugs to the same extent (Breen et al., 2003; Breen, Topp, & Longo, 2003).

Given the significant demonstrated potential for health and other harms associated with party drug misuse (Vincent, Shoobridge, Ask, Allsop & Ali, 1998; Williamson, Gossop, Powis, Griffiths, Fountain & Strang, 1997; Deehan & Saville, 2003; Degenhardt & Topp, 2003; Topp, Hando, Dillon, Roche & Solowij, 1999), there is an imperative for broadening existing drug trend monitoring systems to facilitate a more sensitive mechanism for detecting trends in this area. The greatest opportunity for achieving this is by extending current monitoring methods to new sentinel groups and settings. With increasing community interest in the patterns and characteristics of party drug use, the Victorian Party Drugs Initiative (PDI) represents a timely move to gather information about these local markets[1].

In 2000, NDLERF funded a two-year, two-state trial of the feasibility of monitoring emerging trends in ecstasy and other related drug markets using the extant IDRS methodology. For the purposes of the study, the term 'party drug' is considered to include drugs that are routinely used in the context of entertainment venues such as nightclubs or dance parties. This includes drugs such as ecstasy (MDMA), methamphetamine, cocaine, LSD, ketamine, MDA (3,4-methylenedioxyamphetamine) and GHB (gamma-hydroxybutyrate)[2]. The findings of the two-year trial (Breen, Topp et al. 2002) are reported elsewhere.

---

[1] See the Drugs & Crime Prevention Committee's discussion paper 'Inquiry into amphetamine and 'party drug' use in Victoria' as a good source for further reading.

[2] For further information about these and other party drugs see: www.adf.org.au; www.bluelight.nu; www.erowid.org

The sentinel population examined in this report (and in the 2003 and 2004 PDI Victorian reports) are regular ecstasy users. The findings in this report provide a summary of trends in ecstasy and other 'party drug' use detected in Melbourne, Victoria in 2005 through the conduct of the third year of the PDI study. Comparisons are also made between results reported in the 2003 and 2004 PDI studies. The trends described in this report have been extrapolated from the three data sources – interviews with current regular ecstasy users, interviews with individuals who have contact with ecstasy users through their work, and the collation of indicator data. As with the core IDRS, the data sources are triangulated in order to minimise the biases and weaknesses inherent to each. Consistency between the main IDRS and the ecstasy and related drugs study was maintained where possible, as the IDRS has demonstrated success as a monitoring system (Shand, Topp, Darke, Makkai & Griffiths, 2003; Topp, Degenhardt, Day & Collins, 2003; Topp et al., 2002; Topp, Day, Degenhardt & Collins, 2003). Consequently, the focus is on the capital city, as new trends in illicit drug markets are more likely to emerge in large cities rather than regional centres or rural areas.

1.1 Aims

The overall aim of the 2005 Victorian PDI was to extend to a third year the routine monitoring of key party drug market indicators in Melbourne. The specific aims of the study were to:

1. describe the characteristics of a sample of current ecstasy users interviewed in Melbourne;

2. examine the patterns of ecstasy and other drug use of this sample;

3. document the current price, purity and availability of ecstasy and other related drugs in Melbourne;

4. examine participants' perceptions of the benefits of ecstasy and other party drug use;

5. examine participants' perceptions of the incidence and nature of ecstasy- and other party drug-related harm, including physical, psychological, financial, occupational, social and legal harms;

6. identify emerging trends in the party drug market that may require further investigation;

7. where appropriate, provide a comparison of 2005 findings with those reported in the 2003 and 2004 PDI reports.

2.0 METHODS

The 2005 Party Drugs Initiative used the methodology trialled in the feasibility study (Breen, Topp et al. 2002) to monitor trends in the markets for ecstasy and other ecstasy and related drugs, and replicate the methods used in the 2003 and 2004 studies. The three main sources of information used to document trends were:

1. Face-to-face interviews with current regular ecstasy users;

2. Telephone and face-to-face interviews with KE who, through their work, have regular contact with ecstasy users in Melbourne; and

3. Indicator data sources such as party drug-related drug treatment episodes, the purity of seizures of ecstasy analysed in Victoria, and prevalence of use data drawn from the National Drug Strategy Household Surveys.

These three data sources were triangulated, so that different data sources were used to validate each other and provide a more reliable indication of emerging trends in drug use and party drug markets.

2.1 Survey of regular ecstasy users (REU)

The sentinel population chosen to monitor trends in party drug markets consisted of people who reported regular use of tablets sold as 'ecstasy'. A range of drugs fall into the category ecstasy and related drugs, and ecstasy can be considered one of the main illicit drugs used in Australia. It is the second most widely used illicit drug after cannabis, with 3.4% of the Australian population aged 14 years and older estimated to have used it in the last 12 months (Australian Institute of Health and Welfare 2005).

Further, a sample of this population was successfully recruited and interviewed for both the two-year feasibility trial (2000-2001) in NSW, QLD and SA, as well as the subsequent implementation of the PDI in 2002 in these jurisdictions. The findings from these studies provide further evidence of the central role of ecstasy to the various party drug markets of Australia (White, Breen & Degenhardt, 2003). Therefore, regular ecstasy users, who were used in the 2003 and 2004 PDI studies, have again been used in the 2005 study to provide information on party drug markets.

For the purpose of this study 'regular use' was defined as use of ecstasy at least once a month for the previous six months. Participants were also required to have resided in the Melbourne metropolitan area for the 12 months prior to the interview.

2.1.1 Recruitment

A total of 100 regular ecstasy users were interviewed for the Victorian 2005 PDI. All of the participants resided in the Melbourne metropolitan region and were recruited through a purposive sampling strategy (Kerlinger 1986). This strategy included advertisements in entertainment street press and online forums, gay and lesbian newspapers, interviewer contacts, flyers at retail outlets (for example, music stores and clothing shops) and at bars and cafes, and 'snowball' procedures (Biernacki and Waldorf 1981). 'Snowballing' is a means of sampling 'hidden' populations which relies on peer referral, and is widely used to access illicit drug users both in Australian (Solowij, Hall et al. 1992; Ovendon and Loxley 1996; Boys, Lenton et al. 1997) and international studies (Dalgarno and Shewan 1996; Forsyth 1996; Peters, Davies et al. 1997). Snowballing is also routinely employed as a recruitment method in the IDRS (Jenkinson and O'Keeffe 2005). Thus, on completion of their interview, participants were asked if they would be willing to discuss the study with friends who might be willing and able to participate.

2.1.2 Procedure

All participants contacted the researchers by telephone and were screened for eligibility. To meet entry criteria, they had to be at least 16 years of age, have used ecstasy at least once a month for the last six months, and have been a resident of the Melbourne metropolitan region for the past 12 months. As in the main IDRS, the focus was on the capital city, as new trends in illicit drug markets are more likely to emerge in urban areas rather than in remote or regional areas.

Participants were informed that all information provided was strictly confidential and anonymous, and that the study would involve a face-to-face interview that would take approximately 60 minutes. All respondents were volunteers who were reimbursed $30 for their participation. The vast majority of the interviews were undertaken at Turning Point Alcohol and Drug Centre, although, in instances that this was not convenient for the participant, another location was negotiated (for example, a coffee shop or park). All interviews were conducted by trained researchers using a standardised interview schedule. The nature and purpose of the study was explained to participants before informed consent was obtained. Ethics approval for this study was obtained from the Victorian Department of Human Services, Human Research Ethics Committee.

2.1.3 Measures

Participants were administered a structured interview schedule based on a national study of ecstasy users conducted by NDARC in 1997 (Topp, Hando et al. 1998; Topp, Hando et al. 2000), which incorporated items from previous NDARC studies of users of ecstasy (Solowij, Hall et al. 1992) and powder amphetamine/methamphetamine (Hando and Hall 1993; Darke, Cohen et al. 1994; Hando, Topp et al. 1997). The interview schedule focused primarily on the preceding six months, and assessed demographic characteristics; patterns of ecstasy and other drug use, including frequency and quantity of use and routes of administration; the price, purity and availability of ecstasy and other related drugs; patterns of ecstasy purchasing; self-reported criminal activity; perceived physical and psychological side-effects of ecstasy; other ecstasy-related problems, including relationship, financial, legal and occupational problems; help-seeking behaviour; and general trends in party drug markets, such as new drug types, new drug users and perceptions of police activity.

2.1.4 Data analysis

Univariate descriptive analyses were conducted using SPSS for Windows Version 11.5.1.

2.2 Survey of key experts (KE)

The criterion for KE eligibility was regular contact, in the course of employment, with an ecstasy users throughout the preceding six months. Twenty-four KE provided information on the ecstasy users with whom they had contact in the 6 to 12 months preceding the interview. All of the KE interviews were conducted face-to-face.

The 24 KE interviewed in 2005 represented a range of occupations and organisations. Six were alcohol and drug counsellors, psychologists or community development workers, and six worked for medical services (private and public first aid and emergency management organisations, ambulance services and hospital accident and emergency departments). Four KE were from Victoria Police, including members of the Drug and Alcohol Strategy Unit and Major Drug Investigation Division, and three were alcohol and drug researchers. Two KE were health promotion/peer educator workers, with a further two from the Victorian Department of Human Services. One party promoter and event organiser was interviewed.

Just over one-third of KE (n=8) stated that they worked with one or more 'special population' groups, identifying 'youth' (n=6) or 'youth and their families' (n=2). The majority of KE (n=15),

however, did not report working with any 'special population' groups. Indeed, the majority of KE reported that the demographics of the ecstasy users they had contact with were comparable to that of the general community.

Nineteen of the KE had regular daily to weekly contact with ecstasy users over the preceding six months. The remaining KE, for example senior police and policy-level government bureaucrats, had only indirect contact with users. Despite this, these KE were considered well positioned to comment on ecstasy and related drug use or associated drug markets as a result of their responsibilities and/or managerial roles. Sixteen KE obtained their knowledge solely through their work. Eight KE stated that their information came from ecstasy users they knew through both their work and personal lives.

In the six months preceding their interviews, the majority of KE (n=15) reported having gained their information, at least in part, from users. Other KE gained information from colleagues (both peers and more junior staff with more hands-on roles), friends and acquaintances, data sets, surveys, research reports and websites. Of the KE who gained information via direct contact with users, one estimated they had contact with less than 10 users in the previous six months, three reported contact with between 10 and 20 users, five had contact with between 21 and 50 users, two had contact with between 51 and 100 users, and four had contact with more than 100 users. Many KE reported that their level of contact with users tends to fluctuate, either around a particular time of the week (i.e. weekends versus weekdays) and particular times of the year (i.e. summer and/or public holidays versus winter).

2.3 Other indicators

Primary information collected from the REU survey and KE interviews was supplemented by data obtained from a number of secondary indicator sources of illicit drug use and related morbidity and mortality. Where possible, data relating to trends for the 2004/05 financial year are reported, unless otherwise indicated. For secondary indicators where current data are not available, the most recently available data have been included. There are a number of limitations specific to the indicator data for ecstasy and other ecstasy and related drugs.

Indicator data sources accessed for this study are described in the following sections.

Surveys reporting on illicit drug use prevalence in Victoria

- Data on the prevalence of drug use in the community are typically derived from large-scale population surveys. The most recent household survey, from which national estimates of illicit drug use within the community are available, is the 2004 National Drug Strategy Household Survey (Australian Institute of Health and Welfare 2005). The most recent surveys providing estimates of illicit drugs used within the Victorian community include: the 2004 National Drug Strategy Household Survey (state and territory supplement) (Australian Institute of Health and Welfare 2005) and the 2004 Victorian Youth Alcohol and Drug Survey (Premier's Drug Prevention Council 2005).

Drug seizure purity levels

- The Drug Analysis Branch of the Victoria Police Forensic Services Department conducts purity analyses for all drug seizures made by the Victoria Police. This report presents data for the 2004/05 financial year.

Drug-related arrest data

- Information pertaining to drug-related arrests in Victoria has been obtained from the Australian Crime Commission (ACC). The Victoria Police and the Australian Federal Police provide arrest data to the ACC for the Illicit Drug Data Report. This report presents drug-related arrest data for the 2003/04 financial year.

Specialist drug treatment presentations

- DirectLine is a 24-hour specialist telephone service in Victoria (operated by Turning Point Alcohol and Drug Centre) that provides counselling, referral and advice about drug use and related issues. All calls to DirectLine are logged to an electronic database that can provide information about caller drugs of concern, calls from drug users, and calls about drug users. This report presents data for the 1999 to 2004 calendar years.

Ambulance attendances at non-fatal drug overdoses and other episodes

- Turning Point Alcohol and Drug Centre manage an electronic drug-related ambulance attendance database, comprised of information obtained from Metropolitan Ambulance Service Patient Care Records (Dietze, Cvetkovski et al. 2000). Reliable data are available from June 1998 (with missing data for periods May-July 2001, October 2002-February 2003, and June-July 2004). Data for the period January 2003 to December 2004 are presented in this report.

NHMD (National Hospital Morbidity Database)

- The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. It is a collection of electronic records for admitted patients in public and private hospitals in Australia. *Principal diagnosis* (the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of care in hospital) has been reported. This report presents drug-related hospital admissions for Victoria and Australia, 2000-2004.

3.0 OVERVIEW OF REGULAR ECSTASY USERS (REU)

3.1 Demographic characteristics of the REU sample

Just over half (52%) of the sample of 100 REU interviewed was male (Table 1). The mean age of the sample was 24.2 years (SD 5.7; range 17-45). Most (86%) participants nominated their sexual identity as heterosexual, although bisexuals (9%) and gay males (4%) were also represented. Nearly all participants (94%) identified English as the main language spoken at home, and two participants identified themselves as Aboriginal and/or Torres Strait Islander (A&TSI). Two-thirds (66%) of the sample lived in rental accommodation and 27% lived in their parents' or family house.

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

	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Mean age (years)	25.1	23.5	**24.2**
Male (%)	53	58	**52**
English speaking background (%)	99	96	**94**
A&TSI (%)	6	0	**2**
Heterosexual (%)	81	87	**86**
Mean number school years*	12.5	11.6	**11.7**
Tertiary qualifications (%)	41	53	**52**
Employed full-time (%)	31	25	**33**
Full-time students (%)	18	23	**17**
Unemployed (%)	24	17	**15**
Previous conviction (%)	7	4	**4**
Current drug treatment (%)	6	6	**0**

Source: PDI REU interviews, 2003-2005
***Question changed from 'How many years of school did you complete?' (2003) to 'What grade of school did you complete?' (2004 and 2005)**

The mean number of years of school education completed by the sample was 11.7 (SD 0.7; range 10-12), and just over three-quarters (76%) of participants had completed high school education. Fifty-two percent of the sample had completed courses after school, with 27% possessing a trade or technical qualification, and 25% having completed a university degree or college course. Seventeen percent of the sample were full-time students. Just over two-thirds (67%) were currently employed; 33% on a full-time basis and 34% on a part-time or casual basis, and 15% were unemployed. None of the participants reported being in drug treatment at the time of interview. Four participants had a previous criminal conviction for which they had served a custodial sentence.

The demographic characteristics of the 2003, 2004 and 2005 REU samples were generally comparable. The 2003 sample, however, differed to the 2004 and 2005 samples in terms of a number of characteristics (i.e. slightly larger proportion of A&TSI participants, participants

reporting previous convictions and unemployed participants, and fewer reporting having completed tertiary qualifications). These differences (consistent with differences in terms of drug use patterns of the REU samples between 2003 and the subsequent years, as discussed in Section 3.2) are potentially due to sampling bias (with the result an artefact of sample idiosyncrasies rather than reflecting genuine population parameters). Finally, none of the 2005 participants reported being in drug treatment at the time of interview compared to six participants in both the 2003 and 2004 samples.

The information from KE interviews indicates that diverse groups of people (in terms of differing age, gender, sexuality, geographic location) are part of the broad ERD-using population in Melbourne. Indeed, three KE commented on the increasingly mainstream nature of ERD use. Given the broad, heterogenous population that the KE reported on, the information gained from the REU surveyed is generally not inconsistent with descriptions provided by KE.

KE indicated that the gender mix of ERD users they had contact with tended to be relatively equal, with one reporting the 'sense that women are as likely as men to use these drugs'. Those KE from treatment services and law enforcement, however, tended to report seeing more males than females. Consistent with REU sample findings, KE reported that the majority of the ecstasy users they had contact with and/or were aware of were aged 18 to 30 years of age, with most in their early- to mid-twenties. Eight KE reported ERD users coming from a wide range of ethnic backgrounds, with one commenting that they reflected the variety of the general population in Australia. Five KE reported that the majority of ecstasy users they had contact with were of Anglo backgrounds.

Consistent with REU sample findings, many KE (n=11) reported on relatively well-educated ERD users. All but one of these KE talked of users as having completed high school, with the vast majority also university-educated (including a large proportion of current students). Other KE, however, talked of ERD use having a negative impact on the educational attainment of their clients, particularly among younger age groups.

The description of employment among this group provided by the KE ranged from professionals in high-functioning positions (n=8), those employed in other positions/less demanding roles (compatible with their lifestyle) (n=8), students, often with concurrent casual, part or full-time employment (n=5), to unemployed and those receiving disability pensions (n=6). Some KE talked of ERD users they had contact with falling into more than one of these categories. Three KE spoke of the need to have disposable income to partake in drug taking and other aspects (i.e. clothing and entry to events).

Seven KE reported that the majority of ERD users they were aware of were heterosexual, although most also commented on smaller numbers of gay, lesbian and bisexual ERD users.

Similar to the REU sample findings, KE suggested that REU were unlikely to have had experience with the criminal justice system. Three KE reported that none of the users they were aware of had ever been to prison, three reported on small proportions having minor drug-related charges (i.e. possession). Naturally, however, the ERD users that law enforcement KE had contact with had experience with the criminal justice system, ranging from diversion clients to those involved in trafficking and cultivation. The treatment experiences of ERD users was also clearly delineated along the background of the KE. Those KE from the alcohol and drug (A&D) sector reported on ERD clients receiving treatment services, predominately counselling (n=6). One KE reported that they were increasingly seeing clients with ERD-use problems at their service, although qualified this by noting that this was likely to be a result of new a service targeting younger users, and having dedicated youth workers able to tap into it all. Other KE, however, reported ERD users not tending to need treatment for their drug use (n=9), either because it was not problematic or because they were able to reduce their own use without the

need for formal treatment (see Section 14 for a more detailed discussion of treatment and other service utilisation by this population).

3.2 Drug use history and current drug use

As in 2003 and 2004, polydrug use was the norm among the 2005 REU sample, with participants reporting having ever used a median of 11.5 drug classes (range 4-17). All participants had used at least two drugs classes in the preceding six months with a median of 8 drug classes (range 2-15) used in this period. The percentage of the sample reporting having ever and recently used each of the eighteen drugs asked about is presented in Table 2.

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

	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Median number of drug types ever used (range)	11 (6-17)	11 (4-19)	**11.5 (4-17)**
Median number of drug types used in the last 6 months (range)	7 (2-15)	8 (1-14)	**8 (2-15)**
Ever inject any drug (%)	43	15	**16**
Alcohol			
ever used (%)	99	100	**100**
used last 6 months (%)	87	94	**97**
Cannabis			
ever used (%)	98	98	**97**
used last 6 months (%)	82	78	**87**
Tobacco			
ever used (%)	86	94	**93**
used last 6 months (%)	73	83	**78**
Methamphetamine powder (speed)			
ever used (%)	98	98	**97**
used last 6 months (%)	89	92	**85**
Methamphetamine base (base)			
ever used (%)	50	45	**34**
used last 6 months (%)	27	34	**21**
Crystal meth (crystal)			
ever used (%)	75	71	**71**
used last 6 months (%)	62	52	**42**
Cocaine			
ever used (%)	80	72	**79**
used last 6 months (%)	35	48	**63**
LSD			
ever used %	86	72	**67**
used last 6 months %	48	39	**38**

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

	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
MDA			
ever used (%)	40	37	**25**
used last 6 months (%)	19	16	**8**
Ketamine			
ever used %	70	70	**56**
used last 6 months %	51	45	**35**
GHB			
ever used (%)	33	38	**33**
used last 6 months (%)	18	27	**16**
Amyl nitrate			
ever used (%)	70	52	**49**
used last 6 months (%)	25	20	**20**
Nitrous oxide			
ever used (%)	59	54	**41**
used last 6 months (%)	22	27	**17**
*Psilocybin mushrooms			
ever used (%)	--	--	**53**
used last 6 months (%)	--	--	**19**
Benzodiazepines			
ever used (%)	61	58	**54**
used last 6 months (%)	38	41	**37**
Anti-depressants			
ever used (%)	35	28	**33**
used last 6 months (%)	11	12	**14**
Heroin			
ever used (%)	39	18	**18**
used last 6 months (%)	23	9	**7**
Methadone			
ever used (%)	15	8	**1**
used last 6 months (%)	6	2	**0**
Other opiates			
ever used (%)	33	26	**34**
used last 6 months (%)	9	13	**18**

Source: PDI REU interviews, 2003-2005
***Question not asked prior to 2005**

Some participants reported the use of drugs other than those listed in Table 2. Those drugs most commonly nominated as ever used included DMT (7%), 2C-B (7%) and mescaline (4%).

For the purposes of this study, bingeing was defined as using drug/s on a continuous basis for more than 48 hours without sleep (Ovendon and Loxley 1996). Over half (52%) of the sample

reported that they had binged in ERDs in the six months preceding interview. The median length of the longest binge was 72 hours (range 49-144 hours). Given that ecstasy users were the sentinel population sampled for this survey, it is not surprising that ecstasy (98%) was the most commonly reported drug used during a binge. Methamphetamine powder (80%) was the next most commonly used drug during binges, followed by cannabis (57%), alcohol (45%), crystal methamphetamine (33%), LSD (24%), ketamine (22%), cocaine (18%) and GHB (16%). Smaller numbers of participants reported using methamphetamine base (6%), pharmaceutical stimulants (6%) and nitrous oxide (4%) during binges in the six months prior to interview.

Over the three years that data have been collected in Victoria, the number of drugs ever and recently used by participants has been stable. The drugs reported as being used have also generally been comparable, with use of alcohol, cannabis, tobacco and methamphetamine powder commonly reported. There have been some changes over the three years, however, with reductions in levels of recent use of crystal methamphetamine (2003-2005) and GHB (2004-2005), and lower levels of lifetime and recent methamphetamine base (2004-2005), ketamine (2003-2005) and nitrous oxide (2004-2005). In addition, the levels of recent cocaine use have increased from 2003 to 2005.

A notable difference between the samples is in the levels of injecting drug use, with the patterns of injecting drug use reported by the 2004 and 2005 samples comparable, and considerably lower than those reported by the 2003 sample (Table 2). The levels of injecting reported by the 2003 REU sample were considerably higher (43%), with this discrepancy potentially due to sampling bias (with the result an artefact of sample idiosyncrasies rather than reflecting genuine population parameters). Indeed, the differences in patterns of injecting and demographic characteristics, as discussed in Section 3.1, are consistent with this explanation. These sampling differences are also likely to account for the lower levels of lifetime and recent heroin and methadone use reported by the 2004 and 2005 REU samples compared to 2003. It is interesting to note, however, an increase in the reported recent use of 'other opiates' by the 2005 sample compared to previous years.

Of those from the 2005 sample reporting having injected a drug (n=16), the median number of drugs ever injected was four (range 1-9). Most of the injectors reported first injecting methamphetamine powder (63%) or heroin (31%). Ten participants reported having injected a median of 3.5 drugs (range 1-5) in the previous six months. The most commonly reported drugs injected in the preceding six months by these participants were methamphetamine powder (100%), methamphetamine base (50%), crystal methamphetamine (50%), ecstasy (30%), and pharmaceutical stimulants (20%).

Consistent with the reports of the REU sample, information from KE generally supported a high prevalence of polydrug use among ERD users. All KE reported that (varying proportions) of ERD users combine ecstasy and legal (e.g. alcohol and tobacco) and illegal drugs (e.g. cannabis, speed). In particular, KE reported that the ecstasy users they had contact with also commonly used cannabis, alcohol, tobacco and methamphetamine powder. KE also reported that smaller proportions of ecstasy users used crystal, ketamine, GHB, LSD and cocaine. ERD users were broadly described by one KE as being very savvy about what they use and aware of different and new drugs. The KE reported low (if any) levels of injecting among ERD users, with one noting that, in comparison to injecting, 'popping a pill' is an unthreatening way to consume a drug, leading to its widespread acceptance.

3.3 Summary of demographic characteristics and polydrug use trends of REU

Reports from the Victorian REU sample and KE suggest that regular ecstasy users:

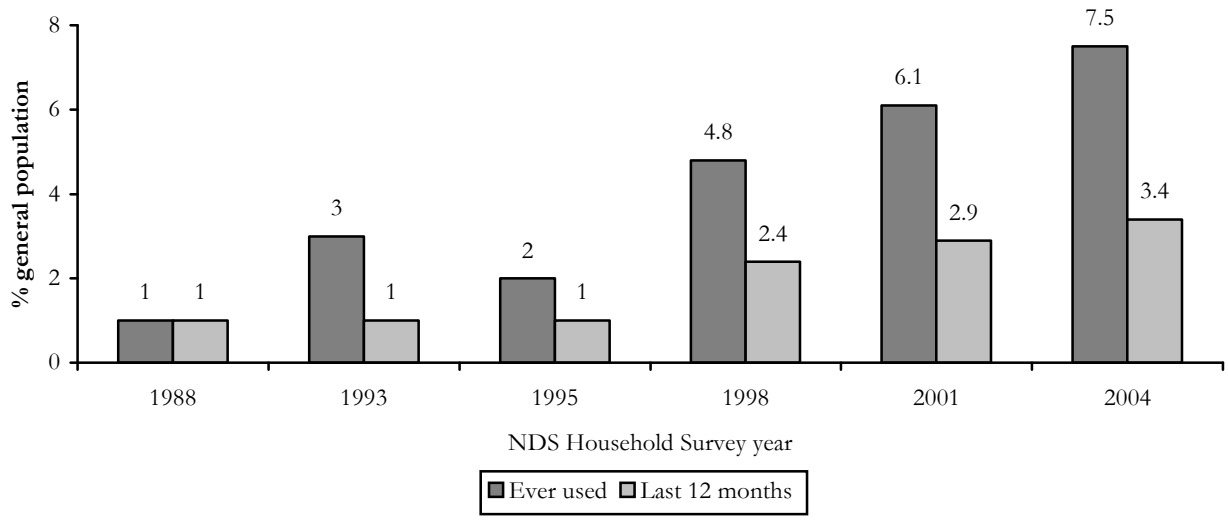
- **are approximately equally likely to be male or female;**
- **are likely to be aged in their early twenties;**
- **are likely to have completed secondary school, with a substantial proportion continuing to tertiary education;**
- **are likely to be employed and/or studying;**
- **are unlikely to have been in prison;**
- **are unlikely to have used A&D treatment services in relation to their ERD use;**
- **are very likely to be polydrug users;**
- **are likely, in addition to ecstasy, to have recently used alcohol, cannabis, methamphetamine powder, tobacco, and cocaine;**
- **are unlikely to inject drugs.**

4.0 ECSTASY

4.1 Use of ecstasy in the general population

The 2004 National Drug Strategy Household Survey (NDSHS) provides the most recent national figures regarding the prevalence of ecstasy use in the general population. The results of this survey indicate that in 2004 3.4% of the Australian population aged 14 years and over had recently (in the last 12 months) used ecstasy (Australian Institute of Health and Welfare 2005). This represents a statistically significant increase from the previous NDSHS survey, which indicated that in 2001 2.9% of the general population aged 14 years and older had recently used ecstasy (Australian Institute of Health and Welfare 2005) (see Figure 1). The most recent data available regarding the prevalence of ecstasy use in the general population of Victoria also come from the 2004 NDSHS, according to which, in 2004, 3.1% of the Victorian population aged 14 years and above had used ecstasy within the past twelve months (Australian Institute of Health and Welfare 2005).

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



Source: 2004 National Drug Strategy Household Survey (Australian Institute of Health and Welfare 2005)

It is noteworthy that, nationally, the highest prevalence of both 'lifetime' (22.0%) and 'recent' (12.0%) ecstasy use was reported by the 20-29 year old age group (Australian Institute of Health and Welfare 2005). Data from the most recent Victorian Youth Alcohol and Drug Survey (VYADS) (Premier's Drug Prevention Council 2005) provide further evidence of relatively high levels of ecstasy use among a young cohort: of the 16-24 year olds surveyed in 2004 (n=6,005), 18% reported having ever used ecstasy, 12% reported use in the 12 months prior to survey, 6% reported ecstasy use in the last month and 2% in the last week (Premier's Drug Prevention Council 2005). Of those who reported having used ecstasy in the 12 months prior to interview, however, frequency of use tended to be low: approximately one-third (34%) reported using it once a month or more often, just fewer than one-third (30% reported using it 'every few months', slightly less than one-quarter (24%) reported using it once or twice a year, and 12% had used ecstasy on one occasion (Premier's Drug Prevention Council 2005). The vast majority of respondents (97%) reported taking ecstasy in pill or tablet form (Premier's Drug Prevention Council 2005). Median age for first use for the participants in the VYADS was 17.4 years

(Premier's Drug Prevention Council 2005), with data from the 2004 NDSHS indicating a median age of first use at 22.8 years (Australian Institute of Health and Welfare 2005).

4.2 Ecstasy use among REU

The average age at which participants first tried ecstasy was 18 years (SD = 4.6; range 14-40) and the average age at which participants first started using ecstasy regularly (at least once a month) was 19 years (SD = 4.7; range 16-40; Table 3). Ecstasy was the drug of choice for slightly less than half (45%) of respondents.

In accordance with the eligibility criteria, all participants had been using ecstasy at least monthly for the six months prior to the interview. For the first time, in 2005, participants were asked to differentiate their use in terms of ecstasy pills/tablets and ecstasy powder. All of the participants reported use of ecstasy pills in the six months to interview and had used them on a median of 13 days in the preceding six months (range 6-72). Over half (53%) of the participants reported using ecstasy pills fortnightly or less frequently, 23% reported using them more than fortnightly but less than weekly, and the remaining quarter (24%) reported using ecstasy pills at least once a week.

The median number of ecstasy pills taken in a 'typical' or 'average' use episode in the preceding six months was two (range 0.5-10), with 10% of the participants typically using four or more in a single 'typical' or 'average' episode. During their 'heaviest' use episode in the preceding six months, participants reported using a median of three pills (range 0.5-16), with 17% of the participants typically using six or more in a single 'heavy' episode.

A wide range of patterns of use (in terms of both quantity and frequency of use) were reported by the KE. Two KE described comparable 'typical' patterns of ecstasy use over time or ecstasy use careers. One of these KE specifically reported that novice users commonly start by sharing one ecstasy pill with a friend, and build up to taking a whole one on their own. According to this KE, some users then think 'One (pill) is good, I wonder what two would be like…?' This KE noted, however, that 'double dropping' is considered by some users as par for the course and by others as going a bit too far. One KE reported that decisions to use smaller quantities of ecstasy and/or use ecstasy less frequently may be influenced by a number of factors, including not wanting to be too high in public, having limitations in terms of money available and/or willing to spend on ecstasy, and being conscious of not developing a tolerance for ecstasy (some are aware that they need to take a rest between doses). Indeed, one KE commenting on typical ecstasy use careers estimated that 20% of those who ever try ecstasy only ever use small quantities of it 3-4 times a year, with many sustaining that level of use for considerable periods of time, typically not experiencing any harms from their use and being able to incorporate it into their life.

For other users, however, these two KE both spoke of a honeymoon period (with one KE estimating that 80% of ERD go through it), characterised by an extended period lasting 6 to 18 months during which ecstasy (and typically other drugs) are taken between once a fortnight and three times a week. The KE (n=2) reported that this so-called honeymoon period typically ends for a variety of reasons: a tolerance is developed and they no longer have the same subjective 'high'; the individual starts to experience harms; and/or undergoes a lifestyle change, so that ERD use is no longer a priority (e.g. commences a full-time job after finishing university).

More generally, the KE reported a wide variety of current ecstasy use patterns among the ecstasy users they were aware of. Although ERD use was typically considered to be restricted to weekend use, KE reported frequency of use as ranging from weekly to once every three months. One KE noted that patterns of use seems to be very seasonal, increasing around the time of the Spring Racing Carnival (early November) and extending over summer.

In terms of quantity of use, the KE generally reported that the ecstasy users they were aware of would typically take more than one pill per session, with larger quantities (i.e. 3-10) taken over extended periods of time. One KE reported that novice users, or those using other drugs, may use less. Two KE, however, noted a trend whereby the proportion of those taking to excess (characterised by multiple pills and high levels of polydrug use) may have increased. One KE noted that some people are being competitive and taking more than previously. The second KE reporting this trend noted that there seems to be the perception among some more chaotic users that if they don't 'drop' and become unwell (to the extent of ending up in hospital); it has been an 'unsuccessful' occasion.

All the REU participants reported swallowing ecstasy pills in the six months preceding the interview. In addition, participants reported snorting (80%), smoking (10%), shelving or shafting (5%, refers to vaginal/anal administration) and injecting (3%) ecstasy pills during this period. The majority (86%) of the sample reported swallowing as their main route of ecstasy pill administration in the previous six months. Nine participants reported that they had ever injected ecstasy pills.

Consistent with the REU reports, the KE all reported swallowing as the main route of ecstasy pill administration. Two KE specifically made mention of the innocuous, unthreatening nature of swallowing, especially compared to snorting or injecting. Some crushing and snorting of pills, however, was reported (n=4). One KE reported that snorting was uncommon but might occur under some circumstances, such as if there was one pill left at the end of the night and several people wanted some. Shelving was considered by KE to be very rarely undertaken (n=3), with heterosexual males holding particularly unfavourable perceptions of this route of administration (n=1). KE either reported no injection of ecstasy or a recent reduction in injection (n=2), with injecting considered not be a part of ERD users, drug using repertoire. One KE commented that it had 'been a while since I heard of injecting ecstasy – people seem to be aware that purity of pills is a problem, they are not designed to be injected'. One KE noted, however, that 'people won't talk about injecting them [ecstasy pills], so who knows?'

Just over half (55%) of the REU sample reported having ever used ecstasy powder, with first use at a median of 19 years (SD = 3.9; range 15-32). Slightly more than one-quarter (27%) of the sample reported having used ecstasy powder in the six months prior to interview. Ecstasy powder was used relatively infrequently, with those reporting recent use of ecstasy powder using it on a median of 3 days in the preceding six months (range 1-30). Indeed, the majority (89%) of recent users reported using ecstasy powder monthly or less frequently, with two participants reporting using is approximately fortnightly and one reporting using ecstasy powder more than once a week.

Recent ecstasy powder users (n=27) quantified their use in terms of capsules, points, lines and grams. Both typical and heavy use episodes were most often reported in terms of points, with participants (n=8) reporting using a median 3 points in a 'typical' or 'average' use episode in the preceding six months (range 0.5-4). During their 'heaviest' use episode in the preceding six months, participants (n=9) reported using a median of three points (range 1-6). Recent ecstasy powder users (n=27) reported snorting (81%) and swallowing (59%) powder in the six months prior to interview.

It is also of interest to note that one participant reported the use of 'pure MDMA crystals' in the six months prior to interview. This participant reported having both smoked and injected such crystals during this time, injecting them on ten days (also number of days used in last six months).

In line with the relatively low prevalence of ecstasy powder use within the REU sample and the low frequency of use reported by recent users, the vast majority (99%) of the REU sample reported pills as the form of ecstasy they most often used in the six months prior to interview, with only one participant reporting mostly using ecstasy powder. Further, the KE reports around

the forms of ecstasy available and used in Melbourne are consistent with those of the REU sample, with most KE reporting that pills are always, or the majority of the time, the form of ecstasy used. Occasional caps and powder were, however, reported by two of the KE.

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

	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Mean age first used ecstasy (years)	19.4	18.5	**19**
Ecstasy 'favourite' drug (%)	44	47	**45**
Median days used ecstasy pills last 6 months*	15	15	**13**
Use ecstasy pills weekly or more (%)	36	21	**33**
Median ecstasy pills in 'typical' session	1.5	2	**2**
Typically use >1 pill (%)	55	77	**72**
Recently binged on ecstasy (%)*	60	47	**50**
Main route of administration of ecstasy pills in the last 6 months (%)			
Swallow	85	95	**86**
Snort	10	2	**13**
Inject	3	1	**1**
Ever injected ecstasy pills (%)	27	9	**9**
Main form used last 6 months (%)**	--	--	**99**
Tablets (pills)	--	--	**1**
Powder	--	--	**0**
Capsules			
Typically use other drugs in conjunction with ecstasy (%)	97	94	**97**
Typically use other drugs to 'comedown' from ecstasy (%)	84	85	**88**

Source: PDI REU interviews, 2003-2005
*** 'Binged' defined as the use of drugs for more than 48 hours continuously without sleep**
**** Question not asked prior to 2005**

Consistent with the high levels of polydrug use reported by the REU sample (see Section 3.2), most 'typically' (defined as on two-thirds or more occasions of their ecstasy use in the preceding six months) used other drugs in combination with ecstasy (97%) and during the 'comedown' (i.e. acute recovery period) following ecstasy use (88%). Participants using drugs in conjunction with ecstasy (n=97) most commonly reported using alcohol (73%), tobacco (70%), methamphetamine powder (55%), cannabis (52%), crystal methamphetamine (10%) and ketamine (9%) at the same time as ecstasy. Of those who typically drank alcohol while using ecstasy, 58% usually consumed more than five standard drinks. Smaller proportions reported typically using cocaine (8%), LSD (7%), GHB (6%), nitrous oxide (2%), amyl nitrate (2%), methamphetamine base (1%),

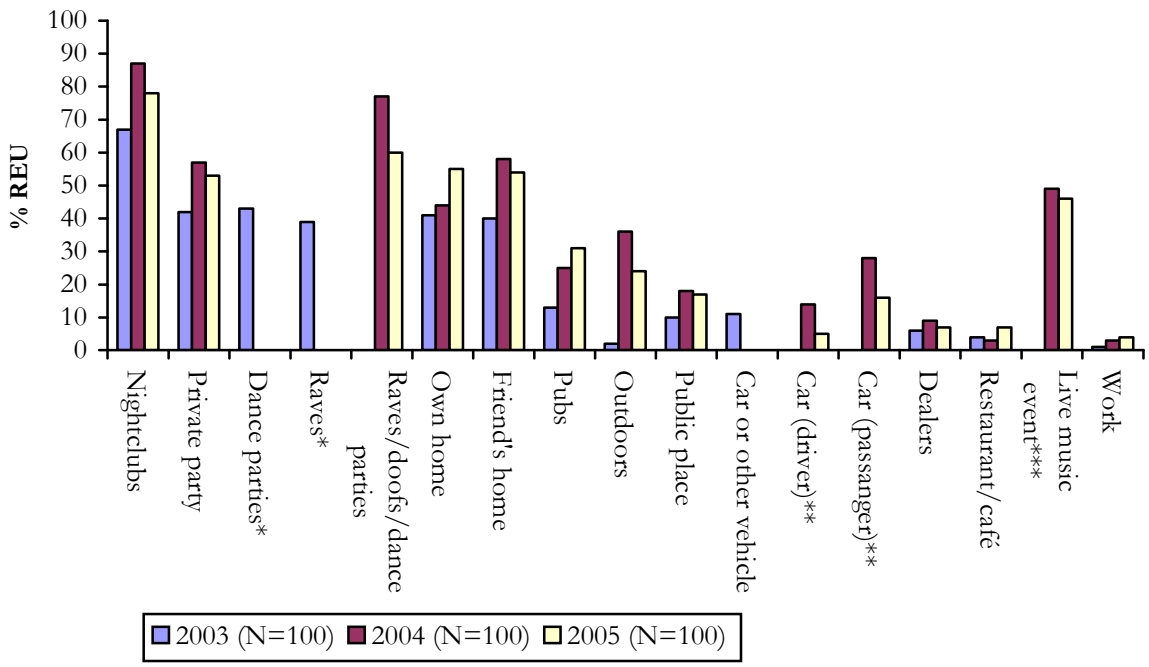
benzodiazepines (1%), MDA (1%), 1,4B (1%), pharmaceutical stimulants (1%), anti-depressants (1%) and psilocybin mushrooms (1%) in conjunction with ecstasy.

Participants reporting using drugs during the 'comedown' from ecstasy (n=88) reported the use of a range of drugs, most frequently tobacco (66%), cannabis (64%), alcohol (40%), methamphetamine powder (11%), benzodiazepines (9%) and GHB (9%). Of those who typically drank alcohol during the comedown from ecstasy, nearly two-thirds (48%) reported usually consuming more than 5 standard drinks. Smaller proportions reported the use of ketamine (8%), anti-depressants (6%), nitrous oxide (3%), crystal methamphetamine (2%), cocaine (2%), LSD (2%) and 'other' opiates (1%) during the 'comedown' from ecstasy.

Patterns of ecstasy use differed somewhat between 2003, 2004 and 2005 REU samples. The 2004 and 2005 samples were more likely to use more than one tablet in a 'typical' session (77% and 72%, respectively) compared to the 2003 sample (54%). In addition, differences in levels of injecting of ecstasy use over the three years (i.e. 9% in both 2004 and 2005 compared to 27% in 2003) are consistent with the differences in levels of injecting drug use discussed in Section 3.2.

Participants reported a wide range of places where they usually used ecstasy in the past six months (Figure 2). Consistent with previous years, the locations most commonly reported by the 2005 REU sample were nightclubs (78%), raves/doofs/dance parties (60%), in their own home (55%), friends' homes (54%), private parties (53%) and at live music events (46%). Participants also reported usually using ecstasy in pubs (31%), outdoors (24%) and in public places (17%). Fewer 2005 than 2004 participants reported having used ecstasy as a passenger in a car (16% compared to 28%) and as a driver in a car (5% compared to 14%).

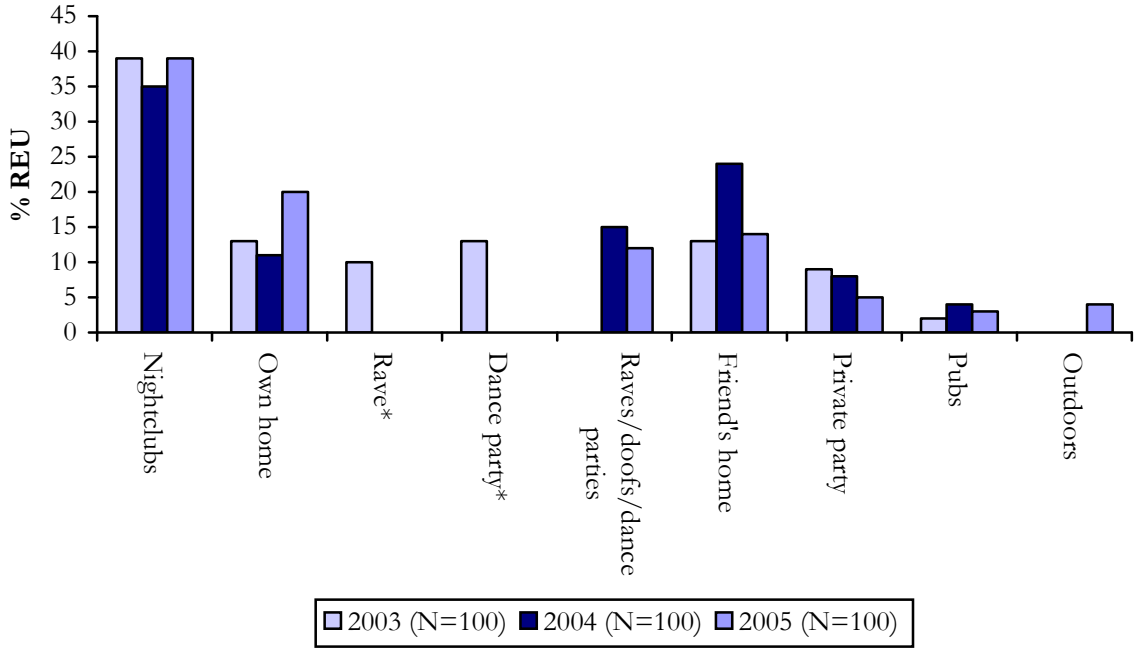
Figure 2: Usual location of ecstasy use, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**
**** Distinction between driver and passenger made from 2004 onwards**
***** No 'live music' category in 2003 REU survey**

The 2005 REU sample most commonly reported nightclubs (39%) and their own home (20%) as the last venue where they used ecstasy (Figure 3). Friends' homes (14%), raves/doofs/dance parties (12%), private parties (5%), outdoors (4%) and the pub (3%) were also nominated by participants as the venue they last used ecstasy.

Figure 3: Location of most recent ecstasy use, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**

As mentioned previously, three KE commented on the increasingly mainstream nature of ERD use. One noted that such drug use is no longer something that just ravers undertake, with many people using ecstasy having never even been to a rave. Another KE comments were consistent with this view, noting that there has been an increase in the number of people using drugs outside the traditional ERD culture or scene. This KE raised concerns about those people using these drugs in private homes and thus being isolated from information about the use of ERDs, and having a lack of knowledge about harm reduction strategies.

4.3 Summary of patterns of ecstasy use

Reports from the Victorian REU and KE suggest that:

- **ecstasy tends to be used for the first time during late-teenage years;**
- **although there is a wide range of frequencies and amounts of ecstasy used by REU, ecstasy is commonly used less than weekly and most ecstasy users report using more than one tablet per episode;**
- **ecstasy is most commonly used orally;**
- **binging on ERDs is common among ecstasy users, with ecstasy and methamphetamine powder the drugs most commonly used during a binge;**
- **most ecstasy users use other drugs in combination with ecstasy and during 'comedown' from ecstasy;**
- **ecstasy is used in a wide range of locations, most commonly used at nightclubs, dance parties/raves/doofs, private homes/parties and at live music events.**

4.4 Price

All of the of the 2005 REU sample were able to comment on the price of ecstasy in Melbourne during the six months preceding interview. All spoke of purchasing ecstasy in terms of pills or tablets, although a small number of respondents also spoke of purchasing capsules and powder (in grams and points). Participants reported a median price of $30 per pill (range $15-$40; Table 4). The price that the REU samples paid for ecstasy has remained remarkably stable over the three years that the PDI has been conducted in Victoria.

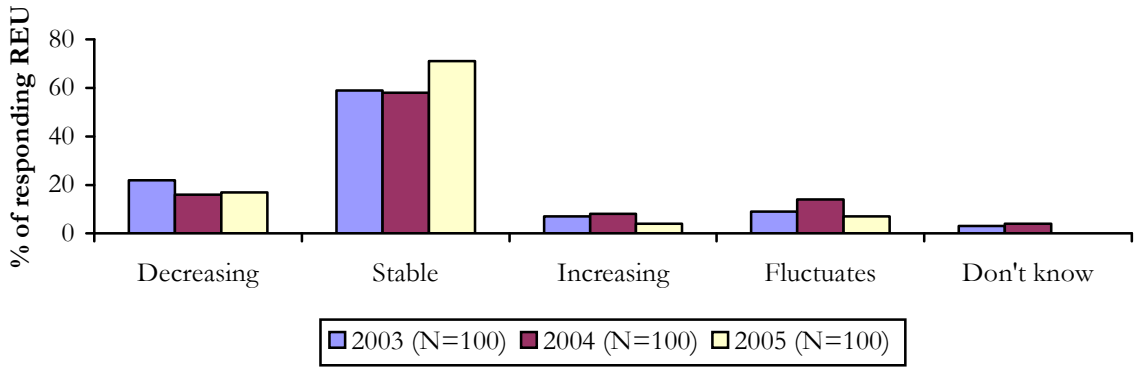
Table 4: Price of ecstasy purchased by REU and price variations, 2003-2005

	2003	2004	**2005**
Median price per tablet (range)	$30 ($8-$50)	$30 ($14-$45)	**$30 ($15-$40)**

Source: PDI REU interviews, 2003-2005

In line with these findings, most of the 2005 REU sample (and the previous REU samples) reported that the price of ecstasy had remained stable in the previous six months (71%), with smaller proportions reporting that it had decreased (17%), fluctuated (7%) or increased (4%) over this time (Figure 4).

Figure 4: Recent changes in price of ecstasy purchased by REU, 2003-2005



Source: PDI REU interviews, 2003-2005

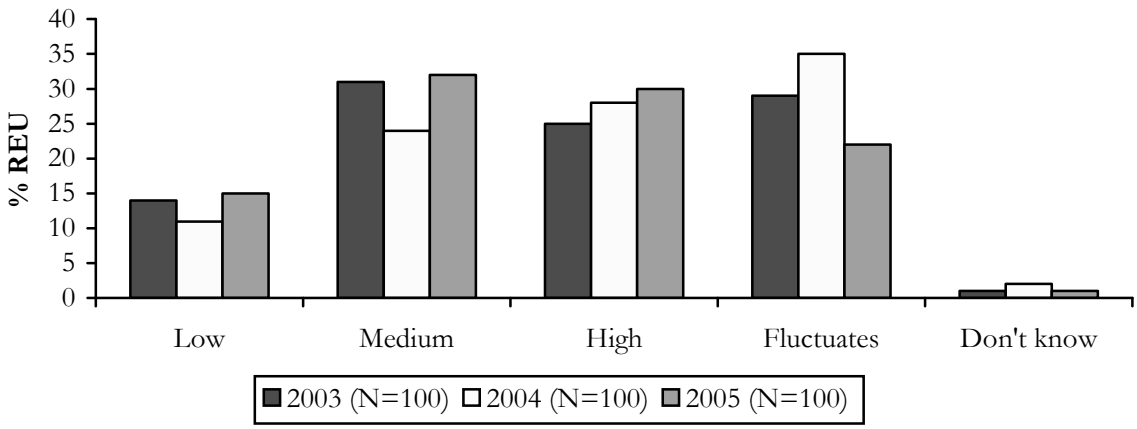
The price for ecstasy reported by the KE was relatively consistent with the REU reports, with most citing prices within the $25-$40 range and an average price of $30. One KE, however, reported a price range of $20-$80, and an average price of $50. Two KE commented that the price depends on the quality and indeed that price seems to be a good indicator of quality. In comparison, one KE noted that MDMA pills may be sold at the same price, regardless of purity.

Most KE reported that the price of ecstasy had been stable over the preceding six months, with two noting this was the case despite a number of large seizures. Two KE, however, noted that ecstasy purchased in bulk costs less, with one KE noting that this has led to an overall decrease in the price, as the savings from bulk purchases are passed down the supply chain (i.e. 'kids aren't being greedy in the profits').

4.5 Purity

In comparison to the stability of reported ecstasy price, the purity of ecstasy is typically considered as more variable. Consistent with previous years, the 2005 REU sample tended to rate the current purity of ecstasy as medium (32%) or high (30%), although a substantial proportion of the sample (22%) considered the purity to have fluctuated over the previous six months and 15% reported that the current purity was low (Figure 5).

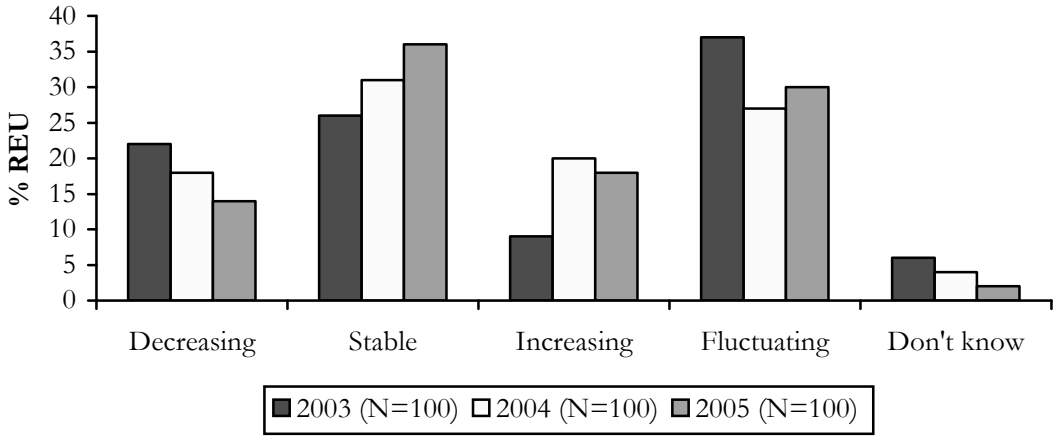
Figure 5: REU reports of current ecstasy purity, 2003-2005



Source: PDI REU interviews, 2003-2005

As in 2003 and 2004, the 2005 REU sample's reports of changes in ecstasy purity in the preceding six months were inconsistent (Figure 6). Thirty-six percent of the 2005 sample reported that the purity of ecstasy had remained stable over the preceding six months, whereas 30% responded that the purity had fluctuated over this time. Smaller proportions reported that the purity had increased (18%) or decreased (14%). Two participants were not able to comment on the purity of ecstasy over the preceding six months.

Figure 6: REU reports of change in purity of ecstasy in the preceding six months, 2003-2005

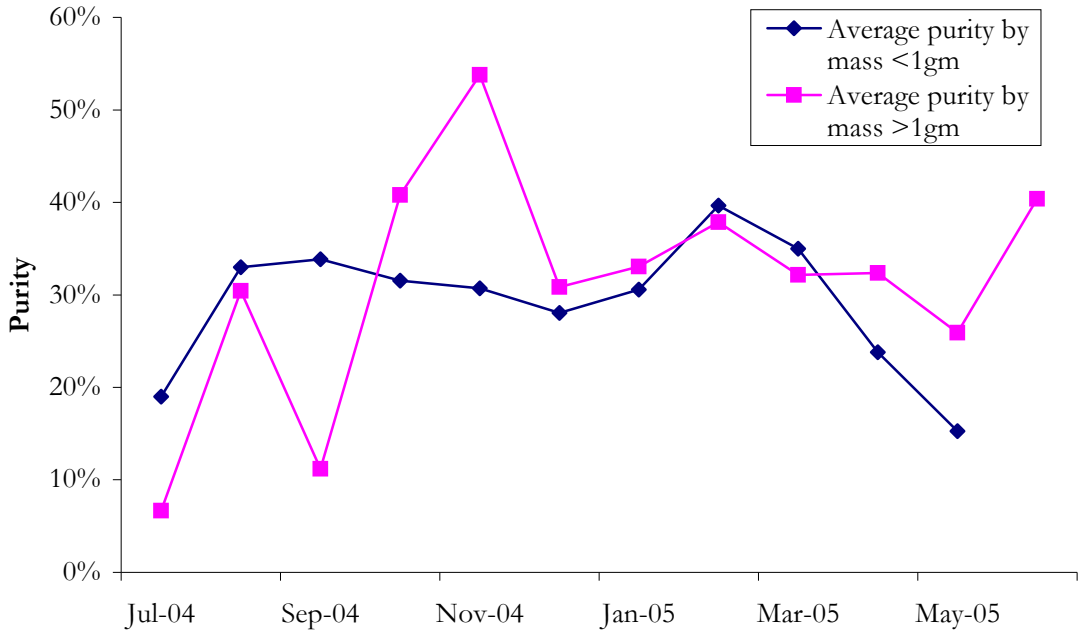


Source: PDI REU interviews, 2003-2005

Reports of ecstasy purity by KE were comparable with those of the REU sample, with the majority of KE rating it as medium to high, and stable. Two KE reported fluctuating purity, with another alluding to fluctuations, saying rating of purity 'depends on who you are talking to'. One KE reported that 6-9 months prior to interview there had a spike in 'Red Mitsubishi' pills in the Melbourne market, which had since declined/reduced. This KE also reported seeing a lot more of the stronger pills (130-150mg) and users also reporting an increase in the subjective effects of pills with increased MDMA purity. Another KE made a comparison between ecstasy pills and powder, noting that powder is perceived as being purer than pills.

The average purity level of ecstasy seizures analysed by law enforcement agencies in Victoria during the 2004/05 financial year (see Figure 7) was 30% (range 7% to 54%), which was similar to the previous six financial years: 32% in 2003/04; 30% in 2002/03; 31% in 2001/02; 31% in 2000/01; 34% in 1999/00; 28% in 1998/99.

Figure 7: Purity of ecstasy seizures by Victorian law enforcement, Jul 2004-Jun 2005

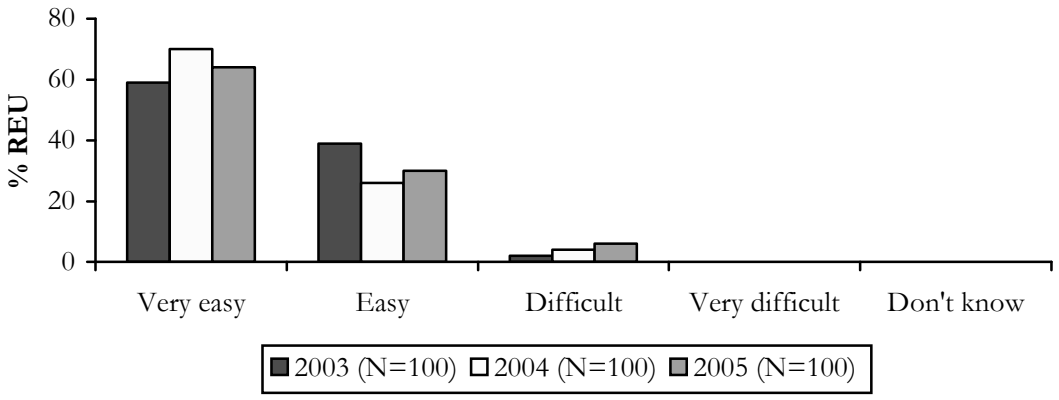


Source: Victoria Police Forensic Services Department.

4.6 Availability

All participants in the 2005 REU sample were able to comment on the availability of ecstasy. Consistent with previous years, the vast majority considered that ecstasy was currently either 'very easy' (64%) or 'easy' (30%) to obtain, with only 6% reporting it as difficult to obtain (Figure 8).

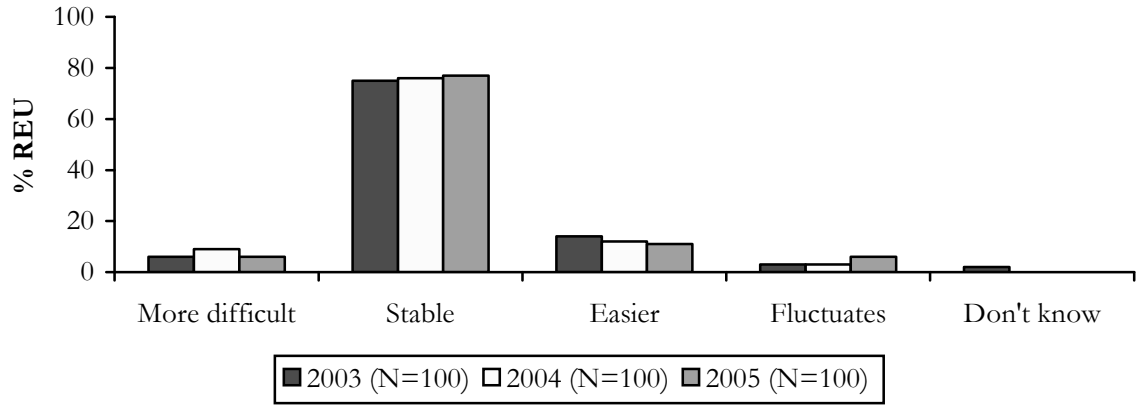
Figure 8: REU reports of current availability of ecstasy in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005
Note: The 2003 REU survey included a 'moderately easy' category, combined here with the 'easy' category

The samples of REU have consistently reported that the availability of ecstasy has been stable in the six-month period prior to interview, with the majority of the 2005 sample reporting that the availability of ecstasy had remained stable (77%) in the preceding six months (Figure 9).

Figure 9: REU reports of changes in availability of ecstasy in the preceding six months, 2003-2005



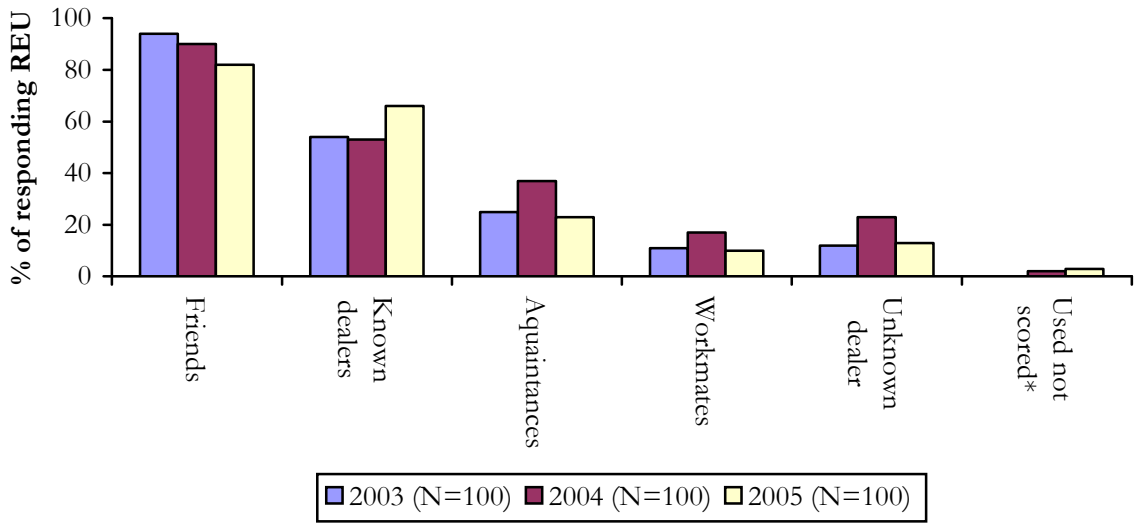
Source: PDI REU interviews, 2003-2005

Consistent with the REU sample reports, the KE reported that ecstasy pills were easy to very easy to obtain, and that the availability had recently been stable. Four KE commented that recent large seizures, including one of 1.3 tonnes in April 2005, had seemed to have had no effect on the availability of ecstasy. A number of KE made the distinction between ecstasy pills and MDMA powder, with one noting that, although the availability of pills is stable, there appears to have been a recent reduction in the availability of MDMA powder. A second KE commented that the ecstasy market was predominately made up of pills, with neither powder or caps being picked up in Melbourne by undercover police. A third KE noted, however, that powder has been around for a few years.

One KE noted that there were a number of options available to someone wanting to purchase ecstasy: 'Everyone knows someone, a friend of a friend. Also, in certain car parks (St Kilda and Prahran) dealers pull up, sell out of car and then move on. Or you can buy in club, although as a last resort, as this is a more risky in terms of getting a dud pill, or something dodgy'. Further, one KE noted that ecstasy is so readily available that 'if you go to a rave, expect to be offered one'. Another KE reported that 'There is so much around that discerning users can be very specific about what they want'.

As with previous years, the majority of the 2005 REU sample reported that in the six months prior to interview they had obtained ecstasy from friends (82%) or known dealers (66%; Figure 10). Other people from whom ecstasy had recently been obtained included acquaintances (23%), unknown dealers (13%) and work colleagues (10%).

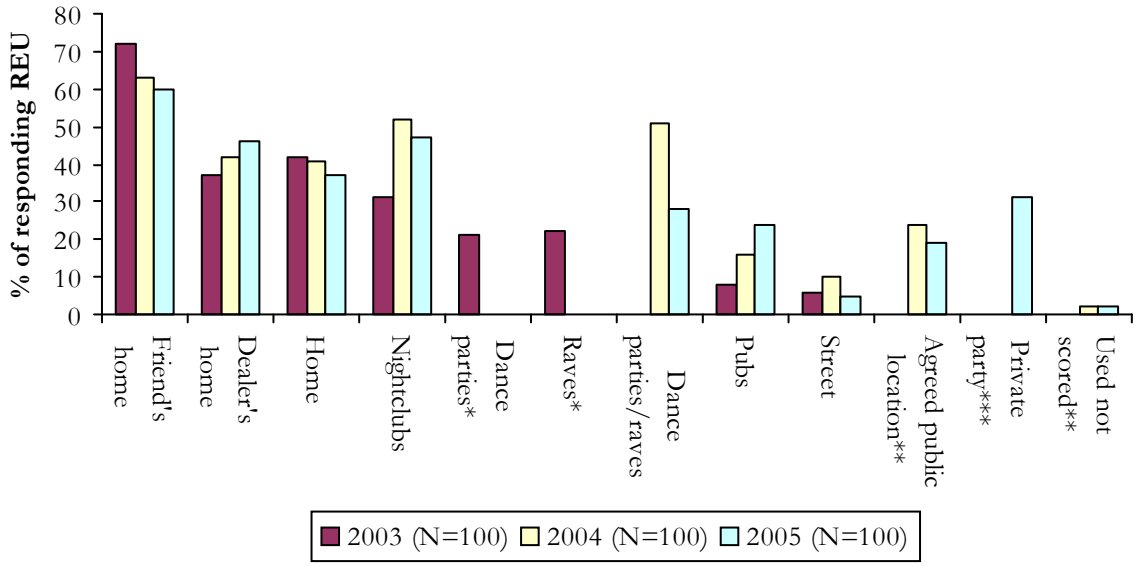
Figure 10: People from whom ecstasy was purchased in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005
*** Categories not included in 2003 REU survey**

The 2005 REU sample reported most often obtaining ecstasy at friends' homes (59%), in nightclubs (46%), at dealers' homes (46%) and their own home (37%; Figure 11). Other purchase locations included at private parties (31%), raves/doofs/dance parties (28%), pubs (24%), agreed public locations (19%), acquaintance's homes (7%), the street (5%) and work (3%).

Figure 11: Locations where ecstasy was purchased in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**
**** Categories not included in 2003 REU survey**

These reports, both in terms of who the REU sample purchase ecstasy from (i.e. friends and other social network members) and purchase locations (i.e. private homes), illustrate the central role that social networks play in ecstasy markets.

4.7 Ecstasy markets and patterns of purchasing ecstasy

The 2005 REU sample reported a variety of methods of paying for ecstasy in the preceding six months, most commonly paid employment (90%) and being given ecstasy by friends or partner (being 'shouted'; 65%; Table 5). Dealing drugs to provide personal supply (25%), borrowing money from friends (25%), government benefits (24%), receiving credit from dealers (22%), cash profit from dealing drugs (15%), money from parents (15%) and bartering other drugs or goods for ecstasy (9%) were less commonly mentioned. Infrequently reported methods of paying for ecstasy included pawning goods (1%) and sex work (1%).

The 2005 REU sample reported that they had scored ecstasy from a median of three different people in the preceding six months. The majority (80%) of the sample reported typically purchasing ecstasy for themselves and others, and purchasing a median of five ecstasy pills (range 1-200) on an occasion. Two KE made reference to the ecstasy users they were of aware of buying in bulk, with one noting that particularly the younger users he was aware of were increasingly pooling their money to make bulk purchases. Another KE reported that a dealer they were aware of had recently started only dealing in 'tens', thereby doing less deals but larger quantities, and increasing the amount of on-selling (not for profit) within the group.

Over three-quarters (77%) of the REU sample reported being able to obtain other drugs from their main ecstasy dealer. Other drugs identified by these participants as being obtainable from their main dealer included methamphetamine powder (87%), cannabis (53%), crystal methamphetamine (30%), LSD (29%), cocaine (27%), and ketamine (26%).

Table 5: Patterns of purchasing ecstasy, 2005

	2005 (N=100)
Forms used to pay for ecstasy tablets (%)	
Paid employment	90
Credit from dealers	22
Government allowance	24
Gift from friend	65
Borrowed from friends	25
Money from parents	15
Dealing drugs (ecstasy profit)	25
Dealing drugs (cash profit)	15
Bartering drugs	9
Fraud	0
Property crime	0
Pawning	1
Sex work	1
Median no. of people purchased from	3
Purchased for (%)	
Self only	18
Self and others	80
Others only	1
No. of times purchased in the last 6 months (%)	
1-6	32
7-12	45
13-24	16
25 +	4
Median no. of ecstasy tablets purchased	5
Able to purchase other drugs from main dealer (%)	77
Drugs able to purchase*	
Speed	87
Base	8
Ice	30
Pharmaceutical stimulants	4
Cocaine	27
MDA	7
LSD	29
GHB	3
Ketamine	26
Cannabis	53
Heroin	3

Source: 2005 PDI REU interviews
*** Among those who reported being able to purchase other drugs from main dealer**

The 2005 sample were asked how a range of factors would potentially affect the price of ecstasy (Table 6). Of those who responded (n=97), factors which participants believed would increase the price of ecstasy included buying in a public venue (63%) and a decrease in availability of ecstasy generally (51%). Factors thought by participants to lead to a decrease in the price of ecstasy included buying larger quantities (95%), knowing the supplier well (75%) and supplier being close to the original source (71%). A number of factors were thought by participants to have no influence on the price of ecstasy: increase in police activity (72%), not planning the purchase in advance (63%), purchasing at a special time of year (59%), a decrease in availability of a particular type (i.e. brand/logo) of pill (51%), and higher MDMA content and/or purity (50%).

One KE commented, however, that when dealers are marketing a new product (pill) the branding is a very important component of that.

Table 6: Factors influencing the price of ecstasy, 2005

	2005 (n=97)
Knowing supplier	
Don't know	1
Increase	2
Decrease	75
No change	22
Supplier close to source	
Don't know	4
Increase	1
Decrease	71
No change	24
High MDMA content	
Don't know	6
Increase	44
Decrease	0
No change	50
Decrease in brand/logo	
Don't know	6
Increase	42
Decrease	1
No change	51
Decrease in availability	
Don't know	10
Increase	51
Decrease	1
No change	38
Special time of year	
Don't know	1
Increase	34
Decrease	6
No change	59
Buying larger quantity	
Don't know	0
Increase	0
Decrease	95
No change	5
Increased police activity	
Don't know	21
Increase	6
Decrease	1
No change	72
Buying in public venue	
Don't know	6
Increase	63
Decrease	1
No change	30

Source: 2005 PDI REU interviews

The 2005 sample were also asked whether (and how) a number of factors would hypothetically influence their own levels of ecstasy use (Table 7). Of those who commented, factors thought to potentially lead to a reduction in levels of personal ecstasy use included if the purity went down (85%) and if it was harder to obtain ecstasy (63%). Equal proportions of the sample reported that

their use of ecstasy would decrease (47%) or not change (47%) if the price of ecstasy increased. A large number of factors were considered not to have the potential to change participants' levels of ecstasy use: if the chances of being caught by the police were reduced (92%), if the penalties for use were decreased (90%), if crystal methamphetamine was easier to get (85%), if ecstasy was easier to obtain (77%), if the penalties for ecstasy use were increased (71%), if cocaine was easier to obtain (59%) and if the chances of being caught by the police were higher (52%).

Table 7: Factors influencing the use of ecstasy, 2005

	2005 (n=97)
Price went up	
Don't know	3
Increase	0
Decrease	47
No change	47
Purity went down	
Don't know	2
Increase	6
Decrease	85
No change	7
Harder to get	
Don't know	1
Increase	1
Decrease	63
No change	35
Easier to get	
Don't know	0
Increase	23
Decrease	0
No change	77
Ice easier to get	
Don't know	1
Increase	1
Decrease	13
No change	85
Cocaine easier to get	
Don't know	3
Increase	6
Decrease	32
No change	59
Chance of being caught by police higher	
Don't know	3
Increase	2
Decrease	43
No change	52
Chance of being caught by police lower	
Don't know	1
Increase	7
Decrease	0
No change	92
Penalties for ecstasy use increased	
Don't know	3
Increase	1
Decrease	25
No change	71

Table 7: Factors influencing the use of ecstasy, 2005 (continued)

	2005 (n=97)
Penalties for ecstasy use decreased	2
Don't know	8
Increase	0
Decrease	90
No change	
Negative effects on:	
Physical health	2
Don't know	1
Increase	83
Decrease	14
No change	14
Mental health	
Don't know	0
Increase	1
Decrease	90
No change	9
Work/study	
Don't know	0
Increase	0
Decrease	88
No change	12
Relationships	
Don't know	1
Increase	1
Decrease	89
No change	9
Friends stopped use	
Don't know	2
Increase	0
Decrease	54
No change	44
Friends increased use	
Don't know	1
Increase	23
Decrease	0
No change	76

Source: 2005 PDI REU interviews

4.8 Ecstasy-related harms

4.8.1 Law enforcement

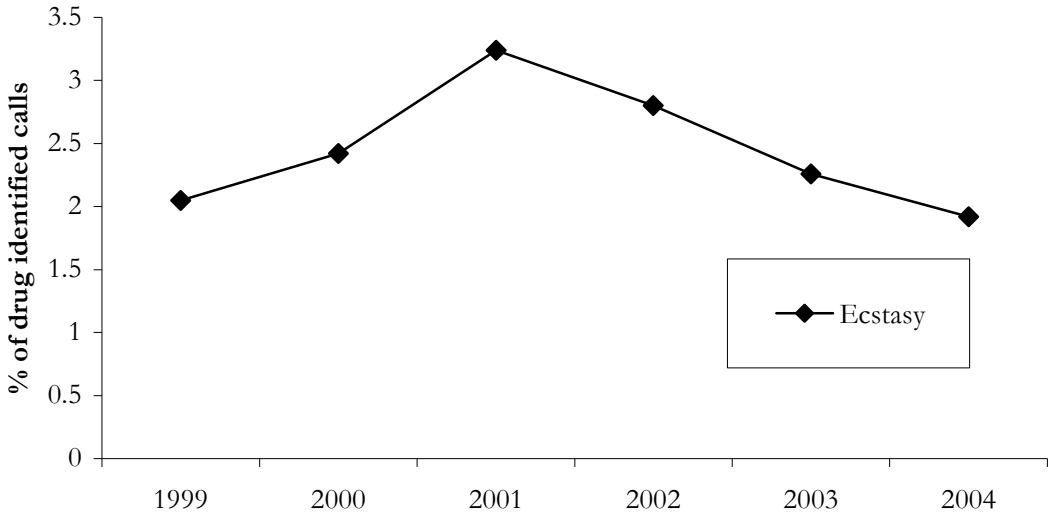
No Victorian ecstasy-specific law enforcement indicator data are available.

4.8.2 Health

DirectLine calls

During 2004, DirectLine responded to 517 calls where ecstasy was identified as a drug of concern. This represents two percent of all drug-identified calls to DirectLine in that year (Turning Point Alcohol and Drug Centre Inc., unpublished data). The proportion of drug-related calls where ecstasy was identified is low, and has steadily declined since 2001 (see Figure 12).

Figure 12: DirectLine calls where drug of concern identified as ecstasy, 1999-2004



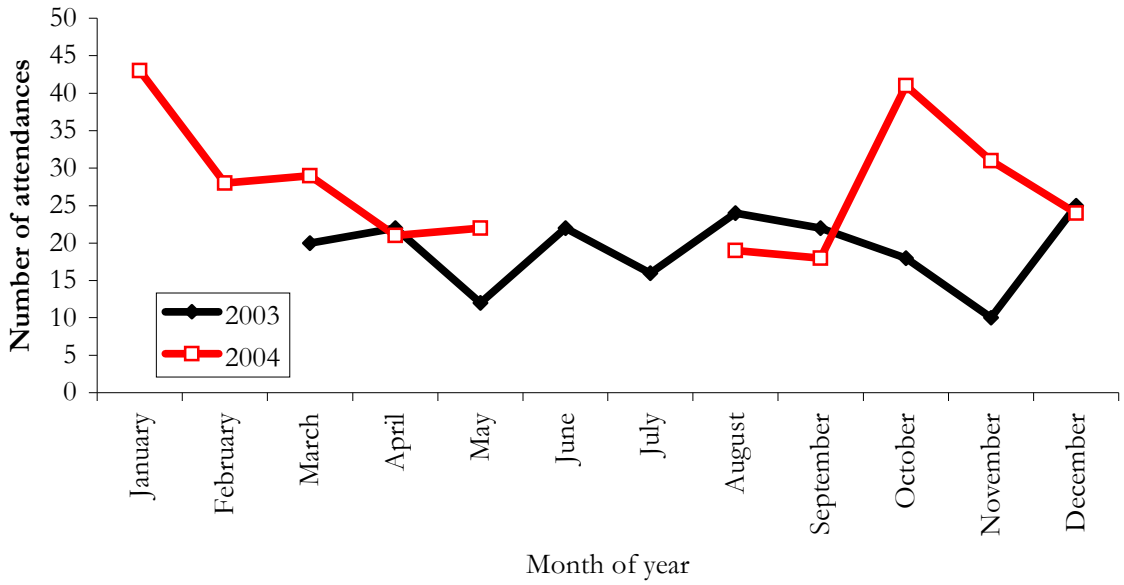
Source: DirectLine, Turning Point Alcohol and Drug Centre Inc (unpublished data).

Ecstasy-related events attended by ambulance

Figure 13 reports the monthly totals of ambulance attendances where ecstasy use was mentioned in Melbourne, January 2003-December 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004). Ambulance attendances where ecstasy use was recorded ranged between approximately 10-40 per month during 2003-2004, peaking in January and October 2004. This may reflect a relationship between increased use and the holiday periods, which are the peak times of year for large dance parties and music festivals.

In 2004 there were a total of 276 attendances where ecstasy use was mentioned, a larger number than in 2003 (n=191), and 2002 (n=174). In 2004 the average estimated age of cases was 24 years, and in 2003 it was 25 years (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre).

Figure 13: Monthly totals of ambulance attendance where ecstasy was mentioned in Melbourne, Jan 2003-Dec 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004).



Source: Metropolitan Ambulance Service and Turning Point Alcohol and Drug Centre.

In general, the KE reported low levels of health problems among the ERD users they were aware of. Consistent with the nature of their work, however, those KE in first aid/treatment/clinical roles reported two broad categories of health problems associated with ERD use: acute health problems and general mental health concerns.

Those KE providing harm reduction and first aid services (n=4) at events reported people presenting with a wide range of concerns, from headaches, and high blood pressure and pulse rates, to respiratory arrest (i.e. patients are unconscious and/or unresponsive). One KE reported treating people experiencing hallucinations, not necessarily related to taking specific hallucinogens but rather as a result of high levels of polydrug use. As one KE noted, however, nothing too serious [in terms of acute health risks] is associated with just ecstasy use, apart from some anxiety, and a limited ability to cope with the drug effects. Indeed, four KE noted that young, first time users can be quite anxious and take a long time to calm down. One KE spoke of increasing numbers of, particularly novice, ERD users requiring 'babysitting' at events. These users were described as the ones reluctant to ask questions around their use of ERDs and then subsequently having trouble dealing with a 'good' pill. The KE described them as 'not letting go and trying to fight it', noting that 'taking a psychoactive drug and expecting to retain complete control is a contradiction'. Two KE noted an increase of violent presentations and another reported seeing more amphetamine-related presentations. This KE noted that this may be because of amphetamine in pills sold as ecstasy rather than an increase in amphetamine use per se. Indeed, all four of these KE noted the high levels of polydrug use, the increased potential for harms associated with such use, and the difficulties in providing timely and appropriate treatment under such circumstances. As one KE argued, service providers need intelligence as to new drugs and likely presentations at specific places in order to provide optimum treatment, and establish the need for security and other management issues if there is a risk of aggression and/or violent behaviour.

KE reports (n=2) suggest that presentations to Melbourne hospitals' accident and emergency departments have increased in the last two years, but stabilised more recently. This broad pattern

of ERD-related presentations was clarified with acknowledgement of waves of presentations, such as when a new batch 'hits the streets', which will be associated with a run of 'significant overdoses', and that ERD-related presentations tend to be made from Thursday through to Sunday. The presentations to A&E departments, however, tend to be associated with GHB use (see Section 8.5); with one KE citing that approximately one-quarter of the A&E presentations could be classified as ecstasy overdoses (a reduction from approximately one-third of presentations two years ago). Such presentations were reported to be associated with agitation, insomnia, and abnormal movements, to the extent of body jerking. This KE reported that one-quarter of ERD-related presentations could be attributed to methamphetamine use (see Section 5.6).

Generalised anxiety disorder and depression were the most commonly reported general mental health concerns, followed by social phobia, and, less frequently, agoraphobia, reported by KE in clinical/treatment roles (n=4). One KE specified that all of his clients would have clinically significant depression but that it tends not to be the main presenting problem and/or primary concern, with users keen to address their anxiety first. KE (n=2) also spoke of ERD users experiencing suicidal ideation and exhaustion.

Clinical KE (n=2) reported rarely seeing clients with psychosis, but one noted that this was likely to be a result of the circumstances of clients he was seeing, who were 'ready of counselling' and so unlikely to be experiencing psychotic symptoms. A number (n=3) of clinical - and treatment - based KE made the observation that, compared to users of other drugs, ERD users experienced less significant problems, such as drug-induced psychosis, and that most problems (except short-term memory loss) reported by their clients cannot be directly attribute to their ecstasy use but rather to other drug use (i.e., chronic cannabis use and/or methamphetamine use).

One KE noted that some ERD users experience sub-acute anxiety following ecstasy use but tend to be insightful about how to manage the comedown. Another concurred, noting that ecstasy users seem to be pretty aware that after a weekend of partying, they are going to be depressed, tired and fatigued.

Three KE commented on the high levels of polydrug use, and the implications of this use in terms of A&D treatment provision. One used the example of those using ecstasy on the weekends, and cannabis for comedown, having an increased likelihood of experiencing problems. Three KE noted that, for some clients, polydrug use is an attempt to self-medicate for problems such as generalised anxiety disorder, depression and social phobia, although, as one KE noted, it is difficult for clinicians to be sure of the direction of causality.

4.9 Benefit and risk perception

Participants were asked to describe the benefits and risks they perceived to be associated with their own use of ecstasy.

4.9.1 Perceived benefits

The vast majority of the 2005 REU sample (90%) reported that they perceive there to be benefits associated with ecstasy use. In general, these perceived benefits concerned enhanced social and interpersonal experiences and the emotional and physical effects of the drug (Table 8). The most commonly mentioned benefits were fun (44%), enhanced closeness and bonding (41%), enhanced mood (such as euphoria, a sense of well-being and happiness; 26%) and enhanced communication and sociability (24%). Increased energy (16%), enhanced appreciation of music and dance (16%), the high/rush/buzz (15%), feelings of relaxation, escape and release (11%) and drug effects (11%) were also reported.

Table 8: Perceived benefits of ecstasy use among those who commented, 2005

Benefit	2005 (N=100)
Enhanced communication/talkativeness/more social	**24**
Fun	**44**
Enhanced mood	**26**
Increased confidence/decreased inhibitions	**9**
Enhanced closeness/bonding/empathy with others	**41**
Increased energy/stay awake	**16**
Relax/escape/release	**11**
Enhanced appreciation of music and/or dance	**16**
Enhanced sexual experience	**9**
The high/rush/buzz	**15**
Different to effects of alcohol	**6**
Drug effects	**11**
Feelings in control/focused	**3**
Cheap	**0**
Other	**12**
None	**10**

Source: 2005 PDI REU interviews

4.9.2 Perceived risks

The majority (92%) of the 2005 REU sample also reported that they perceived there to be risks associated with their own use of ecstasy. Psychological harms were the most commonly mentioned risks, including unspecified psychological harms (32%), depression (28%), anxiety/panic (12%), psychosis (7%) and lack of motivation (7%; Table 9). Physical harms such as unspecified physical harms (14%), dehydration (11%), and general acute physical harms (10%) were also identified by participants. Concerns about the contents of ecstasy tablets, such as unknown strength and purity (5%) and unknown contaminants (8%) were also mentioned as a potential source of harm. In addition, financial (10%), employment (6%) and legal (6%) problems were identified as risks associated with ecstasy use by the participants.

Table 9: Perceived risks of ecstasy use among those who commented, 2005

Risk	2005 (N=100)
Physical harm (effects on physical health)	**59**
Psychological harm (effects on mental health)	**71**
Neuropsychological harms	**48**
Harms related to illicit status (unknown purity/ contaminants)	**13**
Overdose (fatal or non-fatal)	**8**
None	**7**
Impaired decision making	**4**
Addiction/ dependence	**5**
Legal problems	**7**
Unknown long-term risks	**4**
Financial problems	**10**
Employment problems	**6**
Social/relationship problems	**4**
Driving risk	**4**
Increased vulnerability	**4**
Unsure	**1**

Source: 2005 PDI REU interviews

4.10 Summary of ecstasy trends

Reports from the Victorian REU and KE suggest that:

- **ecstasy typically costs $30 per pill;**
- **the price of ecstasy has remained stable over the previous three years;**
- **the purity of ecstasy was rated as medium to high, although many users reported fluctuations in purity;**
- **ecstasy remains readily available and is predominantly sourced from friends or known dealers in private residences and nightclubs;**
- **the perceived benefits of ecstasy use include fun, and enhanced bonding with others, mood and communication;**
- **the perceived risks of ecstasy use include psychological/mental health concerns, physical harms and neuropsychological harms.**

5.0 METHAMPHETAMINE

5.1 Methamphetamine use in the general population

The 2004 NDSHS provides the most recent national figures regarding the prevalence of methamphetamine use in the Australian general population. This survey indicates that in 2004 3.2% of the Australian population aged 14 years and over had recently (in the last 12 months) used meth/amphetamine (Australian Institute of Health and Welfare 2005). The most recent data available regarding the prevalence of methamphetamine use in the general population of Victoria also comes from the 2004 NDSHS. According to the findings of this survey, 2.8% of the Victorian population aged 14 years and above had used methamphetamine within the twelve months prior to interview (Australian Institute of Health and Welfare 2005).

It is noteworthy that, as with ecstasy use, nationally the highest prevalence of both 'lifetime' (21.1%) and 'recent' (10.7%) methamphetamine use was reported by the 20-29 year old age group (Australian Institute of Health and Welfare 2005). Figures from the most recent Victorian Youth Alcohol and Drug Survey (Premier's Drug Prevention Council 2005), are comparable with these findings: of the 16-24 year olds surveyed (n=6,005), 15% reported having ever used methamphetamine in their lifetime, and 10% reported use in the 12 months prior to survey. The VYADS provides evidence of the relatively infrequent use of methamphetamine use among this younger age group: among recent methamphetamine users, just over one-third (35%) reported using approximately once a month or more frequently, just over a quarter (29%) reported using 'every few months', less than a quarter (22%) reported using once or twice a year and 14% reported having only used methamphetamine on one occasion (Premier's Drug Prevention Council 2005). According to the VYADS, methamphetamine powder (87%) and crystal methamphetamine or 'ice' (19) were the most commonly used forms of methamphetamine by respondents, and were most commonly snorted (72%), swallowed (59%) or smoked (23%) (Premier's Drug Prevention Council 2005). Evidence from the 2004 NDSHS suggests a median age of first methamphetamine use of 20.8 years (Australian Institute of Health and Welfare 2005).

5.2 Methamphetamine use among REU

5.2.1 Methamphetamine powder (speed)

Nearly all the 2005 REU sample (97%) reported lifetime methamphetamine powder (speed) use and the majority (85%) had used speed in the preceding six months (Table 10). The median age of first use for speed was 18 years (range 14-40). Twelve percent of the sample nominated speed as their drug of choice.

Those participants that reported speed use in the preceding six months had used it on a median of 10 days (range 1-80), with nearly half (41%) using speed once a month or less and the majority (60%) using it fortnightly or less. Twelve percent of recent speed users used speed more than fortnightly but less than once per week and slightly more than one-quarter (28%) used it once per week or more.

Thirty-five participants reported their 'typical' or 'average' use episode and forty-eight reported their 'heaviest' use episode in the preceding six months in terms of grams: the median amount used in a 'typical' episode was 0.5 grams (range 0.05-1) and the median amount used in the 'heaviest' session was one gram (range 0.01-5). Thirty-nine participants reported their 'typical' or 'average' use episode and twenty-eight participants reported their 'heaviest' use episode in the preceding six months in terms of 'points' (one point is equal to approximately 0.1 of one gram). The median amount used in a 'typical' episode was two points (range 1-4) and the median

amount used in the 'heaviest' session was two points (range 0.25-6). Small numbers of participants quantified their use in terms of lines, ounces, and bags.

Table 10: Patterns of methamphetamine powder (speed) use among REU, 2003-2005

Speed	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Ever used (%)	98	98	**97**
Used preceding six months (%)	89	92	**85**
Of those who had used			
Median days used last 6 mths (range)	8 (1-170) (n=89)	7.5 (1-150) (n=92)	**10 (1-80) (n=85)**
Median quantities used (grams)			
Typical (range)	0.5 (0.1-5) (n=23)	0.5 (0.13-1) (n=23)	**0.5 (0.05-1) (n=35)**
Heavy (range)	1 (0.1-14) (n=43)	1 (0.25-4) (n=40)	**1 (0.01–5) (n=48)**

Source: PDI REU interviews, 2003-2005

Over half (55%) of those participants (n=97) who reported that they typically used drugs in conjunction with ecstasy reported that they usually used speed in conjunction with ecstasy, whereas only eleven percent of those reporting use of drugs during the comedown from ecstasy (n=88) reported usually using speed during this period. Of those reporting bingeing (n=52), speed (80%) was the second most popular drug used during binges, behind ecstasy (98%).

The majority of participants who reported using speed in the past six months (n=85) said they snorted it (91%). Swallowing (61%), smoking (45%) and injecting (12%) were other routes of speed administration reported by the 2005 REU sample.

Although the patterns of speed use were generally comparable between the 2003, 2004 and 2005 samples, a considerably higher proportion of the 2005 sample reported smoking speed (45%) than the 2003 (20%) and 2004 (6%) REU samples.

As was the case in 2004, compared to the 2005 REU sample reports, KE tended to underestimate the prevalence of speed use among REU, with sixteen reporting use of speed by 10% to 90% of REU they were in contact with. Please note that, although four of these KE reported that they do not distinguish between the three forms of methamphetamine, their reports concerning methamphetamine are included in this section of the report.

There was also diversity in the KE reports concerning whether or not ecstasy and speed were typically used in conjunction with one another. Some KE reported that ecstasy and speed were considered a good combination or complementary drugs, and thus were often used together (n=6): 'if using e, likely to be using some other type of stimulant and may have speed towards the end of the night when the pill wears off – seem to be getting more aware that it is better than having another pill'. Other KE, however, reported users as infrequently using the two drugs at the same time (n=3). As one KE explained it, 'ecstasy is a drug by itself, to be experienced by itself … why wouldn't you just take e?'

KE from first aid backgrounds reported that there were high levels of methamphetamine use in those presenting at their services (n=3), although one KE questioned whether this was as a result of intentional methamphetamine use, or the consumption of pills sold as ecstasy containing methamphetamine.

Snorting was the route of administration of speed reported by the KE (n=3), with small proportions taking it orally (n=1) or injecting it (n=1). One KE reported an increase in the use of

'smokeable' speed, noting that previously people preferred smoking crystal meth, partly as it had been perceived as being cleaner, so now 'smokeable' speed is being marketed. One KE noted that among a group of young, more chaotic ERD users, there had been recent reports of 'skittles', that is, cold and flu tablets with dextromethorphan (DXM) as the active ingredient.

5.2.2 Methamphetamine base

Just over a third of the 2005 REU sample (34%) reported lifetime methamphetamine base (base) use and less than one-quarter (21%) reported using base in the preceding six months (Table 11). The median age of first use for base was 19 (range 15-30). One participant nominated base as their drug of choice.

Those participants that reported using base in the preceding six months (n=21) had done so on a median of 3 days (range 1-70). Base was used relatively infrequently in the preceding six months, with most (67%) respondents who had used base in the preceding six months doing so once a month or less. Nineteen percent of recent base users had used base more than once per month but less than fortnightly, and 14% used base more than fortnightly, with only two participants reported using it weekly or more. Base was only used by one percent of those participants that reported they typically used other drugs in conjunction with ecstasy (n=97), and none of those participants reporting the use of drugs during the comedown reported using base during this period (n=88). Of those who reported binging in the preceding six months (n=52), six percent had used base when doing so.

Of those who reported using base during the preceding six months, over half quantified their average (n=14) and heaviest (n=13) use in terms of points. The median amount of base used in a 'typical' episode was 1.25 points (range 0.5-3) and the median amount used in the 'heaviest' session was 2 points (range 0.5-3). Small numbers of participants also referred to grams and lines.

The majority (81%) of participants that reported using base in the preceding six months (n=21) had swallowed it. Over one-third (38%) reported snorting base, with 38% reporting smoking base and 24% reporting injecting it in the previous six months.

The patterns of base use are comparable over the three years that data have been collected in Victoria, reflecting relatively low levels of lifetime and recent use in the REU samples, and low frequency of use by those reporting recent use.

Table 11: Patterns of methamphetamine base use among REU, 2003-2005

Base	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Ever used (%)	50	45	**34**
Used last six months (%)	27	34	**21**
Of those who had used			
Median days used last 6 months (range)	4 (1-52)	2.5 (1-48)	**3 (1-70)**
Median quantities used (points)			
Typical (range)	1 (0.13-3) (n=15)	1 (0.25-5) (n=26)	**1.25 (0.5-3) (n=14)**
Heavy (range)	1 (0.5-11) (n=16)	1 (0.5-5) (n=19)	**2 (0.5-3) (n=13)**

Source: PDI REU interviews, 2003-2005

Only five KE reported use of base by the ecstasy users they had contact with, and were typically able to provide only limited information about this use. Although three KE reported base as rarely seen, with one saying this was stable, one KE reported seeing a 'fair bit around'. This KE described base as varying from brown to a 'nice white', wet but 'not too wet than you can't smoke it', and reported ERD users as smoking this base.

In addition to these reports, one law enforcement KE reported seeing less base than previously, proposing that this was a trend on 'cooking', in terms of methods used and level of skills. This KE explained that base exists 'when cooks aren't cooking very well – purer and sticky because can't get to nice, white, fluffy powder stage'. Base was particularly associated with the 'hypo' method – a method 'out of a suitcase' and using pseudoephedrine, so it was very accessible. People previously using this method and/or producing base have either moved away from the scene or got better at cooking.

5.2.3 Crystal methamphetamine

Nearly three-quarters of the 2005 REU sample (71%) reported lifetime crystal methamphetamine use and less than half (42%) reported using crystal methamphetamine in the preceding six months (Table 12). The median age of first use for crystal methamphetamine was 20 years (range 16-45). Seven participants nominated crystal meth as their drug of choice.

Those participants that reported use of crystal methamphetamine in the preceding six months (n=42) had done so on a median of 4.5 days (range 1-100). Crystal methamphetamine was used relatively infrequently in the preceding six months, with most (67%) participants using crystal meth once a month or less, 12% more than once a month but less than fortnightly, and 21% using crystal meth more than fortnightly. Ten percent of those participants reporting typically using other drugs in conjunction with ecstasy (n=97) reported usually using crystal methamphetamine with ecstasy, and only two percent of those participants that reported typically using drugs during the comedown from ecstasy (n=88) reported typically using crystal methamphetamine during this period. Of those who reported binging in the preceding six months (n=52), one-third (33%) reported that they had used crystal methamphetamine when doing so.

Of those who reported using crystal methamphetamine during the preceding six months, most quantified their average (n=28) and heaviest (n=26) use in terms of points. The median amount of crystal methamphetamine used in a 'typical' episode was 1 point (range 0.13-5) and the median amount used in the 'heaviest' session was 2 points (range 0.5-5; Table 13). Small numbers of participants also referred to grams, lines, pipes, bulbs and crystals.

Most (83%) participants that reported using crystal methamphetamine in the preceding six months (n=42) had smoked it. One-third 33% reported snorting crystal methamphetamine, just over one-quarter (26%) reported having swallowed it, and twelve percent of recent users reported injecting crystal methamphetamine in the past six months.

Although lifetime prevalence of crystal meth was similar between the 2003, 2004 and 2005 samples, levels of recent use have decreased since 2003. In addition, those who had recently used crystal methamphetamine in 2004 and 2005 had typically done so on fewer days than recent users in the 2003 sample.

Table 12: Patterns of crystal methamphetamine use among REU, 2003-2005

Crystal	2003 (N=100)	2004 (N=100)	2005 (N=100)
Ever used (%)	75	71	**71**
Used last six months (%)	62	52	**42**
Of those who had used			
Median days used last 6 mths (range)	6 (1-60) (n=62)	5.5 (1-96) (n=52)	**4.5 (1-100) (n=42)**
Median quantities used (points)			
Typical (range)	1 (0.25-3) (n=42)	1 (0.5-5) (n=40)	**1 (0.13-5) (n=28)**
Heavy (range)	2 (0.5-6) (n=33)	1 (0.5-4) (n=31)	**2 (0.5-5) (n=26)**

Source: PDI REU interviews, 2003-2005

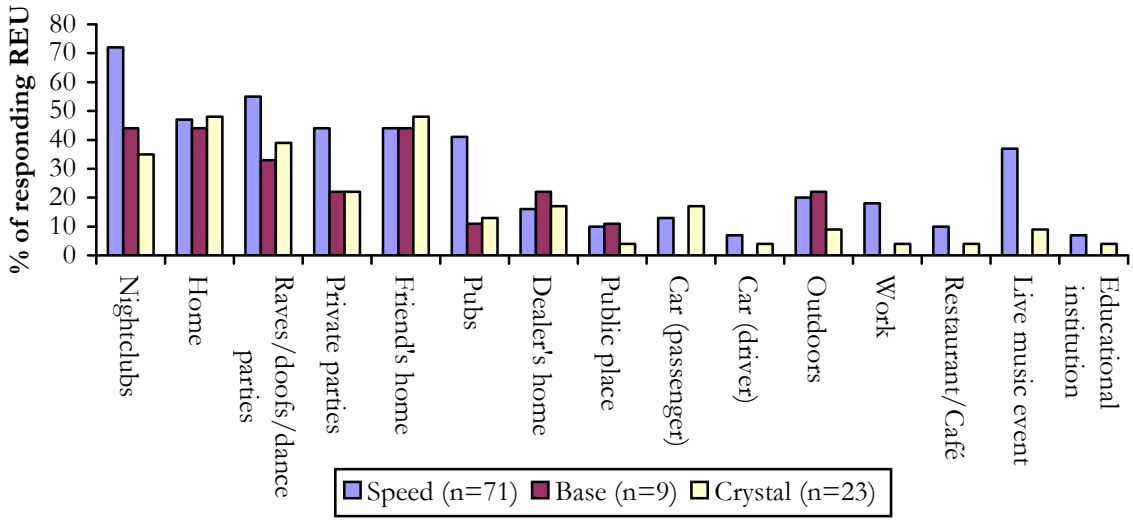
Sixteen KE estimated a wide range of prevalence ('none' to 'most') of crystal meth use among ecstasy users, with most reported low prevalence of use. One KE, however, reported that crystal meth use was more prevalent than ecstasy use in the group of ERD users she was aware of. Only four KE reported routes of crystal meth administration: smoking (n=2), snorting (n=1) and injecting (n=1). One KE reported that most users prefer not to smoke, considering it the 'next step', and so snort crystal meth. Further, this KE noted that although pipes are illegal in Victorian, people still have them and some still report being able to buy them (perhaps interstate). The KE reporting the injection of crystal meth talked of the use of the drug in a sexual context for men who have sex with men (MSM). This KE noted that there has been an increased in the injection of crystal methamphetamine since the banning of crystal pipes, despite strong anti-injection stigma.

Two KE reported that people seem to be wary of crystal meth and 'treat it with respect', with some users reporting previous problems associated with crystal. One KE argued that crystal methamphetamine is less of a 'party drug', as its highly addictive qualities make it conducive towards daily smoking, meaning that it is 'only a matter of time before negative consequences are experienced'. Indeed, as described below (see Section 5.6), a range of harms may be associated with the use of crystal methamphetamine.

5.2.4 Location of methamphetamine use

Participants reported a wide range of locations where they usually used the different forms of methamphetamine, with some variation in places where participants used the different types of methamphetamines (Figure 14). Speed was predominantly used in nightclubs (72%) and at raves/doofs/dance parties (55%), with its use at participants' own home (47%), friends' homes (44%) and private parties (44%) also commonly reported. In comparison, the most commonly reported usual locations of crystal methamphetamine use were private locations such as participants' own homes (48%) and friends' homes (48%), although use in public locations such as raves/doofs/dance parties (39%) and nightclubs (35%) was also reported. This difference is likely related to preferred routes of administration for these forms of methamphetamine (see Sections 5.2.1 to 5.2.3), with speed primarily snorted or swallowed and crystal methamphetamine primarily smoked, and locations chosen as most amenable to such methods. Base use, however, (most commonly snorted or swallowed) was equally reported in nightclubs (44%) and private locations such as participants' own homes (44%) and friends' homes (44%).

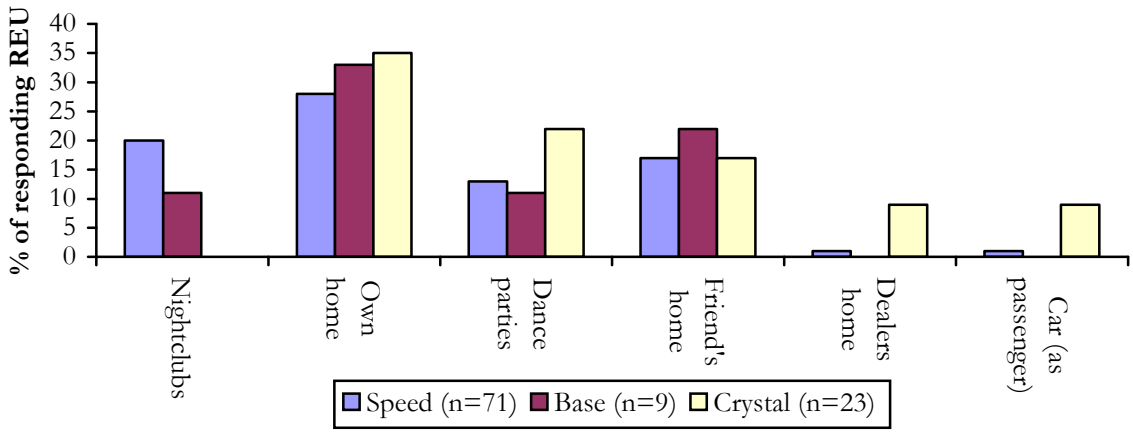
Figure 14: Location of usual methamphetamine use by form, 2005



Source: PDI REU interviews, 2005

In comparison to the variability in the locations of *usual* methamphetamine use, the reports of the 2005 REU sample concerning their *most recent* location of methamphetamine use were remarkably consistent, with their own home the most common location for most recent use of all three forms of methamphetamine (powder 28%; base 33%; crystal 35%) (Figure 15).

Figure 15: Location of most recent methamphetamine use by form, 2005



Source: PDI REU interviews, 2005

5.3 Price

Slightly less that three-quarters (71%) of the 2005 REU sample was able to comment on the current price, purity or availability of speed (Table 13). Forty-six participants were able to comment on the price of speed per gram, with a median of $180 being reported. The other commonly mentioned amount of speed was a point (n=16), with a median of $30 reported. Small numbers of participants also commented on half-weight or half-gram prices and one participant reported the price of one ounce of methamphetamine powder. The prices reported for each of the quantities has remained relatively consistent across the three years.

Only nine participants from the 2005 REU sample were able to comment on the price, purity or availability of base. Four participants commented on the price of methamphetamine base in gram quantities, reporting a median price of $200 per gram. Two participants were able to comment on the current price of base in terms of points, with the median price of $22.50 paid for a point of base.

Slightly less than one-quarter (24%) of the sample was able to comment on the price, purity or availability of crystal methamphetamine. Five participants were able to comment on the price of crystal meth per point, with a median of $40 being reported. Twelve participants reported the price of crystal methamphetamine in terms of grams, with a median price of $385 per gram. Other quantities of crystal methamphetamine reported by participants were half weight (n=1) and quarter ounce (n=1).

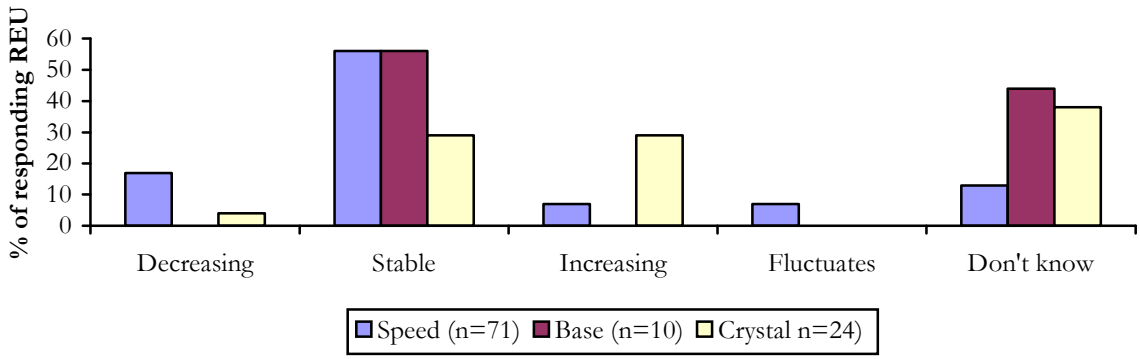
Table 13: Price of various methamphetamine forms purchased by REU, 2001-2005

Median price ($)	2003	2004	2005
Speed			
Point	$30 ($15-$50) (n=30)	$25 ($15-$50) (n=34)	**$30 ($20-$50) (n=16)**
Half gram	-	$95 ($80-$120) (n=4)	**$100 ($50-$130) (n=11)**
Gram	$180 ($30-$300) (n=33)	$180 ($50-$250) (n=34)	**$180 ($100-$280) (n=46)**
Ounce	-	-	**$1300 (n=1)**
Base			
Point	$32.50 ($20-$230) (n=10)	$28.75 ($25-$50) (n=6)	**$22.50 ($20-$25) (n=2)**
Half gram	-	$110 ($100-$120) (n=2)	**-**
Gram	-	$200 ($160-$270) (n=3)	**$200 ($170-$300) (n=4)**
Crystal			
Point	$40 ($20-$50) (n=29)	$40 ($25-$50) (n=20)	**$40 ($25-$40) (n=5)**
Half gram	-	$150 ($125-$180) (n=4)	**$120 (n=1)**
Gram	$300 ($200-$400) (n=13)	$290 ($120-$400) (n=11)	**$385 ($200-$550) (n=12)**
Quarter ounce	-	-	**$2450 (n=1)**

Source: PDI REU interviews, 2005

Of the 71 participants from the 2005 REU sample who were able to comment on the price of speed over the preceding six months, over half (56%) reported the price of speed had remained stable and 17% reported decreases in the price of speed (Figure 16). Of the nine participants who commented, over half (56%) reported the price of base over the preceding six months had remained stable and four (44%) reported that they did not know. Of the 24 participants who were able to comment on the price of crystal methamphetamine over the preceding six months, less than one-third (29%) reported the price of crystal methamphetamine had remained stable, with the same proportion (29%) reporting that it had increased.

Figure 16: Recent changes in price of various methamphetamine forms purchased by REU, 2005

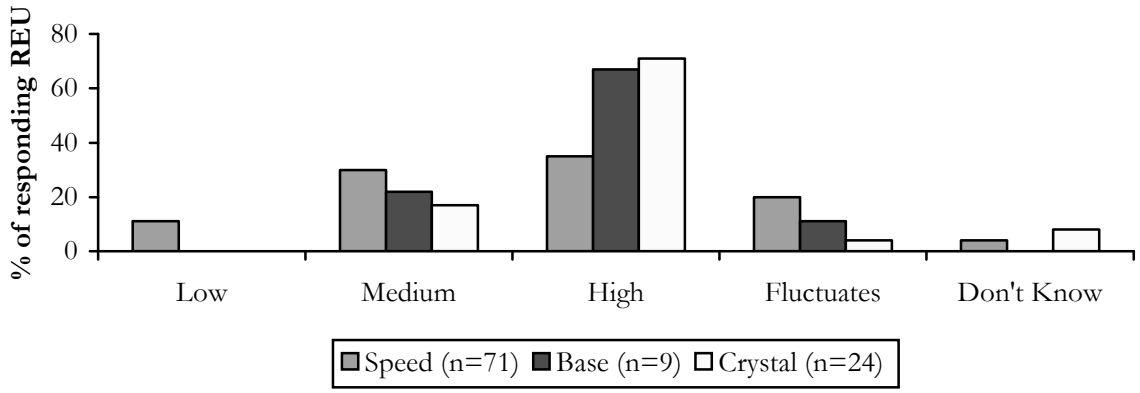


Source: PDI REU interviews, 2005

5.4 Purity

Estimates of the purity of speed by the 2005 REU sample were less consistent than for base or crystal methamphetamine (Figure 17). Of those participants who reported recent use of speed (n=71), 35% reported its current purity as high, 30% rated it as medium and 20% reported it as fluctuating (20%). Only nine participants commented on the current purity of methamphetamine base, with two-thirds (67%) reporting it as high, 22% as medium and 11% as fluctuating. Of those who responded (n=24), the majority (71%) rated the purity of crystal methamphetamine as high, with a further 17% rating it as medium. Comparisons between the reported purity of different types of methamphetamine need to be approached with caution, however, because relatively small numbers of participants were able to rate the purity of base (n=9) and crystal meth (n=24) compared to speed (n=71).

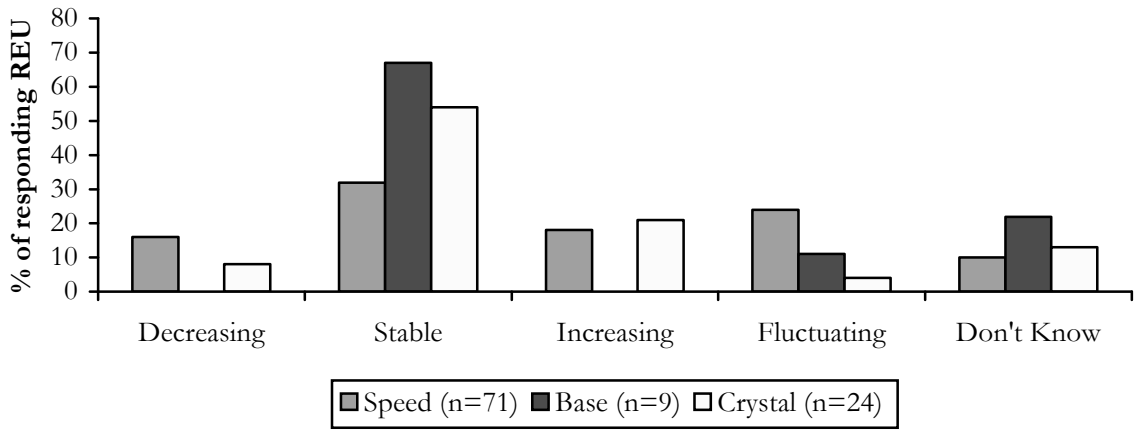
Figure 17: User reports of current methamphetamine purity, 2005



Source: PDI REU interviews, 2005

Reports of changes in the purity of base and crystal methamphetamine over the past six months were more consistent than for speed (Figure 18). Whereas estimations of recent changes in the purity of speed were roughly evenly distributed across the response categories, of those who responded, most (67%) said that the purity of base was stable over the preceding six months and the majority (75%) responded that the purity of crystal meth had either remained stable or increased. Again, these figures should be compared with caution because of the relative numbers of participants who were able to comment on the purity of different types of methamphetamines.

Figure 18: User reports of changes in methamphetamine purity in the past six months, 2005

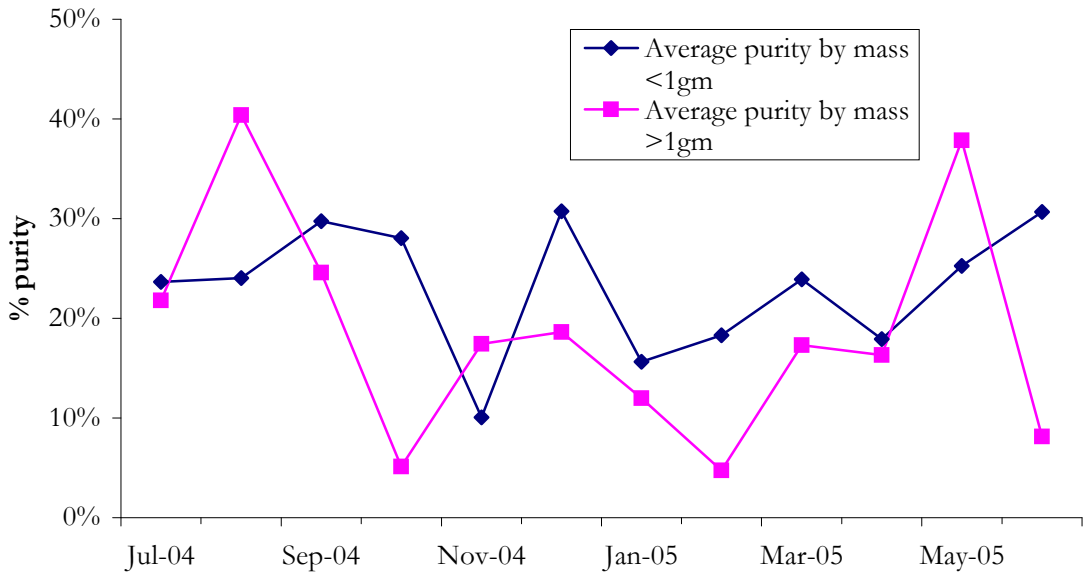


Source: PDI REU interviews, 2005

The mean purity of <1gm and >1gm methamphetamine seizures by law enforcement agencies in Victoria during the 2004/05 financial year is shown in Figure 19. All Victorian seizures are tested for purity. As shown in Figure 19, there is variability in the average purity of methamphetamine seizures over the 12-month period, more so in the larger (>1gm) seizures.

The mean purity of all seizures of methamphetamine analysed in Victoria during the 2004/05 financial year was 21% (range 5% to 40%), compared to 31% reported in 2003/04; 33% reported in 2002/03; 20% reported in 2001/02; 21% in 2000/01; and 15% in 1999/00 (Jenkinson & O'Keeffe, 2005).

Figure 19: Average purity of methamphetamine seizures by Victorian law enforcement, July 2004-June 2005



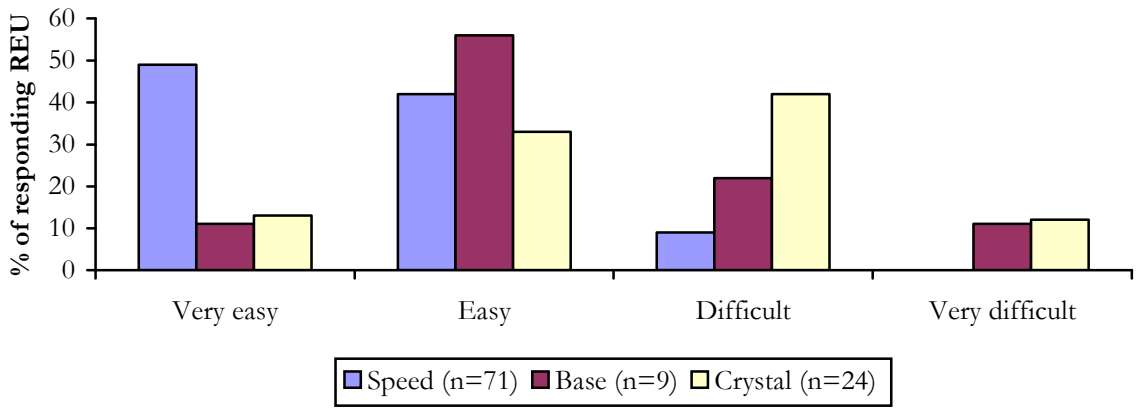
Source: Victoria Police Forensic Services Department.

5.5 Availability

The reported current availability varied across the three types of methamphetamines (Figure 20). Of those who commented on the availability of methamphetamine powder (n=71), the majority (91%) reported it as being 'very easy' (49%) or 'easy' (42%) to obtain. Of those who commented on the availability of methamphetamine base (n=9), more than two-thirds (67%) thought it was 'very easy' (11%) or 'easy' (56%) to obtain, with the remaining third (33%) responding that base was either 'difficult' (22%) or 'very difficult' (11%) to obtain.

In contrast to the reported relative ease of availability of both powder and base methamphetamine, of those who commented on the availability of crystal methamphetamine (n=24), just over half (54%) reported it as 'difficult' (42%) or 'very difficult' (12%) to obtain, with less than half (46%) reporting crystal methamphetamine as 'easy' (33%) or 'very easy' (13%) to obtain. Comparing the availability of the different types of methamphetamine is problematic because of the different numbers of participants able to respond. There does appear to be a trend, however, for crystal methamphetamine to be less readily available than the other two forms of methamphetamine.

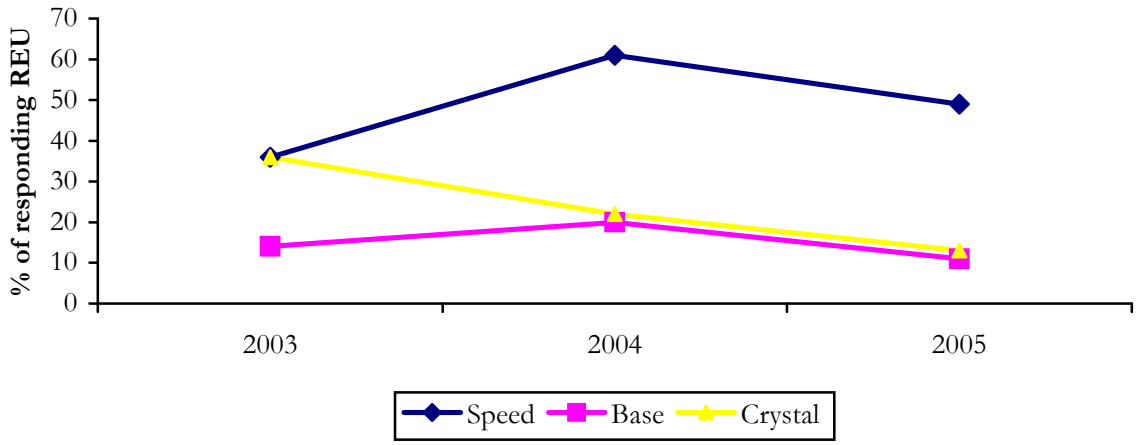
Figure 20: Current availability of methamphetamine forms, 2005



Source: PDI REU interviews, 2005

Consistent with the patterns of recent use reported earlier (i.e. reductions in the prevalence and frequency of crystal methamphetamine use: see Table 12), the availability of crystal methamphetamine (as indicated by reports of 'current availably') appears to have declined between 2003 and 2005 (Figure 21). Powder methamphetamine remains reportedly easier to obtain than the other forms of methamphetamine (i.e. base and crystal).

Figure 21: 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 in Victoria, 2003-2005

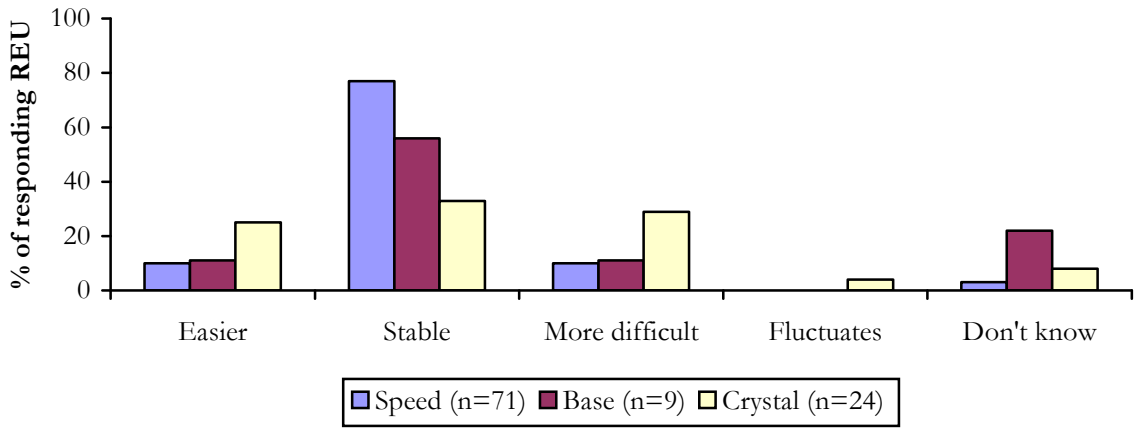


Source: PDI REU interviews, 2003-2005

Of those able to comment (n=71), the majority (77%) reported that the availability of speed had remained stable over the preceding six months, with smaller numbers of participants reporting that it had become 'easier' (10%) or 'more difficult' (10%) to obtain over that period of time (Figure 22). Over half (56%) of respondents (n=9) thought the availability of base in the preceding six months had remained stable, with equal proportions reporting that it had become more difficult to obtain (11%) and easier to obtain (11%).

Participants' (n=24) reports concerning the availability of crystal methamphetamine in the preceding six months varied: one-third (33%) reported that it had remained stable, one-quarter (25%) reported it had become easier to access, and slightly less than one-third (29%) reported that it was more difficult to obtain. Only a small proportion (4%), however, reported that the availability of crystal methamphetamine had fluctuated over the previous six month period.

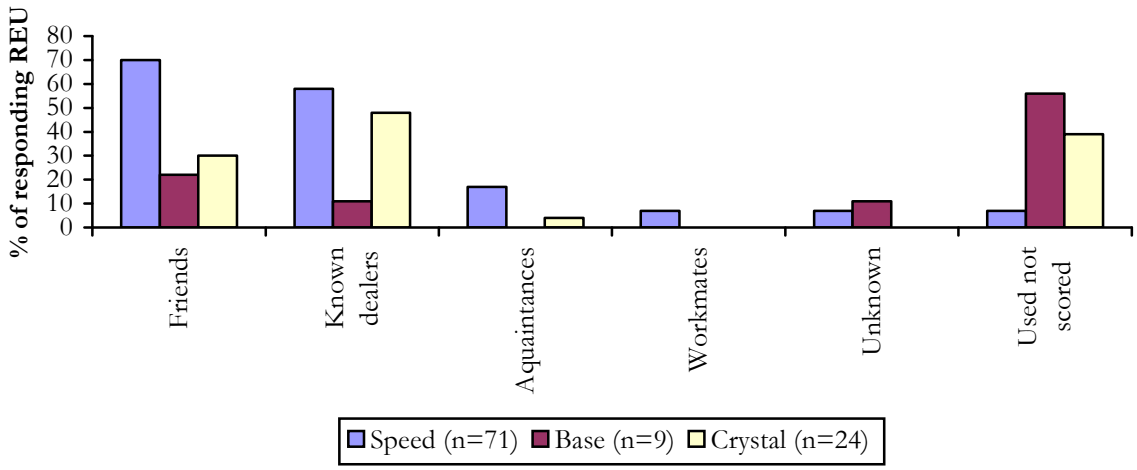
Figure 22: Change in the availability of various forms of methamphetamine in the preceding six months, 2005



Source: PDI REU interviews, 2005

Although the three forms of methamphetamines were purchased from a range of people, friends (speed 70%; base 20%; crystal meth 30%) and known dealers (speed 58%; base 10%; crystal meth 48%) were commonly reported (Figure 23). In addition, particularly in relation to the less widely available forms of base and crystal methamphetamine (see Figure 21), considerable proportions of participants reported using these drugs but not personally purchasing them.

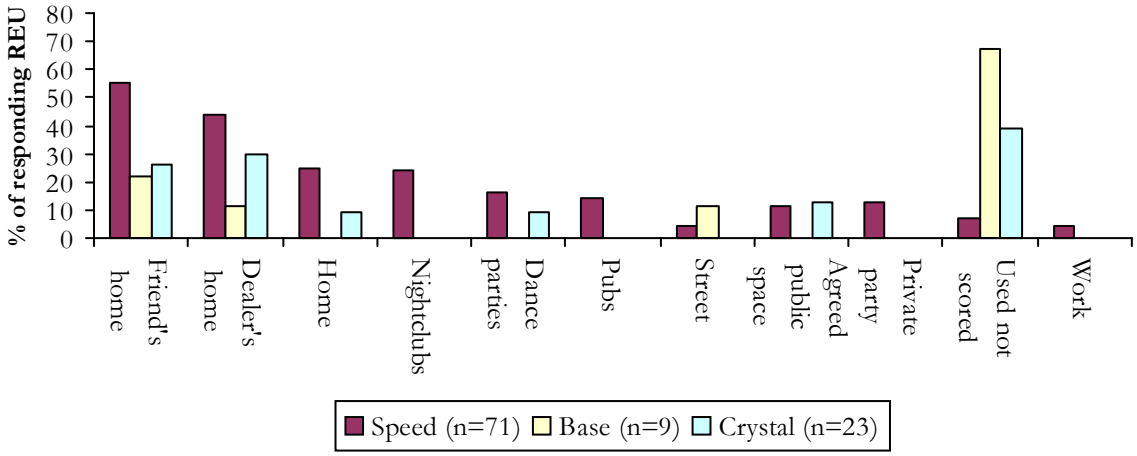
Figure 23: People from whom methamphetamine powder, base and crystal was purchased in the preceding six months, 2005



Source: PDI REU interviews, 2005

Consistent with the range of people from whom participants reported purchasing methamphetamines, these drug types were also purchased in a variety of locations (Figure 24). The characteristics of the purchase locations vary slightly across the different types of methamphetamine. Speed was most commonly purchased at friends' homes (55%), dealers' homes (44%), participants' own homes (25%) and nightclubs (24%). Participants most frequently reported using but not scoring base (67%). Of those who did score base, the locations reported were friends' homes (22%), dealers' homes (11%) and the street (11%). Similar to the findings for base, the largest proportion of participants reported using but not scoring crystal methamphetamine (39%). Of those who did score it, the most frequently reported locations were dealers' homes (30%) and friends' homes (26%).

Figure 24: Locations where methamphetamine purchased in the preceding six months, 2005



Source: PDI REU interviews, 2005

5.6 Methamphetamine-related harms

5.6.1 Law enforcement

Table 14 details consumer (e.g. possession/use) and provider (e.g. trafficking/manufacture) arrests for amphetamine-type stimulants, during 2004–05 (in Victoria and Australia). During that financial year just over one-fifth (22%) of the arrests made in Australia for amphetamine-type stimulant offences occurred in Victoria (Australian Crime Commission 2004)[3]. In Victoria the total number of consumer and provider arrests for amphetamine-type stimulants remained relatively stable since 2003/04 (n=2,240 in 2003/04).

Table 14: Amphetamine-type stimulants: consumer and provider arrests, Victoria and national, 2004-2005

	Victoria (n)	Australia (n)	% of national arrests
Consumer	1515	7285	20.8
Provider	659	2696	24.4
TOTAL*	2174	10,056	21.6

Source: Australian Crime Commission
***Includes those offenders for whom consumer/provider status was not stated.**

One KE reported that the use of crystal methamphetamine is definitely associated with violent crime and that the criminal system seems to be treating such offenders differently given their mental state when committing these crimes (i.e. taking this into account when sentencing them).

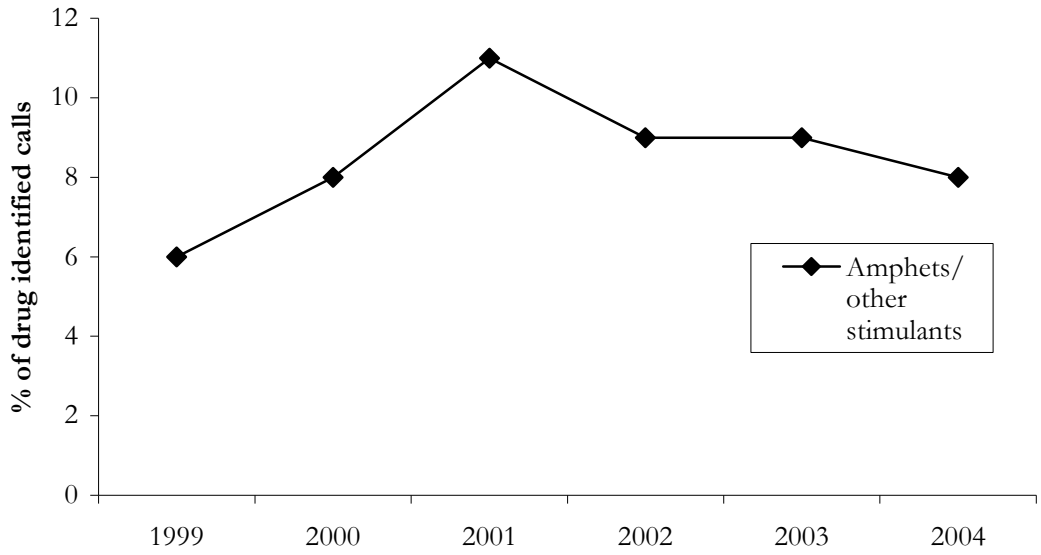
[3] Proportions (%) should be interpreted with caution due to the lack of uniformity across states and territories in the recording and storing of data on illicit drug arrests.

5.6.2 Health

DirectLine calls

During 2004, DirectLine responded to 2,251 calls where amphetamines and other stimulants were identified as a drug of concern. This represents eight percent of all drug-identified calls to DirectLine in that year (Turning Point Alcohol and Drug Centre Inc., unpublished data). The proportion of drug-related calls where amphetamines and other stimulants have been identified has remained relatively stable over the past three years (see Figure 25).

Figure 25: DirectLine calls where drug of concern identified as amphetamines and/or other stimulants, 1999-2004



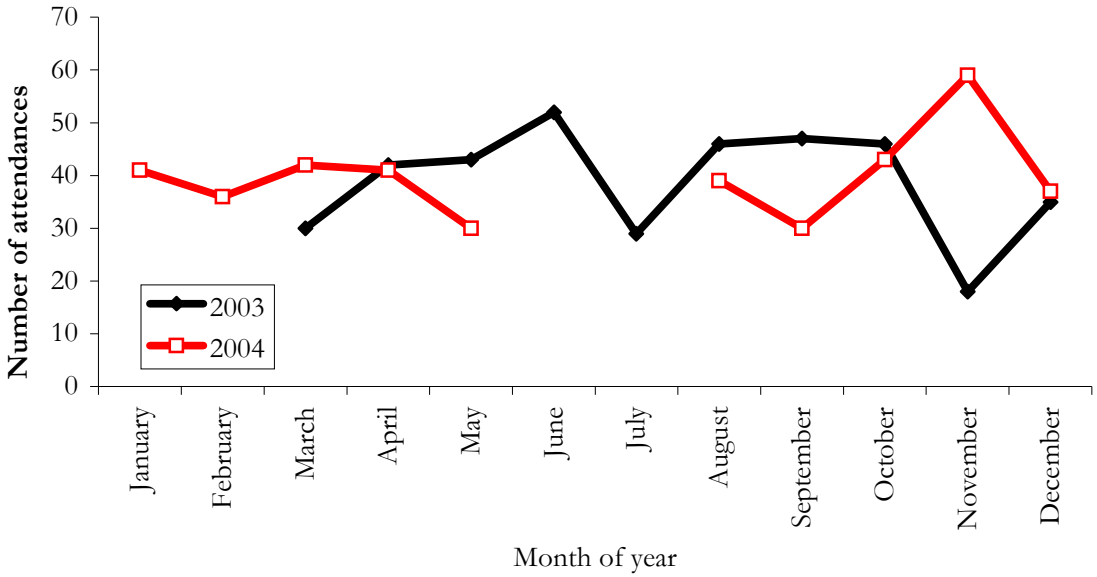
Source: DirectLine, Turning Point Alcohol and Drug Centre Inc (unpublished data).

KE with clinical and/or treatment backgrounds reported a number of concerns associated with methamphetamine use, particularly in relation to the use of crystal methamphetamine: two KE reported psychotic behaviour associated with chronic, heavy ice use – also paranoia, aggression and violence. One KE noted that not many GPs are aware of how to deal with and/or manage such situations (i.e. the acute state), leading to presentations to A&E and CAT team and police involvement. This means that people are experiencing the extreme end (i.e., hospital and/or the police being involved) rather than preventative services.

Amphetamine-related events attended by ambulance

Figure 26 reports the monthly totals of ambulance attendances where amphetamine use was mentioned in Melbourne, January 2003-December 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004). Ambulance attendances where amphetamine use was recorded ranged between approximately 20-60 per month during this time. In 2004 there were a total of 398 attendances where amphetamine use was mentioned and in 2003 there were a total of 388. In 2004 the average estimated age of cases was 27yrs and in 2003 it was 28yrs (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre).

Figure 26: Monthly totals of ambulance attendance where amphetamines were mentioned in Melbourne, Jan 2003-Dec 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004).



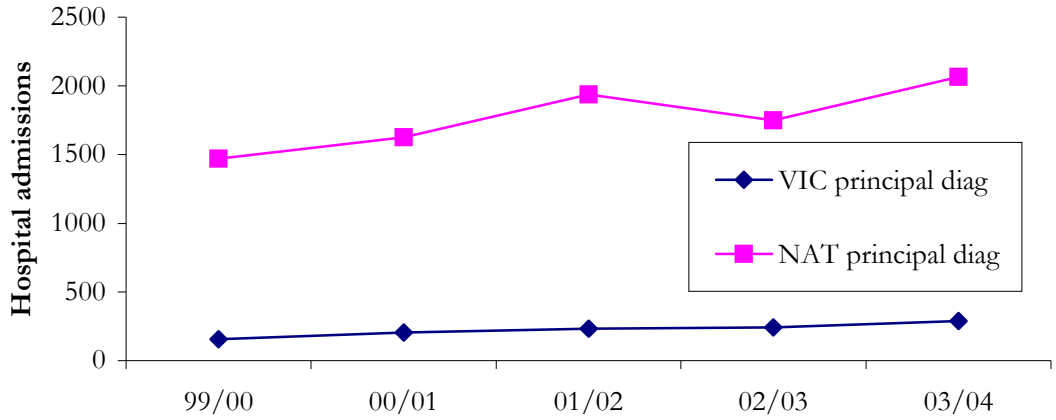
Source: Metropolitan Ambulance Service and Turning Point Alcohol and Drug Centre.

First aid KE also cited methamphetamine, and particularly crystal methamphetamine, as a drug associated with significant problems. One KE estimated that 30% of the presentations seen by their service at events were related to methamphetamine use and that this proportion was increasing. An increase of violent presentations, with some requiring the assistance of security staff, and in extreme cases police to be called, was also noted (n=2). One KE estimated that approximately half of the cases that they see are violent and/or aggressive, with such behaviour attributed by the KE to amphetamines and ecstasy use.

Hospital admissions

The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. Amphetamine-related hospital admissions for Victoria and Australia are presented in Figure 27. It is evident from these data that the number of amphetamine-related hospital admissions, both in Victoria and nationally, has been stable to increasing between 1999/00-2003/04.

Figure 27: Amphetamine-related hospital admissions, Victoria and Australia, 1999/00-2003/04.



Source: Australian Institute of Health and Welfare

A KE from a Melbourne hospital A&E department estimated that methamphetamine-related overdoses accounted for approximately one-quarter of the ERD-related admissions (down from approximately one-third during the previous two years). Such presentations were described as aggressive and behaviourally disturbed, and experiencing palpitations and insomnia, with aggressive methamphetamine users tending to be brought in by police or ambulance.

5.7 Summary of methamphetamine trends

Reports from the Victorian REU and KE suggest that:

- **of the three forms of methamphetamine, speed is most widely used (in terms of both lifetime and recent use), followed by crystal meth and then base;**
- **speed is commonly used in conjunction with ecstasy and during binges;**
- **speed is most commonly snorted, whereas base is predominantly swallowed and crystal meth smoked;**
- **methamphetamines are used in a variety of locations, predominantly nightclubs, dance parties and in users' homes;**
- **crystal meth is more expensive than speed and base (which are of comparable cost);**
- **the price of the three forms of methamphetamine has remained stable;**
- **the purity of base and crystal meth is high and stable, whereas the purity of speed is less consistent;**
- **all forms of methamphetamines are readily available (although access to crystal meth appeared to decline), and are most commonly acquired through friends and known dealers;**
- **A number of KE identified significant problems associated with violence and health-related harms caused by methamphetamine use.**

6.0 COCAINE

6.1 Cocaine use in the general population

The 2004 NDSHS provides the most recent national figures regarding the prevalence of cocaine use in the Australian general population. This survey indicates that in 2004 1.0% of the Australian population aged 14 years and over had recently (in the last 12 months) used cocaine, a statistically significant decrease from the 2001 survey estimate of 1.3% (Australian Institute of Health and Welfare 2005). The most recent data available regarding the prevalence of cocaine use in the general population of Victoria also come from the 2004 NDSHS. According to the findings of this survey, 1.2% of the Victorian population aged 14 years and above had used cocaine within the twelve months prior to interview (Australian Institute of Health and Welfare 2005).

As is the case with ecstasy and methamphetamine use, nationally the highest prevalence of both 'lifetime' (8.9%) and 'recent' (3.0%) cocaine use was reported by the 20-29 year old age group (Australian Institute of Health and Welfare 2005). Figures from the most recent Victorian Youth Alcohol and Drug Survey (Premier's Drug Prevention Council 2005), are comparable with these findings: of the 16-24 year olds surveyed (n=6,005), 6% reported having ever used cocaine in their lifetime, and 3% reported use in the 12 months prior to survey. The VYADS also provides indicators of the frequency of cocaine use among this younger age group: among recent cocaine users, 17% reported using cocaine once a month or more frequently, slightly less than one-quarter (22%) reported using cocaine 'every few months', approximately one-third (31%) reported using cocaine once or twice a year and 30% reported having only used cocaine on one occasion in the previous year (Premier's Drug Prevention Council 2005). According to the VYADS, cocaine was most commonly used in powder form (95%), although a small proportion of recent users reported having used crack cocaine (smokeable crystals: 7%). The majority of respondents reported typically snorting cocaine (91%). The median age for first cocaine use was 18.5 years (Premier's Drug Prevention Council 2005), compared to a median age of 23.5 years suggested by the 2004 NDSHS (Australian Institute of Health and Welfare 2005) (an artefact of the differing sampling frames of the two surveys).

6.2 Cocaine use among REU

Over three-quarters (79%) of the REU sample reported lifetime cocaine use and nearly three-quarters (63%) reported use in the preceding six months (Table 15). The median age of first use for cocaine was 21 years (range 16-44).

The 63 participants that reported recent cocaine use had done so on a median of two days in the preceding six months (range 1-50). The majority of those who had used cocaine in the previous six months had done so infrequently, with 81% of the participants using it once a month or less frequently, 10% using it more than once a month but less than once a week and the remaining 9% using it more than once a week.

Approximately half of the recent cocaine users reported their recent use in terms of grams, with a median of half a gram being used during a typical occasion (range 0.1-3) (n=31) and a median of one gram being used during a heavy occasion (range 0.1-5) (n=33) of use. Of those participants who reported binging in the preceding six months, 18% reported using cocaine when doing so. Only a small proportion of those participants reporting typically using drugs in conjunction with ecstasy (n=97) reported using cocaine (8%). Similarly, only a small proportion of those participants reporting typically using drugs during the comedown from ecstasy (n=88) reported using cocaine during this time (2%).

Most (95%) recent users reported snorting cocaine, with fewer participants swallowing cocaine (30%) and small proportions smoking (6%) and injecting (2%) cocaine.

Although the prevalence of lifetime use has remained relatively stable over the three years, levels of recent use reported by the REU sample have increased. Frequency of use, however, has remained relatively low, and quantity of use has also been stable.

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

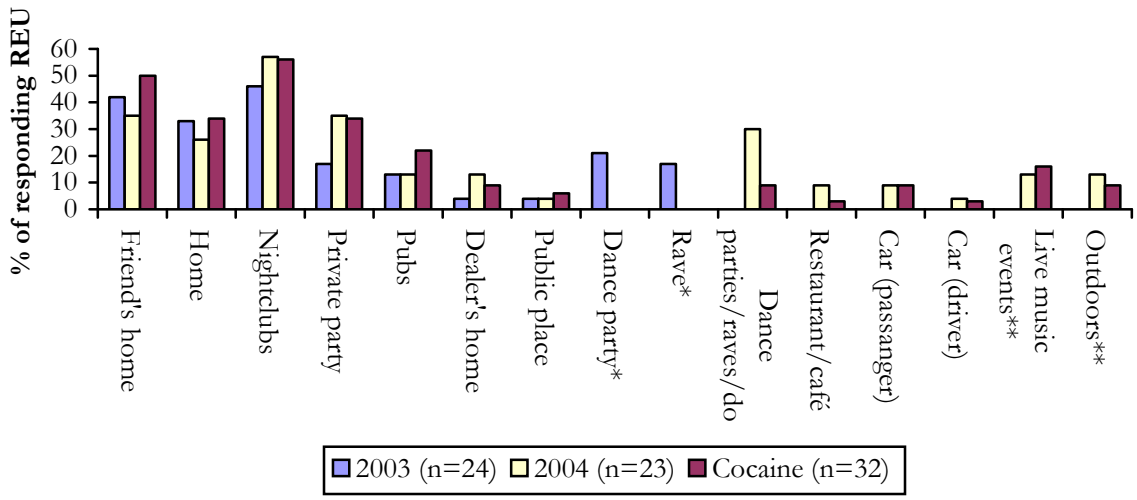
Cocaine	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Ever used %	80	72	**79**
Used last six months%	35	48	**63**
Of those who had used			
Median days used last 6 months (range)	3 (1-30) (n=35)	1.5 (1-180) (n=48)	**2 (1-50) (n=63)**
Median quantities used (grams)			
Typical (range)	0.5 (0.25-3) (n=13)	0.5 (0.13-2) (n=20)	**0.5 (0.1-3) (n=31)**
Heavy (range)	1 (0.5-3.5) (n=16)	0.5 (0.13-4) (n=23)	**1 (0.1-5) (n=33)**

Source: PDI REU interviews, 2003-2005

Sixteen KE reported that small numbers of REU use cocaine and three reported that none do so. Use was typically characterised as infrequent, opportunistic and as a part of 'special occasions', more commonly part of more affluent ERD users' repertoires. Indeed, five KE speculated that cocaine would be used more commonly if the price was not so prohibitive. Two KE reported that the ecstasy users they were aware of had recently used cocaine more frequently.

Thirty-two of the recent cocaine users in the 2005 REU sample reported using cocaine in a wide variety of locations in the six months prior to interview (Figure 28), predominantly in nightclubs (56%), friends' homes (50%), their own home (34%), private parties (34%) and pubs (22%).

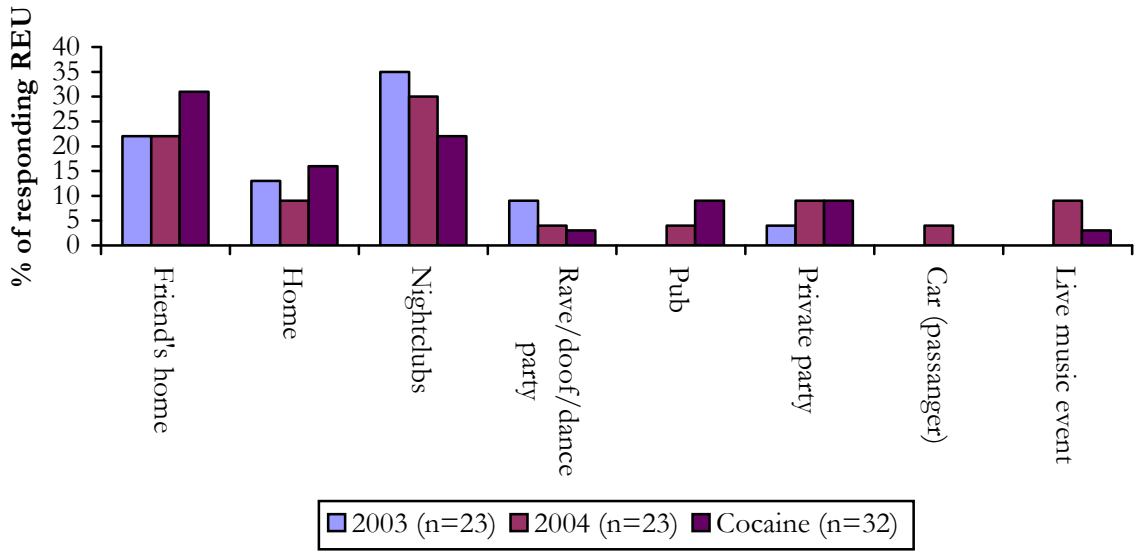
Figure 28: Usual location of cocaine use, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**
**** No 'live music' or 'outdoors' category in 2003 REU survey**

Consistent with reports of usual locations of cocaine use, the most common places of last use reported by the 2005 REU sample were friends' homes (31%), nightclubs (22%) and own home (16%; Figure 29).

Figure 29: Location of most recent cocaine use, 2003-2005



Source: PDI REU interviews, 2003-2005

6.3 Price

Slightly less than a third (32%) of the REU sample were able to comment on the current price, purity and availability of cocaine. The majority (91%) of these reported on the price of cocaine per gram, with a median of $300 (range $200-$350) being reported. One participant reported purchasing a quarter ounce for $2,450. Comparable cocaine prices were reported by the 2003, 2004 and 2005 REU samples (Table 16).

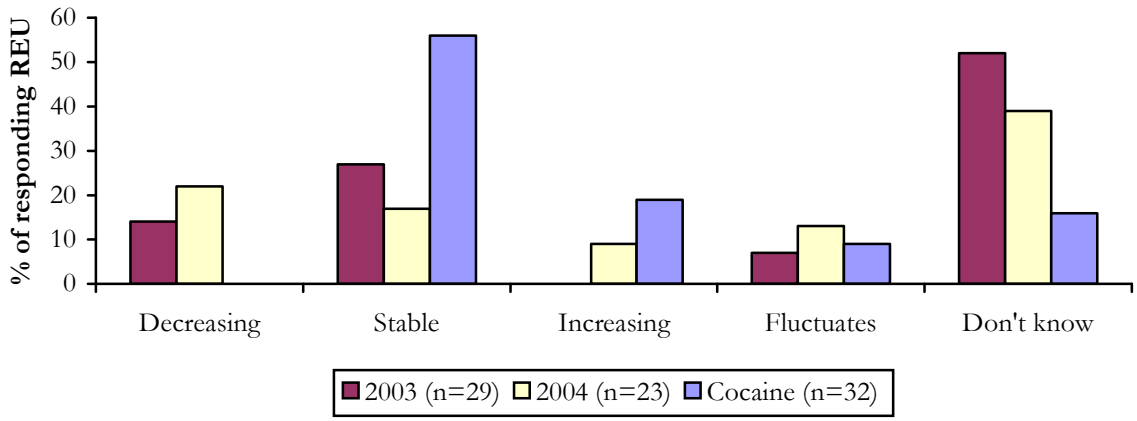
Table 16 Price of cocaine purchased by REU, 2003-2005

Variable	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Median price gram cocaine (range)	$250 ($100-$400) (n=14)	$277.50 ($100-$400) (n=16)	**$300 ($200-$350) (n=29)**

Source: PDI REU interviews, 2003-2005

Of those 32 participants commenting on the change in cocaine price in the last six months, over half (56%) reported that the price had been stable, 19% reported that it had increased and 9% reported that it had fluctuated (Figure 30). Sixteen percent reported that they did not know about changes in the price of cocaine in the previous six months and none of the participants reported that the price of cocaine had decreased. A higher proportion of the 2005 REU sample than previous years reported cocaine price as stable.

Figure 30: Recent changes in price of cocaine purchased by REU, 2003-2005

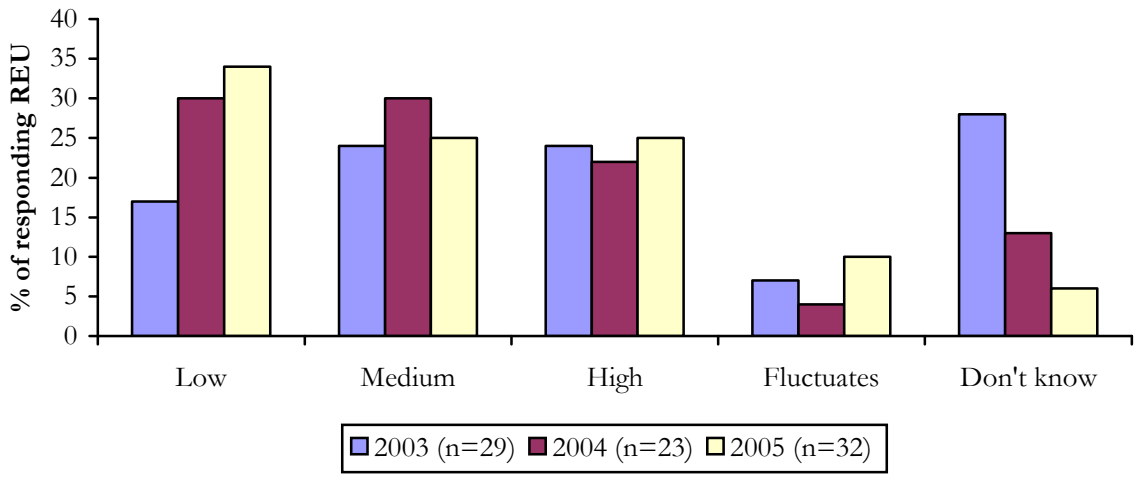


Source: PDI REU interviews, 2003-2005

6.4 Purity

As in previous years, the reports of the current purity of cocaine by the 2005 REU sample were inconsistent, with one-third (34%) reporting it as low, one-quarter (25%) as medium, one-quarter (25%) as high purity and three participants (10%) reporting fluctuating cocaine purity (Figure 31).

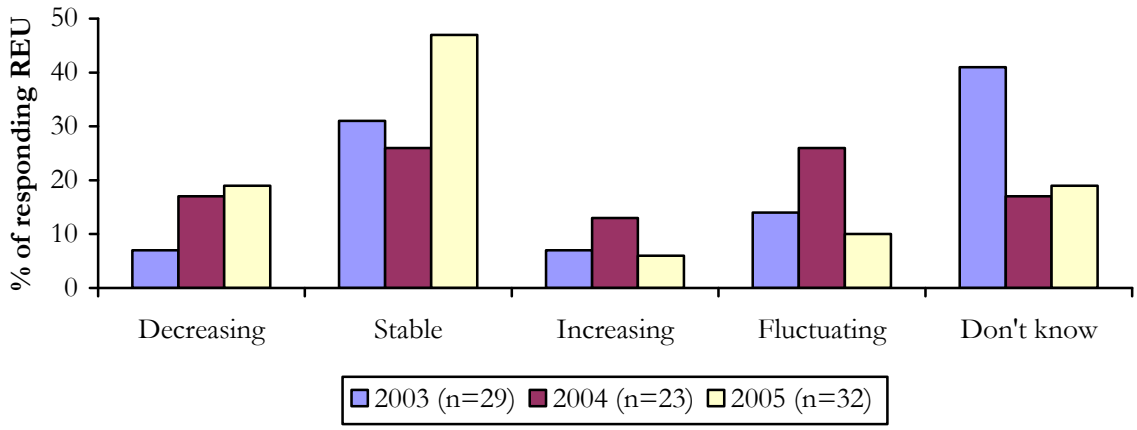
Figure 31: User reports of current purity of cocaine, 2003-2005



Source: PDI REU interviews, 2003-2005

Regarding changes in the purity of cocaine over the preceding six months, however, nearly half of the 2005 REU participants able to comment reported the purity had remained stable (47%), with 18% reporting it as decreasing, 6% as increasing and 9% as fluctuating (Figure 32). Thus, a higher proportion of the 2005 REU sample than previous years reported cocaine purity as stable.

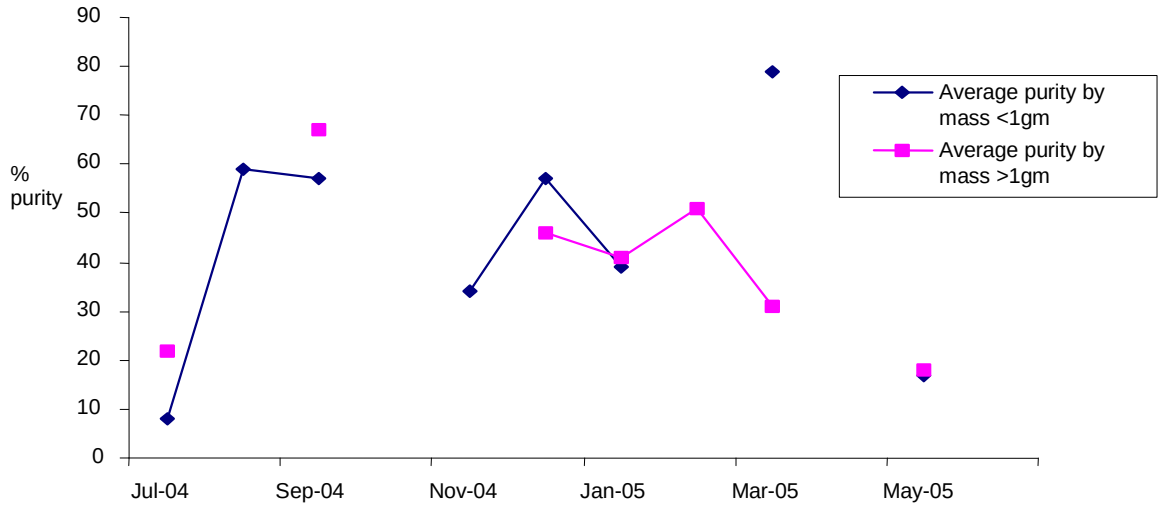
Figure 32: User reports of changes in cocaine purity in the past six months, 2003-2005



Source: PDI REU interviews, 2003-2005

The mean purity levels of cocaine seizures analysed by law enforcement agencies in Victoria during the 2004/05 financial year are shown in Figure 33. In some months during this period there were no seizures of cocaine.

Figure 33: Average purity of cocaine seizures by Victorian law enforcement, July 2004-June 2005



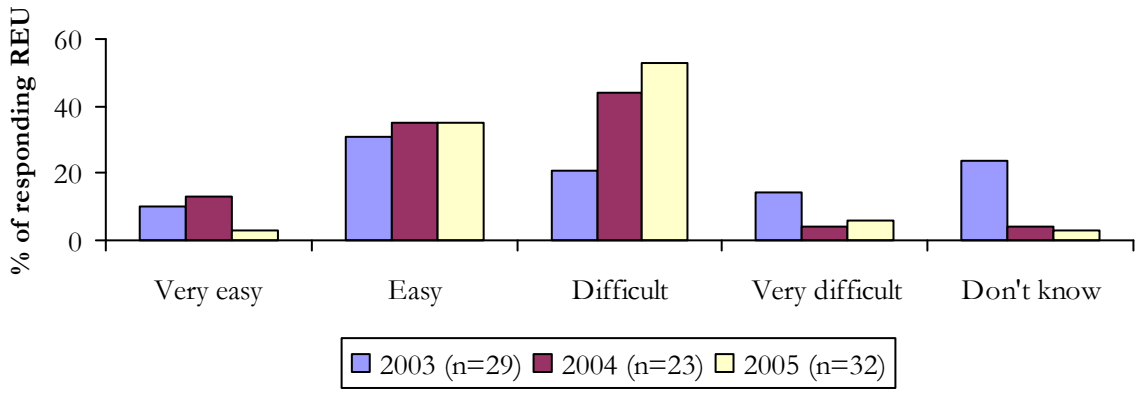
Source: Victoria Police Forensic Services Department.

The mean purity of all seizures analysed during this period was 42% (range 8% to 79%), compared to 40% in 2003/04; 27% in 2002/03; 38% in 2001/02; 40% in 2000/01; and 53% in 1999/00. Hence, whilst there was variability in the purity of cocaine seized by Victoria Police in 2004/05 (see Figure 33), the average purity of cocaine seizures in this jurisdiction has generally ranged from approximately 30-50% since 1999/00 (Jenkinson & O'Keeffe, 2005).

6.5 Availability

Of the 2005 REU participants that were able to comment on the current availability of cocaine (n=32), over half (59%) reported it as 'difficult' (53%) or 'very difficult' (6%), with slightly more than one-third (38%) reporting it as 'easy' (35%) or 'very easy' (3%) to obtain (Figure 34). A larger proportion of the 2005 sample reported cocaine as difficult to obtain than in previous years.

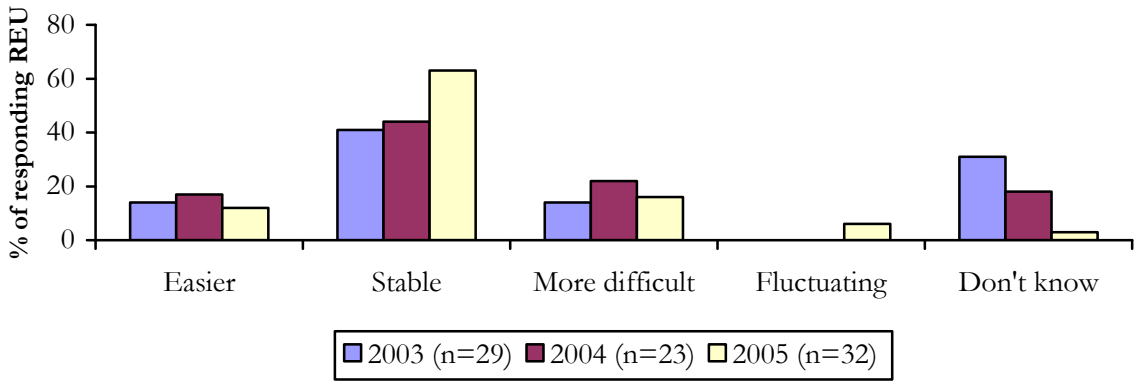
Figure 34: Current availability of cocaine, 2003-2005



Source: PDI REU interviews, 2003-2005

The availability of cocaine is generally reported by the REU samples as being stable (Figure 35). Just under three-quarters (63%) of the 2005 respondents reported that during the preceding six months the availability of cocaine had remained stable, with 16% believing it had become more difficult and 12% easier to obtain. Smaller proportions reported that the availability had fluctuated (6%) over the preceding six months, or that they did not know (3%).

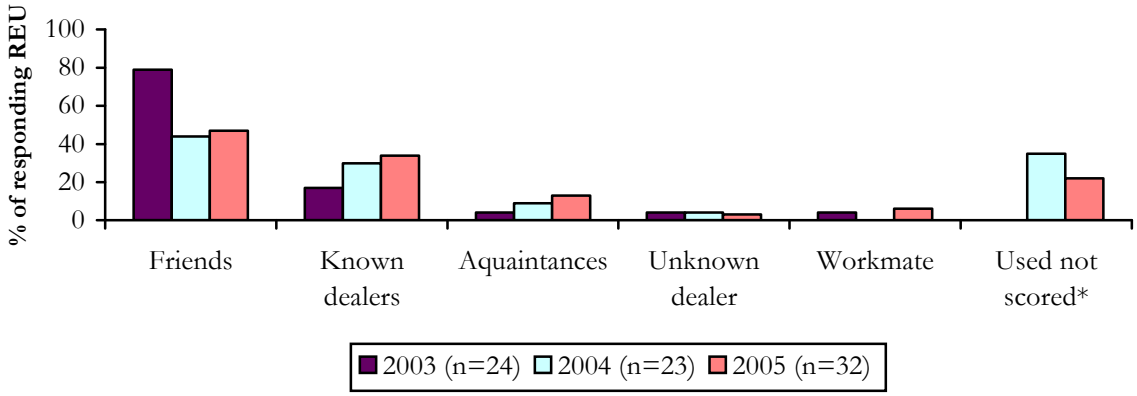
Figure 35: Changes in cocaine availability in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005

Consistent with previous years, the 2005 REU sample reported that cocaine was primarily purchased from friends (47%) or known dealers (34%). In addition, a number of recent cocaine users reported using but not scoring cocaine (i.e. being 'shouted' it).

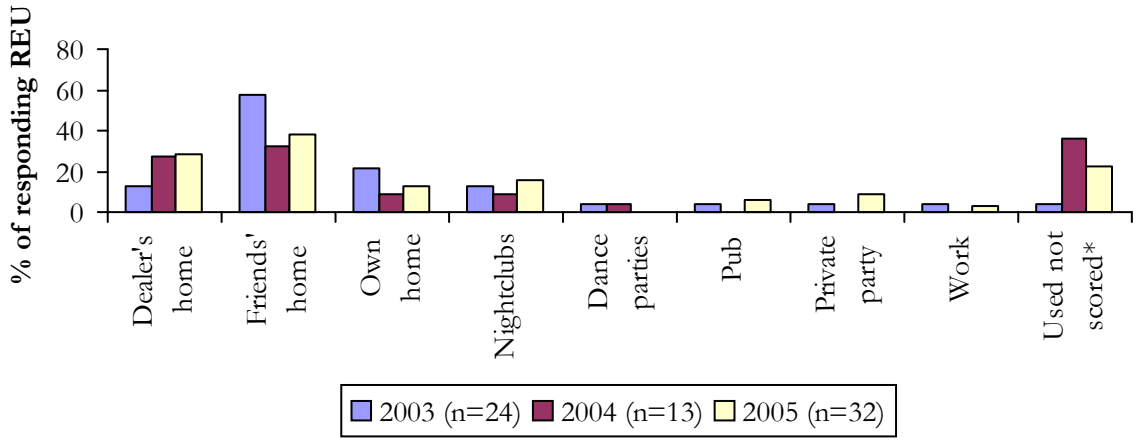
Figure 36: People from whom cocaine had been purchased the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Used not scored' option not included in 2003 survey**

Across the three years of the Victorian PDI, private homes, including participants' own homes, friends' homes and dealers' homes, were the locations participants were most likely to report scoring cocaine in (Figure 37).

Figure 37: Locations where cocaine had been purchased in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Used not scored: option not included in 2003 survey**

Thus, the social nature of cocaine markets is illustrated by REU reports concerning who cocaine is purchased from and where it is purchased (i.e. primarily from social network members in private locations).

6.6 Cocaine-related harms

6.6.1 Law enforcement

Table 17 details consumer (e.g. possession/use) and provider (e.g. trafficking/manufacture) arrests for cocaine, during 2004–05 (in Victoria and Australia). During that financial year approximately one-fifth (21%) of the arrests made in Australia for cocaine offences occurred in

Victoria (Australian Crime Commission 2004)[4]. In Victoria the total number of consumer and provider arrests for amphetamine-type stimulants remained relatively stable since 2003/04 (n=85 in 2003/04).

Table 17: Cocaine: consumer and provider arrests, Victoria and national, 2004-2005

	Victoria (n)	Australia (n)	% of national arrests
Consumer	54	257	21.0
Provider	37	164	22.6
TOTAL*	91	425	21.4

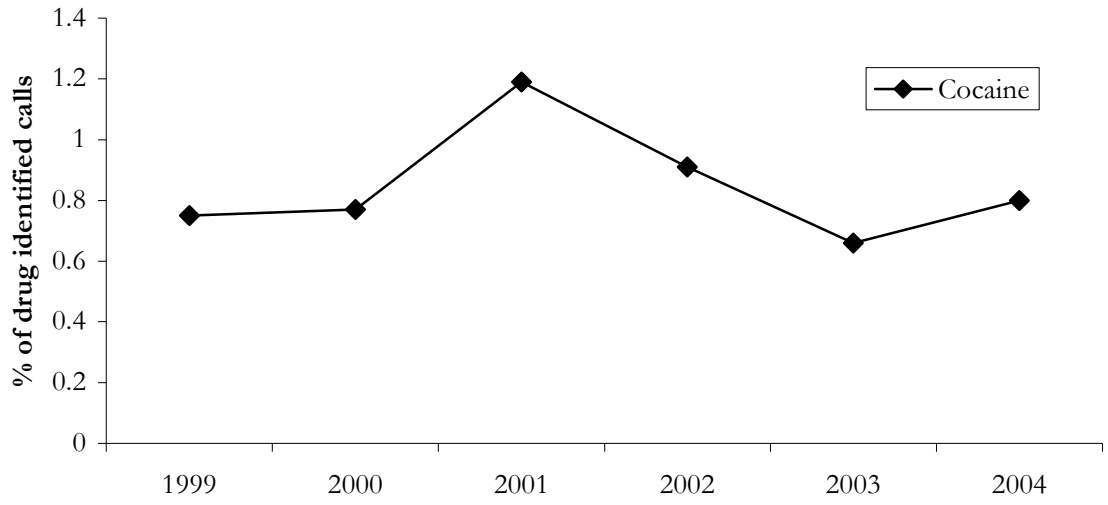
Source: Australian Crime Commission
***Includes those offenders for whom consumer/provider status was not stated.**

6.6.2 Health

DirectLine calls

During 2004 DirectLine responded to 216 calls where cocaine was identified as a drug of concern. This represents less than one percent of all calls made to DirectLine during that year where a drug of concern was cited (Turning Point Alcohol and Drug Centre Inc., unpublished data). The proportion of drug-related calls where cocaine was identified has remained very low (<1%) during the past six years (see Figure 38).

Figure 38: DirectLine calls where drug of concern identified as cocaine, 1999-2004



Source: DirectLine, Turning Point Alcohol and Drug Centre Inc (unpublished data).

[4] Proportions (%) should be interpreted with caution due to the lack of uniformity across states and territories in the recording and storing of data on illicit drug arrests.

Cocaine-related events attended by ambulance

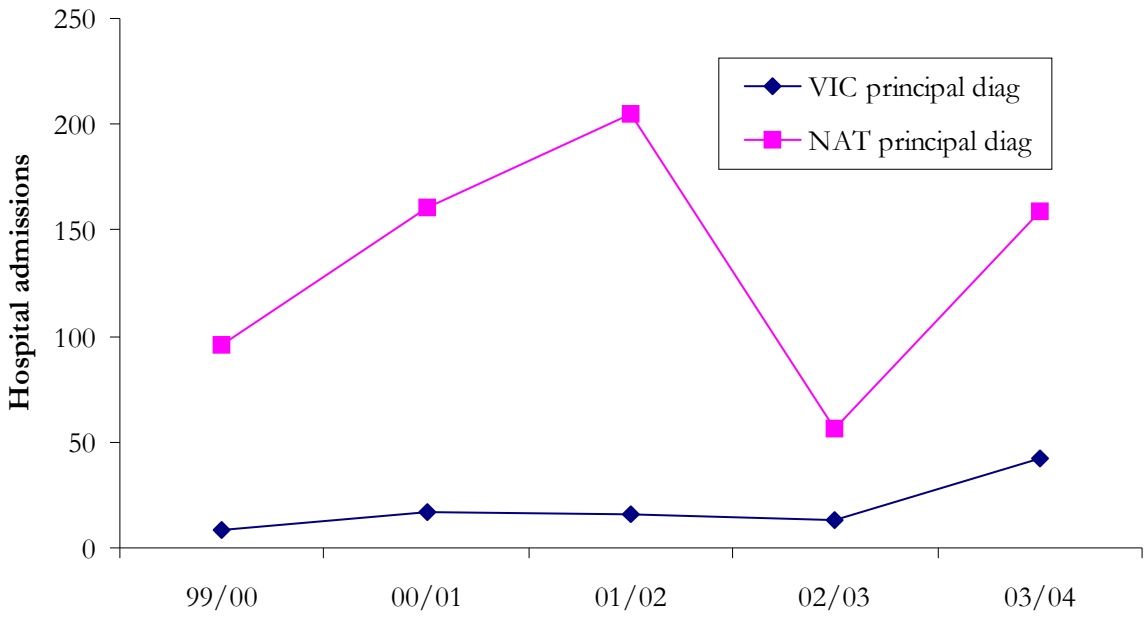
In 2004 there were a total of 26 ambulance attendances in Melbourne where cocaine use was mentioned (23 in 2003). The estimated average age of cases in 2004 was 29.62 years (29.32 years in 2003) (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre). As in previous years (Jenkinson & O'Keeffe, 2005; Jenkinson, Miller & Fry, 2004), these numbers are too small to provide clear trends, but generally indicate that those people who are using cocaine in Melbourne are not coming into contact with the ambulance service.

One first aid KE noted that in six years he had never treated anyone for a cocaine-related presentation.

Hospital admissions

The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. Cocaine-related hospital admissions for Victoria and Australia are presented in Figure 39. It is evident from these data that the number of cocaine-related hospital admissions in Victoria was relatively stable between 1999/00-2002/03, but increased in 2003/04. Nationally, the number of cocaine-related hospital admissions increased between 1999/00 and 2001/02, then decreased significantly in 2003, and increased again in 2003/04. The number of cocaine-related hospital admissions is much lower than for opioids or amphetamines.

Figure 39: Cocaine-related hospital admissions, Victoria and national, 1999/00-2003/04.



Source: Australian Institute of Health and Welfare

One KE reported that cocaine-related admissions were rare, occurring on approximately a monthly basis and typically comprising of older males presenting with chest pain.

6.7 Summary of cocaine trends

Reports from the Victorian REU and KE suggest:

- **high prevalence of lifetime use and recent use among REU, with higher levels of recent use reported by 2005 samples than 2003 and 2004 samples;**
- **cocaine is typically used infrequently by REU;**
- **cocaine is typically snorted;**
- **cocaine is used across a wide range of locations;**
- **cocaine is an expensive drug, the price of which has remained relatively stable or decreasing over the past six months;**
- **the purity of cocaine is medium or low and there is little consistency in the reported changes in purity over the past six months;**
- **there is little consistency in reports of the availability of cocaine, although respondents most commonly reported that the availability had remained stable over the past six months;**
- **cocaine is commonly purchased from friends in friends' homes.**

7.0 KETAMINE

7.1 Ketamine use in the general population

There is only a small amount of data available regarding the prevalence of ketamine use in the Australian general population as questions about its use were included for the first time in the 2004 NDSHS and it is not asked about in the VYDSHS. The available evidence suggests that 0.3% of the Australian population aged 14 years and older have used ketamine in the last 12 months, that 1.0% of the population have ever used it, and that the median age of first use is 23.7 (Australian Institute of Health and Welfare 2005). The available Victorian data suggest comparable prevalence of ketamine use, with 0.3% of the Victorian population aged 14 years and older estimated to have used ketamine in the previous 12 months (Australian Institute of Health and Welfare 2005).

7.2 Ketamine use among REU

Over half (56%) of the 2005 REU sample reported having ever used ketamine, with just over one-third of the sample (35%) reporting recent use (Table 18). The median age of first use for ketamine was 19 (range 16-42).

The 35 participants that reported recent ketamine use had done so on a median of three days in the preceding six months (range 1-72). The majority (71%) used ketamine once a month or less, 23% used more than monthly but less than weekly or fortnightly, and two participants reported using ketamine more than one a week.

Participants most commonly quantified the amounts of ketamine used in the preceding six months in terms of points (n=16), with six quantifying their ketamine use in terms of lines, four in terms of bumps, four as grams and small numbers in terms of snorts (n=2), vials (n=1) and pills (n=1). A bump refers to a small amount of powder, typically measured on either the end of a key or a small spoon provided with a container used to store and administer measured doses of powdered substances.

For those quantifying their use in terms of bumps, a median of 1.5 bumps (range 1-3) was used during both typical and heavy occasions of use. For those quantifying their use in terms of points, a median of one point was used during a typical (range 0.5-4) and heavy (range 0.5-5) occasion of use. Of those participants who reported binging in the preceding six months (n=52), 22% reported using ketamine when doing so. Only a small proportion of those participants reporting typically using drugs in conjunction with ecstasy (n=97) reported using ketamine (9%). Similarly, only a small proportion of those participants reporting typically using drugs during the comedown from ecstasy (n=88) reported using ketamine during this time (8%).

Most participants that reported recent ketamine use (n=35) reported snorting it (97%). Some participants had swallowed (31%) ketamine, and two participants reported having smoked it (6%).

Although a smaller proportion of the 2005 REU sample reported having ever used and having recently used ketamine than in previous years, patterns of use among recent users were comparable over the three years.

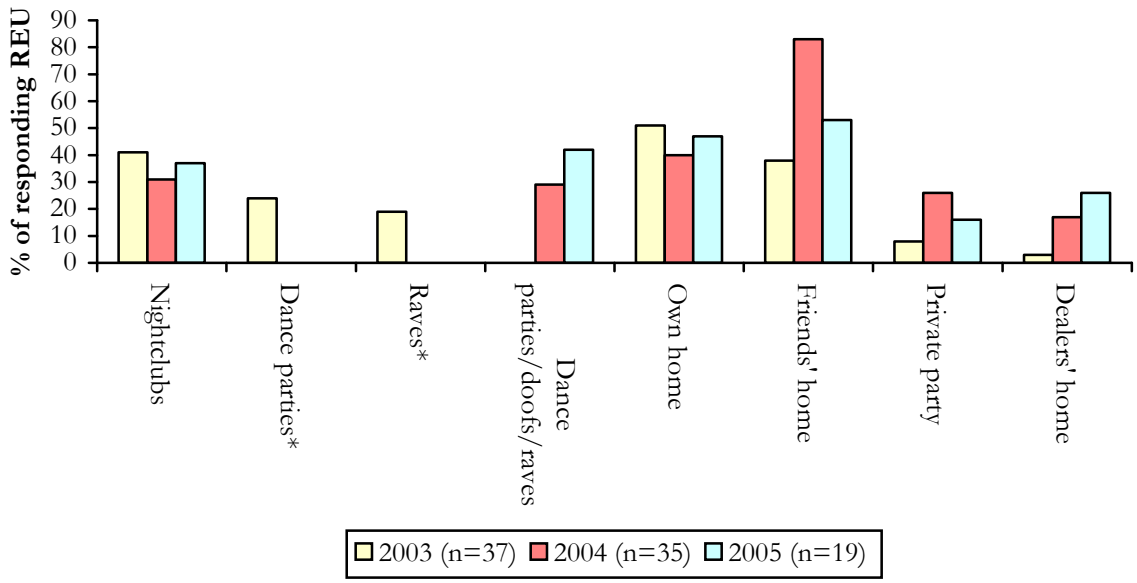
Table 18: Patterns of ketamine use among REU, 2003-2005

Ketamine	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Ever used (%)	70	70	**56**
Used last six months (%)	51	45	**35**
Of those who had used			
Median days used last 6 mths (range)	3.5 (1-104) (n=50)	3 (1-96) (n=45)	**3 (1-72) (n=35)**
Median quantities used (bumps)			
Typical (range)	2 (0.5-4) (n=11)	2 (1-10) (n=11)	**1.5 (1-3) (n=4)**
Heavy (range)	2 (0.5-16) (n=11)	2 (1-10) (n=10)	**1.5 (1-3) (n=4)**

Source: PDI REU interviews, 2003-2005

Locations of ketamine use reported by recent users with the REU samples have changed somewhat over the years. The locations most commonly reported by the 2005 participants were friends' homes (53%), participant's own home (47%) and raves/doofs/parties (42%).

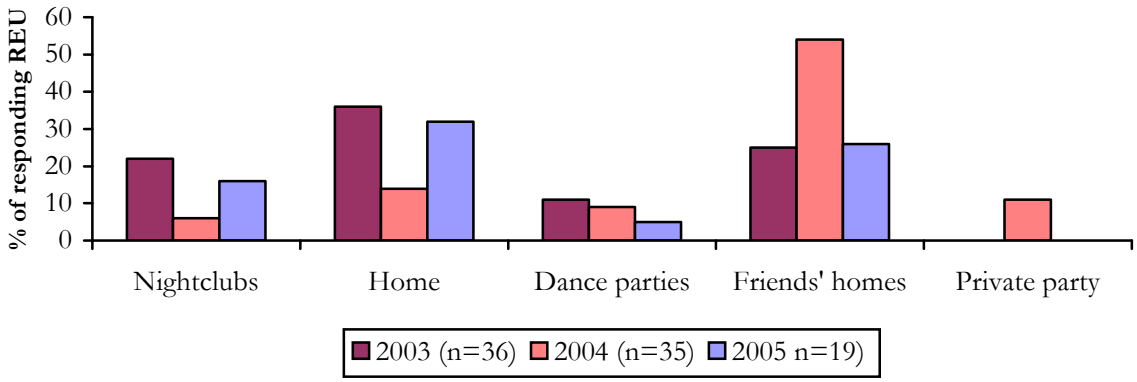
Figure 40: Location of usual ketamine use, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**

The 2005 REU sample reported most recently using ketamine at their own home (32%), friends' homes (26%) and at nightclubs (16%) (Figure 41):

Figure 41: Location of most recent ketamine use, 2003-2005



Source: PDI REU interviews, 2003-2005

Thus, ketamine use in private locations was a more prominent feature of the 2005 REU sample's use patterns than in previous years.

Twelve KE reported low prevalence and frequency of ketamine use among the ecstasy users they had contact with, with 4 reporting recent reductions in both prevalence and frequency ketamine use. Intentional use of ketamine was typically described as being part of 'planned' polydrug use patterns (n=7), ('typically goes e, then speed, then k'), with unintentional use (i.e. due to the presence in pills sold as ecstasy) also reported (n=7). Two KE commented on routes of ketamine administration, reporting some users snorting it (n=1) and others taking pills orally (n=1). One KE reported, however, that some of those people testing their pills would not take a pill testing positive for the presence of ketamine, another KE described inexperienced ketamine users as 'having no idea what is going on and experiencing mood swings'. Indeed, a KE from a peer harm reduction organisation reported 'a couple of phone calls about what it is, how it works, how it compares to other drugs – like a roadworthy check'.

7.3 Price

Nineteen participants from the 2005 REU sample were able to comment on the current price, purity and availability of ketamine. Thirteen participants reported on the price of ketamine per gram, with a median price of $180 (range $150-$250) being reported (Table 19). Two participants reported ketamine in terms of vial quantities, with price ranging from $45 to $100 per vial. One participant reported ketamine price per point ($25) and one participant reported purchasing half a gram of ketamine for $100.

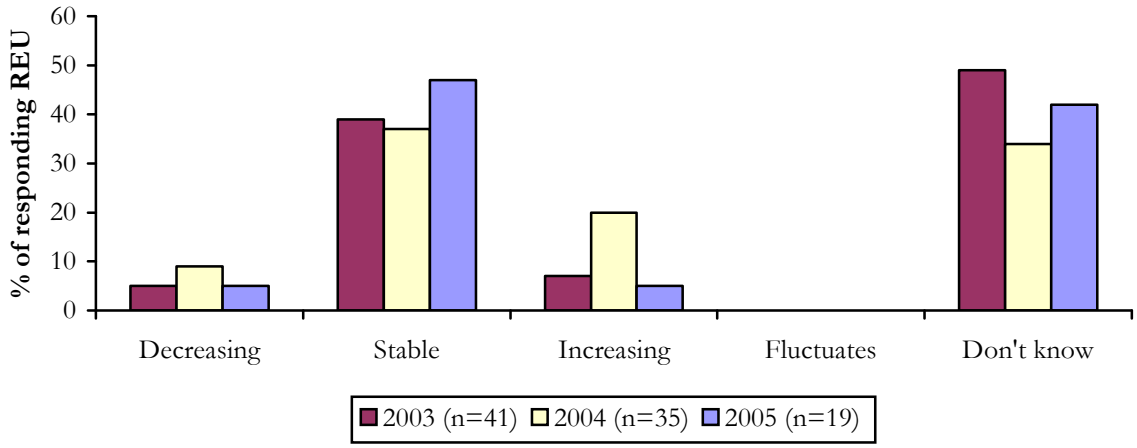
Table 19: Price of ketamine purchased by REU, 2003-2005

Median price ($) Ketamine	2003 (N=100)	2004 (N=100)	**2005** **(N=100)**
Point (range)	-	$22.50 ($15-$40) (n=10)	**$25 (n=1)**
Gram (range)	$200 ($100-200) (n=10)	$195 ($150-$250) (n=10)	**$180 ($150-$250) (n=13)**

Source: PDI REU interviews, 2003-2005

Of the nineteen 2005 REU participants able to comment on the price of ketamine, nearly half (47%) reported that the price had been stable in the preceding six months, with one participant reporting it had increased and one that it had decreased. A substantial proportion (42%) were unable to comment (Figure 42).

Figure 42: Recent changes in price of ketamine purchased by REU, 2003-2005

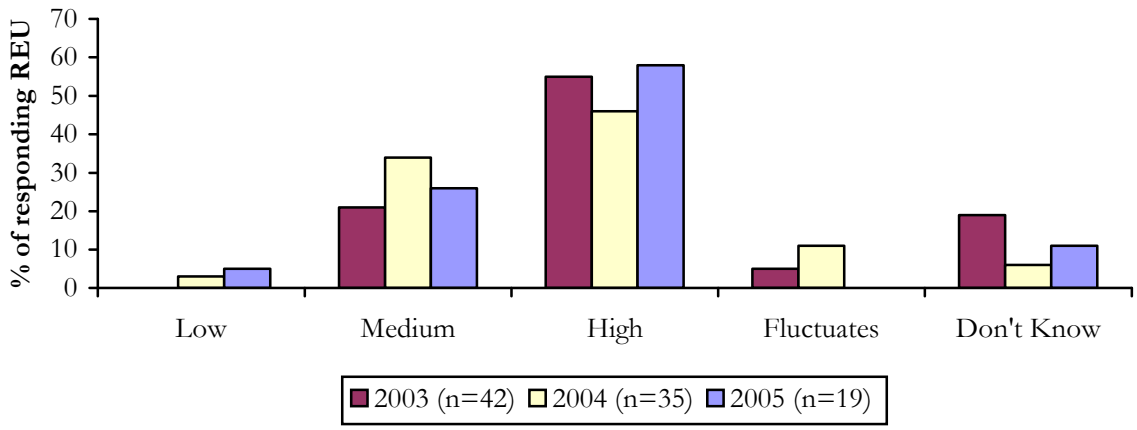


Source: PDI REU interviews, 2003-2005

7.4 Purity

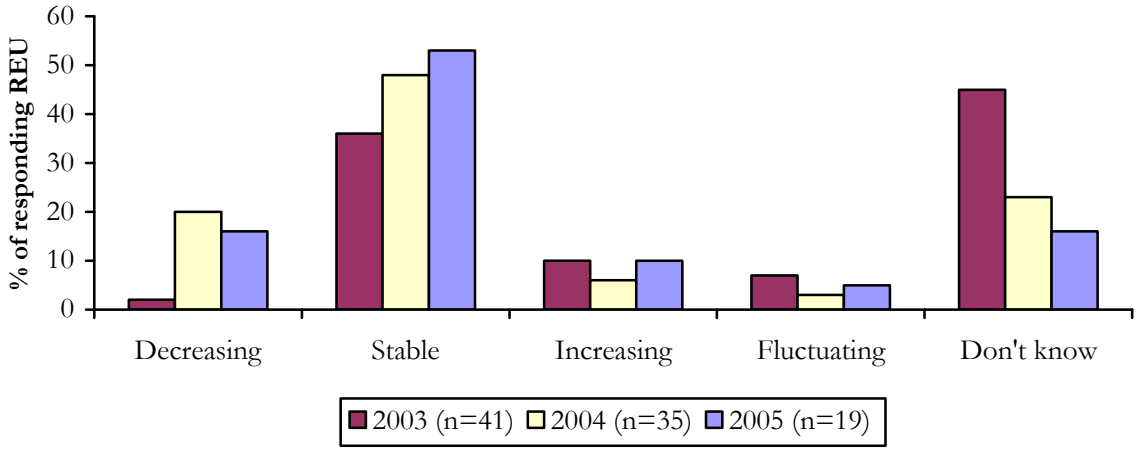
Consistent with previous years, the majority of those from the 2005 REU sample who commented (n=19) reported the current purity of ketamine as medium (26%) or high (58%; Figure 43). Over half reported that the purity of ketamine had remained stable (53%) in the preceding six months, although 16% reported the purity had decreased, 10% that it had increased, and 5% that it had fluctuated (Figure 44).

Figure 43: Current purity of ketamine, 2003-2005



Source: PDI REU interviews, 2003-2005

Figure 44: Recent change in ketamine purity, 2003-2005

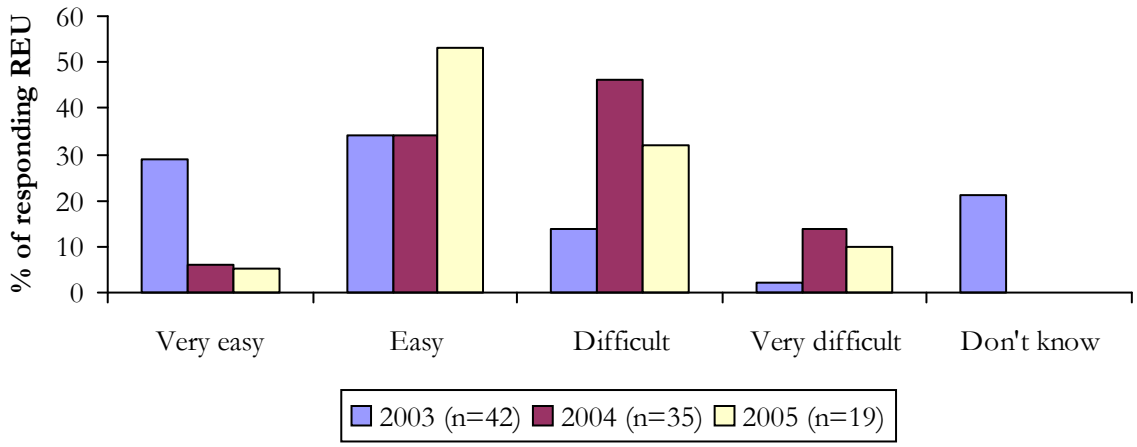


Source: PDI REU interviews, 2003-2005

7.5 Availability

As with previous years, there was little consistency in the reports of the current availability of ketamine among the 2005 REU sample (Figure 45). Although over half (58%) of those able to comment (n=19) reported that ketamine was currently either 'easy' (53%) or 'very easy' (5%) to obtain, a considerable proportion reported it as either 'difficult' (32%) or 'very difficult' (10%) to obtain.

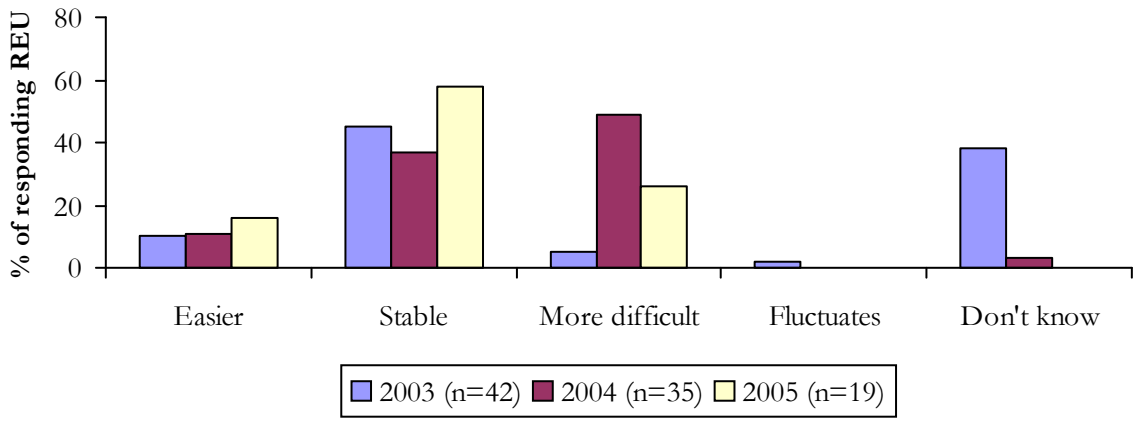
Figure 45: Current ketamine availability, 2003-2005



Source: PDI REU interviews, 2003-2005

Of those from the 2005 REU sample who commented on changes in the availability of ketamine in the previous six months (n=19), over half (58%) believed it had remained stable, 26% reported it had become more difficult to obtain, and 16% believed it was more available (Figure 46).

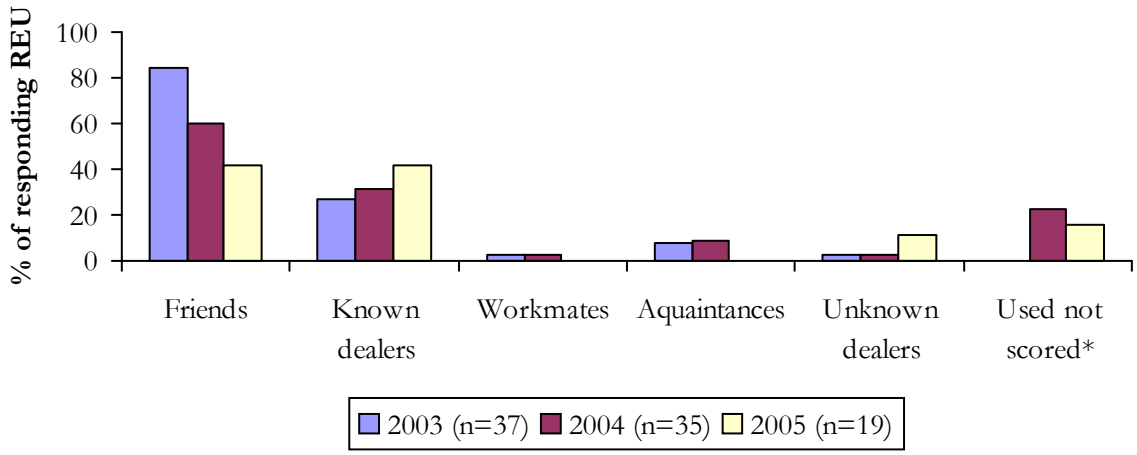
Figure 46: Changes in availability of ketamine over the past 6 months, 2003-2005



Source: PDI REU interviews, 2003-2005

Consistent with previous years, ketamine was most commonly purchased from friends (42%) or known dealers (42%), although a considerable minority reported using but not scoring ketamine (16%) (Figure 47).

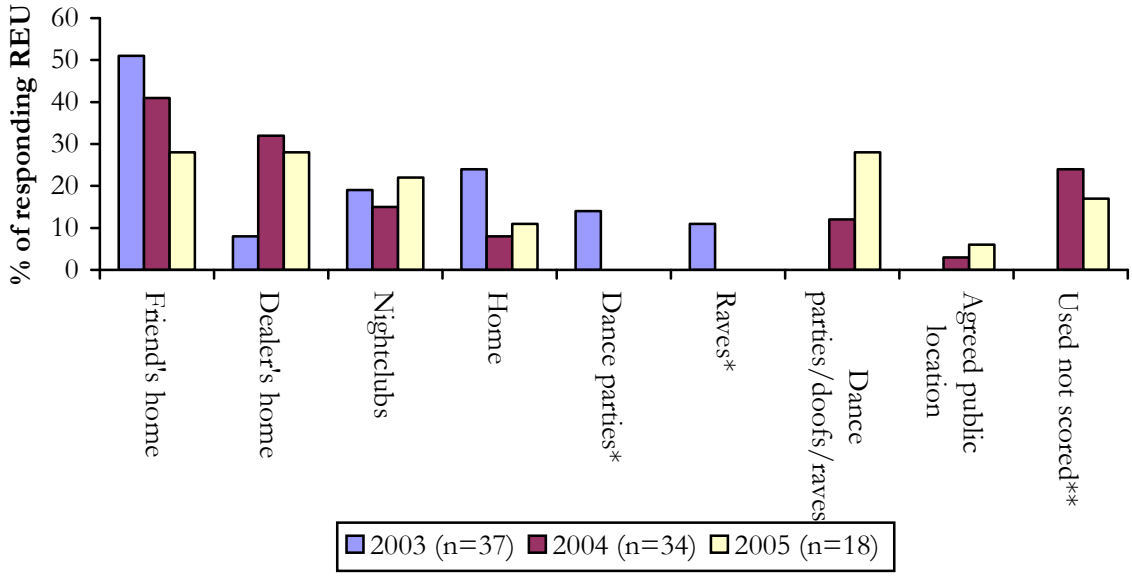
Figure 47: People from whom ketamine had been purchased in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Used not scored' option not included in 2003 REU survey**

The 2005 REU participants (n=18) reported scoring ketamine in a wide range of locations including friends' homes (28%), dealer's home (28%) and raves/doofs/dance parties (28%; Figure 48).

Figure 48: Locations ketamine had been purchased from in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**
**** 'Used not scored' option not included in 2003 REU survey**

7.6 Ketamine-related harms

7.6.1 Law enforcement

No Victorian ketamine-specific law enforcement indicator data are available. Three law enforcement KE did, however, comment on certain aspects of ketamine markets. One KE stressed the need to be aware of Asian drug use trends, particularly in relation to the use of ketamine. This KE reported that whereas MDMA had previously been a big problem in Hong Kong, ketamine is now much more prevalent, with a market existing for $1-$2 'foils'.

Another law enforcement KE noted an increase in ketamine diversion, with a considerable amount being imported. As ketamine is also used for legitimate purposes (i.e. in race horse training) there is a need to distinguish between legitimate and not legitimate uses (i.e. if a horse trainer is noted to be importing huge amounts, a check will be made to see if it is all appropriate).

The third law enforcement KE commented on the typical purity of ketamine seizures, ranging from 15% to 75% pure.

7.6.2 Health

Mortality

No Victorian ketamine-related mortality data are available.

Treatment

No Victorian ketamine-related mortality data are available. KE from first aid and hospital backgrounds, however, noted ketamine use was very infrequently, if ever, reported by those presenting to their services (n=2).

7.7 Summary of ketamine trends

Reports from the Victorian REU and KE suggest:

- **lower levels of lifetime and recent ketamine use were reported in 2005 than in 2003 and 2004**;
- **ketamine is typically infrequently used, commonly in private homes;**
- **the purity of ketamine is generally reported high, with price and purity reported as stable;**
- **reports of ketamine availability are inconsistent, with recent trends of easy and stable availability;**
- **ketamine is most commonly purchased from friends and known dealers in private homes and dance parties/raves/doofs.**

8.0 GHB

There is only a small amount of data available regarding the prevalence of GHB use in the Australian general population, as questions about its use were included for the first time in the 2004 NDSHS and it is not asked about in the VYDSHS. The available evidence suggests that 0.1% of the Australian population aged 14 years and older have used GHB in the last 12 months, that 0.5% of the population have ever used it, and that the mean age of first use is 23.7 years (Australian Institute of Health and Welfare 2005). The available Victorian data suggest comparable prevalence of GHB use, with 0.2% of the Victorian population aged 14 years and older estimated to have used GHB in the previous 12 months (Australian Institute of Health and Welfare 2005).

8.1 GHB use among REU

One-third (33%) of the 2005 REU sample reported having ever used GHB, with 16% of the sample reporting recent use (Table 20). The median age of first use for GHB was 20 years (range 15-31).

The 16 participants that reported recent GHB use had done so on a median of ten days in the preceding six months (range 1-100). Less than half (43%) used GHB once a month or less, 19% used more than monthly but less than weekly, and over one-third (37%) reported using GHB more than weekly.

All participants that commented quantified amounts of GHB used in the preceding six months in terms of millilitres (ml; n=15). A median of 10ml was used during a typical occasion (range 3-50) and a median of 20ml was used during a heavy occasion (range 3-70) of use. Of those participants who reported binging in the preceding six months, 15% reported using GHB when doing so. All of the participants that reported recent GHB use in 2005 had swallowed it, with no other routes of administration reported.

Patterns of GHB use reported by the REU samples have varied over the three years of data collection. Although a higher proportion of the 2004 sample had recently used GHB than the 2003 sample, the frequency and amounts used by recent users were lower compared to 2003. Further, the proportion of recent users was lower in 2005 than 2004 (to levels comparable to 2003). The frequency of use reported by the 2005 sample, however, was considerably higher than that reported by the 2003 and 2004 samples.

Table 20: Patterns of GHB use among REU, 2003-2005

GHB	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Ever used (%)	33	38	**33**
Used last six months (%)	18	27	**16**
Of those who had used			
Median days used last 6 months (range)	4 (1-72) (n=18)	3 (1-72) (n=27)	**10 (1-100) (n=16)**
Median quantities used (ml)			
Typical (range)	14 (1-70) (n=13)	7.5 (1-75) (n=26)	**10 (3-50) (n=15)**
Heavy (range)	22.5 (2-130) (n=14)	8 (2-150) (n=26)	**20 (3-70) (n=15)**

Source: PDI REU interviews, 2003-2005

Fourteen KE commented on patterns of GHB use, typically reporting low prevalence of use (n=10), a recent reduction in prevalence of use (n=3) and low frequency of use (n=4). A small number of KE, however, noted small groups of 'dedicated' GHB users continuing to use the drug relatively frequently (n=3), or as part of 'risky' polydrug use patterns (n=3). One KE reported excessive, potentially harmful patterns of use, with some GHB users bragging about who has had the most. This KE also noted that some users see using GHB 'as a great opportunity to keep going for the whole weekend… The use of G is perceived as increasing e and speed, enhancing the drug effects'. This KE noted that amphetamines and GHB are considered by some as the 'ideal combination', and expressed concern about many users' ignorance of the physiology of different types of drugs and potential interactions. According to another KE, GHB users are aware of the risks but, in their minds, the low price counters the risks. Another KE, however, reported 'massive diversity amongst users in terms of understanding what it is and where it comes from'. GHB users were characterised by KE as likely to be younger (n=2) and one KE noted that GHB is particularly popular in the gay scene. Two KE reported on KE route of administration, reporting only oral use.

Following a number of GHB-related overdoses at events in Melbourne in 2004 an industry-lead 'Say not to G' campaign was initiated. One KE noted that this campaign was generally well regarded within the scene; many perceived it as coming from a good source, although others still dismissed the message and messengers. Indeed, according to this KE, some users perceived the campaign as a joke; for example, they walked around with 'say no to G' stickers 'when out of it on G'. This KE reported that others users, however, took the message on board, with the campaign particularly changing the behaviour of those who didn't want to be banned from the clubs that their friends were going to. Clubs approached their response to GHB in a range of ways, with some threatening to take pictures of people overdosed on GHB to put up in the club and/or on the club's web-site. The aim of such responses was to both shame GHB users and to deny them access to the club. This KE noted, however, that it is unclear whether any clubs actually did this or just threatened to.

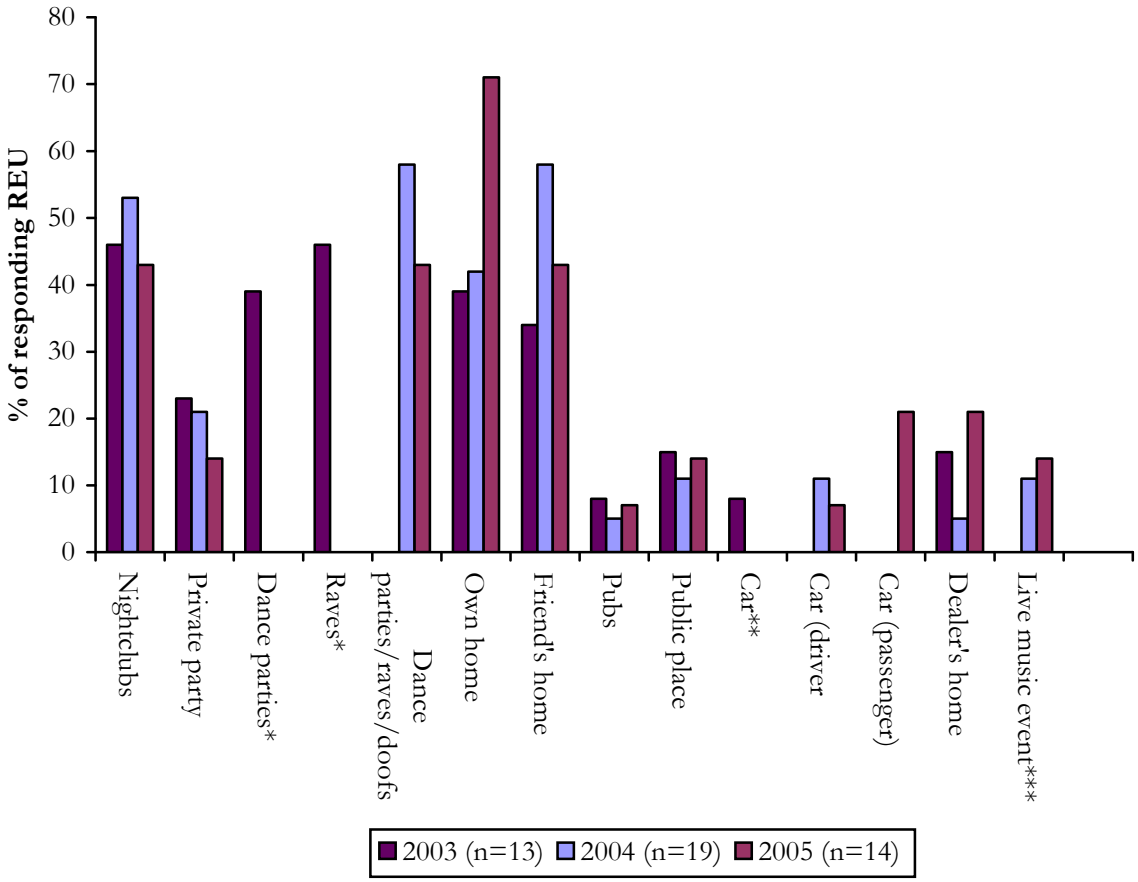
A DHS-initiated campaign, 'Using G is never safe', commenced in April 2005, with support of a number of industry members. As part of this campaign, over 500 kits were sent out to a wide range of selected sites, including late-night entertainment venues, pubs, clubs and venues, as well as A&D agencies, police, licensing authorities, promoters, and education institutions that conduct courses for promoters. One KE with extensive knowledge of this campaign noted that nothing comparable had previously been done in Australia, and that the emphasis of the campaign was intended to be on asking questions of users and potential users and getting them to consider their use and the potential consequences, rather than being too accusatory or strong.

Five KE, however, reported that following these two campaigns a distinct divide developed between those who were using GHB (i.e. being shunned and stigmatised) and those not using it. Two KE raised concern about users being marginalised and being reluctant to seek help should they experience complications following GHB use, with one KE arguing for the need for education around encouraging people to seek help, rather than hiding GHB use and potentially experiencing severe consequences. Further, two KE reported concern about GHB use increasingly taking place in private homes (i.e. if no longer able to have it in clubs and/or not wanting to use it in front of non-GHB using friends) and the implications of this change should complications from use arise.

Consistent with previous years, the 2005 REU participants reported typically using GHB at participants' own homes (71%), friends' homes (43%), dance parties/raves/doofs (43%) or in nightclubs (43%; Figure 49). There was an increase in the proportion of recent GHB users reporting using GHB in their own homes from 2003 and 2004 to 2005, and, although this trend

must be interpreted with caution given the small number of participants responding, it is consistent with KE reports.

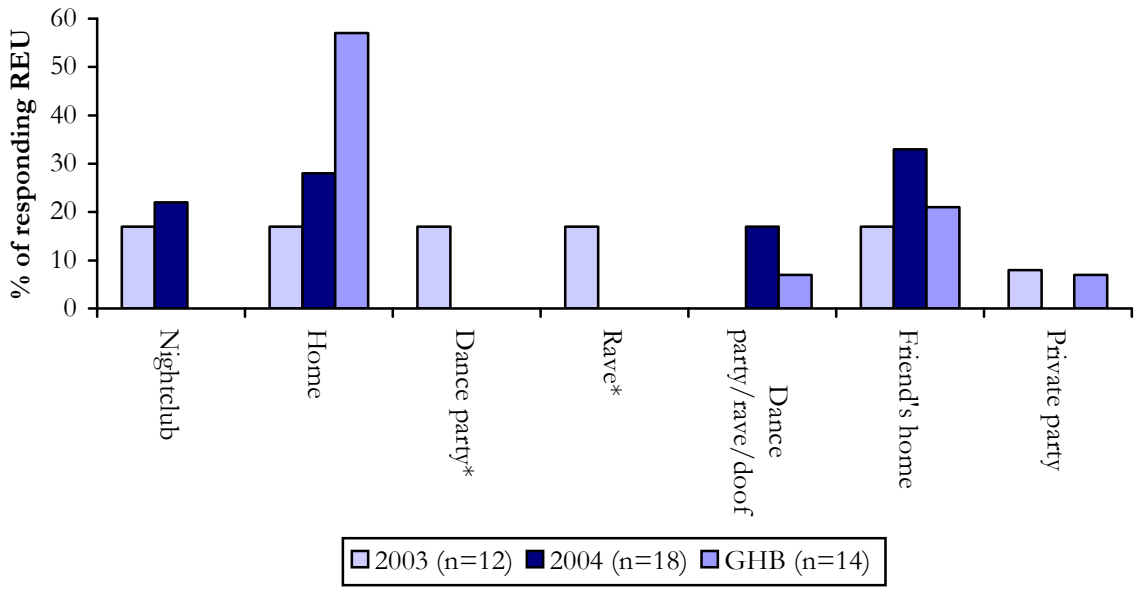
Figure 49: Usual location of GHB use, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**
**** 'Car driver' and 'car passenger' distinction not made in 2003 REU survey**
***** 'Live music event' not a response option in 2003 REU survey**

The most frequently reported location of GHB use by recent users in the 2005 sample was own home (71%), a considerable increase on previous years' figures (Figure 50). As outlined above, this observed increase in the use of GHB in participants' own homes may be in response to the anti-GHB campaigns and the associated stigma associated with GHB use, resulting in people being more likely to use it in the privacy of their own homes.

Figure 50: Location of most recent GHB use, 2003-2005



Source: PDI REU interviews, 2003-2005
*** 'Rave' and 'dance party' categories combined from 2004 onwards**

8.2 Price

Fourteen participants from the 2005 REU sample were able to comment on the current price, purity and availability of GHB. Twelve participants reported on the price of GHB per ml, with a median price of $2.50 (range $1-$3) being reported (Table 21). Two participants described purchasing 20ml quantities of GHB, at a median price of $35 (range $30-$40), and one participant reported purchasing a 3ml measure for $3.

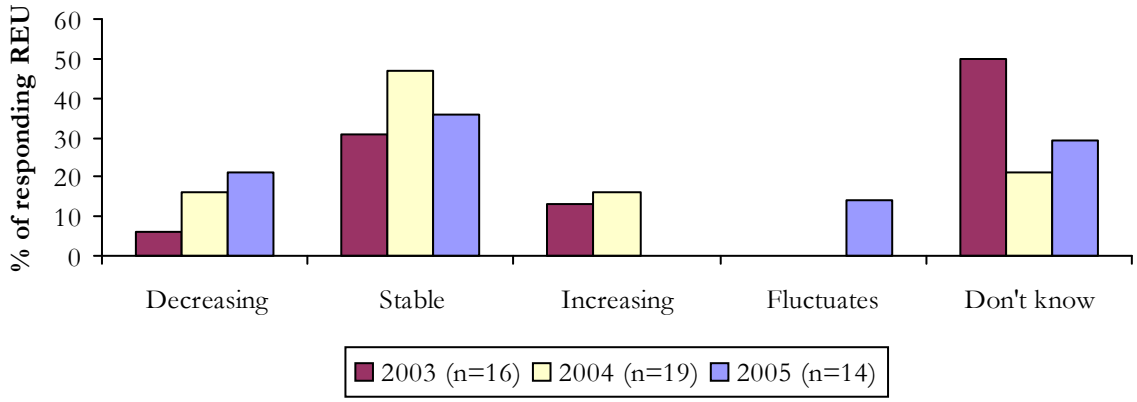
Table 21: Price of GHB purchased by REU, 2003-2005

Median price ($) GHB	2003 (N=100)	2004 (N=100)	**2005 (n=14)**
ml (range)	$3 ($2.50-$3) (n=5)	$2.50 ($2-$8) (n=12)	**$2.50 ($1-$3) (n=12)**
3 ml (range)	-	-	**$3 (n=1)**
20 ml (range)	-	-	**$35 ($30-$40) (n=2)**
Vial 100ml (range)	$25 ($25-$300) (n=3)	$119 ($38-$200) (n=3)	**-**

Source: PDI REU interviews, 2003-2005

Of the fourteen participants from the 2005 REU sample who responded, over one-third (36%) reported that the price of GHB had been stable over the preceding six months, 21% reported it had decreased, 14% that it had fluctuated and 27% were unable to comment (Figure 51).

Figure 51: Recent changes in price of GHB purchased by REU, 2003-2005



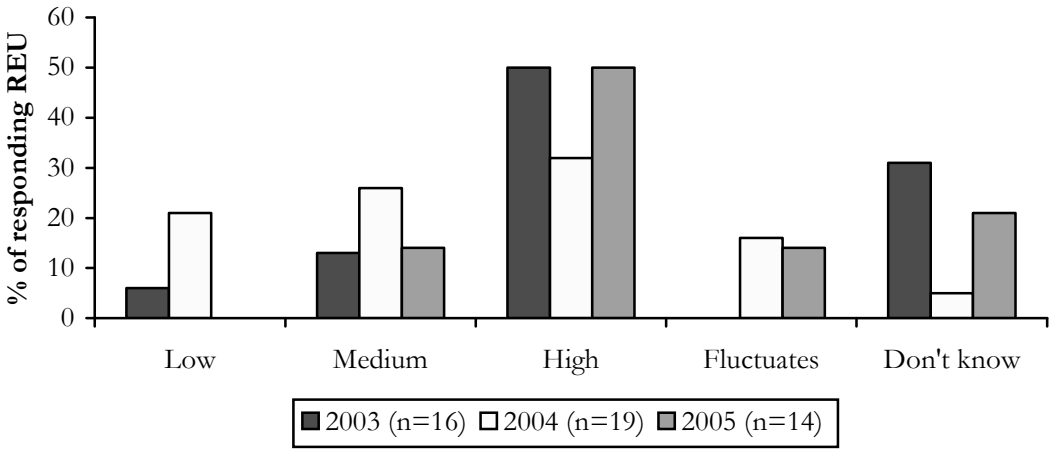
Source: PDI REU interviews, 2003-2005

Only two KE commented on GHB price, both of whom reported it as cheap and one noting that it is an 'increasingly attractive drug given its affordability'.

8.3 Purity

Of the fourteen participants from the 2005 REU sample who reported on current GHB purity, half (50%) reported the strength as high, 14% as medium and 14% as fluctuating (Figure 52). Three participants (21%) reported that they did not know about the current purity of GHB.

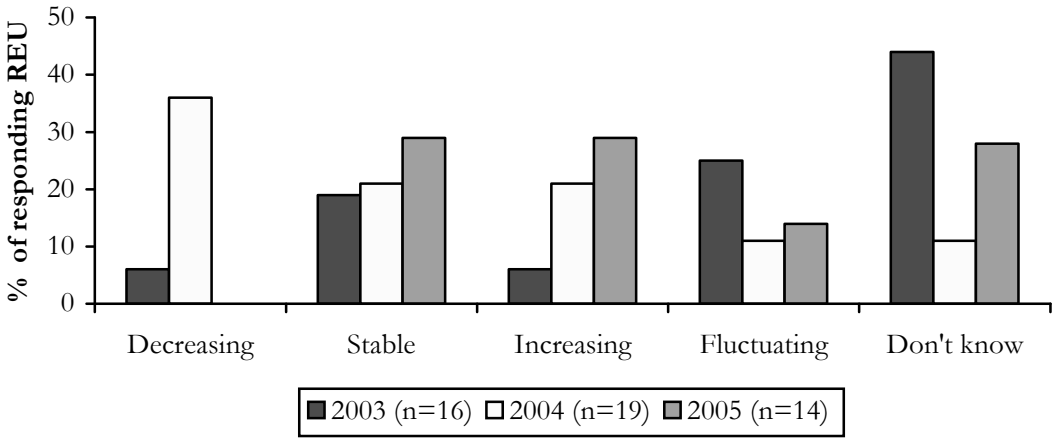
Figure 52: REU reports of purity of GHB in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005

Reports concerning the purity of GHB in the six-month period prior to interview have been variable within each year that the PDI has been conducted in Victoria. Again, in 2005, the reports were inconsistent, with 29% of those able to respond reporting the purity as stable, 29% as increasing and 29% unable to comment (Figure 53).

Figure 53: REU reports of change in purity of GHB in the preceding six months, 2003-2005



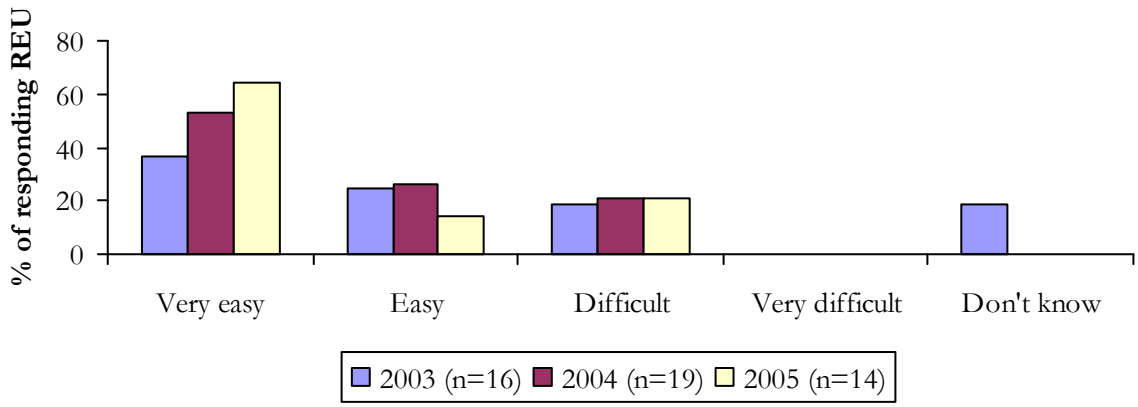
Source: PDI REU interviews 2003-2005

Two KE commented on the purity of GHB, one reporting it as being of high quality and stable purity, the other reporting variable purity.

8.4 Availability

Of the fourteen participants from the 2005 REU sample who were able to comment on the current availability of GHB, most responded that it was 'very easy' (64%) or 'easy' (14%) to obtain, whereas 21% said it was 'difficult' to obtain (Figure 54). Over the three years of the Victorian PDI, GHB has consistently been reported as being readily available by the REU samples.

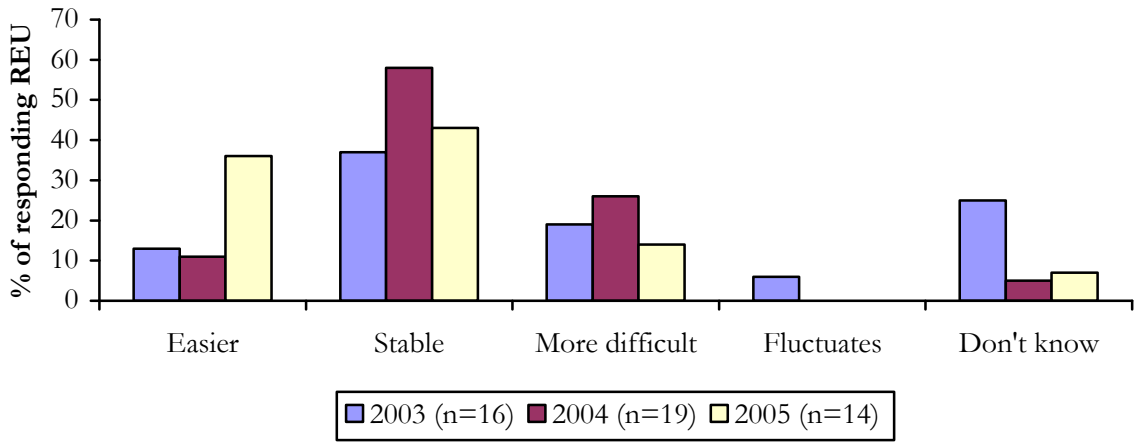
Figure 54: Current availability of GHB, 2003-2005



Source: PDI REU interviews, 2003-2005

Most respondents (43%) the 2005 REU sample who were able to comment indicated that GHB availability had remained stable or become easier to access over the preceding six months (36%), with only 14% reporting that it had become more difficult to access (Figure 55). Indeed, a considerably larger proportion of 2005 participants reported that GHB had become easier to obtain than in previous samples.

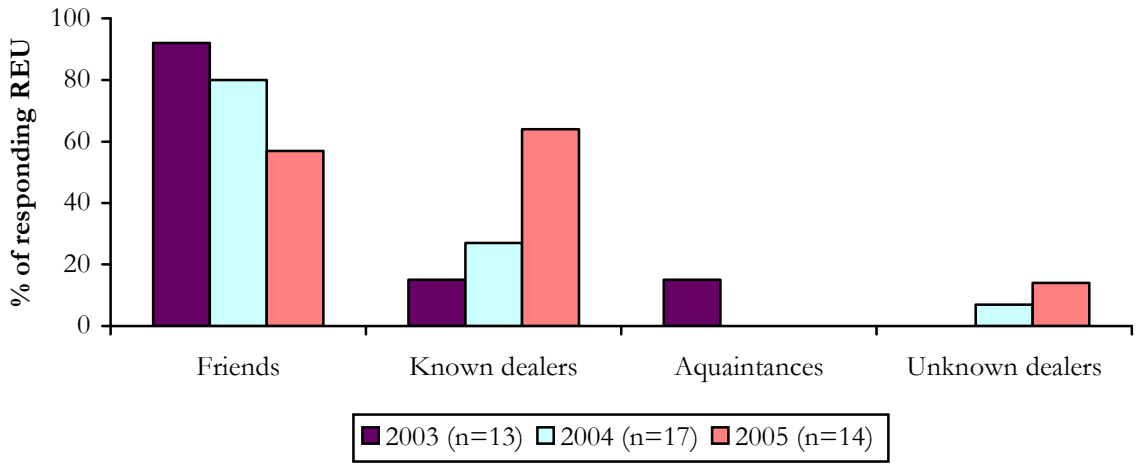
Figure 55: Change in GHB availability in the preceding six months, 2003-2005



Source: PDI REU interviews 2003-2005

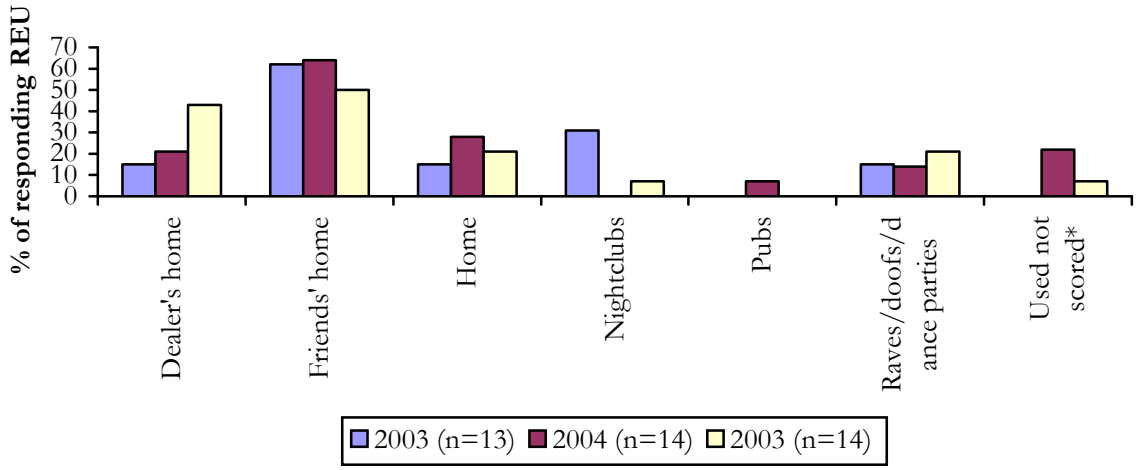
Consistent with previous years, GHB was reported to be predominately purchased from friends and known dealers (Figure 56). There appears to be a trend over the three years of data collection, however, for people to be less likely to purchase GHB from friends, and increasingly purchasing it from known dealers. Again, this trend may reflect changes in attitudes and perceptions of GHB, and stigma against GHB users within some social networks and/or scenes, necessitating its purchase from dealers rather than from within friendship groups. One KE commented on the availability of GHB, noting that it is more likely sourced from one of a number of trusted people.

Figure 56: People from whom GHB had been purchased the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005

Figure 57: Locations where GHB had been purchased in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005

8.5 GHB-related harms

8.5.1 Law enforcement

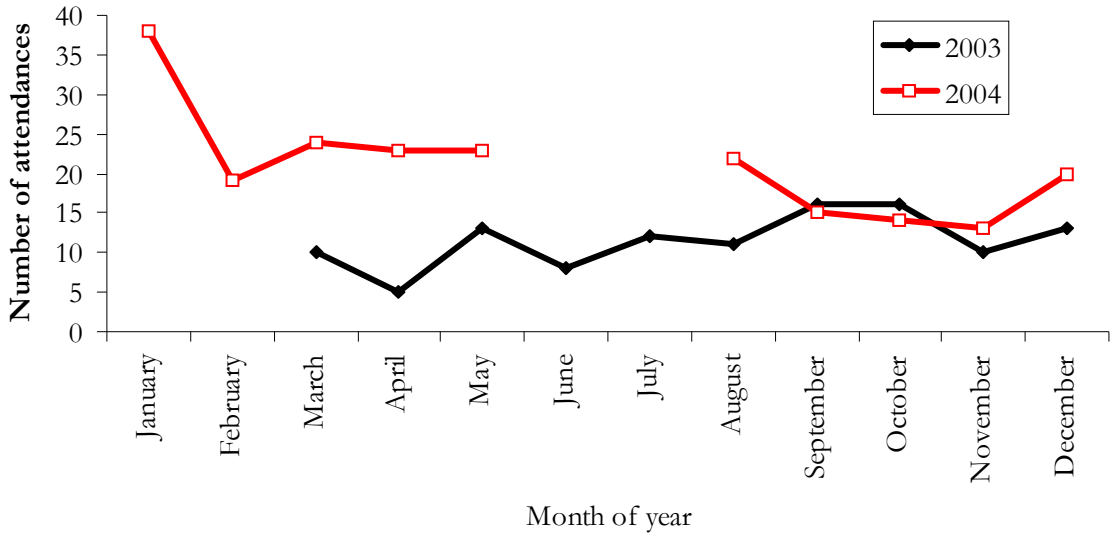
No Victorian GHB-specific law enforcement indicator data are available. Two law enforcement KE, however, commented on GHB, both noting that it is not frequently seen, either by undercover police nor by those investigating clan labs. This was proposed to be as a result of a number of factors including that it is a hard substance to detect, it is a liquid and so is easy to dispose of (i.e. down the drain) in the event of a raid, and its manufacture involved a 'small, quick process'. It is also not easy to detect in the body as it is quickly broken down. From the manufacturing perspective, one KE noted that although there is not much evidence of GHB, and its manufacture does not appear to be happening in conjunction with methamphetamine and/or MDMA production, it must be occurring. One KE noted that recent codes of conduct have been introduced to address the issue of GHB manufacturing.

8.5.2 Health

GHB-related events attended by ambulance

Figure 58 reports the monthly totals of ambulance attendances where GHB use was mentioned in Melbourne, January 2003-December 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004). Ambulance attendances where GHB use was recorded ranged between 5-38 per month during this time. In 2004 there were a total of 211 attendances where GHB use was mentioned, which was almost double the number recorded in the previous year (n=114 in 2003). In 2004 the average estimated age of cases was 23yrs and in 2003 it was 25yrs (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre).

Figure 58: Monthly totals of ambulance attendance where GHB was mentioned in Melbourne, Jan 2003-Dec 2004 (excluding Jan-Feb 2003 & Jun-Jul 2004).



Source: Metropolitan Ambulance Service and Turning Point Alcohol and Drug Centre.

Those KE providing first aid and ambulatory services reported seeing a relatively high number of presentations reporting use of GHB, although one reported that the number of GHB overdoses had recently dropped. One KE argued, however, that as GHB use is always as part of polydrug use, negative effects should not be solely attributed to GHB. GHB overdose cases at events were described by one KE as generally initially unconscious, with some easily aroused (i.e. responsive to pain – sternum or pinching). The majority of cases 'will get up and leave the scene - they can't be forced to stay and not much more we can do for such cases anyway'. If an individual is unable to be roused, however, an ambulance will be called, with monitoring and oxygen provided in the interim.

The two KE providing hospital-based emergency treatment for GHB overdoses reported a relatively stable number of such presentations, particularly compared to the dramatic increase observed in recent years. One KE reported seeing 5 GHB OD per month in early 2003, with this number increasing to 10 GHB OD per month in early 2005. Further, one KE noted that GHB overdoses are the second most common drug-related incident following those associated with alcohol, and the other KE estimated that GBH was involved in 50% of cases (compared to 30% in previous years). One KE also noted high rates of polydrug use by GHB overdose cases, with GHB and ecstasy the most commonly reported combination.

The two KE reported quite distinct approaches to the treatment of GHB overdose. One noted that some GHB overdose cases are dropped (and left) out the front of the hospital by their friends, though the majority are brought in by ambulance. This means that in a small number of cases bystanders may be able to tell the A&E staff what drugs have been taken, but in the majority of cases the staff have to rely on a presumptive diagnosis (i.e. exclude everything else and then assume it is GHB). Most GHB cases end up being intubated for 8-12 hours before they are discharged. Intubation is undertaken to ensure that people do not aspirate (i.e. choke on vomit – if they do that, they may be in hospital for weeks). Such treatment, however, is very resource intensive, as, even once they have been intubated; patients need 1-2 nurses to continually monitor them.

In comparison, the approach reported by the second KE involves monitoring rather than intubation. This KE noted that, as most GHB overdose cases wake up within two hours, laying them on their side and watching them closely is an appropriate response. Indeed, as this KE notes, to date no complications have been experienced, and so the hospital continues to treatment GHB overdoses in this manner.

Thus, the two hospitals have quite different approaches to the treatment of GHB overdoses, with both having considerable experience and obvious success with their method. One KE, however, expressed concern about the impact on emergency services should the use of GHB move out of central Melbourne, with other hospitals potentially not knowing about GHB, how to recognise the symptoms or how best to treat such cases.

One hospital KE reported seeing a considerable number (estimated at 10%) of repeaters, with some being seen by the A&E department on a weekly basis. Further, another KE reported some people 'using GHB, blowing out, going to hospital and then coming back [to the event]'. A second KE concurred, arguing that 'even if ambulance gets called and/or they get taken to A&E, when they come to they have no understanding of how serious the overdose was … they just seem to bounce back and walk out – sometimes back to the party or wherever their friends are'. A KE involved in promoting parties noted an additional cause for concern, particularly related to GHB overdoses, whereby if overdoses involve GHB some people are inclined to hide it (for example, hide them in the car) rather than getting the person to a safe place and/or calling the ambulance.

8.6 Summary of GHB trends

Reports from the Victorian REU and KE suggest:

- **moderate prevalence of lifetime and low prevalence of recent GHB use among REU;**
- **fewer ERD users using GHB but more frequent use among those using it;**
- **GHB is used across a wide range of locations, predominantly private homes, dance parties and nightclubs;**
- **GHB is very cheap and the price has remained stable over the preceding six months;**
- **current GHB purity is regarded as medium to high, but there is little consensus about recent changes in purity;**
- **GHB is readily available and availability has remained stable over the previous six months;**
- **GHB is increasingly being purchased from known dealers in their homes;**
- **KE report the marginalisation of GHB use;**
- **KE report more concern for the health consequences associated with GHB use compared to other party-drugs.**

9.0 LSD

There are limited data available regarding the prevalence of LSD use in the Australian general population. A 'hallucinogen' category is included in the NDSHS, but this is a broad category encompassing the use of synthetic hallucinogens such as LSD, psilocybin and angel dust, and naturally occurring hallucinogens such as magic mushrooms and datura (Australian Institute of Health and Welfare 2005). The most recent data from the 2004 NDSHS indicate that this category of drugs had been used by 0.7% of the general Australian population in the preceding twelve months, a statistically significant reduction on the 2001 estimate of 1.1% (Australian Institute of Health and Welfare 2005). It is estimated that 7.5% of the general Australian population aged 14 years and older have ever used a 'hallucinogenic' substance (Australian Institute of Health and Welfare 2005). The estimates of use within the Victorian general population are consistent with national figures, with 0.7% estimated to have recently used a hallucinogenic substance (Australian Institute of Health and Welfare 2005). LSD is specifically asked about in VYADS, with estimates of use slightly higher in this younger cohort than the general Australian population: 5% having ever used LSD and 2% used LSD in the preceding 12 months (Premier's Drug Prevention Council 2005). Data from the 2004 VYADS suggest that hallucinogens tend to be infrequently used: 30% of recent users report using them once a month or more, 32% once or twice a year and 37% had only used on one occasion in the 12 months prior to interview (Premier's Drug Prevention Council 2005).

9.1 LSD use among REU

Two-thirds (67%) of the 2005 REU sample reported having ever used LSD, with approximately one-third (38%) reporting use of LSD in the preceding six months (Table 22). The median age of first use for LSD was 18 (range 12-43).

Thirty-eight recent LSD users reported a median of three days of use in the preceding six months (range 1-30). The majority (68%) reported using LSD monthly or less, 23% had used LSD more than monthly and less than fortnightly and three people used approximately weekly or more frequently. Most respondents quantified LSD usage in terms of tabs (n=31), with a median number of one (range 0.5-3) reported as being taken in a 'typical' or 'average' use episode. During their 'heaviest' use episode in the preceding six months, a median of 1.25 tabs (range 0.5-10) was used. Twenty-four percent of those who had recently binged used LSD when doing so. All recent LSD users reported swallowing the drug.

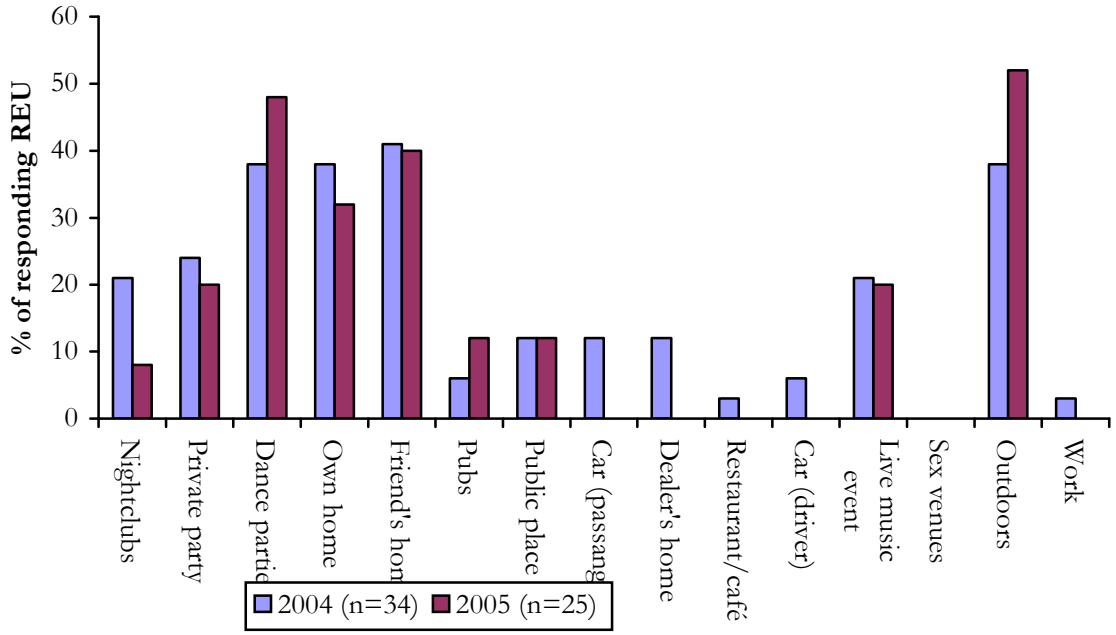
Table 22: Patterns of LSD use among REU, 2003-2005

LSD	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Ever used (%)	86	72	**67**
Used last six months (%)	48	40	**38**
Of those who had used			
Median days used last 6 months (range)	2 (1-70) (n=48)	2 (1-18) (n=39)	**3 (1-30) (n=38)**
Median quantities used (tabs)			
Typical (range)	1 (0.5-3) (n=38)	1 (0.5-5) (n=30)	**1 (0.5-3) (n=31)**
Heavy (range)	1 (0.5-15) (n=36)	2 (0.5-50) (n=29)	**1.25 (0.5-10) (n=3)**

Source: PDI REU interviews, 2003-2005

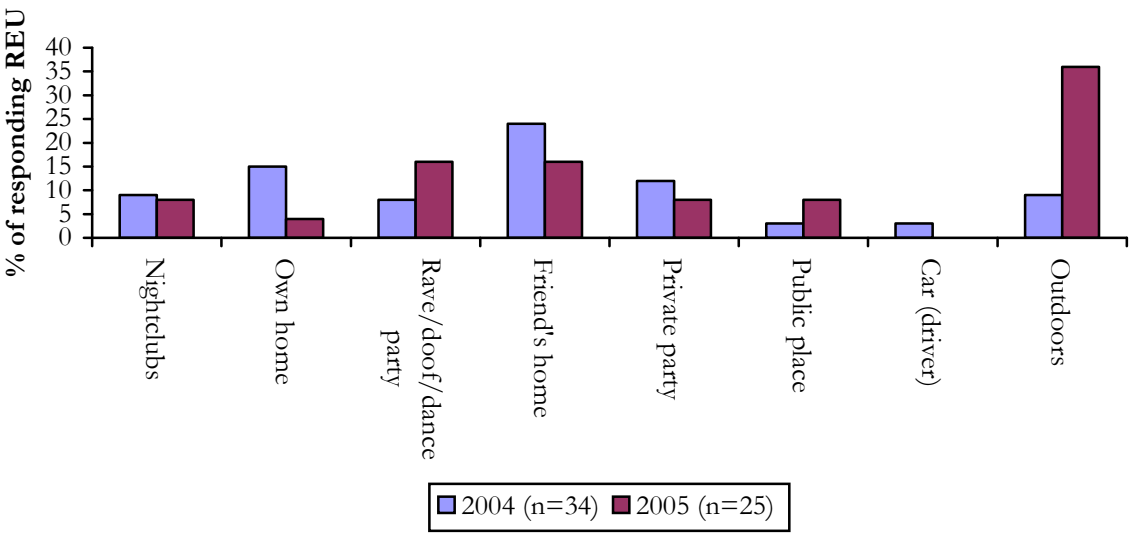
LSD was used across a wide variety of locations (although fewer than in 2004), predominantly outdoors (52%), at dance parties (48%), in friends' homes (40%), and in participants' own homes (32%; Figure 59). The most common location where participants last used LSD was outdoors (36%; Figure 60). Information regarding location of LSD use was not collected in the 2003 REU survey.

Figure 59: Usual location of LSD use, 2004-2005



Source: PDI REU interviews, 2004-2005

Figure 60: Location of most recent LSD use, 2004-2005



Source: PDI REU interviews, 2004-2005

Seventeen KE reported limited use of LSD, with prevalence described as 'rare' and frequency of use as typically infrequent. LSD use was described as being part of young people's experimentation or being undertaken by older users. Relatively low levels of LSD use were attributed by three KE to the hallucinogenic nature of the drug effects not necessarily being the experience that ERD users desire. LSD was reported as most commonly sold in tabs or as a liquid.

9.2 Price

One-quarter of the sample was able to comment on the current price, purity and availability of LSD. Twenty-five participants reported on the price of LSD per tab, with a median price of $15 (range $5-$30) being reported (Table 23). Two participants described purchasing LSD 'microdots', at a median price of $20 (range $10-$30), two participants reported purchasing one drop of LSD, with both reporting a price of $15 and a third reporting purchasing in bulk (100 drops for $1000). One participant reported purchasing one sugar cube (infused with LSD) for $15. The REU reports of LSD price were similar between the 2003, 2004 and 2005 samples.

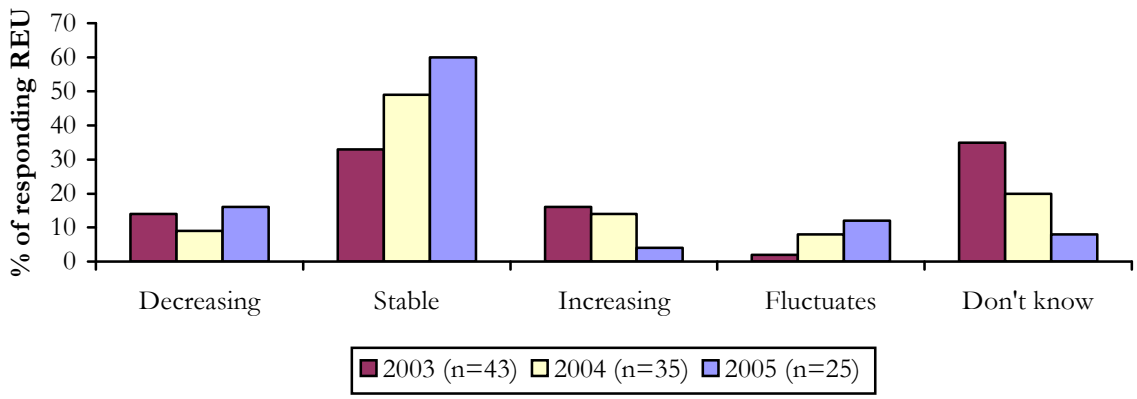
Table 23: Prices of LSD purchased by REU, 2003-2005

Median price ($) LSD	2003 (n=18)	2004 (n=33)	**2005 (n=25)**
Tab (range)	$15 ($6.50-$25)	$20 ($4-$40)	**$15 ($5-$30)**

Source: PDI Regular ecstasy user interviews, 2003-2005

Of the twenty-five participants who responded, the majority (60%) reported that the price of LSD had been stable in the prior six months (Figure 61). Four (16%) reported that it had decreased, 12% as fluctuating and one (4%) that it had increased. Two participants (8%) were unable to comment on price variations of LSD in the past six months.

Figure 61: Recent changes in price of LSD purchased by REU, 2005



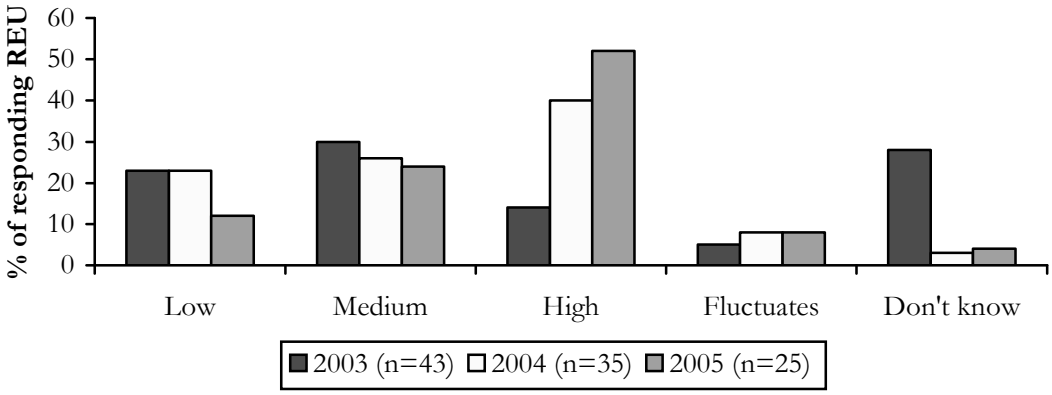
Source: PDI REU interviews, 2005

9.3 Purity

Of the twenty-five participants who commented on current LSD purity, just over half (52%) reported the strength as high and slightly less than one-quarter (24%) as medium, with only 12%

reporting the current purity of LSD as low (Figure 62). A larger proportion of the 2005 REU sample than those of the preceding years rated the current purity of LSD as high.

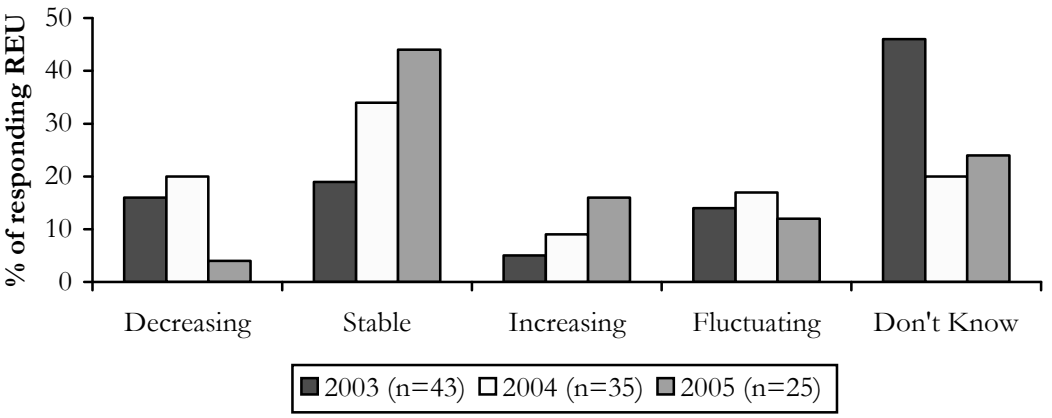
Figure 62: REU reports of purity of LSD in the preceding six months, 2003-2005



Source: PDI REU interviews 2003-2005

Regarding changes in the purity of LSD in the preceding six months, nearly half (44%) of the 2005 REU sample able to comment reported the purity had remained stable, 4% reported decreased purity, 16% increased purity, 12% reported fluctuating purity and 24% could not comment on changes in purity (Figure 63). A larger proportion of the 2005 sample than previous years reported that the purity had been stable in the preceding six months.

Figure 63: REU reports of change in purity of LSD in the preceding six months, 2003-2005

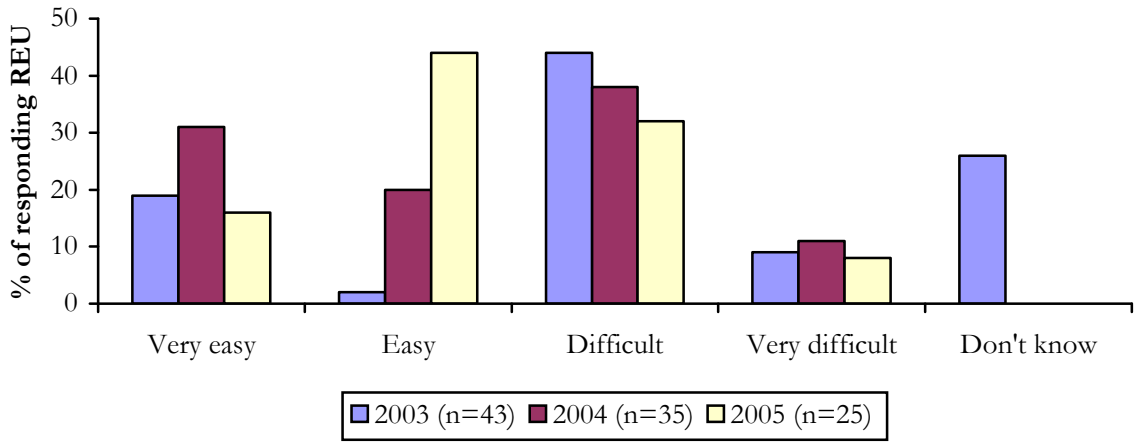


Source: PDI REU interviews 2003-2005

9.4 Availability

There was little consistency in responses around the current availability of LSD (Figure 67). Of the 25 participants who were able to comment on availability, nearly two-thirds (60%) reported that LSD was either 'easy' (44%) or 'very easy' (16%) to obtain. The remaining 40% reported LSD to either be 'difficult' (32%) or 'very difficult' to obtain. A larger proportion of the 2005 respondents reported the current availability as 'easy' than in previous years (Figure 64).

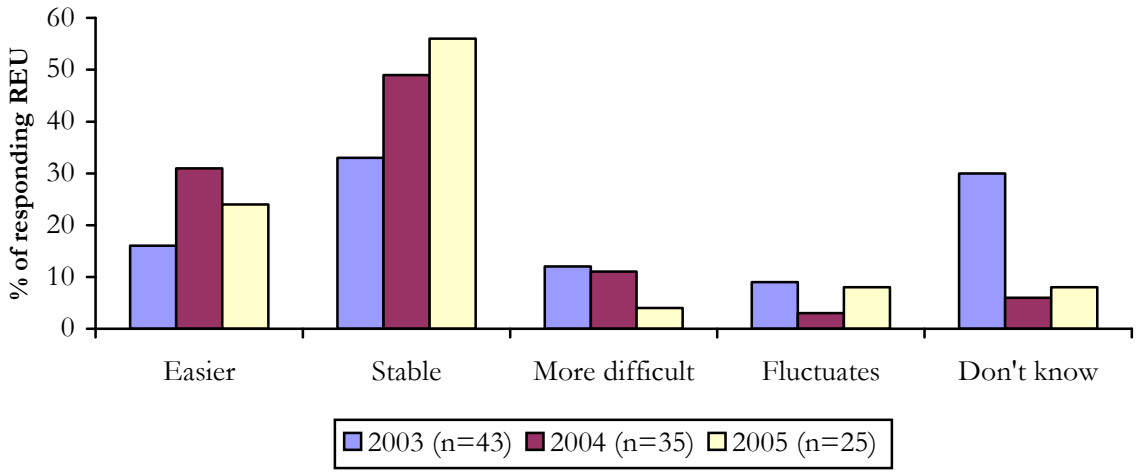
Figure 64: Current LSD availability, 2003-2005



Source: PDI REU interviews 2003-2005

Over half of respondents (56%) indicated that LSD availability had remained stable over the preceding six months, 24% said it had become easier to access and only 4% reported that it was more difficult. Two participants (8%) reported fluctuating availability and two were unable to comment (Figure 65). A larger proportion of the 2005 respondents reported the availability of LSD as stable over the preceding six months than in previous years.

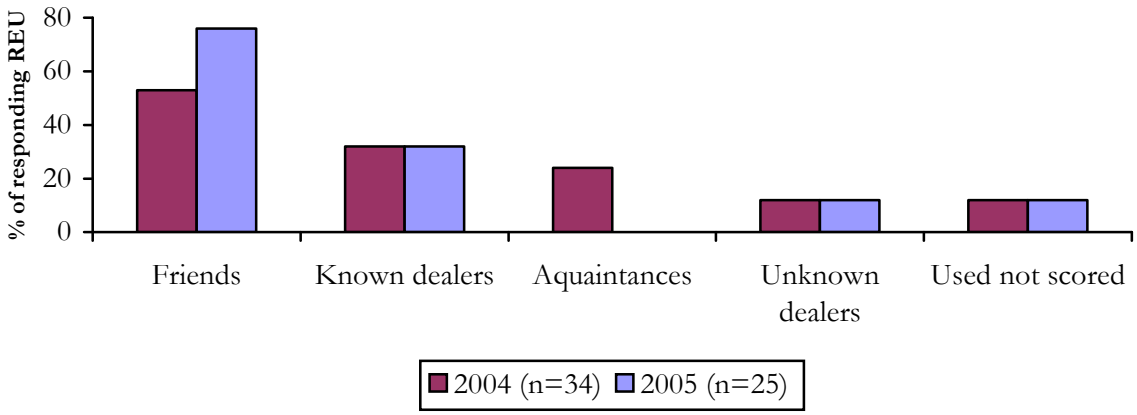
Figure 65: Changes in availability of LSD, 2003-2005



Source: PDI REU interviews 2003-2005

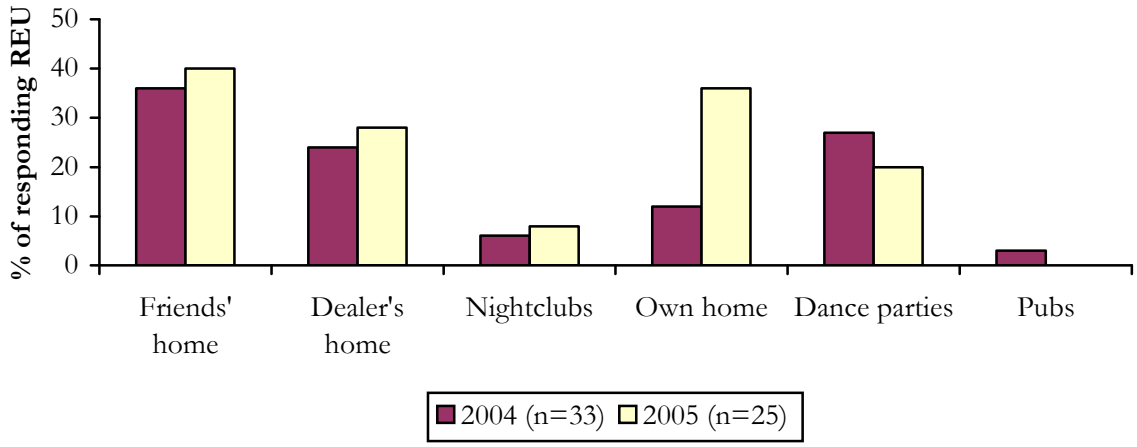
Friends (67%) were the most common people from whom LSD had been purchased in the past six months (Figure 66). The most common places of purchase were friends' homes (50%), dance parties (38%) and dealers' homes (33%; Figure 67). Data regarding LSD sources were not collected in 2003.

Figure 66: People from whom LSD had been purchased in the preceding six months, 2004-2005



Source: PDI REU interviews 2004-2005

Figure 67: Locations LSD had been purchased from in the preceding six months, 2004-2005



Source: PDI REU interviews 2004-2005

9.5 Hallucinogen-related harms

Law enforcement

Table 24 details consumer (e.g. possession/use) and provider (e.g. trafficking/manufacture) arrests for hallucinogens, during 2004–05 (in Victoria and Australia). During that financial year 19% of the arrests made in Australia for hallucinogen offences (LSD or psilocybin mushrooms) occurred in Victoria (Australian Crime Commission 2004)[5]. The number of consumer and provider arrests for hallucinogen offences remains very low.

[5] Proportions (%) should be interpreted with caution due to the lack of uniformity across states and territories in the recording and storing of data on illicit drug arrests.

Table 24: Hallucinogens: consumer and provider arrests, Victoria and national, 2004-2005

	Victoria (n)	Australia (n)	% of national arrests
Consumer	19	89	21.3
Provider	4	30	13.3
TOTAL*	23	119	19.3

Source: Australian Crime Commission
***Includes those offenders for whom consumer/provider status was not stated.**

9.6 Summary of LSD Trends

Reports from the Victorian REU and KE suggest:

- **high prevalence of lifetime use of LSD with moderate levels of recent use;**
- **recent users report infrequent use of LSD;**
- **LSD is used across a wide range of locations, predominantly 'outdoors', private homes, and at dance parties;**
- **LSD is relatively cheap and the price has remained stable over the preceding six months;**
- **current LSD purity is regarded as high, with purity described as stable over the previous six months;**
- **there is little consistency in the reported current availability of LSD, although availability has remained stable over the previous six months;**
- **LSD is most commonly purchased from friends in private homes.**

10.0 MDA

10.1 MDA use among REU

One-quarter of the sample (25%) reported lifetime use of MDA, with only 8% reporting use of MDA in the preceding six months (Table 25). The median age of first use for MDA was 19 (range 15-33).

Recent MDA users (n=8) reported a median of 5.5 days of use in the preceding six months (range 1-24). Of those who had used MDA in the preceding six months, the majority (75%) reported using monthly or less. Two participants (25%) had used MDA more than fortnightly and less than weekly. One participant nominated MDA as their drug of choice.

MDA users quantified their usage in terms of a range of amounts, including capsules (n=2), with a median of one MDA cap taken during both 'typical' or 'average' use episodes and 'heaviest' use episodes. Use of grams (n=2), tabs (n=2), lines (n=1) and points (n=1) were also reported. None of the participants who had recently binged had used MDA when doing so. Recent MDA users reported swallowing (88%) and snorting (88%) the drug, with one participants reporting shelving it. There were lower levels of MDA use reported by the 2005 sample than those of previous years in terms of prevalence of lifetime and recent use (Table 22).

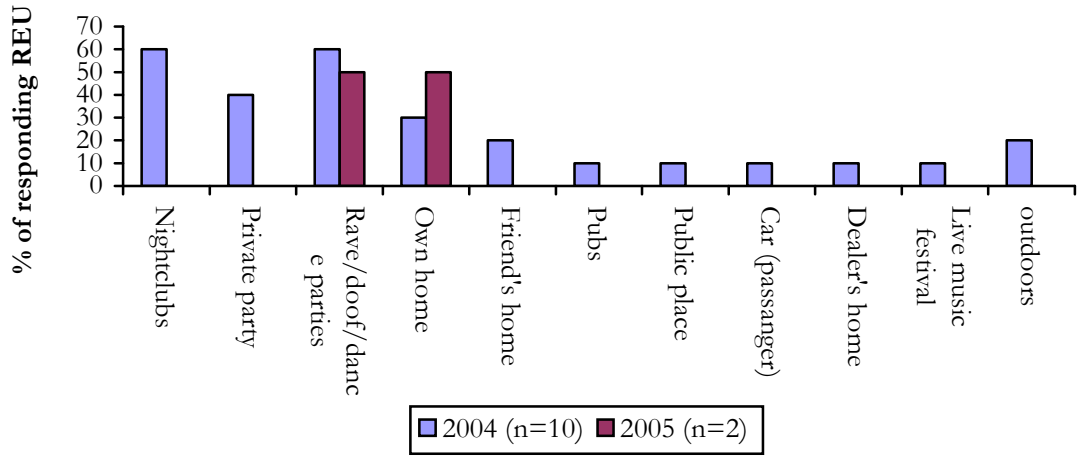
Table 25: Patterns of MDA use among REU, 2003-2005

MDA	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Ever used (%)	40	37	25
Used last six months (%)	19	16	**8**
Of those who had used			
Median days used last 6 mths (range)	4 (1-72) (n=19)	2.5 (1-15) (n=16)	**5.5 (1-24)**
Median quantities used (capsules)			
Typical (range)	1 (0.5-2) (n=7)	1 (0.5-4) (n=14)	**1 (n=2)**
Heavy (range)	1 (0.5-4) (n=8)	1.5 (0.5-8) (n=14)	**1 (n=2)**

Source: PDI REU interviews, 2003-2005

Only two participants reported on their locations of MDA use: their own home (n=1) and raves/doofs/dance parties (n=1). Comparisons between the 2004 and 2005 data should not be made given the small number of participants form the 2005 sample reporting on locations of recent MDA use (Figure 68). Questions regarding location of MDA use were not included in the 2003 survey.

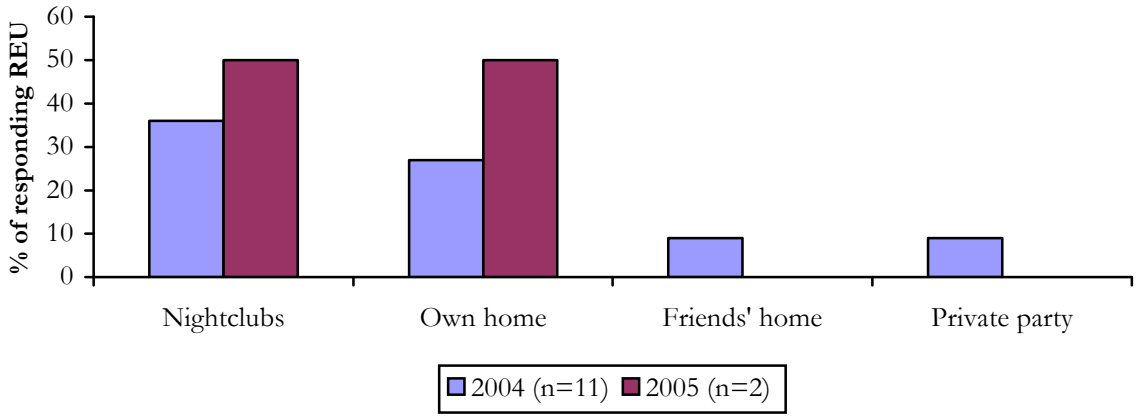
Figure 68: Usual location of MDA use, 2004-2005



Source: PDI REU interviews, 2004-2005

The two participants reported last using MDA at their own home (n=1) and at a nightclub (n=1; Figure 69). Again, comparisons should not be made between the two years that these data have been collected.

Figure 69: Location of most recent MDA use, 2004-2005



Source: PDI REU interviews, 2004-2005

10.2 Price

Only two participants were able to comment on the current price, purity and availability of MDA, with both reporting the price of an MDA cap as $24 (Table 26). Although the price reported by the 2005 REU participants was cheaper than previous years, no meaningful comparisons can be made, given the small sample sizes.

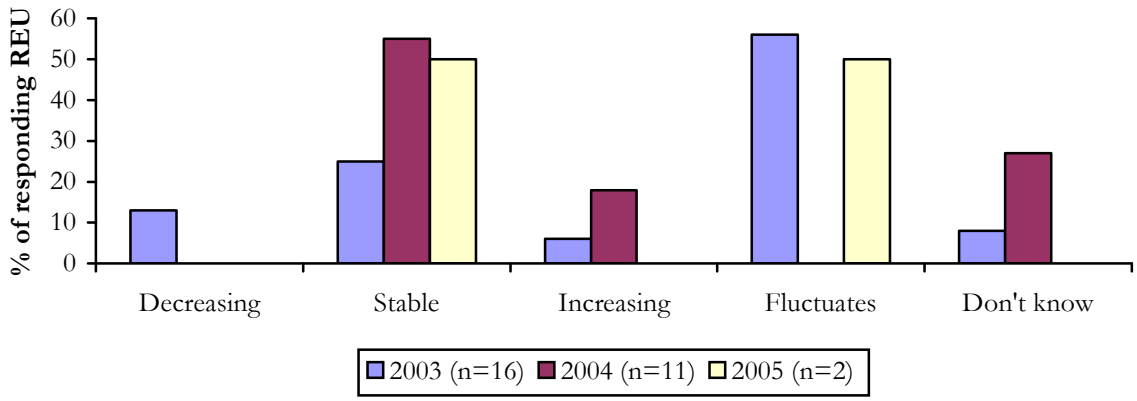
Table 26: Price of MDA purchased by REU, 2003-2005

	2003 sample	2004 sample	**2005 sample**
Capsule median (range)	$35 ($30-$40) (n=2)	$35 ($8-$45) (n=7)	$24 (n=2)

Source: PDI REU interviews, 2003-2005

One participant reported that the price of MDA had been stable in the last six months, with the other reporting it as fluctuating.

Figure 70: Recent changes in price of MDA purchased by REU, 2003-2005

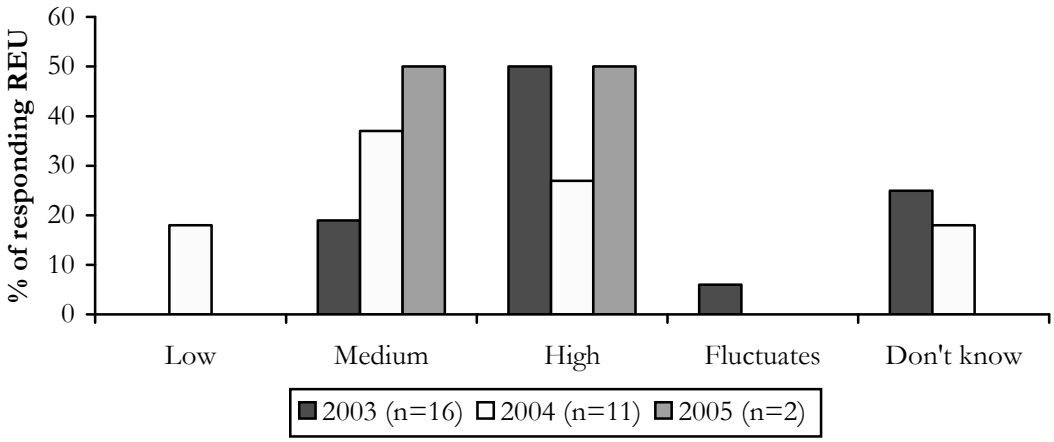


Source: PDI REU interviews, 2003-2005

10.3 Purity

The two participants who commented on current MDA purity reported it as medium (n=1) or high (n=1) (Figure 71).

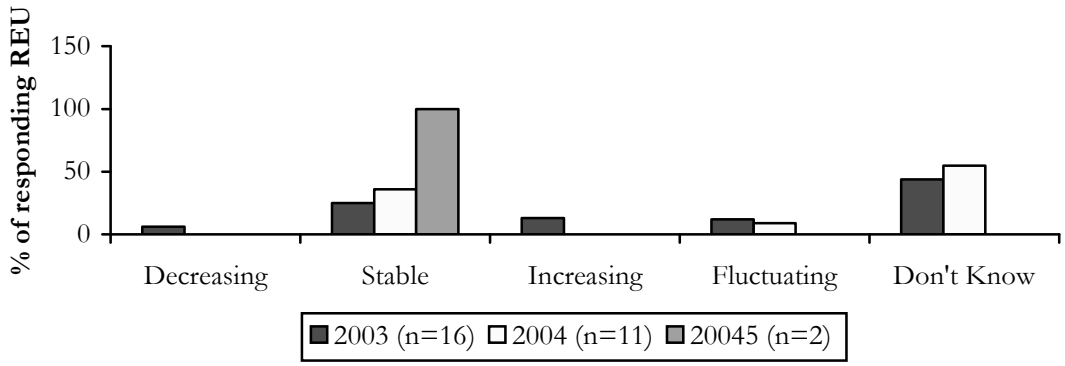
Figure 71: REU reports of purity of MDA in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005

Regarding changes in the purity of MDA in the preceding six months, both respondents able to comment reported it as stable (Figure 72).

Figure 72: REU reports of change in purity of MDA in the preceding six months, 2003-2005

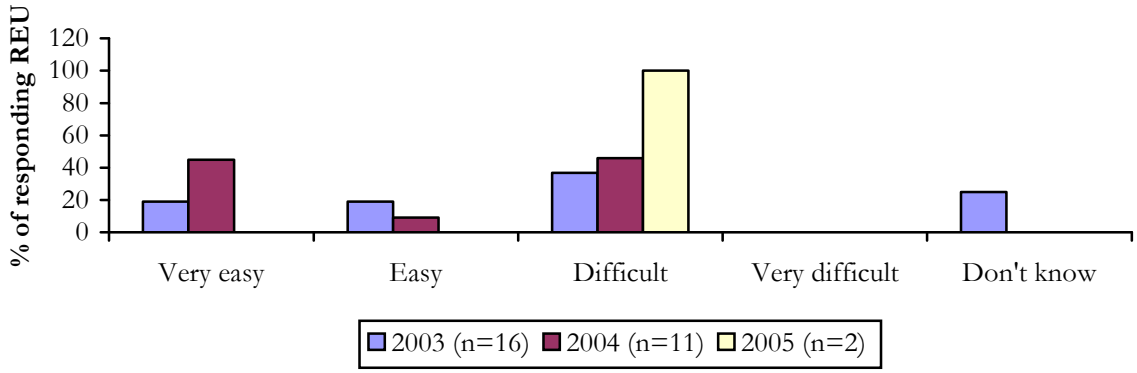


Source: PDI REU interviews, 2003-2005

10.4 Availability

The two participants able to comment on the current availability of MDA reported it as difficult to obtain (Figure 73).

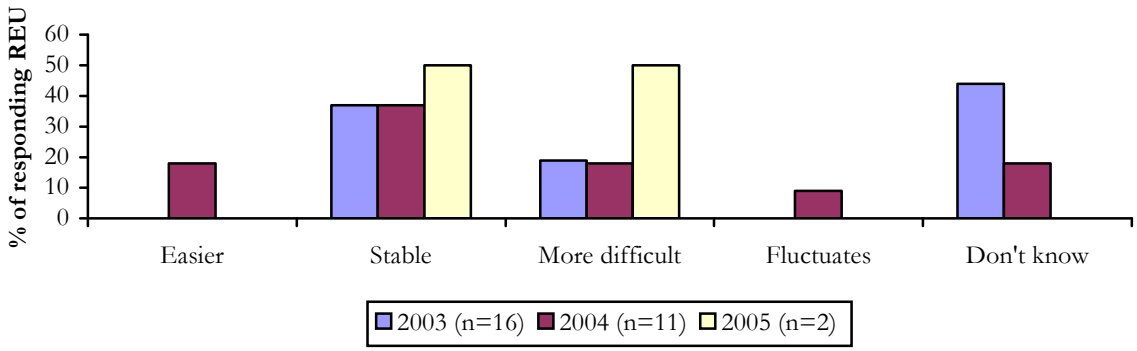
Figure 73: Current MDA availability, 2003-2005



Source: PDI REU interviews, 2003-2005

Of the two 2005 REUs able to comment, one participant reported that MDA had become more difficult to access in the previous six months, with the other reporting the availability over this period of time as stable (Figure 74).

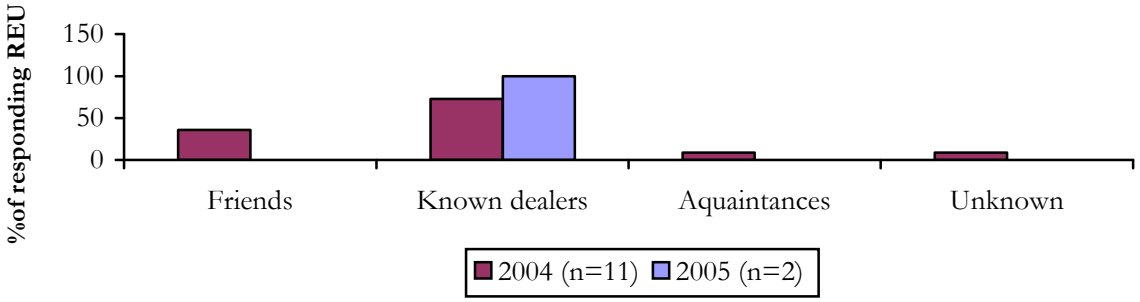
Figure 74: Changes in availability of MDA, 2003-2005



Source: PDI REU interviews, 2003-2005

Both participants commenting on recent MDA purchases reporting purchasing it from known dealers (Figure 75).

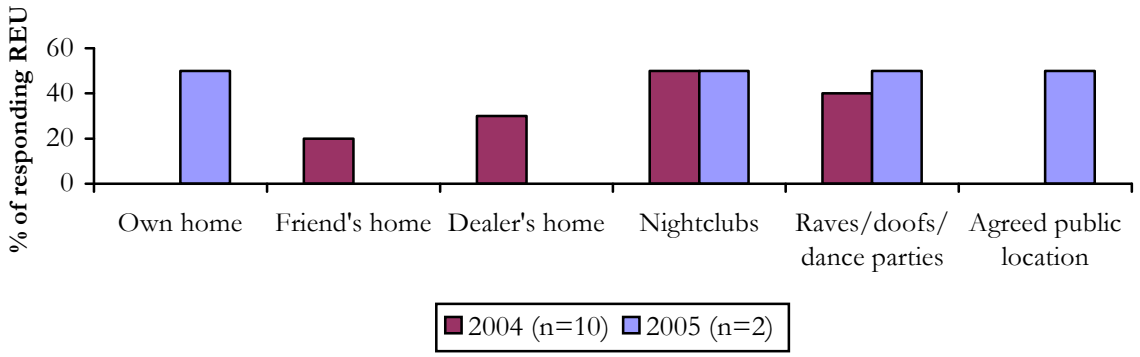
Figure 75: People from whom MDA had been purchased in the preceding six months, 2003-2005



Source: PDI REU interviews, 2003-2005

The two participants reporting on recent MDA purchases reporting scoring it at their own home (n=1), raves/doofs/dance parties (n=1), nightclubs (n=1) and/or agreed public locations (n=1; Figure 76).

Figure 76: Locations MDA had been purchased from in the preceding six months, 2004-2005



Source: PDI REU interviews, 2003-2005

10.5 Summary of MDA Trends

Reports from the Victorian REU and KE suggest:

- **low and decreasing prevalence of lifetime and recent use of MDA;**
- **recent users report infrequent use of MDA;**
- **MDA is used across a wide range of locations, predominantly nightclubs and private homes;**
- **it is difficult to comment on trends in the price of MDA purity given small number of respondents;**
- **current MDA purity is regarded as medium to high, and considered as stable over the last six months;**
- **MDA appears difficult to obtain, perhaps recently becoming more so;**
- **MDA is most commonly purchased from dealers at nightclubs and private homes.**

11.0 OTHER DRUGS

11.1 Alcohol

All participants reported that they had ever used alcohol and nearly all (97%) reported recent alcohol use. The median age of first alcohol use was 13 years (range 5-21). Alcohol was consumed on a median of 48 days (approximately twice a week) (range 2-180) in the preceding six months. Twenty participants (21% of recent drinkers) reported drinking at least five days per week.

Nearly three-quarters (73%) of the sample reported usually (at least two-thirds or more of occasions of ecstasy use in the preceding six months) drinking alcohol while using ecstasy, nearly two-thirds (60%) of who consumed more than five standard drinks when doing so. Slightly more than one-third of the sample (35%) reported drinking alcohol during the comedown from ecstasy, nearly two-thirds (60%) of who reported consuming more than five standard drinks when doing so. Of those participants that reported binging in the six months prior to being interviewed (n=52), nearly half (45%) reported drinking alcohol during a binge. Compared to the reports of the 2004 REU sample, a larger proportion of the 2005 REU sample reported drinking during the comedown period, and drinking more during the comedown, and a larger proportion reported drinking during binges.

11.2 Cannabis

The most recent survey of cannabis use within the general community of Victoria was undertaken within the 2004 National Drug Strategy Household Survey. The findings of this survey suggest that cannabis is the most commonly used illicit drug within the Victorian community, with 9.8% of the Victorian population aged 14 years and over reporting use of the drug within the past 12 months (Australian Institute of Health and Welfare 1999).

Data from the 2004 Victorian Youth Alcohol and Drug Survey (Premier's Drug Prevention Council 2002) show that cannabis is the most frequently, and widely used illicit drug by the 6,005 young people surveyed. Approximately half (48%) of the 16-24 year olds sampled reported lifetime use of cannabis, and over one-quarter of the sample (27%) reported use in the 12 months prior to the survey. Alcohol and tobacco were reported to be the drugs most commonly used at the same time as cannabis.

Nearly all (97%) of the 2005 REU reported having ever used cannabis and the majority (87%) had used cannabis in the preceding six months. The median age of first use for cannabis was 15 (range 10-35). Cannabis was used on a median of 20 days (range 1-180) in the preceding six months. Of those who had used cannabis in the previous six months (n=87), a substantial proportion (43%) reported using cannabis twice a week or more in the preceding six months, with 23% reporting using cannabis daily. Further, more than half (50%) of the sample used cannabis in conjunction with ecstasy and more than half (56%) during 'comedown' from ecstasy in the six months preceding the interview. Of those participants that reported binging in the six months prior to being interviewed (n=53), over half (55%) reported using cannabis during a binge.

11.3 Tobacco

Nearly all (93%) the sample reported having ever smoked tobacco and 78% had used tobacco in the six months preceding the interview. Of those participants who had smoked in the preceding six months, nearly two-thirds (62%) were daily smokers, with only 5% reporting smoking once a week or less frequently.

11.4 Psilocybin or 'magic' mushrooms

The REU sample were specifically asked about their use of psilocybin or 'magic' mushrooms for the first time in 2005. Over half (53%) of the sample reported having ever used mushrooms, with a median age of 19 years (range 14-45) at first use. Nineteen participants reported having used mushrooms during the six months prior to interview, using them on a median two days (range 1-10) during this period of time. All of the recent mushroom users reported swallowing mushrooms during the last six months. In addition, one participant reported snorting and one participant reported smoking mushrooms during this period of time.

Only a small number (n=2) of participants reported using mushrooms during binges, in conjunction with ecstasy (n=1) and during the comedown period (n=1).

11.5 Benzodiazepines

Over half (54%) of the sample reported having ever used benzodiazepines (BZD) and 38% had used BZD in the six months preceding the interview. The median age of first use for BZD was 19.5 years (range 12-29). Those reporting recent use of BZD had done so on a median of five days in the preceding six months (range 1-180). Most (62%) recent users had used BZD once a month or less, with 22% reporting using them once a week or more frequently. The only route of administration reported by the sample for BZD use, both ever and recent, was swallowing. Only one participant reported the use of BZD in conjunction with ecstasy and eight during the comedown period.

11.6 Anti-depressants

One-third of the sample (33%) reported having ever used anti-depressants, with 14% reporting use of them in the six months prior to interview. Median age of first use was 21 years (range 12-39). The fourteen recent users used anti-depressants on a median of 30 days (range 2-180) in the six months prior to interview, with swallowing the only route of administration reported during that time. Only one participant reported the use of anti-depressants in conjunction with ecstasy, and four during the comedown period.

11.7 Inhalants

Just less than half (49%) of the sample had ever used amyl nitrate and 41% had used nitrous oxide. Twenty percent had used amyl and 17% nitrous oxide in the preceding six months. The median age of first use for amyl was 19 (range 13-30) and the median age of first use for nitrous oxide was 17 (range 14-32). Most (65%) recent users had used amyl only once or twice in the previous six months, and 76% of recent users had used nitrous oxide three times or less in the previous six months. Small proportions of the sample had used amyl (2%) and nitrous oxide (2%) in conjunction with ecstasy, and three percent had used nitrous oxide during the 'comedown' from ecstasy. Of the participants who reported binging in the previous six months (n=53), only two (4%) used nitrous oxide, with none reporting the use of amyl during binges.

11.8 Heroin and other opiates

Less than one in five (18%) of the sample reported lifetime use of heroin, with only 7% reporting heroin use in the previous six months. The median age of first use for heroin was 20.5 years (range 15-36). Only one participant reported using heroin weekly in the previous six months, with most (57%) using less than monthly. Five of the recent heroin users had injected it, with two reporting snorting it and one smoking it in the six months prior to interview. None of the participants said they usually used heroin in conjunction with ecstasy or during the comedown from ecstasy.

Only one participant reported having ever used methadone and they had not used it in the last six months. Only two participants reported having used buprenorphine, again with no use reported in the six months prior to interview.

Just over one-third (34%) of the sample reported lifetime 'other opiate' (e.g. morphine, codeine) use, while 18% had used 'other opiates' on a median of two days (range 1-36) in the preceding six months. Higher proportions of the 2003 sample reported lifetime (39%) and recent (23%) use of heroin and lifetime (15%) and recent (6%) use of methadone compared to the 2004 and 2005 samples. These characteristics are consistent with fewer 2004 and 2005 respondents reporting ever injecting drugs (Section 3.2).

11.9 Other drugs

Small proportions of the sample reported the use of other drugs. Seven participants reported having ever used 2C-B, 'a synthetic psychedelic that first gained popularity as a legal Ecstasy replacement in the mid 1980s. It is known for having a strong physical component to its effects and a moderate duration' (http://www.erowid.org/chemicals/2cb/2cb.shtml, sourced 15 February 2006). Median age of first 2C-B use was 20 years (range 17-27). Five participants reported using SC-B in the six months prior to interview, either snorting (n=3) or swallowing (n=3) it on a median of one occasion (range 1-2).

Seven participants reported having ever used DMT, 'a powerful, visual psychedelic which produces short-acting effects when smoked. It is used orally in combination with a MAOI, as in ayahuasca brews. It is naturally produced in the human brain and by many plants' http://www.erowid.org/chemicals/dmt/dmt.shtml, sourced 15 February 2006). Median age of first DMT use was 24 years (range 21-30). Four participants reported that they had used DMT in the six months prior to interview, with all reporting smoking it (indeed, all seven participants reported smoking as their only route of DMT administration) on a median of two occasion (range 1-15).

Five participants reported having ever used 'cactus' and/or mescaline, 'a naturally occurring psychedelic with a long history of human use. It is best known as the primary active chemical in the peyote cactus' http://www.erowid.org/chemicals/mescaline/mescaline.shtml, sourced 15 February 2006), with two reporting use in the last six months.

11.10 Summary of other drug use

Reports from the Victorian REU and KE suggest:

- **very high levels of both lifetime and recent use of alcohol, and high prevalence of alcohol use in conjunction with, and during comedown from, ecstasy;**
- **very high lifetime and recent use of cannabis, and high prevalence of cannabis use in conjunction with, and during comedown from, ecstasy;**
- **very high lifetime and recent use of tobacco, with many REU daily tobacco smokers;**
- **over half REU report lifetime use and approximately one-fifth report recent use of magic mushrooms, although low frequency of use is typical;**
- **approximately half of REU report lifetime and one-third recent use of benzodiazepines, although low frequency of use is typical;**
- **low levels of lifetime and recent use of anti-depressants;**
- **approximately half of REU report lifetime use of inhalants and about one-quarter report low levels of recent use;**
- **low levels of lifetime and recent use of heroin and 'other opiates' among REU.**

12.0 DRUG INFORMATION-SEEKING BEHAVIOUR

For the first time, in 2005, the REU sample was asked about their use of methods to determine the content and purity of ecstasy pills and other drugs, their knowledge of the limitations of available pill testing methods, and how pill test results would influence their drug use behaviour.

The majority of the sample reported attempting to find out the content and purity of ecstasy at least some of the time (91%), most commonly asking friends who had taken it (79%) or asking dealers (63%: Table 27). Slightly more than one-third (38%) of the sample reported personal use of testing kits. There was a moderate level of awareness of the limitations of testing kits among those who reported having used them, with over half (56%) able to comment on the limitations. Nearly two-thirds (62%) of those participants reporting personal use of testing kits reported that they would not take a pill if test results indicated that it contained ketamine, and over three-quarters (79%) reported that they would not take an 'unknown' pill (producing no reaction in a reagent test).

Table 27: Content and testing of ecstasy tablets by jurisdiction, 2005

	2005 (N=100)
Find out the content of other drugs (not including ecstasy %)	
Always	29
Most times	19
Half the time	7
Sometimes	17
Never	28
Find out the content of ecstasy (%)	
Always	40
Most times	27
Half the time	8
Sometimes	16
Never	9
Find out content via (%)	
Friends	79
Dealers	63
Testing kits	38
Websites	58
Information pamphlets	3
Personal experience	31
Other people who have taken it	20
Use testing kits* (%)	
Always	34
Most times	19
Half the time	13
Sometimes	34
Are aware of limitations of testing kits* (%)	56
Would still take pill if contained* (%)	
Ecstasy-like substance	100
Amphetamine substance	77
Ketamine substance	38
No reaction	21

Source: PDI REU interviews, 2005
*** among those who used testing kits**

One KE talked about many of the ERD users they were aware of using testing kits (or having a friend in their group who does it) or using pill reports (a web site reporting the result of pill testing and subjective experiences of certain pills: www.pillreports.com). In comparison, a second KE reported that the users they were aware of don't use pill testing, with this KE perceiving pill testing methods to be used predominately by 'heavier' users.

Participants were also asked what information sources they would find most useful if they were made locally available, with web sites (61%) and testing kits (60%) receiving the most support (Table 28).

Table 28: Drug information relating to ecstasy tablets, 2005

	2005 (N=100)
Information resources believed to be/would be useful (%)	
Pamphlets	41
Local website	61
Testing kits	60
Venue outreach worker	38
Logo believed to be a good indication of what pill is like (%)	
Always	9
Often	22
Sometimes	40
Never	29
Don't know	0
'Ecstasy' pills contain little or no MDMA (%)	
Always	1
Often	14
Sometimes	43
Never	40
Don't know	2
'Ecstasy' pills contain mainly MDMA (%)	
Always	25
Often	34
Sometimes	33
Never	3
Don't know	5
Don't care about content as long I have a good time (%)	
Always	16
Often	11
Sometimes	26
Never	45
Don't know	2
Using 'ecstasy' should be legal (%)	
Always	25
Often	9
Sometimes	18
Never	45
Don't know	3
Selling 'ecstasy' should be legal (%)	14
Always	7
Often	14
Sometimes	62
Never	3
Don't know	

Source: PDI REU interviews, 2005

13.0 RISK BEHAVIOUR

13.1 Injecting and injecting-risk behaviour

Sixteen percent of the sample reported ever injecting any drug, with a mean of four drug types injected (range 1-9: Table 28). Ten participants reported having injected a median of 3.5 drugs types (range 1-5) in the six months preceding interview.

Table 28: Injecting behaviour among REU, 2005

	2005 (N=100)
Ever injected (%)	16
Median number of drugs ever injected* (range)	4 (1-9)
Injected last 6 months*	10
Median number of drugs injected last 6 months* (range)	3.5 (1-5)

Source: PDI REU interviews, 2005
***Among those that had injected**

13.1.1 Lifetime injectors

Patterns of injecting drug use

Of the sixteen participants who reported ever injecting drugs, 63% first injected speed (at a median age of 18 years), 31% heroin (at a median age of 19) and 6% other opiates (at a median age of 35: Table 29). Speed (15%) was the drug most commonly ever injected by the 2005 sample, followed by heroin (9%); ecstasy pills (9%) and methamphetamine base (8%).

Table 29: Injecting drug use history among REU injectors, 2005

	First drug injected (%) n=16	**Median age first injected (in years) (range) n=16**	**Ever injected (%) N=100**
Speed	63	18 (15-23)	15
Crystal	0	--	7
Heroin	31	19 (16-25)	9
Ecstasy (pills)	0	--	9
Ecstasy (powder)	0	--	3
Cocaine	0	--	4
Base	0	--	8
Ketamine	0	--	2
MDA	0	--	0
Other opiates*	6	35 (n=1)	5
Any drug	--	--	16

Source: PDI REU interviews, 2005
*** Includes codeine, Physeptone tablets, morphine, and pethidine.**

Context of initiation to injecting

Of those who responded (n=14), 57% injected for the first time under the influence of other drugs – cannabis (29%); alcohol (29%); heroin (7%); other opiates (7%); ecstasy (7%); GHB (7%) (multiple responses given). One participant reported that they never injected themselves, with the remaining respondents reporting that they learned to inject through a friend/partner (57%), being self-taught (36%), a website (7%), information pamphlet (7%), indirectly from a health professional (7%).

13.1.2 Recent injectors

Patterns of injecting drug use

All of the participants who reported injecting in the six months prior to interview (n=10) reported injecting speed during this time (Table 30). Further, of those who responded (n=9), four participants reported most recently injecting speed and three reported most recently injecting heroin. Overall, recent injectors (n=9) had injected any drug a median of 14 times (range 2-200) in the preceding six months.

Table 30: Recent injecting drug use patterns (recent injectors) among REU, 2005

	% injected past 6 months n=10	Median days injected last 6 months (range)*	Last drug injected n=9
Crystal	50	2 (1-15)	0
Speed	100	5 (2-24)	44
Base	50	4 (1-7)	11
Ecstasy (pills)	30	6 (6-15)	11
Heroin	50	5 (2-24)	33
Cocaine	10	1 (n=1)	0
Any drug	--	14 (2-200)	--

Source: PDI REU interviews, 2005
*** Of those who had injected in the preceding six months**

Injecting risk behaviour

Of the participants who responded (n=9), only one reported that they had used a needle after someone else in the previous month, reporting doing so one time. The same participant was the only one to report having used a needle after someone else in the last six months, reporting doing so three to five times after one person (their regular sex partner). This participant was also the only respondent to report that someone had used a needle after them, estimating that this had occurred on three occasions on the last six months.

Of those who responded (n=9), however, seven reported that they had shared other injecting paraphernalia: four reported that they had used spoons or other mixing equipment after someone else, three that they had used shared spoons, two that they had used water after someone else, and one participant reported that they had used filters after someone else in the preceding six months.

Context of injecting

REU who had injected drugs in the past six months who commented (n=9) most commonly injected in their own home (Table 31). Only a small number reported injecting alone, with close friends and regular sex partners reported as the people most commonly injecting with. Most participants (78%) reported having injected both under the influence of and coming down from ecstasy and related drugs in the past six months, a median of five times during this time.

Table 31: Context and patterns of recent injection among REU, 2005

	Recent injectors (n=9)
Frequency of self-injection	
Every time (%)	56
Often (%)	22
Rarely (%)	11
Never (%)	11
People usually inject with*	
Close friends (%)	44
Regular sex partner (%)	33
Casual sex partner (%)	11
Acquaintances (%)	11
No one (%)	22
Locales where injected*	
Own home (%)	89
Friend's home (%)	44
Car (%)	0
Dealer's home (%)	11
Street, park (%)	22
Public toilet (%)	33
Venue toilet (%)	22
Sex venue (%)	11
Injected (only) under the influence (%)	11
Injected (only) while coming down (%)	11
Injecting (both) while under the influence and coming down (%)	78
Median times injected any drug under the influence last 6 months (range)	5 (2-100)

Source: PDI REU interviews, 2005
***could nominate more than one response**

Obtaining needles

For those who had injected drugs in the past six months who responded (n=9), 78% obtained needles from NSPs, 67% from chemists, 22% from friends, and 22% from dealers. Only one participant had problems accessing clean needles because of restricted opening hours for dispensing outlets.

13.2 Blood-borne viral infections (BBVI)

Of those who had injected drugs in the past six months and who responded (n=9), more than three-quarters (78%) had either not been vaccinated for hepatitis B virus (HBV) (56%) or had started but not completed a vaccination schedule (22%: Table 32). All of the recent injector had, however, been tested for hepatitis C virus (HCV), with all reporting that their most recent test results had been negative. In comparison, over half of those reporting never injecting had not ever had an HCV test. The majority (79%) of the recent injectors had been tested for human immunodeficiency virus (HIV), with all testing negative.

Table 32: BBVI vaccination, testing and self-reported status, 2005

	Never injectors (n=82)	Recent injectors (n=9)
HBV vaccination:		
No (%)	44	56
Schedule not completed (%)	10	22
Schedule completed (%)	37	11
Don't know (%)	9	11
HCV test:		
No (%)	53	0
Yes (in last year) (%)	27	89
Yes (more than a year ago) (%)	18	11
Don't know (%)	2	0
If tested, results:		
Negative (%)	94	100
Don't know (%)	6	0
HIV test:		
No (%)	54	11
Yes (in last year) (%)	28	67
Yes (more than a year ago) (%)	18	22
Don't know (%)	0	0
If tested, results:		
Negative (%)	100	100

Source: PDI REU interviews, 2005

13.3 Sexual risk behaviour

Recent sexual activity

Of those participants who responded (n=94), ninety-seven percent (n=91) reported having penetrative sex in the six months prior to interview (Table 33). Of those reporting having penetrative sex, nearly half (47%) had sex with one person during this time, 15% with two people, 23% with three to five people, 9% with 6-10 people and 6% with more than 10 people. Anal sex was relatively uncommon among REU reporting penetrative sex in the six months prior to interview (n=91), with 25 participants reporting having it monthly or less and four participants reporting it more than monthly. Condoms were used infrequently with regular sex partners but more frequently with casual partners (Table 33).

Table 33: Prevalence of sexual activity and number of sexual partners in the preceding six months, 2005

	2005 n=94
Penetrative sex (%)	97
No. of sexual partners (%)*	
One person	47
Two people	15
3-5 people	23
6-10 people	9
10+ people	6
Sex with a regular partner (%)*	85 (n=77)
Always use protection (%)**	19
Never used a protective barrier (%)**	49
Any protective barrier use (%)**	51
Sex with a casual partner (%)*	53 (n=48)
Always use a protective barrier (%)***	65
Never used a protective barrier (%)***	6
Any protective barrier use (%)***	94
Anal sex (in last six months) (%)*	32 (n=29)
No. of times has anal sex	
≤ Mthly (%)****	87
Less than fortnightly, more than monthly (%)****	3
Weekly or less, more than fortnightly (%)****	3
More than weekly (%)	7

Source: PDI REU interviews, 2005
*** of those who had penetrative sex in the last 6 months**
**** of those who had sex with a regular partner**
***** of those who had sex with a casual partner**
****** of those reporting anal sex**

Drug use during sex

Of those who commented, most (90%) had had penetrative sex under the influence of ecstasy or other related drugs in the past six months. Ecstasy (76%) was the most common drug used during sex, followed by cannabis (40%), alcohol (39%) and speed (39%). When having sex under the influence of ecstasy and related drugs, condoms were used infrequently with regular sex partners but frequently with casual partners. However, 13% (n=5) of those who had had casual sex under the influence in the past six months responded that they never used condoms when doing so (Table 34).

Table 34: Drug use during sex in the preceding six months, 2005

	2005 n=91
Penetrative sex while on drugs* (%)	90
Of those who had penetrative sex under the influence of drugs	
Number of times	
Once (%)	9
Twice (%)	15
3-5 times (%)	30
6-10 times (%)	19
Ten or more times (%)	27
Drug used	
Ecstasy (%)	76
Cannabis	40
Alcohol (%)	39
Speed (%)	39
Base (%)	1
Ice (%)	2
Cocaine (%)	9
Ketamine (%)	2
GHB (%)	6
LSD (%)	9
Sex with a regular partner (%)*	
Always used a protective barrier (%)	17
Never used a protective barrier (%)	59
Any protective barrier use (%)	41
Sex with a casual partner (%)*	
Always used a protective barrier %	63
Never used a protective barrier %	13
Any protective barrier use %	87

Source: PDI REU interviews, 2005
*** of those who had penetrative sex under the influence of drugs in the last 6 months**

13.4 Driving risk behaviour

Seventy-nine participants from the 2005 REU sample reported having driven in the six months prior to being interviewed. Of those driving during this time, slightly more than one-third (35%), reported having driven under the influence of alcohol (i.e. over the legal limit) and over half (58%) having driven soon after (i.e. within one hour) of taking any illicit drug/s (Table 35). Those reporting driving after taking illicit drugs (n=46) did so after using ecstasy (70%), speed (70%), cannabis (43%), crystal meth (24%) and cocaine (15%). The drugs that the 2005 participants reported driving after using were comparable to those reported by the 2004 REU sample.

Table 35: Drug driving in the last six months among REU, 2004-2005

	2004 (N=100)	**2005 (N=100)**
Driven while over the limit of alcohol#	--	35
Driven soon after* taking a drug# (%)	63	58
Of those who'd driven soon after		
Drug (%)		
Ecstasy	73	70
Cannabis	48	43
Methamphetamine powder (speed)	58	70
Cocaine	8	15
Crystal methamphetamine (ice)	22	24
Methamphetamine base (base)	8	2
Ketamine	11	7
LSD	8	9
GHB	8	7
Other opiates	0	0
Benzodiazepines	6	2
MDA	0	2
Methadone	3	0
Amyl nitrate	0	0
Nitrate oxide	0	2
Heroin	6	0

Source: PDI REU interviews, 2005
# of those who had driven a car in the last 6 months
***within one hour of taking**

One law enforcement KE had been involved in the introduction of random drug driving testing in Victoria, and so was able to comment extensively on road safety strategies. According to this KE, research suggests that people with any level of stimulants are 2.2 times more likely to be involved in an accident, and people with any level of delt-9 THC are 2.7 times more likely to be involved in an accident.

The KE clarified that delta-9 THC is the active component of cannabis and will stay in the system of 'recreational' users (i.e. once a week) for 2 hours. In chronic, daily users it may be present almost all the time. If it can be detected, it is deemed as having an effect. Carby acid is the (inactive) component that may stay in the body of even 'recreational' users for days, maybe weeks (depending on level of use) but is not what is tested for.

The KE noted that the evidence suggested that drug use and driving needed to be addressed, and that, regardless of level of use, amphetamine and cannabis use is associated with increased driving risk. Consequently, the Victorian Government made it an offence to drive under a 'prescribed' concentration of a drug: for methamphetamine and THC, this is zero concentration. These were the two drugs chosen, as they were evidenced by road safety data.

Thus, in a world-first, a 12-month trail (which was subsequently extended) of random drug screening commenced in Victoria on 13th December, 2004. Although specific areas and risk groups are being targeted, the tests are still considered to be random (i.e. the police don't have to have suspicions about driving under the influence or impaired). Three deployment methods have been used:

1. General deterrent on freeways – high visibility and in conjunction with booze buses. Whereas they can do 3000-4000 alcohol breath-tests per week, because of time, far fewer can be drug tested.
2. Targeted 'high drug use areas' – transport industry routes.
3. Targeted 'high drug use areas' – entertainment precincts.

As the KE explained, the drug driving campaign has been very much focused on perceptions of drug driving within the community. The aim has been to increase awareness that the tests are out there and that it is not safe to use drugs and drive (aiming for a similar shift in attitudes and behaviour as with alcohol and driving).

The KE also noted that, in terms of the implications of testing positive for drug driving, beyond the monetary fine and/or loss of points, drug driving is a traffic offence and is noted on Vic Roads records/licence history (as is drink driving). A drug driving offence would not, however, come up on a police record check. Further, if there is suspicion of a serious drug offence (i.e. trafficking, supply/dealing – quantity is more than personal use) then the vehicle may be searched. Police will not, however, automatically search the car – there needs to be other reasons, some cause (i.e. something giving an indication that they posses a substantial quantity such as 100 tablets). The KE stressed that they are not interested in use and possession and that a positive drug test cannot, by law, be used as evidence for charges of possession and use. According to the KE, the drug driving tests are concerned solely with road safety, not general law enforcement. The KE also noted that it is a criminal offence to conduct DNA testing on any samples taken in the course of random drug testing.

Of the more than 13,000 drivers tested since the testing commenced, 4,287 have recorded positive results for cannabis and/or methamphetamines. In February 2005, the Victorian State Government announced that random drug driving testing was to continue beyond the trial, with MDMA being added to the legislation and subsequent random testing.

In addition to the law enforcement KE, four KE commented on the impact of the random drug driving testing upon the ecstasy users they were aware of. One KE reported that people are getting caught for driving after taking pills with methamphetamine in them and that, anecdotally, people are 'easing off the pills' prior to driving. Another KE, however, expressed concern over the drug testing, noting that some ecstasy users were reporting more harmful drug use behaviour: whereas previously they may have used pills and driven, now, because they do not want to get caught, they are drinking too (often to excess) and not driving a car. This KE also reported a few

ecstasy users trying to use drugs that they cannot be tested for, and/or swigging vinegar in an effort to 'fool' the tests. The third KE also noted that some people are reporting changing their drug use in order to get around drug driving testing, such as using ketamine and/or LSD. The fourth KE commented that the group of ecstasy users they had contact with had not personally been affected by the introduction of drug driving tests. This KE noted, however, that a few users had re-thought ways of getting home from a party, although not actually changing their (drug use) behaviour. This KE commented that people have their own limits regarding drug driving, regardless of the law.

14.0 HEALTH-RELATED ISSUES

14.1 Overdose

Seventeen participants reported that they had ever overdosed on any party drug(s), a median of one times (range one to twelve: Table 36). Seven participants reported that they had overdosed on a party drug in the preceding six months, with the most recent overdose occurring a median of 14 months (range 0.75-132) prior to the interview. Drugs reported by participants as being involved in their most recent overdose included GHB and GHB-type substances (i.e. 1,4B and GBL) (47%), ecstasy (35%), alcohol (18%), speed (12%), crystal meth (12%), cocaine (12%), ketamine (12%) and cannabis (12%).

Table 36: Overdose in the last six months among REU, 2005

	2005 N=100
Ever overdosed on ecstasy or related drugs (%)	17
Overdosed on ecstasy or related drugs last six months (%)	7
Which drugs overdosed on most recently (%)*	
Ecstasy	35
Cannabis	12
Alcohol	18
Speed	12
Ice	12
Ketamine	12
GHB/14,B/GBL	47

Source: PDI REU interviews
*** Percentage of those reporting ever overdosing**

The KE reports pertaining to ERD-related overdoses have been presented elsewhere in this report, primarily in Sections 4.8.2 (ecstasy-related health harms) and 8.5.2 (GHB-related health harms). It is worth noting here, however, that the characteristics of the overdoses reported by the REU sample are consistent with the reports of the KE, with GHB implicated in the majority of overdoses, and most characterised by polydrug use. It is also of interest that a number of KE spoke of the need for resources to give to ERD users who have experienced overdoses, or ERS-related adverse events, detail on how to avoid such experiences in the future and how to recognise the early signs to encourage help to be sought earlier: as one reported, there is a need for outlining the 'basic signs and symptoms'.

14.2 Self-reported symptoms of dependence

Participants were asked to complete the Severity of Dependence Scale (SDS) regarding their ecstasy and methamphetamine use. The SDS is a short, five-item scale designed to measure the level of dependence on a range of drugs. It was specifically designed as a research tool (Gossop, Darke et al. 1995) and is quick and easy to administer (it may be self-completed or interviewer administered). The SDS is explicitly concerned with the psychological components of dependence, with the items pertaining to impaired control over drug use, preoccupation and

anxiety about drug use, and difficulty stopping (Gossop, Darke et al. 1995; Dawe, Loxton et al. 2002). Each of the five items is scored on a four-point scale (0-3), resulting in a range of possible scores of 0-15. The SDS has been widely used to assess dependence on a range of drugs including heroin, amphetamines, cocaine, cannabis and alcohol (Gossop, Darke et al. 1995; Ferri, Marsden et al. 2000). A score of four or more is considered as indicative of amphetamine dependence (Topp and Mattick 1997; Dawe, Loxton et al. 2002). No published research has established a cut-off score for ecstasy dependence.

14.2.1 Ecstasy

Ninety-nine of the participants in the Victorian sample completed the SDS for their ecstasy use, with scores on this scale generally low with a median of one (range 0-7). Over one-third (39%) of the participants scored zero and a further 38% scored one to three. Nearly one-quarter (23%) of the participants, however, scored four or more on this scale.

14.2.2 Methamphetamine

Eighty-three participants from the Victorian sample completed the SDS in regards to their methamphetamine use, 57% regarding their speed use, 10% regarding their crystal meth use, and 33% regarding their use of methamphetamine in general. Methamphetamine SDS scores from the Victorian sample were generally low with a median of zero (range 0-10). Over half (52%) of the participants scored zero and a further 22% scored one to three. Over one-quarter (26%) of the participants, however, scored four or more on this scale, indicative of amphetamine dependence (Topp and Mattick 1997; Dawe, Loxton et al. 2002).

14.3 Help-seeking behaviour

Fourteen percent of the 2005 REU participants had accessed a health or medical service in relation to their party drug use in the six months preceding interview. Participants reported most commonly accessing general practitioners (5%) and counsellors (5%: Table 37). Other services accessed in the six months prior to interview included first aid services (4%), drug and alcohol workers (3%), social/welfare workers (2%), psychologists (2%), emergency departments (2%) and ambulance (1%). One participant reported being admitted to hospital after having their drink spiked. The participants reported accessing these services in relation to a range of drugs and issues. Participants accessing GPs reported doing so because of depression associated with their ecstasy use (n=1) and unusual (minor) physical symptoms thought to be associated with ecstasy use (n=1), depression associated with speed use (n=1), needing information and advice about drug (ketamine) effects (n=1), and dependence/addiction to GHB (n=1). Those accessing counsellors did so for issues related to dependence/addiction to alcohol (n=1) and polydrug use (n=1), depression (ecstasy-related n=1; base-related n=1) and 'other' psychological problems associated with speed use (n=1).

Table 37: Proportion of REU who accessed health help by main drug type, 2005

	Any drug (%)	Ecstasy (%)	Speed (%)	Base (%)	Crystal (%)	Cannabis (%)	Alcohol (%)	Ketamine (%)	GHB (%)
GP	5	2	1	0	0	0	0	1	1
Counsellor	5	1	1	1	0	0	1	0	0
D&A	3	0	0	1	0	1	1	0	0
worker	2	0	0	0	0	0	0	0	1
Emergency	2	1	0	1	0	0	0	0	0
Psychologist	4	0	0	0	0	1	0	0	1
First aid	1	0	0	0	0	0	0	0	1
Ambulance	1	0	0	0	0	0	0	0	1
Hospital	1	0	0	0	0	0	0	0	0

Source: PDI REU interviews

KE (n=3) noted that, although people's levels of ERD use tends to fluctuate, formal treatment utilisation is rare. Further, two other KE noted that, compared to other drugs (i.e. opiates), people seem less likely to seek help for their ERD use, and particularly stimulant, use. As one KE put it, users often prefer to 'doona dive – shut down, hide away. [They are] not compelled to seek help – it is too hard'. This KE also noted that: 'People are often not making the connection between drug effects and what they are experiencing. The term 'party drugs' smacks of denial'.

Consistent with the REU reports, KE (n=3) noted that counselling is the most commonly sought treatment modality by ERD users. As one KE noted, because ERD use is mainly weekend use, users tend not to be physically dependent, and thus to not need and/or want to detox. Further, two KE reported that most have prior contact with GPs, who tend to prescribe BZD and anti-depressants as a way to cope. These two KE had quite disparate views of this practise, with one viewing it as 'quite successful' and the other as serving to 'override what they are experiencing'.

Three KE reported that they had not observed changes in the treatment-seeking behaviour of clients, although one noted that there has been an increase in the number of parents ringing their service reporting being concerned about their children's' use. One KE working in a hospital A&E setting noted that none of the users presenting to their service made requests from referral to treatment services, and that such circumstances may usefully be used to at least increase awareness of the treatment options available.

14.4 Other problems

Participants reported high rates of occupational/study (39%), financial (36%) and relationship/social (41%) problems due to ecstasy and related drugs in the six months preceding interview (Table 38). The most commonly reported occupational/study problems reported by those participants reporting such problems (n=41) related to being unmotivated (44%), reduced work performance (18%), sick leave/not attending class (15%) and trouble concentrating (10%). Occupational/study problems were most commonly attributed to ecstasy (51%) and cannabis (26%) use. The financial problems experienced most commonly related to not having money for recreation/luxuries (36%), being in debt/owing money (31%) and having no money for food and/or rent (25%). Financial problems were most commonly attributed to ecstasy (43%), speed (23%) and cannabis (11%) use. The two most commonly reported relationship problems were

mistrust/anxiety (40%) and arguments (30%), with such problems most frequently attributed to ecstasy (37%), cannabis (18%), speed (13%) and GHB (10%) use.

Relatively few participants (3%) reported legal/police problems associated with their party drug use. The legal/police problems reported by the 2005 sample were being cautioned by the police (n=1) and being arrested (n=1), both attributed to alcohol use, and being issued with a driving ticket for being in 'no state to drive' after using mushrooms (n=1). The criminal activity of the REU sample, and KE reports regarding this issue, are discussed below in Section 15.

Table 38: Self-reported drug-related problems and drugs problems attributed to, 2005

	Any drug (N=100)	Ecstasy*	Speed*	Base*	Crystal*	Cannabis*	Alcohol*
Occupational /study (%)	39	51	8**	3**	5**	26	3**
Financial (%)	36	43	23	3**	3**	11**	6**
Relationship/social (%)	41	36	13**	3**	8**	18	8**
Legal/police (%)	3	0	0	0	0	0	67**

Source: PDI REU interviews, 2005
*** of those reporting problem**
****n=5 or less**

15.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

15.1 Reports of criminal activity among REU

Ten participants had been arrested in the twelve months preceding interview. The most common reason for arrest was property crime (n=6). Smaller numbers of participants reported being arrested in the 12 months prior to interview for violent crime (n=2), being drunk in a public place (n=1), being drunk and disorderly (n=1), indecent exposure (n=1) and breaching an intervention/restraining order (n=1). In comparison to the low levels of arrest reported, nearly one-quarter (24%) of the REU sample had committed at least one of the crimes listed in Table 39 in the month preceding interview, most commonly drug dealing. One-quarter of the participants reported paying for ecstasy through dealing drugs (ecstasy profit) in the six months prior to interview and 15% reported paying for their ecstasy via cash profit from dealing drugs during this period of time.

Table 39: Criminal activity reported by REU, 2003-2005

Criminal activity in the last month	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Any crime (%)	49	33	**24**
Drug dealing (%)	43	29	**18**
Property crime (%)	12	9	**10**
Fraud (%)	5	2	**2**
Violent crime (%)	4	2	**1**
In the preceding six months:			
Paid for ecstasy through dealing drugs (ecstasy profit) (%)	19	18	**25**
Paid for ecstasy through dealing drugs (cash profit) (%)	--	--	**15**
Paid for ecstasy through property crime (%)	2	0	**0**
Arrested in the preceding 12 months (%)	--	17	**10**

Source: PDI REU interviews, 2003-2005
*** Not recorded prior to 2004**

A number of KE (n=5) made reference to the ecstasy users they were of aware of undertaking low level dealing, either mainly within their social group or moving beyond their immediate circle of friends, although, as one KE noted, it is often hard to distinguish between clients and friends. Motivations for dealing, as reported by the KE, were diverse, and included making a bit of money to cover the cost of their weekend (n=3); students becoming involved so they can afford to study (n=1); the desire to be 'popular and cool' (n=1); for profit (n=2: as one KE noted, it is

such an easy source of income – purchase pills, in bulk, for $15 and can sell them for up to $50 in a nightclub).

A number of KE, particularly those from law enforcement backgrounds, noted that those being charged with ecstasy dealing were 'not limited to the traditional criminal element'. As four KE noted, the majority of those being charged have no prior convictions and are surprised they have been charged. KE reported that many being charged don't think of what they are doing as illegal (n=2) – rather they see themselves as simply supplying, meeting a demand. Those being charged with trafficking were broadly described by one KE as well-educated, middle-class, mainly male and mostly 'Aussies'. One treatment service-based KE concurred with this, noting that 'high functioning people are coming in due to diversion or to help with pending court cases – for example, one guy picked up 100 pills for friends for a four day festival and was busted'.

The incidence of both 'any' crime and dealing reported by the 2005 REU sample was lower than that reported by the 2003 and 2004 samples (Table 37). This might be attributed, at least in part, to different sample characteristics reported earlier, such as fewer injecting drug users in the 2004 and 2005 sample, who typically report higher levels of crime (Jenkinson, Miller, & Fry, 2004).

15.2 Perceptions of police activity towards REU

Over half (52%) of the 2005 participants believed police activity had increased in the last six months, whereas 31% believed police activity had remained stable. Fifty-six participants commented on their perceptions of recent changes in police activity, most frequently mentioning increased presence of sniffer dogs (n=25), increased police presence at specific events and venues in general (n=21), and drug-driving buses (n=20). Smaller numbers of participants commented on an increase in the number of raids and drug busts at events and venues (n=10), increased police presence in city car parks (n=3), in the city in general (n=2), large-scale drug busts (n=3) and dealers being caught (n=2). Despite these perceived changes in police activity, an overwhelming majority of participants (94%) said that police activity had not made it more difficult to obtain ecstasy and related drugs in the past six months (Table 40).

Table 40: Perceptions of police activity by REU, 2003-2005

	2003 (N=100)	2004 (N=100)	**2005 (N=100)**
Recent police activity:			
Decreased (%)	3	1	**1**
Stable (%)	56	31	**31**
Increased (%)	19	58	**52**
Don't know (%)	22	10	**16**
Did not make scoring more difficult (%)	86	90	**94**

Source: PDI REU interviews, 2003-2005

In terms of the impact of and/or changes in police activity, a number of KE commented on the introduction of sniffer dogs to Victoria. One first aid KE reported having people present to their service (and experiencing harms) after taking three pills – which were meant for the whole night – after seeing sniffer dogs. In comparison, one KE reported that the ecstasy users they were aware of were generally 'not fazed' about sniffer dogs, to the extent that some are cavalier, and

test them out. Further, another KE reported that, although ERD users were annoyed about the introduction of sniffer dogs, they were considered an irritation rather than a reason to change their drug use.

A number of law enforcement KE made comments about recent initiatives that they have been involved in, particularly addressing the increasing levels of pseudoephedrine being found in pills. One noted that the Major Drug Investigation Division (MDID) has had some recent success in addressing 'pseudoephedrine runners'; that is, people coming down to Victoria from QLD and NSW and posting boxes of Sudafed and other pharmaceuticals containing pseudoephedrine back. MDID has had success in targeting, arresting and charging these runners, resulting in jail sentences. This KE noted that Victoria is the only state where having over 20g is a possession offence and over 100g is considered trafficking a drug of dependence. As part of this operation, MDID has a 'chemical diversion desk', with staff undertaking full-time liaison with pharmacies and the industry. Thus, the KE had been involved in delivering 30-plus lectures to pharmacists, with posters also being placed in all pharmacies, with the aim of educating and targeting both staff and customers.

In a related initiative, a second law enforcement KE reported on his recent involvement in a program 'Keeping illegal drugs out of rental properties', focusing on highlighting the issue of clandestine laboratories in rental properties. A third law enforcement KE noted that, as a result of the targeting of pseudoephedrine (which is going to Schedule 3 nationally, whereby anything above a pack will be prescription only and no advertising will be allowed), there has been an increase in the use of what is known as the 'Nazi' method to make amphetamine, a method which uses lithium or sodium with anhydrous ammonia. This KE noted that thefts of ammonia (used commercially in refrigeration) are increasing.

16.0 SUMMARY

16.1 Demographic characteristics of REU

Reports from the 2005 Victorian REU sample and KE suggest that regular ecstasy users are likely to be aged in their early twenties, tend be well-educated and either employed and/or studying. The findings suggest that regular ecstasy users are unlikely to be involved in either the treatment or justice systems.

16.2 Patterns of polydrug use

Reports from the Victorian REU sample and KE suggest that regular ecstasy users are polydrug users and are likely, in addition to ecstasy, to have recently used alcohol, cannabis, methamphetamine powder, tobacco, and cocaine. The findings suggest that few regular ecstasy users inject drugs.

16.3 Ecstasy

16.3.1 Price, purity and availability of ecstasy

Reports from the Victorian REU and KE suggest that the price of ecstasy has remained stable over the previous three years and that ecstasy typically costs $30 per pill, with lower prices paid for bulk purchases. Although the purity of ecstasy tends to be rated as medium to high, many users perceived purity to fluctuate. Ecstasy remains readily available and is predominantly sourced from friends or known dealers in private residences and nightclubs.

16.3.2 Ecstasy markets and patterns of purchasing

Reports from the Victorian REU suggest ecstasy is obtained via a range of methods, most commonly by paid employment and being given ecstasy by friends or partner (being 'shouted'). Regular ecstasy users tend to have a few people they can purchase ecstasy from, typically purchase for themselves and others, and purchase a median of five pills per transaction. In addition to ecstasy, most regular ecstasy users can obtain a range of other drugs from the dealers, most commonly methamphetamine powder and cannabis.

16.4 Methamphetamine

Reports from the Victorian REU and KE suggest that, of the three forms of methamphetamine, speed is most widely used (in terms of both lifetime and recent use), followed by crystal meth and then base. Regular ecstasy users commonly use speed in conjunction with ecstasy and during binges. Methamphetamines are used in a variety of locations, predominantly nightclubs, dance parties and in users' homes. The three forms of methamphetamine are used in a range of ways: speed is mostly commonly snorted, whereas base is predominantly swallowed and crystal meth smoked.

The price of the three forms of methamphetamine has remained stable, with crystal meth more expensive than speed and base (which are of comparable cost). According to the REU reports, the purity of base and crystal meth is high and stable, whereas the purity of speed is less consistent. All forms of methamphetamines, however, appear to be readily available (although access to crystal meth has declined), and are most commonly acquired through friends and known dealers.

Methamphetamine use, particularly crystal methamphetamine use, has the potential to be associated with considerable harms (i.e. violence and mental and physical health problems).

16.5 Cocaine

Reports from the Victorian REU and KE suggest that a high proportion of regular ecstasy users have ever used cocaine, with a considerable number also reporting recent use. Those regular ecstasy users using cocaine tend to use it infrequently, typically snort it, and report using it in a wide range of locations.

Perhaps contributing to the relatively low frequency of recent use, cocaine is an expensive drug, with its purity typically rated as medium or low. Although there is little consistency in reports of the availability of cocaine, availability was most commonly reported as stable over the past six months. Cocaine is commonly purchased from friends in friends' homes.

16.6 Ketamine

Reports from the 2005 Victorian REU and KE reflect lower levels of both lifetime and recent ketamine use than in the 2003 and 2004 samples. Those reporting recent ketamine use typically use it infrequently, most commonly in private homes.

The purity of ketamine is generally reported high, with price and purity reported as stable. Reports of ketamine availability are inconsistent, with a recent trend of easy and stable availability. Ketamine is most commonly purchased from friends and known dealers in private homes and dance parties/raves/doofs.

16.7 GHB

Reports from the 2005 Victorian PDI suggest moderate prevalence of lifetime and low prevalence of recent GHB use among regular ecstasy users. Indeed, fewer of the 2005 REU sample reported recent GHB use than the 2004 sample, although those from the 2005 sample reporting recent use reported more GHB frequent use.

GHB is used across a wide range of locations, predominantly private homes, dance parties and nightclubs. GHB is inexpensive and the price has remained stable. Current GHB purity is regarded as medium to high, but there is little consensus about recent changes in purity. GHB is readily available and availability has remained stable. GHB appears to be increasingly being purchased from known dealers in their homes.

KE report more concern for the acute health consequences associated with GHB use compared to other party-drugs. Indeed, in response to the significant health consequences associated with GHB use (i.e. overdose) a number of anti-GHB campaigns were undertaken in Victoria. Following these campaigns, a number of KE report the marginalisation of GHB users and concern for the implications of this marginalisation (i.e. reluctance to call for help for GHB overdoses).

16.8 LSD

Reports from the Victorian REU and KE suggest high prevalence of lifetime use of LSD, with moderate levels of recent use among regular ecstasy users. Recent users report infrequent use of LSD across a wide range of locations, predominantly 'outdoors', private homes, and at dance parties.

LSD is relatively cheap and the price has remained stable. Current LSD purity is regarded as high, with purity described as stable. There is little consistency in the reported current availability of LSD, although availability tends to be reported as stable over the previous six months. Regular ecstasy users most commonly purchase LSD from friends in private homes.

16.9 MDA

Reports suggest low prevalence of lifetime and recent use of MDA among regular ecstasy users. Recent users report infrequent use of MDA across a wide range of locations, predominantly nightclubs and private homes. It is difficult to comment on trends in the price, purity and availability of MDA, given the small number of respondents able to comment in 2005.

16.10 Patterns of other drug use

Reports from the Victorian REU and KE suggest almost universal lifetime and recent use of alcohol, and high prevalence of alcohol use in conjunction with, and during comedown from, ecstasy. Indeed, a larger proportion of the 2005 REU sample reported drinking during the comedown period, and drinking larger quantities, and drinking during binges, than of the 2004 REU sample.

High lifetime and recent use was also reported for cannabis (with nearly one-quarter of recent cannabis users reporting smoking it daily), which was also commonly used in conjunction with and during comedown from, ecstasy. Very high lifetime and recent use was reported for tobacco, with many REU being daily tobacco smokers. Over half the REU sample reported having ever used psilocybin mushrooms, with nearly one in five reporting recent use. Over half of the REU sample report lifetime use of benzodiazepines, with more than one-third reporting recent use. The 2005 Victorian REU reported relatively low levels of lifetime and recent use of anti-depressants, inhalants, and heroin and 'other opiates'.

16.11 Drug information-seeking behaviour

For the first time, in 2005, the REU sample was asked about their use of methods to determine the content and purity of ecstasy pills and other drugs, their knowledge of the limitations of available pill testing methods, and how pill test results would influence their drug use behaviour.

The majority of the Victorian sample reported attempting to find out the content and purity of ecstasy at least some of the time, most commonly asking friends who had taken it or asking dealers. Slightly more than one-third of the sample reported personal use of testing kits. There was a moderate level of awareness of the limitations of testing kits among those who reported having used them, with over half able to comment on the limitations. The findings suggest that the results of pill testing may influence the drug use behaviour of regular ecstasy users: nearly two-thirds of those participants reporting personal use of testing kits reported that they would not take a pill if test results indicated that it contained ketamine, and over three-quarters reported that they would not take an 'unknown' pill (producing no reaction in a reagent test).

Participants were also asked what information sources they would find most useful if they were made locally available, with web sites and testing kits receiving the most support.

16.12 Risk behaviour

Reports from the 2005 Victorian REU and KE suggest low levels of injecting drug use by regular ecstasy users. The findings suggest that the sharing of needles is rare among those regular ecstasy users reporting injecting, although the sharing of other injecting equipment (i.e. spoons or other mixing equipment, water and/or filters) is more common. This population appear not to experience difficulties in accessing injecting equipment, most commonly accessing equipment through NSPs and chemists. Among regular ecstasy users reporting recent injection, there appears to be low levels of HBV vaccination and low levels of HCV and HIV infection. These findings, however, need to be interpreted with caution, given the small numbers of participants reporting injection as a route of administration.

Regular ecstasy users appear to be a relatively sexually active group, among whom condom use with regular sex partners is infrequent but with casual partners relatively frequent. Unsurprisingly, this group tend to report having sex while under the influence of drugs. A small proportion of those who had had casual sex under the influence in the past six months reported that they never used condoms when doing so.

The current study also suggests that risky driving practises are relatively common among regular ecstasy users: over half of the REU sample who reported having driven in the six months prior to interview reported having driven soon after (i.e. within one hour) of taking any illicit drug/s and slightly more than one-third reported having driven under the influence of alcohol (i.e. over the legal limit). Those reporting driving after using illicit drugs most commonly did so following ecstasy or speed use. It will be of interest to determine the influence of the recently introduced random drug driving on the levels of drug driving tests among this population.

16.13 Health-related issues

Although not a commonly reported harm by the 2005 REU sample, overdose is experienced by a small proportion of regular ecstasy users and is considered a significant harm by many KE. GHB is the drug most commonly implicated in overdose events, both by the REU sample and KE.

Although the REU sample tended not to score highly on the measure of dependence used (SDS), nearly one-quarter had scores indicative of dependence on ecstasy. Methamphetamine SDS scores from the REU sample were also generally low. Over one-quarter of the participants, however, had a score indicative of amphetamine dependence.

Reports from the REU sample and KE indicate that regular ecstasy users tend not to utilise health and treatment services for their ERD use. This appears to be a result of a number of factors, including services not being necessary due to generally infrequent patterns of use and low levels of harms, and, among those experiencing harms, a lack of recognition that such harms are associated with ERD use. GPs and counsellors appear to be the treatment types most commonly accessed by regular ecstasy users.

The reports of the 2005 REU sample suggest that relatively high levels of non-health-related problems are experienced by regular ecstasy users: participants reported high rates of occupational/study, financial, and relationship/social problems due to their use of ERDs in the six months preceding interview. It is important to note, however, that the majority of these problems are considered as relatively minor by users, and that few participants reported legal/police problems associated with their ERD use.

16.14 Criminal activity, policing and market changes

The reports of the 2005 REU sample and KE suggest that the majority of regular ecstasy users do not undertake criminal activities and/or experience legal problems. Nearly one in five participants, however, had been involved in drug dealing in the month prior to interview. Further, one-quarter of the participants reported paying for ecstasy through dealing drugs (ecstasy profit) in the six months prior to interview and 15% reported paying for their ecstasy via cash profit from dealing drugs during this period of time. These relatively high levels of dealing were also corroborated by the KE, with a number noting that users do not seem to be aware of the legal implications of such behaviour.

Over half of the 2005 participants believed police activity had increased in the last six months, most frequently citing increased presence of sniffer dogs, increased police presence at specific events and venues in general, and drug-driving buses. Despite such perceived changes, however, the majority of participants reported that police activity had not made it more difficult to obtain ERDs in the six months prior to interview.

17.0 IMPLICATIONS

The results reported here describe trends in the market for ecstasy and related drugs in Victoria, and provide comparisons with the findings of the 2003 and 2004 studies. Many characteristics of ERD use reported in the previous Victorian and national reports (e.g., Breen et al., 2003) are confirmed in the current study, perhaps suggesting a level of stability in this illicit market. Regular ecstasy users are typically aged in their mid-twenties, are well educated and tend to be employed and/or students.

Polydrug use appears to be the norm among regular ecstasy users, with a range of drugs used in conjunction with, and during the comedown from ecstasy. Binging on drugs also appears to be common by this population, although few engage in intravenous drug use.

Many of the drugs investigated in this research (i.e. ecstasy and methamphetamine powder) were identified as readily available, although some classes of drug (i.e. cocaine and crystal meth) appear more difficult to access or highly variable in their availability. Similarly, there was a degree of variability in the frequency with which some drugs were used. Ecstasy, speed and cannabis were used regularly, whereas cocaine was used infrequently and opportunistically.

In general, risk behaviours, health-related problems and criminal activity among REU were relatively uncommon. However, considerable proportions of REU reported driving soon after taking drugs (both ERDs and alcohol) and participating in dealing. Problems associated with ERD use tend to involve work, study and social relationships, and were reported by a substantial proportion of participants.

The findings of the 2005 Victorian PDI study suggest the following recommendations:

1. Polydrug use by REU, associated harms, and explorations of harm reduction strategies used by REU, warrant further investigation. In particular, the high levels of alcohol use reported by the REU sample, both in conjunction with ecstasy and during the comedown, as well as during binges, needs to be examined further, with new harm reduction messages targeting such behaviours potentially required.
2. The findings of the PDI studies illustrate the wide range of settings in which ERDs are used. Considering that harm reduction messages have traditionally been designed for and implemented in rave settings, such findings have implications for the development and implementation of harm reductions in a wider range of settings. For example, specific resources targeting home-based users and those using in nightclubs is also required (i.e. the expansion of the RaveSafe model of peer education to an equivalent nightclub-based initiative).
3. More thorough and targeted research examining the extent and nature of injecting drug use in ecstasy-using populations is required. Although reports from the 2004 and 2005 Victorian REU suggest low levels of injecting drug use, the sharing of injecting equipment other than needles (i.e. spoons or other mixing equipment, water and/or filters) is relatively common among those reporting injecting. Further, there appears to be low levels of HBV vaccination among this group. Interventions addressing these issues (i.e. risks of sharing *any* injecting equipment and increasing awareness of HBV vaccination) may usefully be developed, and potentially disseminated via NSPs and chemists (the most commonly reported sources of injecting equipment). The findings and implications of the current research need to be interpreted with caution, however, given the small numbers, with further research clearly warranted.
4. GHB use continues to be associated with increased risk of harm, especially overdose. The influence of the recent anti-GHB campaigns' influence on drug use behaviour and attitudes towards users may usefully be examined. In particular, the apparent reluctance

on the part of some GHB users to call for help needs to be investigated, and education campaigns developed to address this concern.

5. Problems related to financial, work/study, and relationship/social outcomes need further exploration to provide a better understanding of the harms associated with regular ecstasy use. The perceived risks of ecstasy use, including psychological/mental health concerns, physical harms and neuropsychological harms, also warrant further exploration. Such an inquiry should also examine the perceptions and recognition of such harms and risks by REU. Increased understanding of such issues may have implications for the development of both prevention and harm reduction strategies.
6. The findings of the 2005 PDI suggest that a notable proportion of regular ecstasy users experience dependence on ecstasy and/or methamphetamines. This needs to be explored further, in terms of the implications for such users, their perceptions of such dependence, and the utilisation of treatment services. Levels of dependence of this population on other drugs commonly used (i.e. cannabis) should also be explored.
7. The findings of the 2005 Victorian PDI also provide evidence of low levels of treatment utilisation among regular ecstasy users. Although this may primarily be a result of low levels of harm and need of treatment among this group, there is also some evidence to suggest a lack of problem recognition and a reluctance to seek treatment among those regular ecstasy users experiencing harms. Barriers to treatment beyond lack of problem recognition (i.e. lack of knowledge of treatment options available, stigma associated with treatment utilisation) should be explored. Such research may usefully inform the development of a tool designed to increase recognition of problematic use and encourage treatment utilisation among those experiencing harms. Further, KE in the present research commented on the need for resources, to give to ERD users experiencing overdose and/or other adverse events, about the treatment options available.
8. The high levels of driving under the influence of both alcohol and ERDs reported by the 2004 and 2005 REU samples is a major concern. Targeted research is needed in this area, particularly in the context of Victoria's new 'drug-driving' testing initiatives and the impact such initiatives have on behaviour. Attitudes towards these initiatives and drug driving more generally need to be assessed to allow for education and awareness campaigns to be developed.
9. Although experienced by a minority of regular ecstasy users, overdose events are a significant concern. Little is known about the circumstances around overdose, hampering efforts to both prevent and treat such events. Further research examining such factors is a priority. Further, KE having contact with ERD users around the time of overdose experiences noted that such events presented opportunities to provide individuals with information about their overdose, harm minimisation strategies and general drug information. All of these KE, however, reported a lack of appropriate resources to provide such information and commented on the need for such a resource to be developed.
10. Despite the relatively high levels of dealing reported by the 2005 REU sample, there appears to be a general lack of awareness of the criminality of on-selling and dealing/supplying to friends. These issues need to be examined in greater detail, potentially informing the development of resources designed to raise awareness of such issues and the potential penalties of such behaviour.
11. The 2005 PDI represent the first systematic examination of methods used by regular ecstasy users in attempts to determine the content and purity of ERDs. The findings suggest that the majority attempt to determine the content and purity of ecstasy pills prior

to taking them, and that, although only a small proportion have used testing kits, many would do so if they were more widely available. The findings also suggest that the results of pill tests may influence drug use behaviour. More detailed research examining ways in which pill testing may influence drug use is required to inform evidence-based policy.

REFERENCES

Australian Crime Commission (2004). The Illicit Drug Data Report. Canberra, ACC.

Australian Institute of Health and Welfare (1999). 1998 National Drug Strategy Household Survey: First Results. Canberra.

Australian Institute of Health and Welfare (2005). 2004 National Drug Strategy Household Survey. Canberra, Australian Institute of Health and Welfare.

Australian Institute of Health and Welfare (2005). 2004 National Drug Strategy Household Survey: State and territory supplement. Canberra, Australian Institute of Health and Welfare.

Biernacki, P. and D. Waldorf (1981). 'Snowball sampling: Problems, techniques and chain referral sampling.' Sociological Methods for Research 10: 141-163.

Boys, A., S. Lenton, et al. (1997). 'Polydrug use at raves by a Western Australian sample.' Drug and Alcohol Review 16: 227-234.

Breen, C., L. Topp, et al. (2002). Adapting the IDRS methodology to monitor trends in party drug markets: Findings of a two-year feasibility trial. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

Dalgarno, P. J. and D. Shewan (1996). 'Illicit use of ketamine in Scotland.' Journal of Psychoactive Drugs 28: 191-199.

Darke, S., J. Cohen, et al. (1994). 'Transitions between routes of administration of regular amphetamine users.' Addiction 89: 1683-1690.

Dawe, S., N. J. Loxton, et al. (2002). Review of diagnostic screening instruments for alcohol and other drug use and other psychiatric disorders. Canberra, Commonwealth Department of Health and Aging.

Dietze, P., S. Cvetkovski, et al. (2000). 'Ambulance attendance at heroin overdose in Melbourne: The establishment of a database of Ambulance Service records.' Drug and Alcohol Review 19(1): 27-33.

Ferri, C. P., J. Marsden, et al. (2000). 'Validity and reliability of the Severity of Dependence Scale (SDS) in a Brazilian sample of drug users.' Drug & Alcohol Review 19(4): 451-455.

Forsyth, A. J. M. (1996). 'Places and patterns of drug use in the Scottish dance scene.' Addiction 91: 511-521.

Gossop, M., S. Darke, et al. (1995). 'The Severity of Dependence Scale (SDS) – Psychometric Properties of the SDS in English and Austrian Samples of Heroin, Cocaine and Amphetamine Users.' Addiction 90(5): 607-614.

Hando, J. and W. Hall (1993). Amphetamine use among young adults in Sydney, Australia. Sydney, NSW Health Department.

Hando, J., L. Topp, et al. (1997). 'Amphetamine-related harms and treatment preferences of regular amphetamine users in Sydney, Australia.' Drug and Alcohol Dependence 46: 105-113.

Jenkinson, R. and B. O'Keeffe (2005). Victorian Drug trends 2004: Findings from the Illicit Drug Reporting System (IDRS). Sydney, National Drug and Alcohol Research Centre (NDARC), University of NSW.

Kerlinger, F. N. (1986). Foundations of Behavioral Research. Japan, CBS Publishing Limited.

Ovendon, C. and W. Loxley (1996). 'Bingeing on psychostimulants in Australia: Do we know what it means (and does it matter)?' Addiction Research **4**: 33-43.

Peters, A., T. Davies, et al. (1997). 'Increasing popularity of injection as the route of administration of amphetamine in Edinburgh.' Drug and Alcohol Dependence 48: 227-237.

Premier's Drug Prevention Council (2002). Victorian Youth Alcohol and Drugs Survey: Number 1 March 2002. Melbourne, State Government of Victoria.

Premier's Drug Prevention Council (2005). Victorian Youth Alcohol and Drug Survey 2004. Melbourne, Victorian Government Department of Human Services.
Solowij, N., W. Hall, et al. (1992). 'Recreational MDMA use in Sydney: A profile of 'Ecstasy' users and their experiences with the drug.' British Journal of Addiction 87: 1161-1172.
Topp, L., J. Hando, et al. (1998). Ecstasy Use in Australia. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
Topp, L., J. Hando, et al. (2000). 'Ecstasy use in Australia: Patterns of use and associated harms.' Drug and Alcohol Dependence 55: 105-115.
Topp, L. and R. P. Mattick (1997). 'Choosing a Cut-Off on the Severity of Dependence Scale (SDS) for Amphetamine Users.' Addiction 92(7): 839-845.