N.Sindicich & L.Burns

AUSTRALIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2011: Findings from the Ecstasy and Related Drugs Reporting System (EDRS)

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AUSTRALIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2011



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

Natasha Sindicich and Lucy Burns

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TABLE OF CONTENTS

LIST OF TABLES ..... **III**

LIST OF FIGURES ..... **VI**

ACKNOWLEDGEMENTS ..... **VIII**

ABBREVIATIONS ..... **X**

GLOSSARY OF TERMS ..... **XII**

Guide to days of use/injection xii

EXECUTIVE SUMMARY INTRODUCTION ..... **XIII**

Executive Summary Snapshot 14

1 INTRODUCTION **19**

1.1 Study aims 19

2 METHOD **19**

2.1 Survey of REU 20

2.2 Survey of KE 22

2.3 Other indicators 22

3 DEMOGRAPHICS **24**

3.1 Overview of the REU participant sample 24

4 CONSUMPTION PATTERN RESULTS **28**

4.1 Drug use history and current drug use 28

4.2 Ecstasy use 38

4.3 Methamphetamine use 44

4.4 Cocaine use 50

4.5 Ketamine use 53

4.6 GHB use 55

4.7 LSD use 57

4.8 Cannabis use 59

4.9 Other drugs use 63

4.10 Emerging psychoactive substance (EPS) use 71

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY & SUPPLY **78**

5.1 Ecstasy 78

5.2 Methamphetamine 88

5.3 Cocaine 102

5.4 Ketamine 108

5.5 GHB 114

5.6 LSD 118

5.7 Cannabis 123

6 HEALTH-RELATED TRENDS ASSOCIATED WITH ERD USE **131**

6.1 Overdose and drug-related fatalities 131

6.2 Help-seeking behaviour 138

6.3 Drug treatment 140

6.4 Other self-reported problems associated with ERD use 142

6.5 Hospital admissions 144

6.6 Mental and physical health problems 147

7 RISK BEHAVIOUR **150**

7.1 Injecting risk behaviour 150

6.2 Blood-borne viral infections (BBVI) 153

7.3 Sexual risk behaviour 156

7 Driving risk behaviour 158
7.6 The Alcohol Use Disorders Identification Test (AUDIT) 163

8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ERD USE 164
8.1 Reports of criminal activity among REU 164
8.2 Perceptions of police activity towards REU 165

9 SPECIAL TOPICS OF INTEREST 170
9.1 Heavy Smoking Index nicotine dependence 170
9.2 Pleasure, happiness and quality of life scale 172
9.3 Online drug-related activity 174
9.4 Sleep patterns 177
9.5 Ecstasy Dependence 182

REFERENCES 183

APPENDICES 188
Appendix A: Recruitment of REU over time, 2003-2010 188
Appendix B: Price trends of ecstasy and related drugs, 2003-2011 189

LIST OF TABLES

Table 1: Demographic characteristics of REU, 2011 25
Table 2: Demographic characteristics of REU continued, 2011 26
Table 3: Demographic characteristics of REU, 2003-2011 26
Table 4: Previous participation in the EDRS and IDRS and source of participant recruitment, by jurisdiction, 2011 27
Table 5: Lifetime and recent (last six months) polydrug use of REU, 2011 29
Table 6: Lifetime and recent (last six months) polydrug use of REU, 2003-2011 33
Table 7: Lifetime and recent (last six months) polydrug use of REU continued, 2003-2011 34
Table 8: Drug of choice and recent (last six months) bingeing among REU, by jurisdiction, 2011 35
Table 9: Frequency of polydrug use in the REU sample, 2011 36
Table 10: Proportion that reported recent changes in social drug use patterns, by jurisdiction, 2011 37
Table 11: Patterns of ecstasy use among REU, 2011 39
Table 12a: Quantity of average and heavy session use of ecstasy pills, powder and capsules, 201140
Table 13: Proportions of friends that use ecstasy, 2011 41
Table 14: Drugs usually used in combination with ecstasy among those who used other drugs with ecstasy, by jurisdiction, 2011 41
Table 15: Drugs used to come down from ecstasy last time used, by jurisdiction, 2011 42
Table 16: Main ROA of ecstasy in the last six months, by jurisdiction, 2011 43
Table 17: Patterns of methamphetamine (any form) use among REU, 2011 45
Table 18: Patterns of methamphetamine powder (speed) use among REU, 2011 46
Table 19: Patterns of methamphetamine base use among REU, 2011 47
Table 20: Patterns of crystalline methamphetamine (ice/crystal) use among REU, 2011 48
Table 21: Patterns of cocaine use, by jurisdiction, 2011 51
Table 22: Patterns of ketamine use among REU, 2011 54
Table 23: Patterns of GHB use among REU, 2011 56
Table 24: Patterns of LSD use among REU, 2011 58
Table 25: Patterns of cannabis use among REU, 2011 60
Table 26: Use of illicitly obtained benzodiazepines, by jurisdiction, 2010 65
Table 27: Use of licitly obtained antidepressants, by jurisdiction, 2011 66
Table 28: Use of illicitly obtained antidepressants, by jurisdiction, 2011 66
Table 29: Use of licit opioids, by jurisdiction, 2011 68
Table 30: Use of illicit opioids, by jurisdiction, 2011 69
Table 31: Use of licit (prescribed) pharmaceutical stimulants, by jurisdiction, 2011 69
Table 32: Use of illicit pharmaceutical stimulants, by jurisdiction, 2011 70
Table 33: Use of OTC codeine, by jurisdiction, 2010 70
Table 34: Use of 2C-I, 2C-B, 2C-B, by jurisdiction, 2011 72
Table 35: Use of DOI by jurisdiction, 2011 72
Table 36: Use of Mescaline by jurisdiction, 2011 73
Table 37: Use of 5-MEO-DMT, by jurisdiction, 2011 73
Table 38: Use of DMT by jurisdiction, 2011 73
Table 39: Use of mephedrone by jurisdiction, 2011 74
Table 40: Use of BZP by jurisdiction, 2011 75
Table 41: Use of Ivory Wave by jurisdiction, 2011 75
Table 42: Use of Datura by jurisdiction, 2011 76
Table 43: Use of DXM by jurisdiction, 2011 76
Table 44: Use of PMA by jurisdiction, 2011 77
Table 45: Median last price paid for ecstasy tablet and participants' reports of price change, by jurisdiction, 2011 78
Table 46: Price changes reported by REU, 2011 79
Table 47: Median price of ecstasy per tablet, 2000-2011 79

Table 48: Median price of ecstasy tablets bought in larger quantities, 2011 80
Table 49: Participant reports of current ecstasy purity, by jurisdiction, 2011 80
Table 50: Participant reports of changes in ecstasy purity in the past six months, by jurisdiction, 2011 81
Table 51: REU reports of availability of ecstasy in the preceding six months, 2011 85
Table 52: Purchasing patterns related to ecstasy use, 2011 86
Table 53: Last source, purchase location and use location of ecstasy, by jurisdiction, 2011 87
Table 54: Median of last price paid of various forms of methamphetamine, by jurisdiction, 2011 . 89
Table 55: Methamphetamine price changes, by jurisdiction, 2011 90
Table 56: Median price per gram of methamphetamine powder (speed), by jurisdiction, 2000-2011 91
Table 57: Median price per point of methamphetamine base (base), by jurisdiction, 2000-2011 ... 91
Table 58: Median price per point of crystalline methamphetamine (ice/crystal) by jurisdiction, 2000-2011 92
Table 59: Participant reports of current methamphetamine purity, by jurisdiction, 2011 93
Table 60: Participant reports of methamphetamine purity change, by jurisdiction, 2011 94
Table 61: Availability of methamphetamine powder (speed), by jurisdiction, 2011 96
Table 62: Availability of methamphetamine base, by jurisdiction, 2011 96
Table 63: Availability of methamphetamine base continued, by jurisdiction, 2011 97
Table 64: Availability of crystalline methamphetamine (ice/crystal), by jurisdiction, 2011 97
Table 65: Last source, purchase location and use location of methamphetamine powder (speed), 2011 98
Table 66: Last source, purchase location and use location of methamphetamine base, 2011 99
Table 67: Last source, purchase location and use location of crystalline methamphetamine (ice/crystal), 2011 100
Table 68: Median price per gram of cocaine, by jurisdiction, 2011 102
Table 69: Price changes of cocaine, by jurisdiction, 2011 102
Table 70: Median price of cocaine, by jurisdiction, 2003-2011 103
Table 71: Availability of cocaine, by jurisdiction, 2011 106
Table 72: Last source, purchase location and use location of cocaine, by jurisdiction, 2011 107
Table 73: Median price of ketamine, by jurisdiction, 2011 108
Table 74: Price changes of ketamine, by jurisdiction, 2011 109
Table 75: Median price of ketamine, by jurisdiction, 2000-2011 109
Table 76: Availability of ketamine, by jurisdiction, 2011 111
Table 77: Last source, purchase location and use location of ketamine, by jurisdiction, 2011 112
Table 78: Median price per ml of GHB, by jurisdiction, 2011 114
Table 79: Price changes of GHB, by jurisdiction, 2011 114
Table 80: Availability of GHB, by jurisdiction, 2011 116
Table 81: Median price per tab of LSD, by jurisdiction, 2011 118
Table 82: Price changes of LSD, by jurisdiction, 2011 118
Table 83: Availability of LSD, by jurisdiction, 2010-2011 120
Table 84: Last source, purchase location and use location of LSD, by jurisdiction, 2011 121
Table 85: Median last price paid per quarter ounce and ounce of hydroponically and outdoor grown cannabis, by jurisdiction, 2010-2011 124
Table 86: Cannabis price changes, by jurisdiction, 2011 124
Table 87: Cannabis price changes continued, by jurisdiction, 2011 125
Table 88: Availability of hydro, by jurisdiction, 2011 126
Table 89: Availability of bush, by jurisdiction, 2011 127
Table 90: Last source person and purchase locations and use locations of hydro, by jurisdiction, 2011 128
Table 91: Last source person, purchase location and use location of bush, by jurisdiction, 2011 129
Table 92: Stimulant overdose in the last six months among REU, by jurisdiction, 2011 133
Table 93: Depressant overdose in the last 12 months among REU, by jurisdiction, 2011 135
Table 94: Proportion of REU who accessed a medical or health service, 2011 138

Table 95: Main issue for REU who accessed medical or health service, 2011 138
Table 96: Main issue for REU who accessed medical or health service continued, 2011 139
Table 97a: Main drug for health and medical service accessed for REU, 2011 139
Table 98: Self-reported drug-related problems, by jurisdiction, 2011 142
Table 99a: Sought help for self-reported problem, by jurisdiction, 2011 143
Table 100: Main drug attributed to self-reported problem, 2011 143
Table 101: K10 scores, by jurisdiction (method used in ABS National Health Survey), 2011 147
Table 102: Self reported mental health problem in the last six months, 2011 149
Table 103: Mental health assistance and medication, 2010-2011 149
Table 104: Injecting risk behaviour among REU, by jurisdiction, 2011 151
Table 105: Recent injecting drug use patterns among those who had recently injected, 2011 151
Table 106: Context and patterns of recent (last six months) injection, 2010 152
Table 107: Blood borne virus vaccination and testing among REU, 2011 154
Table 108: Prevalence of sexual activity and number of sexual partners in the preceding six months, by jurisdiction, 2011 156
Table 109: Drug use during sex with a casual partner in the preceding six months, by jurisdiction, 2011 157
Table 110: REU reports of alcohol driving risk behaviour in the last six months, by jurisdiction, 2011 158
Table 111: Random breath testing among those who had driven in the preceding six months, by jurisdiction, 2011 158
Table 112: REU reports of drug driving risk behaviour in the last six months, by jurisdiction, 2011 159
Table 113: REU reports of drug driving risk behaviour last time in the last six months, by jurisdiction, 2011 160
Table 114: Drug driving (saliva) testing among those who had driven in the preceding six months, by jurisdiction, 2011 162
Table 115: AUDIT total scores and proportion of REU scoring above recommended levels indicative of hazardous alcohol intake, by jurisdiction, 2011 163
Table 116: Criminal activity among REU, by jurisdiction, 2011 164
Table 117: Perceptions of police activity towards REU, 2011 165
Table 118: Proportion of REU reporting arrest in the past year, by jurisdiction, 2011 166
Table 119: Charges of arrest in the past year, national 2011 166
Table 120: Heavy Smoking Index for nicotine dependence, by jurisdiction, 2011 171
Table 121: Overall Quality of Life Score (0 = very bad and 10 = excellent), 2011 172
Table 122: Self-reported ranking* of life aspects that contribute to pleasure, contribute to happiness and contribute to quality of life (0 = nil and 100 = a lot), 2011 173
Table 123: Frequency of going online in the previous six months, 2011 174
Table 124: Drug related activities online reported by REU, in the previous six months, 2011 175
Table 125: Bought legal highs in the last six months, 2011 175
Table 126: Mediums used for online drug related activity among participants, 2011 176
Table 127: Pittsburgh Sleep Quality Index mean scores for REU, 2011 177
Table 128: Quality of sleep as reported by REU in the past month, 2011 178
Table 129: Sleep satisfaction rating (median out of 10) as reported by REU, 2011 179
Table 130: Number of hours of sleep reported by REU, 2011 179
Table 131: Self reported problem with sleep and ratings of areas affected by sleep problems (median out of 10) as reported by REU, 2011 180
Table 132: Self reported negative impact of drug use on sleep in REU, 2011 180
Table 133: Use of sleep medication in REU in the past month, 2011 181

LIST OF FIGURES

Figure 1: Drug of choice for REU, 2003-2010 35
Figure 2: Prevalence of ecstasy use in Australia, 1988-2010 43
Figure 3: Recent any methamphetamine, speed powder, base and ice/crystal methamphetamine use, 2003-2011 45
Figure 4: Prevalence of methamphetamine use in Australia, 1993-2010 49
Figure 5: Prevalence of cocaine use in Australia, 1993-2011 52
Figure 6: Prevalence of hallucinogen use in Australia, 1993-2010 58
Figure 7: Median days used cannabis among national REU, 2003- 2011 61
Figure 8: Patterns of recent and daily* cannabis use among national REU, 2003- 2011 61
Figure 9: Lifetime and past year prevalence of cannabis use by Australians, 1985-2010 62
Figure 10: Use of nitrous oxide across jurisdictions, 2010-2011 67
Figure 11: Use of amyl nitrate across jurisdictions, 2010-2011 67
Figure 12: National REU reports of current ecstasy purity, 2007-2011 80
Figure 13: National REU reports of recent (last six months) change in ecstasy purity, 2003-2011 81
Figure 14: Number of phenethylamine state police seizures, by jurisdiction, 1999/00-2009/10 82
Figure 15: Median purity of state police phenethylamine seizures, eastern jurisdictions, 1999/00-2009/10 83
Figure 16: Median purity of state police phenethylamine seizures, smaller jurisdictions, 1999/00-2009/10 83
Figure 17: Number of AFP phenethylamine seizures, by jurisdiction, 1999/00-2009/10 84
Figure 18: Median purity of AFP phenethylamine seizures, by jurisdiction, 1999/00-2009/10 84
Figure 19: Number and weight of detections of MDMA detected at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2010/11 85
Figure 20: National REU reports of current methamphetamine purity, 2011 92
Figure 21: National REU reports of recent (last six months) change in methamphetamine purity, 2011 93
Figure 22: Median purity of methylamphetamine seizures analysed by state/territory police, by jurisdiction, 2003/04-2009/10 94
Figure 23: Total weight and number of ATS detected by the ACS, financial years 1 997/98-2009/10 101
Figure 24: Total number and weight of crystalline methamphetamine detected by the ACS, 1997/98-2009/10 101
Figure 25: National REU reports of current cocaine purity, 2009-2011 103
Figure 26: National REU reports of recent (last six months) change in cocaine purity, 2011 104
Figure 27: Number and weight of detections of cocaine detected at the border by the ACS, financial years 1997/98-2009/10 104
Figure 28: Number of state/territory police cocaine seizures, by jurisdiction, 1999/00-2009/10 105
Figure 29: Median purity of state/territory police cocaine seizures, by jurisdiction, 1999/00-2009/10 106
Figure 30: National REU reports of current ketamine purity, 2009-2011 110
Figure 31: National REU reports of recent (last six months) change in ketamine purity, 2009-2011 110
Figure 32: Number of detections of ketamine detected at the border by the ACS, 2003/04-2009/10 113
Figure 33: National REU reports of current GHB purity, 2009-2011 115
Figure 34: National REU reports of recent (last six months) change in GHB purity, 2009-2011 115
Figure 35: Number of GHB and GBL detections at the border by ACS, financial years 1997/98-2009/10 117
Figure 36: National REU reports of current LSD purity, 2010-2011 119
Figure 37: National REU reports of recent (last six months) change in LSD purity, 2009-2011 119

Figure 38: Number of LSD detections at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2009/10 122
Figure 39: National REU reports of current cannabis potency among those who commented, 2010-2011 125
Figure 40: National REU reports of recent (last six months) change in cannabis potency, 2010-2011 126
Figure 41: Weight and number of detections of cannabis made at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2009/10 130
Figure 42: Proportion of closed treatment episodes for clients who identified amphetamine as their principal drug of concern (excluding pharmacotherapy), by jurisdiction, 2009/10 140
Figure 43: Proportion of closed treatment episodes for clients who identified cannabis as their principal drug of concern (excluding pharmacotherapy), by jurisdiction, 2009/10 141
Figure 44: Number of principal amphetamine-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2008/09 144
Figure 45: Number of principal cocaine-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2008/09 145
Figure 46: Number of principal cannabis-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2008/09 146
Figure 47: Proportion of population (ABS National Health Survey) and REU sample of K10 categories, 2011 148
Figure 48: Total notifications for HBV and HCV (unspecified and incident) infections, Australia, 1997-2012 155
Figure 49: Perceived impairment on driving ability last time after taking illicit drugs, 2011 161
Figure 50: Amphetamine-type stimulants: consumer and provider arrests, 1999/00-2009/10 167
Figure 51: Total number of cocaine consumer and provider arrests, 1996/97- 2009/10 167
Figure 52: Number of hallucinogen consumer and provider arrests, 2005/06-2009/10 168
Figure 53: Number of cannabis and all drug consumer and provider arrests, 1998/99-2009/10 169
Figure 54: Self-reported dependency on text messaging to obtain ecstasy and similar drugs among REU in the previous six months, 2011 177
Figure 55: Pittsburgh Sleep Quality Index frequency mean scores for REU, 2011 178
Figure A1: Recruitment of REU over time, 2003-2011 188
Figure B1: Median price of an ecstasy pill, 2003-2011 189
Figure B2: Median price of methamphetamine powder (speed), 2003-2011 189
Figure B3: Median price of methamphetamine base, 2003-2011 190
Figure B4: Median price of ice/crystal, 2003-2011 190
Figure B5: Median price of one gram of cocaine, 2003-2011 191
Figure B6: Median price of hydroponic cannabis, 2006-2011 191
Figure B7: Median price of bush cannabis, 2006-2011 192

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ABBREVIATIONS

5-MEO-DMT	5-methoxy-dimethyltryptamine
1,4B	1,4 butanediol
2C-B	4-bromo-2,5-dimethoxyphenethylamine
2C-E	2, 5-dimethoxy-4-ethylphenethylamine
2C-I	2,5-dimethoxy-4-iodophenethylamine
4-MTA	4-methylthioamphetamine
ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACS	Australian Customs Service
ACT	Australian Capital Territory
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH&A	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
AOD	Alcohol and Other Drug
AODTS-NMDS	Alcohol and Other Drug Treatment Services National Minimum Data Set
AQFV	Alcohol Quantity Frequency and Variability
ATS	Amphetamine type stimulants
AUDIT	Alcohol Use Disorders Identification Test
AVO	Apprehended Violence Order
BBVI	Blood-borne viral infection(s)
BMI	Body Mass Index
BZP	1-Benzylpiperizine(s)
CNS	Central nervous system
CRUFAD	Clinical Research Unit For Anxiety and Depression
DASSA	Drug and Alcohol Services of South Australia
DOB	2,5-dimethoxy-4-bromoamphetamine
DOI	Death on Impact; 2, 5-dimethoxy-4-iodamphetamine
DOM	2,5-dimethoxy-4-methylamphetamine
DMT	Dimethyl tryptamine
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition
DXM	Dextromethorphan hydrobromide
D&A	Drug and Alcohol
EDRS	Ecstasy and Related Drugs Reporting System
EPS	Emerging psychoactive substances
ERD	Ecstasy and related drug(s)
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
GP	General Practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus

ICD-9	International Statistical Classification of Diseases and Related Health Problems, Ninth Revision
ICD-10	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision
IDRS	Illicit Drug Reporting System
IDU	Person(s) who inject(s) drugs; injecting drug user(s)
Ivory wave	See MDVP
K10	Kessler Psychological Distress Scale
KE	Key expert(s)
LSD	*d*-lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDEA	3,4-methylenedioxyethylamphetamine
MDMA	3,4-methylendioxymethamphetamine
MDVP	Methylenedioxypyrovalerone (Ivory wave)
MSIC	Medically Supervised Injecting Centre (Sydney)
N	(or n) Number of participants
NCIS	National Coronial Information System
NIDIP	National Illicit Drug Indicators Project
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NDLERF	National Drug Law Enforcement Research Fund
NHMD	National Hospital Morbidity Database
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and Syringe Program(s)
NSW	New South Wales
NT	Northern Territory
OD	Overdose
OCD	Obsessive Compulsive Disorder
OTC	Over the counter
PCP	Phencyclidine
PDI	Party Drugs Initiative
PMA	Para-methoxyamphetamine
QLD	Queensland
RBT	Random Breath Test
REU	Regular ecstasy users(s)
ROA	Route of administration
SA	South Australia
SAPOL	South Australia Police
SCID	Structured Clinical Interview for DSM-IV
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
STI	Sexually transmitted infection
TAS	Tasmania
TMA	3,4,5 trimethoxyamphetamine
VIC	Victoria
WA	Western Australia
WHO	World Health Organization

GLOSSARY OF TERMS

Binge	Use over 48 hours without sleep
Eightball	3.5 grams
Halfweight	0.5 gram
Illicit	Illicit refers to pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner
Indicator data	Sources of secondary data used in the EDRS (see *Method* section for further details)
Key expert(s)	Also referred to as KE; persons participating in the Key Expert Survey component of the EDRS (see *Method* section for further details)
Licit	Licit refers to pharmaceuticals (e.g. benzodiazepines, antidepressants and opioids such as methadone, buprenorphine, morphine and oxycodone) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: injecting; smoking; snorting/shelving/shafting and/or swallowing
Opiates	Opiates are derived directly from the opium poppy by departing and purifying the various chemicals in the poppy
Opioids	Opioids include all opiates but also include chemicals that have been synthesised in some way e.g. heroin is an opioid but not an opiate, morphine is both an opiate and opioid
Point	0.1 gram although may also be used as a term referring to an amount for one injection
Recent injection	Injection (typically intravenous) in the six months preceding interview
Recent use	Use in the six months preceding interview via one or more of the following routes of administration: injecting; smoking; snorting; and/or swallowing
Shelving/shafting	Use via insertion into vagina (shelving) or the rectum (shafting)
Use	Use via one or more of the following routes of administration: injecting; smoking; snorting; shelving/shafting and/or swallowing

Guide to days of use/injection

180 days	daily use/injection* over preceding six months
90 days	use/injection* every second day
24 days	weekly use/injection*
12 days	fortnightly use/injection*
6 days	monthly use/injection*

* As appropriate

EXECUTIVE SUMMARY INTRODUCTION

The *Australian Drug Trends in Ecstasy and Related Drug Markets 2011* report presents the findings from the nineth year in which data have been collected in all states and territories in Australia on the markets for ecstasy and related drugs (ERD). The Ecstasy and Related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI) is the most comprehensive and detailed study of ERD markets in Australia.

Using a similar methodology to the Illicit Drug Reporting System (IDRS), the EDRS monitors the price, purity and availability of 'ecstasy' (3,4-methylendioxymethamphetamine; MDMA) and other drugs such as methamphetamine, cocaine, gamma-hydroxybutyrate (GHB), *d*-lysergic acid (LSD), 3,4-methylendioxyamphetamine (MDA) and ketamine. It also examines trends in the use and harms of these drugs. It utilises data from three sources: (a) surveys with regular ecstasy users (REU); (b) surveys with key experts (KE) who have contact with REU through the nature of their work; and (c) the analysis of existing data sources that contain information on ERD. The EDRS is designed to be sensitive to emerging trends, providing data in a timely manner, rather than describing issues in extensive detail.

It is important to note that the results from the REU surveys are not representative of ecstasy users and their other drug use in the general population, but this is *not* the aim of these data. These data are intended to provide evidence that is indicative of emerging issues that warrant further monitoring. REU are a sentinel group that provides information on patterns of drug use and market trends.

The findings from each year not only provide a snapshot of the ERD market in Australia, but in total they help to provide an evidence base for policy decisions; help to inform harm reduction messages; and to provide directions for further investigation when issues of concern are detected. Continued monitoring of the ERD markets in Australia will help add to our understanding of the use of these drugs; the price, purity and availability of these drugs; and how these may impact on each other; and the associated harms which may stem from the use of these drugs.

Drug trends in this publication are cited by jurisdiction, although they primarily represent trends in the capital city of each jurisdiction, where new drug trends are likely to emerge. Patterns of drug use may vary among other groups of REU in the capital cities and in regional areas.

Executive Summary Snapshot

Demographics of REU participants and Patterns of Drug use

- REU participants were primarily recruited through street press adverts and word – of - mouth.
- As a sample, the demographics of REU were consistent with previous years.

Consumption pattern results

- Ecstasy continues to decline at a significant rate in relation to preference as a drug of choice (37% in 2010 to 27% in 2011). All other drugs including the top three: cannabis (20%), cocaine (14%) and alcohol (11%) continue to be reported at stable levels of preference.
- Significant increases were reported in those that reported excess stimulant use in a 'binge session'.
- Poly drug use is reported by this sample in a fortnightly to monthly frequency.
- Almost half of the sample commented on changes in the drug market over the preceding six months to interview, the main themes included: The low quality or purity of ecstasy pills and the increase in use of MDMA capsules, new drugs on the market such as: mephedrone, DMT and BZP, and an increase in prevalence of acid and decrease in drug use generally.

Ecstasy

- Most ecstasy use continued to be reported on a fortnightly basis, with 22% of REU reporting using more than weekly.
- A median of two tablets and 2.5 lines were used in a typical session.
- There was a significant increase in the capsule form of ecstasy.
- The median price of an ecstasy tablet was $25 ranging from $20-$35 a tablet and it was purchased on at a similar frequency to 2010 (monthly compared to fortnightly).
- Purity was reported as 'low', and having 'decreased' over the last six months..
- Availability still regarded as 'easy' to obtain by majority, and this was reported as having been stable.
- Ecstasy is still most commonly used in nightclubs and purchase source is most commonly friends.
- Border detections (weight and number of detections) remain at the lowest level recorded.

Methamphetamine

- Over half (60%) the number of REU participants interviewed reported use of one form of methamphetamine, with use across all forms reported as stable comparable to 2010 levels.
- Ice/crystal use has significantly increased from 2010 to 2011 (17% to 26%) however is still considered low.
- Median days use of any form was six days (i.e monthly use), with one participant reporting daily use. Median days use in 2010 was four days (range 1-180 days).
- The most common route of administration (ROA) for speed was snorting, for base was swallowing and for ice/crystal was smoking.
- The average amount used in a typical session for speed was 0.5 grams, for base and ice/crystal was two points.
- Speed market characteristics of price slightly increased from $50 in NSW in 2010 to $80 in NSW in 2011. Purity and availability all remained stable with 2010 results.
- Base market characteristics saw a drop in availability with reports slightly increasing of difficulty. In relation to price and purity the market characteristics remained stable.
- Ice/crystal market characteristics saw an increases in price to between $60-$100 per point, with the majority of participants commenting reported that the price had

increased or remained stable. Purity had more participants reporting it as 'high', whilst availability remained at constant levels and regarded as 'easy' to 'very easy' to obtain.
- All forms were primarily sourced from friends or known dealers and used in a range of public and private locations.

Cocaine

- Recent cocaine use was reported by almost half of the sample (46%) in 2011 with comparable levels to 2010. Frequency of use remained low at two days over the last six months.
- Main ROA reported by participant REU was snorting (97%).
- Fourteen percent reported cocaine as a drug of choice in this sample.
- Market characteristics of cocaine saw purity reported as 'medium' to 'low' an comparable to 2010 levels. Price and availability market characteristics remained stable.
- Cocaine was reported mostly purchased from friends and mostly used in public locations such as nightclubs.

Ketamine

- Recent ketamine use remained localised to VIC, NSW and the ACT, with 16% of the national sample reporting recent use, a significant increase from 2010 (12%). Ketamine was used on a median of two days.
- The majority reported the main ketamine ROA was snorting (87%).
- Due to small numbers reporting recent use, market characteristics were also reported by small numbers so please interpret results with caution.
- Market characteristics of price and purity for ketamine remained consistent with 2010 figures, reports of availability were predominantly mixed.

GHB

- Seven percent of the national sample reported recent use on a median of two days in the last six months. Use was localised to NSW, QLD and VIC.
- The only ROA reported was oral consumption. Very small numbers were able to report on market characteristics so please interpret results with caution. Price was varied due to small numbers and availability was considered mixed with more participants in 2011 reporting that it had become more difficult to obtain. Purity was still reported as high.
- GHB was mostly obtained from friends and used in nightclubs.

LSD

- Forty-six percent of the sample reported recent LSD use a significant increase from 36% in 2009, the median days of use was three days in the last six months.
- As a drug of choice, LSD had incrementally increased from 4% in 2007 to 7% in 2011.
- Price, purity and availability had all remained stable.

Cannabis

- Cannabis was the second most recently used drug in the sample behind alcohol and was the third most nominated drug for drug of choice in the sample.
- There was a significant increase in reported recent use and daily use compared to 2010.
- Frequency of use was weekly and main ROA was smoking (98%). Smoking cones was more common than smoking joints.

- Prices for hydro cannabis remained slightly higher than for bush cannabis, potency and availability remained stable for both types of cannabis.

Other drugs

- MDA recent use saw a significant increase from 5% to 12% in the REU sample.
- Recent alcohol use was reported by 98% of the sample with a median of 48 days use in the last six months (twice weekly) compared with 60 days in 2010.
- Over half of the recent tobacco users (86%) were daily smokers. Recent tobacco use saw an increase from 78% in 2010 to 86% in 2011.
- One-third (33%) of the REU sample reported recent illicit benzodiazepine use.
- One-quarter (25%) of the REU sample reported recent nitrous oxide use; use was highest in TAS and SA.
- One-quarter (26%) of REU had used amyl nitrate on a median of three days in the last six months.
- Twenty-nine percent of the national sample reported recent mushroom use, a significant increase from 18% reported in 2010. Use occurred on a median of three days, and 79% of recent users had used less than once per month.
- Other drugs discussed in this section include heroin and other opiates, methadone, buprenorphine, pharmaceutical stimulants, over the counter (OTC) codeine, OTC stimulants and steroid use.

Emerging psychoactive substances (EPS)

- Drugs in the 2C-family had significant increases reported in recent use, however numbers reporting use remained low.
- There was also a significant increase reported in recent mescaline use (2% in 2010 vs 4% in 2011).
- Psychedelic tryptamine DMT also reported a significant increase in recent use, and is the EPS most reportedly used out of all the drugs in this category.
- Interestingly, mephedrone experienced a significant decrease in recent use in 2011 compared to 2010 results.
- For more information regarding these drugs see: Bruno et al., (in press) Emerging psychoactive substance use among regular ecstasy users in Australia. *Drug and Alcohol Dependence* (http://www.sciencedirect.com/science/article/pii/S0376871611005205)

Health-Related Trends Associated with ERD use

- Of the national sample, 32% reported having ever **overdosed** on a **stimulant** drug and, of those, 68% had done so in the preceding 12 months. Ecstasy was the main drug to which participants attributed the stimulant overdose. Most stimulant OD occurred in private locations, which has major health implications. The most common symptoms reported were vomiting and increased heart rate. Of those that sought treatment, most were taken to an emergency department.

- Forty-six percent of the national sample reported having ever **overdosed** on a **depressant** drug and, of those, 75% reported recent (last 12 months) overdose. Recent overdoses were most commonly attributed to alcohol (83%). Most depressant OD occurred in private locations, and the main drug attributed to the OD was alcohol. The most commonly reported symptom was vomiting. Of those that sought treatment, most were attended to by an ambulance.

- Of the national sample 20% had **accessed either a medical or health service** in relation to their drug use during the six months preceding interview. The services most commonly accessed by these participants were GPs (34%). In terms of medical issues (e.g. overdoses), the main issue for seeking medical attention was

dependence or addiction issues (24%) followed by overdose (8%). The main drugs to seek medical attention for were alcohol (30%), cannabis (17%) and ecstasy (16%).

- In 2009/10, **treatment seeking** for ecstasy use (as the principal drug of concern) remained low in the general population at 1.0% of closed treatment episodes.
- A small proportion of participants (9%) were classified as currently experiencing very high psychological distress on the **Kessler Psychological Distress Scale**. The majority reported no or low distress (36%).
- Almost a third (31%) of the sample reported experiencing a **mental health problem** in the preceding six months; depression and anxiety were the most commonly reported.

Risk Behaviour

- Nineteen percent of the national sample reported having **injected** at some time in their lives; 10% of the national sample reported injecting in the six months preceding interview. The mean age of first injection was 20 years of age. Among those who had injected in the preceding six months, the last drug injected was methamphetamine.
- Syringes were typically obtained from a Needle and Syring Program (NSP) (56%). Of those who had injected in the preceding six months a total of four respondents reported using a needle after someone else in the month preceding interview. Thiry-one recent injecting participants reported **sharing** of other injecting equipment.
- Fifty-one percent of the national sample reported they had completed the **vaccination** schedule for hepatitis B virus, the most common reason for the vaccination was being vaccinated as a child. The majority of the sample (83%) reported not ever being diagnosed with a sexually transmitted infection.
- Three-fifths (62%) of participants reported penetrative sex in the six months preceding interview with at least one **casual partner**. A fifth (19%) of those who had had casual sex reported never using a condom. The majority (86%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months, predominantly alcohol, ecstasy and cannabis were the drugs most commonly reported.
- Three-quarters (75%) had **driven a car** in the last six months, 64% of those had reported having been over the legal limit, and 59% had driven shortly after taking an illicit drug on a median of four occasions. The most commonly reported illicit drugs after which these participants had driven were ecstasy and cannabis. A small number reported positive notifications were from being saliva drug tested.
- In the Alcohol Use Disorders Identification Test (AUDIT) males were found to have a significantly higher score than females. Higher scores are indicative of greater likelihood of hazardous drinking.

Law Enforcement-Related Trends Associated with ERD use

- Two-fifths of the sample reported engaging in some form of **criminal activity** in the month prior to interview.
- Drug dealing was the most common crime reported across all jurisdictions, with smaller proportions reported having committed fraud or a violent crime in the last month.
- Reports of recent **police activity** were that it was stable.
- Sixteen percent of the national sample had been arrested in the past year, compared with 14% in 2010. The most common charges reported were violent crimes (e.g. assault) and use/possession.
- **Consumer arrests** had increased in relation to cocaine and hallucinogen use. All other drug arrests appeared to have remained stable.

Special Topics of Interest

- **Heavy smoking Index nicotine dependece** score was calculated for participants for the first time in 2011. A quarter (24%) of daily REU smokers scored 4 or above indicating high nicotine dependence.
- **Pleasure, happiness and quality of life scale** was asked of participants in 2011. REU endorsed 'listening to music' as most important to their pleasure and happiness life rankings and 'being with friends' as most important to their overall quality of life ranking.
- **Online drug-related activity** was a topic of interest in this group for 2011 with 60% of REU reporting going on line to get information about drugs. Ecstasy was the most common drug that was used to source information from the internet.
- **Sleep patterns** of REU were investigated in 2011. Most REU reported that their quality of sleep in the past month was good (32%). However, 39% of REU reported a problem with their sleep and 30% reported using sleep medication in the past month.
- In 2011, participants were asked questions regarding **dependence on ecstasy** based on the Severity of Dependence (SDS) scale. The median score of the scale was 0, with 17% of the sample reporting a cut –off of three or more and 10% reporting a cut-off of four or more both indicating dependence.

1 INTRODUCTION

This report provides a national summary of trends from the nineth year of monitoring ecstasy and related drug (ERD) markets across Australia. These trends have been extrapolated from the three data sources: interviews with current regular ecstasy users (REU); interviews with professionals who have contact with ecstasy users (key experts, or KE); and the collation of indicator data. The data sources are triangulated in order to minimise the biases and weaknesses inherent to each, and ensure that only valid emerging trends are documented.

The term 'ecstasy and related drugs' includes drugs that are routinely used in the context of entertainment venues and other recreational locations including nightclubs, dance parties, pubs and music festivals. ERD include ecstasy (MDMA, 3,4-methylenedioxymethamphetamine), methamphetamine, cocaine, LSD (*d*-lysergic acid), ketamine, MDA (3,4-methylenedioxyamphetamine) and GHB (gamma-hydroxybutyrate).

In 2011, the Ecstasy and Related Drugs Reporting System (EDRS) was funded by the Australian Government Department of Health and Ageing (AGDH&A). The project uses a methodology that was based on the methodology used for the Illicit Drug Reporting System (IDRS) (Topp, Breen et al. 2004). The IDRS monitors Australia's heroin, cocaine, methamphetamine and cannabis markets, but does not adequately capture ERD use and, therefore, there was a need to access a different population in order to obtain information on ERD markets. Consistency between the methodology of the main IDRS and this study was maintained where possible, as the IDRS has demonstrated success as a monitoring system.

The focus is on the capital city in each state/territory because new trends in illicit drug markets are more likely to emerge in large cities rather than regional centres or rural areas. Detailed information from each state and territory is presented in individual jurisdictional reports which are available from the NDARC website. This report focuses on the 2011data collection in all states/territories; reports from this and all previous years are available on the NDARC website[1]. Before 2003, data were collected in New South Wales (NSW), Queensland (QLD) and South Australia (SA) and some trend data are reported here; however, the reader should refer to the jurisdictional reports for more detailed trend information available from these years.

Please note that as with all statistical reports there is the potential for minor revisions fo data in this report over its life. Please refer to the online version at www.ndarc.med.unsw.edu.au

1.1 Study aims

In 2011, the specific aims of the EDRS were:

1. to describe the characteristics of a sample of current REU interviewed in each capital city of Australia;
2. to examine the patterns of ERD use of these samples;
3. to document the current price, purity and availability of ERD across Australia;
4. to examine participants' reports of ecstasy-related harm, including physical, psychological, occupational, social and legal harms; and
5. to identify emerging trends in the ERD market that may require further investigation.

2 METHOD

The EDRS used the methodology trialled in the feasibility study (Breen, Topp et al. 2002; Topp, Breen et al. 2004) to monitor trends in the markets for ERD. The three main sources of information used to document trends were:

[1] See www.ndarc.med.unsw.edu.au for details.

1. face-to-face interviews with current REU recruited in each capital city across Australia;
2. face-to-face and telephone interviews with KE (formally known as key informants, or KI) who, through the nature of their work, have regular contact with REU; and
3. indicator data sources such as the purity of seizures of ecstasy analysed and prevalence of use data drawn from the National Drug Strategy Household Surveys (NDSHS).

These data were used to provide an indication of emerging trends in ERD use, ERD markets and related issues. Comparisons of data sources were used to determine convergent validity of trends. The data sources were also used in a supplementary fashion, in which KE reports served to validate and contextualise the quantitative information obtained through the REU survey and/or trends suggested by indicator data. Comparable methodology was followed in each site for individual components of the EDRS. Further information on methodology in each jurisdiction in 2011 can be found in the jurisdictional reports, available from the NDARC website (www.ndarc.med.unsw.edu.au).

2.1 Survey of REU

The sentinel population chosen to monitor trends in ERD markets consisted of people who engaged in the regular use of the drug sold as 'ecstasy'. Although a range of drugs fall into the ERD category, ecstasy is considered one of the main illicit drugs used in Australia. It is the second most widely used illicit drug after cannabis with 3 % of the population aged 14 years or older reporting recent use of ecstasy in the Australian Institute of Health and Welfare's *National Drug Strategy Household Survey (AIHW, 2011)*.

A growing market for ecstasy, i.e. tablets sold purporting to contain MDMA, has existed in Australia for more than a decade. In contrast, other drugs that fall into the class of ERD have either declined in popularity since the appearance of ecstasy in this country (e.g. LSD), fluctuate widely in availability (e.g. MDA), or are relatively new in the market and are not as widely used as ecstasy (e.g. ketamine and GHB). It was suggested (Topp and Darke 2001) that it would be difficult to identify a regular user of GHB or ketamine who was not also an experienced user of ecstasy, whereas the reverse will often be the case. Ecstasy may be the first drug categorised under ERD with which many young Australians who choose to use illicit drugs will experiment, and a minority of these users will go on to experiment with the less common related drugs such as ketamine and GHB.

The entrenchment of ecstasy in Australia's illicit drug markets, relative to other related drugs, underpinned the decision that regular use of ecstasy could be considered the defining characteristic of the target population – REU (Topp and Darke 2001). A sample of this population was successfully recruited and interviewed in the two-year feasibility trial, and was able to provide the data that were sought. Therefore, REU have been used again in 2011 to provide information on ERD markets, however, as will become evident in the report, it is apparent that the ecstasy market and the regularity of its consumption and type of consumers may be changing. More discussion on this issue see Section 4.10: *Emerging Psychoactive Substances*.

Each jurisdiction obtained ethics approval to conduct the study from the appropriate Ethics Committees in their jurisdiction.

2.1.1 Recruitment

Participants were recruited through a purposive sampling strategy (Kerlinger 1986), which included advertisements in entertainment street press, music and clothing stores, via internet websites (including drug information sites and forums as well as social mediums), gay and

lesbian newspapers, on radio and at university campuses. Interviewer contacts and 'snowball' procedures (Biernacki and Waldorf 1981) were also utilised. '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 (Solowij, Hall et al. 1992; Dalgarno and Shewan 1996; Forsyth 1996; Peters, Davies et al. 1997) studies. Initial contact was established through advertisements or, less commonly, through interviewers' personal contacts. On completion of the 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

Participants contacted the researchers by telephone (call or text) or email and were screened for eligibility. To meet entry criteria they had to be:

- at least 16 years of age (due to ethical constraints);
- have used ecstasy at least six times during the preceding six months (equating to monthly use); and
- have been a resident of the capital city in which the interview took place for the past year. As in the main IDRS, the focus was on the capital city because new trends in illicit drug markets are more likely to emerge in urban areas rather than in remote or regional areas.

All information provided was confidential and anonymous, and the study involved a face-to-face interview that took approximately 45 minutes. All respondents were volunteers who were reimbursed $40 for time and expenses incurred. Informed consent to participate was obtained prior to the interview. All participants were assured that all information they provided would remain confidential and anonymous. Interviews took place in varied locations negotiated with participants, including the research institutions, coffee shops or parks, and were conducted by interviewers trained in the administration of the interview schedule. The nature and purpose of the study was explained to participants before informed consent was obtained.

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 a number of previous NDARC studies of users of ecstasy (Solowij, Hall et al. 1992) and powder amphetamine/methamphetamine (Darke, Cohen et al. 1994) (Hando and Hall 1993; Hando, Topp et al. 1997). The interview focused primarily on the preceding six months, and assessed:

- demographic characteristics;
- patterns of ERD use, including frequency and quantity of use and routes of administration;
- drug market characteristics: the price, purity and availability of different ERD;
- risk behaviours (such as injecting, sexual behaviour, driving under the influence of alcohol and other drugs);
- help-seeking behaviour;
- mental and physical health, personal health and wellbeing;
- self-reported criminal activity;
- ecstasy-related problems, including relationship, legal and occupational problems;
- general trends in ERD markets, such as new drug types, new drug users and perceptions of police activity; and
- areas of special interest including: online drug-related activity, ecstasy dependence, sleep patterns related to drug use and the pleasure, happiness and quality of life scale.

2.1.4 Data analysis

The REU participant survey results are used as the primary basis on which to estimate drug trends. These participants provide the most comparable information on drug price, availability and use patterns in all jurisdictions and over time. However, purity of drug seizures data provided by the Australian Crime Commission (ACC) are an objective indicator of drug purity, and data are also presented in this report. Other indicator data are reported to provide a broader overview and a basis against which trends in REU participant data may be contextualised. KE data are discussed within the individual jurisdictional reports to provide a context around the quantitative data from the REU surveys.

For continuous, normally distributed variables, *t*-tests were employed and means reported. Where continuous variables were skewed, medians were reported and the Mann-Whitney *U*-test, a non-parametric analogue of the *t*-test (Siegel and Castellan 1988), was employed. Categorical variables were analysed using χ^2. To investigate differences between states/territories, dummy variables were created and an individual state/territory was compared against all the other states/territories combined. All analyses were conducted using SPSS for Windows, Version 14.0 or Version 17.0 (SPSS Inc, 2008). More detailed analyses on specific issues may be found in other literature, including quarterly bulletins and peer-reviewed articles produced by the project, details of which may be found on the NDARC website[2].

2.2 Survey of KE

To maintain consistency with the main IDRS, it was decided that the eligibility criterion for KE participation in the EDRS would be regular contact, in the course of employment, with a range of REU throughout the preceding six months.

The interview schedule was a semi-structured instrument that included sections on drug use patterns, drug availability, criminal behaviour, health issues and police activity. The majority of interviews took approximately 45 minutes to one hour to conduct. Notes were taken during the interview and the responses were analysed and sorted for recurring themes. Interviews were conducted either in person or via telephone between July and September 2011. KE were renumerated with a small incentive (e.g. box of chocolates, coffee) for their time.

Eighty-nine KE across the country participated in the 2011 EDRS. These included law enforcement personnel, drug treatment staff, harm reduction workers (including needle and syringe program (NSP) workers), emergency workers, ambulance services, first aid workers/'drug rovers', forensic scientists, counsellors, health promotion officers, peer educators, youth workers, DJs, party promoters/event organisers, policy officers, researchers, dealers/users and venue managers/staff. Many KE reported they had contact with a range of REU, although several also reported having contact with specific groups such as youth, people who regularly inject drugs, human immunodeficiency virus (HIV) -positive people, and the gay and lesbian community.

KE reports are critical in providing a context within which the REU participant data may be understood, e.g. in providing an indication of the extent to which trends may be extending to groups of users in other areas. Detailed reports of key findings arising from KE interviews may be found in each jurisdictional report available on the NDARC website: www.ndarc.med.unsw.edu.au.

2.3 Other indicators

To complement and validate data collected from user surveys and KE interviews, a number of secondary data sources were examined. These included data from health, survey, research and law enforcement sources.

[2] See www.ndarc.med.unsw.edu.au for details (click on 'Drug Trends').

Data sources that are included in the national IDRS report were obtained as part of the National Illicit Drug Indicators Project (NIDIP) and include:

- The 2010 NDSHS (AIHW, 2008a);
- Drug purity data provided by the ACC. These data include the number and median purity of seizures of illicit drugs made by state/territory and federal law enforcement agencies that were analysed in Australia;
- Data on consumer and provider arrests by drug type provided by the ACC;
- Data from the National Hospital Morbidity Database (NHMD) provided by the AIHW (the ACT, TAS, NT, QLD, SA, NSW, VIC and WA health departments contribute to this database);
- Data from the Alcohol and Other Drug Treatment Services-National Minimum Dataset (AODTS-NMDS) provided by the AIHW;
- National notifiable diseases surveillance data provided by the AGDH&A National Notifiable Disease Surveillance System (NNDSS);
- Cocaine and amphetamine-related overdose fatalities provided by the Australian Bureau of Statistics (ABS); and
- Data on the number and weight of seizures of illicit drugs made at the border provided by the Australian Customs Service (ACS).

DEMOGRAPHICS

- REU in 2011 continue to be a group that are aged in their mid-20s (mean age of 24 years), predominantly male (69%), with a majority identifying as heterosexual (88%) and being of single marital status (61%). Small proportions reported a currently being in drug treatment which was mainly drug counselling.
- The REU interviewed were well educated: 78% had completed secondary school; 46% had obtained post-secondary qualifications; while 10% were full-time students.
- One quarter (25%) of the national sample was currently in full-time employment. The mean weekly income was $546. The main source of income was salary/wages (61%). The majority were renting (61%) or living in the parental/family home (29%).
- In 2011, REU participants were recruited primarily through adverts in street press and word-of-mouth, fliers were also a stable means of recruitment. Although the same recruitment methodology to previous years was applied, difficulty was experienced in the NT and WA in being able to recruit 100 REU in the allotted time period.
- Data across time show that key demographic characteristics of the sample have remained stable.

In the 2011 EDRS, 574 REU participants were interviewed. The national sample comprised of 103 REU from Brisbane and Gold Coast (QLD); 101 Melbourne (VIC), 100 from Sydney (NSW), 80 from Canberra (ACT), 76 from Adelaide (SA), 75 from Hobart (TAS), 28 from Perth (WA); and 11 from Darwin (NT). The sample size was predetermined, with each state/territory aiming to interview 100 REU. Although the same recruitment strategies were employed across all jurisdictions, certain states found it difficult to recruit 100 eligible participants in the required timeframe. This may indicate a smaller or more hidden population of REU in these jurisdictions, which is further discussed in the ecstasy chapter. Given the small numbers in the NT, a bulletin has been released with the 2011 findings (Phillips & Burns, 2012 in press; please see the NDARC website for details).

3.1 Overview of the REU participant sample

Three fifths (69%) of the national sample interviewed in 2011 were male. The mean age of the sample was 24 years (SD=6.12, range=16-57). There was a significant difference between gender and age, with males found to be significantly older than females (24.72 *versus* 23.64, t_{572}=1.984, p<0.05). Most participants identified as heterosexual and nominated English as the main language spoken at home. The majority of participants were also born in Australia (88%) with the following majority born in the United Kingdom (3%) and New Zealand (2%). A minority (1%) identified as being of Aboriginal and/or Torres Strait Islander (ATSI) descent. The majority lived in either their own premises (purchased or rented) or in their parents' or family's house (Table 1).

The mean number of years of school education completed by the sample was 12 (SD=0.81, range=7-12), and 77% had completed high school education (year 12 or above). More than half had completed courses after school, with 22% having completed a trade or technical qualification and 24% having completed a university degree or college course. Main source of income for this sample was wages or salary (61%) followed by government benefits (28%), parental allowance (5%), criminal activity (2%), sex work (<1%) and other means (3%). Mean weekly income nationally was $546 with variations across jurisdictions (Table 1).

Over half (61%) of the national sample reported that they were of single status and one-third (33%) had a partner. Six percent reported being married or living in a de facto relationship, and less than 1% reported that they were separated, divorced or widowed respectively.

Five percent (n=26) of the national sample reported that they were currently in drug treatment (Table 1). Of those that were in treatment, drug counselling was reported as their main form of treatment (n<10), with small numbers (n<5) reporting other treatments including methadone and buprenorphine treatment (Subutex or Suboxone) treatment.

Table 1: Demographic characteristics of REU, 2011

(%)	National N=693	National N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Mean age (years)	24	**24**	24	22	26	25	23	27	26	25
Male	58	**69**	77	66	64	65	68	68	55	70
English speaking background	98	**98**	98	99	98	100	97	96	100	97
Aboriginal and/or Torres Strait Islander	1.5	**1**	1	1	2	0	1	4	9	0
Sexual identity										
Heterosexual	86	**88**	76	89	86	91	99	100	82	88
Gay male	5	**4**	9	6	5	0	0	0	9	5
Lesbian	3	**2**	7	1	3	0	0	0	0	0
Bisexual	6	**5**	7	4	6	9	1	0	9	6
Other	<1	**<1**	1	0	0	0	0	0	0	1
Mean years of school education (n)	12	**12**	12	12	12	12	12	11	11	12
Tertiary qualifications	47	**46**	40	24	58	53	55	36	82	42
Employed full time	29	**25**	26	23	25	32	21	14	55	26
Students[#]	12	**10**	11	10	9	11	8	7	18	12
Unemployed	14	**22**	25	19	32	19	22	25	18	15
Mean weekly income ($)	N=591 $566	**N=522 $546**	N=87 $522	N=71 $525	N=96 $539	N=69 $678	N=73 $459	N=13 $471	N=11 $810	N=102 $541

Source: EDRS REU interviews
[#] Question wording changed in 2007 to include only full-time students
Note: Meanweekly income first included in 2009

Table 2: Demographic characteristics of REU continued, 2011

(%)	National N=693	National N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Accommodation										
Own house/flat	7	**5**	4	11	6	5	3	0	0	1
Rented house/flat	56	**61**	49	46	61	76	57	64	91	73
Family home	34	**29**	41	43	20	13	40	29	9	22
Boarding House/hostel	2	**3**	6	0	6	1	1	4	0	3
Drug residence	<1	**0**	0	0	0	0	0	0	0	0
Shelter /refuge	0	**<1**	0	0	0	0	0	0	0	1
No fixed address	<1	**2**	0	0	7	4	0	4	0	1
Currently in drug treatment	4	**5**	3	4	4	4	4	7	0	9

Source: EDRS REU interviews
[#] Question wording changed in 2007 to include only full-time students
Note: Meanweekly income first included in 2009

The demographic characteristics of the REU recruited were generally consistent across jurisdictions, though some jurisdictional differences were noted. Reasons for these demographic differences between jurisdictions are unclear. Participants were recruited using the same methodology and eligibility criteria. It may be that there are differences between groups of REU around the country.

Table 3 presents key demographic characteristics across time. The age of REU in the national sample, have consistently been aged, on average, in their mid-20s. Other key demographic characteristics have also remained consistent across time. The proportions reporting a prison history and/or current engagement in drug treatment have remained low, supporting previous findings that REU are a group with little contact with law enforcement and drug treatment services.

Table 3: Demographic characteristics of REU, 2003-2011

(%)	2003 N=809	2004 N=852	2005 N=810	2006 N=752	2007 N=741	2008 N=678	2009 N=756	2010 N=693	2011 N=574
Mean age (n; range)	25 (15-59)	24 (16-61)	24 (16-61)	25 (16-71)	25 (16-54)	25 (17-59)	24 (16-54)	24 (16-59)	**24 (16-57)**
Male	60	62	59	63	58	57	64	58	**69**
English speaking background	98	98	98	98	98	98	98	98	**98**
Heterosexual	82	83	84	84	81	81	86	86	**88**
Tertiary qualifications	46	50	50	45	56	53	43	47	**46**
Employed full time	30	37	35	37	33	41	29	29	**25**
Unemployed	25	16	14	16	16	11	18	14	**22**
Prison history	8	7	8	7	6	4	6	4	**n.a**
Currently in drug treatment	6	3	3	4	4	3	3	4	**5**

Source: EDRS REU interviews

3.1.1 Recruitment of REU sample, 2011

Participation in the EDRS and/or IDRS study in previous years has continued to be reported by a minimal number of participants. Participants that meet criteria for the IDRS, that is regular injectors of illicit drugs, are purposefully screened out of the EDRS as they become a sentinel group able to provide information of a different nature for the IDRS study. Street press advertising continued to be the medium which most participants were recruited followed by word-of-mouth and then fliers(Table 4). Despite the use of the same methodology, participants in the NT and WA were extremely difficult to recruit in the given timeframe. See Figure A1 for total number of participants recruited over time. For further explanation on jurisdictional differences please consult the relevant 2011 jurisdictional report.

Table 4: Previous participation in the EDRS and IDRS and source of participant recruitment, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	**2011 N=574**	**n=100**	**n=80**	**n=101**	**n=75**	**n=76**	**n=28**	**n=11**	**n=101**
Previously participated in EDRS	**17**	**18**	9	24	15	44	11	11	46	12
Where found out about EDRS survey recruitment										
Internet	**5**	**9**	16	9	10	0	4	22	0	7
Word of mouth	**35**	**31**	29	26	30	65	21	19	50	19
Advert in street press	**48**	**39**	47	34	54	5	45	52	10	41
Fliers	**11**	**20**	7	31	0	28	29	7	40	30
Other	**2**	**2**	1	0	7	1	0	0	0	3
Previously participated in IDRS	**2**	**1**	0	0	2	0	1	7	0	3

Source: EDRS REU interviews

4 CONSUMPTION PATTERN RESULTS

4.1 Drug use history and current drug use

- Ecstasy continues to decline at a significant rate in relation to preference as a drug of choice (37% in 2010 to 27% in 2011). All other drugs including the top three: cannabis (20%), cocaine (14%) and alcohol (11%) continue to be reported at stable levels of preference.
- Significant increases were reported in those that reported excess stimulant use in a 'binge session'.
- Poly drug use is reported by this sample in a fortnightly to monthly frequency.
- Almost half of the sample commented on changes in the drug market over the preceding six months to interview, the main themes included: The low quality or purity of ecstasy pills and the increase in use of MDMA capsules, new drugs on the market such as: mephedrone, DMT and BZP, and an increase in prevalence of acid and decrease in drug use generally.

In 2011, participants were asked about lifetime (i.e. ever having used) and recent (last six months) use of a broad range of drug types, including alcohol and tobacco.

The participants recruited for the EDRS were well placed to comment on the market characteristics of the main drugs focused on in the EDRS, namely ecstasy, methamphetamine, cocaine, ketamine, GHB and LSD.

Participants reported the use of a wide range of other drugs in their lifetime (Table 5). A small proportion of REU reported the use of less commonly used substances, including many of the synthetic analogues known as 'research chemicals' that have had much media attention including mephedrone, ivory wave, DMT (a powerful hallucinogen); synthetic drugs such as 2CI, 2CB and benzylpiperizines (BZP); and naturally occurring drugs, such as kava (data not shown). First included in 2010 and continued in 2011, the EDRS included a section investigating the prevalence of use of these substances in this sample. Results can be found in the Section 5.7 Emerging psychoactive substances. Jurisdictional reports may also provide a more detailed overview of the use of these drugs in those areas.

The drugs most likely to have ever been used and to have been used in the preceding six months were alcohol, followed by cannabis and tobacco (Table 5). Sixteen percent of the national sample reported having ever injected a drug, and one-tenth of the sample had injected a drug in the six months preceding interview.

Table 5: Lifetime and recent (last six months) polydrug use of REU, 2011

(%)	National N=693 2010	National N=574 2011	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever injected a drug	**16**	20	13	9	27	22	16	36	18	24
Injected drug recently	**10**	N=410 18	n=74 14	n=64 11	N=34 50	n=61 16	n=70 7	n=7 100	n=10 0	n=90 19
Alcohol										
ever used	**99.6**	99.7	100	100	99	100	99	100	100	100
recent use	**97**	98	99	99	97	100	99	93	91	98
median days recent use (n; range)	**60 (2-180)**	48 (2-180)	48 (5-180)	37 (3-180)	48 (2-180)	60 (3-180)	48 (3-180)	52 (2-180)	90 (48-180)	72 (3-180)
Cannabis										
ever used	**99**	98	97	98	96	100	97	100	100	100
recent use	**80**	85	83	88	86	67	92	86	73	93
median days recent use (n; range)	**24 (1-180)**	48 (1-180)	48 (1-180)	48 (1-180)	48 (1-180)	24 (1-180)	50 (1-180)	155 (1-180)	60 (1-180)	50 (1-180)
Tobacco										
ever used	**95**	95	95	94	92	97	93	89	82	99
recent use	**86**	86	92	86	82	83	86	89	82	88
median days recent use (n; range)	**180 (1-180)**	180 (1-180)	180 (1-180)	180 (2-180)	180 (1-180)	90 (1-180)	180 (3-180)	180 (4-180)	90 (10-180	180 (1-180)
Meth. powder (speed)										
ever used	**76**	**77**	67	78	88	76	67	67	100	82
recent use	**47**	49	32	50	69	47	45	44	91	49
median days recent use (n; range)	**3 (1-180)**	5 (1-180)	2.5 (1-40)	4.5 (1-90)	11 (1-115)	3 (1-48)	4 (1-96)	8 (2-56)	8 (3-180)	4 (1-159)
Meth. base										
ever used	**30**	**36**	41	24	32	16	41	36	46	53
recent use	**13**	**16**	16	10	12	8	24	11	18	26
median days recent use(n; range)	**2 (1-150)**	**4 (1-150)**	2 (1-20)	4.5 (1-36)	5 (1-72)	3 (1-4)	5 (1-150)	6 (2-24)	1 (-)	4.5 (1-72)
Crystal meth. (ice/crystal)										
ever used	**38**	**43**	37	23	56	25	50	64	82	52
recent use	**17**	**26**	19	9	38	5	43	46	27	32
median days recent use (n; range)	**4 (1-40)**	**6 (1-159)**	5.5 (1-96)	2 (1-5)	8 (1-120)	2 (1-5)	5.5 (1-150)	16 (1-70)	1 (1-14)	5 (1-159)
Meth. (any form)										
ever used	***81***	***83***	*75*	*78*	*91*	*84*	*83*	*86*	*100*	*86*
recent use	***56***	***60***	*49*	*51*	*75*	*52*	*67*	*64*	*91*	*60*
median days recent use (n; range)	***4 (1-180)***	***6 (1-180)***	*3.5 (1-96)*	*5.5 (1-95*	*12 (1-180)*	*3 (1-48)*	*6 (1-165)*	*12 (2-112)*	*11.5 (3-180)*	*6 (1-159)*
Cocaine										
ever used	**73**	**79**	84	76	74	74	75	82	100	86
recent use	**48**	**46**	59	43	43	39	45	32	27	52
median days recent use (n; range)	**3 (1-180)**	**2 (1-120)**	4 (1-120)	3.5 (1-24)	2.5 (1-60)	1 (1-30)	2 (1-20)	1.5 (1-15)	2 (-)	2 (1-80)
LSD										
ever used	**63**	**73**	75	60	82	65	63	71	90	86
recent use	**38**	**46**	46	39	57	43	30	36	60	52
median days recent use (n; range)	**3 (1-96)**	**3 (1-72)**	2 (1-48)	3.5 (1-24)	4 (1-48)	3.5 (1-48)	2 (1-20)	3.5 (1-30)	7.5 (1-22)	2 (1-72)

Source: EDRS REU interviews

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2011continued

(%)	National N=693 2010	National N=574 2011	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD N=103
MDA										
ever used	**17**	**25**	22	21	27	32	32	25	36	17
recent use	**7**	**12**	8	9	12	21	15	14	27	6
median days recent use (n; range)	**2 (1-20)**	**2 (1-24)**	2.5 (1-12)	3 (2-20)	2.5 (1-24)	2 (1-12)	4 (1-12)	1 (1-3)	5 (1-10)	1 (1-4)
Ketamine										
ever used	**36**	**42**	56	29	60	32	37	18	73	36
recent use	**12**	**16**	39	14	26	8	8	0	0	4
median days recent use (n; range)	**2 (1-30)**	**2 (1-100)**	2 (1-100)	2 (1-2)	4 (1-40)	2.5^ (2-30)	2^ (1-20)	- -	- -	1 (1-2)
GHB/1,4B/GBL										
ever used	**18**	**22**	30	17	24	5	26	14	27	28
recent use	**6**	**7**	16	9	6	3	5	0	0	7
median days recent use (n; range)	**2 (1-96)**	**2 (1-125)**	2 (1-125)	1^ (1-2)	6.5^ (1-25)	1.5^ (1-2)	9^ (1-24)	- -	- -	1^ (1-6)
Amyl nitrate										
ever used	**51**	**60**	75	50	62	76	45	29	64	57
recent use	**29**	**26**	40	28	24	29	17	7	18	22
median days recent use (n; range)	**3.5 (1-180)**	**3 (1-100)**	3 (1-72)	3.5 (1-30)	4.5 (1-60)	4 (1-20)	1 (1-30)	17.5^ (15-20)	1.5^ (1-2)	3 (1-100)
Nitrous oxide										
ever used	**47**	**52**	41	44	55	59	59	50	82	55
recent use	**20**	**25**	13	24	33	36	36	18	46	16
median days recent use (n; range)	**4 (1-180)**	**4 (1-180)**	3 (1-180)	5 (1-100)	4 (1-48)	5 (1-24)	3 (1-20)	2^ (1-15)	7^ (1-39)	3.5 (1-48)
Licit benzodiazepines										
ever used	**17**	**21**	15	14	30	18	20	18	18	28
recent use	**10**	**14**	10	9	19	12	15	11	18	19
median days recent use (n; range)	**20 (1-180)**	**30 (1-180)**	27.5 (2-180)	30^ (1-180)	24 (1-180)	20^ (2-180)	22 (3-72)	180^ (-)	31^ (2-60)	30 (3-180)
Illicit benzodiazepines										
ever used	**43**	**53**	50	44	65	51	42	50	55	60
recent use	**26**	**34**	25	25	46	36	33	29	46	36
median days recent use (n; range)	**3 (1-180)**	**5 (1-180)**	6 (1-24)	3 (1-25)	10 (1-180)	5.5 (1-40)	6 (1-25)	2.5^ (1-7)	5^ (1-40)	3 (1-180)
Any benzodiazepin (licit/illicit)										
ever used	***51***	***61***	*57*	*51*	*71*	*61*	*53*	*61*	*55*	*70*
recent use	***32***	***43***	*34*	*33*	*56*	*45*	*42*	*39*	*55*	*46*
median days recent use (n; range	***5 (1-180)***	***7.5 (1-180)***	*10 (1-180)*	*8 (1-180)*	*10 (1-180)*	*7 (1-180)*	*8 (1-72)*	*4 (1-180)*	*4^ (1-75)*	*6 (1-180)*

Source: EDRS REU interviews

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2011 continued

(%)	National N=693 2010	National N=574 2011	NSW n=100	ACT n=80	VIC n=101	TAS n=76	SA n=75	WA n=28	NT n=11	QLD N=103
Licit pharm. stimulants										
ever used	**6**	**6**	9	8	8	5	4	0	0	2
recent use	**1**	**2**	3	3	4	3	0	0	0	1
median days recent use (n; range)	**180 (1-180)**	**180 (1-180)**	102^ (24-180)	95^ (10-180)	180^ (10-180)	90.5^ (1-180)	- (-)	- (-)	- (-)	1^ (-)
Illicit pharm. stimulants										
ever used	**49**	**53**	45	59	54	39	46	89	55	63
recent use	**23**	**27**	18	43	26	15	24	68	18	26
median days recent use (n; range)	**3 (1-180)**	**4 (1-100)**	3.5 (1-25)	4.5 (1-80)	3.5 (1-96)	5 (3-20)	5.5 (1-30)	10.5 (1-100)	1 (-)	3 (1-72)
Any pharm. stimulants (licit/illicit)										
ever used	***51***	***57***	*50*	*64*	*58*	*41*	*49*	*89*	*55*	*64*
recent use	***24***	***28***	*20*	*44*	*29*	*16*	*24*	*68*	*18*	*27*
median days recent use (n; range)	***4 (1-180)***	***4 (1-180)***	*4.5 (1-180)*	*5 (1-180)*	*4 (1-180)*	*6 (3-180)*	*5 (1-30)*	*10.5 (1-100)*	*1 (-)*	*3 (1-72)*
Licit antidepressants										
ever used	**21**	**23**	22	25	25	17	24	22	0	28
recent use	**10**	**9**	8	14	8	7	11	4	0	12
median days recent use (n; range)	**180 (1-180)**	**180 (1-180)**	60^ (6-180)	120 (1-180)	52^ (3-180)	180^ (75-180)	135^ (20-180)	180^ (-)	- -	180 (6-180)
Illicit antidepressants										
ever used	**8**	**8**	9	5	7	5	8	11	24	9
recent use	**3**	**2**	1	1	3	1	4	0	0	2
median days recent use (n; range)	**2 (1-60)**	**2.5 (1-48)**	1^ (-)	5^ (-)	1.5^ (1-2)	3^ (-)	6^ (1-48)	- (-)	- (-)	2.5^ (2-3)
Any antidepressants (licit/illicit)										
ever used	***27***	***29***	*27*	*29*	*31*	*23*	*28*	*30*	*27*	*34*
recent use	***12***	***11***	*9*	*15*	*11*	*8*	*13*	*4*	*0*	*13*
median days recent use (n; range)	***150 (1-180)***	***120 (1-180)***	*36^ (1-180)*	*90 (1-180)*	*14 (1-180)*	*135^ (3-180)*	*75 (2-180)*	*180 (-)*	*- (-)*	*180 (3-180)*
Magic mushrooms										
ever used	**57**	**70**	58	73	83	64	62	79	55	76
recent use	**18**	**29**	25	46	41	23	24	11	46	21
median days recent use (n; range)	**2 (1-60)**	**3 (1-32)**	2 (1-16)	3 (1-32)	2 (1-15)	3 (1-24)	3 (1-15)	2^ (1-2)	6^ (2-8)	2.5 (1-6)

Source: EDRS REU interviews

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2011 continued

(%)	National N=693 2010	National N=574 2011	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD N=103
Heroin										
ever used	**12**	**18**	13	8	28	17	16	25	9	24
recent use	**4**	**7**	2	5	15	8	7	11	0	7
median days recent use (n; range)	**12 (1-180)**	**12 (1-180)**	75.5^ (1-150)	47^ (2-96)	12 (1-180)	13^ (2-31)	2^ (1-180)	48^ (3-80)	- (-)	24^ (1-80)
Methadone										
ever used	**7**	**8**	5	5	13	8	11	7	0	8
recent use	**4**	**3**	2	4	6	4	4	0	0	2
median days recent use (n; range)	**8 (1-180)**	**4 (1-180)**	2^ (1-4)	4^ (1-180)	2^ (1-40)	180^ (6-180)	3^ (2-4)	- -	- -	180^ (-)
Buprenorphine										
ever used	**4**	**7**	3	4	11	8	5	11	0	9
recent use	**2**	**4**	1	3	5	3	5	11	0	8
median days recent use (n; range)	**45 (1-180)**	**21 (1-180)**	30^ (-)	5.5^ (1-10)	61^ (1-180)	9.5^ (4-15)	22^ (10-110)	15^ (2-180)	- (-)	24^ (5-160)
Other opiates licit										
ever used (%)	**12**	**21**	19	28	11	8	18	14	9	41
recent use (%)	**3**	**8**	5	5	3	5	9	4	0	21
median days recent use	**2 (1-90)**	**5 (1-180)**	1^ (1-4)	1^ (1-3)	4^ (2-5)	12.5^ (1-30)	7^ (1-24)	180^ (-)	- (-)	7^ (1-72)
Other opiates illicit										
ever used	**18**	**27**	19	14	39	29	28	36	18	28
recent use	**6**	**14**	9	11	19	16	15	14	0	18
median days recent use (n; range)	**3 (1-180)**	**4 (1-180)**	4^ (1-30)	3^ (1-60)	4 (1-180)	6 (1-40)	3 (1-14)	6.5^ (1-30)	- (-)	4 (1-180)
Any other opiates										
ever used	**27**	**42**	34	36	43	36	41	43	27	58
recent use	**9**	**20**	14	16	21	20	20	14	0	34
median days (n; range)	**n.a**	**1 (1-180)**	2.5 (1-30)	2 (1-60)	4 (1-180)	9 (1-40)	3 (1-25)	15.5 (n.a)	-	5.5 (1-80)
OTC codeine										
ever used	**48**	**59**	57	58	73	53	47	57	82	61
recent use	**33**	**42**	39	40	52	31	36	43	73	49
median days pain use* (n; range)	**5 (1-180)**	**6 (1-180)**	4 (1-30)	10 (1-180)	5 (1-24)	12 (2-70)	7 (2-72)	7.5^ (1-180)	5^ (1-48)	10 (1-48)
median days other use** (n; range)	**3 (1-175)**	**4.5 (1-177)**	6 (1-177)	4 (1-30)	3.5 (1-7)	4^ (1-64)	4^ (1-48)	2^ (2-4)	30^ (12-48)	8 (1-156)

Source: EDRS REU interviews

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2011 continued

(%)	National N=693 2010	National N=574 2011	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD N=103
OTC stimulants										
ever used	**37**	**40**	43	39	54	20	40	43	73	34
recent use	**22**	**23**	27	26	31	5	22	11	73	20
median days recent use (n; range)	**4 (1-72)**	**5 (1-96)**	5 (1-20)	5 (1-40)	5 (1-25)	1^ (1-2)	7 (1-48)	7^ (2-7)	6.5^ (2-96)	3 (1-24)
Steroids										
ever used	**2**	**4**	5	4	4	0	5	0	9	4
recent use	**<1**	**2**	1	3	2	0	4	0	9	2
median days recent use (n; range)	**8 (2-90)**	**21 (1-180)**	60^ (-)	30.5^ (1-60)	12.5^ (4-21)	- -	21^ (7-24)	- -	48^ (-)	91^ (2-180)

Source: EDRS REU interviews
Note: Median days have been rounded to whole numbers. *of those that used OTC codeine for pain use
**of those that used OTC codeine for other than pain use

Table 5 presents the proportion of REU reporting lifetime and recent use the main drug types investigated by the EDRS across the sampling years (methamphetamine, cocaine, LSD, MDA, GHB and ketamine) as well as the proportion reporting lifetime and recent use of alcohol and cannabis. The proportion of participants reporting lifetime use of the drugs presented in Table 5 has remained consistent across the five sampling years.

Increasing and decreasing trends are evident across time in relation to lifetime and recent use of ecstasy and related substances (Table 6). In 2011, of interest is the increasing trend of lifetime and recent use of ice/crystal methamphetamine, and the continuing increasing trend of LSD use.

Table 6: Lifetime and recent (last six months) polydrug use of REU, 2003-2011

(%)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Alcohol									
ever used	98	99	99	99	100	99	99	99	**100**
used last six months	93	95	97	96	98	97	97	97	**98**
Cannabis									
ever used	96	96	97	98	100	97	98	99	**98**
used last six months	85	81	84	83	87	76	82	80	**85**
Meth. powder (speed)									
ever used	87	85	89	86	82	77	74	76	**77**
used last six months	73	68	74	64	57	46	45	47	**49**
Meth. base									
ever used	51	53	52	52	45	39	33	30	**36**
used last six months	36	39	38	34	26	18	15	13	**16**
Crystal meth. (ice/crystal)									
ever used	63	63	60	65	54	47	36	38	**43**
used last six months	52	45	38	49	33	24	15	17	**26**

Source: EDRS REU interviews
+ GHB category also includes 1,4 butanediol (1,4B) and GBL
^ Refers to participants who nominated one or more of the following drugs: speed, base and/or ice/crystal

Table 7: Lifetime and recent (last six months) polydrug use of REU continued, 2003-2011

(%)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Meth. (any form)^									
ever used	92	91	94	93	89	83	79	81	**83**
used last six months	84	83	84	82	71	59	54	56	**60**
Cocaine									
ever used	54	54	61	63	66	68	63	73	**79**
used last six months	24	27	41	37	40	36	39	48	**46**
LSD									
ever used	65	60	64	61	61	58	61	63	**73**
used last six months	29	26	32	29	28	30	34	38	**46**
MDA									
ever used	33	32	20	23	24	21	14	17	**25**
used last six months	19	15	9	7	6	4	5	7	**12**
Ketamine									
ever used	40	40	38	35	39	35	29	36	**42**
used last six months	26	23	21	14	16	12	10	12	**16**
GHB/1,4B/GBL+									
ever used	22	23	21	20	20	17	14	18	**22**
used last six months	12	11	10	9	7	7	4	6	**7**

Source: EDRS REU interviews
+ GHB category also includes 1,4 butanediol (1,4B) and GBL
^ Refers to participants who nominated one or more of the following drugs: speed, base and/or ice/crystal

4.1.1 Injecting drug use

Twenty percent of the national sample reported that they had injected a drug in their lifetime, and 18% had injected in the preceding six months. Among those who had recently injected, the most commonly reported drugs injected recently were methamphetamine (any form) was the most commonly last injected drug in the preceding six months, followed by heroin.For further details, please refer to Section 7.1 *Injecting Risk Behaviour* section.

4.1.2 Drug of choice and binge drug use

Ecstasy was the drug of choice for just under one-third (27%) of respondents in 2011. This is a significant decrease from the percentage that reported ecstasy as their drug of choice in 2010 (37% in 2010 vs 27% in 2011 $p<0.05$). The next most commonly preferred drug was cannabis, followed by cocaine, and alcohol (Table 8). Trend data would indicate that ecstasy has been declining in preference (52% in 2003 to 27% in 2011) and alcohol and cocaine have been subsequently increasing in preference in this sample (Figure 1).

Participants were asked whether they had binged on ERD in the six months proceeding interview. Bingeing was defined as using drugs on a continuous basis for more than 48 hours without sleep (Ovendon and Loxley 1996). One-fifth (41%) of the national sample had binged on one or more drugs in the preceding six months on a median of three occasions (range 1-65). The median length of the longest binge was almost three days (72 hours).

Amongst those who had binged for over 48 hours, ecstasy (80%) was the drug most commonly reported being used in a binge session. Alcohol more than five standard drinks (67%), cannabis (58%), speed (38%), energy drinks (35%) and ice/crystal methamphetamine (32%) were also frequently reported as being used in a binge session. Other drugs mentioned included LSD (25%), cocaine (23%), base (13%), benzodiazepines (11%), nitrous oxide (10%), mushrooms (7%), pharmaceutical sitmulants (7%), ketamine (6%), amyl nitrate (5%), and GHB (3%). Several EPS was also mentioned as a bingeing agent by (4%; n=9 participants).

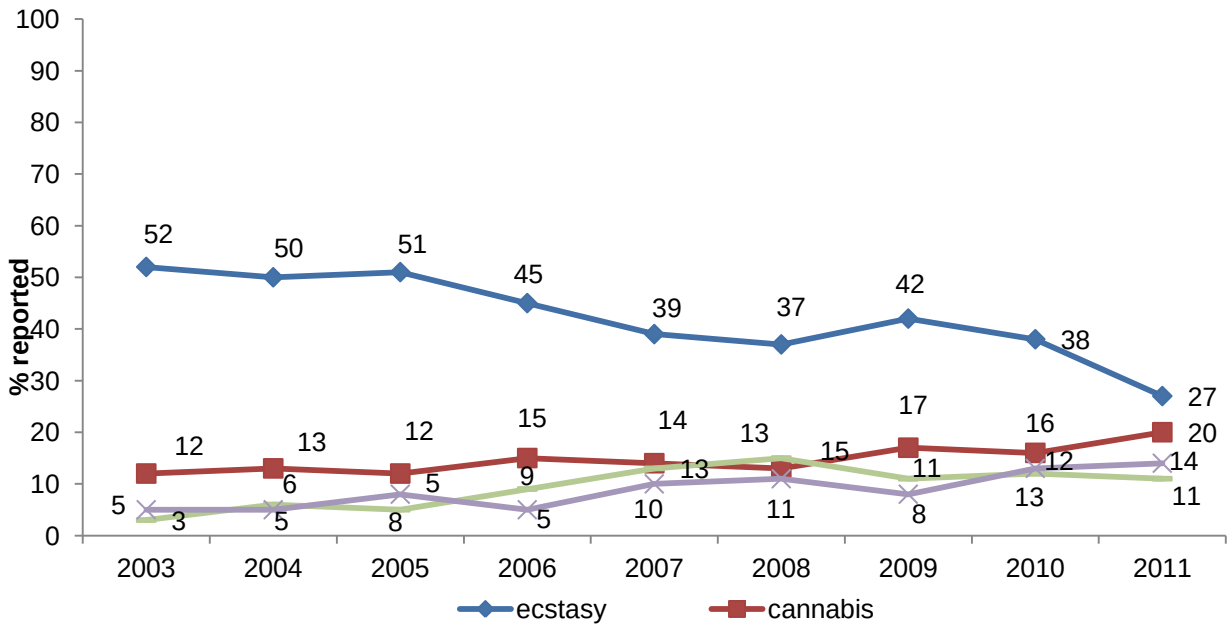
Table 8: Drug of choice and recent (last six months) bingeing among REU, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	**2011 N=574**	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ecstasy	37	**27 ↓**	32	23	31	28	22	26	18	28
Cannabis	16	**20**	27	26	14	7	27	26	0	19
Cocaine	13	**14**	13	15	14	19	8	7	46	13
Alcohol	12	**11**	7	14	3	23	20	11	0	8
LSD	8	**7**	9	9	10	4	0	4	0	9
Ice/crystal	3	**3**	5	1	2	0	7	7	0	2
Speed	2	**5**	2	1	11	4	3	0	18	9
Heroin	2	**3**	1	1	4	5	1	11	0	5
Base	1	**<1**	1	0	0	0	0	0	0	1
Mushrooms	1	**2**	0	3	4	1	1	4	0	2
Ketamine	1	**2**	2	1	2	3	1	0	9	0
GHB	<1	**<1**	1	0	0	0	0	0	0	1
Pharm Stim*	<1	**0**	0	0	0	0	0	0	0	0
Benzodiazepines	<1	**<1**	0	0	1	0	3	0	0	0
Binged* on any stimulant	34	**41 ↑**	40	41	41	22	47	54	64	44

Source: EDRS REU interviews

* 'Binged' was defined as the use of any stimulant for more than 48 hours continuously without sleep

Figure 1: Drug of choice for REU, 2003-2010



Source: EDRS REU interviews

In 2011, participants were asked which drug they had used most often in the month prior to interview (see table 7). Similar to recent use patterns reported by participants (table 4), cannabis (31%) followed alcohol (25%) and ecstasy (19%) were the drugs most often reportedly used. Where there was a discrepancy between nominated drug of choice and drug most often used, participants were asked the reason for this and the most common responses given for this were availability of the drug of choice (19%), price of the favourite drug (11%), health effects (4%), low purity of the favourite drug (3%), and peer influence (3%).

Table 7: Drug used most often in the last month among REU, by jurisdiction, 2011

(%)	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Cannabis	**31**	44	36	22	20	35	37	27	28
Alcohol	**25**	10	36	6	57	26	22	9	30
Ecstasy	**19**	24	14	30	15	12	11	18	20
Speed	**6**	0	1	22	3	1	0	18	6
Tobacco	**6**	4	8	5	0	15	4	0	5
Ice/crystal	**3**	5	0	1	0	7	15	0	2
LSD	**2**	6	0	2	3	0	0	18	1
Cocaine	**2**	3	1	3	0	0	0	0	2
Heroin	**2**	1	1	4	0	1	7	0	2
Other opiates	**1**	0	0	1	1	3	0	0	1

Source: EDRS REU interviews

Note: mushrooms, methadone, pharmaceutical stimulants, benzodiazepines, base, MDA, ketamine, GHB and amylnitrate were all mentioned by n<5 participants each.

4.1.3 Polydrug use in REU, 2011

In 2011, participants were asked how often they used ERDs. The majority of responses reported between monthly and weekly use which is supportive of the literature which indicates that this sample of regular ecstasy users is a poly drug using group. In comparison to 2010, there hasonly been slight variations of between month to weekly use. Very small numbers were reported for daily and more than once a week use (see Table 9).

Table 9: Frequency of polydrug use in the REU sample, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=685	2011 N=571	n=100	n=80	n=99	n=75	n=76	n=27	n=11	n=103
Not in the last month	**5**	**3**	4	3	0	5	1	4	0	2
Monthly	**27**	**22**	12	23	15	41	22	30	18	21
Fortnightly	**34**	**36**	45	30	36	32	37	33	36	37
Weekly	**24**	**28**	29	34	29	12	30	22	27	34
More than once a week	**8**	**9**	10	6	17	8	5	11	18	6
Once a day	**<1**	**1**	0	5	2	1	1	0	0	0
More than once a day	**0**	**<1**	0	0	0	0	3	0	0	0

Source: EDRS REU interviews

4.1.4 Change in trends of ERD use

Participants were asked to report if they had experienced anything novel regarding drug use (new drugs, routes of administration, types of people using) in the last six months. Proportions that reporting that there were changes are shown below in Table 10 (50% in 2010 to 45% in 2011).

Nationally, the common themes reported were:

- the low quality and decrease in use of ecstasy pills, followed by a reported increase in presence and consumption of MDMA capsules;
- new drugs on the market and friends or participants seeing and using more of these drugs such as mephedrone, DMT and BZP; and
- an increase in drug use presence of acid
- a decrease in the use of drugs generally

Readers are directed to jurisdictional reports for further in depth analysis of these trends.

Table 10: Proportion that reported recent changes in social drug use patterns, by jurisdiction, 2011

(%)	National 2010 N=693	National 2011 N=569	NSW n=98	ACT n=78	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=102
Changes in drug use	**50**	**45**	44	49	54	31	51	54	46	40

Source: EDRS REU interviews

4.2 Ecstasy use

- Ecstasy tablets were used on a median of 12 days in the six months prior to interview, i.e. approximately fortnightly. Twenty-two percent of REU reported using ecstasy more than weekly.
- Participants reported using a median of two tablets in a typical session of use, a median of 2.5 lines, and two capsules in average sessions of use.
- A significant increase was reported in those using ecstasy in the form of capsules (47% in 2010 to 53% in 2011) and powder (17% in 2010 to 26% in 2011).
- A significant increase was also reported in those that reported using drugs during the 'comedown' phase of ecstasy.
- The mean age at which ecstasy was first used was 18 years, and was used regularly (at least monthly) at a median age of 19 years. No sex differences were found.
- Ecstasy remained to be seen as a 'social' drug with REU reporting 'most' (41%) of their friends consumed it.
- Current domestic and EDRS market indicators would suggest that ecstasy consumption is decreasing. See section 5.1 *Ecstasy* for more information.

4.2.1 Ecstasy use among REU

The median age at which participants in the 2011 national sample first used ecstasy was 17 years (range=13-35years, mean is 18 years; see Table 11). Participants reported that regular (at least monthly) ecstasy use occurred at a median of 18 years (range=13-40 years, mean is 19 years of age). The median length of time since participants reported first using regularly was four years (range=0-27 years).

Participants in the national sample had used ecstasy (referring to ecstasy tablets only) on a median of 12 days in the preceding six months (range=1-96 days). There was no significant difference reported in median days use in 2011 compared with 2010, *p>0.05*. Just over half (52%, 58% in 2010) of participants had used between monthly and fortnightly (inclusive), 26% (22% in 2009) had used between fortnightly and weekly and 9% (10% in 2010) had used ecstasy more than once per week[3].

The median number of ecstasy tablets taken in a typical or average use episode in the preceding six months was two tablets (range=0.5-24 tablets),. one-third (34%) reported using over two tablets per session. During the heaviest use episode in the preceding six months, participants in the national sample reported a median of four tablets (range=1-30 tablets; see Table 9a).

The majority of participants reported using pills recently, while other forms of capsules (53%) and ecstasy powder (26%) continue to gain in popularity of use. Thirty-three percent of the national sample reported having binged on ecstasy in the preceding six months; the longest binge session reported was a median of 60 hours (range= 48-168 hours). VIC and the NT both reported the longest binge sessions of a median of 72 hours (three days). A summary of these findings is shown in Table 11.

[3] Considering ecstasy pills, powder and capsules together, results were: 52% had used between monthly and fortnightly (inclusive); 32% had used between fortnightly and weekly; and 17% had used more than once per week.

Table 11: Patterns of ecstasy use among REU, 2011

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Median age first used ecstasy (years)	**18**	**17**	17	17	18	19	17	17	17	17
Median age first used ecstasy regularly (years)	**19**	**18**	18	19	18	20	18	18	18	18
Median days used ecstasy in the last six months[#]	**12**	**12**	12	12	10	6	12	12	10	12
Used ecstasy[#] more than weekly (%)	**19**	**22**	24	28	20	11	22	29	27	24
Median tablets in typical session	**2**	**2**	2	2	2	2	2.5	2	2	2
Typically use >2 tablets (%)	**34**	**32**	42	25	28	13	51	29	46	28
Forms used (%)										
Pills	**98**	**97**	99	100	90	95	100	100	100	99
Capsules	**47**	**53↑**	55	39	64	80	34	11	64	57
Powder	**17**	**26↑**	21	23	30	26	29	7	27	32
Recently binged[*] on ecstasy (%)	**29**	**33**	31	40	33	14	40	39	55	33
Ever injected[#] ecstasy (%)	**7**	**6**	2	1	10	3	7	21	0	11
Use other drugs with ecstasy (%)	**92**	**92**	91	95	94	99	90	68	100	91
Use other drugs to come down from ecstasy (%)	**49**	**62 ↑**	70	53	67	51	67	54	46	65

Source: EDRS REU interviews

[*] Binged defined as the use of ecstasy for more than 48 hours continuously without sleep

[#] Refers to ecstasy 'pills' only; excludes powder and capsules

Note: Medians rounded to nearest whole number.

Table 12a: Quantity of average and heavy session use of ecstasy pills, powder and capsules, 2011

	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Pills used in an average session	**2 (0.25-12)**	2	2	2	2	2.5	2	2	2
Pills used in a heavy session	**4 (1-30)**	5	4	3	3	5	3	5	4
Powder used in an average session (grams)	**0.5 (0.1-3)**	0.5	1	0.5	0.5	0.5	0.2	0.375	0.5
Powder used in heavy session (grams)	**1 (0.1-6.5)**	0.5	1	0.5	0.75	0.75	0.5	0.5	1
Powder used in an average session (lines)	**2.5 (1.5-5)**	1.5	2	3	4	2.5	-	-	3.5
Powder used in heavy session (lines)	**3 (1-8)**	1.5	3.5	3	8	3	-	-	3
Capsules used in an average session	**2 (0.33-10)**	1	2	2	2	2	1	2	2
Capsules used in a heavy session	**2 (0.33-17.50)**	2	2	2	3	2	1	3	2.5

Source: EDRS REU interviews

Participants were also asked what proportion of their friends used ecstasy (see Table 13). Across jurisdictions there did not appear to be much variation with the majority reporting 41% that most of their friends used ecstasy and 31% said about half their friends used it. This is aligned with the literature that suggests ecstasy is a socially used drug. Smaller proportions reported that all (8%), a few (20%) or none (<1%) of their friends used ecstasy. There was little to no variation in reports of proportions of friends that use ecstasy from 2010 to 2011.

Table 13: Proportions of friends that use ecstasy, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=569	n=98	n=79	n=100	n=75	n=76	n=28	n=11	n=102
All friends	**9**	**8**	6	10	8	7	7	14	18	9
Most friends	**43**	**41**	37	47	41	39	46	32	36	41
About half	**30**	**31**	36	33	30	31	24	32	18	33
A few	**18**	**20**	21	10	21	24	24	21	27	17
None	**<1**	**<1**	0	1	0	0	0	0	0	0

Source: EDRS REU interviews

4.2.2 Other drug use with ecstasy and when coming down from ecstasy

The majority (92%) of REU interviewed reported that they usually used other drugs with ecstasy.

Twelve participants (2%) had used EPS with ecstasy, with four participants reporting mephedrone. As in previous years, alcohol, tobacco and cannabis were most commonly reported drugs typically used with ecstasy. Noticeably, energy drinks were consumed with ecstasy at a similar level that REU reported using any form of methamphetamine with ecstasy (see Table 14).

Table 14: Drugs usually used in combination with ecstasy among those who used other drugs with ecstasy, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=563	n=99	n=80	n=98	n=71	n=76	n=28	n=11	n=100
Alcohol >5 standard drinks*	75	**68**	62	65	63	92	70	43	82	71
Tobacco	56	**62**	53	68	65	61	62	32	82	71
Cannabis	42	**44**	34	51	52	32	49	36	55	48
Energy drinks	20	**18**	17	24	14	24	15	4	46	19
Meth. (any form)	20	**21**	14	14	28	9	30	11	64	25
Speed	14	**14**	6	13	24	9	15	7	55	16
Cocaine	11	**7**	12	6	9	3	4	0	0	7
LSD	7	**8**	5	10	11	9	4	0	27	6
Pharmaceutical Stimulants	4	**2**	1	4	3	0	0	11	9	0
Ice/crystal	4	**7**	6	1	10	0	15	4	9	8
Amyl nitrate	3	**3**	2	6	3	1	1	4	0	2
Base	3	**3**	3	3	2	0	9	0	0	3
Benzodiazepines	3	**6**	2	1	15	4	8	0	0	5
Ketamine	2	**3**	5	1	7	0	1	0	0	0
Nitrous oxide	2	**2**	1	1	3	1	5	0	9	0
GHB	1	**1**	4	0	2	0	1	0	0	1

Source: EDRS REU interviews * Of those who reported usually drinking alcohol

Over half (62%) of the sample also used other drugs to come down from ecstasy. This is a significant increase from that reported in 2010 (49% in 2010 vs 62% in 2011, *p<0.05*) (see Table 15). Similarities in drug types used are reported across 2009-10.

Table 15: Drugs used to come down from ecstasy last time used, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=568	n=99	n=80	n=101	n=72	n=76	n=28	n=11	n=101
Used drugs to come down from ecstasy	**49**	**62 ↑**	70	55	67	51	67	54	46	65
Cannabis	**36**	**48**	55	48	47	36	53	39	36	54
Alcohol >5 standard drinks	**5**	**10**	13	0	11	7	13	11	46	11
Alcohol <5 standard drinks	**6**	**3**	9	1	1	1	0	0	0	7
Tobacco	**13**	**16**	22	10	16	15	13	18	27	14
Benzodiazepines	**10**	**13**	9	4	27	13	13	14	9	13
OTC Codeine	**1**	**2**	1	0	3	0	3	4	9	4
Meth. (any form)	**<1**	**<1**	0	0	2	1	1	0	0	0
Speed	**0**	**<1**	0	0	2	1	0	0	0	0
Ice/crystal	**0**	**<1**	0	0	1	0	0	0	0	0
Nitrous oxide	**1**	**<1**	1	0	1	0	1	0	0	0
Ketamine	**1**	**1**	2	0	2	0	3	0	0	0
Base	**<1**	**<1**	0	0	0	0	2	0	0	0
GHB	**<1**	**<1**	1	0	1	0	0	0	0	0
LSD	**<1**	**<1**	0	0	1	0	0	0	0	0
Cocaine	**<1**	**0**	0	0	0	0	0	0	0	0
Pharmaceutical stimulants	**<1**	**0**	0	0	0	0	0	0	0	0

Source: EDRS REU interviews

4.2.3 Route of administration

Table 16 presents the 'main' route of administration (ROA) by jurisdiction for all forms of ecstasy. The vast majority of participants (86%) nominated oral ingestion as their main route of administration, 14% mainly snorted the drug, and small numbers mainly injected it. Two participants reported smoking and one participant as shelving/shafting as the main route of administration. The slight reported increase (though not significant) in the route of administration of snorting may be due to the increase in reported use of powder and capsule forms of ecstasy.

In relation to ecstasy pills/tabs, 97% of participants had swallowed ecstasy pills, 67% had snorted them, 5% had shelved/shafted (refers to vaginal/anal administration respectively), 5% had smoked and 2% had injected ecstasy pills. These figures were comparable to those reported in 2010. Ecstasy capsules were predominantly swallowed by 29% of the entire sample (29% in 2010), 35% had snorted (44% in 2010), 2% had smoked and two participants had injected and two participants had shelved/shafted ecstasy capsules recently. Ecstasy powder was swallowed by 20% of the national sample in the preceding six months (9% in 2010), snorted by 22% (14% in 2010), smoked by 3% of REU participants and injected by two participants. One participant reported having shelved or shafted ecstasy powder during that time (two reports in 2010).

Table 16: Main ROA of ecstasy in the last six months, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Swallow	**88**	**86**	93	95	83	71	79	93	73	90
Snort	**11**	**14**	7	5	17	29	20	7	27	7
Inject	**1**	**<1**	0	0	0	0	0	0	0	1
Other	**-**	**<1**	0	0	0	0	1	0	0	2

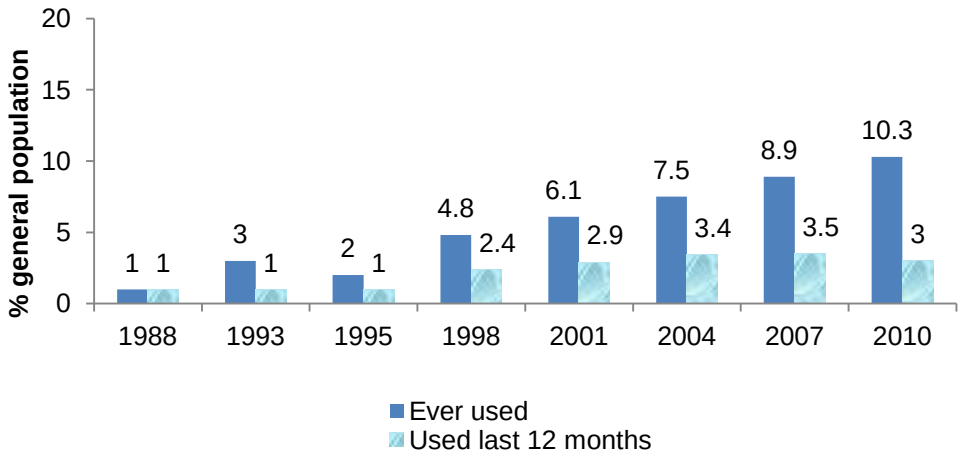
Source: EDRS REU interviews
Note: 'Other' includes methods of smoking and shelve/shaft

4.2.4 Use of ecstasy in the general population

Ecstasy remained the second most commonly used illicit drug in Australia, behind cannabis. Since ecstasy was first included in the NDSHS in 1988, reported lifetime prevalence of ecstasy use among the general population aged 14 years and above increased from 1% in 1988 to 8.9% in 2007. For the first time since 1995, there was a statiscally significant decline in recent ecstasy use between 2007 and 2010 (
Figure 2). This decrease was seen amongst males and those aged between 14-19 years of age (ref).

Ecstasy use remained highest among those aged 20-29 years , with 1 in 4 (24.2%) ever using ecstasy and 1 in 10 (9.9%) using it in the previous 12 months (AIHW, 2011).

Figure 2: Prevalence of ecstasy use in Australia, 1988-2010



Source: NDSHS 1988-2007 (Commonwealth Department of Community Services and Health 1988; Commonwealth Department of Health 1993; Commonwealth Department of Health and Family Services 1996; Australian Institute of Health and Welfare 2002; 2005; 2008; 2011)
Note: In the 2001 and earlier surveys, ecstasy was analysed as ecstasy/designer drugs, the term 'designer drugs' not being defined in the survey. The 2004 survey separated out ecstasy, ketamine and GHB and did not cover any other 'designer drugs'.

4.3 Methamphetamine use

The majority of participants reported lifetime use of one or more forms of methamphetamine (speed, base and/or ice/crystal) and over half reported use of one or more of these forms during the six months preceding interview.
The median frequency of methamphetamine use (any form) among users was six days (approximately monthly) in the preceding six months. Daily use was uncommon, with one participant reporting daily use (speed) in 2011. Fourteen percent of the national sample reported having ever injected methamphetamine (any form).

Speed powder

- Just under half (49%) of the sample reported the use of speed in the six months prior to interview. The median days of use was five days. As in 2010, VIC was the jurisdiction with the highest reported use of speed powder. The mean age of first use was 19 years.
- Among recent speed users, snorting (70%) and swallowing (63%) were the most common routes of recent (last six months) administration. Smoking appears to have increased as a reported ROA (23% in 2010 vs 35% in 2011). The amount used in an average session was 0.5 gram and the amount used in a heavy session was one gram.

Base

- Sixteen percent of participants reported using base in the six months prior to interview. The median days of use among users rose to four days from two days. QLD (26%) was the jurisdictions with the highest reported base use. The mean age of first use was 20 years.
- Among recent base users, swallowing was the most commonly nominated ROA (74%). The average amount used in a typical and heavy session was two points.
- Whilst base is the least common form used by REU participants it is the form that is reported most injected by one-fifth of recent users (21%).

Ice/crystal

- Twenty-six percent of the national sample reported recent ice/crystal use, a significant increase from 2010 (17%). The median days of use among those who had recently used also increased from four to six days (approximately monthly). . VIC (38%) was the jurisdiction with the most recent ice/crystal use reported. The mean age of first use was 22 years.
- The most common ROA for ice/crystal was smoking (80%). The average amount used in a typical session was two points and for a heavy session

4.3.1 Methamphetamine use among REU

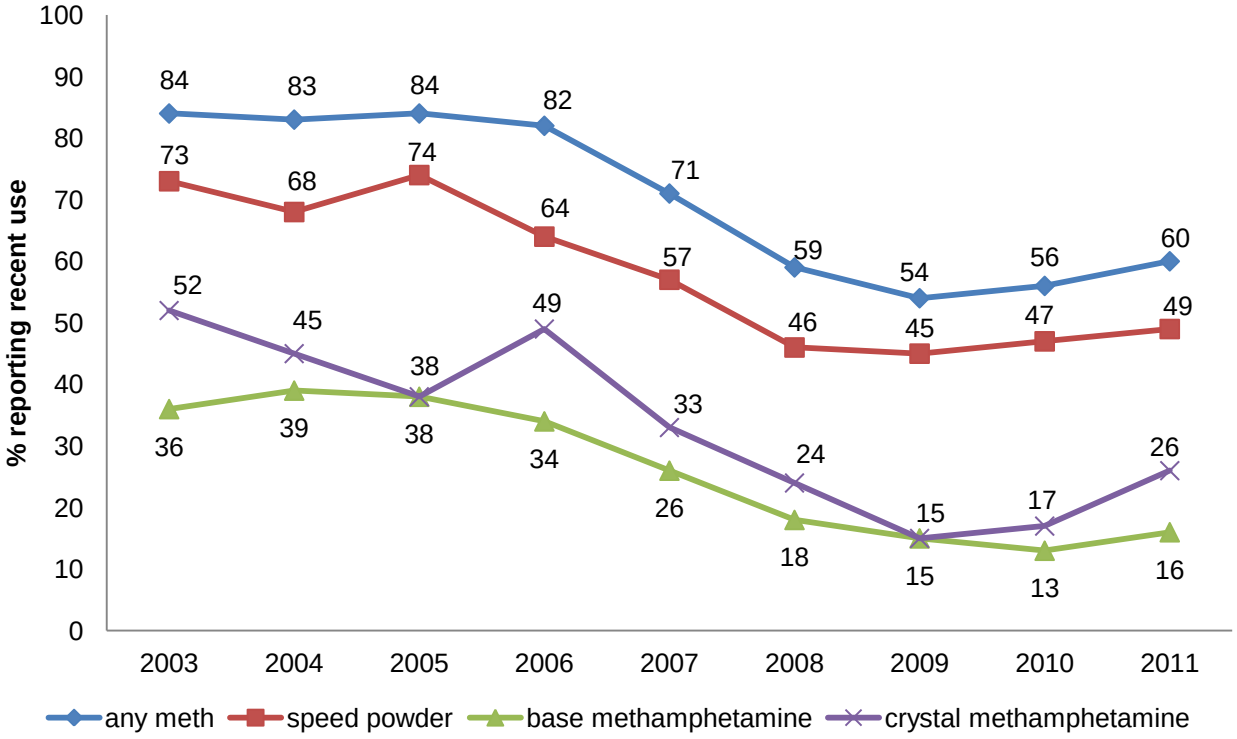
The majority (83%) of the national sample reported having used one or more forms of methamphetamine (speed, base and/or ice/crystal) at some stage during their lifetime (see Figure 3). Over half (60%) of the national sample reported use during the preceding six months, ranging from the highest use reported in VIC (75%) to the lowest use reported in NSW (49%). These results are consistent with 2010 data. Speed was the form accounting for the majority of recent any methamphetamine use. However, while still at low rates, ice/crystal methamphetamine has reported a signigificant increase in use (from 2010 17% to 2011 26%; $p<0.05$). Fourteen percent of participants in the national sample reported having ever injected methamphetamine. Frequency of use among recent users averaged approximately monthly use (median six days; Table 17). Nationally, 55% of recent users reported using less than monthly, 23% used between monthly and fortnightly, 10% had used between fortnightly and weekly and 12% had used weekly or more often. Daily use of methamphetamine was uncommon in this group, being reported by one participant in the entire sample. Levels of reported use were comparable to 2010 results.

Table 17: Patterns of methamphetamine (any form) use among REU, 2011

(%)	National 2010 N=693	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Ever used	**81**	**83**	75	78	91	84	83	86	100	86
Ever injected	**16**	**14**	6	3	21	15	15	32	9	21
Used last six months	**56**	**60**	49	51	75	52	67	64	91	60
Median days used* last six months (n;range)	**4 (1-180)**	**6 (1-180)**	3.5 (1-96)	5.5 (1-95)	12 (1-180)	3 (1-48)	6 (1-165)	12 (2-112)	11.5 (3-180)	6 (1-159)

Source: EDRS REU interviews
* Among those who had used recently.
Note: Includes speed, base and ice/crystal. Medians rounded to nearest whole number.

Figure 3: Recent any methamphetamine, speed powder, base and ice/crystal methamphetamine use, 2003-2011



Source: EDRS REU interviews

4.3.1.1 Methamphetamine powder (speed)

Three-quarters (77%) of participants in the 2011 national sample reported lifetime speed use and half (49%) had used speed in the preceding six months (Table 18). Those who had used speed recently reported first using it at mean age of 19 years (SD=2.9, range=14-35). No significant difference was found between recent six monthly use from 2010 to 2011 *(p>0.05).*

The most common ROA for speed was snorting followed by swallowing and smoking (Table 18). Routes of smoking significantly increased from 23% in 2010 to 35% in 2011 (*p<0.05*).

Of those who recently used speed, the median number of days used was five, ranging from having used once to daily use. There was a significant increase in median days used from 2010 to 2011 (speed: 3 days vs 5 days, p=0.003). Over half of recent users (55%) used less than once a month (63% in 2010), 23% used speed between monthly and fortnightly (also 23% in 2010), 10% between fortnightly and weekly (7% in 2010) and 12% used speed more than once a week (6% in 2010). Daily use was uncommon, being reported by one participant (n=1 in 2010).

Recent speed users reported using a median of half a gram in a typical session of use (range=0.5-3.5 grams) and one gram in the heaviest recent session of use (range=0.1-10 grams).

Table 18: Patterns of methamphetamine powder (speed) use among REU, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	76	**77**	67	78	88	76	67	67	100	82
Ever injected	11	**12**	4	3	19	12	8	22	9	20
Used last six months	47	**49**	32	50	69	47	45	44	91	49
Snorted*	72	**70**	88	75	81	60	62	83	90	46
Swallowed*	62	**63**	41	76	53	69	62	58	90	70
Injected*	11	**14**	3	3	17	18	9	33	0	22
Smoked*	23	**35↑**	16	20	60	15	44	33	80	22
Shelved*	0	**1**	3	0	1	0	6	0	0	0
Median days used* last six months (n; range)	3 (1-180)	**5 (1-180)**	2.5 (1-40)	4.5 (1-90)	11 (1-115)	3 (1-48)	4 (1-96)	8 (2-56)	8 (3-180)	4 (1-159)
Average grams used (n; range)*	0.5 (0.10-4.5)	**0.5 (0.05-3.5)**	0.5 (0.2-1.5)	0.55 (0.1-3.5)	0.5 (0.1-2.0)	0.5 (0.1-1)	0.85 (0.1-3)	0.5 (0.1-3)	0.5 (0.1-1)	0.5 (0.2-2)
Heaviest grams used (n; range)*	1 (0.10-10)	**1 (0.1-10)**	0.55 (0.25-6)	1 (0.25-10)	1 (0.1-4)	0.75 (0.1-3)	1.5 (0.1-5)	1 (0.2-2)	1 (0.5-2)	0.88 (0.2-3)
Drug of choice	2	**5**	2	1	11	4	3	0	18	9
Binged on speed**	40	**38**	18	53	56	38	22	20	100	36

Source: EDRS REU interviews
* Of those who used in the six months preceding interview
** Of those that had used stimulants for more than 48 hours
Note: Medians rounded to nearest whole number

4.3.1.2 Methamphetamine base

One-third (36%) of participants in the national sample reported lifetime use of base and 13% had used it in the six months preceding interview (Table 18). The mean age of first use (among those who had recently used base) was 20 years (median = 19 years, range=14-38 years). There was no significant difference found between recent users from 2010 to 2011 (*p>0.05*).

Most recent base users reported swallowing (74%) followed by smoking (74%) and snorting (27%) as the most common ROA. Injecting as a ROA was reported by 21% of recent users; a stable to 19% reported in 2010. The median number of days used was four (sporadic use), ranging from having used base once to 150 days (Table 19). There was no significant difference in median days used in 2010 compared to 2011 (*p> 0.05*). The majority of recent base users (61%) had used less than monthly; 19% used base between monthly and fortnightly; nine participants used between fortnightly and weekly (n=4 in 2010) and nine participants used base more than once a week (n=7 in 2010). There were no reports of daily use.

Recent base users reported using a median of two points in a typical session of use (range=0.1-20 points) and two points in the heaviest recent session of use (range=0.1-30 points).

Table 19: Patterns of methamphetamine base use among REU, 2011

(%)	National 2010 N=693	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Ever used	30	**36**	41	24	32	16	41	36	46	53
Ever injected	6	**8**	4	1	11	5	8	18	0	14
Used last six months	13	**16**	16	10	12	8	24	11	18	26
Snorted*	25	**27**	31	38	33	0	39	0	0	22
Swallowed*	69	**74**	100	75	50	50	83	67	50	70
Injected*	19	**21**	6	0	25	50	17	33	0	30
Smoked*	26	**48**	32	38	83	0	83	33	50	33
Median days used* last six months (n; range)	2 (1-150)	**4 (1-150)**	2 (1-20)	4.5 (1-36)	5 (1-72)	3 (1-4)	5 (1-150)	6 (2-24)	1 (-)	4.5 (1-72)
Average points used (n; range)*	2 (0.10-8)	**2 (0.1-20)**	2^ (0.1-5)	0.65^ (0.1-5)	3^ (0.5-15)	2^ (-)	2 (0.5-20)	1.5^ (1-2)	1^ (-)	2 (0.5-5)
Heaviest points used (n; range)*	2 (0.20-140)	**2 (0.1-30)**	2^ (0.1-10)	2.25^ (0.2-7)	5^ (1.5-20)	4^ (2-4)	3 (0.5-30)	2^ (-)	1^ (-)	2 (0.5-5)
Drug of choice	1	**<1**	1	0	0	0	0	0	0	1
Binged on base**	8	**13**	8	6	15	6	19	0	14	24

Source: EDRS REU interviews
* Of those who used in the six months preceding interview
**Of those that had used stimulants for more than 48 hours
^ Small numbers responded; interpret with caution
Note: Medians rounded to nearest whole number.

4.3.1.3 Crystalline methamphetamine (ice/crystal)

Forty-three percent of the participants in the 2011 national sample reported having ever used ice/crystal and around one-quarter (26%) had used ice/crystal in the six months preceding

interview (Table 20). The mean age of first use, among those who reported using ice/crystal recently, was 22 years (median = 20 years, range=11-50 years).

Of those who reported recent use of ice/crystal, the most common ROA was via smoking (80%); notable proportions also reported swallowing, snorting, injecting the drug in the past six months (Table 20).

Of those who reported recent use of ice/crystal, the median number of days used was six, (monthly use) ranging from having used once in the preceding six months to approximately almost daily (159 days; Table 20). Recent ice/crystal use significantly increased from 17% in 2010 to 26% in 2011 ($p< 0.05$). There was a significant increase in median days use of ice/crystal in 2010 compared with 2011 (ice/crystal: 4 days vs 6 days, $p=0.02$). Fifty percent of recent users reported using less than monthly (56% in 2010), 25% between monthly and fortnightly (31% in 2010), five participants reported between fortnightly and weekly use and six participants reported using more than weekly. There were no reports of daily use in 2011.

The median amount of ice/crystal used in a typical or average use episode in the preceding six months was two points (range=0.2-20 points). Recent ice/crystal users reported using a median of two-and-a-half points (range=0.2-35 points) during the heaviest recent use episode.

Table 20: Patterns of crystalline methamphetamine (ice/crystal) use among REU, 2011

(%)	National 2010 N=693	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Ever used	38	**43**	37	23	56	25	50	64	82	52
Ever injected	8	**11**	5	1	17	7	11	32	9	14
Used last six months	17	**26**	19	9	38	5	43	46	27	32
Snorted*	18	**25**	11	57	21	25	30	46	0	21
Swallowed*	33	**36**	0	43	24	25	67	31	33	42
Injected*	18	**23**	26	0	29	0	12	39	0	30
Smoked*	75	**80**	84	71	87	50	76	85	100	76
Median days used* last six months (n; range	4 (1-40)	**6 (1-159)**	5.5 (1-96)	2 (1-5)	8 (1-120)	2^ (1-5)	5.5 (1-150)	16 (1-70)	1^ (1-14)	5 (1-159)
Average points used (n; range)*	2 (0.10-10)	**2 (0.20-20)**	2 (0.5-6)	2^ (0.2-5)	2 (0.2-10)	2.5^ (0.5-15)	1 (0.5-20)	1^ (0.5-2.5)	2^ (1-2)	2 (1-5)
Heaviest points used (n; range)*	2 (0.2-20)	**2.5 (0.2-35)**	3 (0.5-12)	2^ (0.2-7)	3 (0.4-17)	2.5^ (0.5-15)	2 (0.5-35)	1^ (0.5-2.5)	1.5^ (1-2)	2 (0.5-10)
Drug of choice	3	**3**	5	1	2	0	7	7	0	2
Binged on ice/crystal**	23	**32**	25	9	49	6	44	40	29	36

Source: EDRS REU interviews

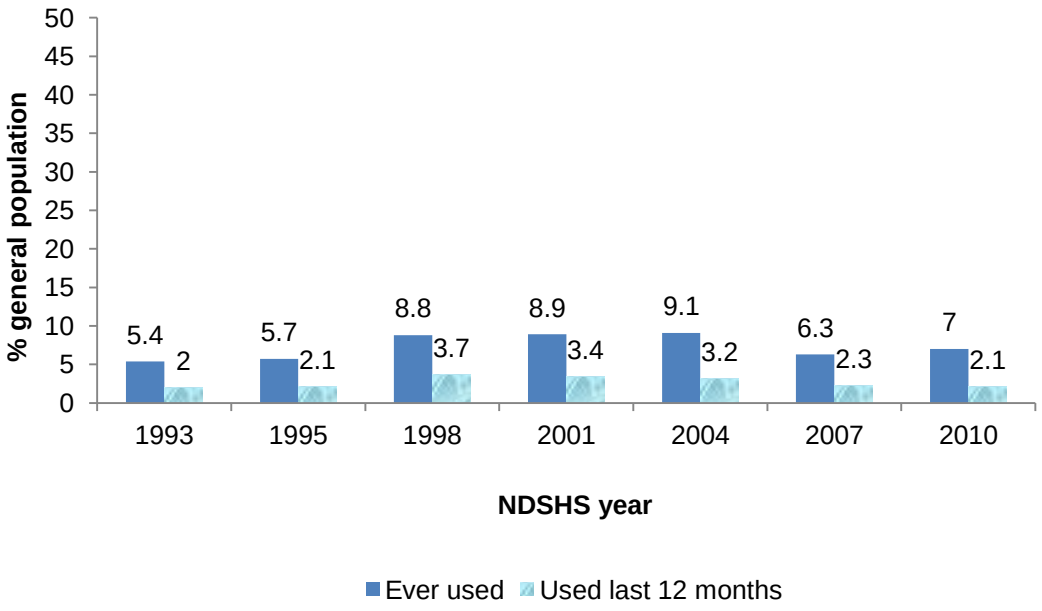
* Of those who used in the six months preceding interview ** Of those that had used stimulants for more than 48 hours

^ small numbers responded; interpret with caution Note: Medians rounded to nearest whole number.

4.3.1.4 Meth/amphetamine use in the general population

The NDSHS presents the proportion of the Australian general population who have ever used methamphetamine as well as the proportion that have used the drug in the past 12 months (see Figure 4). A noticeable increase in the lifetime use occurred between 1995 and 1998, with the proportion of the Australia general population having ever used methamphetamine remaining stable until 2007 at which time it began to decrease. In 2010, a significant increase was reported in lifetime use compared with 2007. Past-year use of methamphetamine is reported at similar levels of those reported in 2007 and 1995. Males aged 20-29 years were the only group to record a significant decrease in recent (past 12 months) use.

Figure 4: Prevalence of methamphetamine use in Australia, 1993-2010



Source: NDSHS 1993-2007 (Commonwealth Department of Health 1993; Commonwealth Department of Health and Family Services 1996; Australian Institute of Health and Welfare 2002; 2005; 2008; 2011)

4.4 Cocaine use

Current use

- Almost half (46%) of the national sample reported cocaine use in the six months prior to interview, stable with 2010 figures (48%). NSW was the jurisdiction reported with the most amount of recent use.
- Among recent users, cocaine had typically been snorted (97%), or swallowed (28%). The mean age of first use was 20 years.
- Frequency of cocaine use remained low at a median of two days (sporadic use) during the six months prior to interview. The majority (76%) had used less than once per month. There were no reports of daily use.
- The median amount of cocaine used in a typical session of use was half a gram and in a heavy session it was one gram.
- Cocaine was the drug of choice for 14% of the REU sample, similar to levels reported in 2010 (13%).

4.4.1 Cocaine use among REU

The majority (79%) of the participants in the national sample reported having ever used cocaine and just under half (46%) had used cocaine in the six months preceding interview (Table 20). There was no significant difference found in recent use of cocaine in 2011 compared with 2011. The majority of cocaine use continues to be reported on the east coast in NSW (59%) and QLD (52%). The mean age of first use, among those who reported having used cocaine recently, was 20 years (median = 19, range=14-40 years).

Of those who had used cocaine, the median number of days of use was two, ranging from having used cocaine once to 120 days (Table 21). There was no significant difference detected in median days of use between 2010 and 2011 (*p>0.05*). The majority (76%) had used less than monthly; 12% had used between monthly and fortnightly; 7% reported using between fortnightly and weekly and three participants had used cocaine once a week or more. There was no reported daily use of cocaine.

Cocaine was predominantly snorted (97%), with substantial proportions also reporting swallowing as an ROA.

The median amount of cocaine used in a typical or average use episode in the preceding six months was half a gram (range=0.1-6 grams). Recent cocaine users reported using a median of one gram (range=0.1-6.5 grams) during the heaviest use episode in the last six months (Table 21).

Table 21: Patterns of cocaine use, by jurisdiction, 2011

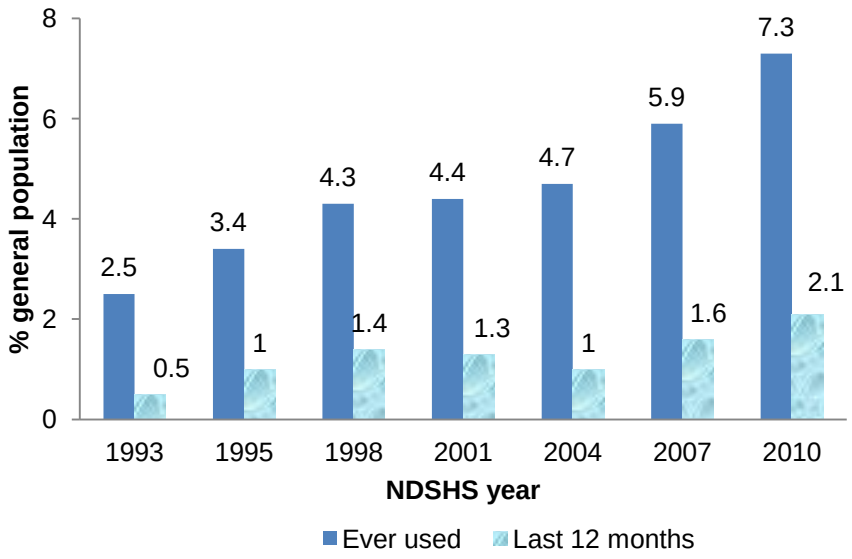
(%)	National 2010 N=693	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Ever used	73	**79**	84	76	74	75	75	82	100	86
Ever injected	5	**5**	4	1	7	4	5	7	0	9
Used last six months	48	**46**	59	43	43	39	45	32	27	52
Snorted*	96	**97**	98	100	95	100	97	100	100	91
Swallowed*	25	**28**	19	50	26	24	32	0	100	26
Injected*	4	**2**	2	0	2	0	0	0	0	6
Smoked*	5	**6**	3	3	12	0	6	0	0	9
Median days used* last six months (n; range)	3 (1-180)	**2 (1-120)**	4 (1-120)	3.5 (1-24)	2.5 (1-60)	1 (1-30)	2 (1-20)	1.5 (1-15)	2 (-)	2 (1-80)
Average grams used (n; range)*	0.5 (0.05-4)	**0.5 (0.1-6)**	0.5 (0.1-3)	0.5 (0.25-2.5)	1 (0.1-5)	0.5 (0.1-5)	1 (0.1-2)	1^ (0.5-1)	1^ (0.5-1)	0.78 (0.2-6)
Heaviest grams used (n; range)*	1 (0.05-8)	**1 (0.1-6.5)**	1 (0.1-6.5)	1 (0.5-3.5)	1 (0.1-5)	0.5 (0.1-5)	1 (0.1-3)	1^ (0.5-2)	1^ (1-5)	1 (0.25-6)
Drug of choice	13	**14**	13	15	14	19	8	7	46	13
Binged on cocaine**	28	**23**	40	28	17	13	14	13	0	27

Source: EDRS REU interviews
* Of those who used in the six months preceding interview
** Of those that had used stimulants for more than 48 hours
Note: Medians rounded to nearest whole number
^small numbers responded; interpret with caution

4.4.2 Use of cocaine in the general population

Reports of lifetime cocaine use amongst the Australian general population remained consistent between 1993 and 1995 with approximately 3% of the population having ever used the drug. This figure rose to 4.3% in 1998, and remained consistent in 2001 and 2004 (see Figure 5). In 2010, 7.3% reported ever having used cocaine, which was a significant increase from that reported in 2007 (Figure 5: Prevalence of cocaine use in Australia, 1993-20). Recent use of cocaine has remained relatively stable across the five sampling years; however, in 2004 through to 2010 this figure has been significantly increasing. In 2010, significant increases were seen among females in the 20-29 year old age category.

Figure 5: Prevalence of cocaine use in Australia, 1993-2011



Source: NDSHS 1993-2007 (Commonwealth Department of Health 1993; Commonwealth Department of Health and Family Services 1996; Australian Institute of Health and Welfare 2002; 2005; 2008; 2011)

4.5 Ketamine use

Current use

- Two-fifths (42%) of the national sample reported lifetime use of ketamine, and 16% reported using ketamine recently a siginificant increase from 2010 (12%). The mean age of first use was 21 years.
- Ketamine use is predominantly reported in NSW, VIC and the ACT. All other states had less than 10 participants reporting recent use.
- Amongst recent ketamine users, the majority (87%) snorted, while one-quarter (24%) had swallowed it. More participants reported smoking it in 2011 (7% vs 2% in 2010).
- Among users, ketamine had been used on a median of two days in the past six months; the majority (83%) had used ketamine less than once per month. There were two reports of more than weekly use.

Trend use

- In 2010, a tenth of the national sample (12%) reported using ketamine recently.
- Proportion of reported recent use of ketamine had declined in all jurisdictions from 2003-2009.

4.5.1 Ketamine use among REU

One-fifth (42%) of the 2011 national sample reported lifetime use of ketamine and just over a tenth (12%) had used it in the six months preceding interview (Table 22). There was a significant difference detected in recent use from 2010 compared with 2011 ($p<0.05$). While the figures reported were relatively low, they were more substantial than those reported in the 2010 NDSHS (0.2% recent use for participants aged 14 years and over). The EDRS has been able to monitor and document trends in ketamine use nationally since 2003, placing it in a good position to shape appropriate evidence-based policy responses in light of new trends that may be detected.

Ketamine was first used at a mean age of 21 years (median = 20 years, range=12-38 years) by recent users. Lifetime ketamine injection was reported by 2% (n=10) of the national sample (Table 22).

In the six months preceding interview, snorting (87%) was the most common ROA of ketamine, followed by swallowing (24%).

Of those who used ketamine, the median number of days used was two (range=1-100 days) (Table 22). There was no significant difference detected in median days of use in 2010 compared with 2011 ($p>0.05$). The majority (83%) had used less than monthly (70% in 2010); 10% had used between monthly and fortnightly (18% in 2010); 4% used between fortnightly and weekly. Two participants reported more than weekly use, no reports of daily use were reported.

Ketamine use was commonly quantified in ‘bumps’. A bump refers to a small amount of powder, typically measured and snorted through a bumper. A bumper is a small glass nasal inhaler that is used to store and administer powdered substances in a measured dose. The median amount of ketamine used was two bumps (range=0.3-10 bumps) for a typical or average use episode and three bumps (range=0.3-15 bumps) for the heaviest recent use episode.

Ketamine use was also quantified in lines and grams. Twelve participants reported using a median of two lines in a typical session (range=1-5 lines) and the heaviest recent session of use was two lines (range=1-5 lines). Nineteen participants reported using a median of one

gram (range=0.25-1.5 gram) in a typical session of use and reported using a median of one gram (range=0.25-3 grams) in the heaviest recent session of use.

Table 22: Patterns of ketamine use among REU, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=76	n=75	n=28	n=11	n=103
Ever used	**36**	**42**	56	29	60	32	37	18	73	36
Ever injected	**1**	**2**	1	0	5	1	1	0	0	2
Used last six months	**12**	**16↑**	39	14	26	8	8	0	0	4
Snorted*	**81**	**87**	92	36	92	100	100	-	-	100
Swallowed*	**25**	**24**	15	73	27	0	17	-	-	0
Injected*	**1**	**2**	0	0	4	17	0	-	-	0
Smoked*	**2**	**7**	5	0	12	17	0	-	-	0
Median days used* last six months (n; range)	**2 (1-30)**	**2 (1-100)**	2 (1-100)	1 (1-2)	4 (1-40)	2.5^ (2-30)	2^ (1-20)	- -	- -	1 (1-2)
Average bumps used (n; range)*	**2 (0.5-12)**	**2 (0.3-10)**	2 (1-10)	1^ (1-5)	3 (0.3-8)	- -	1^ (1-2)	- -	- -	3^ (-)
Heaviest bumps used (n; range)*	**2 (1-12)**	**3 (0.3-15)**	3 (1-10)	1^ (1-2)	3 (0.3-15)	- -	2^ (1-2)	- -	- -	3^ (-)
Drug of choice	**1**	**2**	2	1	2	3	1	0	9	0
Binged on ketamine**	**3^**	**6**	10	6	10	6	6	0	0	0

Source: EDRS REU interviews
* Of those who used in the six months preceding interview
** Of those that had used stimulants for more than 48 hours
Note: Medians rounded to nearest whole number.
^small numbers responded; interpret with caution

4.5.2 Ketamine in the general population

The 2010 NSDSHS was the third year in which the prevalence of ketamine use in the general population was investigated. Use of ketamine in those aged 14 years and above was low – only 1.4% had ever used ketamine, however this was a significant increase from 2007 (1.1%). 0.2% had used ketamine in the past year approximating 37, 000 people (Australian Institute of Health and Welfare 2011).

4.6 GHB use

Current use

- Twenty-two percent of the national sample reported lifetime use of GHB, with 7% reporting recent use. The mean age of first use was 21 years.
- There was a comparable level of recent use from 2010 (6%) to 2011 (7%). Most recent use was reported on the east coast of Australia (NSW, QLD and VIC). There were no reports of recent use in the NT and WA.
- Recent use occurred on a median of two days in the six months preceding interview; 83% reported using less than once per month.
- Recent GHB users reported using a median of 2.75 mls in a typical episode of use and a median of 4.5 ml in the heaviest recent episode of use. GHB was reported only consumed orally.

Trends in use

- There was a significant increase in recent use in 2010 compared to 2009
- Proportion of reported recent use of GHB has declined in all jurisdictions from 2003-2009.

4.6.1 GHB use among REU

Almost one-fifth (22%) of the 2011 national sample reported lifetime use of GHB and 7% had used it in the six months preceding interview (Table 23). There was no significant increase in recent use reported in 2011 compared with 2010.

GHB was first used at a mean of 21 years (median = 21 years, range=14-31 years). All recent GHB users reported swallowing GHB, there were no other ROA reported.

Of those who used GHB in the six months preceding interview, the median number of days used was two (Table 23). There was no significant difference found in median days of use in 2011 compared to 2010 ($p>0.05$). Over three-quarters of the sample (83%) reported using less than once per month (83% in 2010); four participants between monthly and fortnightly (n=3 in 2010); three participants reported using between fortnightly and weekly; two participants reported using more than once per week. No daily use was reported.

GHB use was typically quantified in millilitres (ml). The median amount used in a typical or average use episode in the preceding six months was 2.75 ml (range=0.5-50 ml). Recent GHB users reported using a median of 4.5 ml (range=0.5-50 ml) during the heaviest recent use episode.

Table 23: Patterns of GHB use among REU, 2011

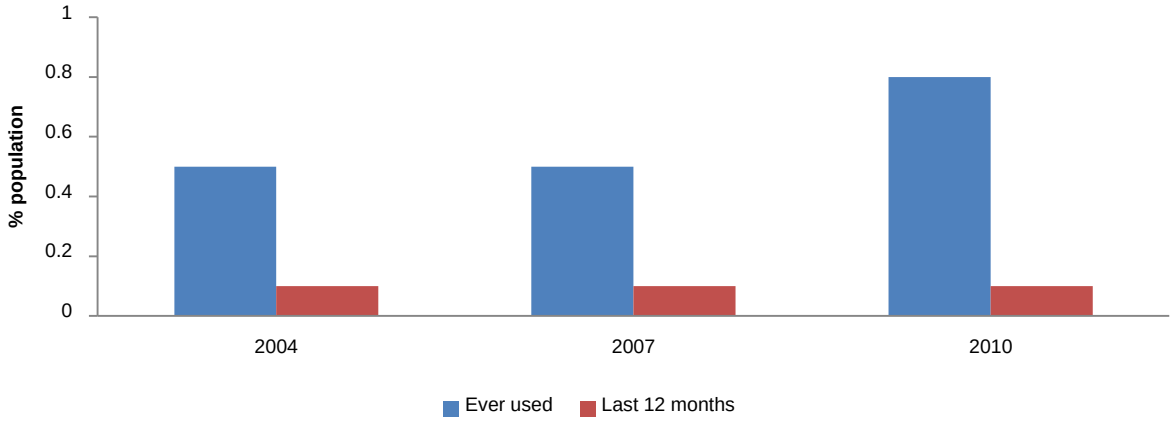
(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	18	**22**	30	17	24	5	26	14	27	28
Used last six months	6	**7**	16	9	6	3	5	0	0	7
Median days used* last six months (n; range)	2 (1-96)	**2 (1-125)**	2 (1-125)	1^ (1-2)	6.5^ (1-25)	1.5^ (1-2)	9^ (1-24)	n.a	n.a.	1^ (1-6)
Average mls used (median; range)*	3.5 (1-15)	**2.75 (0.5-50)**	2^ (1-4)	5^ (1-20)	5.5^ (1.8-50)	16^ (2-30)	5^ (2-10)	n.a	n.a	2.5^ (0.5-10)
Heaviest mls used (n;range)*	5 (1-50)	**4.5 (0.5-50)**	4^ (1-10)	5^ (2-20)	16.5^ (1.8-50)	16^ (2-30)	15^ (2-30)	n.a	n.a	5^ (0.5-12)
Drug of choice	<1	**<1**	1	0	0	0	0	0	0	1
Binged on GHB**	4	**3**	10	0	2	0	6	0	0	0

Source: EDRS REU interviews
* Of those who used in the six months preceding interview
** Of those that had used stimulants for more than 48 hours
Note: Medians rounded to nearest whole number.
^small numbers responded; interpret with caution

4.6.2 GHB use in the general population

The 2004 NSDSHS was the first to investigate the prevalence of GHB use in the general population. In 2010, results were similar to those reported in the 2007 NDSHS. Use of GHB in those aged 14 years and above was low: only 0.8% had ever used GHB, and 0.1% had used GHB in the past year.

Figure 5a: GHB in the general population 2004-2010



Source: NDSHS 1993-2007 (Commonwealth Department of Health 1993; Commonwealth Department of Health and Family Services 1996; Australian Institute of Health and Welfare 2002; Australian Institute of Health and Welfare 2005; Australian Institute of Health and Welfare 2008)

4.7 LSD use

Current use

- Seventy-three percent of the national sample reported the lifetime use of LSD; 46% reported recent use of LSD, a significant increase from 2010 (38%). The mean age of first use was 18 years.
- The median days of LSD use amongst recent users was three. Recent users reported using a median of one tab in a typical session and two tabs in the heaviest recent session of use.
- LSD remains a drug that a substantial proportion of the sample 'binge' on (25%).

Trends in use

- Recent use has steadily increased from 28% in 2003 to 46% in 2011, increasing every year. The slight majority of use appears to be reported on the east coast of Australia (NSW, ACT and QLD).
- LSD as drug of choice has incrementally increased each year from 4% in 2007 to 7% in 2011.

4.7.1 LSD use among REU

In 2011, 73% of the national sample reported lifetime use of LSD and 46% had used it in the six months preceding interview (Table 24). There was a significant increase detected between recent use of LSD in 2011 compared with 2010 (46% vs 38%, $p<0.05$). The mean age of first use was 18 years (median = 18 years, range=10-37 years).

Of those that were asked and answered positively to using other drugs with ecstasy (n=568), 8% answered that they usually used LSD with ecstasy. One participant reported using LSD to come down from ecstasy. Seven percent (n=39) of the 2011 national sample reported that LSD was their drug of choice.

The primary ROA was oral ingestion (45%), followed by nasal ingestion (2%, n=8) by recent LSD users. Two participants reported injecting, one participant shelved and smoked LSD in the last six months.

Of those who used LSD in the six months preceding interview, the median number of days used was three, ranging from having used once in the six months preceding interview to having used approximately three times weekly during this same period. There was no significant difference found in median days use in 2011 compared with 2010 ($p>0.05$). The majority (87%) had used less than monthly; 17% used between monthly and fortnightly; 7% used between fortnightly and weekly; five participants used LSD more than weekly.

The median amount of LSD used in a typical or average use episode in the preceding six months was one tab (range=0.25-20 tabs). The median amount used in the heaviest recent session was two tabs (range=0.25-40 tabs).

Table 24: Patterns of LSD use among REU, 2011

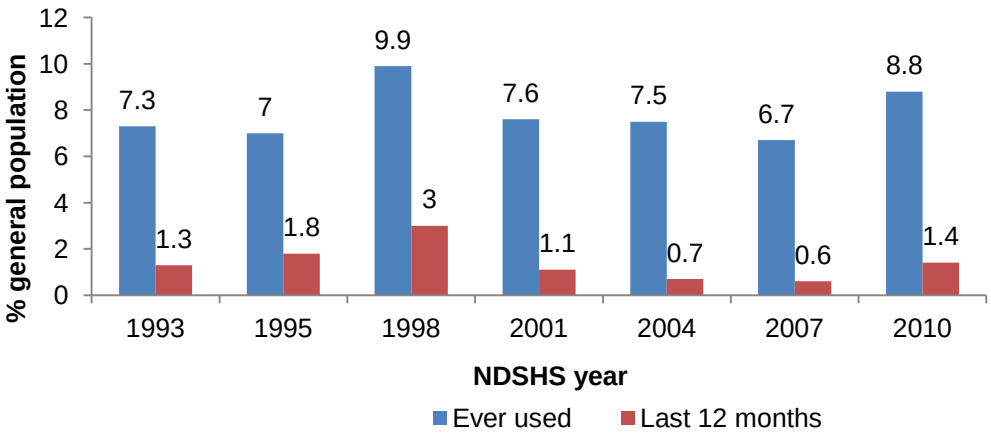
(%)	National 2010 N=693	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Ever used	63	**73**	75	60	82	65	63	71	90	86
Ever injected	1	**2**	1	0	3	3	3	0	0	1
Used last six months	38	**46**	46	39	57	43	30	36	60	52
Median days used* last six months (n; range)	3 (1-96)	**3 (1-72)**	2 (1-48)	3.5 (1-24)	4 (1-48)	3.5 (1-48)	2 (1-20)	3.5 (1-30)	7.5^ (1-22)	2 (1-72)
Average tabs used (n; range)*	1 (0.25-5)	**1 (0.25-20)**	1 (0.25-5)	1 (0.5-20)	1 (0.5-6)	1 (0.25-5)	1 (0.25-2)	1 (0.5-2)	1^ (1-2)	1 (0.5-3)
Heaviest tabs used (n; range)*	1.5 (0.25-11)	**2 (0.25-40)**	1 (0.25-20)	2 (1-40)	2 (0.5-10)	1.75 (0.25-16)	1 (0.5-4)	1.75 (0.5-3)	1.75^ (1-15)	1 (0.5-5)
Drug of choice	8	**7**	9	9	10	4	0	4	0	9
Binged on LSD**	17	**25**	18	31	37	25	8	20	43	29

Source: EDRS REU interviews
* Of those who used in the six months preceding interview
** Of those that had used stimulants for more than 48 hours
Note: Medians rounded to nearest whole number.
^small numbers responded; interpret with caution

4.7.2 Hallucinogen use in the general population

Figure 6 presents the trends in lifetime and past-year use of hallucinogens in the Australian general population aged 14 years and above. The lifetime use of hallucinogens has remained relatively constant between 1993 and 2007, with a significant increase in 2010. Recent hallucinogen use also significantly increased between 2007 and 2010, with most common use in 20-29 year olds.

Figure 6: Prevalence of hallucinogen use in Australia, 1993-2010



Source: (Australian Institute of Health and Welfare, 2011)

4.8 Cannabis use

Current trends

- Along with alcohol, cannabis was the second most used drug by the REU sample recently (85%). There was a significant increase in reported recent use and daily use compared to 2010.
- Among recent (six month) users, cannabis had typically been smoked (99%), and swallowed (37%). The mean age of first use by regular users was 15 years.
- Among those who had used cannabis in the six months preceding interview, use occurred on a median of 48 days during this time, i.e. approximately twice weekly use.
- Cannabis was the drug of choice for 20% of the sample.
- 18% of the national sample were daily cannabis smokers.
- Smoking of cannabis in cones was more common than in joints in the majority of jurisdictions. The median number of cones smoked was four.

Trends in use

- The cannabis market remains relatively stable in relation to use with a reduction from twice weekly use in 2007 to weekly use in 2009 and 2010.

Following high rates of cannabis use reported by REU samples in previous years, from 2006 the EDRS has included survey items on price, potency and availability of this drug. These items distinguish between indoor-cultivated hydroponic (hydro) and outdoor cultivated (bush) cannabis following reports of different market characteristics of each (Breen, Degenhardt et al. 2004; Stafford, Degenhardt et al. 2005). In the absence of definitive data on the extent to which this distinction reflects actual cultivation methods in Australia (Hall and Swift 2000; McLaren, Swift et al. 2008); however, use patterns refer to any form of cannabis.

In 2011, participants completing the section were asked to differentiate between hydro and bush cannabis in terms of price, potency and availability. Seventy-one percent of participants of those that used cannabis were able to distinguish between hydro and bush cannabis.

It should also be noted that the use of hashish (hash) and hash oil was rarely reported by REU participants (n=21 across all jurisdictions reported recent purchase of either form in 2011). The median price for a gram of hash is $35 (range = $20-$90) and the median price for a cap of hash oil is $35^ (range = $20- $100).

This section contains information about cannabis use by the EDRS REU sample, followed by data on market characteristics (including price, purity and availability). Information on harms (health and law enforcement-related) associated with cannabis use, including indicator data on treatment and toxicity, are discussed in the relevant sections later in this report. Further information about cannabis trends in Australia may be found in reports produced as part of the IDRS, and are available from the NDARC website[4].

4.8.1 Cannabis use among REU

Almost all (98%) of the 2011 national sample had ever used cannabis, with the majority (85%) of the sample having used cannabis in the six months prior to interview. There was a significant difference in recent use in 2011 compared with use reported in 2010 (85% in 2011 vs 80% in 2010; *p<0.05*). The mean age of first use was 15 years (median = 15 years, range=8-28 years) of recent users. Cannabis was the drug of choice for 20% of the sample (see Table 25).

[4] See www.ndarc.med.unsw.edu.au

Almost all (99%) of those who had recently used cannabis had smoked it, while one-third (37%) had recently swallowed it. Cannabis had been used on median of 48 days (range=1-180 days) in the six months preceding interview, which equates to use of approximately once per week (see Figure 7). There was no significant difference found in days of use in 2010 compared to 2011 (*p>0.05*).

Amongst recent users, 15% reported using less than once per month; 6% reported using between monthly and fortnightly; 10% reported using between fortnightly and weekly; and 60% reported using more than once per week. Twenty-one percent of recent cannabis users (18% of the entire sample) reported daily cannabis use during the preceding six months (See Figure 8). There was a significant difference in the proportion of daily cannabis users from 2010 (14%) to 2011 (18%; *p<0.05*).

Recent cannabis users were asked how much cannabis they had smoked on the last day of use, as measured by the number of cones or joints used on that occasion, either by themselves or shared with others. Nationally, cannabis had been predominantly smoked in cones (47%) as opposed to joints (40%). Among those who had smoked in cones, the median number used on the last day was four (range=0.25 to 50 cones), while the number of joints smoked was one (range=0.10 to 10 joints). Daily users of cannabis had smoked a median of five cones (range=1-50 cones) or two joints (range=0.5-6 joints) on the last day of use.

Table 25: Patterns of cannabis use among REU, 2011

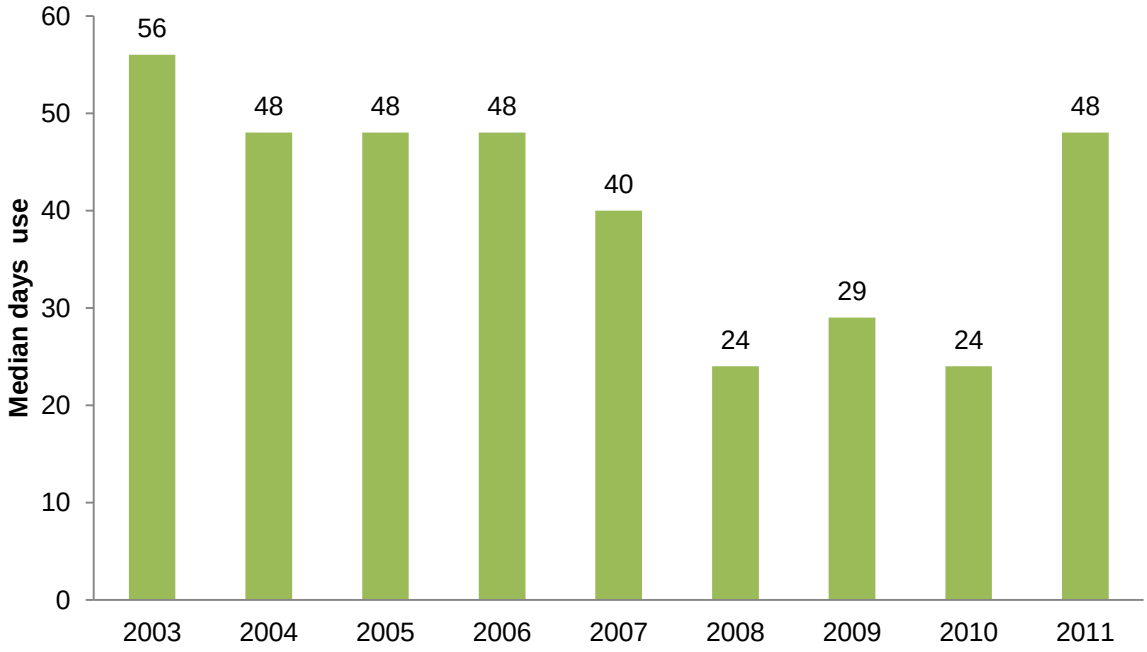
(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	99	**98**	97	98	96	100	97	100	100	100
Used last six months	80	**85**	83	89	86	67	92	86	73	93
Smoked*	98	**99**	100	99	100	100	100	96	100	99
Swallowed*	33	**37**	35	35	52	32	40	33	25	28
Median days used* last six months (n; range)	24 (1-180)	**48 (1-180)**	48 (1-180)	48 (1-180)	48 (2-180)	24 (1-180)	50 (1-180)	155 (1-180)	60 (1-180)	50 (1-180)
Cones used last time (n; range)*	3 (0.33-180)	**4 (0.25-50)**	4 (1-34)	5 (0.5-20)	4.5 (1-50)	5 (1-24)	3 (0.25-15)	3 (1-12)	4^ (3-5)	3 (1-15)
Joints used last time n; (range)*	1 (0.1-12)	**1 (0.1-10)**	1 (0.1-5)	1 (0.25-6)	1 (0.25-5)	1 (0.3-5)	1 (0.5-3)	1^ (0.5-6)	1.5^ (1-3)	1 (0.33-10)
Drug of choice	16	**20**	26	14	7	27	26	0	19	20
Binged on Cannabis**	51	**58**	53	75	61	56	58	40	57	53

Source: EDRS REU interviews

* Of those who used in the six months preceding interview** Of those that had used stimulants for more than 48 hours

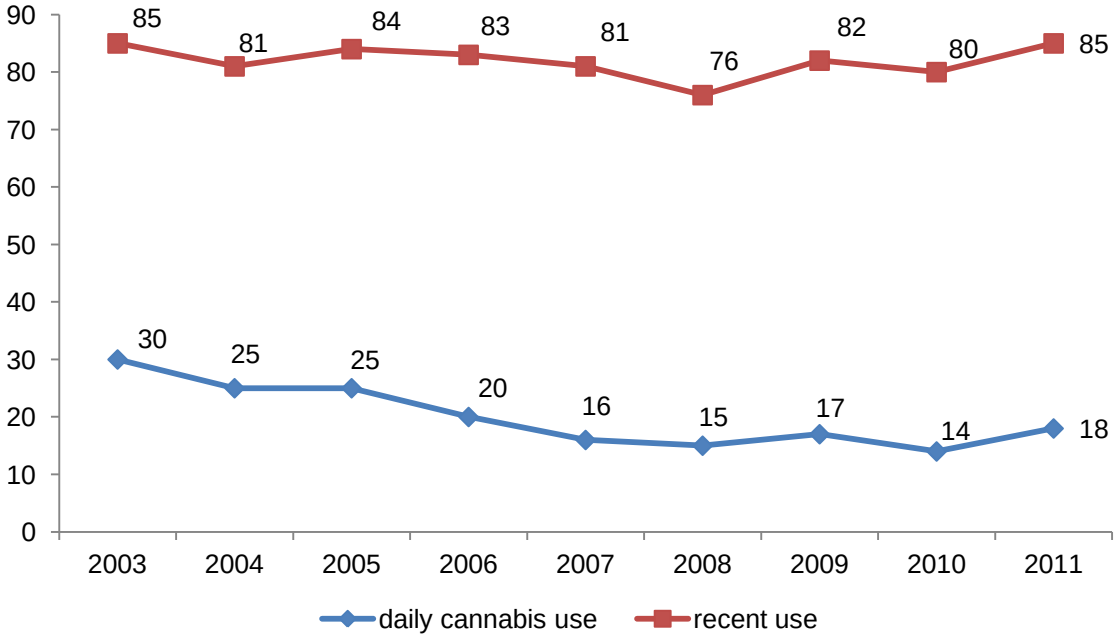
Note: Medians rounded to nearest whole number ^small numbers responded; interpret with caution

Figure 7: Median days used cannabis among national REU, 2003- 2011



Source: EDRS REU interviews

Figure 8: Patterns of recent and daily* cannabis use among national REU, 2003- 2011

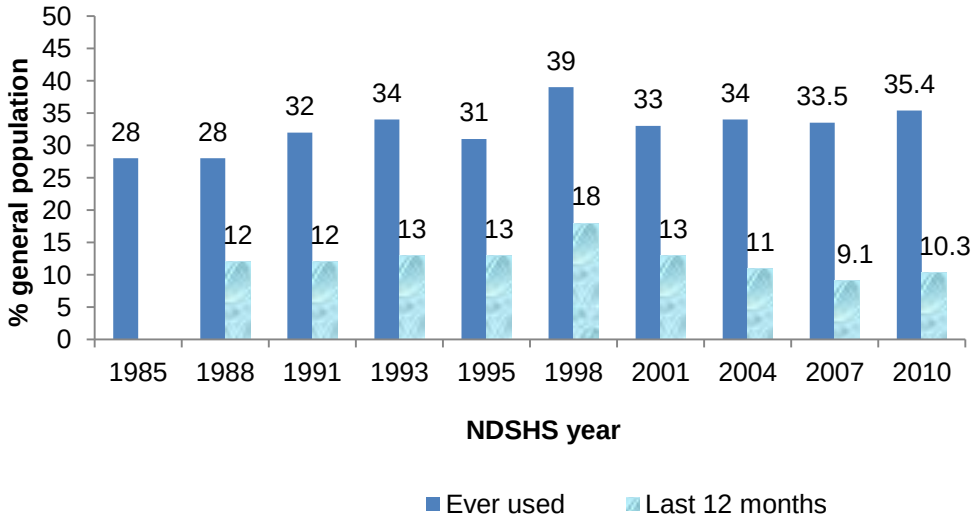


Source: EDRS REU interviews
*daily use is reported from the entire sample

4.8.2 Cannabis use in the general population

As can be seen in Figure 9, the prevalence of lifetime and recent cannabis use in the Australian general population aged 14 years and above has remained relatively stable across sampling years. The most recent survey was conducted in 2010 and found that one-third (35.4%) of the Australian population aged 14 years and above had ever tried cannabis, while 10.3% had used cannabis in the 12 months prior to interview. This is a significant increase in lifetime and recent use from the previous survey year 2007.

Figure 9: Lifetime and past year prevalence of cannabis use by Australians, 1985-2010



Source: NDSHS 1988-2007 (Commonwealth Department of Community Services and Health 1988; Australian Institute of Health and Welfare 2005; 2011)

Note: Caution should be exercised when interpreting prevalence of cannabis use between 1985 and 1993 due to major changes in sampling and methodology of the surveys.

4.9 Other drugs use

Current use

- **MDA** having declined in reported use annually since 2007, has been included in the *Other drug use* section. MDA lifetime use was 25% of the national sample, with 12% reporting recent use (a significant difference to 2010; 5%) on a median of two days.

- Almost all (99.6%) participants reported lifetime use of **alcohol**, and 98% reported alcohol use in the six months preceding interview. The mean age of first use was 14 years. The median days of alcohol use was 48 days (twice weekly). Daily drinking was reported by 8% of the sample. Alcohol was commonly reported as a drug used in combination with other drugs during binge sessions.

- Ninety-five percent reported lifetime **tobacco** use and 86% had used tobacco in the six months preceding interview (a significant increase from recent use in 2010; 78%). Over half (57%) of recent tobacco users were daily smokers (a significant increase in daily smokers from 2010; 50%), with median days use being 180 (i.e. daily).

- Over half (61%) of the sample reported lifetime **benzodiazepine** (both licitly and illicitly obtained) and one-third (33%) reported recent illicit use. Injecting and snorting were reported as routes of administration for illicit use. Daily use of illicit and licit benzodiazepine use was minimal (7%). The type most used wasdiazepam for both forms.

- One-tenth (10%) of the national REU sample reported recent licit use and two percent reported illicit use of **antidepressants**. Licit use was higher than illicit use in 2011 and 2010. ROA was mainly swallowing (85%) with 11% reporting shelving/shafting.

- One-quarter (25%) of the REU sample reported recent **nitrous oxide** use in the six months preceding interview on a median of four days, comparable with 2010 results. Use was highest in TAS, SA (both 36%) and VIC (33%).

- Recent use of **amyl nitrate** (nationally) was reported by one-quarter (26%) in 2011. Use was occasional on a median of three days. Mostly used in NSW.

- Twenty-nine percent of the national sample reported recent **mushroom** use, a significant increase from 2010 (18%). Use occurred on a median of three days, and 79% of recent users had used less than once per month.

- **Other drugs** discussed in this section include **heroin** and **other opiates**, **methadone**, **buprenorphine**, **pharmaceutical stimulants**, **OTC codeine**, **OTC stimulants** and **steroid use**.

4.9.1 MDA use

Due to the reported continued decline in use of MDA, it has been moved to the *Other drugs* section as opposed to retaining its own chapter on consumption patterns and market characteristics.

Twenty five percent of the national sample reported the lifetime use of MDA. The mean age of first use was 20 (range= 15-28 years) years for recent users. Twelve percent of the national sample reported using it in the six months preceding interview (a significant increase from 5% of recent use reported in 2010). Use occurred on a median of two days (range= 1-24), with the majority (91%) of recent users reporting that use had occurred less than once per month. Swallowing (81%) was the most frequently nominated ROA, followed by snorting (63%). There were no reports of injecting MDA, and one participant reported injecting MDA.

A median of 1.5 capsules (range=1-5 capsules) were used in a typical session of use and a median of two capsules (range=1-12 capsules) were used in the heaviest session of use over the preceding six months.

4.9.2 Alcohol

Eleven percent of the 2010 (12% in 2010) national sample nominated alcohol as their drug of choice. All of the national sample reported they had used alcohol in their lifetimes (99.6%) and in the six months preceding interview (98%; see Table 5). The mean age of first use in recent alcohol users was 14 years (median = 14 years, range=1-21 years).

Among those who had used alcohol, use had occurred on a median of 48 days (approximately twice weekly use) in the past six months (range=2-180 days) an increase from 60 days in 2010. There was a significant decrease in median days consumed alcohol in 2011 compared to 2010 (alcohol: 48 days vs 60 days, $p=0.028$). Sixty-three percent of recent alcohol users reported using alcohol more than once per week. Eight percent of recent users reported daily drinking (9% were daily drinkers in 2010).

Of the sample, those that reported using drugs in combination with ecstasy (n=563), 65% reported that they usually consumed more than five standard alcoholic drinks.

In 2011 the Alcohol Use Disorders Inventory Test (AUDIT) was administered to participants. Detailed information regarding the AUDIT in the 2011 EDRS can be found in chapter 7 *Risk Behaviour*.

4.9.3 Tobacco

Ninety-five percent of the national sample reported they had used tobacco in their lifetime and 86% had used tobacco in the six months prior to interview, a significant increase from 2010 (78% in 2010, $p<0.05$). Median days used was reported at 180 days, i.e. daily (range=1-180 days). Tobacco was first used at a mean age of 15 years (range=7-32 years) by recent users. Tobacco was the drug of choice for six participants of the national sample. Fifty-seven percent of those who reported recent tobacco were daily smokers, a significant increase from 2010 (39% in 2010, $p<0.05$).

4.9.4 Benzodiazepines

Over half (61%) of the 2011 sample reported the lifetime use of any benzodiazepine. Two-fifths (43%) reported the recent use of any benzodiazepine on a median of seven-and –a-half days (i.e. approx. monthly). Seven percent of recent users (n=17) reported daily use. Thirty-two participants (6%) in the sample reported usually using benzodiazepines with ecstasy; 22% (n=76) reported usually using benzodiazepines to come down from ecstasy (of those that use drugs to come down off ecstasy n=353); and 11% reported bingeing on benzodiazepines (of those that binged on stimulants n=232). Three participants nominated benzodiazepines as their drug of choice. Since 2007, a distinction was also made between

benzodiazepines that were licitly and illicitly obtained (see below). Brand of benzodiazepine was not specified.

4.9.4.1 *Licitly obtained (prescribed) benzodiazepines*

Twenty -one percent of the 2011 (17% in 2010) sample reported having ever used licitly obtained benzodiazepines and 14% (10% in 2010) reported their use in the six months preceding interview. The mean age of first use was 22 years (median = 22, range=14-39 years). Licit benzodiazepines had been used on a median of 30 days (range=1-180 days) in the preceding six months. Twenty-three percent of recent users reported daily use (14% in 2010). Almost all (99%) of the recent licit benzodiazepine users reported swallowing in the preceding six month, with one report of injecting and two reports of smoking licit benzodiapine use.

The main type of benzodiazepine used by these users were: diazepam (63%; including brand names Valium and generic) and alprazolam (17%; including brand names Xanax).

4.9.4.2 *Illicitly obtained (non-prescribed) benzodiazepines*

Over half (58%) of the 2011 sample reported having ever used illicitly obtained benzodiazepines and one-third (33%) reported their use in the six months preceding interview (Table 26). The mean age of first use was 20 years (median = 19 years, range=12-38 years) in recent users. Illicit benzodiazepines had been used on a median of five days (range=1-180 days) in the preceding six months. Amongst recent users, the majority (89%) reported using illicit benzodiazepines less than monthly, six participants reported daily use. Swallowing was the most common ROA in the six months preceding interview (99%), though 7% (n=14) of recent users reported snorting and very few n<5 participants reported other means of consumption.

The main type of benzodiazepine used by these users were: diazepam (52%; including brand names Valium, Valpam and generic) and alprazolam (31%; including brand names Xanax and Alprax).

Table 26: Use of illicitly obtained benzodiazepines, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	43	**58**	40	43	79	44	46	33	100	65
Used last 6 months	26	**33**	10	14	42	22	36	0	50	50
Median days use (n; range)*	3 (1-180)	**5 (1-180)**	6 (1-24)	3 (1-25)	10 (1-180)	5.5 (1-40)	6 (1-25)	2.5^ (1-7)	5^ (1-40)	3 (1-180)

Source: EDRS REU interviews

* Of those who had used illicit benzodiazepines in the past six months

^small numbers responded; interpret with caution

4.9.5 Antidepressants

4.9.5.1 *Licitly obtained (prescribed) antidepressants*

Twenty-three percent of the national sample reported using licit antidepressants in their lifetime and one-tenth (10%) reported recent use (Table 27). Figures are comparable to those obtained in 2010. The mean age of first using licit antidepressants was 21 years (median = 20 years, range = 14-48 years) amongst recent users. The median days of use

was 180 days (range = 1-180 or daily among those who recently used licit antidepressants. Eleven percent (n = 6) reported using them daily.

Table 27: Use of licitly obtained antidepressants, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	21	**23**	16	30	22	15	24	25	0	32
Used last 6 months	10	**10**	12	20	4	11	16	0	0	8
Median days use (n; range)*	180 (1-180)	**180 (1-180)**	60^ (6-180)	120 (1-180)	52^ (3-180)	180^ (75-180)	135^ (20-180)	180^ (-)	- (-)	180 (6-180)
ROA*										
Swallowing	92	**85**	100	91	50	100	88	100	0	83
Shelve/shaft	8	**15**	0	9	50	0	13	0	0	17

Source: EDRS REU interviews
* Of those who had used licit antidepressants in the past six months
^small numbers responded; interpret with caution

4.9.5.2 Illicitly obtained (non-prescribed) antidepressants

Eight percent of the national sample reported using illicit antidepressants in their lifetime and 2% (n=11) report recent use (Table 28). The mean age of first using licit antidepressants was 19 years (median = 18 years, range = 16-25 years) among recent users. The median days of use was two-and-a-half days among those who recently used illicit antidepressants. Main ROA was swallowing by all recent consumers. There were no other ROA reported. Most participants were unable to recall or report the brand or type of antidepressant they had consumed.

Table 28: Use of illicitly obtained antidepressants, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	**8**	**8**	9	5	7	5	8	11	27	9
Used last 6 months	**3**	**2**	1	1	3	1	4	0	0	2
Median days use (n; range)*	**2 (1-60)**	**2.5 (1-48)**	1^ (-)	5^ (-)	1.5^ (1-2)	3^ (-)	6^ (2-48)	-	-	2.5^ (2-3)

Source: EDRS REU interviews
* Of those who had used illicit antidepressants in the past six months
^small numbers responded; interpret with caution

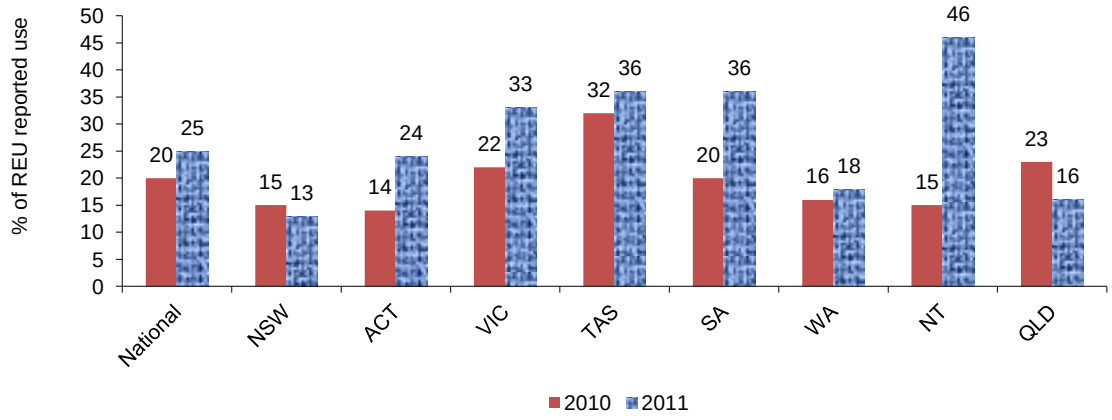
4.9.6 Inhalants use

4.9.6.1 Nitrous oxide

Almost half (52%) of the national sample reported lifetime use of nitrous oxide and one-fifth (25% comparable with 20% in 2010) had used nitrous oxide in the six months preceding interview (Figure 10). REU recent users reported first using nitrous oxide in their late teens (mean=19 years, median = 18, range=12-31 years). Nitrous oxide was used on a median of four days in the preceding six months (range=1-180 days). One participant reported daily use. The majority (90%) reported using nitrous oxide less than once per month in the preceding six months. Nitrous oxide was nominated by one participant as their drug of

choice. The median number of bulbs ingested in an average session was 6 (range =0.5-250), the most number of bulbs consumed in a heavy session was also 10 (range =0.5-250).

Figure 10: Use of nitrous oxide across jurisdictions, 2010-2011



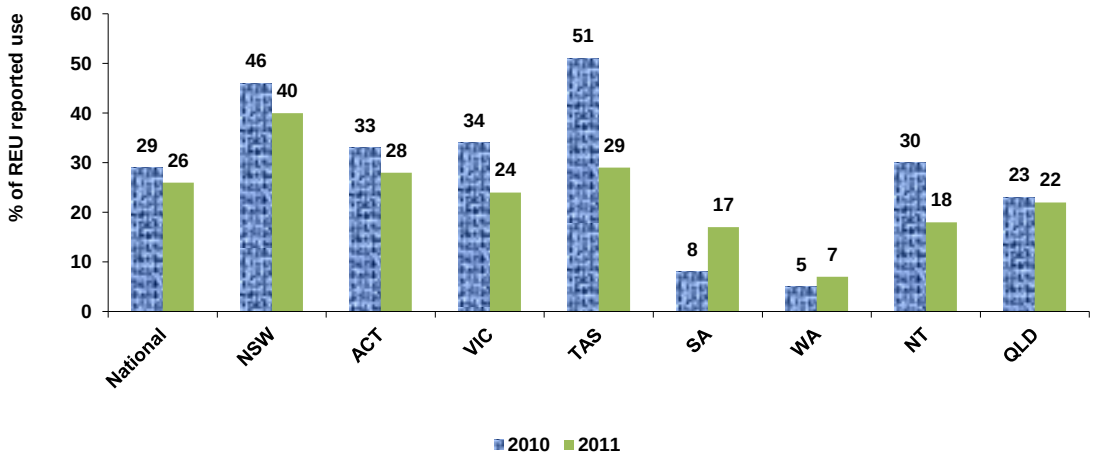
Source: EDRS REU interviews

4.9.6.2 Amyl nitrate

Sixty percent of the REU sample reported having used amyl nitrate (a vasodilator) in their lifetimes and 26% had used amyl nitrate in the six months preceding interview (Figure 11). No significant differences were detected in national use from 2010 to 2011.

REU first used amyl nitrate at a mean age of 19 years (range=8-35 years) by recent users. Frequency of amyl nitrate use was generally low, with users reporting a a median of three days of use in the last six months (range=1-100 days). Sixty-eight percent of recent users had used less than once per month in the preceding six months. No participants reported daily use.

Figure 11: Use of amyl nitrate across jurisdictions, 2010-2011



Source: EDRS REU interviews

4.9.6.3 Psilocybin Mushrooms

Two percent of the national sample (n=11) nominated mushrooms as their drug of choice. Of the national sample, 70% had reported lifetime use of mushrooms and 29% had used mushrooms in the six months preceding interview a significant increase for 2010 (18% in 2010, $p<0.05$). The majority of recent use has been reported in the ACT and VIC (see Table

4). REU first used mushrooms at a mean age of 19 years (range=18-31 years). Of those who used mushrooms in the preceding six months, oral consumption was the most common ROA (99%), though small proportions reported smoking them (n=4) and one participant reported injecting mushrooms. Mushrooms were used on a median of three days (range=1-32 days) indicating sporadic or very occasional use. The majority of all recent mushroom users (79%) had used mushrooms less than monthly.

4.9.7 Heroin and other opioids

Nineteen participants nominated heroin as their drug of choice. Eighteen percent reported they had used heroin in their lifetimes, 6% had injected heroin in their lifetime and 7% reported recently using heroin in the six months prior to interview (Table 4). The mean age of first use of heroin was 21 years (median = 20 years, range=12-35 years) in recent users. Heroin had been used on a median of 12 days (range=1-180 days) in the preceding six months by recent users. One-third (31%) had used heroin less than monthly, 21% between monthly and fortnightly, 12% between fortnightly and weekly and 36% reported using heroin more than once per week. The majority of recent heroin users had injected heroin (79%) in the preceding six months with smaller proportions reporting smoking (24%), snorting (19%) or swallowing (2%) heroin during this time.

4.9.8 Methadone

Methadone medication used for the treatment of opioid dependence, had been used 8% of the entire sample in their lifetime, 3% (n=18) of the national sample had used methadone in the last six months (Table 4). Four percent had ever injected methadone and 1% (n=6) had injected it in the last six months. Methadone was used on a median of four days (i.e. sporadic use) in the six months preceding interview (range=1-180 days). One-quarter (28%, n=5) of those who used methadone reported daily methadone use.

4.9.10 Buprenorphine

Seven percent (n=39) of the national sample had used buprenorphine in their lifetimes, another medication registered for the treatment of opioid dependence. Four percent (n=25) reported recent use of buprenorphine (Table 4). Of those who had used buprenorphine in the last six months, 72% had swallowed and 44% had injected it. The frequency of use in the last six months ranged from one day to 180 days, with a median of 21 days. Two-thirds (64%, n=16) reported using buprenorphine weekly or less in the preceding six months. Three participants of recent users used buprenorphine daily.

4.9.11 Other opioids

4.9.11.1 Licitly (prescribed) other opioids

Lifetime use of licit other opioids was 21% of the national sample and 8% had used at least once in the last six months prior to interview (Table 29). Median days of licit opioid use was five days (range = 1-180 days). The only ROA reported was swallowing (75%), followed by injecting (30%). The mean age of first use for recent licit users was 21 years (median = 20, range=13-26 years). Examples of other opioids include pethidine and opium, however main brand was not specified.

Table 29: Use of licit opioids, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	**12**	**21**	19	28	11	8	18	14	9	41
Used last 6 months	**3**	**8**	5	5	3	5	9	4	0	21

Source: EDRS REU interviews

4.9.11.2 Illicitly obtained (non-prescribed) other opioids

Lifetime use of illicit other opioids was one-quarter (27%) of the national sample, and 14% of the national sample had used other illicit opioids in the previous six months prior to interview (see Table 30). Median days of licit opiate use was four days (range = 1-180 days). The main ROA was swallowing (77%), followed by snorting (21%), injecting (23%), smoking (12%), and one participant reported shelving/shafting. The mean age of first use for recent illicit users was 21 years (median = 20, range=14-39 years). Examples of other opioids include pethidine and opium, however main brand used was not specified.

Table 30: Use of illicit opioids, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=693	n=100	n=80	n=101	n=76	n=75	n=28	n=11	n=103
Ever used	**18**	**27**	19	14	39	29	28	36	18	28
Used last 6 months	**6**	**14**	9	11	19	16	15	14	0	18

Source: EDRS REU interviews

4.9.12 Pharmaceutical stimulants

4.9.12.1 Licitly obtained (prescribed) pharmaceutical stimulants

Six percent of the national sample reported licit lifetime use of pharmaceutical stimulants, tweleve participants reported recent use (see Table 31). The median days of use was 180 days (daily use, range 1-180 days). Swallowing was the ROA reported by all participants with small numbers n<5 reporting snorting and injecting also. Mean age of first use by recent users was 18 years (median = 18, range = 7-29 years). Median amount used in an average session was three tablets (range = 1-15 tablets). The median amount reported for most tablets taken in a session was six (range = 1-60 tablets). Main brand was not specified for pharmaceutical stimulants but they included Dexamphetamines and Ritalin.

Table 31: Use of licit (prescribed) pharmaceutical stimulants, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=76	n=75	n=28	n=11	n=103
Ever used	**6**	**6**	9	8	8	5	4	0	0	2
Used last 6 months	**1**	**2**	3	3	4	3	0	0	0	1

Source: EDRS REU interviews

4.9.12.2 Illicitly obtained (non-prescribed) pharmaceutical stimulants

Fifty-three percent of the national sample reported illicit lifetime use of pharmaceutical stimulants, 27% reported recent use (see Table 32). Illicit use accounts for the majority of pharmaceutical stimulant use in this sample of REU. The majority of recent use occurred in WA. The median days of use was four days (sporadic use, range 1-100 days). Swallowing was the ROA reported by the most participants (90%) followed by snorting (39%) and small numbers n<5 reporting injecting and smoking. Mean age of first use by recent users was 20 years (median = 19, range = 12-49 years). Median amount used in an average session was three tablets (range = 0.25-60 tablets). The median amount reported for most tablets taken in a session was four (range = 0.5 -100 tablets). Main brand was not specified for pharmaceutical stimulants included Dexamphetamines and Ritalin.

Table 32: Use of illicit pharmaceutical stimulants, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	**49**	**53**	45	59	54	39	46	89	55	63
Used last 6 months	**23**	**27**	18	43	26	15	24	68	18	26

Source: EDRS REU interviews

4.9.13 Over the counter (OTC) codeine

Fifty-nine percent (59%) of the 2011 sample reported the lifetime use of over the counter codeine and 42% reported their recent use (see Table 33). The most use was reported in VIC and QLD. OTC codeine was first used by recent users at a mean age of 17 years (median = 17 years, range=3-40 years). In the six months preceding interview, use occurred on a median of six days for among those that had used it for pain (range=1-180 days). Sixty-six participants (12% of national sample) reported that they had used OTC codeine for purposes unrelated to pain (i.e. recreational use) on four-and-a-half days in the previous six months (range = 1-177 days). Swallowing was the most commonly reported ROA (98%); thirteen participants (5%) reported snorting, and one participant reported injecting.

Table 33: Use of OTC codeine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Ever used	**48**	**59**	57	58	79	59	47	57	82	61
Used last 6 months	**32**	**42**	39	40	52	31	36	43	73	49

Source: EDRS REU interviews

4.9.13 Over the counter (OTC) stimulants

Forty percent of the 2011 sample reported the lifetime use of OTC stimulants and 23% reported their recent use. Recent use was mostly reported in VIC (31%). OTC stimulants was first used at a mean age of 15 years (median = 15 years, range=3-35 years) for recent users. In the six months preceding interview, use occurred on a median of five days (range=1-96 days); the majority (64%) reported monthly use or less. Swallowing was the most commonly reported ROA (98%); four participants reported snorting, and one participant reported injecting. The main brand specified was Codral (48%) followed by Sudafed (25%) and chemists own cold and flu (8%).

4.9.14 Steroid use

Four percent of the 2011 sample reported the lifetime use of steroids eleven (2%; n=4 in 2010) participants reported using steroids recently. Of those that had used steroids recently, six participants (55%) had injected steroids and six participants (55%) had swallowed steroids. No other ROA was reported. Median days injected and used by recent steroid users was 21 (1-180). No main brand was reported however brands mentioned included Prednisolone, hydrocortisone and sustanon.

4.9.15 Other drugs

See Table 4 on changes in general trends for ERD use regarding drugs not mentioned.

4.10 Emerging psychoactive substance (EPS) use

- Drugs in the 2C-family had significant increases reported in recent use, however numbers reporting use remained low.
- There was also a significant increase reported in recent mescaline use (2% in 2010 vs 4% in 2011).
- Psychedelic tryptamine DMT also reported a significant increase in recent use, and is the EPS most reportedly used out of all the drugs in this category.
- Interestingly, mephedrone experienced a significant decrease in recent use in 2011 compared to 2010 results.
- For more information regarding these drugs see: Bruno et al., (in press) Emerging psychoactive substance use among regular ecstasy users in Australia. *Drug and Alcohol Dependence* (http://www.sciencedirect.com/science/article/pii/S0376871611005205)

4.10.1 Psychedelic phenethylamines EPS

4.10.1.1 2C-I, 2C-B and 2C-E

2C-I is a psychedelic drug with stimulant effects. A standard oral dose of 2C-I is between 10-25 mg. Recent reports suggest that 2C-I is slightly more potent than its closely related cousin 2C-B. Twelve percent of participants that answered the section reported lifetime use of 2C-I and five percent of that sample that answered the section reported past six month use of 2C-I (Table 34). Median days of use was two (range =1-10 days). ROA reported was swallowing (84%; n=21) and snorting (20%; n=5). There were no reports of smoking or injecting the drug. Of those that used 2C-I recently, the primary sources were friends (60%), followed by dealers (16%) and as a gift (16%) with two reports of online medium.

Closely related is the psychedelic phenethylamine 2C-B (2,5-dimethoxy-4-bromophenethylamine), the dosage range is listed as 16–24mg. 2C-B is sold as a white powder sometimes pressed in tablets or gel caps. The drug is usually taken orally, but can also be snorted. Twenty-one percent of the national sample had lifetime experience of consuming 2C-B, 9% had consumed the drug in the past six months (Table 34). SA reported the most recent use. Median days of use nationally was one day (range = 1-12 days). Swallowing was the most common ROA reported (89% of recent users, n=41), and ten participants (23%) reported having snorted the drug. No other ROA were reported. Of those that used 2C-B recently, the primary sources were friends (50%) and dealers (48%) with one report of online medium.

2C-E is also in this class of psychedelic research chemical drugs. It is commonly active in the 10–20mg range, taken orally, and highly dose-sensitive. Snorting requires a much lower dose, typically not exceeding 5mgs, but this method of consumption elicits a noticeably painful or uncomfortable sensation in the nasal cavity for 10 minutes or so. Of the three related psychedelic phethylamines, 2C-E is the drug least used in the lifetime (8%) and recently (4%) by this sample of REU (Table 34). Most commonly reported ROA nationally was swallowing (n=14) and snorting (n=8). No other ROA was reported. Median days used 2C-E was two day (range =1-10 days). Of those that used 2C-E recently, the primary sources were friends (42%) and dealers (32%), with four participants reporting that it was a gift and one report of online medium.

Table 34: Use of 2C-I, 2C-B, 2C-B, by jurisdiction, 2011

(%)	National 2010 N=693	National 2011 N=574	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used										
2CI	**6**	**12**	7	11	9	12	28	5	40	11
2CB	**9**	**21**	31	14	18	4	41	20	20	19
2CE	**3**	**8**	14	8	2	7	13	5	20	9
Used last 6 months	**National 2010 N=693**	**National 2011 N=574**	**NSW n=71**	**ACT n=80**	**VIC n=101**	**TAS n=75**	**SA n=76**	**WA n=20**	**NT n=5**	**QLD n=103**
2CI	**2**	**5** ↑	1	6	1	4	16	0	0	3
2CB	**4**	**9** ↑	13	3	1	0	29	10	0	10
2CE	**2**	**4** ↑	11	3	0	1	8	5	0	1

Source: EDRS REU interviews

The 2C-class is quite large, and therefore participants in 2011 were asked if they had tried any other the other 2C-class drugs. Six percent (n=30) reported that they had tried a 2C-class drug (outside of those mentioned above).

2C-Other

Thirty participants of the entire sample (5%) had lifetime use of an 'other' 2C-family including 2C-B-Fly, 2C-P, 2C-T2, 2C-T7. Ten participants (2%) had used these drugs recently. Of recent users participants reported swallowing (3%) and snorting (2%) as the only ROA. Most common sources reported were friends (70%), followed by internet, dealer and gift (all 10%).

4.10.1.2 DOI (Death on Impact)

DOI (Death on impact, 2,5-dimethoxy-4-iodoamphetamine) is also a psychedelic phenethylamine. It requires only very small dosages to produce full effects. It is uncommon as a substance for human ingestion but common in research. It has been found on blotter and may be sold as LSD (Erowid: www.erowid.org/chemicals/doi/doi.shtml). Lifetime and recent use of DOI appears to have occurred SA in small numbers (Table 35). All recent users reported swallowing the drug as the only ROA. Median days of recent use was one day (range = 1-10 days). Dealers (n=4) followed by friends (n=3) were the sources reported for obtaining DOI.

Table 35: Use of DOI by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**2**	**3**	1	0	1	1	15	0	20	1
Used last 6 months	**1**	**1**	1	0	0	0	7	0	0	1

Source: EDRS REU interviews

4.10.1.3 Mescaline

Mescaline is a psychoactive phenethylamine chemical which comes from the peyote cactus. It has hallucinogenic properties. A standard dose for oral mescaline use ranges from 200-500 mg. Recent use was reported by 4% of the national sample. Swallowing was reported by all recent users and smoking was reported by one participant (see Table 36). Median days used is one day (range = 1-24 days) over the last six months. The predominant source for obtaining mescaline is through friends (42%) followed by the online/internet (26%) and receiving it as a gift (21%). There were single responses to obtaining mescaline through a dealer and at a shop.

Table 36: Use of Mescaline by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**5**	**15**	18	13	22	5	12	20	40	13
Used last 6 months	**2**	**4 ↑**	6	11	4	1	1	5	0	2

Source: EDRS REU interviews
*Of those that had used Mescaline recently

4.10.2 Psychedelic Tryptamines EPS

4.10.2.1 5-MEO-DMT

5-MeO-DMT (5-methoxy-dimethyltryptamine) is a psychedelic tryptamine. 5-MeO-DMT is a naturally occurring psychedelic present in numerous plants and in the venom of the *Bufo alvarius* toad. It is found in some traditional South American shamanic snuffs and sometimes in ayahuasca brews. It is somewhat comparable in effects to DMT; however, it is substantially more potent, so it should not be confused with DMT. 5-MeO-DMT is mostly encountered as a crystalline chemical and smoked, snorted, or swallowed for recreation and/or insight. The standard dosage range for smoked 5-MeO-DMT is between 2-15 mg (Erowid: www.erowid.org/chemicals/5meo_dmt/5meo_dmt.shtml). Twelve participants reported consuming 5-MeO-DMT in the previous six months of the national sample. The only ROA reported was smoking. Median days used was one day (range = 1-12 days). 5-Meo-DMT was recently obtained by dealers (64%) dealers (18%; n=2) and as a gift (18%; n=2; seeTable 37).

Table 37: Use of 5-MEO-DMT, by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**2**	**6**	6	4	6	7	7	5	20	4
Used last 6 months	**<1**	**2**	1	4	3	3	3	0	0	1

Source: EDRS REU interviews

4.10.2.2 DMT

DMT (chemical name dimethyltriptamine) is a hallucinogenic drug in the tryptamine family, which is similar to LSD though its effects are said to be more powerful. Pure DMT is reportedly found in crystal form but has been as reportedly sold in powder form. It can be injected, smoked or sniffed and the effects rarely last more than two hours (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/dmt). Fourteen percent (n=74) of the national sample reported recently using DMT. This is a significant increase in recent DMT use from 2010 to 2011 (7% vs 14; $p<0.05$). The main route of administration reported by users was smoking (78%) followed by swallowing (14%). Three participants reported snorting it, and one participant reported injecting DMT. Median days of use was two (range = 1-40 days) among recent users(Table 38). Friends (70%) were the source most commonly reported for obtaining DMT, followed by friends (20%) or received it as a gift (11%).

Table 38: Use of DMT by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**13**	**27**	30	21	43	17	21	40	40	21
Used last 6 months	**7**	**14 ↑**	11	18	29	4	8	35	20	6

Source: EDRS REU interviews

4.10.3 Stimulant EPS

4.10.3.1 Mephedrone

Mephedrone (4-methylmethcathinone) is a stimulant which is closely related chemically to amphetamines. Users report that mephedrone produces a similar experience to drugs like amphetamines, ecstasy or cocaine. Mephedrone is a white, off-white or yellowish powder which is usually snorted, but can also be swallowed in bombs (wraps of paper) and may also appear in pill or capsule form. Mephedrone is probably the most well known of a group of drugs derived from cathinone (the same chemical found in the plant called khat) although two other compounds are also increasingly recognised on the market. These are methedrone and methylone. The effects of methylone are said to be broadly similar to mephedrone, although methylone is said to give the user an experience more closely related to taking ecstasy (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/mephedrone).

Mephedrone use continues to be generally reported to have occurred in TAS, VIC and WA. There was a significant decrease reported in recent mephedrone use from 2010 to 2011 (16% vs 14%; *p<0.05*). At this point it is unclear whether this is a trend in declining use of mephedrone or that perhaps a fluctuation and stabilisation of the mephedrone market. Swallowing and snorting were the most common ROAs reported followed by small numbers injecting mephedrone in the last six months (see Table 39). Median days use in the last six months is two days (range 1-40). Mephedrone was predominantly last sourced from friends (53%) followed by dealers (35%), the internet (8%) and as a gift (4%). For more information on Mephedrone, see Bruno et al., (2011) Emerging psychoactive substance use among regular ecstasy users in Australia. *Drug and Alcohol Dependence* (in press) and Matthews & Bruno (2010) Mephedrone use among regular ecstasy consumers in Australia. http://ndarc.med.unsw.edu.au/resource/edrs-bulletin-december-2010-mephedrone-use-among-regular-ecstasy-consumers-australia.

Table 39: Use of mephedrone by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**18**	**23**	24	8	37	37	13	25	60	17
Used last 6 months	**16**	**14 ↓**	6	1	25	27	8	20	60	13
ROA*										
Snorted	**66**	**66**	50	0	64	74	67	100	100	54
Swallowed	**66**	**57**	75	100	48	68	67	67	0	54
Smoked	**5**	**0**	0	0	0	0	0	0	0	0
Injected	**<1**	**4**	0	0	0	5	17	0	0	8

Source: EDRS REU interviews

* Of those who had used mephedrone recently

4.10.3.2 Methylone, bk-MDMA

Methylone, also known as "M1", 3,4-methylenedioxy-*N*-methylcathinone, bk-MDMA, is an entactogen and stimulant of the phenethylamine, amphetamine, and cathinone classes. It was originally patented by Jacob Peyton and Alexander Shulgin in 1996 as an antidepressant. The more intuitive abbreviation MDMC unfortunately can not be used for this chemical, since it had already been given to another earlier Shulgin creation, 3,4-ethylenedioxymethamphetamine. Methylone is a close structural analogue of MDMA, differing by the addition of a β-ketone group (see http://en.wikipedia.org/wiki/Methylone).

Seven percent of the national REU sample reported lifetime use of methylone. Five percent of the sample (n=28) reported recent use across all states (mostly VIC). Median days use was 2.5 (range 1-20). Most recent users reported swallowing (64%) methylone, followed by snorting (43%) and one report of injection. It was primarily obtained from friends (42%) or dealers (38%) with few reports of it being a gift (15%) and purchased online (4%).

4.10.3.3 BZP

BZP (1-benzylpiperazine) is a piperazine and a central nervous system (CNS) stimulant which gained popularity in some countries in the early 2000s as a legal alternative to amphetamine, methamphetamine, and MDMA. It is one of the more commonly used piperazines, providing stimulant effects which people describe as a noticeably different than those of amphetamines. It is not particularly popular because many people find that it has more side effects than amphetamines. BZP is used orally at doses of between 70-150 mg and effects are reported to last 6-8 hours (Erowid: www.erowid.org/chemicals/bzp/bzp_basics.shtml).

Recent use was reported by nine REU participants, with the use relatively comparative across jurisdictions in small numbers (Table 40). The only ROA reported was swallowing. Median days used was three days (range =1-20 days) in the last six months. The most commonly reported source for obtaining BZP was dealer (67%) followed by friends (22%), one purchase was reported through online medium.

Table 40: Use of BZP by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**5**	**6**	16	1	8	3	4	10	0	3
Used last 6 months	**4.5**	**2**	3	1	2	0	1	40	0	1

Source: EDRS REU interviews

4.10.3.4 Ivory Wave (MDPV)

Ivory wave is reported from limited forensic testing to have contained the active drug methylenedioxypyrovalerone (MDPV), along with cutting agents such as the common local anaesthetic Lidocaine. MDPV is a cathinone derivative, it is more potent than other cathinones, so users that may be used to taking mephedrone or other similar drugs may be increasing the risk to their health by taking too much, in the mistaken belief that it will behave the same. Using MDPV can lead to the overstimulation of both the cardiac system and the nervous system, causing heart problems, agitation, hallucinations and fits. Lidocaine is a common local anaesthetic frequently used as a cutting agent, to give users the numbing sensation in the mouth or nose which is associated with drugs of high purity (i.e. high-purity cocaine; Drugscope: www.drugscope.org.uk/ourwork/pressoffice/pressreleases/ivory_wave_MDP.

Use in the REU 2011 sample was small at about 2% for lifetime and recent use (Table 41). Snorting was the main ROA reported by recent users (n=5) followed by and swallowing (n=4) and smoking (n=3). Ivory wave was used on a median of 1 days (range 1-15 days). Ivory wave was obtained from friends (n=5) followed by friends (n=3) with single reports of internet purchase and as a gift.

Table 41: Use of Ivory Wave by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**1**	**2**	0	0	6	1	4	0	20	2
Used last 6 months	**<1**	**2**	0	0	5	1	1	0	20	2

Source: EDRS REU interviews

4.10.4 Natural occurring substances

4.10.4.1 Datura/Angel's Trumpet

There are many different species in the Datura genus. Probably the two most well-known are the devil's weed (*Datura inoxia*) and the thornapple or jimson weed (*Datura strammonium*). The plant's effects are mainly stupefying. That is, they make the user feel drowsy, drunk-like and detached from things around them. They can also bring on hallucinations**.** Doses are difficult to judge and can easily cause unconsciousness and death (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/datura).

Recent use was reported by three participants and smoking as a ROA was reported by two participants and swallowing was by one participant. Median days of recent use was one day (range = 1-8 days; Table 42). Datura was obtained through friends and as a gift (both n=1).

Table 42: Use of Datura by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**3**	**7**	13	3	8	3	5	10	20	9
Used last 6 months	**<1**	**<1**	1	1	0	0	1	0	0	0

Source: EDRS REU interviews

4.10.5 Other drugs

4.10.5.1 DXM

Dextromethorphan is a semisynthetic opiate derivative which is legally available over the counter in the United States. It is most commonly found in cough suppressants, especially those with "DM" or "Tuss" in their names. It is almost always used orally, although pure DXM powder is occasionally snorted. The effects of DXM generally fall into the category of dissociatives, along with ketamine, PCP, and nitrous. As with many psychoactive substances, dosages of DXM vary greatly, depending on the individual and the desired level of effects. Recreational doses range from 100 mg to 1200 mg or more (Erowid: www.erowid.org/chemicals/dxm/dxm_basics.shtml).

Twenty-six participants reported using DXM recently (Table 43). DXM was swallowed by 96% of recent users in the last six months, snorting was also reported by one participant. Median days of recent use was two days (range = 1-7 days) in the last six months. Of those that used DXM recently, the primary sources were friends (50%) and dealers (25%) with one report of online purchase, gift and shop.

Table 43: Use of DXM by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**5**	**13**	18	16	18	5	4	30	20	12
Used last 6 months	**1**	**5**	8	5	6	3	4	5	0	4

Source: EDRS REU interviews

4.10.5.2 PMA

Para-methoxyamphetamine (PMA) has been used as a recreational psychoactive drug, primarily in the 1970s, and in Australia since late 1994. More recently, it has been sold as MDA or MDMA (ecstasy). Pure PMA is a white powder, but street products can also be beige, pink or yellowish. Today it is usually made into pressed pills.

The effects of PMA include increase in energy, visual distortions and a general change in consciousness. Symptoms after ingestions can be pupil dilation, erratic eye movements, muscles spasms, increase in body temperature, nausea and vomiting. In some cases ingestion can lead to convulsions, coma and death. PMA has caused a number of deaths in Canada and Australia and has been implicated in two recent deaths in Chicago, USA. Most PMA deaths have been in users who have taken tablets sold as 'ecstasy' (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/pma).

Five participants reported using PMA recently (Table 44). In REU, swallowing was the only ROA reported. Median days used PMA recently was two days (range 1-10 days;. See table 42). PMA was reportedly obtained by friends (n=3) and dealers (n=2).

Table 44: Use of PMA by jurisdiction, 2011

(%)	National N=693	National N=531	NSW n=71	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=20	NT n=5	QLD n=103
Ever used	**4**	**3**	7	0	4	0	7	5	0	3
Used last 6 months	**<1**	**1**	3	0	0	0	4	0	0	0

Source: EDRS REU interviews

4.10.6 Cannabinoids

4.10.6.1 K2/Spice

A new generation of recreational psychoactives emerged in 2006, with the arrival of a smoking blend named "Spice". The only ingredients listed on the label of Spice, as well as the labels of numerous similar blends, are various herbs. However, these products have recently been found to also contain synthetic chemicals with effects similar to THC. Although sold in the same contexts as the mostly ineffective "legal buds" (in headshops and by online vendors), Spice and its relatives are ostensibly marketed as "incense" rather than smoking material.

Lifetime use of K2/Spice (synthetic cannabinoids) was low among the sample at n=5 (1%) and a similar low rate had consumed K2/Spice (n=4; <1%) in the past six months. Use was reported across NSW, ACT, WA and QLD. Median days of use was 1.5 (range 1-20 days). K2/Spice was only smoked and the two sources it was obtained from were friends (n=3) and dealers (n=1).

Lifetime Kronic use was also reported by few (n=6) participants.

Five percent of the national REU sample believed that they have used another form of cannabinoids.

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY & SUPPLY

5.1 Ecstasy

- The median price of a tablet of ecstasy nationally was $25 ranging from $20 in SA to $35 in the NT. A capsule nationally was $30 and ecstasy (MDMA) powder was reported at a median price of $250 per gram. The majority of the REU in all jurisdictions reported that the price of ecstasy had remained stable in the preceding six months.
- Reports of ecstasy purity remained similar to 2010, whereby purity remained low (48%) as reported by the majority of the sample. There was a mixed view as to the purity change over the last six months.
- The majority continued to report that ecstasy was easy to very easy to obtain. The majority in all jurisdictions reported that availability had remained stable in the six months prior to interview.
- Ecstasy was purchased from a range of people (median=3 people), most commonly from friends, on a monthly basis with a median of four pills purchased in one session.
- It was also used in a range of locations, most commonly in nightclubs.

5.1.1 Price

The median price of ecstasy pills nationally was $25 (range1-70) rangingfrom $25 in NSW, VIC and QLD to $35 in the NT. The price fluctuated across jurisdictions compared to 2010 results. The median price of capsules was $30 ranging from $25 in SA and QLD to $37.50 in NSW. The price of powder per gram varied across jurisdictions with a national median price of $250 per gram and increase from $200 reported in 2010 (caution small numbers reporting across jurisdictions; Table 45). Comparable to 2010, the majority of ecstasy users in all jurisdictions reported that the price of ecstasy had remained stable in the preceding six months (Table 46).

Table 45: Median last price paid for ecstasy tablet and participants' reports of price change, by jurisdiction, 2011

	National 2010 N=693	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Median price ($) per tablet (range)	**N=648 25 (1-60)**	**N=524 25 (1-70)**	25 (7-50)	30 (15-45)	25 (10-50)	30 (15-40)	20 (10-40)	30 (15-40)	35 (20-70)	25 (1-60)
Median price ($) per capsule (range)	**N=175 30 (15-60)**	**N=170 30 (10-50)**	37.50 (11-50)	30^ (20-50)	30 (10-50)	30 (10-40)	25 (10-50)	n.a	30^ (25-30)	25 (20-40)
Median price ($) per gram powder (range)	**N=23 200 (20-400)**	**N=26 250 (100-900)**	400^ (-)	280^ 200-380	200 (100-320)	300^ (-)	900^ (-)	n.a	n.a	235^ (150-300)

Source: EDRS REU interviews

Table 46: Price changes reported by REU, 2011

(%)	National 2010 N=663	National 2011 N=533	NSW n=97	ACT n=73	VIC n=94	TAS n=70	SA n=71	WA n=24	NT n=6^	QLD n=98
Price change										
Increased	**26**	**25**	28	51	22	14	20	4	17	25
Stable	**55**	**56**	58	29	64	69	52	67	33	61
Decreased	**9**	**7**	8	0	4	6	16	17	17	3
Fluctuated	**11**	**12**	6	21	10	11	13	13	33	11

Source: EDRS REU interviews
Note: Response 'don't know' has been excluded from analysis.

Table 47 presents the median price of ecstasy across time. Although prices do vary across jurisdictions, the price of ecstasy appears to be higher in more remote jurisdictions, such as the NT and WA, whilst larger jurisdictions such as NSW and VIC have traditionally reported lower prices. In most jurisdictions, (exception of the NT), the price of ecstasy has steadily declined across time.

Table 47: Median price of ecstasy per tablet, 2000-2011

	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	40	n.a.	n.a.	n.a.	45	n.a.	n.a.	40
2001	35	n.a.	n.a.	n.a.	40	n.a.	n.a.	40
2002	35	n.a.	n.a.	n.a.	35	n.a.	n.a.	n.a.
2003	35	35	30	50	35	40	50	35
2004	35	35	30	40	35	50	50	32
2005	30	35	30	45	30	40	50	32
2006	30	35	30	40	30	40	50	30
2007	30	30	30	40	30	40	50	30
2008	30	30	27.50	35	25	40	50	25
2009	20	25	25	35	20	35	50	20
2010	25	25	25	35	23	35	35	25
2011	**25**	**30**	**25**	**30**	**20**	**30**	**35**	**25**

Source: EDRS REU interviews
Note: Data first collected in NSW, SA and QLD in 2000; data not collected in QLD for 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. From 2009, participants reported last price paid for ecstasy tablet not market price

Table 48 illustrates the change in prices reported when ecstasy tablets (pills) are purchased in larger quantities.

Table 48: Median price of ecstasy tablets bought in larger quantities, 2011

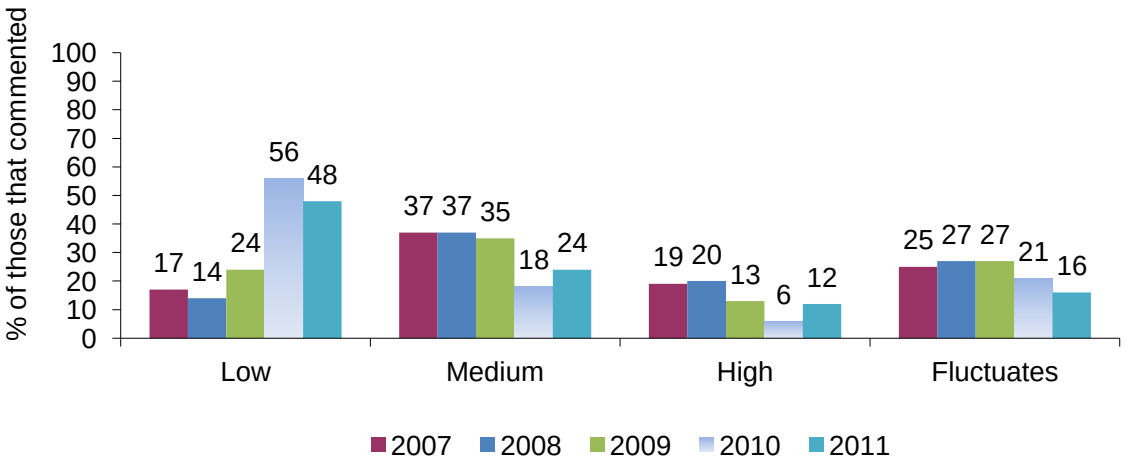
	Per pill/10 pills	Per pill/20 pills	Per pill/50 pills	Per pill/100 pills
NSW	$20/$200	$17/$400	$15/$800^	$15/$1075^
ACT	$22/$300	$22/$500^	$20/$250^	$15.50/$2100^
VIC	$35/$350	$30/$600	$25/$800^	$25/$1500^
TAS	$30^/$300	$20^/$575^	$25^/ $1400^	$20^/n.a
SA	$20/$200	$20/$380	$16^/$750^	$15/$1400
WA	$30^/$250^	$27^/n.a	$25^/n.a	$15^/n.a
NT	$35^/$300^	$25^/n.a	n.a/$200^	n.a/n.a
QLD	$20/$200	$18.25/$400^	$16/$825^	$14/1300^

Source: EDRS REU interviews
Note: ^ small numbers reporting, interpret with caution

5.1.2 Purity

Participants' perceptions of ecstasy purity has changed markedly in recent years from earlier years, with most participants reporting that ecstasy purity had decreased remaining at low purity (see
Figure 12).

Figure 12: National REU reports of current ecstasy purity, 2007-2011



Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Generally there was consensus across jurisdictions that current purity was considered low by the majority. Just under one-third that commented reported that the purity fluctuated (Table 49).

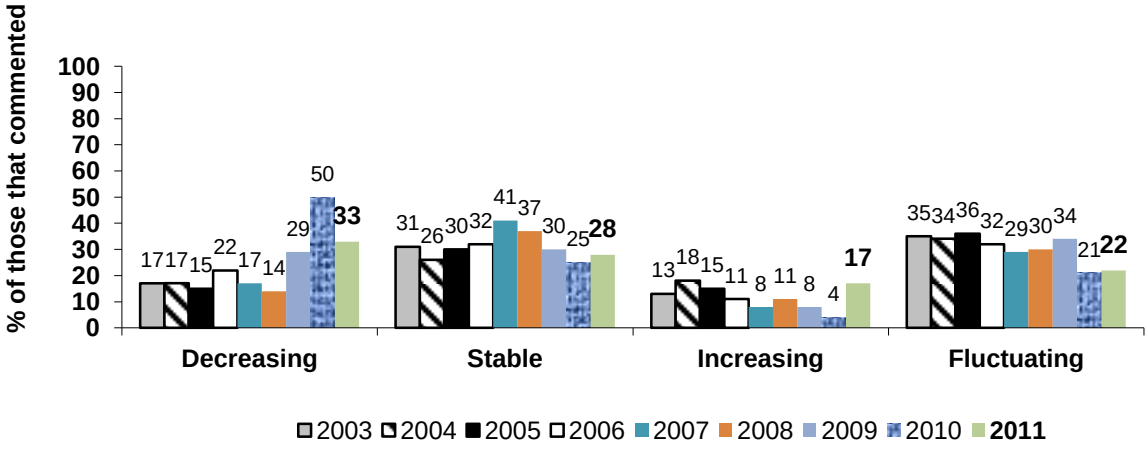
Table 49: Participant reports of current ecstasy purity, by jurisdiction, 2011

(%)	National 2010 N=683	National 2011 N=566	NSW n=100	ACT n=79	VIC n=100	TAS n=73	SA n=75	WA n=28	NT n=9^	QLD n=102
Current purity										
Low	**56**	**48**	53	11	46	47	61	86	56	53
Medium	**18**	**24**	22	8	26	26	28	7	22	31
High	**6**	**12**	12	53	8	8	0	0	0	3
Fluctuates	**21**	**16**	13	28	19	19	11	7	22	13

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Participants were asked to comment on the change of ecstasy purity in the preceding six months. The result is consistent with reports that the purity of ecstasy is low with half of the sample (48%) reporting that the purity had decreased in the last six months (Figure 13). Previously, most participants have reported that the purity of ecstasy tablets had been stable.

Figure 13: National REU reports of recent (last six months) change in ecstasy purity, 2003-2011



Source: EDRS REU Interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Table 50 presents jurisdictions' reports and variability of perceived purity change of ecstasy in the six months preceding interview. Interestingly, there appears to be a fluctuation in perceptions of purity change in the previous six month period with significantly more participants reporting that the purity had increased (4% in 2010 v 17% in 2011, CI -0.096, -0.166, *p<0.05*). The majority of participants however reported that their perceptions of ecstasy purity were decreasing (33%) or stable (28%). .

Table 50: Participant reports of changes in ecstasy purity in the past six months, by jurisdiction, 2011

(%)	National 2010 N=668	National 2011 N=545	NSW n=99	ACT n=79	VIC n=93	TAS n=70	SA n=70	WA n=26	NT n=8^	QLD n=100
Current purity change										
Increasing	**4**	**17**	13	51	13	9	14	8	0	9
Stable	**25**	**28**	38	9	36	36	26	23	63	21
Decreasing	**50**	**33**	35	10	30	24	41	62	25	44
Fluctuating	**21**	**22**	13	30	22	31	19	8	13	22

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

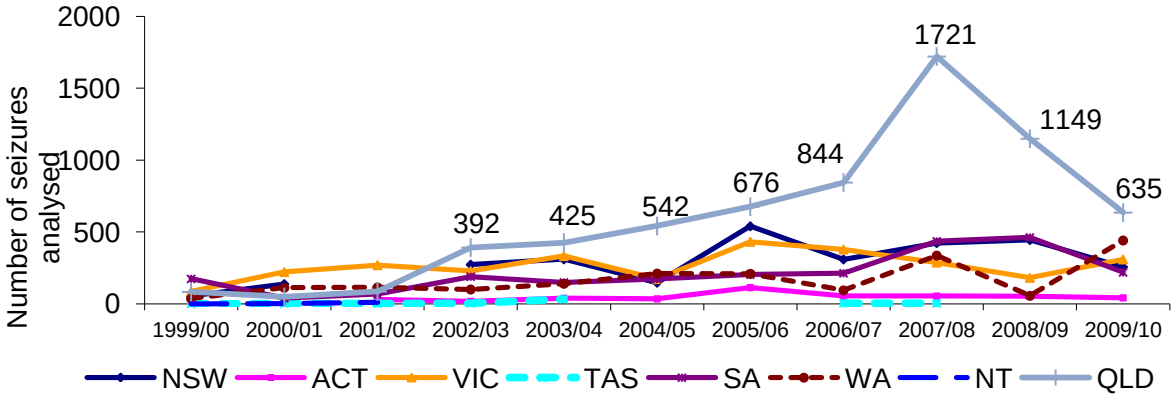
Estimates of purity by users are necessarily subjective and depend, among other factors, on users' tolerance to the drug. Laboratory analyses of the purity of seizures provide more objective evidence regarding purity changes, and should, therefore, be considered in addition to the subjective reports of users. However, it is also important to note the limitation of the average purity figures – namely, that not all illicit drugs seized by Australia's law enforcement agencies are analysed for purity. In some instances, seized drugs will be analysed only in a contested court matter. The purity figures, therefore, relate to an unrepresentative sample of the illicit drugs available in Australia. Notwithstanding this limitation, the purity figures provided remain the most objective measure of changes in purity levels available in Australia.

The purity data presented in this report are provided by the ACC and the former Australian Bureau of Criminal Intelligence (ABCI). The ACC provided data on state/territory police and Australian Federal Police (AFP) seizure data, including the number and weight of seizures. In 1999/00, the purity was reported as 'ecstasy' seizures. Since 2000/01, ecstasy seizures have been reported under 'phenethylamines'. Ecstasy belongs to the phenethylamine family of drugs. Other drugs such as 4-bromo-2,5-dimethoxyamphetamine (DOB), 2,5-dimethoxy-4-methylamphetamine (DOM), MDA, 3,4- methylenedioxyethylamphetamine (MDEA), Paramethoxyamphetamine (PMA), and 4-methylthioamphetamine (4-MTA) also belong to the phenethylamine family and seizures of these drugs are included in the seizure data from 1999/00.

The following caveat applies to figure 14 through to 18 below: Figures do not represent the purity levels of all phenethylamine seizures – only those who have been analysed at a forensic laboratory. Figures for WA, TAS and those supplied by the Australian Forensic Drug Laboratory represent the purity levels of phenethylamines received at the laboratory in the relevant quarter; figures for all other jurisdictions represent the purity levels of phenethylamines seized by police in the relevant quarter. The period between the date of seizure by police and the date of receipt at the laboratory can vary greatly. No adjustment has been made to account for double counting joint operations between the AFP and state/territory police.

In 2009/10, the number of state seizures analysed continued to drop across many jurisdictions. Most apparent is the decrease in the number of seizures in QLD from 1149 in 2008/09 to 635 in 2009/10. There were no seizures analysed in the NT or TAS in 2005/06, 2008/09 and 2009/10 (Figure 14).

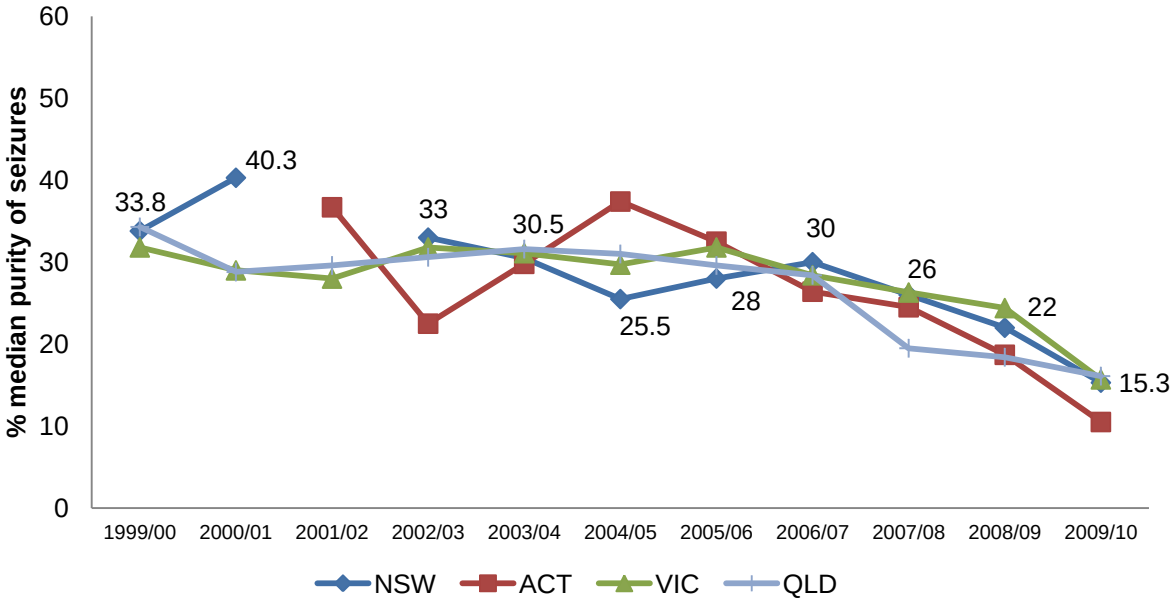
Figure 14: Number of phenethylamine state police seizures, by jurisdiction, 1999/00-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were not available at time of publication.

The analysed median purity of the state police seizures indicates that, generally, purity of phenylethylamine seizures in the eastern states with the larger populations has been on a slight declining trend since 1999/00. The median purity level continues to decline in levels reported in 2009/10 (Figure 15, NSW trend figures highlighted).

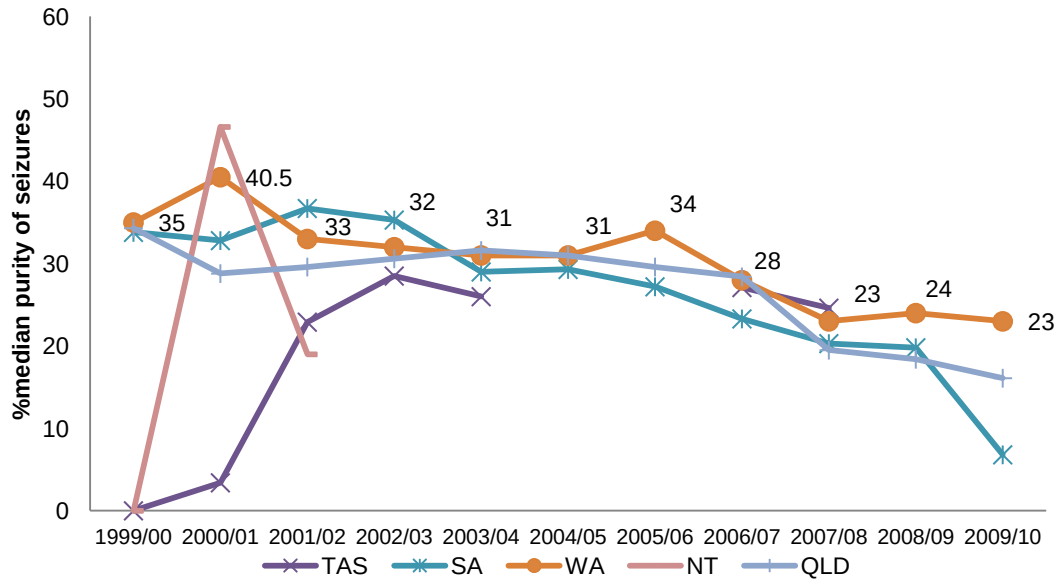
Figure 15: Median purity of state police phenethylamine seizures, eastern jurisdictions, 1999/00-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were not available at time of publication.

In smaller jurisdictions, the analysed median purity of the state police seizures are at a similar level to the larger jurisdictions above. SA reported a noticeable decline in purity. The trend also illustrates a decline in purity over time. TAS and the NT did not have any data recorded in 2009/10 (Figure 16, WA trend figures highlighted).

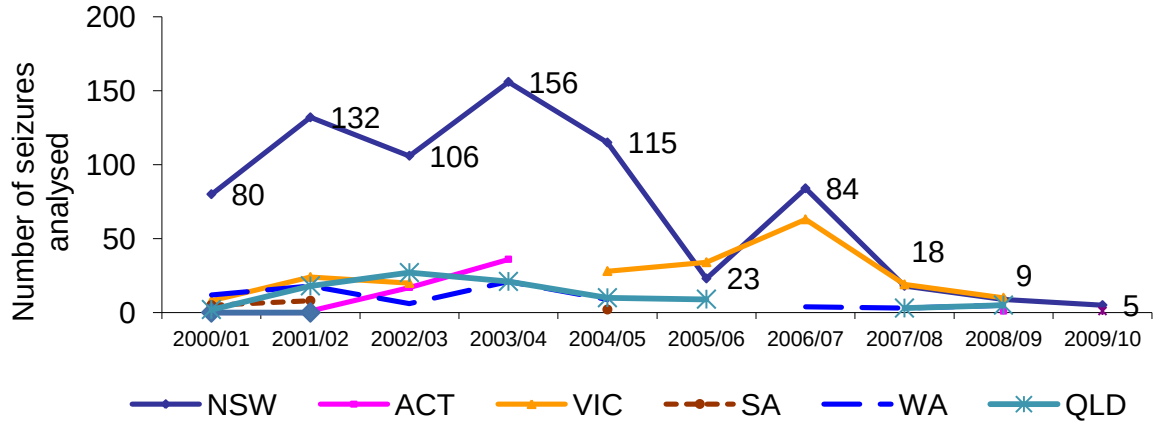
Figure 16: Median purity of state police phenethylamine seizures, smaller jurisdictions, 1999/00-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011) Note: Data for 2010/11 were not available at time of publication.

In 2009/10, NSW and TAS were the only states that recorded any AFP phenethylamine seizures that were analysed, and numbers were much lower than for state police seizures. In NSW, the number of AFP seizures continues to decline (Figure 17, NSW trend highlighted). NT and TAS are not shown.

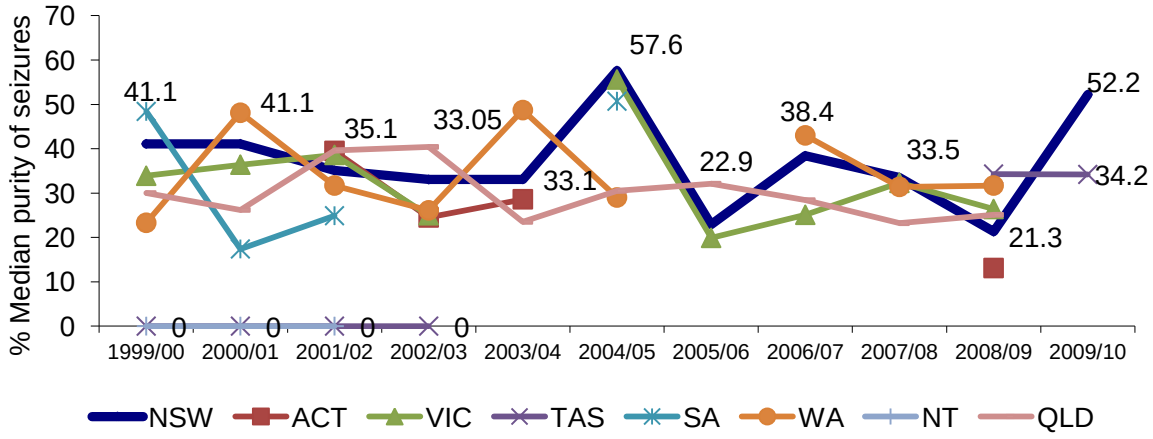
Figure 17: Number of AFP phenethylamine seizures, by jurisdiction, 1999/00-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were unavailable at time of publication.

The median purity of AFP phenethylamine seizures remained relatively stable across time for the majority of jurisdictions. NSW has experienced fluctuations across time, with an increase reported from 2008/09 to 2009/10 (Figure 18, NSW trend highlighted). Note: difficult to interpret trends as small number of seizures across jurisdictions n<10.

Figure 18: Median purity of AFP phenethylamine seizures, by jurisdiction, 1999/00-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were unavailable at time of publication.

5.1.3 Availability

While the majority of the REU national sample continued to report ecstasy as being easy to very easy to obtain (78%). The majority of jurisdictions, reported that availability had remained stable in the six months prior to interview (Table 51).

Table 51: REU reports of availability of ecstasy in the preceding six months, 2011

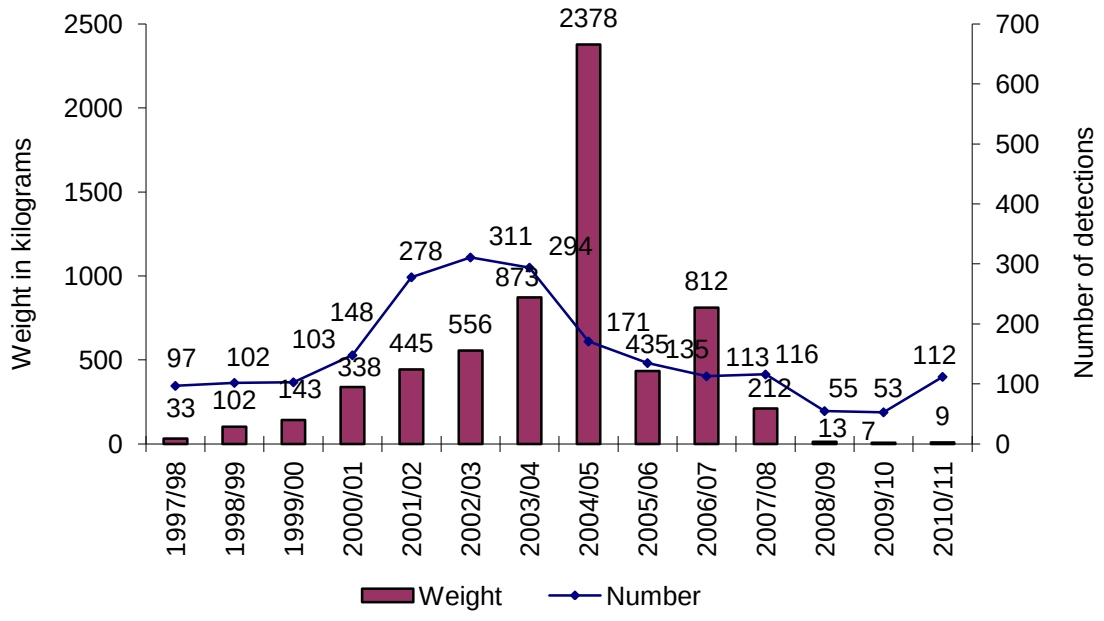
(%)	National 2010 N=686	National 2011 N=564	NSW n=100	ACT n=79	VIC n=98	TAS n=73	SA n=74	WA n=28	NT n=10	QLD n=102
Availability of ecstasy										
Very easy	**29**	**35**	51	33	31	26	40	14	30	36
Easy	**45**	**43**	37	47	46	44	47	50	40	38
Difficult	**22**	**20**	12	20	20	29	11	21	20	25
Very difficult	**4**	**2**	0	0	3	1	3	14	10	1
Change in availability	**N=681**	**N=551**	**n=100**	**n=76**	**n=94**	**n=73**	**n=72**	**n=28**	**n=8^**	**n=100**
More difficult	**31**	**18**	15	15	18	16	17	29	0	25
Stable	**54**	**61**	72	49	67	69	58	64	63	51
Easier	**9**	**14**	13	24	11	7	15	4	13	18
Fluctuates	**7**	**7**	0	13	4	8	10	4	25	6

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.1.3.1 Ecstasy detected at the Australian border

The weight of MDMA presented here is the weight of the tablets, not the weight of the active drug. While the number of seizures have remained similar over the last four years, the weight of seizures have fluctuated and has continued to decline in 2009/10 (Figure 19).

Figure 19: Number and weight of detections of MDMA detected at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2010/11



Source: (Australian Customs Border and Protection Service 2011)

5.1.4 Supply: Purchasing patterns and locations of use

Ecstasy was reportedly purchased from a median of three people (range=0-100 people), and just under two-thirds (61%) reported typically purchasing for themselves and friends on those occasions. There was a significant increase those that reported buying for themselves only (29% in 2010 vs 36% in 2011; *p<0.05)*. Among this group, figures of frequency of purchase were comparable to those reported in 2010, with half (51%) of the sample reporting purchasing ecstasy monthly or less. The median number of ecstasy pills purchased at a time was four (range=1-10000 pills; Table 52). Large numbers may be indicative of purchasing for further sales and distribution networks.

Table 52: Purchasing patterns related to ecstasy use, 2011

(%)	National 2010 N=693	National 2011 N=555	NSW n=97	ACT n=76	VIC n=97	TAS n=72	SA n=74	WA n=28	NT n=10	QLD n=101
Median no. people bought ecstasy from (n; range)	**3 (0-24)**	**3 (0-100)**	3 (0-10)	3 (0-10)	3 (0-10)	3 (0-10)	3 (0-7)	3 (0-10)	3.5 (0-100)	3 (0-15)
Last time purchased ecstasy for:										
Yourself	**29**	**36**	39	35	34	34	35	46	30	38
Yourself and others	**70**	**61**	57	63	64	62	60	50	70	61
Others only	**1**	**1**	1	1	0	1	1	0	0	0
Didn't purchase	**0**	**2**	3	1	2	3	4	4	0	1
Frequency of purchase:										
<=Monthly (1-6 times)	**51**	**51**	45	57	47	62	49	48	50	49
<=Fortnightly (7-12 times)	**33**	**33**	42	28	38	27	35	26	20	32
<=Weekly	**14**	**15**	12	14	13	10	17	22	30	17
<=Three times per week (25-181+)	**2**	**1**	0	1	2	1	0	0	0	2
Median no. pills usually purchased (n; range)	**5 (1-2500)**	**4 (1-10000)**	4	5	4	3	4	3.5	3.5	5

Source: EDRS REU interviews

Ecstasy was purchased from a range of sources and from a variety of public and private locations, with the most common sources at the national level being friends and known dealers (Table 53).

Source location for ecstasy purchase is private locations such as friends home (29%) and dealers home (11%) followed by public locations such as nightclubs (15%), and music festivals (3%).

Ecstasy was reportedly most commonly used in a nightclub setting (42%) followed by private settings such as own home and friends home (11%), own home (9%) and private parties (9%; Table 53).

Table 53: Last source, purchase location and use location of ecstasy, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Source	2010 N=693	2011 N=570	n=100	n=80	n=101	n=74	n=75	n=28	n=10	n=102
Friends	**65**	**61**	61	69	53	74	53	61	100	58
Known dealers	**17**	**22**	23	23	32	15	21	18	0	21
Acquaintances	**12**	**8**	7	3	4	8	17	11	0	11
Unknown dealers	**4**	**5**	8	4	9	0	1	4	0	9
Workmates	**2**	**1**	0	0	0	0	1	7	0	0
Other	**<1**	**1**	0	1	0	0	1	0	0	1
Street dealers	**<1**	**<1**	1	0	0	0	0	0	0	1
Mobile dealers	**<1**	**<1**	0	0	1	0	1	0	0	0
Haven't obtained	**<1**	**1**	0	1	2	3	3	0	0	0
Location scored										
Friend's home	**34**	**29**	19	39	24	28	31	32	30	34
Nightclub	**15**	**15**	17	16	14	14	17	7	10	13
Dealer's home	**7**	**11**	12	5	18	5	13	7	10	14
Own home	**15**	**14**	10	15	15	18	13	14	50	13
Agreed public location	**10**	**10**	16	10	10	3	9	18	0	8
Raves*	**1**	**2**	3	0	4	3	0	4	0	1
Private party	**4**	**3**	6	1	4	4	1	0	0	2
Pubs	**7**	**6**	8	1	3	14	4	4	0	6
Acquaintance's home	**1**	**2**	1	1	0	3	1	4	0	3
Street	**3**	**3**	2	6	3	4	3	0	0	2
Work	**1**	**<1**	2	0	0	0	0	0	0	0
Live music event/festival	**2**	**3**	3	3	2	0	4	11	0	5
Last use venue										
Nightclub	**44**	**42**	55	43	43	37	39	25	30	39
Home	**9**	**9**	6	6	7	4	8	29	20	15
Friend's home	**11**	**11**	8	15	15	8	15	14	10	7
Live music event/festival	**8**	**13**	10	20	8	5	16	14	30	18
Private party	**10**	**9**	9	3	12	14	9	11	0	6
Raves*	**4**	**6**	5	9	7	4	5	4	10	4
Pub	**10**	**7**	4	0	5	23	7	0	0	8
Outdoors◊	**<1**	**2**	1	1	3	3	1	4	0	3
Dealers home	**<1**	**<1**	0	1	0	1	0	0	0	2
Public place	**1**	**1**	2	1	0	1	0	0	0	0
Other	**1**	**1**	0	0	1	0	0	0	0	1

Source: EDRS REU interviews

* Includes 'doofs' and dance parties

◊ Examples include at a beach, bushwalking, camping

Note: In 2009, participants responded to source, location of use and location spent most time intoxicated based on the 'last occasion' in which they used ecstasy not the 'usual' or 'common' source or location

5.2 Methamphetamine

The majority of participants reported lifetime use of one or more forms of methamphetamine (speed, base and/or ice/crystal) and over half reported use of one or more of these forms during the six months preceding interview.
The median frequency of methamphetamine use (any form) among users was six days (approximately monthly) in the preceding six months. Daily use was uncommon, with one participant reporting daily use (speed) in 2011. Fourteen percent of the national sample reported having ever injected methamphetamine (any form).

Speed powder

- Just under half (49%) of the sample reported the use of speed in the six months prior to interview. The median days of use was five days. As in 2010, VIC was the jurisdiction with the highest reported use of speed powder. The mean age of first use was 19 years.
- Among recent speed users, snorting (70%) and swallowing (63%) were the most common routes of recent (last six months) administration. Smoking appears to have increased as a reported ROA (23% in 2010 vs 35% in 2011). The amount used in an average session was 0.5 gram and the amount used in a heavy session was one gram.

Base

- Sixteen percent of participants reported using base in the six months prior to interview. The median days of use among users rose to four days from two days. QLD (26%) was the jurisdictions with the highest reported base use. The mean age of first use was 20 years.
- Among recent base users, swallowing was the most commonly nominated ROA (74%). The average amount used in a typical and heavy session was two points.
- Whilst base is the least common form used by REU participants it is the form that is reported most injected by one-fifth of recent users (21%).

Ice/crystal

- Twenty-six percent of the national sample reported recent ice/crystal use, a significant increase from 2010 (17%). The median days of use among those who had recently used also increased from four to six days (approximately monthly). . VIC (38%) was the jurisdiction with the most recent ice/crystal use reported. The mean age of first use was 22 years.
- The most common ROA for ice/crystal was smoking (80%). The average amount used in a typical session was two points and for a heavy session two-and-a-half points.

5.2.1 Price

Participants were asked to comment on the price of all three forms of methamphetamine and whether these had changed over the six months preceding interview. A degree of caution should be exercised when considering these figures, as fewer than 10 participants in each jurisdiction reported recent purchase of different forms of methamphetamine. The median prices, by jurisdiction, are presented in Table 54 and perceptions of price changes are shown in Table 55.

The price of speed was recorded in terms of a gram and a point (0.1 gram). The median price of a gram ranged from $80 in NSW to $475 in WA. Prices reported were considered to

have remained stable over the six months prior to interview by the majority of participants that commented.

The price of base was commonly reported in points, last purchase price of a point of base was between $22.50 per point (the ACT) to $100 per point in WA. The majority of those commenting in the national sample reported that the price of base had remained stable in the six months prior to interview.

The median price for a point of ice/crystal was $50 in TAS to $100 in WA, QLD and VIC. This is an increase to figures reported in 2010 (see Table 56) and is also an increase from 2009 given that ice/crystal was reported at $50 a point in all jurisdictions, except in the NT (where it was $100). The price per gram was typically higher than for speed or base. Interestingly, participants either reported that price had increased (48%) or remained stable (44%) six months prior to interview.

Table 54: Median of last price paid of various forms of methamphetamine, by jurisdiction, 2011

	Median price $ per point (range)						Median price $ per gram (range)					
	Speed powder		Base		Ice/crystal		Speed powder		Base		Ice/crystal	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
NSW	-	**32.5 ^**	35^	**-**	50	**60**	55	**80**	200^	**100^**	200^	-
	-	**(15-50)**	(10-300)	**-**	(40-90)	**16-100)**	(30-150)	**(20-280)**	(60-450)	**(60-150)**	*no range*	-
ACT	30^	**22.5 ^**	25^	**22.5 ^**	70^	**80^**	200	**200**	200^	**225^**	300^	500
	(25-50)	**(20-30)**	*(no range)*	**(20-25)**	(50-80)	**(50-110)**	(40-300)	**(90-350)**	(150-600)	**110-350**	200-400	(300-1000)
VIC	60^	**45**	-	**40^**	85^	**100**	200	**200**	-	**165^**	625^	-
	(20-100)	**(15-100)**	-	**(20-60)**	(50-100)	**(20-200)**	(90-250)	**(20-600)**	-	**(60-200)**	(180-1000)	-
TAS	40^	**35^**	50^	**50^**	-	**50^**	250	**250^**	150^	**150^**	-	275^
	(20-50)	**(20-50)**	*(no range)*	***(no range)***	-	***(no range)***	(150-300	**(100-300)**	(257-300)	***(no range)***	-	250-300
SA	50^	**50**	50^	**50^**	75^	**95**	200^	**300^**	250^	**625^**	240^	400
	(25-50)	**(20-100)**	(50-350)	**(50-100)**	(20-300)	**(50-100)**	(20-400)	**(50-800)**	(17-400)	**(450-800)**	(80-300)	(100-1000)
WA	50	**75**	-	**100^**	100^	**100^**	300^	**475^**	200^	**-**	225^	237.50^
	(50-150)	**(50-100)**	-	**(50-100)**	*(no range)*	**(50-150)**	(50-400)	**(350-600**	*(no range)*	-	(200-700)	(75-400)
NT	100^	**-**	50^	**-**	100^	**-**	350	**300^**	100^	**-**	1800 ^	-
	(50-150)	**-**	*(no range)*	-	*(no range)*	**-**	(50-400)	**(200-400)**	*no range)*	-	*(no range)*	-
QLD	30^	**25**	35^	**40^**	50^	**100^**	200	**200**	200^	**200^**	350^	400 ^
	(20-100)	**(10-100)**	*(no range)*	**(6-50)**	*(no range)*	**(45-100)**	(60-800)	**(100-800)**	(120-250)	**(200-300)**	(180-450)	(350-550)

Source: EDRS REU interviews
^ Small numbers (n<10); interpret with caution

Table 55: Methamphetamine price changes, by jurisdiction, 2011

(%) Speed price changes (among those who commented)	National 2010 N=146	National 2011 N=190	NSW n=18	ACT n=24	VIC n=55	TAS n=19	SA n=21	WA n=10	NT n=7^	QLD n=36
Increased	**19**	**21**	28	21	20	5	33	20	33	17
Stable	**70**	**70**	61	71	73	95	48	70	56	72
Decreased	**3**	**3**	6	4	0	0	5	10	0	6
Fluctuated	**8**	**6**	6	4	7	0	14	0	11	6
Base price changes (among those who commented)	**National 2010 N=43**	**National 2011 N=48**	**NSW n=11**	**ACT n=4^**	**VIC n=5^**	**TAS n=4^**	**SA n=10**	**WA n=3^**	**NT n=0**	**QLD n=11**
Increased	**12**	**25**	18	25	20	0	30	33	-	36
Stable	**74**	**63**	73	50	80	100	50	67	-	46
Decreased	**2**	**2**	0	0	0	0	0	0	-	9
Fluctuated	**12**	**10**	9	25	0	0	20	0	-	9
Ice/crystal price changes) (among those who commented)	**National 2010 N=60**	**National 2011 N=88**	**NSW n=12**	**ACT n=3^**	**VIC n=24**	**TAS n=4^**	**SA n=19**	**WA n=10**	**NT n=0**	**QLD n=16**
Increased	**47**	**44**	50	33	38	50	47	20	-	63
Stable	**43**	**48**	42	67	50	50	42	70	-	38
Decreased	**0**	**1**	8	0	0	0	0	0	-	0
Fluctuated	**10**	**7**	0	0	13	0	11	10	-	0

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

The median price per gram of speed has remained substantially lower in NSW compared to other jurisdictions over time, however 2011 saw an increase in price speed in NSW to the highest reported since monitoring began in 2000 (Table 56).

Table 56: Median price per gram of methamphetamine powder (speed), by jurisdiction, 2000-2011

	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	60
2001	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2002	60	n.a.	n.a.	n.a.	43	n.a.	n.a.	n.a.
2003	55	175	180	200	40	200	60	200
2004	60	80	180	300	50	300	100	180
2005	60	80	180	325	65	300	200	180
2006	60	200	200	325	50	300	122.75	150
2007	50	200	195	300	200	350	250	200
2008	50	225	200	300	200^	100	300^	165
2009	47.50	200	190	255	350	275	300	180
2010	55	200	200	250	200^	300^	350	200
2011	**80**	**200**	**200**	**250^**	**300^**	**475^**	**300^**	**200**

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: Data not collected in QLD in 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. In 2000, in NSW and SA, price was reported for 'methamphetamine' with no differentiation between forms, and as such is not reported here; no participants reported on the price of speed in QLD in 2001. In 2009 onward, only last price paid for gram of speed was reported.

Very few participants in 2011 across jurisdictions were able to comment on the price per point of base. In 2011, apart from fluctuations in price reported in ACT and QLD, most other jurisdictions reported stability in price (Table 57).

Table 57: Median price per point of methamphetamine base (base), by jurisdiction, 2000-2011

	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	30
2001	50	n.a.	n.a.	n.a.	30	n.a.	n.a.	30
2002	40	n.a.	n.a.	n.a.	25	n.a.	n.a.	n.a.
2003	40	40	32.5	50	25	50	50	25
2004	37.5	40	29	50	25	50	50	27.5
2005	30	40	22.5	50	25	50	75	25
2006	37.5	42.5	*(no purchases)*	40	22.5	50	80^	25
2007	40^	50^	50^	40	40	50^	35^	25
2008	42.5^	30	30^	40^	50	50^	*(no purchases)*	25
2009	30^	40^	*(no purchases)*	60^	50^	50^	55^	40^
2010	35^	25^	*(no purchases)*	50^	50^	*(no purchases)*	50^	35^
2011	***(no purchases)***	**22.50^**	**40^**	**50^**	**50^**	***(no purchases)***	***(no purchases)***	**40^**

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution.
Note: Data not collected in QLD in 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. No participant commented on the price of a point of base in VIC in 2006. In 2000 in NSW and SA, price was reported for 'methamphetamine' with no differentiation between forms, and as such is not reported here. In 2009 onward, only last price paid for point of base was reported

In 2011, the median price for a point of ice/crystal increased across all jurisdictions. NSW reported the lowest price for a point of ice/crystal methamphetamine ($60). Please interpret with caution as small numbers in certain jurisdictions (Table 58).

Table 58: Median price per point of crystalline methamphetamine (ice/crystal) by jurisdiction, 2000-2011

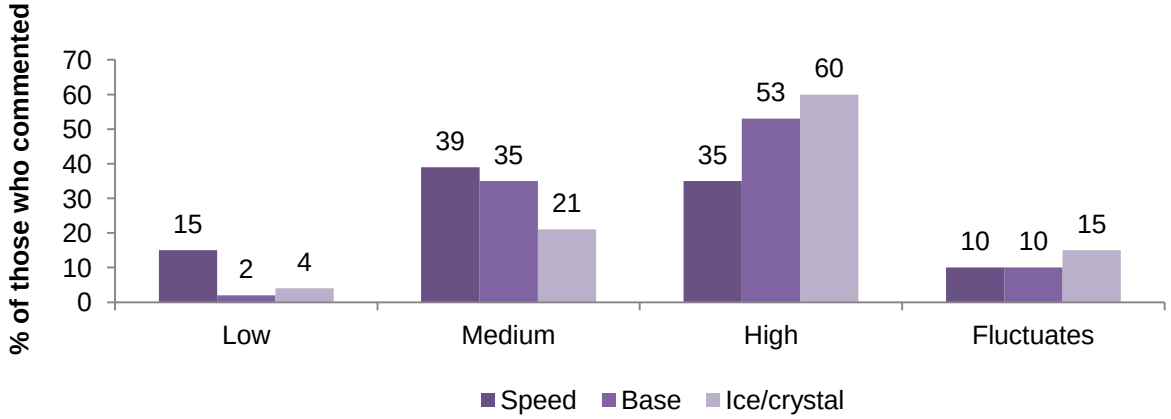
	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	35
2001	50	n.a.	n.a.	n.a.	35	n.a.	n.a.	40
2002	50	n.a.	n.a.	n.a.	25	n.a.	n.a.	n.a.
2003	50	45	40	50^	25	50	65	40
2004	40	47.5	40	50^	25	50	50	40
2005	50	35	40	50^	25	50	80	47.5
2006	50	50	47.5	50^	50	50	80^	50
2007	50	50^	40^	50^	50	50	50^	50
2008	50	50	50^	40^	50	50	*(no purchases)*	50
2009	50^	50^	50^	50^	50	50^	100^	50
2010	50	70^	85^	*(no purchases)*	75^	50^	100^	50^
2011	**60**	**80^**	**100**	**50^**	**95**	**100^**	***(no purchases)***	**100**

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: Data not collected in QLD in 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. In 2000 in NSW and SA, price was reported for 'methamphetamine' with no differentiation between forms, and as such is not reported here. In 2009, only last price paid for point of ice/crystal was reported.

5.2.2 Purity

Participants were asked about their perceptions of speed, base and ice/crystal purity currently and also whether this had changed over the last six months. Ice/crystal and base were most commonly perceived to be of high purity, whilst speed was most commonly reported to be of medium purity (Figure 20).

Figure 20: National REU reports of current methamphetamine purity, 2011



Source: EDRS REU interviews
Note: Among those who commented

National differences noted from 2010 include more REU commenting on market characteristics across forms. Speed had slightly more REU comment that it was of high purity than was reported in 2009, however, the majority of reports remained that it was

considered of 'medium' purity. Base and ice/crystal continued to be reported by the majority of REU participants as being of 'high' purity (Table 59).

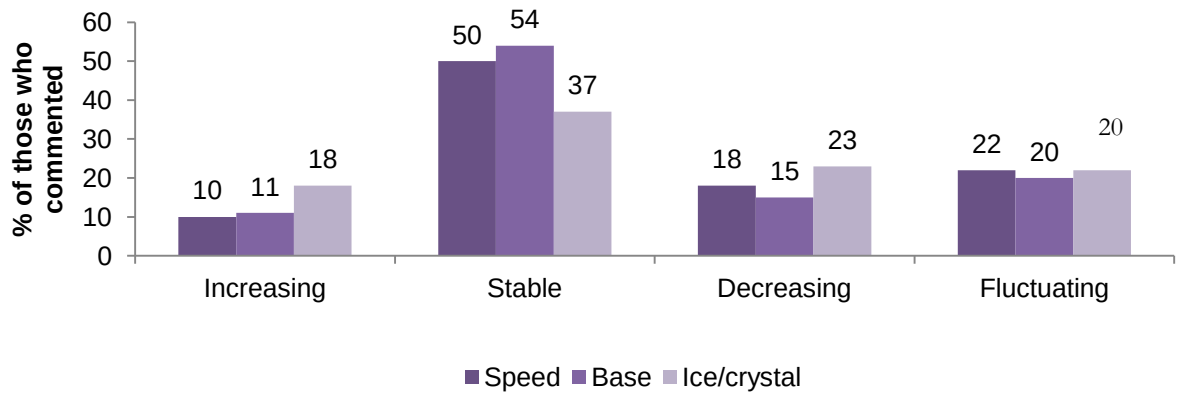
Table 59: Participant reports of current methamphetamine purity, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Current purity Speed	**2010 N=177**	**2011 N=209**	**n=23**	**n=25**	**n=59**	**n=23**	**n=23**	**n=9^**	**n=9^**	**n=38**
Low	12	**15**	17	20	17	9	9	11	33	13
Medium	48	**39**	30	32	34	35	44	44	56	53
High	23	**35**	39	36	39	48	35	44	0	26
Fluctuates	16	**10**	13	12	10	9	13	0	11	8
Current purity Base	**2010 N=56**	**2011 N=58**	**n=12**	**n=8^**	**n=5^**	**n=5^**	**n=13**	**n=3^**	**n=0**	**n=12**
Low	14	**2**	8	0	0	0	0	0	-	0
Medium	30	**35**	25	0	40	20	54	33	-	50
High	46	**53**	58	88	60	40	31	67	-	50
Fluctuates	9	**10**	8	13	0	40	15	0	-	0
Current purity Ice/Crystal	**2010 N=66**	**2011 N=105**	**n=15**	**n=3^**	**n=28**	**n=3^**	**n=24**	**n=12**	**n=2^**	**n=18**
Low	15	**4**	7	33	0	0	8	0	0	0
Medium	23	**21**	7	0	25	0	25	25	50	22
High	50	**60**	73	67	57	67	54	58	50	61
Fluctuates	12	**15**	13	0	18	33	13	17	0	17

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards
^ small numbers commenting (n<10); interpret with caution

The largest proportion of users of all forms of methamphetamine reported that the purity remained stable in the six months preceding interview (Figure 21)(Table 60).

Figure 21: National REU reports of recent (last six months) change in methamphetamine purity, 2011



Source: EDRS REU interviews
Note: Among those who commented

Table 60: Participant reports of methamphetamine purity change, by jurisdiction, 2011

(%) Current purity Speed	National 2010 N=153	National 2010 N=185	NSW n=18	ACT n=21	VIC n=54	TAS n=21	SA n=20	WA n=9^	NT n=5^	QLD n=37
Increasing	**10**	**12**	17	14	14	14	10	0	20	8
Stable	**50**	**51**	67	52	50	52	55	67	60	35
Decreasing	**18**	**14**	6	19	19	5	5	11	20	16
Fluctuating	**22**	**23**	11	14	17	29	30	22	0	41
Base	**2010 N=46**	**2011 N=48**	**n=10**	**n=6^**	**n=5^**	**n=3^**	**n=10**	**n=3^**	**n=0**	**n=11**
Increasing	**11**	**4**	0	0	20	0	0	0	-	9
Stable	**54**	**65**	80	67	80	33	80	33	-	46
Decreasing	**15**	**6**	10	0	0	0	0	33	-	9
Fluctuating	**20**	**25**	10	33	0	67	20	33	-	36
Ice/Crystal	**2010 N=60**	**2011 N=95**	**n=13**	**n=3^**	**n=26**	**n=3^**	**n=21**	**n=10**	**n=1^**	**n=18**
Increasing	**18**	**25**	46	0	31	0	24	20	0	17
Stable	**37**	**47**	39	67	39	100	57	70	100	28
Decreasing	**23**	**6**	0	33	0	0	5	10	0	17
Fluctuating	**22**	**21**	15	0	31	0	14	0	0	39

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards
^ small numbers commenting (n<10); interpret with caution

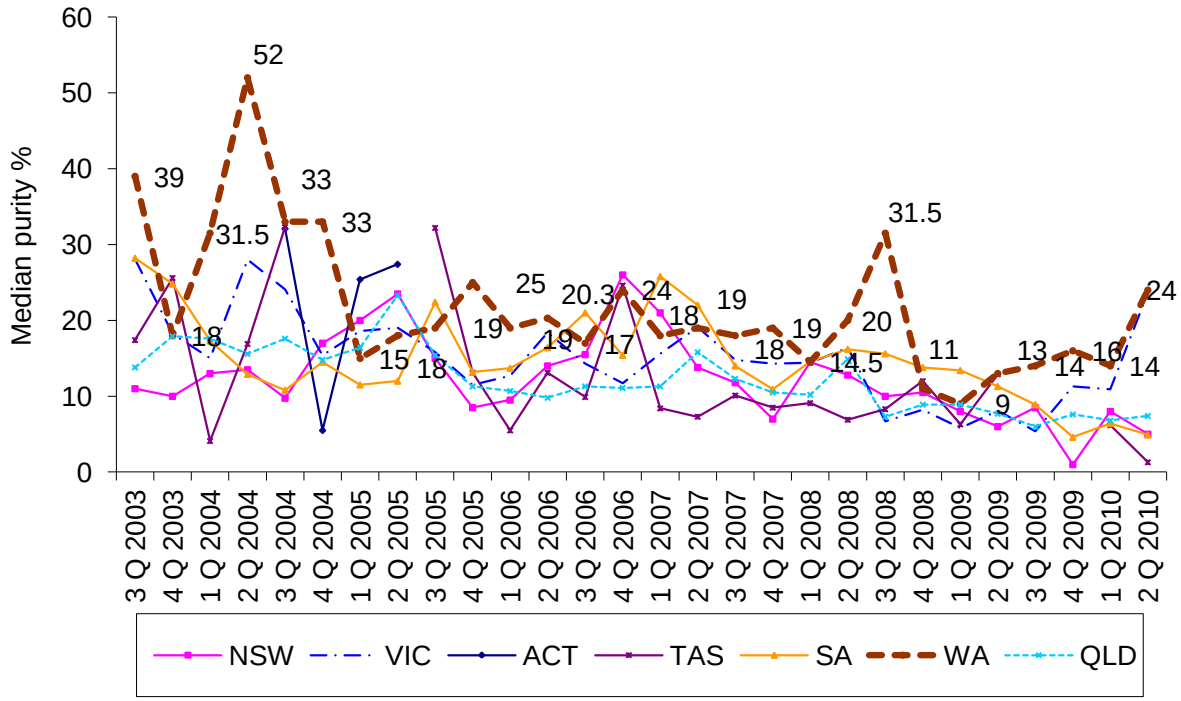
As mentioned previously, user reports of purity are subjective and depend on a number of factors including the user's tolerance to the drug. An objective measure of purity is provided by examination of seizures analysed. There are important caveats to consider when interpreting the methylamphetamine purity data. The ACC has provided the purity figures for state police and AFP seizures.

Secondly, not all illicit drugs seized by Australia's law enforcement agencies are subjected to forensic analysis. The purity figures, therefore, relate to an unrepresentative sample of the illicit drugs available in Australia, and drawing meaningful conclusions from these purity data remains difficult (Australian Customs Service 2007).

Finally, the purity of methylamphetamine fluctuates widely in Australia as a result of a number of factors, including the type and quality of chemicals used in the production process, the expertise of the 'cooks' involved, as well as whether the seizure was locally manufactured or imported.

Figure 22 shows the median purity across jurisdictions of methylamphetamine seizures (respectively) by quarter from 2003/04. As there were few AFP seizures analysed in most jurisdictions, only state/territory police seizures are shown. There is no clear trend in the purity of methylamphetamine or amphetamine seizures that are analysed. Only data for methylamphetamine seizures are presented here. Amphetamine purity is available from the latest Illicit Drug Data Report available online (http://www.crimecommission.gov.au/). In the past five years, the median purity of methylamphetamine has generally remained lower than 25% and has been decreasing except in WA where the purity reached a high of 31.5% in the second quarter of 2008 (WA and VIC figures are bolded). No methylamphetamine seizures were analysed for purity in the ACT or the NT in 2009/10 (Australian Crime Commission 2011).

Figure 22: Median purity of methylamphetamine seizures analysed by state/territory police, by jurisdiction, 2003/04-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were not available at the time of publication; WA figures highlighted

5.2.3 Availability

Thirty-seven percent of the national sample commented on the current availability of speed and whether this had changed in the preceding six months. The majority of participants in all jurisdictions reported that speed had remained easy to very easy (87%) to obtain and that this had remained stable (77%; Table 61).

Table 61: Availability of methamphetamine powder (speed), by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	**2010**	**2011**								
(among those who commented)	**N=187**	**N=213**	**n=26**	**n=26**	**n=57**	**n=25**	**n=24**	**n=9^**	**n=8^**	**n=38**
Very easy	**28**	**45**	27	39	51	52	58	67	38	37
Easy	**52**	**42**	50	54	46	36	21	33	50	42
Difficult	**18**	**12**	19	4	4	12	21	0	13	21
Very difficult	**2**	**1**	4	4	0	0	0	0	0	0
Availability changes	**2010**	**2011**	**NSW**	**ACT**	**VIC**	**TAS**	**SA**	**WA**	**NT**	**QLD**
(among those who commented)	**N=178**	**N=201**	**n=24**	**n=26**	**n=54**	**n=23**	**n=20**	**n=9^**	**n=7^**	**n=38**
More difficult	**13**	**10**	13	8	6	4	15	11	14	16
Stable	**71**	**77**	79	69	87	91	70	79	71	61
Easier	**13**	**11**	8	23	7	4	10	11	0	18
Fluctuates	**3**	**2**	0	0	0	0	5	0	14	5

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Ten percent of the national sample commented on the current availability of base and whether this had changed over the past six months. Reports of difficulty in obtaining base increased, however, overall base reportedly remained easy to very easy (61%) to obtain and this was reported to have remained stable (68%; Table 62).

Table 62: Availability of methamphetamine base, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	**2010**	**2011**								
(among those who commented)	**N=58**	**N=58**	**n=12**	**n=8^**	**n=5^**	**n=5^**	**n=12**	**n=4^**	**n=0**	**n=12**
Very easy	**29**	**28**	17	13	0	20	58	0	-	42
Easy	**53**	**33**	17	50	80	20	42	0	-	25
Difficult	**17**	**38**	67	38	20	60	0	100	-	25
Very difficult	**0**	**2**	0	0	0	0	0	0	-	8

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards
^ small numbers (n<10); interpret with caution

Table 63: Availability of methamphetamine base continued, by jurisdiction, 2011

Availability changes (among those who commented)	2010 N=50	2011 N=53	NSW n=12	ACT n=6^	VIC n=5^	TAS n=5^	SA n=11	WA n=3^	NT n=0	QLD n=11
More difficult	**8**	**15**	17	17	0	0	9	67	-	18
Stable	**64**	**68**	75	83	100	100	55	33	-	46
Easier	**24**	**9**	8	0	0	0	27	0	-	9
Fluctuates	**4**	**8**	0	0	0	0	9	0	-	27

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards^ small numbers (n<10); interpret with caution

Nineteen percent of the national sample commented on the availability of ice/crystal. The majority of participants considered it easy or very easy to obtain (86%) with a smaller proportion to 2010 reporting it to be difficult to obtain. The majority reported that availability had remained stable over the preceding six months (Table 64).

Table 64: Availability of crystalline methamphetamine (ice/crystal), by jurisdiction, 2011

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability (among those who commented)	2010 N=66	2011 N=108	n=16	n=3^	n=28	n=4^	n=24	n=13	n=2^	n=18
Very easy	**42**	**40**	56	0	46	25	29	46	0	39
Easy	**36**	**46**	38	67	43	0	54	39	100	56
Difficult	**21**	**14**	6	33	11	75	17	15	0	6
Very difficult	**0**	**0**	0	0	0	0	0	0	0	0
Availability changes (among those who commented)	2010 N=64	2011 N=100	NSW n=15	ACT n=3^	VIC n=25	TAS n=4^	SA n=21	WA n=13	NT n=1^	QLD n=18
More difficult	**17**	**6**	0	33	8	0	5	0	0	11
Stable	**61**	**71**	67	67	64	100	67	84	100	72
Easier	**14**	**16**	33	0	20	0	14	15	0	6
Fluctuates	**8**	**7**	0	0	8	0	14	0	0	11

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards^ small numbers (n<10); interpret with caution

As with ecstasy, speed use was reported most commonly to have been bought from friends and known dealers, and obtained from friends' homes and used in nightclubs (Table 65). Other includes: educational institution, outdoors and car/other vehicle (driver).

Table 65: Last source, purchase location and use location of methamphetamine powder (speed), 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2010 N=192	2011 N=219	n=26	n=26	n=60	n=25	n=25	n=10	n=9	n=38
Friends	**63**	**53**	65	58	48	64	44	60	67	45
Known dealers	**20**	**28**	27	27	38	8	20	0	33	37
Acquaintances	**3**	**7**	0	4	3	12	24	20	0	3
Unknown dealers	**0**	**1**	0	0	0	8	0	0	0	3
Workmates	**3**	**1**	4	0	0	0	0	0	0	3
Street dealers	**0**	**1**	0	0	3	0	0	0	0	0
Mobile dealers	**<1**	**<1**	0	4	0	0	0	0	0	0
Other	**<1**	**<1**	0	0	0	0	0	0	0	3
Haven't obtained	**7**	**8**	4	8	7	8	12	20	0	8
Locations scored (among those who commented)	2010 N=192	2011 N=218	NSW n=26	ACT n=26	VIC n=60	TAS n=25	SA n=25	WA n=10	NT n=9	QLD n=38
Friend's home	**35**	**38**	27	42	35	48	44	30	56	35
Dealer's home	**15**	**17**	15	27	20	12	8	0	11	19
Own home	**16**	**15**	12	4	15	16	12	30	33	16
Nightclub	**4**	**6**	19	8	3	4	4	0	0	3
Public place	**10**	**7**	8	8	8	8	8	0	0	5
Raves*	**1**	**1**	4	0	2	0	4	0	0	0
Acquaintance's home	**1**	**<1**	0	0	0	0	0	10	0	0
Private party	**1**	**2**	4	0	2	0	0	0	0	5
Pubs	**4**	**2**	0	0	2	4	4	10	0	3
Street	**0**	**1**	4	4	0	0	0	0	0	0
Live music events	**X**	**1**	4	27	2	4	4	0	11	0
Work	**1**	**<1**	0	0	2	0	0	0	0	3
Other	**5**	**1**	0	0	3	0	0	0	0	3
Used but not scored	**7**	**8**	4	8	7	8	12	20	0	8
Last use venue (among those who commented)	2010 N=193	2011 N=218	NSW n=26	ACT n=26	VIC n=60	TAS n=25	SA n=25	WA n=10	NT n=9	QLD n=38
Nightclub	**23**	**22**	27	27	27	24	4	10	0	27
Dealers home	**<1**	**<1**	0	4	0	0	0	0	0	0
Home	**14**	**12**	8	0	15	12	12	30	33	8
Friend's home	**16**	**18**	4	12	18	20	24	30	56	14
Private party	**10**	**6**	8	0	7	4	16	10	0	5
Live music event	**13**	**11**	19	27	7	4	4	0	11	11
Raves*	**5**	**4**	8	8	7	0	4	0	0	0
Pubs	**9**	**6**	15	0	10	24	12	0	0	5
Work	**2**	**<1**	0	4	0	0	0	0	0	0
Public place	**<1**	**1**	4	0	2	0	0	0	0	0
Other	**5**	**3**	4	20	4	4	0	0	6	0
Used but not scored	**5**	**9**	4	4	5	8	24	20	0	14

Source: EDRS REU interviews

* Includes 'doofs' and dance parties

Note: Numbers may not add to 100% due to small proportions reporting that they haven't obtained base recently but were able to comment on market characteristics or the option of a 'street dealer'

As with ecstasy and speed, base was also most commonly reported to have been bought from friends and known dealers. Interestingly, in 2011, it was reportedly obtained by most from friends' homes, by many more than was reported in 2010. Base is the least common form reportedly used by REU. Base continued to be reportedly last used in private locations (own home and friend's home; Table 66). Jurisdictional differences should be interpreted with caution due to small numbers.

Table 66: Last source, purchase location and use location of methamphetamine base, 2011

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2010 N=60	2011 N=59	n=12	n=8^	n=5^	n=5^	n=13	n=4^	n=0	n=12
Friends	**62**	**56**	58	50	60	60	46	50	-	67
Known dealers	**18**	**31**	42	25	20	0	39	25	-	33
Acquaintances	**10**	**3**	0	0	20	0	8	0	-	0
Other	**0**	**2**	0	13	0	0	0	0	-	0
Haven't obtained	**8**	**9**	0	13	0	40	8	25	-	0
Locations scored (among those who commented)	2010 N=60	2011 N=59	NSW n=12	ACT n=8^	VIC n=5^	TAS n=5^	SA n=13	WA n=4^	NT n=0	QLD n=12
Friend's home	**8**	**39**	33	38	60	60	31	0	-	50
Dealer's home	**33**	**15**	17	13	20	0	8	25	-	25
Own home	**20**	**14**	17	13	0	0	15	50	-	8
Public place	**10**	**14**	25	13	0	0	23	0	-	8
Nightclub	**8**	**2**	0	0	0	0	0	0	-	8
Acquaintance's home	**3**	**3**	13	0	20	0	8	0	-	0
Raves*	**0**	**3**	8	0	0	0	8	0	-	0
Live music event	**0**	**2**	0	13	0	0	0	0	-	0
Used but not scored	**8**	**9**	0	13	0	40	8	25	-	0
Last use venue (among those who commented)	2010 N=60	2011 N=59	NSW n=12	ACT n=8^	VIC n=5^	TAS n=5^	SA n=13	WA n=4^	NT n=0	QLD n=12
Home	**18**	**22**	8	0	0	40	46	75	-	8
Friend's home	**25**	**22**	25	25	40	20	15	0	-	25
Live music event	**10**	**10**	17	25	0	0	15	0	-	0
Pub	**5**	**2**	0	0	0	0	0	0	-	8
Nightclub	**22**	**9**	17	13	20	0	0	0	-	8
Private party	**3**	**9**	0	13	20	20	0	0	-	17
Raves*	**2**	**3**	8	0	0	0	8	0	-	0
Work	**0**	**2**	0	13	0	0	0	0	-	0
Public place	**0**	**3**	8	0	20	0	0	0	-	0
Other	**0**	**7**	16	13	0	0	0	0	-	8
Used but not scored	**8**	**12**	0	0	0	20	15	25	-	25

Source: EDRS REU Interviews

* Includes 'doofs' and dance parties

^ Small numbers commenting (n<10); interpret with caution

Note: Numbers may not add to 100% due to small proportions reporting that they have not obtained base recently but were able to comment on market characteristics or the option of 'street dealer' or 'outdoors'

As with the other forms of methamphetamine, friends and known dealers were the most common sources of ice/crystal. It was most commonly scored and used in private locations, including at friends' homes and at participants' own homes. 'Other' includes: pubs, educational institutions, and private parties, and raves. It was most commonly used at a private venue such as friend's home, own home or a private party (Table 67).

Table 67: Last source, purchase location and use location of crystalline methamphetamine (ice/crystal), 2011

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (%) (among those who commented)	2010 N=68	2011 N=107	n=16	n=3^	n=27	n=5^	n=23	n=12	n=3^	n=18
Friends	**53**	**57**	63	33	56	40	44	92	67	56
Known dealers	**25**	**29**	31	33	37	0	39	0	0	33
Acquaintances	**10**	**6**	0	0	4	20	13	8	0	6
Unknown dealers	**2**	**1**	0	0	4	0	0	0	0	0
Street dealers	**0**	**1**	0	0	0	0	0	0	0	6
Mobile dealers	**0**	**1**	6	0	0	0	0	0	0	0
Haven't obtained	**10**	**5**	0	33	0	40	4	0	33	0
Locations scored (among those who commented)	2010 N=67	2011 N=106	NSW n=16	ACT n=3^	VIC n=27	TAS n=5^	SA n=23	WA n=12	NT n=2^	QLD n=18
Friend's home	**36**	**43**	50	33	44	20	40	50	100	33
Dealer's home	**19**	**17**	25	33	19	0	22	0	0	17
Own home	**12**	**13**	13	0	11	0	0	33	0	28
Agreed public location	**10**	**9**	6	0	11	0	17	8	0	6
Nightclub	**5**	**3**	0	0	0	0	4	0	0	11
Acquaintance's home	**1**	**3**	0	0	4	0	4	8	0	0
Other	**2**	**9**	6	0	12	40	9	0	0	11
Used but not scored	**10**	**4**	0	33	0	40	4	0	0	0
Last use venue (among those who commented)	2010 N=68	2011 N=107	NSW n=16	ACT n=3^	VIC n=28	TAS n=5^	SA n=23	WA n=12	NT n=2^	QLD n=18
Home	**24**	**27**	31	33	18	0	30	33	50	33
Friend's home	**18**	**35**	38	0	46	20	30	42	50	22
Nightclub	**21**	**8**	13	33	4	0	9	8	0	6
Private party	**6**	**1**	6	0	0	0	0	0	0	0
Dealers home	**2**	**4**	6	0	11	0	0	0	0	0
Raves*	**2**	**5**	6	0	7	0	9	0	0	0
Work	**0**	**1**	0	0	0	0	0	0	0	6
Live music event	**0**	**2**	0	0	0	0	9	0	0	0
Pub	**9**	**8**	0	0	7	40	4	8	0	11
Other	**3**	**5**	0	0	8	0	0	8	0	0
Used but not scored	**12**	**7**	0	33	0	40	9	0	0	11

Source: EDRS REU interviews

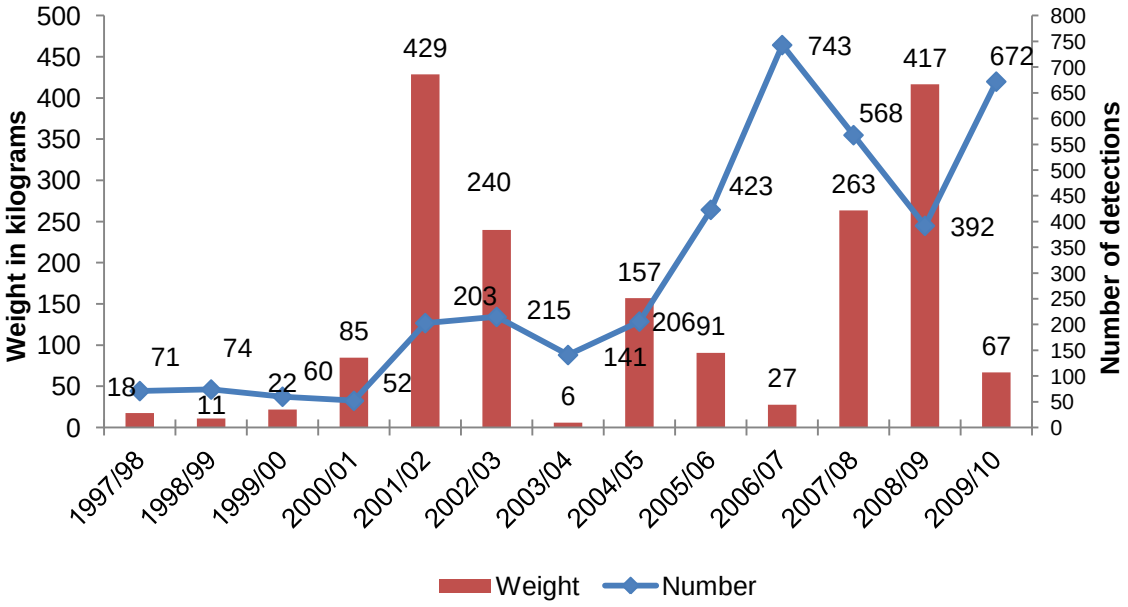
* Includes 'doofs' and dance parties

^ Small numbers commenting (n<10); interpret with caution

5.2.4 Amphetamine-type stimulants detected at the Australian border

Figure 23 shows the weight and number of amphetamine-type stimulants (ATS) detected at the Australian border by the ACS. In 2009/10, the number (672) of detections increased, while the weight of seizures decreased substantially (67 kilograms), suggesting a scattergun pattern to importation.

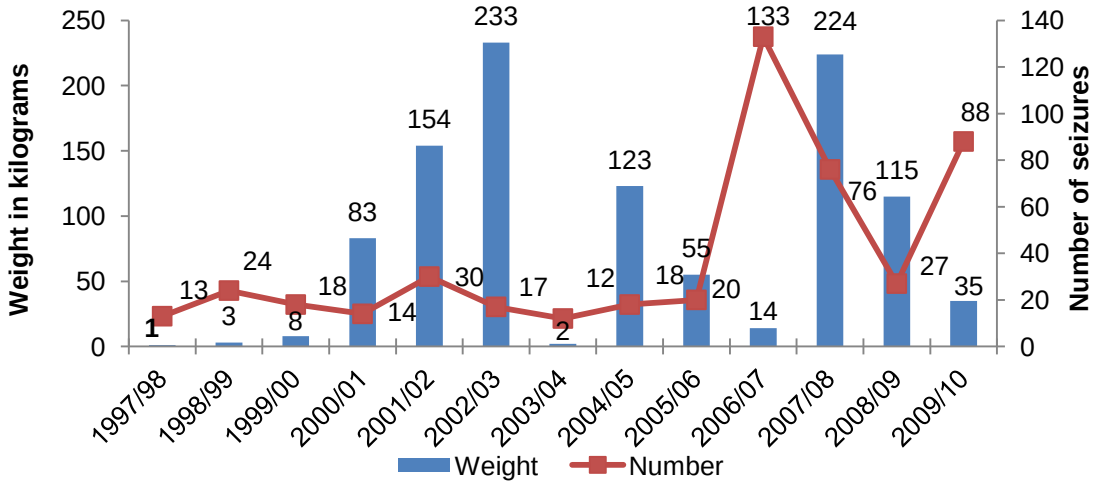
Figure 23: Total weight and number of ATS detected by the ACS, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service 2010)
Note: Includes amphetamine detections, methamphetamine and methamphetamine (ice) detections, excluding MDMA.

The number of crystal methamphetamine seizures detected at the Australian border increased in 2009/10, while the weight continued to decrease from 224 kilograms in 2007/08 to 36 kilograms in 2009/10 (Figure 24). The majority of seizures were detected coming through international mail, involving small quantities (Australian Customs Border and Protection Service 2010).

Figure 24: Total number and weight of crystalline methamphetamine detected by the ACS, 1997/98-2009/10



Source: (Australian Customs Border and Protection Service 2012)

5.3 Cocaine

- The price of cocaine remained stable in NSW, ACT, VIC at $300 per gram.
- Cocaine purity was reported as mixed between low (39%) and medium (38%). Purity was reported as remaining stable over the preceding six months.
- Availability reports were mixed with 51% reporting that it was difficult to very difficult and 49% reporting it was easy-very easy to obtain and availability was reported as being stable.
- Cocaine was predominantly purchased from private sources, i.e. friends at friends' homes, and was most reportedly last used in public locations such as nightclubs and private locations such as friends'home and private parties.

5.3.1 Price

Cocaine was most commonly purchased in grams and ranged from a median of $300 in most eastern jurisdictions to $375 SA in WA (Table 68).

Table 68: Median price per gram of cocaine, by jurisdiction, 2011

($)	NSW n=37	ACT n=24	VIC n=20	TAS n=12	SA n=20	WA n=1^	NT n=2^	QLD n=19
Gram (range)	300 (80-1000)	300 (150-350)	300 (150-500)	300 (200-400)	375 (80-800)	350^ *(no range)*	350^ *(no range)*	350 (120-500)

Source: EDRS REU interviews
^ Small numbers commenting (n<10), interpret with caution

The majority of those commenting on cocaine considered that the price had remained stable over the preceding six months (Table 69).

(%)	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD

Table 69: Price changes of cocaine, by jurisdiction, 2011

Cocaine price changes (Of those who responded)	2010 N=145	2011 N=153	n=42	n=23	n=24	n=13	n=21	n=3^	n=1^	n=26
Increased	15	21	19	22	17	15	24	0	100	27
Stable	68	67	69	78	75	77	52	67	0	54
Decreased	9	5	10	0	4	0	10	0	0	4
Fluctuated	9	7	2	0	4	8	14	33	0	15

Source**: EDRS REU interviews**
^ Small numbers commenting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

The majority of jurisdictions reported stability of the median last price per gram at $300. Smaller jurisdictions of SA and QLD reported increases in median price per gram (Table 70).

Table 70: Median price of cocaine, by jurisdiction, 2003-2011

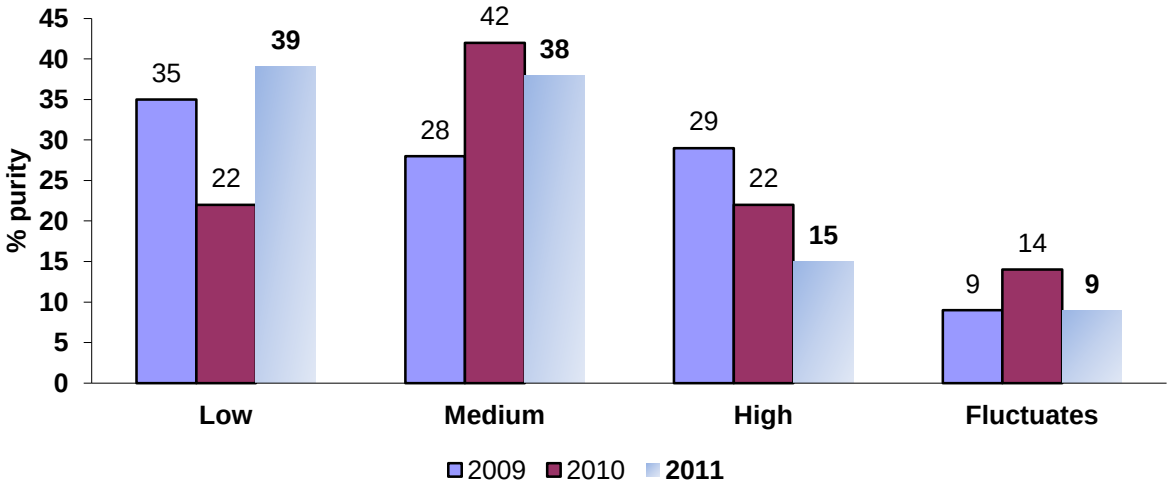
Median price per gram ($)	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	200	250	250	250	210	325	280	250
2004	200	250	277.50	325^	250	400	250	237.50
2005	270	250	300	350	300	350	375	300
2006	300	300	300	350	300^	350	275^	300
2007	300	300	300	350	337.5	400	350^	300
2008	300	300	300	350	375	325	450	300
2009	300	300	300	300	350	375	325	300
2010	300	300	300	350	350	365^	400^	300
2011	**300**	**300**	**300**	**300**	**375**	**350^**	**350^**	**350**

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: The price of cocaine was first collected in 2003

5.3.2 Purity

Participants were asked what the current purity or strength of cocaine was and if the purity had changed in the six months preceding interview. Of those who commented, responses were mixed of between low (39%) and medium (38%). In comparison to 2010 results, cocaine has been perceived by recent users to be decreasing in purity. (Figure 25).

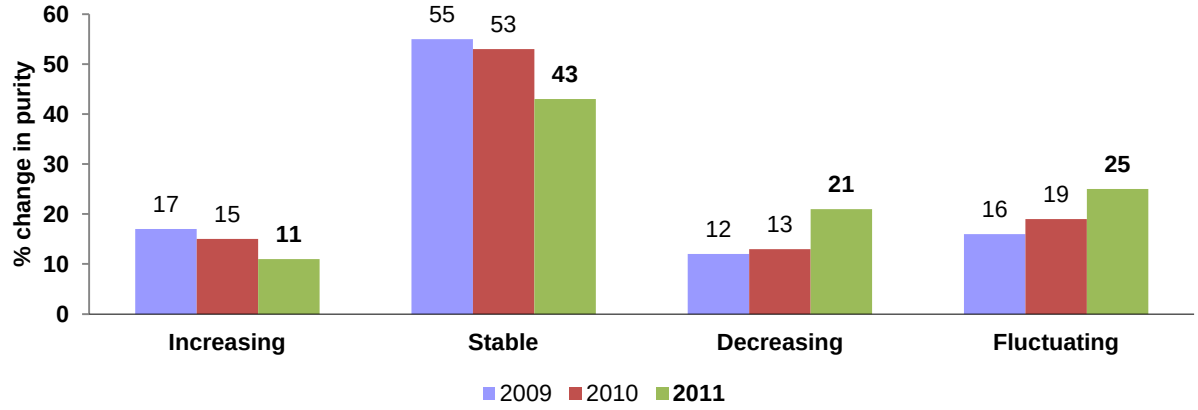
Figure 25: National REU reports of current cocaine purity, 2009-2011



Source: EDRS REU interviews
Note: Among those who commented
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented on whether the purity of cocaine had changed in the six months preceding interview, the largest proportion of the sample reported that it had remained stable (Figure 26).

Figure 26: National REU reports of recent (last six months) change in cocaine purity, 2011

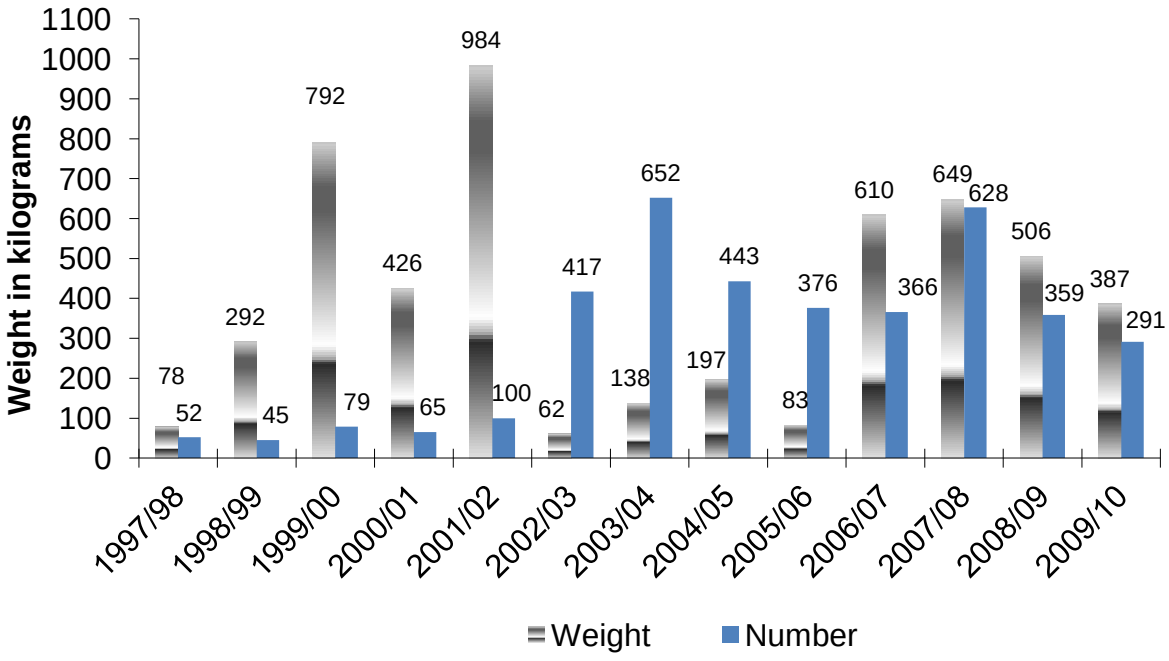


Source: EDRS REU interviews
Note: Among those who commented
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.3.3 Cocaine seized at the Australian border

During 2009/10, the Australian Customs and Border Protection Service made 291 detections of cocaine at the Australian border, a decrease from 359 in 2008/09 (Figure 27). The detections weighed a total of 387 kilograms a decrease from 506 kilograms in 2008/09. There was a significant increase in the weight of cocaine seized through the air passengers and crew stream, however, there was one significant detection of 240kg seized through the cargo stream coming in from Mexico (Australian Customs and Border Protection Service, 2010).

Figure 27: Number and weight of detections of cocaine detected at the border by the ACS, financial years 1997/98-2009/10



Source: Australian Customs and Border Protection Service, 2012

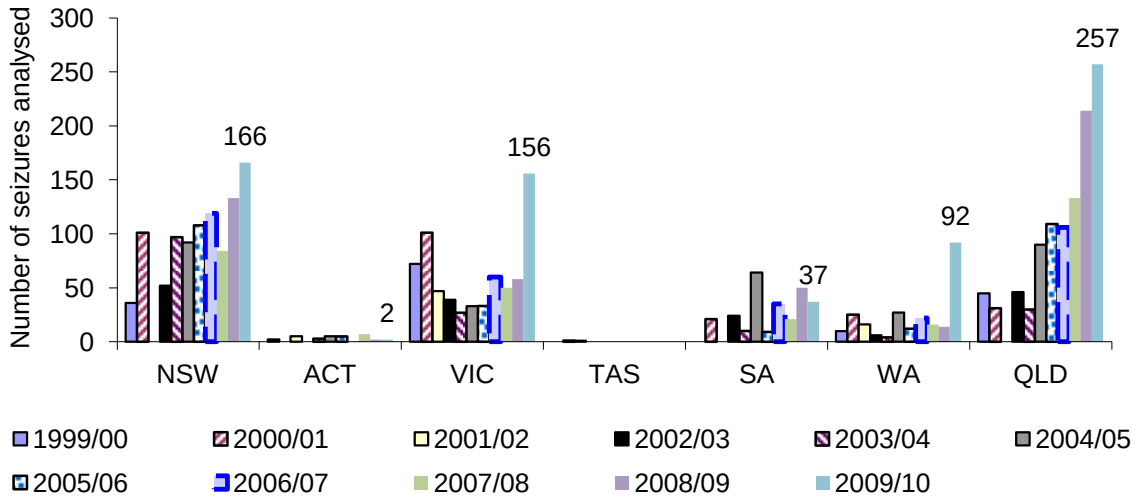
As user reports are subjective and depend on a number of factors, including the tolerance of the individual, objective data from forensic analysis of seizures are also presented. The purity data are provided by the ACC.

As previously mentioned, not all illicit drugs seized by Australia's law enforcement agencies are subjected to forensic analysis. In some instances, the seized drug will be analysed only in a contested court matter. The purity figures, therefore, relate to an unrepresentative sample of the illicit drugs available in Australia, and drawing meaningful conclusions from purity data remains difficult (Australian Crime Commission 2006).

Figures reported include seizures ≤2 grams and >2 grams, reflecting both street and larger seizures. The following caveat applies to Figures 28 and 29: these do not represent the purity levels of all cocaine seizures – only those that have been analysed at a forensic laboratory. Figures for WA (and TAS), and those supplied by the Australian Forensic Drug Laboratory, represent the purity levels of cocaine received at the laboratory in the relevant quarter; figures for all other jurisdictions represent the purity levels of cocaine seized by police in the relevant quarter. The period between the date of seizure by state police and the date of receipt at the laboratory can vary greatly. No adjustment has been made to account for double counting joint operations between the AFP and state/territory police.

There were no AFP cocaine seizures analysed in TAS and the NT in 2009/10. QLD and NSW reported its highest number of seizures to date (Figure 28), while other states all reported an increase in the number of seizures.

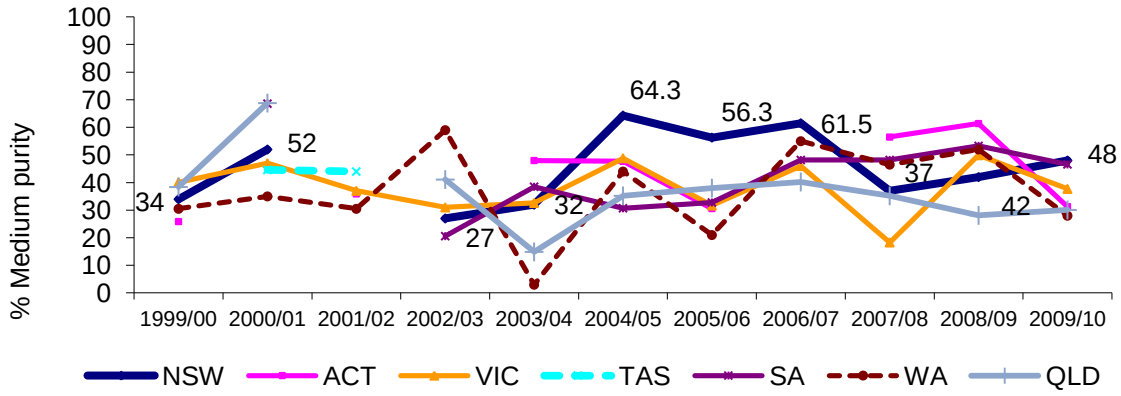
Figure 28: Number of state/territory police cocaine seizures, by jurisdiction, 1999/00-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were unavailable at time of publication.

Median purity of state police seizures was highest in WA at 46.6% . The NSW trend figures are highlighted (Figure 29). Over time it is apparent cocaine purity has fluctuated, however in recent years it appears to have stabilised to between 30-50%.

Figure 29: Median purity of state/territory police cocaine seizures, by jurisdiction, 1999/00-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; Australian Crime Commission 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011).
Note: Data for 2010/11 were unavailable at time of publication.

5.3.4 Availability

Reports of availability were mixed, with the slight majority of those commenting considering it to be difficult to very difficult to obtain (51%) versus easy to very easy (49%) to obtain. Most participants considered the ease of access to cocaine to have remained stable (66%) in the last six months prior to interview (Table 71).

Table 71: Availability of cocaine, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability (among those who commented)	2010 N=182	2011 N=186	n=49	n=29	n=25	n=17	n=27	n=6^	n=3^	n=30
Very easy	21	**17**	31	7	32	0	7	0	0	17
Easy	39	**32**	35	38	40	12	44	17	0	23
Difficult	34	**44**	35	48	24	53	44	84	33	57
Very difficult	6	**7**	0	7	4	35	4	0	0	3
Availability changes (among those who commented)	2010 N=171	2011 N=169	NSW n=46	ACT n=26	VIC n=25	TAS n=13	SA n=22	WA n=5^	NT n=2^	QLD n=30
More difficult	9	**15**	11	23	8	8	14	0	50	27
Stable	69	**66**	74	58	72	85	55	100	50	50
Easier	18	**14**	15	15	12	0	18	0	0	17
Fluctuates	4	**5**	0	4	8	8	14	0	0	7

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Cocaine was most commonly acquired through friends and known dealers. Very small numbers n<5 reported sourcing cocaine through street dealers or mobile dealers. It was most

commonly obtained in private locations, (friends' homes, and/or participants' own homes) and used eaqually in public locations (nightclubs, pubs and raves) vs private locations (Table 72). For place last intoxicated 'other' included: dealers home, restaurant/cafe, educational institution, acquantainances house and work.

Table 72: Last source, purchase location and use location of cocaine, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2010 N=186	2011 N=195	n=49	n=30	n=27	n=19	n=29	n=6^	n=3^	n=32
Friends	**55**	**50**	61	53	37	47	55	33	67	38
Known dealers	**19**	**23**	25	27	26	26	14	0	0	28
Acquaintances	**9**	**7**	2	0	22	5	7	0	0	13
Unknown dealers	**2**	**5**	4	3	4	5	3	17	33	6
Workmates	**2**	**2**	2	0	0	5	3	0	0	3
Other	**0**	**2**	2	7	0	0	0	0	0	0
Street dealers	**<1**	**<1**	0	3	0	0	0	0	0	
Used but not scored	**11**	**11**	4	7	11	11	17	50	0	0
Locations scored (among those who commented)	2010 N=183	2011 N=195	n=49	n=30	n=27	n=19	n=29	n=6^	n=3^	n=32
Friend's home	**32**	**31**	27	40	30	37	35	17	33	28
Dealer's home	**10**	**10**	10	13	19	5	7	0	33	3
Own home	**13**	**9**	12	7	11	5	3	0	0	13
Agreed public location	**6**	**9**	14	7	0	5	14	0	0	9
Acquaintance's home	**3**	**2**	2	0	4	0	0	0	0	4
Private party	**2**	**4**	6	0	4	0	3	17	0	3
Nightclub	**12**	**11**	6	20	19	0	7	17	0	13
Pubs	**7**	**6**	8	0	0	21	3	0	0	6
Raves*	**<1**	**<1**	2	0	0	0	0	0	0	0
Street	**<1**	**1**	2	3	0	0	0	0	0	0
Live music event	**0**	**2**	2	0	4	11	10	0	0	0
Work	**2**	**2**	2	0	0	0	3	0	0	6
Other (including Educational inst.)	**2**	**3**	4	0	8	11	0	0	33	3
Used but not scored	**11**	**11**	4	7	11	11	17	50	0	13
Last use venue (among those who commented)	N=183	N=193	n=49	n=30	n=27	n=19	n=29	n=5^	n=3^	n=31
Nightclub	**27**	**29**	27	40	33	26	14	20	0	36
Friends home	**19**	**18**	16	23	19	16	17	20	0	19
Private party	**7**	**11**	16	3	11	5	17	20	33	13
Home	**13**	**11**	6	17	19	11	3	0	33	7
Raves*	**2**	**2**	2	0	0	0	3	0	0	7
Pub	**14**	**9**	16	0	4	26	3	0	0	7
Live music event	**6**	**4**	2	0	4	11	10	0	0	0
Public place (street/park)	**2**	**1**	4	0	0	0	0	0	0	0
Other	**2**	**7**	4	3	0	0	6	0	33	0
Used, but not scored	**6**	**9**	4	3	7	5	21	40	0	13

Source: EDRS REU interviews
* Includes 'doofs' and dance parties ^Small numbers commenting (n<10); interpret with caution,

5.4 Ketamine

- Very small numbers of the national sample commented on the ketamine market characteristics, please interpret results with caution (n=48).
- Price of a gram of ketamine ranged from a median of $150 in NSW and QLD to $250 in SA and WA. This is a closer range in price and is generally less expensive than prices reported in 2010. The price was reported as stable by two-thirds of the participants that commented.
- The current purity of ketamine has continued to be reported as high, and this was reported to have remained stable by the majority that commented.
- Ketamine availability was returned to having mixed reports as found in 2009 with 52% reporting ease in obtaining ketamine and 49% reporting difficulty. Participant availability was reported as having remained stable in the preceding six months.
- Ketamine was continued to be predominantly obtained from friends, purchase typically occurred in private locations, such as friends' homes. Locations of last use were divided between public locations (nightclubs) and private locations (friends' homes).

5.4.1

Only a small proportion of the national REU sample (6%) were able to comment on the price of a gram of ketamine in all jurisdictions and, therefore, the results should be interpreted with caution. The median last price paid for a gram of ketamine ranged from $150 in NSW and QLD to $250 in SA and WA (Table 73).

Table 73: Median price of ketamine, by jurisdiction, 2011

Median price ($)	NSW n=14	ACT n=1^	VIC n=12	TAS n=0	SA n=3^	WA n=1^	NT n=0	QLD n=3^
Gram (range)	$150 (50-200)	$170 *(no range)*	$200 (80-300)	-	$250 (100-500)	$250 (*no range*)	-	$150 (50-500)

Source: EDRS REU interviews
^ Small numbers commenting (n<10), interpret with caution

Seven percent (n=38) of the national sample commented on whether the price of ketamine had changed in the preceding six months. The majority of these commenting participants reported that the price had remained stable (Table 74).

Table 74: Price changes of ketamine, by jurisdiction, 2011

(%) Ketamine price changes	National 2010	National 2011	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
(among those who commented)	n=24	n=38	n=15	n=4^	n=12	n=1^	n=4^	n=0	n=0	n=2^
Increased	**21**	**26**	33	0	33	0	25	-	-	0
Stable	**71**	**61**	47	75	58	100	75	-	-	100
Decreased	**0**	**5**	7	0	8	0	0	-	-	0
Fluctuated	**8**	**8**	13	25	0	0	0	-	-	0

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution.
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Table 75 presents data across time regarding the price of a gram of ketamine. In most jurisdictions across years, the proportion of REU able to comment on the price of ketamine has been low, so caution should be made when interpreting results. The majority of use has been reported to occur in NSW where the price has remained stable at $150 per gram.

Table 75: Median price of ketamine, by jurisdiction, 2000-2011

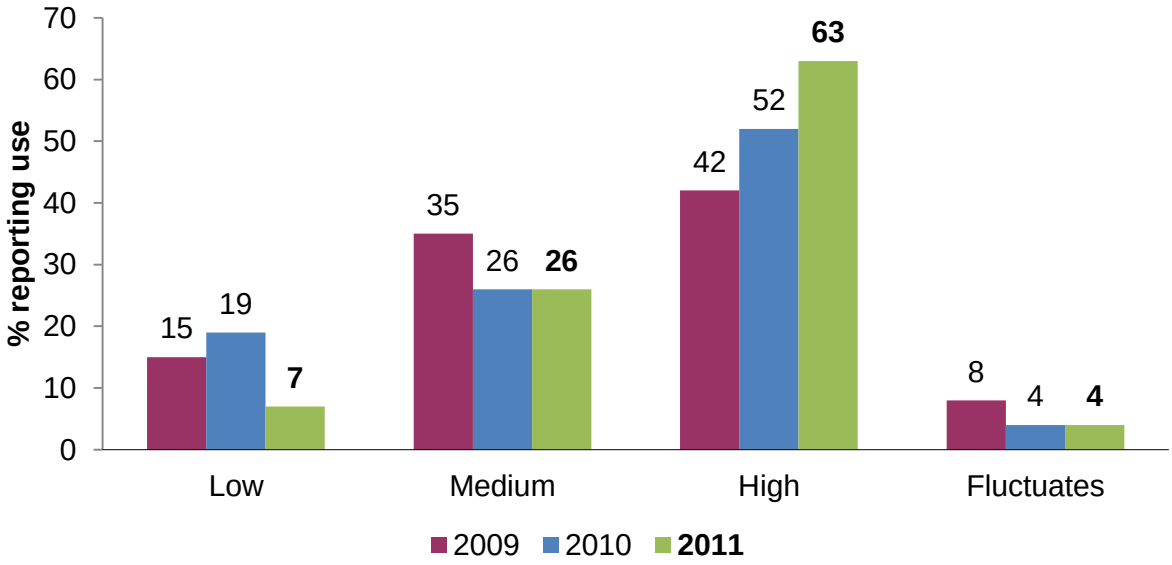
Median price per gram ($)	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	200	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	50
2001	150	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	142.50
2002	160	n.a.	n.a.	n.a.	40	n.a.	n.a.	n.a.
2003	150	n.a.	200	100^	200	n.a.	n.a.	180
2004	200	200^	195	50^	200	n.a.	200^	n.a.
2005	100	65^	180	190^	200	150	80^	150^
2006	175^	40^	100^	180^	300^	160^	50^	180^
2007	150	172.5^	200^	300^	200	n.a.	n.a.	n.a.
2008	150	n.a	200	300^	225^	n.a	n.a	n.a
2009	150^	n.a	200^	300^	200^	n.a	400^	200^
2010	150^	170^	220^	n.a	125^	250^	350^	150^
2011	**150**	**170^**	**$200**	**n.a**	**$250^**	**$250^**	**n.a**	**$150^**

Source: EDRS REU interviews
^A small number of participants commented; interpret with caution.
Note: Data first collected in NSW, SA and QLD in 2000; data not collected in QLD in 2002, data first collected in ACT, VIC, TAS, WA and NT in 2003. In 2009, only the last price paid for ketamine was collected.

5.4.2 Purity

Participants were asked what the current purity or strength of ketamine was, and if the purity had changed in the six months preceding interview. Eight percent (n=48) of the national sample commented on the purity of ketamine. Over half of those that commented reported ketamine purity to be high (63%; Figure 30). Perceived purity of ketamine appears to be increasing over the last three years.

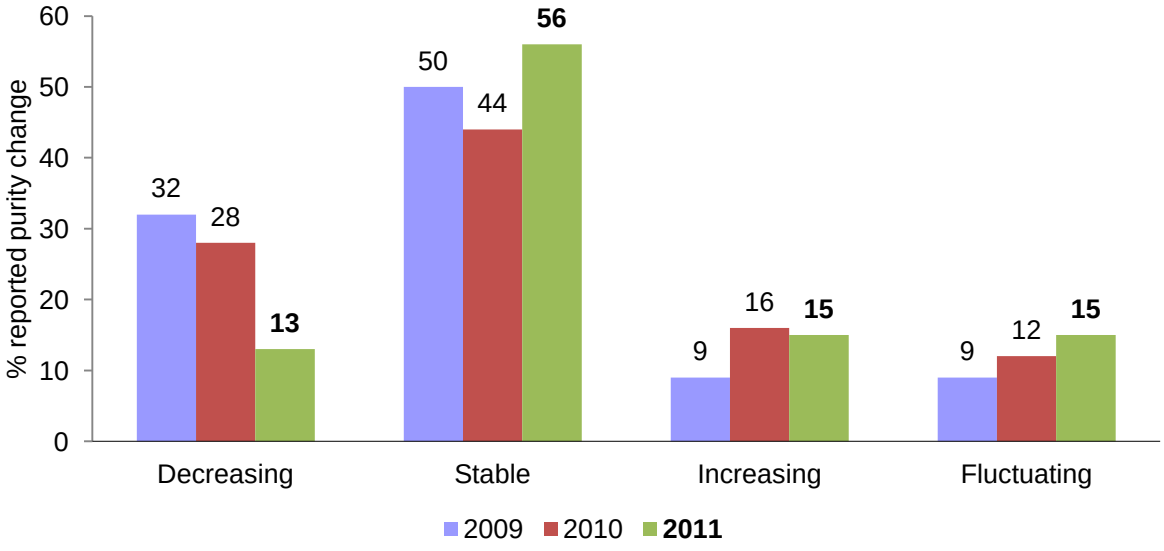
Figure 30: National REU reports of current ketamine purity, 2009-2011



Source: EDRS REU interviews
Note: Among those who commented (n=26 in 2009, n=27 in 2010, n=48).
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented on whether the purity of ketamine had changed in the six months preceding interview, 56% reported that the purity of ketamine had remained stable (Figure 31).

Figure 31: National REU reports of recent (last six months) change in ketamine purity, 2009-2011



Source: EDRS REU interviews
Note: Among those who commented (n=22 in 2009, n=25 in 2010, n=39).
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.4.3 Availability

Eight percent of the national sample commented on the recent availability of ketamine. Overall, ketamine availability reports were mixed with 52% of REU that commented reporting that it was easy to very eary to obtain and 49% reported that it was difficult to very difficult (Table 76).

Interestingly, reports of recent availability change saw over half (61%) of those who commented reporting that the availability of ketamine had remained stable over the preceding six months (Table 76).

Table 76: Availability of ketamine, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	**2010**	**2011**								
(among those who commented)	**N=30**	**N=47**	**n=20**	**n=5^**	**n=15**	**n=0**	**n=4^**	**n=0**	**n=0**	**n=3^**
Very easy	**13**	**26**	30	20	27	-	25	-	-	0
Easy	**20**	**26**	25	60	20	-	25	-	-	0
Difficult	**37**	**38**	45	20	33	-	25	-	-	68
Very difficult	**30**	**11**	0	0	20	-	25	-	-	33
Availability changes	**National 2010**	**National 2011**	**NSW**	**ACT**	**VIC**	**TAS**	**SA**	**WA**	**NT**	**QLD**
(among those who commented)	**n=29**	**n=44**	**n=18**	**n=5^**	**n=14**	**n=0**	**n=4^**	**n=0**	**n=0**	**n=3^**
Easier	**31**	**16**	22	20	14	-	50	-	-	33
Stable	**55**	**61**	50	80	71	-	50	-	-	68
More difficult	**10**	**23**	28	0	14	-	0	-	-	0
Fluctuates	**3**	**0**	0	0	0	-	0	-	-	0

Source: EDRS REU interviews
^ small numbers commenting (n<10); interpret with caution.
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Ketamine was predominantly obtained from friends (47%) or known dealers (31%). It was predominantly obtained from private locations, such as friends' homes (27%) and participants' dealers homes (delivered; 14%). Last use venue, where participants reported spending the most time intoxicated, included public venues such as nightclubs (22%) followed closely by private venues such as own home (22%; Table 77).

Table 77: Last source, purchase location and use location of ketamine, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	**2010 n=31**	**2011 n=49**	**n=22**	**n=5^**	**n=14**	**n=1^**	**n=4^**	**n=0**	**n=0**	**n=3^**
Friends	**58**	**47**	64	20	29	0	75	-	-	33
Known dealers	**16**	**31**	23	40	50	0	0	-	-	33
Acquaintances	**10**	**6**	5	0	7	0	25	-	-	0
Unknown dealers	**7**	**10**	5	20	14	0	0	-	-	33
Other		**2**	5	0	0	0	0	-	-	0
Used, but not scored	**10**	**4**	0	20	0	100	0	-	-	0
Locations scored (among those who commented)	**2010 n=31**	**2011 n=49**	**NSW n=22**	**ACT n=5^**	**VIC n=14**	**TAS n=1^**	**SA n=4^**	**WA n=0**	**NT n=0**	**QLD n=3^**
Friend's home	**29**	**27**	36	0	21	0	50	-	-	0
Dealer's home	**7**	**14**	18	20	14	0	0	-	-	0
Own home	**25**	**4**	0	0	13	0	25	-	-	33
Agreed public location	**3**	**10**	9	20	7	0	25	-	-	0
Acquaintance's home	**3**	**0**	-	-	-	-	-	-	-	-
Private party	**7**	**2**	0	0	7	0	0	-	-	0
Nightclub	**13**	**20**	23	0	29	0	0	-	-	33
Work	**0**	**0**	-	-	-	-	-	-	-	0
Pubs	**3**	**4**	5	0	0	0	0	-	-	33
Live music event	**0**	**6**	5	20	7	0	0	-	-	0
Raves/doofs/ dance parties	**0**	**6**	5	0	14	0	0	-	-	0
Used, but not scored	**9**	**4**	0	20	0	100	0	-	-	0
Last use venue (among those who commented)	**2010 n=31**	**2011 n=49**	**NSW n=22**	**ACT n=5^**	**VIC n=14**	**TAS n=1^**	**SA n=4^**	**WA n=0**	**NT n=0**	**QLD n=3^**
Nightclub	**36**	**22**	27	20	29	0	0	-	-	0
Friends home	**23**	**18**	32	0	7	100	0	-	-	0
Private party	**10**	**6**	5	20	7	0	0	-	-	0
Home	**19**	**22**	14	20	21	0	75	-	-	33
Dealers Home	**3**	**0**	-	-	-	-	-	-	-	-
Live music event	**3**	**10**	9	20	14	0	0	-	-	0
Educational institution	**3**	**0**	-	-	-	-	-	-	-	-
Raves/doofs/ dance parties	**n.a**	**8**	9	0	14	0	0	-	-	0
Outdoors	**n.a**	**2**	0	0	7	0	0	-	-	0
Pubs	**n.a**	**4**	5	0	0	0	0	-	-	33
Used, but not scored	**3**	**6**	0	20	0	0	25	-	-	0

Source: EDRS REU interviews

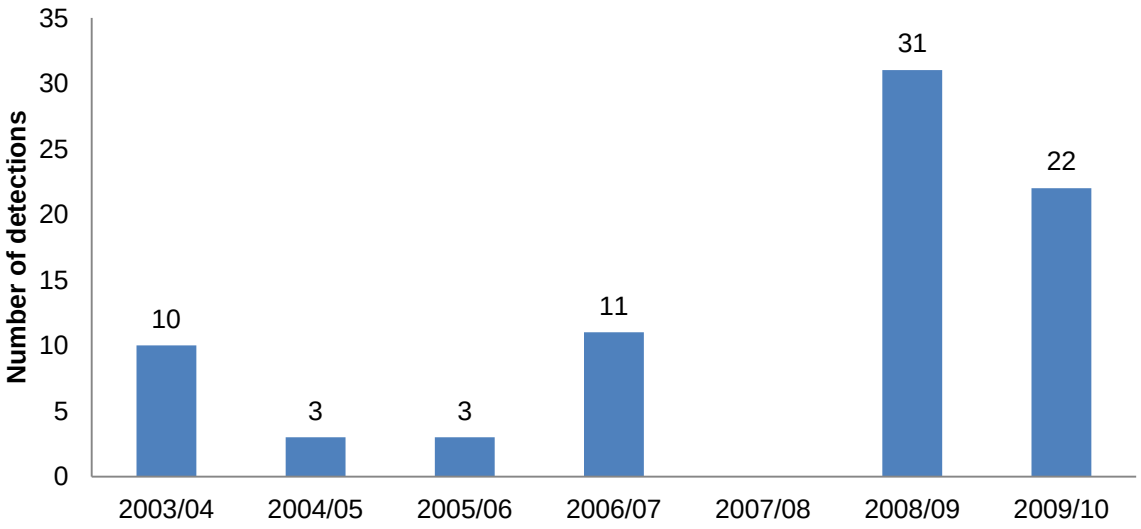
^ Small numbers commenting (n<10); interpret with caution

Note: For columns that do not add up to 100%, responses such as 'other' were not reported

5.4.4 Ketamine detected at the Australian border

As mentioned previously, diversion from legitimate sources is an issue for ketamine. Border controls for ketamine were introduced in March 2002; prior to this, suspected ketamine importations were referred to police for investigation under state and territory laws. Given that ketamine is available in various forms such as powder, liquid or pharmaceutical preparations, it is difficult to provide accurate data on the weights of seizures detected. There were 22 seizures detected in 2009/10, representing a slight decline from 31 in 2008/09 (Figure 32).

Figure 32: Number of detections of ketamine detected at the border by the ACS, 2003/04-2009/10



Source: (Australian Customs Border and Protection Service 2011)

5.5 GHB

- Only nine participants were able to comment on the price of a millilitre of GHB of between $1.42 (VIC) to $10 (NSW). The majority reported that the price had remained stable, as opposed to 2010 whereby reports were mixed.
- Purity was still predominantly reported as high (77% in 2011 to 45% in 2010). Comments about purity change were that it was stable.
- Of those who commented on GHB availability, reports have increased to those reporting that it had become difficult to very difficult to obtain from easy. Availability change was reported as stable.
- GHB was scored from friends and known dealers and from private locations. Location where GHB was last used was nightclubs.

5.5.1 Price

The median price per millilitre in each jurisdiction is presented in Table 78. Only nine participants from the national sample were able to comment on the current price per millilitre of GHB and, as such, the results should be interpreted with caution.

Table 78: Median price per ml of GHB, by jurisdiction, 2011

Price ($)	NSW n=5^	ACT n=0	VIC n=2^	TAS n=0	SA n=1^	WA n=0	NT n=0	QLD n=1^
Per ml (range)	$10 (0-10)	n.a.	$1.42 (0.35-2.5)	n.a	$7 *(no range)*	n.a.	n.a.	$5.50 *(no range)*

Source: EDRS REU interviews
^ Small numbers commenting (n<10), interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Eighteen participants were able to comment on whether the price of GHB had changed. Most participants reported that the price had remained stable (83%; Table 79).

Table 79: Price changes of GHB, by jurisdiction, 2011

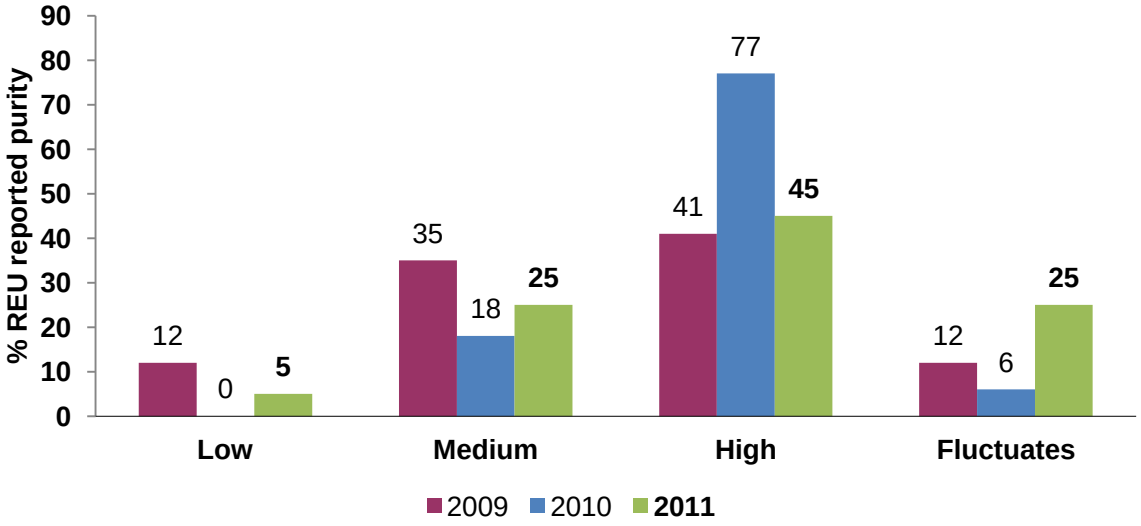
(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
GHB price changes (among those who commented)	2010 n=15	2011 n=18	n=9^	n=1^	n=3^	n=0	n=1^	n=0	n=0	n=3^
Increased	**20**	**17**	22	0	0	0	50	0	0	0
Stable	**33**	**83**	79	100	100	0	50	0	0	100
Decreased	**20**	**0**	0	0	20	0	0	0	0	0
Fluctuates	**27**	**0**	0	0	0	0	0	0	0	0

Source: EDRS REU interviews
^ small numbers commenting (n<10); interpret with caution
Note: There were no reports that the price of GHB had fluctuated in the last six months.
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.5.2 Purity

Participants were asked what the current purity or strength of GHB was, and if the purity had changed in the six months preceding interview. Twenty participants commented on the purity of GHB. Purity was considered to be high (45%, n=9) by the majority of commenting participants (Figure 33).

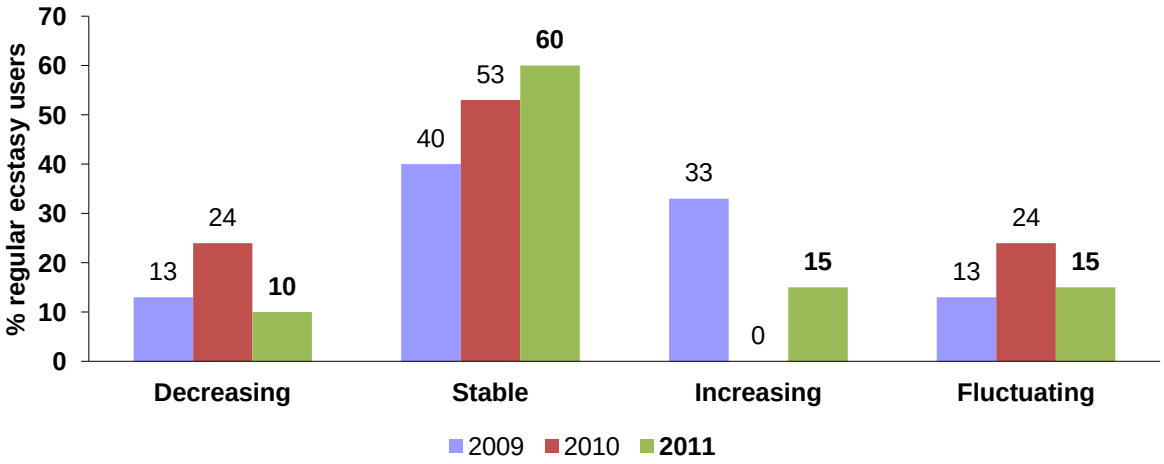
Figure 33: National REU reports of current GHB purity, 2009-2011



Source: EDRS REU interviews
Note: Among those who commented (n=17 in 2009, n=17 in 2010, n=20 in 2011).
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented (n=20) on whether the purity of GHB had changed in the six months preceding interview, the majority of participants reported that the purity was stable (60%, n=12; Figure 34).

Figure 34: National REU reports of recent (last six months) change in GHB purity, 2009-2011



Source: EDRS REU interviews
Note: Among those who commented (n=15 in 2009, n=17 in 2010, n=20 in 2011).
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.5.3 Availability

Twenty-three participants of the national sample commented on the recent availability of GHB. Again, small numbers were reported in all states/territories, and these data should, therefore, be interpreted with caution.

Nationally, reports on availability were mixed with 47% reporting GHB was easy to very easy to obtain and 52% reporting that it was difficult (Table 80). A definite increase in difficulty has been reported in access to GHB from 2010 to 2011. Sydney continues to be the jurisdiction where the most use and therefore market characteristics can be obtained from.

The majority (62%) reported that availability of GHB had remained stable in the six months proceeding interview (Table 80).

Table 80: Availability of GHB, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability (among those who commented)	**2010** n=19	**2011** n=23	n=12	n=1^	n=3^	n=1^	n=2^	n=1^	n=0	n=3^
Very easy	**37**	**17**	17	0	0	0	100	0	0	0
Easy	**32**	**30**	25	0	100	0	0	0	0	33
Difficult	**32**	**39**	42	100	0	100	0	0	0	67
Very difficult	**0**	**13**	17	0	0	0	0	100	0	0
Availability changes (among those who commented)	**2010** n=17	**2011** n=21	**NSW** n=11	**ACT** n=1^	**VIC** n=3^	**TAS** n=1^	**SA** n=2^	**WA** n=1^	**NT** n=0	**QLD** n=2^
More difficult	**12**	**29**	36	0	33	0	0	0	0	50
Stable	**53**	**62**	55	100	67	100	50	100	0	50
Easier	**29**	**10**	9	0	0	0	50	0	0	0
Fluctuates	**6**	**0**	0	0	0	0	0	0	0	0

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

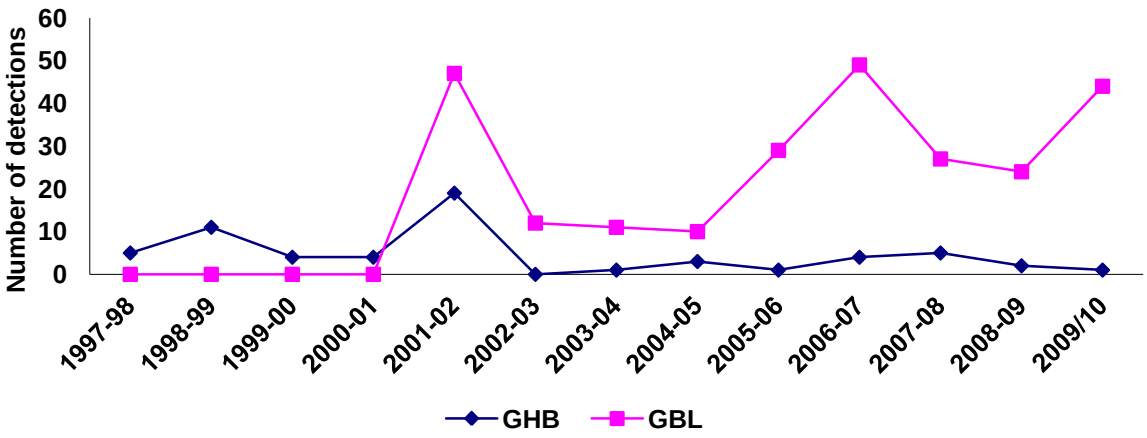
In all jurisdictions except NSW, fewer than 10 participants were able to comment on the source, purchase location of GHB and last use venue. GHB was obtained from friends (49%, n=11) and known dealers (17%, n=4) and acquaintances (13%, n=3) and unknown dealers (9%, n=2). The purchase location was predominantly private locations (64%, n=14). Most participants reported the last venue of intoxication was a nightclub (43%, n=9).

5.5.4 GHB and GBL detected at the Australian border

Although the number of detections for GHB and GBL are relatively low compared to other drugs, Figure 35 indicates an increase in recent years in the number of detections of GBL at the Australian border, and these continue to outnumber seizures for GHB. There were 44 detections of GBL in 2009/10, representing an increase from 24 in 2008/09. The higher number of GBL detections may be an indication that it is being imported for production of GHB in Australia, and/or that it is being imported for use as a substitute for GHB itself. Only one seizure for GHB was reported in 2009/10.

It must be remembered that it is possible to obtain the precursors from legitimate sources in Australia. It is likely that some manufacturers of GHB source the precursors for the drug in this country. The relatively small number of GHB/GBL detections at the border, comparative to other drug types, may also be a reflection of this fact.

Figure 35: Number of GHB and GBL detections at the border by ACS, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service 2011)

5.6 LSD

- The median price per tab of LSD ranged from $15 in VIC and SA to $27.50 in the NT, slightly higher than prices reported in 2010. Seventy-two percent of those commenting reported that the price had remained stable in the six months prior to interview.
- Current purity of LSD was high. Most of those who commented reported that purity had remained stable, in the six months preceding interview.
- Overall LSD was reported to have remained easy to obtain and this has remained stable (65%) in the last six months.
- LSD was mostly reported to have been obtained from friends and used in private locations such as the participants' own homes or friends homes.

5.6.1 Price

Thirty-seven percent (37%, n=213) of the national sample commented on the price of a tab of LSD. The median price of a tab of LSD ranged from $15 in VIC and SA to $27.50 in the NT (Table 81). Prices across time have remained relatively stable across jurisdictions with minor fluctuations of up to $10 or less.

Table 81: Median price per tab of LSD, by jurisdiction, 2011

Median price ($)	NSW n=34	ACT n=27	VIC n=50	TAS n=26	SA n=23	WA n=10	NT n=2^	QLD n=41
Per tab (range)	$20 (6-30)	$20 (10-30)	$15 (5-30)	$20 (10-35)	$15 (5-35)	$25 (15-50)	$27.50 (25-30)	$20 (10-25)

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution

Thirty-eight percent (n=216) of the national sample commented on whether the price of LSD had changed in the preceding six months. The price of LSD was generally considered to be stable (72%) in the preceding six months (Table 82). In 2011, approximately 46 more participants were able to comment on LSD market characteristics than 2010.

Table 82: Price changes of LSD, by jurisdiction, 2011

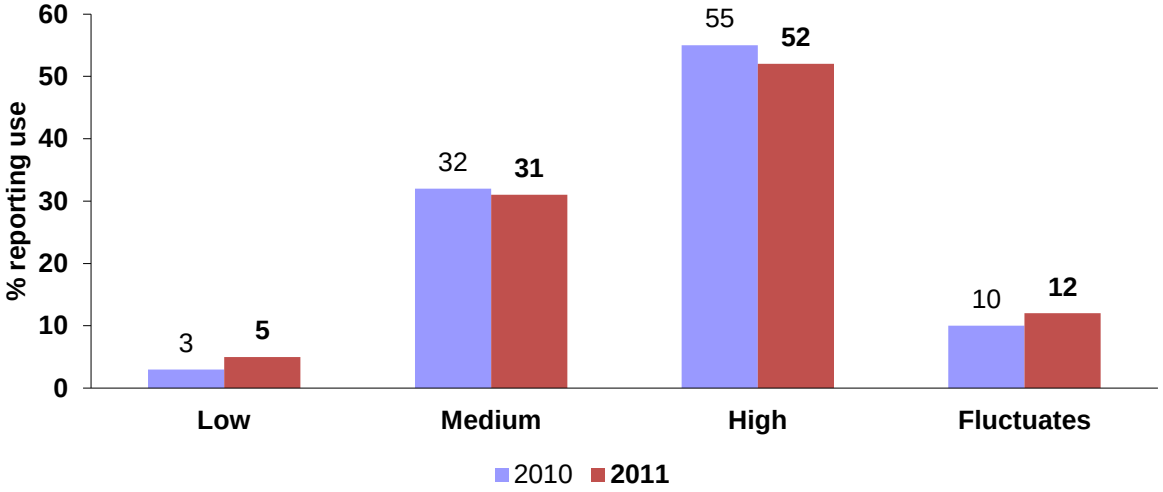
(%) LSD price changes (among those who commented)	National 2010 n=170	National 2011 n=216	NSW n=33	ACT n=26	VIC n=51	TAS n=29	SA n=24	WA n=11	NT n=3^	QLD n=39
Increased	**12**	**17**	24	8	12	14	29	9	0	21
Stable	**76**	**72**	67	69	86	79	50	64	100	67
Decreased	**5**	**3**	3	12	0	3	4	0	0	0
Fluctuated	**7**	**9**	6	12	2	3	17	27	0	13

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.6.2 Purity

Participants were asked what was the current purity or strength of LSD, and if the purity had changed in the six months preceding interview. Over half of the participants that commented reported the purity of LSD to be high (52%; Figure 36).

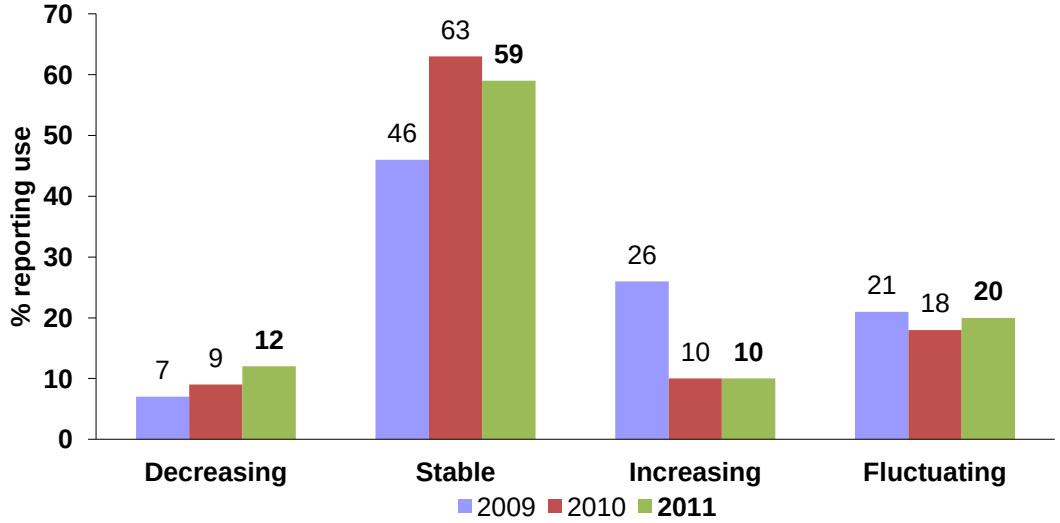
Figure 36: National REU reports of current LSD purity, 2010-2011



Source: EDRS REU interviews
Note: Among those who commented (n=192 in 2009, n=184 in 2010, n=229 in 2011).
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented on whether the purity of LSD had changed in the six months preceding interview, 59% reported that it had remained stable (Figure 37).

Figure 37: National REU reports of recent (last six months) change in LSD purity, 2009-2011



Source: **EDRS REU interviews**
Note: Among those who commented (n=147 in 2009, n=160 in 2010, n=203 in 2011).
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.6.3 Availability

Forty-one percent (n=236) of the national sample commented on the recent availability of LSD; the majority reported LSD to be easy to very easy (73%) to obtain. Of those who

commented, the availability of LSD was reported to have remained stable (65%) in the six months preceding interview (Table 83).

Table 83: Availability of LSD, by jurisdiction, 2010-2011

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability (among those who commented)	**2010** **n=195**	**2011** **n=236**	**n=38**	**n=28**	**n=52**	**n=32**	**n=27**	**n=12**	**n=4^**	**n=43**
Very easy	**25**	**30**	34	25	37	44	15	33	25	19
Easy	**45**	**43**	34	50	48	34	37	50	75	44
Difficult	**28**	**25**	32	25	15	22	41	17	0	28
Very difficult	**3**	**3**	0	0	0	0	7	0	0	9
Availability changes (among those who commented)	**2010** **n=176**	**2011** **n=222**	**NSW** **n=37**	**ACT** **n=29**	**VIC** **n=48**	**TAS** **n=28**	**SA** **n=26**	**WA** **n=11**	**NT** **n=2^**	**QLD** **n=41**
Easier	**22**	**15**	22	10	15	25	15	9	0	7
Stable	**61**	**65**	60	76	75	61	50	73	50	63
More difficult	**13**	**12**	16	7	6	7	19	9	0	20
Fluctuates	**4**	**8**	3	7	4	7	15	7	50	10

Source: EDRS REU interviews
^ Small numbers commenting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.6.4 Source and locations of use

LSD had predominantly been obtained from friends (64%) or known dealers (20%). LSD source venue was primarily private locations such as friends' homes (33%) or home delivered to participants' own homes (17%). LSD was most frequently used private locations such as friends' homes (19%) and own homes (19%; Table 84).

Table 84: Last source, purchase location and use location of LSD, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from	**2010**	**2011**								
(of those who commented)	**n=202**	**n=241**	n=40	n=30	n=51	n=34	n=28	n=11	n=4^	n=43
Friends	**60**	**64**	58	60	63	68	54	82	100	72
Known dealers	**14**	**20**	33	30	26	9	21	9	0	9
Acquaintances	**11**	**5**	3	3	8	9	7	0	0	5
Unknown dealers	**6**	**1**	0	0	0	3	0	0	0	5
Street dealers	**n.a**	**1**	0	0	0	0	0	0	0	7
Mobile dealers	**n.a**	**1**	0	3	0	0	0	0	0	2
Other	**n.a**	**1**	3	0	2	0	0	0	0	0
Used but not scored	**5**	**6**	5	3	2	12	18	9	0	0
Locations scored	**2010**	**2011**								
(of those who commented)	**n=201**	**n=241**	n=40	n=29	n=52	n=34	n=28	n=11	n=4^	n=43
Friend's home	**32**	**33**	30	31	33	32	36	27	0	42
Own home	**17**	**17**	10	10	15	21	25	27	25	19
Dealer's home	**9**	**13**	3	13	16	3	0	6	0	7
Raves*	**8**	**2**	20	24	19	0	11	9	0	2
Agreed public location	**8**	**8**	18	3	12	0	4	9	0	7
Private party	**7**	**8**	0	3	4	6	7	0	0	7
Nightclub	**3**	**5**	5	7	4	6	0	0	0	9
Pubs	**3**	**3**	0	0	2	3	0	18	0	3
Acquaintances home	**5**	**2**	0	0	2	6	0	0	0	2
Other	**3**	**2**	0	0	2	6	0	0	0	2
Live music event	**n.a**	**6**	5	10	6	9	0	0	75	2
Educational institution	**n.a**	**1**	3	0	0	3	0	0	0	2
Street	**n.a**	**1**	3	0	0	0	0	0	0	5
Used but not scored	**6**	**6**	5	3	2	12	18	9	0	3
Last use venue	**2010**	**2011**								
(of those who commented)	**n=202**	**n=241**	n=40	n=29	n=52	n=34	n=28	n=11	n=4^	n=43
Own home	**20**	**19**	5	14	25	18	25	64	25	14
Friend's home	**21**	**19**	20	21	17	18	18	9	0	26
Live music event	**7**	**13**	20	10	19	12	0	0	75	7
Raves*	**11**	**5**	5	10	4	6	0	0	0	5
Outdoors	**10**	**11**	20	17	15	3	0	9	0	7
Private party	**7**	**6**	0	14	8	6	4	0	0	9
Public place	**6**	**4**	13	3	2	6	0	0	0	2
Nightclub	**7**	**3**	8	3	0	6	4	0	0	2
Pubs	**3**	**3**	0	0	2	6	0	9	0	9
Other	**4**	**3**	0	0	4	3	7	0	0	5
Used but not scored	**5**	**12**	8	3	4	15	43	9	0	12

Source: EDRS REU interviews

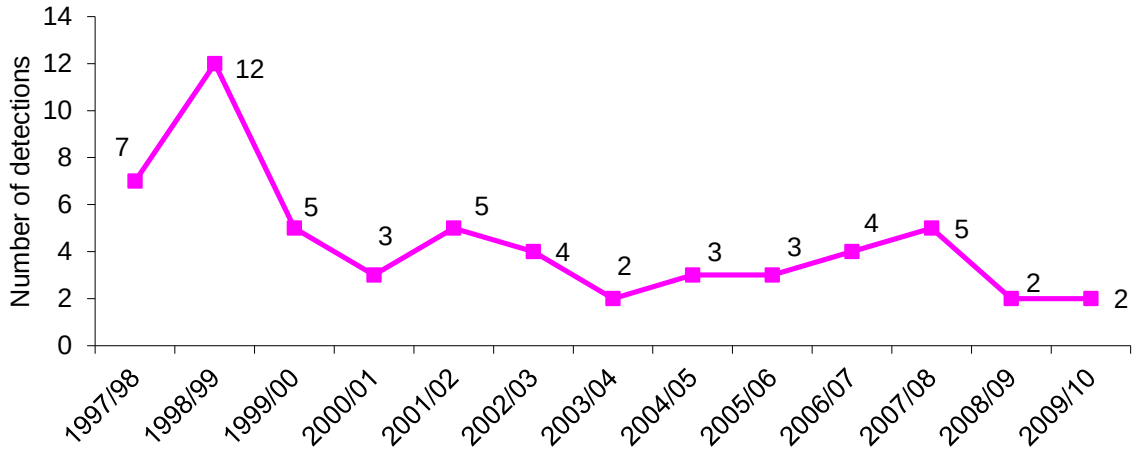
* Includes 'doofs' and dance parties

^ Small numbers commenting (n<10); interpret with caution

5.6.5 LSD detected at the Australian border

There have only been a small number of seizures of LSD in recent years, with only two recorded in 2009/10 (Figure 38).

Figure 38: Number of LSD detections at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service 2011)

5.7 Cannabis

- The majority of respondents were able to differentiate between hydro and bush cannabis when being asked about cannabis market characteristics.
- Nationally, prices for hydro were generally (slightly) more expensive than those for bush cannabis. Prices were reported to have remained stable over the preceding six months.
- As in 2010, participants in all jurisdictions generally perceived the potency of hydro to be high and bush was most commonly reported to be medium. The potency for both forms was generally reported to have remained stable over the last six months.
- Hydro and bush were both reported by the majority to be easy or very easy to obtain, and the availability of both forms was reported to have remained stable.
- Both hydro and bush cannabis were most commonly bought from friends, and used in private locations.

5.7.1 Price

Prices in Table 85 represent the median last price paid for the most commonly reported purchase amounts (quarter-ounces and ounces) of bush and hydro by jurisdiction. Nationally, 113 participants reported having purchased an ounce of hydro in the preceding six months (n= 69 purchased an ounce of bush), while 114 reported purchase of a quarter-ounce of hydro (n= 64 purchased a quarter-ounce of bush). These quantities are the most frequent quantities purchased. Prices last paid per quarter ounce of hydro were either reported as constant or having had a slight decrease, as opposed to 2010 when minor increases in price were reported. The median last price paid per ounce of hydro ranged from $120 in VIC to $400 in the NT. The median last price paid per ounce of bush ranged from $125 in VIC, to $400 in the NT (Table 85).

Table 85: Median last price paid per quarter ounce and ounce of hydroponically and outdoor grown cannabis, by jurisdiction, 2010-2011

	Median last price $ per quarter-ounce (range)				Median last price $ per ounce (range)			
	Hydro		Bush		Hydro		Bush	
	2010	2011	2010	2011	2010	2011	2010	2011
NSW	95 (50-100)	**90 (20-240)**	80^ (70-100)	**80^ (20-100)**	300 (150-450)	**300 (230-400)**	235^ (150-300)	**290^ (200-300)**
ACT	90 (80-300)	**90 (50-240)**	90^ (50-210)	**80 (20-700)**	300^ (250-350)	**280^ (250-300)**	280^ (220-300)	**200^ (150-250)**
VIC	80 (70-280)	**70 (50-190)**	80^ (70-85)	**80 (50-160)**	250 (200-300)	**240 (120-320)**	270^ (65-300)	**250 (125-280)**
TAS	90 (75-100)	**70^ (50-100)**	70^ (65-90)	**70^ *(no range)***	275^ (250-350)	**287.50^ (225-350)**	235^ (200-300)	**225^ *(no range)***
SA	60^ (50-70)	**60 (50-80)**	70^ *(no range)*	**60 (50-80)**	230 (200-280)	**200 (160-270)**	220 (100-280)	**200 (160-260)**
WA	100^ (75-100)	**87.50^ (75-100)**	90^ (80-100)	**50^ *(no range)***	350 (300-380)	**350 (200-375)**	300 (100-350)	**300^ (200-350)**
NT	150^ *(no range)*	**150^ *(no range)***	150^ *(no range)*	**120^ *(no range)***	425^ (250-480)	**400^ *(no range)***	400^ (350-450)	**400^ *(no range)***
QLD	90 (50-120)	**90 (25-120)**	75 (50-100)	**70 (50-90)**	325 (150-370)	**300 (130-350)**	260 (200-300)	**220 (130-280)**

Source: EDRS REU interviews
^ Small numbers reporting (n<10); interpret with caution

Consistent with the reporting of other drug types, participants were asked whether the price of cannabis had changed in the six months preceding interview, again making the distinction between hydro and bush cannabis. Prices for both were largely reported to have remained stable over the preceding six months (Table 86).

Table 86: Cannabis price changes, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Hydro price changes	**2010**	**2011**								
Of those who responded	**n=295**	**n=296**	**n=60**	**n=40**	**n=56**	**n=7^**	**n=50**	**n=20**	**n=5^**	**n=58**
Increased	**23**	**12**	5	10	13	0	18	20	40	12
Stable	**70**	**78**	93	80	71	100	68	75	60	78
Decreased	**1**	**3**	2	3	5	0	2	0	0	3
Fluctuated	**6**	**7**	0	8	11	0	12	5	0	7

Source: EDRS REU interviews
^ Small numbers reporting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Table 87: Cannabis price changes continued, by jurisdiction, 2011

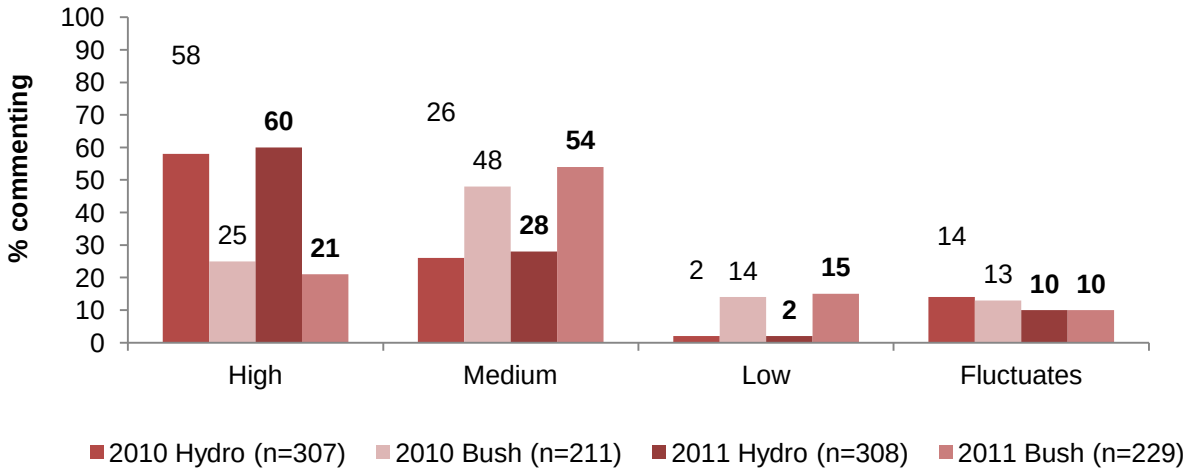
Bush price changes Of those who responded	2010 n=189	2011 n=189	n=26	n=30	n=34	n=8^	n=48	n=16	n=1^	n=46
Increased	**13**	**10**	8	13	6	0	13	19	0	9
Stable	**77**	**79**	89	73	85	100	69	69	100	85
Decreased	**6**	**4**	4	3	3	0	6	13	0	2
Fluctuated	**4**	**6**	0	10	6	0	13	0	0	4

Source: EDRS REU Interviews, 2011
^ Small numbers reporting (n<10); interpret with caution
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.7.2 Potency

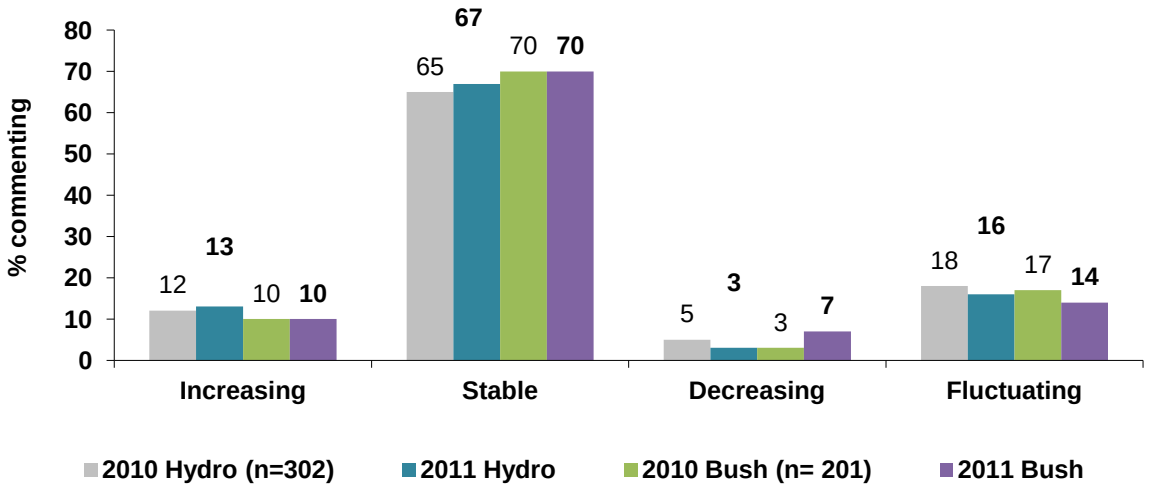
More participants were able to comment about bush potency in 2011 compared with 2010. Of those who commented, the majority reported that the current potency of hydro cannabis was high. In contrast, bush cannabis was most commonly reported to be of medium potency (Figure 39). Reports on whether potency had changed were similar for both hydro and bush, with the majority reporting that they had remained stable in the preceding six months (Figure 40).

Figure 39: National REU reports of current cannabis potency among those who commented, 2010-2011



Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Figure 40: National REU reports of recent (last six months) change in cannabis potency, 2010-2011



Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.7.3 Availability

REU were asked to comment on the current availability of hydro, and whether this had changed in the six months preceding interview. Hydro was commonly reported to be easy or very easy to obtain (93%). Over half of the sample that commented reported access to hydro cannabis to have remained stable (82%; Table 88).

Table 88: Availability of hydro, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability (among those who commented)	**2010** n=312	**2011** n=311	n=64	n=42	n=58	n=9^	n=50	n=20	n=5^	n=63
Very easy	**50**	**64**	75	62	66	67	54	50	40	68
Easy	**37**	**29**	19	33	28	33	38	40	60	22
Difficult	**13**	**7**	6	5	7	0	8	10	0	10
Very difficult	**<1**	**0**	0	0	0	0	0	0	0	0
Availability changes (among those who commented)	**2010** n=310	**2011** n=310	**NSW** n=64	**ACT** n=43	**VIC** n=58	**TAS** n=10	**SA** n=50	**WA** n=19	**NT** n=4^	**QLD** n=62
More difficult	**14**	**7**	3	5	12	0	10	11	0	5
Stable	**72**	**82**	84	86	78	100	74	68	75	87
Easier	**10**	**7**	9	2	7	0	10	11	0	5
Fluctuates	**5**	**5**	3	7	3	0	6	11	25	3

Source: **EDRS REU interviews**
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Reports of bush availability also indicated that bush tended to be easy or very easy to obtain (77%), with approximately one-tenth of the national sample considering it to be difficult to obtain. NSW and QLD were the jurisdictions that had the highest proportion that reported bush as being 'difficult' to obtain. Availability was most commonly reported to have remained stable in the past six months by the national sample, a finding reflected across all jurisdictions except the NT (Table 89).

Table 89: Availability of bush, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2010	2011								
(among those who commented)	N=216	N=234	n=31	n=35	n=37	n=11	n=50	n=15	n=4^	n=51
Very easy	**38**	**38**	29	46	32	64	44	47	0	29
Easy	**35**	**39**	36	51	38	27	42	47	100	28
Difficult	**26**	**20**	32	3	19	9	14	7	0	39
Very difficult	**2**	**3**	3	0	11	0	0	0	0	4
Availability changes	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
(among those who commented)	N=210	N=224	n=31	n=35	n=37	n=11	n=50	n=15	n=4^	n=51
More difficult	**9**	**10**	7	3	22	0	13	0	0	12
Stable	**72**	**70**	77	74	68	89	50	77	0	80
Easier	**13**	**13**	16	14	5	11	29	29	0	6
Fluctuates	**6**	**7**	0	9	5	0	15	0	100	2

Source: **EDRS REU interviews**
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Hydro was most commonly reported to have been obtained from friends and known dealers and was the most commonly reported to have been obtained at friends' homes. Participants' own homes and friends' homes were most frequently reported as last locations of use (Table 90).

Table 90: Last source person and purchase locations and use locations of hydro, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	**2010 N=315**	**2011 N=311**	**n=63**	**n=43**	**n=56**	**n=10**	**n=51**	**n=21**	**n=5^**	**n=62**
Friends	**62**	**51**	54	49	43	50	47	52	60	60
Known dealers	**22**	**35**	38	44	45	40	28	14	40	29
Acquaintances	**7**	**5**	2	0	4	0	10	14	0	7
Workmates	**1**	**<1**	0	0	0	0	0	5	0	0
Unknown dealers	**1**	**2**	5	2	0	0	0	0	0	5
Street dealer	**2**	**1**	0	0	4	0	2	0	0	0
Other	**2**	**<1**	0	0	2	0	0	0	0	0
Used, but not scored	**2**	**5**	2	5	4	10	14	14	0	0
Locations scored (among those who commented)	**2010 N=315**	**2011 N=312**	**NSW n=63**	**ACT n=43**	**VIC n=57**	**TAS n=10**	**SA n=51**	**WA n=21**	**NT n=5^**	**QLD n=62**
Friend's home	**45**	**38**	38	40	37	40	41	29	40	39
Dealer's home	**15**	**25**	22	44	28	30	16	14	20	23
Own home	**22**	**16**	14	9	5	20	10	29	0	32
Agreed public location	**6**	**10**	18	0	14	0	14	10	20	5
Acquaintance's home	**4**	**1**	2	0	2	0	2	0	0	2
Work	**2**	**<1**	0	0	2	0	0	0	0	0
Street market	**1**	**1**	3	0	2	0	0	0	5	0
Other	**4**	**3**	2	2	7	0	4	0	0	0
Used, but not scored	**2**	**5**	2	5	4	10	14	14	0	0
Last use venue (among those who commented)	**2010 N=316**	**2011 N=313**	**NSW n=63**	**ACT n=43**	**VIC n=57**	**TAS n=10**	**SA n=51**	**WA n=21**	**NT n=5^**	**QLD n=63**
Friend's home	**25**	**22**	24	33	18	30	29	19	40	11
Own home	**61**	**64**	65	44	74	70	49	62	60	79
Dealer's home	**<1**	**<1**	2	2	0	0	0	0	0	0
Public place	**1**	**2**	2	2	0	0	4	5	0	0
Pub	**1**	**<1**	0	0	2	0	0	0	0	0
Outdoors	**3**	**2**	2	0	4	0	2	0	0	2
Nightclub	**2**	**<1**	0	2	0	0	0	0	0	0
Private party	**1**	**1**	0	2	2	0	2	0	0	0
Other	**2**	**5**	5	7	5	0	8	0	0	8
Have not used	**2**	**3**	2	7	0	0	6	14	0	0

Source: **EDRS REU interviews**

- 'Other' last use venue includes: restaurants/cafes, raves/doofs/dance parties, and car/other vehicle and work

As with hydro and other drug types investigated by the EDRS, REU most commonly reported obtaining bush from friends and known dealers and this most commonly occurred in private locations (at friends' homes and at their own homes). Participants' own homes followed by friends' homes were most commonly reported as last use venues (Table 91).

Table 91: Last source person, purchase location and use location of bush, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2010 N=218	2011 N=237	n=32	n=35	n=37	n=12	n=50	n=17	n=4^	n=50
Friends	**64**	**54**	59	60	54	58	46	59	50	52
Known dealers	**16**	**21**	28	29	19	25	24	0	25	16
Acquaintances	**8**	**5**	3	0	3	0	10	6	25	6
Unknown dealers	**1**	**3**	3	0	0	0	0	12	0	10
Street dealer	**2**	**3**	3	0	0	0	2	6	0	10
Workmates	**1**	**1**	0	0	3	0	0	0	0	2
Other	**2**	**2**	3	0	3	8	0	0	0	2
Used but not scored	**6**	**11**	0	11	19	8	18	18	0	2
Locations scored (among those who commented)	**2010 N=217**	**2011 N=238**	**NSW n=32**	**ACT n=35**	**VIC n=37**	**TAS n=12**	**SA n=50**	**WA n=17**	**NT n=4^**	**QLD n=49**
Friend's home	**48**	**44**	56	49	51	33	36	24	75	41
Home delivery	**18**	**15**	9	20	3	25	12	41	0	16
Dealer's home	**12**	**15**	22	11	14	25	14	6	25	16
Agreed public location	**6**	**5**	3	3	3	0	12	6	0	2
Acquaintance's home	**6**	**2**	3	0	5	0	2	0	0	0
Street market	**<1**	**4**	6	3	0	0	0	0	0	14
Work	**1**	**1**	0	0	0	0	2	0	0	2
Live music event	**X**	**2**	0	0	3	0	2	0	0	4
Other	**2**	**3**	0	3	3	8	2	6	0	2
Used but not scored	**6**	**11**	0	11	19	8	18	18	0	2
Last use venue (among those who commented)	**2010 N=219**	**2011 N=238**	**NSW n=32**	**ACT n=35**	**VIC n=37**	**TAS n=12**	**SA n=50**	**WA n=17**	**NT n=4^**	**QLD n=49**
Friend's home	**33**	**26**	25	29	26	33	28	18	25	24
Own home	**54**	**56**	56	51	50	67	56	71	75	54
Dealer's home	**0**	**1**	0	0	0	0	0	0	0	4
Private party	**1**	**1**	0	3	0	0	0	0	0	0
Pub	**<1**	**<1**	0	0	3	0	0	0	0	0
Outdoors	**2**	**5**	6	3	0	0	4	0	0	12
Public place	**1**	**1**	0	0	0	0	2	6	0	0
Other	**4**	**5**	12	6	11	0	2	0	0	4
Live music event	**<1**	**1**	0	0	3	0	2	0	0	2
Have not used	**4**	**4**	0	9	8	0	4	6	13	3

Source: EDRS REU interviews

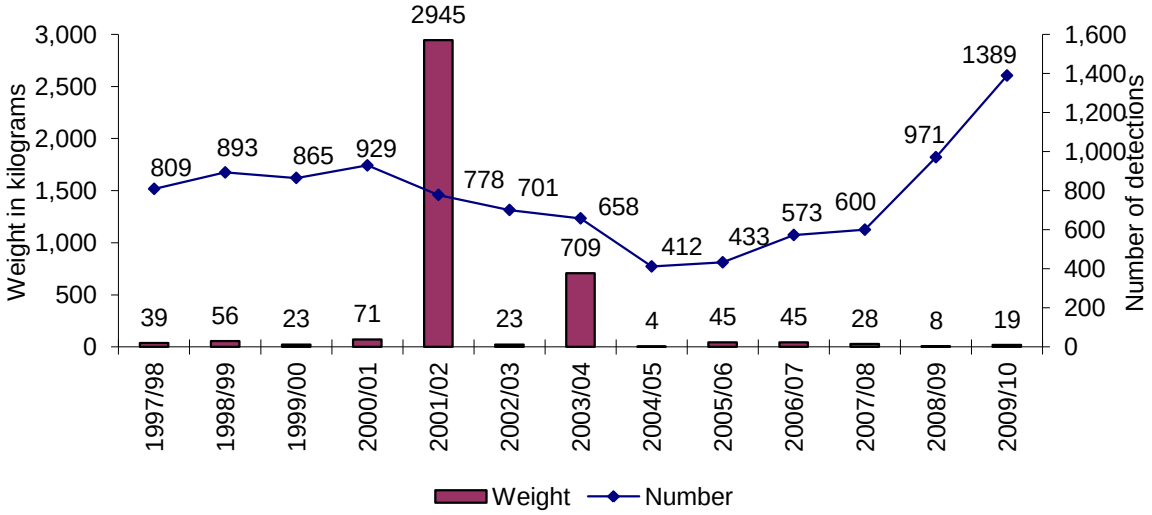
- 'Other' last use venue includes: car/other vehicle, raves/doofs/dance parties, educational institutions, work and acquaintances house.

5.7.4 Cannabis detected at the Australian border

Cannabis production occurs in many parts of Australia and much of the cannabis consumed in Australia is believed to be domestically produced. However, there are also numerous cannabis detections made by the Australian Customs and Border Protection Service each year.

The number of cannabis detections continued to increase in 2009/10 to 1,389 (up from 971 in 2008/09), while weights of seizures continues to fluctuate (Figure 41).

Figure 41: Weight and number of detections of cannabis made at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service 2011)

6 HEALTH-RELATED TRENDS ASSOCIATED WITH ERD USE

- Of the national sample, 32% reported having ever **overdosed** on a **stimulant** drug and, of those, 68% had done so in the preceding 12 months. Ecstasy was the main drug to which participants attributed the stimulant overdose. Most stimulant OD occurred in private locations, which has major health implications. The most common symptoms reported were vomiting and increased heart rate. Of those that sought treatment, most were taken to an emergency department.
- Forty-six percent of the national sample reported having ever **overdosed** on a **depressant** drug and, of those, 75% reported recent (last 12 months) overdose. Recent overdoses were most commonly attributed to alcohol (83%). Most depressant OD occurred in private locations, and the main drug attributed to the OD was alcohol. The most commonly reported symptom was vomiting. Of those that sought treatment, most were attended to by an ambulance.
- Of the national sample 20% had **accessed either a medical or health service** in relation to their drug use during the six months preceding interview. The services most commonly accessed by these participants were GPs (34%). In terms of medical issues (e.g. overdoses), the main issue for seeking medical attention was dependence or addiction issues (24%) followed by overdose (8%). The main drugs to seek medical attention for were alcohol (30%), cannabis (17%) and ecstasy (16%).
- In 2009/10, **treatment seeking** for ecstasy use (as the principal drug of concern) remained low in the general population at 1.0% of closed treatment episodes.
- A small proportion of participants (9%) were classified as currently experiencing very high psychological distress on the **Kessler Psychological Distress Scale**. The majority reported no or low distress (36%).
- Almost a third (31%) of the sample reported experiencing a **mental health problem** in the preceding six months; depression and anxiety were the most commonly reported.

6.1 Overdose and drug-related fatalities

As in previous years[5], participants were surveyed regarding their experience of overdose. 'Overdose' was defined as experiencing symptoms consistent with either stimulant toxicity (e.g. nausea and vomiting, chest pains, tremors, increased body temperature or heart rate, seizure, extreme paranoia, anxiety or panic, hallucinations) or symptoms consistent with a depressant overdose (e.g. reduced level of consciousness, respiratory depression, turning blue, collapsing and being unable to be roused). It should be noted that the following data refer to participants' understandings of these definitions and do not represent medical diagnoses. Fifty-eight percent of the national sample reported having ever experienced either a stimulant and/or a depressant overdose[6].

6.1.1 Non-fatal stimulant overdose

Thirty-two percent of the national sample reported having ever overdosed on a stimulant drug on an average (mean) number of four (range=1-50 occasions). Of those who had ever overdosed on a stimulant drug, 68% (n=125, representing 22% of the entire sample) reported having overdosed in the past 12 months.

[5] Note however that in 2007 a distinction was drawn between self-reported overdose of stimulant drugs and of depressant drugs (in previous years these drug types were combined).

[6] Comparisons with previous years should be undertaken with caution due to changes in survey items on overdose.

Participants reporting an overdose in the last 12 months were asked which stimulant drug they considered to be the main drug causing their last overdose. The most commonly reported main drug was ecstasy (59%), with smaller proportions nominating speed, ice/crystal and cocaine (Table 92). Polydrug use was common, with 77% reporting that they had been under the influence of one or more other drugs (stimulants or depressants) in addition to the 'main' drug at the time of last overdose. these were typically alcohol (54%) and cannabis (25%). Ecstasy (10%), speed (6%), benzodiazepines (5%) and ice/crystal (3%) were also mentioned.

Of those who had overdosed in the past 12 months, private locations such as friend's home, own home and private party were the locations that most participants reported the stimulant OD taking place at relatively similar rates (Table 92).

The main symptoms which participants reported on their last stimulant overdose occasion (if it occurred within the last 12 months) included vomiting (16%), increased heart rate (11%), extreme anxiety (10%), paranoia (8%), nausea (8%), passed out (6%), increased body temperature (5%) and other (36%).

At their last occasion of overdose (of those who had overdosed in the preceding 12 months), most did not receive any medical treatment (57%). Of those that received treatment, small numbers reported the following forms of treatment: attended the emergency department (3%); attended an ambulance (3%); saw a GP (1%); drug health service (1%). Thirty-one percent reported another form of treatment such as being monitored by friends.

Of those that had a stimulant overdose in the last 12 months, participants reported having been partying for a median of 6.25 hours (range= 0 hours to 288 hours).

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Of those that had a stimulant overdose in the last 12 months, participants reported having been partying for a median of 6.25 hours (range= 0 hours to 288 hours).

Table 92: Stimulant overdose in the last six months among REU, by jurisdiction, 2011

(%)	National 2010 N=693	National 2011 N=573	NSW n=99	ACT n=80	VIC n=101	TAS n=75	SA n=92	WA n=28	NT n=11	QLD n=103
Ever overdosed on stimulant drug	**21**	**32**	31	36	35	27	28	57	64	24
Mean number times ever overdosed* (n)	**3**	**2**	2	2	2	2	2	2	7.5	1
Overdosed last 12 months*	**59**	**70**	77	90	51	60	76	81	29	56
Main drug**	**(n=85)**	**(n=120)**	(n=24)	(n=25)	(n=17)	(n=12)	(n=16)	(n=13)	(n=2^)	(n=11)
Ecstasy	**67**	**59**	67	96	29	17	56	54	50	64
Ice/crystal	**5**	**8**	4	0	29	0	0	15	0	9
Speed	**7**	**13**	8	4	35	33	6	15	0	0
Cocaine	**6**	**4**	8	0	6	0	6	0	0	9
Base	**n.a**	**3**	0	0	0	0	13	0	0	9
Pharmaceutical stimulants	**n.a**	**2**	4	0	0	8	0	0	0	0
Other	**13**	**12**	8	0	0	42	19	15	50	9
More than one drug in last OD**	**79**	**77**	75	76	100	92	62	69	100	64
Last OD location**	**(n=84)**	**(n=121)**	(n=24)	(n=26)	(n=17)	(n=12)	(n=16)	(n=13)	(n=2^)	(n=11)
Nightclub	**16**	**19**	29	27	12	8	6	8	0	36
Own home	**19**	**21**	8	12	47	17	38	23	0	9
Friend's home	**27**	**18**	4	15	12	42	19	39	50	9
Live music event	**10**	**18**	13	31	12	8	19	23	0	18
Rave/dance party	**13**	**3**	13	0	0	0	0	8	0	0
Outdoors	**2**	**1**	0	0	0	0	0	0	0	9
Private party	**6**	**7**	17	8	6	8	0	0	0	9
Other	**7**	**12**	8	8	6	8	18	0	50	0

Source: EDRS REU interviews
* Of those who ever overdosed ** Of those who had overdosed in the past 12 months
^ Small numbers n<10; interpret with caution
Note: 'Other drug' includes MDA, PMA, Pharmaceutical stimulants, DMT, GHB, LSD.
'Other last location OD' includes public place (street/park), pub, dealers home, day club and car

6.1.2 Non-fatal depressant overdose

Forty-six percent of the national sample reported having ever overdosed on a depressant drug on a median of seven occasions (range=1-365 occasions). Participants reported that their last depressant overdose had occurred a median of four months ago (, range=<1 month-2 years). Of those who had ever overdosed on a depressant drug, 75% reported having overdosed in the past 12 months (see Table 89).

Participants were asked to report the main drug to which they attributed their last depressant overdose. The most commonly reported main drug was alcohol (83%); smaller proportions reported heroin (7%) and other opiates including methadone (3%). The 'other' category consisted of reports of cannabis and antidepressants. Half (50%) of those who reported recent depressant overdose had been under the influence of more than one drug at that time. In addition to the main drug, the most commonly reported 'other' drugs taken when recently overdosed were cannabis (28%), alcohol (6%), ecstasy (8%) and benzodiazepines (4%).

As with stimulant overdose, of those that had had a depressant overdose in the past six months, locations of last overdose reported were predominantly private locations (51%) such as friends' homes and own home versus public locations such as nightclubs and live music events (44%). This has implications in terms of access to treatment. Symptoms which participants reported on their last overdose occasion included vomiting (62%) and losing consciousness (27%) and collapsing (4%). See Table 93 for other symptoms experienced.

At their last occasion of overdose (of those who had overdosed in the preceding six months), 52% reported that there was a person sober who was able to assist at the time. On the occasion of overdose, immediate attention/care reported was monitoring by friends (31%), ambulance attendance (5%), and emergency department attendance (5%). Smaller numbers reported immediate treatment of narcan, oxygen, GP and CPR. In relation to follow-up treatment post depressant overdose, small numbers (n<3) reported visiting a counsellor, GP, seeking information on the internet or a telephone information service, visiting a psychologist or a Consumer group.

The majority of those that had recently overdosed on a depressant reported that it had occurred on a night of 'heavy session' of use (71%) as opposed to a normal night out. The depressant OD was reported to have occurred a median of six hours (range= 0-96 hours) after being out partying.

Table 93: Depressant overdose in the last 12 months among REU, by jurisdiction, 2011

	National 2010 N=693	National 2011 N=571	NSW n=99	ACT n=80	VIC n=100	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=102
Ever overdosed on depressant drug	**31**	**46**	24	39	91	44	49	57	36	25
Mean number times ever overdosed[*] (n)	**15**	**22**	8	11	32	18	26	33	8	7
Overdosed last 12 months[*]	**62**	**75**	77	87	73	82	78	71	0	61
Main drug [**]	**(n=130)**	**(n=183)**	(n=17)	(n=25)	(n=64)	(n=27)	(n=28)	(n=12)	(n=0)	(n=14)
Alcohol	**85**	**83**	53	84	88	93	86	100	-	57
Heroin	**6**	**7**	6	8	5	7	4	0	-	29
GHB	**3**	**1**	6	0	2	0	0	0	-	0
Benzodiazepines	**2**	**2**	12	4	0	0	4	0	-	0
Other opiates	**0**	**3**	12	4	4	0	0	0	-	7
Other	**4**	**5**	12	0	3	0	7	0	-	7
Last OD location[**]	**(n=130)**	**(n=188)**	(n=17)	(n=26)	(n=66)	(n=27)	(n=28)	(n=10)	(n=0)	(n=14)
Friends home	**32**	**18**	24	27	11	22	18	30	-	14
Own home	**28**	**29**	6	35	32	33	25	10	-	43
Nightclub	**10**	**16**	6	23	15	22	17	10	-	14
Private party	**9**	**9**	6	12	14	4	3	0	-	7
Pub	**12**	**11**	18	0	8	15	21	20	-	7
Live music event	**2**	**3**	0	0	5	4	0	10	-	7
Public place (street/park)	**4**	**7**	18	0	9	0	7	20	-	0
Other	**3**	**2**	6	0	3	0	0	0	-	0
More than one drug in last OD[**]	**52**	**50**	35	52	52	52	45	63	-	60
Symptoms experienced last OD[**]										
Vomiting	**79**	**62**	24	82	67	70	62	80	-	14
Losing consciousness	**52**	**27**	42	19	20	26	28	10	-	79
Collapsing	**31**	**4**	12	0	3	0	7	10	-	7
Suppressed breathing	**12**	**1**	6	0	0	4	0	0	-	0
Other	**15**	**6**	18	0	11	0	3	0	-	0

Source: EDRS REU interviews

[*] Of those who ever overdosed

[**] Of those who had overdosed in the past 12 months

Drug-related fatalities

The ABS has changed the way it collates deaths data, making comparisons to earlier overdose bulletins published by NDARC difficult. Since 2003, the ABS has progressively ceased visiting jurisdictional coronial offices to manually update causes of death that had not been loaded onto the computerised National Coronial Information System (NCIS). It was in 2006 that the ABS began to rely solely on data contained on NCIS at the time of closing the deaths data file. In addition, a number of jurisdictions, notably NSW and QLD, reported backlogs in cases that *had* been finalised by the coroner (i.e. cases where the coroner has determined the cause of death), but not yet loaded onto NCIS. This is likely to have an impact on the number of opioid-related deaths recorded at a national level in 2006, given that NSW and QLD recorded the highest number of opioid-related deaths in Australia during the period 2000 to 2005. Accordingly, only drug-related deaths for 2008 are reported here. These data should be interpreted in conjunction with the ABS Technical Note 2: Coroner Certified Deaths, 3303.0 2007. Excerpt taken from**:** (Roxburgh and Burns in press).

6.1.3 Methamphetamine-related fatalities

There are fewer deaths attributable to methamphetamine than are attributable to opioids. There is a limited understanding of the role of methamphetamine in death, and, therefore, mortality data may under-represent cases where methamphetamine has contributed to death, such as premature death related to cerebral vascular pathology (e.g. haemorrhage or thrombosis in the brain).

In 2008, there was a total of 55 'drug induced' deaths in which methamphetamine was mentioned among those aged 15-54 years. Methamphetamine was determined to be the underlying cause of death in thirteen of all methamphetamine related deaths in 2008 (Roxburgh and Burns in press). The 2009 ABS data on methamphetamine-related deaths were not available at the time of publication.

6.1.4 Cocaine

Eleven drug-related deaths in which cocaine was mentioned occurred among the 15-54 year age group in 2008, with two deaths mentioning cocaine as an underlying cause (Roxburgh and Burns in press). The 2009 ABS data on methamphetamine-related deaths were not available at the time of publication.

6.1.5 Fatal and non-fatal ketamine overdose

Ketamine users may be at risk of experiencing a range of acute side effects that place them at risk of harm. In an Australian study of ketamine users, effects such as an inability to speak, blurred vision, lack of co-ordination and increased body temperature were often reported (Dillon, Copeland et al. 2003), and the experience of a 'k-hole' may lead some to experience symptoms of paranoia, hallucinations and distress (Jansen 2000). These effects may increase the acute risks of ketamine, particularly because it is often used in nightclubs or dance parties, where the confusion and dissociation induced by ketamine may lead to unintended harms such as falls, traffic accidents (when leaving venues), and the unpleasant event of being taken advantage of by others.

No national data could be collected on non-fatal or fatal overdoses where ketamine was implicated. It is problematic to monitor deaths due to ketamine in existing data collections. See individual state/territory reports for jurisdictional-level information, where available.

6.1.6 Fatal and non-fatal GHB overdose

One of the reasons for the considerable media attention around GHB has arisen from numerous anecdotal and case reports of GHB overdose. GHB is known as a drug with a steep dose-response curve, which means that the difference between a 'desired' dose and one that renders the users unconscious is very small (Nicholson and Balster 2001). In recreational settings, the additional factors of inconsistent potency, variable individual response to GHB, environmental conditions and polydrug use may increase risks of GHB

overdose, despite the best intentions of users to reduce these risks. In one Australian study, half (53%) of a sample of GHB users had overdosed at some time (overdosing was defined as losing consciousness and being unable to be woken) (Degenhardt et al., 2003).

Concerted media attention on GHB-related overdoses has certainly existed in Australia, with wide media reporting of occasions where multiple GHB overdoses have occurred. Recent analysis of data from coronial records has suggested that 10 cases had been confirmed in this country to be associated with the use of GHB, with eight of these cases confirmed as primarily caused by the drug (Caldicott, Chow et al. 2004).

It is not possible at this time, however, to report statistics on the numbers of GHB overdoses presenting to emergency departments and hospitals in Australia. This is because GHB is not a separately recorded drug type in ICD-9 or ICD-10 (the classification system used in these settings), and no alternative mechanism for routinely documenting GHB overdoses has yet been developed around the country.

Given that anecdotal reports suggest continued occurrence of GHB overdoses, and reports from hospitals in increasing locations and jurisdictions around the country reinforcing this suggestion, it would be desirable for some simple mechanism for collecting and reporting these adverse events to be developed.

6.2 Help-seeking behaviour

Participants were asked if they had accessed any medical or health services in relation to their ERD or alcohol use in the last six months. Of the national sample, 16% (n=90) had accessed either a medical or health service in the six months preceding interview. The majority of the sample reported having accessed a doctor or GP(34%), followed by a counsellor (17%) and a Drug and Alcohol Worker (12%). Very small numbers accessed the emergency services such as the Emergency Department (6%) and one person reported accessing First Aid and hospitalisation. Other services accessed by one participant included internet counselling (see Table 94).

Table 95 presents the proportion of participants who accessed medical and health services, with dependence/addiction (24%) and cutting down drug use (13%) being the primary reasons people accessed services. In terms of immediate reasons, overdose was reported by 8% of participants that answered the section (see Table 91). Also reported by one participant was the reasons of 'other psychologiscal problems' and 'pre-existing health conditions'.

Table 94: Proportion of REU who accessed a medical or health service, 2011

Service accessed (%)	National N=90	NSW n=24	ACT n=5^	VIC n=12	TAS n=10	SA n=12	WA n=5^	NT n=1^	QLD n=21
Doctor (GP)	**34**	33	40	58	40	33	60	0	14
Counsellor	**17**	25	0	8	10	17	20	100	14
Drug and Alcohol worker	**12**	0	0	25	10	17	20	0	19
Psychologist	**12**	8	20	0	10	17	0	0	24
Emergency Department	**6**	4	0	0	20	0	0	0	10
Psychiatrist	**3**	8	20	0	0	0	0	0	0
Telephone counselling	**3**	0	20	0	0	0	0	0	10
Other	**9**	17	0	0	10	17	0	0	5

Source: EDRS REU interviews
Note: Multiple responses were permitted

Table 95: Main issue for REU who accessed medical or health service, 2011

Main Issue (%)	National N=90	NSW n=24	ACT n=5^	VIC n=12	TAS n=10	SA n=12	WA n=5^	NT n=1^	QLD n=21
Dependence /Addiction	**24**	8	0	58	10	25	20	0	38
Cutting down drug use	**13**	21	20	0	10	25	0	0	10
Overdose	**8**	4	0	17	10	8	0	0	10
Depression/ anxiety	**8**	13	0	0	20	0	20	0	5
Social/ relationship issues	**6**	13	0	8	0	0	20	0	0
Anxiety immediate	**6**	0	0	0	0	17	0	0	14

Source: EDRS REU interviews

Table 96: Main issue for REU who accessed medical or health service continued, 2011

Main Issue (%)	National N=90	NSW n=24	ACT n=5^	VIC n=12	TAS n=10	SA n=12	WA n=5^	NT n=1^	QLD n=21
Information/ advice on drugs	**3**	8	0	8	0	0	0	0	0
Aggression/ violent behaviour	**6**	4	20	0	10	0	0	0	10
Psychosis	**3**	0	40	0	0	0	0	0	5
Physical accident	**2**	8	0	0	0	0	0	0	0
Acute physical problems	**2**	0	0	0	0	0	40	0	0
Physical accident longer term	**2**	4	0	0	10	0	0	0	0
Other	**14**	17	20	8	30	25	0	100	5

Source: EDRS REU interviews

The main drug reported for the health and medical service access was alcohol (30%) followed by cannabis (17%) and ecstasy (16%). Other drugs reported by one participant was pharmaceutical stimulants, mushrooms, base, benzodiazepines and LSD.

Table 97a: Main drug for health and medical service accessed for REU, 2011

Main Drug (%)	National N=90	NSW n=24	ACT n=5^	VIC n=12	TAS n=10	SA n=12	WA n=5^	NT n=1^	QLD n=21
Alcohol	**30**	25	0	23	50	33	40		
Cannabis	**17**	38	0	0	10	17	20		
Ecstasy	**16**	13	40	0	0	8	20		
Heroin	**14**	0	0	55	10	8	0		
Speed	**6**	0	40	9	0	0	0		
Ice/crystal	**3**	4	0	0	0	8	20		
Other opiates	**3**	4	0	0	10	8	0		
Other	**3**	4	0	0	20	0	0		

Source: EDRS REU interviews

6.3 Drug treatment

6.3.1 Ecstasy

Although ecstasy users do not typically come into contact with health professionals for problems related to drug use, and few of the REU were currently in drug treatment, there is some evidence that there are people experiencing problems with their ecstasy use and have sought treatment.

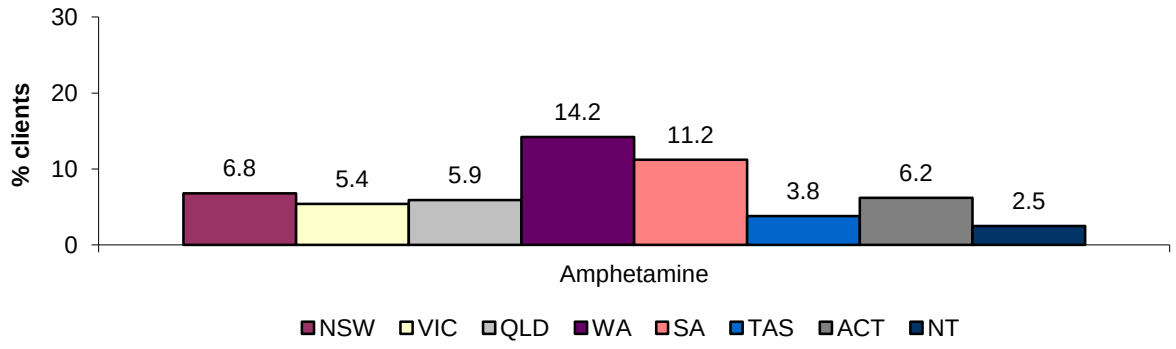
Ecstasy as a principal drug of concern accounted for 1% of closed treatment episodes (1,107) in 2009–10, a four-fold increase since 2001–02 (253). When all drugs of concern are considered, 6% of treatment episodes included ecstasy as a drug of concern, down from 7% in 2008–09. Six in 10 episodes (58%) included at least one other drug of concern, a decrease from 63% in 2008–09. The most common other drug used in addition to ecstasy in 2009–10 was alcohol (Australian Institute of Health and Welfare 2011).

Males (82%) were the clients mostly seeking treatment. People seeking treatment for ecstasy tended to be younger than those seeking treatment for other drugs, with the median age for ecstasy-related episodes at 22 years. Ecstasy-related episodes were mostly referred by court diversion programs (42%) or police diversion (20%). Counselling was the most common main treatment type received (46% of episodes) followed by information and education only at 28%.

6.3.2 Methamphetamine

WA had the highest proportion of closed treatment episodes for people who identified amphetamine as their drug of concern (14.2%), followed by SA (11.2%), and NSW (6.8%) (**Error! Reference source not found.**) (Australian Institute of Health and Welfare, 2011b) .

Figure 42: Proportion of closed treatment episodes for clients who identified amphetamine as their principal drug of concern (excluding pharmacotherapy), by jurisdiction, 2009/10



Source: AODTS-NMDS (Australian Institute of Health and Welfare 2011b)
Note: Excludes closed treatment episodes for clients seeking treatment for the drug use of others. Treatment utilisation depends on demand and jurisdictional funding; data do not include clients from methadone maintenance treatments, NSP, correctional institutions, halfway houses or sobering up shelters

6.3.3 Cocaine

Closed treatment episodes for clients who identified cocaine as their principle drug of concern were included under 'other drugs' in 2008/09 due to small numbers (Australian Institute of Health and Welfare, 2011b) .

6.3.4 Ketamine

No specific ketamine data were available in 2009/10. Closed treatment episodes for 'other drugs' accounted for 2.6% of total Australian treatment episodes (3,609) of which ketamine was included (Australian Institute of Health and Welfare 2010). Case studies of ketamine dependence in the medical literature are accumulating (Ahmed and Petchovsky 1980; Kamaya and Krishna 1987; Jansen 1990; Soyka, Krupinski et al. 1993; Hurt and Ritchie 1994; Moore and Bostwick 1999). Treatment-seeking for problems associated with ketamine use is low compared to other drugs.

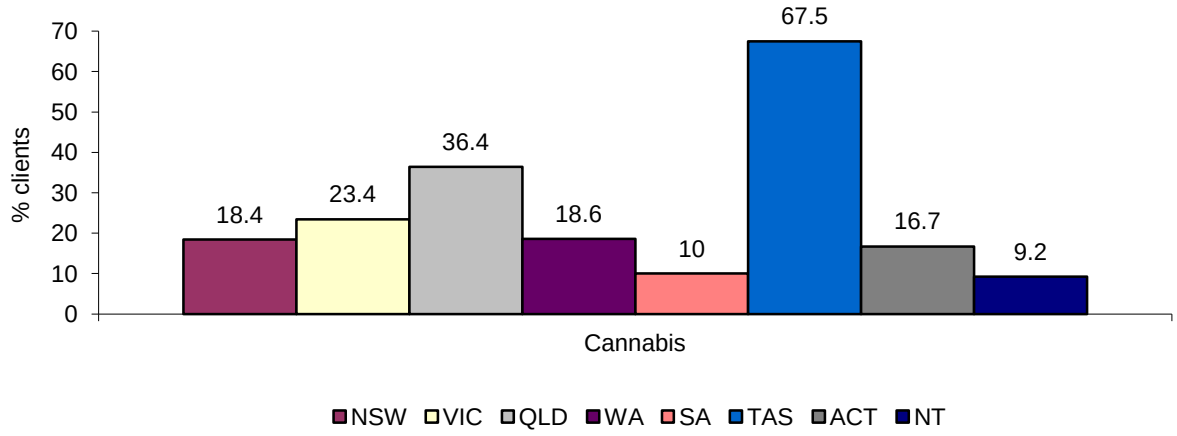
6.3.5 GHB

No specific data were available for 2008/09. As with ketamine, treatment-seeking for problems associated with GHB use is relatively uncommon. There has been a total of 19 episodes where GHB was identified as the principal drug of concern during the period 2002/03 and 2005/06, with seven of these episodes occurring in 2005/06 (AODTS-NMDS unpublished data, 2002/03 to 2005/06). These data are based on closed treatment episodes, and episodes that are not completed within the annual collection period are not included in the collection for that period.

6.3.6 Cannabis

Data from the AODTS-NMDS indicate that in 2009/10, TAS had the highest proportion of closed treatment episodes for clients who identified cannabis as their principal drug of concern (67.5%), followed by QLD (36.4%) and VIC (23.4%) (**Error! Reference source not found.**) (Australian Institute of Health and Welfare, 2011b) .

Figure 43: Proportion of closed treatment episodes for clients who identified cannabis as their principal drug of concern (excluding pharmacotherapy), by jurisdiction, 2009/10



Source: AODTS-NMDS
Note: Excludes closed treatment episodes for clients seeking treatment for the drug use of others.

6.4 Other self-reported problems associated with ERD use

6.4.1 Self-reported drug related problems

Participants in 2011 were asked about a range of other problems associated with their drug use. Participants were asked if, in the past six months, their drug use had caused repeated problems with family, friends or people at work or school; if they had any recurrent drug-related legal problems; if they had recurrently found themselves in situations where they were under the influence of any drug and someone (themselves or another person) could have been hurt or put at risk; or if their drug use had recurrently interfered with their responsibilities at home, work or school. Table 98 presents the proportion experiencing these problem and Table 100 the main drugs responsible.

Table 98: Self-reported drug-related problems, by jurisdiction, 2011

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
(%)	2010 N=693	2011 N=530	n=93	n=61	n=100	n=75	n=73	n=28	n=10	n=89
Drugs caused repeated problems with family, friends or colleagues	**20**	**28**	36	26	23	15	33	43	20	30
Had recurrent drug-related legal problems last six months	**5**	**7**	5	7	1	5	12	11	0	10
Recurrently found self in at-risk situations when under influence	**38**	**44**	40	54	37	40	55	46	40	42
Drugs recurrently interfered with responsibilities at home/work/school	**34**	**38**	43	41	29	27	36	54	20	48

Source: EDRS REU interviews

If participants identified with experiencing one of the above mentioned problems due to drug use recently, participants were asked if they had sought help for this issue. Results would suggest that of those that had a legal issue, the majority (70%) sought help. These issues may have included: drink driving/drug driving charges and assaults that have occurred under the influence. The other issues including social problems with known persons, repeatedly at-risk/dangerous situations and interference with responsibilities of the individual only had a minority report that they had taken action to address the issues (see Table 93a).

Table 99a: Sought help for self-reported problem, by jurisdiction, 2011

(%)	National 2011	NSW n=93	ACT n=61	VIC n=100	TAS n=75	SA n=73	WA n=28	NT n=10	QLD n=89
Drugs caused repeated problems with family, friends or colleagues	**N=12939**	33	43	27	40	38	50	50	57
Had recurrent drug-related legal problems last six months	**N=3370**	80	100	0	50	67	100	0	57
Recurrently found self in at-risk situations when under influence	**N=21011**	11	15	6	10	10	17	0	22
Drugs recurrently interfered with responsibilities at home/work/school	**N=18524**	25	8	15	25	31	14	0	41

Source: EDRS REU interviews

Participants that self-reported a drug related issue/problem were asked which main drug they attributed to contributing to the issue. For repeated social problems, recurrent legal problems and interference with responsibilities at home and work participants identified alcohol and cannabis. For issues related to repeated at risk situations and alcohol and ecstasy were the main drugs reported to contribute to these issues.

Table 100: Main drug attributed to self-reported problem, 2011

(%)	Drugs caused repeated problems with family, friends or colleagues		Had recurrent drug-related legal problems last six months		Recurrently found self in at-risk situations when under influence		Drugs recurrently interfered with responsibilities at home/work/school	
	2010 N=140	2011 N=146	2010 N=33	2011 N=35	2010 N=260	2011 N=231	2010 N=234	2011 N=198
Ecstasy	21	**14**	18	**9**	22	**14**	19	**16**
Speed	3	**7**	0	**3**	2	**6**	3	**4**
Ice/crystal	6	**7**	9	**3**	1	**6**	4	**5**
Cannabis	19	**28**	9	**26**	9	**3**	21	**31**
Alcohol	31	**32**	49	**40**	55	**61**	39	**36**

Source: EDRS REU interviews

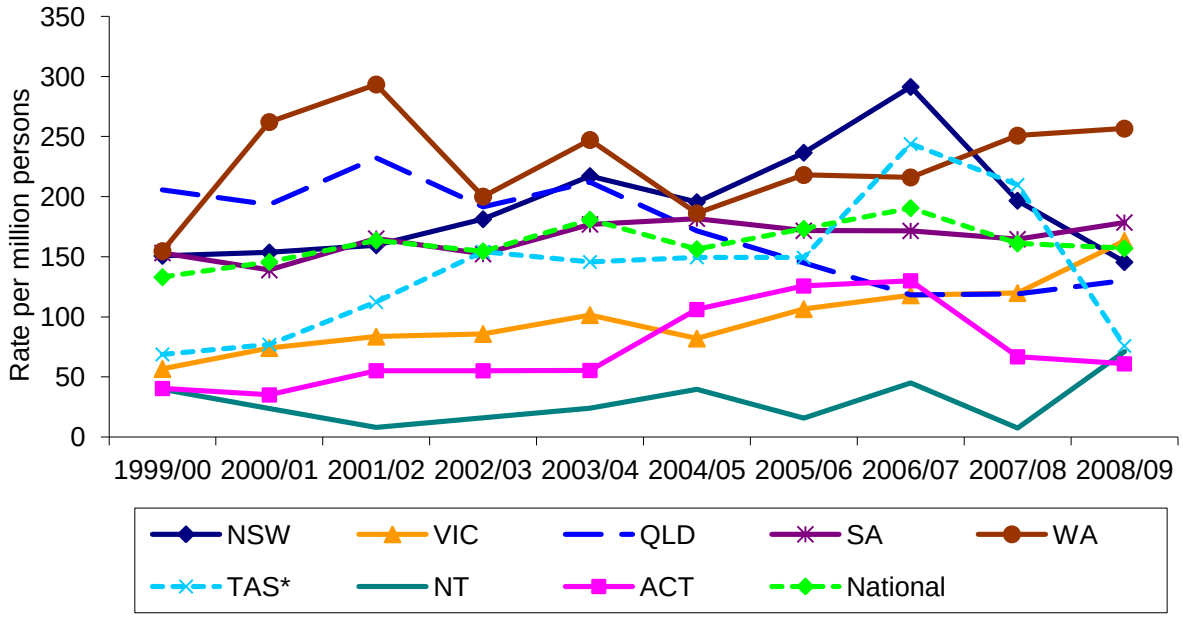
6.5 Hospital admissions

Please note: Data for 2009/10 was not available at the time of print. Please see PDF on NDARC website for updated data.

6.5.1 Methamphetamine

Figure 44 shows the number of inpatient hospital admissions per million persons, since 1999/00, with a principal diagnosis relating to amphetamines among persons aged 15-54 years. Figures have steadily increased at a national level since 1999/00, peaking at 180 per million persons in 2003/04 and again at 191 in 2006/07. These admissions have stabilised over the past five years. WA recorded the highest number of amphetamine-related hospital admissions in 2008/09 at 257 admissions per million persons. NSW and TAS reported a decrease in amphetamine-related hospital admissions in 2008/09. Data for 2009/10 was unavailable at time of printing.

Figure 44: Number of principal amphetamine-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2008/09



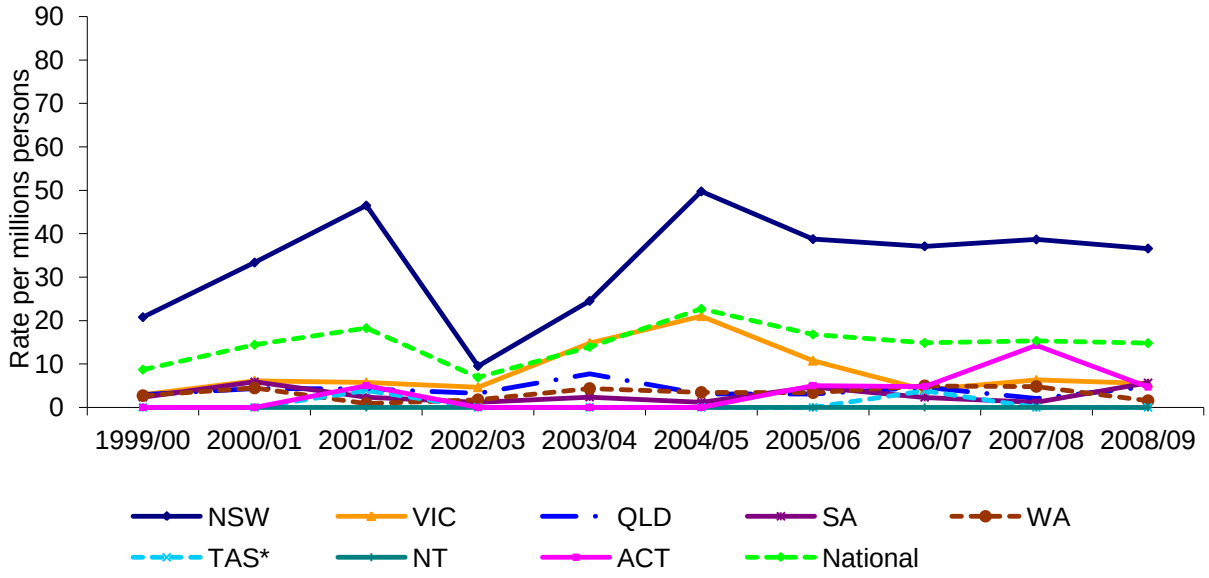
Source: AIHW, ACT, TAS, NT, QLD, SA, NSW, VIC and WA Health Departments (Roxburgh and Burns in press)

* From 2001, numbers in TAS included admissions from an additional drug withdrawal unit

6.5.2 Cocaine

Figure 45 shows the number of inpatient hospital admissions per million persons with a principal diagnosis relating to cocaine. These figures have fluctuated at a national level over the nine-year period, ranging from seven admissions per million persons in 2002/03 to 23 admissions per million persons in 2004/05. In 2008/09, the number of cocaine-related hospital admissions was 15 per million persons. It should be noted, however, that relative to opioids and amphetamines, these figures are small. NSW has consistently had the highest number of cocaine-related hospital admissions, which reached a peak of 49 admissions per million persons in 2004/05. In 2008/09, NSW recorded 36 cocaine-related admissions per million persons. Figures were relatively lower in all other jurisdictions. Data for 2009/10 was unavailable at time of printing.

Figure 45: Number of principal cocaine-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2008/09



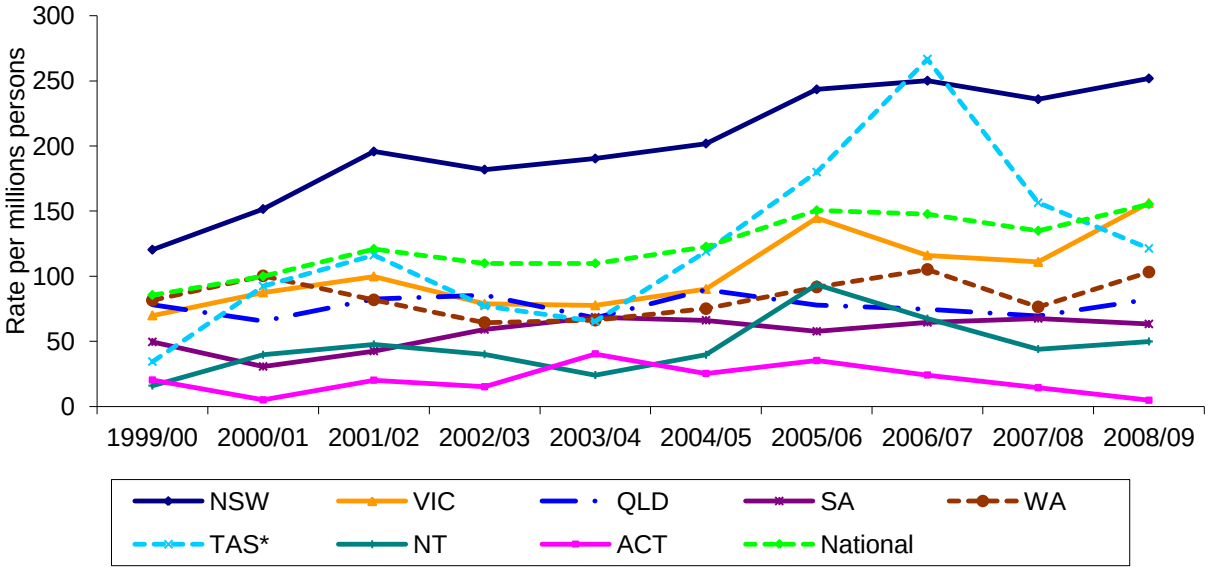
Source: AIHW; ACT, TAS, NT, QLD, SA, NSW, VIC and WA Health Departments (Roxburgh and Burns in press)

* From 2001, numbers in TAS included admissions from an additional drug withdrawal unit

6.5.3 Cannabis

Figure 46 shows the number of inpatient hospital admissions per million persons (among those aged 15-54 years) with a principal diagnosis related to cannabis. At a national level, these figures have steadily increased over the nine-year period from 85 admissions per million persons in 1999/00 to 155 per million persons in 2008/09. NSW recorded the highest number of admissions per million persons among people aged 15-54 years in 2008/09 (252 admissions per million persons). Data for 2009/10 was unavailable at time of printing.

Figure 46: Number of principal cannabis-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2008/09



Source: AIHW; ACT, NSW, NT, QLD, SA, NSW, VIC and WA Health Departments (Roxburgh and Burns in press)

* From 2001, numbers in TAS included admissions from an additional drug withdrawal unit

6.6 Mental and physical health problems

6.6.1 Mental health problems and psychological distress (K10)

The Kessler Psychological Distress Scale 10 (K10) was administered to obtain a measure of psychological distress. It is a 10-item standardised measure that has been found to have good psychometric properties and to identify clinical levels of psychological distress as measured by the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV)/the Structured Clinical Interview for DSM disorders (SCID; Andrews and Slade 2001; Kessler, Andrews et al. 2002).

The minimum score was 10 (indicating no distress) and the maximum was 50 (indicating very high psychological distress). Among participants who completed the full scale (n=573), the mean score was 19.2 (median=18, SD=6.64, range=10-43). Among the general population, scores of 30 or more have been demonstrated to indicate a high likelihood of having a mental health problem (Andrews and Slade 2001; Furukawa, Kessler et al. 2003), and work conducted at the Clinical Research Unit For Anxiety Disorders (CRUFAD) found that those scoring 30 or more have 10 times the population risk of meeting criteria for an anxiety or depressive disorder[7].

The 2010 NDSHS {Australian Institute of Health and Welfare, 2011 #2785} provided the most recent Australian population norms available for the K10, and used four categories to describe degree of distress: scores from 10-15 were considered to be low; 16-21 as moderate; 22-29 as high; and 30-50 as very high. Using these categories, a similar proportion of EDRS participants reporting very high distress was similar to those in the NDSHS (Table 101).

Table 101: K10 scores, by jurisdiction (method used in ABS National Health Survey), 2011

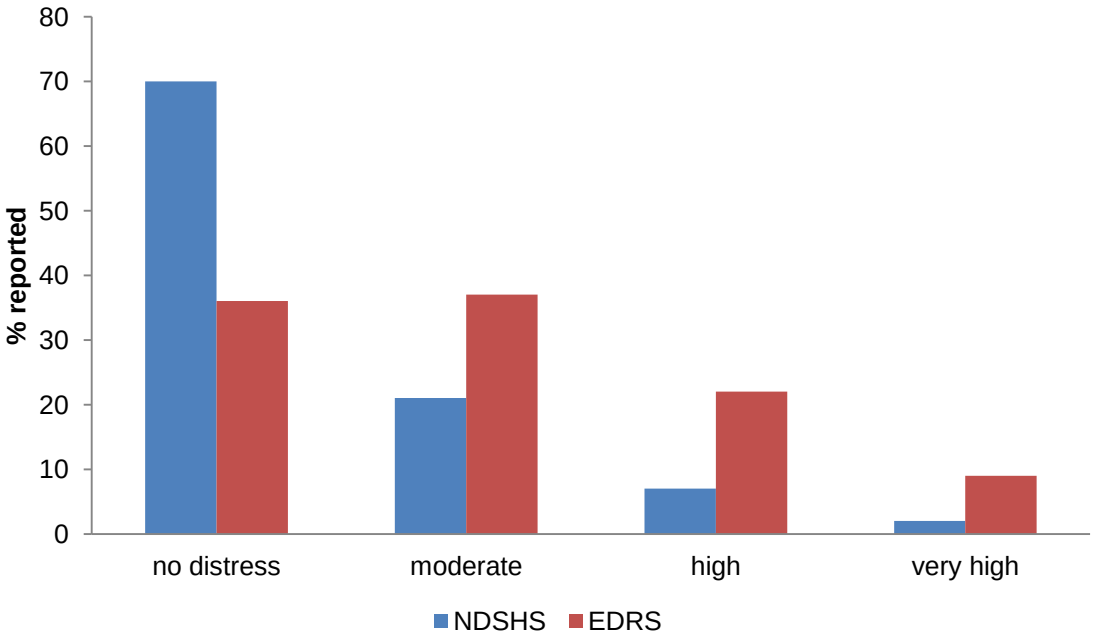
(%)	NDSHS		EDRS							
K10 category	**National ABS**	**National N=573**	**NSW n=100**	**ACT n=80**	**VIC n=101**	**TAS n=75**	**SA n=76**	**WA n=28**	**NT n=10**	**QLD n=103**
reporting no or low distress (score 10-15)	**70**	**36**	40	45	26	37	36	46	30	30
reporting moderate distress (score 16-21)	**21**	**34**	34	26	36	37	36	25	40	34
reporting high distress (score 22-29)	**7**	**22**	21	18	28	20	18	21	30	25
reporting very high distress (score 30-50)	**2**	**9**	5	11	11	5	11	7	0	11

Source: EDRS REU interviews; (ABS, (2006))
Note: The extent to which cut-offs derived from population samples can be applied to the REU population is yet to be established and therefore these findings should be taken as a guide only

[7] See www.crufad.unsw.edu.au/k10/k10info.htm for details.

As is evident (Figure 47), the proportion of the REU sample in the moderate, high and very high distress categories is greater than that of the general population.

Figure 47: Proportion of population (ABS National Health Survey) and REU sample of K10 categories, 2011



Source: EDRS REU interviews; {Australian Institute of Health and Welfare, 2011 #2782}
Note: The extent to which cut-offs derived from population samples can be applied to the REU population is yet to be established and therefore these findings should be taken as a guide only

6.7.2 Self-reported mental problems and medication

Almost one-third (31%) of REU national participants reported experiencing a mental health problem in the six months preceding interview. Of these, the primary issue of concern was depression (71%), followed by anxiety (56%) and paranoia (17%). For jurisdictional breakdowns, see Table 95. Other mental health problems reported, but not listed due to small numbers, included phobias (1%), mania (3%) and any personality disorders (3%; Table 102).

Table 102: Self reported mental health problem in the last six months, 2011

(%)	National		NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=10	QLD n=101
	2010 N=693	2011 N=571								
Experienced a mental health problem	29	**31**	26	30	37	27	26	14	40	39
Of those that had mental health problem	N=199	**N=174**	n=26	n=24	n=37	n=20	n=20	n=4^	n=4^	n=39
Depression	66	**71**	73	71	65	40	90	50	50	80
Anxiety	61	**56**	46	63	43	60	75	50	50	62
Paranoia	10	**17**	8	17	22	10	15	50	25	18
Panic	8	**14**	4	17	11	20	15	0	0	21
OCD	5	**3**	0	0	3	0	5	25	0	8
Manic-depression/Bipolar disorder	7	**9**	8	8	11	15	10	0	0	5
Drug induced psychosis	2	**6**	4	4	5	0	15	25	25	3
Schizophrenia	2	**3**	4	4	0	0	0	0	0	8

Source: REU participant interviews

Participants that reported experiencing a mental health problem were also asked whether they had visited a mental health professional for a mental health problem in the last six months to which 61% participants reported doing so. Of these, 67% had medication prescribed, primarily antidepressants (64%; Table 103). The most common antidepressants prescribed were: Lexapro (n=7), Efexor (n=6), and Zoloft and Prozac (n=5). Antipsychotics were the least commonly prescribed medication to this sample (20%). The most common antipsychotic prescribed to participants was Seroquel (n=7). The most common benzodiazepines reportedly prescribed to participants were: Valium (n=13) and Xanax (n=4; Table 103).

Table 103: Mental health assistance and medication, 2010-2011

(%)	National	
	2010 N=197	2011 N=173
Attend a mental health professional	61	**61**
Had medication prescribed*	69	**N=105 67**
Antidepressants#	76	**64**
Antipsychotics#	22	**20**
Benzodiazepines#	47	**47**

Source: REU participant interviews, 2011
* Of those who attended a mental health professional
# Of those who were prescribed medication

7 RISK BEHAVIOUR

- Nineteen percent of the national sample reported having **injected** at some time in their lives; 63% of those reported injecting in the six months preceding interview. The mean age of first injection was 20 years of age. Among those who had injected in the preceding six months, the last drug injected was heroin (35%) as seen in 2010.
- Syringes were typically obtained from a Needle and Syring Program (NSP) (71%). Of those who had injected in the preceding six months a total of three respondents reported using a needle after someone else in the month preceding interview. Twenty-eight percent of recent injecting participants reported **sharing** of other injecting equipment.
- Forty-six percent of the national sample reported they had completed the **vaccination** schedule for hepatitis B virus, the most common reason for the vaccination was being vaccinated as a child.
- The majority (78%) of participants reported penetrative sex in the six months preceding interview with at least one **casual partner**. Two-fifths (43%) of those who had had casual sex last time under the influence reported not using a condom and predominantly reported using alcohol, ecstasy and cannabis.
- Just over three-quarters (75%) had **driven a car** in the last six months, 67% of those had reported having been over the legal limit, and 59% had driven shortly after taking an illicit drug on a median of six occasions. The most commonly reported illicit drugs after which these participants had driven were ecstasy and cannabis. A number reported positive notifications were from being saliva drug tested.
- In the Alcohol Use Disorders Identification Test (AUDIT) males were found to have a significantly higher score than females. Higher scores are indicative of greater likelihood of hazardous drinking.

7.1 Injecting risk behaviour

As in previous years, the EDRS asked participants about injecting and associated risk behaviours. Previous research has shown that REU who had ever injected a drug were significantly older, more likely to be unemployed and have a prison history, while participants who had completed high school and those who identified as heterosexual were less likely to have injected. Participants in the EDRS have been found to be demographically different to other samples of people who inject drugs (White, Day et al. 2006).

In the 2010 EDRS, 19% of the national sample reported having injected at some time in their lives and, of those, 63% (n=69) reported injecting in the six months preceding interview (Table 104).

Table 104: Injecting risk behaviour among REU, by jurisdiction, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 (N=693)	2011 (N=571)	n=99	n=79	n=101	n=75	n=76	n=28	n=11	n=102
Ever injected	**16**	**19**	13	8	27	21	16	36	18	24
Mean age first injected any drug (SD)	**20 (n.a)**	**20 (4.4)**	22 (4.4)	19^ (2.3)	20 (4.6)	20^ (2.5)	23 (6.1)	21^ (4.7)	19^ (4.2)	20 (4.2)
Injected last six months*	**61**	**63**	62	83	63	63	42	70	50	67

Source: EDRS REU interviews
*Among those who had injected
^ Small numbers interpret with caution
Note: Means have been rounded to whole numbers

6.1.3 Recent injectors

Participants who had injected in the last six months reported injecting a median of 20 times in that time (mean= 59, range=1-360 times). Methamphetamine (any form) was the most commonly last injected drug in the preceding six months, followed by heroin. Other drugs reported in small numbers (n<5) included other opiates and steroids (Table 105).

Sixty-seven percent of recent injectors had injected under the influence of ERD in the past six months, 25% had injected while coming down and 21% had injected both while under the influence and while coming down during that time.

Table 105: Recent injecting drug use patterns among those who had recently injected, 2011

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=65	2011 N=69	n=8^	n=5^	n=17	n=10	n=5^	n=6^	n=1^	n=16
Median number of times injected last 6 months (range)	**15 (1-500)**	**20 (1-360)**	11 (4-180)	20 (2-180)	24 (1-360)	17.5 (6-90)	50 (12-360)	36 (5-100)	48 *(no range)*	22 (1-180)
Last drug injected*										
Speed	**25**	**23**	0	0	31	30	40	17	0	27
Base	**9**	**5**	0	0	0	10	20	0	0	7
Heroin	**29**	**35**	13	80	56	30	20	17	0	27
Ice/crystal	**8**	**17**	50	0	6	0	20	17	0	27
Ecstasy	**8**	**2**	0	0	0	0	0	17	0	0
Other opiates	**3**	**6**	0	0	0	20	0	33	0	0
Cocaine	**6**	**0**	0	0	0	0	0	0	0	0
Other	**6**	**6**	25	0	0	10	0	0	6	6
Injected while under influence/ coming down*										
Neither	**33**	**37**	75	60	38	20	40	17	100	25
Not intoxicated	**5**	**0**	0	0	0	0	0	0	0	0
Under influence	**14**	**16**	25	0	13	10	20	0	0	31
Coming down	**25**	**25**	0	40	13	50	20	33	0	31
Both	**23**	**21**	0	0	38	20	20	50	0	13
Median number of times injected while under influence/coming down (range)**	**N=34 4 (1-15)**	**N=41 6 (0-180)**	5.5^ (5-6)	17^ (10-24)	12^ (2-180)	3.5^ (0-20)	24^ (20-40)	3^ (2-40)	n.a	7.5 (1-24)

Source: EDRS REU interviews
* Of those who had injected each drug in the preceding six months
** Of those who had injected whilst under the influence and/or coming down
^ Small numbers; interpret with caution

7.1.1.1 Context of injecting

The majority of participants obtained their needles for injecting recently from an NSP or from a pharmacy or chemist. Other areas mentioned in small numbers n<5 included a hospital and an outreach program.

The majority of participants who had injected usually did so in the presence of others, typically close friends and/or a regular sex partner. Small numbers reported 'other' such as 'dealer' or 'relative'. The majority of those who had recently injected reported having injected at home or at a friend's home, although public locations such as in a car, on the street or in a public toilet were also reported (Table 106). Comparisons across jurisdictions should be made with a degree of caution due to small numbers commenting in many states/territories.

7.1.1.2 Sharing of needles/syringes and other injecting equipment

Of those who injected in the preceding six months (n=69), three respondents reported using a needle between twice and five times after another person in the month preceding interview. These included a regular and/or casual sex partner (n=1) and a close friend (n=2).

Sharing of other injecting equipment in the preceding month was reported by 28% (n=19) of recent (past six months) injectors. Of those who reported sharing any equipment, 57% (n=11) reported sharing spoons, 32% (n=9) shared water, 53% (n=10) reported sharing tourniquets, 21% (n=4) shared filters and swabs 11% (n=2) (Table 106).

Table 106: Context and patterns of recent (last six months) injection, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=66	2011 N=69	n=8^	n=5^	n=17	n=10	n=5^	n=7^	n=1^	n=16
Needle sources										
NSP	**56**	**71**	38	60	88	90	40	43	100	81
Vending machines	**27**	**7**	13	40	0	0	20	0	0	6
Chemist	**39**	**30**	63	40	0	10	80	57	0	31
Partner	**6**	**4**	0	0	0	0	20	0	0	13
Friend	**17**	**19**	50	60	12	0	20	0	0	19
Dealer	**8**	**3**	13	20	0	0	0	0	0	0
People usually inject with*										
Close friends	**41**	**46**	75	60	29	50	40	33	0	50
Regular sex partner	**31**	**19**	13	0	18	30	20	17	0	25
Casual sex partner	**11**	**2**	0	0	0	0	20	0	0	0
Acquaintance	**6**	**13**	0	20	12	0	20	17	100	18
No one	**20**	**21**	13	20	35	10	20	33	0	13
Locations injected last 6 months*										
Own home	**64**	**60**	75	20	71	60	80	50	100	50
Friend's home	**20**	**26**	25	60	18	30	20	33	0	25
Dealer's home	**5**	**2**	0	0	0	10	0	0	0	0
Street/park/bench	**3**	**0**	0	0	0	0	0	0	0	19
Public toilet/Venue toilet	**3**	**4**	0	0	0	0	0	0	0	0
Car	**5**	**7**	0	20	12	0	0	17	0	6

Source: EDRS REU interviews
* Multiple responses allowed ^ Small numbers; interpret with caution

6.1.4 Injecting drug use in the general population

It has been estimated that a very low proportion of the Australian general population aged 14 years and over have ever injected or recently injected drugs. In 2010, 1.8% of the population had ever injected a drug, with 0.4% (74, 000 people) having injected a drug in the past year.

Those in the 20-29 year and 30-39 year age group had a higher proportion of both lifetime and past-year injecting drug use {Australian Institute of Health and Welfare, 2011 #2800}.

Another recent prevalence estimate of injecting in Australia in 15-64 year olds is 1.09% (range =0.65%-1.50%) which equates to approximately 149,591 persons (range =89,253 - 204,564) (Mathers, Degenhardt et al. 2008).

6.2 Blood-borne viral infections (BBVI)

Twenty-one percent of the national sample reported that they have never been vaccinated for hepatitis B virus (HBV), 46% reported that they had completed the vaccination schedule and 7% did not finish the vaccination schedule. Reasons for seeking HBV vaccination included being vaccinated as a child (46%), going overseas (31%), for work (9%), at risk due to injecting drug use (3%) and at risk due to sexual practices (4%; Table 107).

Participants were asked if they had been tested for hepatitis C virus (HCV). Of the national sample, 43% reported that they had never been tested for HCV, while 30% had been tested in the last year and 17% were tested more than a year ago. Six percent of those tested reported positive diagnoses of HCV (Table 107).

Participants were asked if they had been tested for human immunodeficiency virus (HIV). Of the national sample, 46% had never been tested for HIV, 34% had been tested in the past year and 17% had been tested more than one year ago. One percent reported that they were HIV positive (Table 107).

Thirty-three percent had never had a sexual health check-up (Table 107). Forty-eight percent of the sample reported having a sexual health check-up (such as a swab, urine, or other blood test) in the past year, while 20% reported having had their last sexual health check-up more than one year ago.

Sixteen percent reported having been diagnosed with a sexually transmitted infection in their lifetime to which Chlamydia was the most common diagnosis.

Table 107: Blood borne virus vaccination and testing among REU, 2011

(%)	National 2010 N=693	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Vaccinated for Hepatitis B	**N=589**	**N=564**	n=99	n=79	n=99	n=75	n=76	n=28	n=11	n=97
No	**41**	**27**	48	17	23	23	24	32	9	27
Yes, didn't complete	**8**	**7**	11	6	4	11	7	7	9	5
Yes, completed	**51**	**46**	31	49	56	49	50	50	55	42
Don't know	**n.a**	**19**	10	28	17	17	20	11	27	26
Main reason for Hepatitis B vaccination	**N=n.a**	**N=299**	n=41	n=44	n=59	n=45	n=42	n=16	n=7^	n=45
At risk (IDU)	**6**	**3**	0	2	7	7	2	0	0	2
At risk (sexual)	**2**	**4**	10	2	2	2	0	0	0	11
Going overseas	**32**	**31**	37	30	32	33	19	44	29	31
Vaccinated as a child	**40**	**46**	34	59	54	36	67	19	57	30
Work	**7**	**9**	12	0	0	13	10	19	0	18
Don't know/can't remember	**4**	**2**	0	0	0	7	0	6	0	2
Other	**10**	**6**	7	7	5	2	2	13	14	7
Tested for HepatitisC	**n=632**	**N=563**	n=98	n=79	n=100	n=74	n=76	n=27	n=11	n=98
No	**62**	**43**	53	52	36	34	54	33	27	36
Yes, in last year	**25**	**30**	33	17	39	31	25	14	27	34
Yes, > year ago	**13**	**17**	8	19	12	23	15	37	46	15
Don't know/didn't get result	**n.a**	**11**	6	13	13	12	7	15	0	15
Hepatitis C positive **	**5**	**6**	3	4	12	5	3	15	0	6
Tested for HIV	**n=665**	**n=565**	n=99	n=79	n=100	n=74	n=76	n=28	n=11	n=98
No	**58**	**46**	55	66	32	40	53	50	18	39
Yes, in last year	**28**	**34**	32	19	47	37	32	21	36	36
Yes, > year ago	**15**	**17**	11	13	15	23	16	25	46	20
Don't know/didn't get result	**n.a**	**3**	2	3	6	1	0	4	0	5
HIV positive#	**2**	**1**	2	0	0	0	0	0	0	4
Other sexual health checkups	**n=676**	**n=567**	n=99	n=79	n=100	n=75	n=76	n=28	n=11	n=99
No	**37**	**33**	40	33	35	20	37	36	18	28
Yes, in last year	**44**	**48**	42	43	49	56	38	36	64	58
Yes, > year ago	**19**	**20**	17	24	15	24	25	25	18	14
Don't know/didn't get result	**X**	**<1**	0	0	1	0	0	4	0	0
Sexually transmitted infection (STI)	**N=669**	**n=552**	n=98	n=77	n=98	n=74	n=76	n=28	n=11	n=90
positive in past year	**17**	**4**	3	1	5	1	7	0	0	6
positive more than one year ago	**n.a**	**12**	9	4	16	18	7	4	27	19
STI diagnosis##	**N= n.a**	**n=86**								
Gonorrhoea	**7**	**13**	55	25	0	0	10	0	0	14
Chlamydia	**70**	**70**	36	75	76	93	60	0	100	68
Syphillis	**0**	**1**	9	0	0	0	0	0	0	0
HPV (genital warts)	**17**	**14**	0	0	19	21	20	100	0	9
Other	**10**	**12**	9	25	5	0	20	0	0	23

Source: EDRS Regular ecstasy user interviews

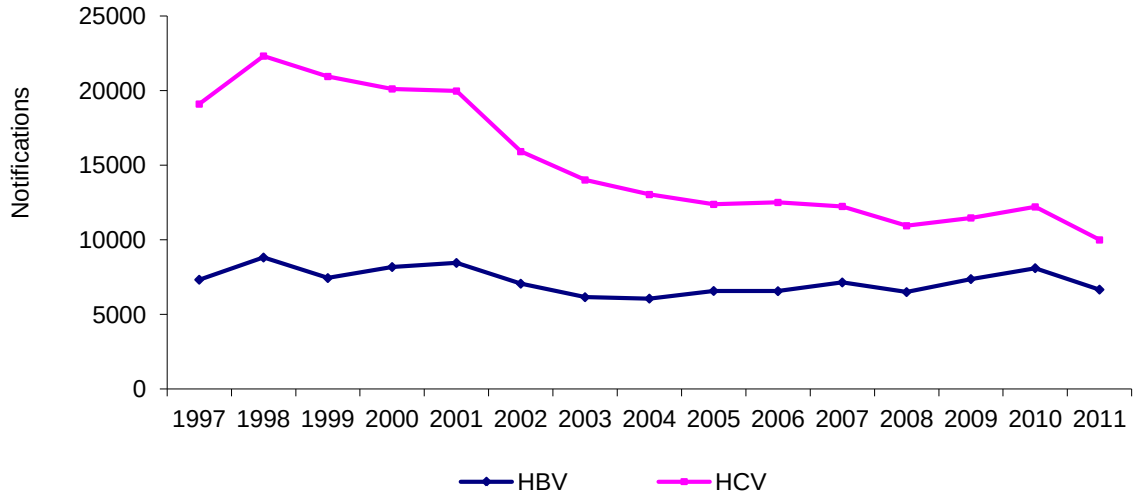
^caution small numbers n<10 * among those who had been vaccinated for Hepatitis B

** among those tested for hepatitis C # among those tested for HIV ## among those who tested positive for STI in the last year

7.2.1 The National Notifiable Diseases Surveillance System

Figure 48 presents the total number of notifications for the hepatitis B virus (HBV) and the hepatitis C virus (HCV) in Australia from the Communicable Diseases Network –NNDSS. Incident or newly acquired infections, and unspecified infections (i.e. where the timing of the disease acquisition is unknown) are presented. HCV continued to be more commonly notified than HBV, with a gradual decreasing trend in notifications of HCV since 2001. HBV notifications have remained relatively stable over the past five years.

Figure 48: Total notifications for HBV and HCV (unspecified and incident) infections, Australia, 1997-2012



Source: Communicable Diseases Network – NNDSS[8] date accessed: 14th March, 2012
Note: Figures are updated on an ongoing basis

[8] *Notes on interpretation*
There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to only represent a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

7.3 Sexual risk behaviour

7.3.1 Recent sexual activity

Over one-third (68%) of the national sample reported having casual sex with at least one casual partner in the six months preceding interview. Penetrative sex was defined as 'penetration by penis or hand of the vagina or anus'. Given the sensitive nature of these questions, participants were given the option of self-completing this section of the questionnaire. Seventeen percent reported having one casual partner, and 52% reported having more than one partner (range: 2 to more than 10 partners; Table 108).

Participants were asked if they had used a barrier for safe sex during their last sexual encounter that was sober to which 36% (of n=384) reported that they had not. Five percent reported that this response was unapplicable as they had not had sex with a casual partner sober. Response options reported for not using a barrier on this occasion included: 'I did not wish to use it' (31%),'It was not mentioned' (30%), 'my partner did not wish to use' (8%), lack of availability (5%) and 'other' (26%). 'Other' responses were themed around both people not wishing to use contraception and being on the female contraceptive pill.

Table 108: Prevalence of sexual activity and number of sexual partners in the preceding six months, by jurisdiction, 2011

(%)	National 2010	National 2011	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
No. casual sexual partners	**(N=651)**	**(N=571)**	(n=99)	(n=80)	(n=101)	(n=75)	(n=76)	(n=27)	(n=11)	(n=102)
No casual partner	**38**	**32**	27	38	33	36	34	26	27	28
1 person	**38**	**17**	13	16	12	15	21	33	9	19
2 people	**16**	**15**	14	10	20	13	18	7	9	19
3-5 people	**15**	**24**	30	26	24	24	18	26	46	19
6-10 people	**7**	**8**	9	9	6	9	8	4	9	8
10 or more	**3**	**4**	6	1	6	3	0	4	0	9
Use of protection during sex with casual partner when sober	**N/A**	**(N=384)**	(n=68)	(n=50)	(n=68)	(n=47)	(n=50)	(n=20)	(n=7^)	(n=74)
Yes		**60**	65	68	74	57	48	55	57	47
No		**36**	34	26	25	36	48	35	14	47
Not applicable		**5**	2	6	2	6	4	10	29	5

Source: EDRS REU interviews
* Of those who had a casual partner

7.3.2 Drug use during sex

The majority (93%) of those reporting recent penetrative sex with a casual partner reported using drugs during sex in the previous six months (Table 109). Most participants reported that drug use during sex with a casual partner had occurred between three and five times (31%) and 11 or more times (30%) in the preceding six months.

The most commonly used drugs used during sex were alcohol (83%), ecstasy (46%) and cannabis (45%) as seen last year. Other drugs nominated can be seen in Table 109. In previous years, ecstasy was nominated as the drug that most participants nominated being under the influence of during sex with a casual partner.

Participants were asked if they had used a barrier for safe sex during their last sexual encounter that was under the influence to which 43% (of n=204) reported that they had not. Response options reported for not using a barrier on this occasion included: 'It was not mentioned' (27%), 'I did not wish to use it' (23%), 'We were too intoxicated' (13%), 'my partner did not wish to use' (7%), lack of availability (7%) and 'other' (21%). 'Other' responses were themed around both people not wishing to use contraception, not being concerned with contraception, being on the female contraceptive pill, and knowing the other person – long term friend or casual sex partner.

Table 109: Drug use during sex with a casual partner in the preceding six months, by jurisdiction, 2011

(%)	National 2010 N=400	National 2011 N=390	NSW n=72	ACT n=50	VIC n=68	TAS n=48	SA n=50	WA n=20	NT n=8^	QLD n=74
Penetrative sex with casual partner while on drugs *	**86**	**93**	89	92	97	92	94	95	100	91
No. times had sex while on drugs with casual partner	**N=270**	**N=358**	n=63	n=46	n=65	n=44	n=47	n=19	n=8^	n=66
Once	**19**	**7**	3	11	6	2	11	11	13	6
Twice	**19**	**17**	21	17	12	18	23	23	13	11
3-5 times	**15**	**31**	35	26	39	16	21	21	50	32
6-10 times	**4**	**16**	15	22	14	27	15	15	13	14
Eleven +	**11**	**30**	27	24	29	36	30	30	13	38
Drug used last time**	**N=333**	**N=361**	n=64	n=46	n=66	n=44	n=47	n=19	n=8^	n=67
Ecstasy	**57**	**46**	48	46	32	48	60	21	50	55
Alcohol	**81**	**83**	81	85	76	89	89	90	88	79
Cannabis	**34**	**45**	48	50	35	34	62	37	25	51
Speed	**11**	**14**	5	15	24	14	13	11	50	10
Ice/Crystal	**5**	**9**	14	2	5	0	19	16	0	12
Cocaine	**11**	**12**	23	15	5	2	13	5	0	13
Base	**3**	**4**	2	2	2	0	15	0	0	5
LSD	**7**	**8**	9	4	11	9	2	5	25	9
Ketamine	**1**	**2**	5	0	6	0	0	0	0	0
Amyl nitrite	**3**	**2**	5	2	0	2	0	0	0	2
Nitrous oxide	**2**	**2**	3	2	2	0	2	0	13	2
GHB	**2**	**1**	3	0	2	0	2	0	0	0
Use of protection during sex with casual partner under influence of drugs last time**	**N/A**	**N=204**	n=63	n=45	n=66	n=44	n=47	n=19	n=8^	n=66
Yes		**57**	59	60	71	43	49	63	63	52
No		**43**	41	40	29	57	51	37	38	49

Source: EDRS REU interviews

* Of those who had a casual partner

** Among those who had a casual partner while under the influence of a drug

7 Driving risk behaviour

Participants were asked a series of questions regarding driving under the influence of alcohol and other drugs. Seventy-five percent of the national sample reported having driven a car in the six months preceding interview. Of these, 64% had driven under the influence of alcohol (Table 110).

Table 110: REU reports of alcohol driving risk behaviour in the last six months, by jurisdiction, 2011

(%)	National	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	2011 N=574	n=100	n=80	n=101	n=75	n=76	n=28	n=11	n=103
Driven a vehicle in the last six months	**77**	**75**	57	88	68	87	82	61	82	79
Driven under influence of alcohol[#]	**n=53464**	**n=42964**	n=5650	n=7064	n=6959	n=6572	n=6265	n=1777	n=9^100	n=8164
Driven while over the limit of alcohol[#]	**n=34170**	**n=27567**	n=2875	n=4576	n=4168	n=4751	n=4063	n=1377	n=9^67	n=5267
Median number of times driven over limit of alcohol[##] (n; range)	**3 (1-180)**	**3 (1-90)**	3 (1-48)	4.5 (1-72)	2.5 (1-40)	2 (1-20)	2 (1-7)	2 (1-20)	4.5 (1-10)	4 (1-90)

Source: EDRS REU interviews
[#] Of those who had driven a vehicle in the last six months
[##] Of those who had driven over the limit of alcohol in the last six months

Experiences of RBT and roadside drug driving testing in the preceding six months were also recorded. Almost half of those who had driven a car in the last six months had been required to perform a RBT during that time. Of those, 5% had been found to be over the legal alcohol limit (Table 111)[9].

Table 111: Random breath testing among those who had driven in the preceding six months, by jurisdiction, 2011

(%)	National 2010 N=533	National 2011 N=415	NSW n=55	ACT n=70	VIC n=69	TAS n=62	SA n=62	WA n=17	NT n=9^	QLD n=71
Random breath tested (RBT) last six months[*]	**46**	**45**	46	46	44	50	42	59	44	**42**
RBT positive result over the legal alcohol limit[†]	**11**	**5**	4	16	0	0	8	10	0	**3**

Source: EDRS REU interviews
[9] [*] Among those who had driven a car in the last six months [†] Among those who had been random breath tested Participants may not necessarily have been under the influence of alcohol when they were random breath tested.

Over half (59%) of those who had driven in the previous six months had driven after taking an illicit drug and had done so on a median of six occasions in the preceding six months (range=1-180 times); this was reported to have occurred most in VIC and SA. Ecstasy and cannabis were the drugs most frequently nominated as having been consumed prior to driving a car in the preceding six months; such findings are likely, at least in part, to reflect the relative prevalence of use of these drugs amongst this group (Table 112). Cannabis was the drug most reported to have been used last time this action occurred (Table 113).

Table 112: REU reports of drug driving risk behaviour in the last six months, by jurisdiction, 2011

(%)	National 2010	National 2011	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	N=534	N=429	n=56	n=70	n=69	n=65	n=62	n=17	n=9^	n=81
Driven soon after taking an illicit drug*	**56**	**59**	55	73	67	40	60	53	89	56
Median number of times driven after taking an illicit drug**	**4**	**6**	11	10	4	6	8	8	9	6
(n; range)	**(1-180)**	**(1-180)**	(1-180)	(1-180)	(1-180)	(1-180)	(1-180)	(1-48)	(2-180)	(1-180)
All drugs used in last 6 months**	**(n=297)**	**(n=253)**	(n=31)	(n=51)	(n=46)	(n=26)	(n=37)	(n=9^)	(n=8^)	(n=45)
Ecstasy	**57**	**47**	48	67	30	27	41	44	88	51
Cannabis	**62**	**71**	68	75	59	81	78	56	63	76
Speed	**18**	**19**	7	18	33	23	22	0	50	7
Ice/crystal	**8**	**11**	3	0	17	4	19	22	13	16
Cocaine	**13**	**9**	19	10	7	0	5	0	0	13
LSD	**8**	**9**	19	10	7	0	5	0	0	13
Mushrooms	**3**	**6**	7	16	0	4	3	0	0	4
Heroin	**2**	**5**	3	4	4	8	3	11	0	9
Benzodiazepines	**n.a**	**5**	7	2	15	4	3	0	0	2

Source: EDRS REU interviews

* Among those who had driven a car in the last six months

** Of those that had driven soon after taking an illicit drug

Table 113: REU reports of drug driving risk behaviour last time in the last six months, by jurisdiction, 2011

(%)	National 2010 N=297	National 2011 N=253	NSW n=31	ACT n=51	VIC n=46	TAS n=26	SA n=37	WA n=9^	NT n=8^	QLD n=45
Drugs used last time[**]	**38**	**25**	23	37	20	12	30	22	25	20
Ecstasy	**59**	**63**	68	63	54	69	68	44	63	67
Cannabis	**7**	**10**	3	6	22	8	16	0	25	4
Speed	**4**	**6**	3	0	9	0	14	11	0	11
Ice/crystal	**7**	**4**	10	0	7	0	3	0	0	9
Cocaine	**5**	**3**	3	4	2	4	0	11	0	4
LSD	**2**	**2**	3	4	0	4	3	0	0	2
Mushrooms	**2**	**4**	3	2	4	4	3	11	0	7
Heroin	**n.a**	**2**	3	0	7	4	3	0	0	0
Benzodiazepines										

Source: EDRS REU interviews
[#] Of those who had driven a vehicle in the last six months
[##] Of those who had driven over the limit of alcohol in the last six months

In 2011, participants were asked last time they used substances before driving, the reasons why this occurred (see Table 107a). The most endorsed response was that they felt their driving was not affected by the substance use (62%), followed by they thought it would be unlikely that they would be caught (43%) and they did not want to use public transport (22%)

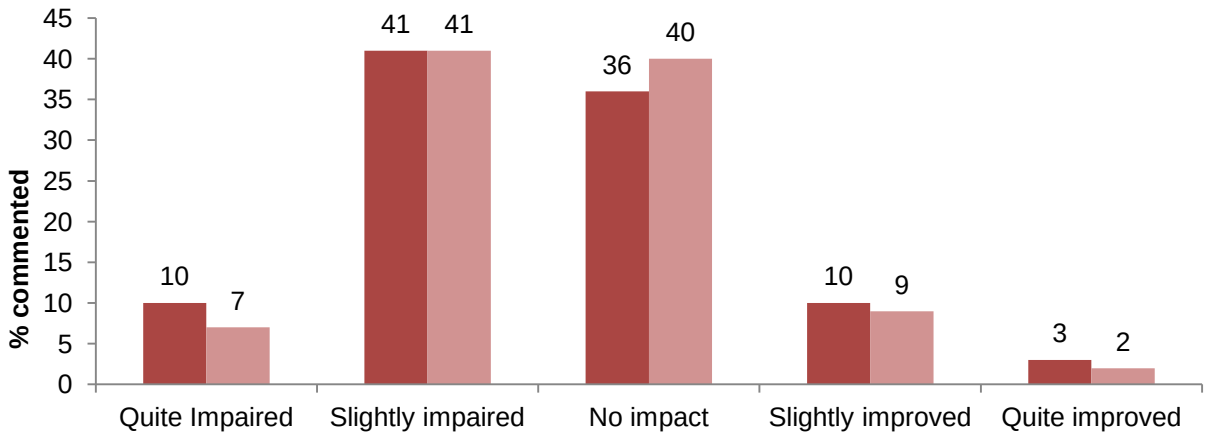
Table 107a: Reasons for drug driving on last occasion, 2011

(%)	National 2011 N=246	NSW n=31	ACT n=51	VIC n=44	TAS n=26	SA n=37	WA n=4^	NT n=8^	QLD n=81
Felt driving not affected	**62**	74	59	66	54	57	100	63	58
Thought unlikely to be caught	**43**	57	41	61	31	32	100	38	32
Did not want to use public transport	**22**	45	16	41	8	14	100	0	11
Unplanned drug use	**20**	17	18	34	12	27	80	13	7
Could not use public transport	**20**	27	12	25	15	19	100	25	18
Most sober driver	**18**	23	14	34	12	16	-	25	9
Designated driver	**10**	13	16	14	0	5	-	0	9
Other reason	**14**	18	4	16	8	16	100	13	21

Source: EDRS REU interviews, 2011
Note: multiple responses allowed

Participants who had driven under the influence of illicit drugs in the past six months were asked to indicate how impaired they felt their driving had been on the last occasion that they had engaged in this behaviour. The majority of those who commented thought that they had either been slightly impaired (41%) or that the drugs had had no impact (40%) on their driving ability (Figure 49). This trend has been consistent over time.

Figure 49: Perceived impairment on driving ability last time after taking illicit drugs, 2011



Source: EDRS REU interviews

In 2011, participants were asked their perceived likeliness of an accident occurring if they were to drive under the influence of the following substances (See table xx). Alcohol was the drug most commonly reported in which the likeliness of an accident was most commonly perceived (75%), followed by ecstasy (55%), methamphetamine (44%) and lastly, cannabis (39%).

Table 107b: Perception of likeliness of accident while driving soon after drug consumption, 2011

(%)	Very unlikely	Unlikely	Neutral	Likely	Very likely	Don't know
Alcohol (over the legal blood alcohol limit)	6	10	8	46	29	1
Ecstasy	10	18	16	36	19	2
Methamphetamine	12	21	14	29	15	10
Cannabis	15	22	21	27	12	4

Source: EDRS REU interviews, 2011

Participants were also asked to report their perceptions on the likeliness they would be caught by police driving under the influence of the following substances (see table 107c). Again, alcohol was the drug most commonly perceived to be caught by police whilst driving under the influence (over the legal limit) of (76%), followed by ecstasy (43%), methamphetamine (38%) and cannabis (37%).

Table 107c: Perception of likeliness of being caught by police while driving soon after drug consumption, 2011

(%)	Very unlikely	Unlikely	Neutral	Likely	Very likely	Don't know
Alcohol (over the legal blood alcohol limit)	3	8	12	37	39	1
Ecstasy	8	25	22	29	14	2
Methamphetamine	8	25	21	25	13	8
Cannabis	10	25	26	28	9	3

Source: EDRS REU interviews, 2011

Four percent (n=18) of those who had driven a vehicle in the past six months had been saliva drug tested at some stage during that time. Two participants reported positive results from being tested for driving under the influence of illicit drugs[10], which was for cannabis.

Table 114: Drug driving (saliva) testing among those who had driven in the preceding six months, by jurisdiction, 2011

	National 2010 N=526	National 2011 N=429	NSW n=56	ACT n=70	VIC n=69	TAS n=65	SA n=62	WA n=17	NT n=9^	QLD n=81
% Drug driving (saliva) test last six months*	**7**	**4**	**5**	**4**	**0**	**0**	**8**	**12**	**11**	**3**

Source: EDRS REU interviews

* Among those who have driven a vehicle in the last six months

[10] Participants may not necessarily have been under the influence of drugs at the time(s) they were drug tested.

7.6 The Alcohol Use Disorders Identification Test (AUDIT)

The AUDIT (Saunders, Aasland et al. 1993) was completed by REU participants in the EDRS. The AUDIT was designed by the World Health Organisation (WHO) as a brief screening scale to identify individuals with alcohol problems, including those in early stages. It is a 10-item scale, designed to assess three conceptual domains: alcohol intake; dependence; and adverse consequences (Reinert and Allen 2002). Total scores of eight or more are recommended as indicators of hazardous and harmful alcohol use and may also indicate alcohol dependence (Babor, de la Fluente et al. 1992). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor and Higgins-Biddle 2000).

The overall sample mean score on the AUDIT was 15.04 (median=15, range=0-38). There was a significant difference in female and male AUDIT scores, with males having the significant higher scores (15.46 vs. 14.11; $t_{(564)}$=-2.040, p<0.05). Eighty-four percent of the national sample scored eight or more; these are levels at which alcohol intake may be considered hazardous. Jurisdictional scores of eight or more illustrate that half or more of the participants in each state/territory reported scores at this level. Table 83 presents a jurisdictional overview of AUDIT scores.

The total AUDIT score places respondents into one of four 'zones' or risk levels. At a national level, sixteen percent in 2011 (16% in 2010) scored in Zone 1 (low-risk drinking or abstinence), 38% (39% in 2010) scored in Zone 2 (alcohol use in excess of low-risk guidelines), a fifth(21%) (20% in 2010) scored in Zone 3 (harmful or hazardous drinking) and 26% (compared with 26% in 2010) scored in Zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence). Jurisdictional overviews for the four zones are presented in Table 115.

Table 115: AUDIT total scores and proportion of REU scoring above recommended levels indicative of hazardous alcohol intake, by jurisdiction, 2011

	NSW		ACT		VIC		TAS		SA		WA		NT		QLD	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Mean AUDIT total score, SD (range)	14.4, 7.9 (0-38)	**14.3, 7.2 (0-35)**	16.2, 7.4 (0-36)	**13.4, 6.2 (0-28)**	13.9, 7.3 (0-30)	**12.9, 7.4 (0-36)**	14.6 5.4 (1-28)	**17.4 6.5 (4-31)**	14.9 6.8 (2-29)	**15.8 7.2 (0-30)**	12.5 6.9 (0-28)	**15.8 8.6 (1-35)**	16.0 6.2 (5-29)	**17.3 7.0 (0-25)**	17.0 6.6 (0-36)	**16.4 7.7 (1-38)**
Score 8 or above (%)	81	**80**	87	**80**	79	**78**	90	**94**	920	**90**	82	**82**	92	**91**	94	**86**
Zone 1	19	**20**	13	**20**	23	**22**	7	**6**	14	**11**	28	**18**	8	**9**	6	**14**
Zone 2	39	**39**	37	**42**	30	**42**	52	**32**	42	**42**	35	**25**	39	**18**	37	**36**
Zone 3	18	**17**	17	**22**	23	**22**	20	**26**	19	**18**	16	**21**	31	**18**	23	**19**
Zone 4	25	**24**	34	**17**	21	**15**	21	**36**	25	**29**	20	**36**	23	**55**	33	**30**

Source: EDRS REU interviews

Note: Zone 1 refers to low risk drinking or abstinence; Zone 2 consists of alcohol use in excess of low-risk guidelines; Zone 3 may refer to harmful or hazardous drinking; and Zone 4 may be indicative of those warranting evaluation or treatment for alcohol dependence.

8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ERD USE

- Two-fifths of the sample reported engaging in some form of **criminal activity** in the month prior to interview.
- Drug dealing was the most common crime reported across all jurisdictions, with smaller proportions reported having committed fraud or a violent crime in the last month.
- Reports of recent **police activity** were that it was stable.
- Sixteen percent of the national sample had been arrested in the past year, compared with 14% in 2010. The most common charges reported were violent crimes (e.g. assault) and use/possession.
- **Consumer arrests** had increased in relation to cocaine and hallucinogen use. All other drug arrests appeared to have remained stable.

8.1 Reports of criminal activity among REU

Almost two-fifths (38%) of the national sample reported engaging in some form of criminal activity in the month prior to interview (Table 116). A quarter (24%) of the national sample reported that they had dealt drugs in the last month and, of these, three-fifths (60%) reported doing so less than once per week, 15% once per week, 14% more than once per week but less than daily, and 11% reported dealing on a daily basis. Eighteen percent of the national sample reported that had committed a property crime in the last month and, of those, the majority (70%) reported doing so less than once per week, 16% once per week, 10% more than once per week but less than daily, and 5% reported property crime on a daily basis. Six percent (n=32) reported committing a violent crime in the past month. Four percent (n=24) reported having committed fraud in the month prior to interview (Table 116).

Table 116: Criminal activity among REU, by jurisdiction, 2011

(%)	National 2010 N=756	National 2011 N=574	NSW n=100	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
In the last month										
Any crime	**33**	**38**	43	35	50	28	46	39	46	26
Drug dealing	**24**	**24**	25	20	33	11	33	29	27	19
Property crime	**13**	**18**	24	18	25	15	20	11	18	8
Fraud	**2**	**4**	1	8	5	5	4	7	0	3
Violent crime	**5**	**6**	5	10	3	3	11	7	0	4

Source: EDRS REU interviews

8.2 Committing crime under the influence

In 2011, participants that reported having committed a property crime or violent crime in the preceding month were asked if they had been under the influence any drugs/ and or alcohol and if so to specify what those substances were and what the particular offense had been.

Of those who had committed a property offense (n=97), 37% reported having been under the influence the last time a property offense was committed. The substances reportedly consumed by participants at the time of committing a property crime was: alcohol (64%), cannabis (50%), any form methamphetamine (14%), ecstasy (8%), benzodiazepines (6%), other opiates, heroin and ghb and mushrooms were all mentioned by one participant. A mean of 1.5 (SD 0.69) drugs types had been consumed at the time of the property offense. The last property crime most reported was shoplifting (65%), theft (12%) and vandalism (11%).

Of those who had committed a violent offense (n=31), 74% reported having been under the influence of alcohol and/or drugs the last time a violent offense was committed. The majority had consumed alcohol (96%) at the time of committing the offense. Ecstasy and cannabis were next in line (both 22%). Interestingly, no participants reported having consumed speed and ice/crystal, however two participants reported having consumed base. Small numbers (n=1) reported consuming cocaine, mushrooms and mephedrone (miaow). The last crime involving violence most reported was assault (93%).

8.3 Perceptions of police activity towards REU

Participants were asked whether there had been changes in police activity towards REU in the six months preceding interview. The majority of reports of recent police activity was that activity was stable (59%) or had increased (39%). Noticably, the ACT is the only jurisdiction to have a higher number of participants reporting police activity had increased as opposed to reporting recent activity as stable (Table 117).

Table 117: Perceptions of police activity towards REU, 2011

(%)	National 2010 N=509	National 2011 N=362	NSW n=85	ACT n=47	VIC n=66	TAS n=42	SA n=40	WA n=18	NT n=4^	QLD n=60
Recent police activity										
Decreased	**2**	**2**	1	0	2	0	5	0	0	3
Stable	**58**	**59**	53	36	70	76	63	56	75	62
Increased	**40**	**39**	46	64	29	24	33	44	25	35

Source: EDRS REU interviews
Note: the response option 'don't know' was excluded from analysis from 2009 onwards

8.3 Arrests

Sixteen percent of the national REU 2011 sample reported that they had been arrested in the past year (Table 118). Of those arrested in the past year, the charges most commonly reported in this sample were drug use/possession (23%) and violent crime such as assault (23%). The charges reportedly incurred were similar to those reported in 2010 (Table 119).

Table 118: Proportion of REU reporting arrest in the past year, by jurisdiction, 2011

(%)	National N=693	National N=573	NSW n=99	ACT n=80	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
Arrested last 12 months	14	**16**	14	14	16	16	16	18	0	18

Source: EDRS REU interviews

Table 119: Charges of arrest in the past year, national 2011

(%)	National 2010 N=97	National 2011 N=89
Charge arrested for last 12 months		
Alcohol and driving offences	**19**	**15**
Use/possession	**18**	**23**
Violent crime	**16**	**23**
Property crime	**14**	**16**
Other driving offences	**6**	**2**
Dealing	**5**	**7**
Fraud	**1**	**0**
Other offences*	**40**	**17**

Source: EDRS REU interviews
* 'Other offences' included: public orders (55%, 'drunk in public, drunkards behaving in riotous or disorderly manner, persons found drunk and disorderly, public nuisance).

In addition to EDRS REU participant data on arrest over the past year, population level statistics related to drug use are also available from the ACC (latest available year 2009/10). These are reported in the following sub-sections by drug type.

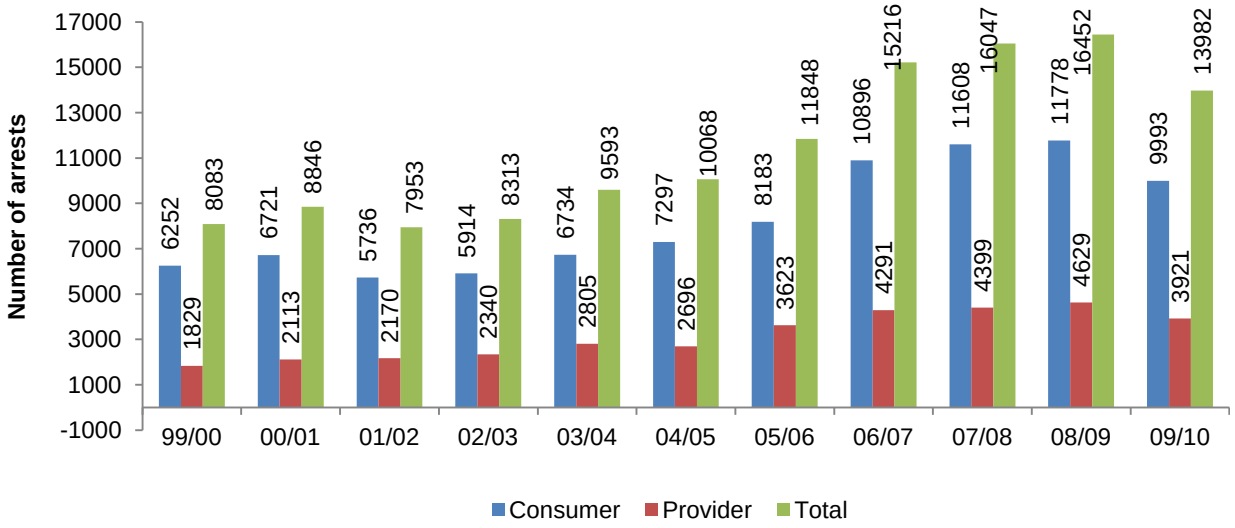
8.3.1 Ecstasy

A number of jurisdictions do not differentiate between arrests associated with ATS and phenylethylamines, the class of drug to which ecstasy belongs; ecstasy arrests are, therefore, included under ATS. These data are presented below in the methamphetamine section.

8.3.2 Methamphetamine

It should be noted that a number of jurisdictions do not differentiate between arrests connected with ATS and phenethylamines (the class of drugs to which ecstasy belongs), so these classes have been aggregated. Consumer and provider arrests for ATS have experienced a large increase since 2005/06, however year 2009/10 saw decreases in both (Figure 50).

Figure 50: Amphetamine-type stimulants: consumer and provider arrests, 1999/00-2009/10

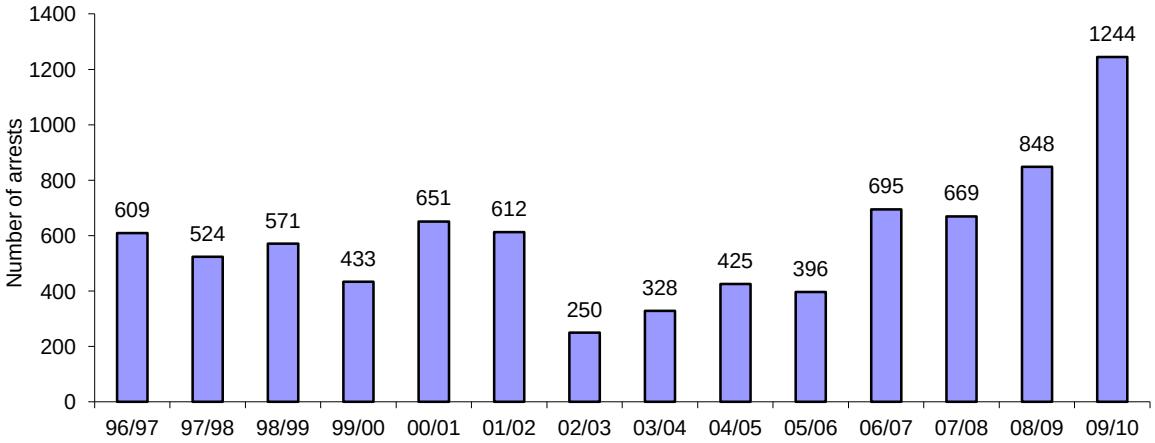


Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)

8.3.3 Cocaine

In 2009/10, the number of cocaine arrests Australia wide has increased to the highest level recorded to date. This finding is consistent with the finding that cocaine availability has increased nation-wide due to indicators such as increases in the EDRS use in recent times, and increase in arrests. The majority of these arrests continued to occur in NSW (Figure 51).

Figure 51: Total number of cocaine consumer and provider arrests, 1996/97- 2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: The arrest data for each state and territory include AFP data. Data for 2010/11 were not available at the time of publication.

8.3.4 Ketamine

Ketamine is scheduled differently in different jurisdictions across Australia, but some jurisdictions (such as NSW) have recently attempted to make ketamine a more tightly scheduled substance. Although it is an offence in jurisdictions such as NSW and VIC to be in the possession of ketamine for personal use or in amounts suggesting an individual is supplying others, ketamine is

not separately recorded in police databases. Therefore, no data are available on the number of police apprehensions for possession or supply of this controlled substance.

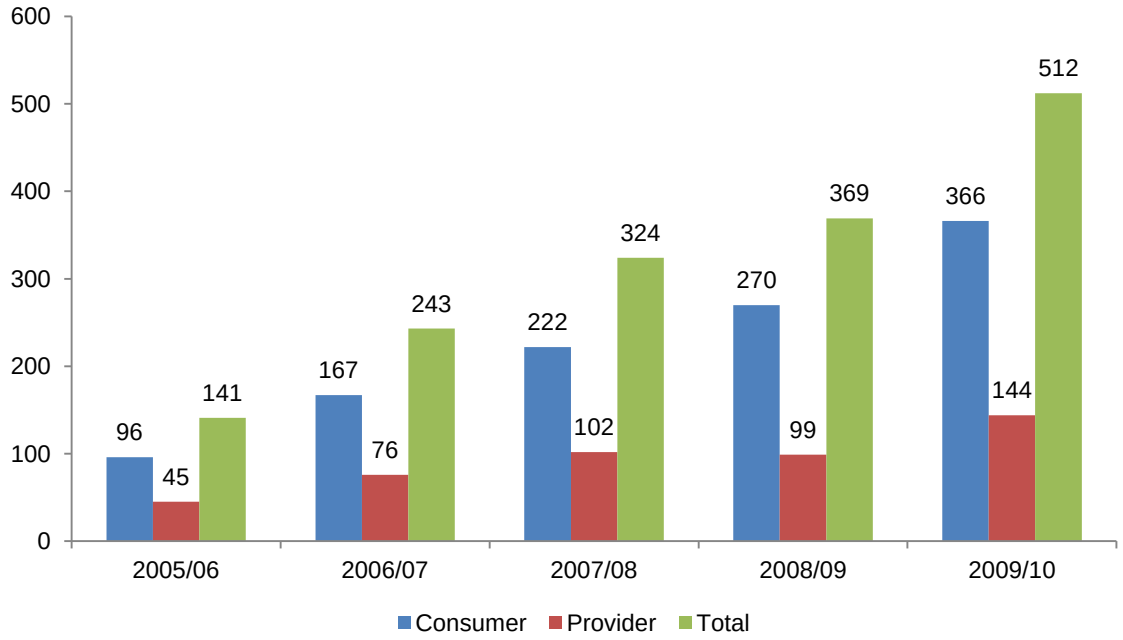
8.3.5 GHB

GHB is a controlled substance in Australia, and possession of GHB is an offence. However, it is not currently possible to obtain data on any police apprehensions of persons caught supplying, manufacturing or in the possession of GHB, because GHB is not separately recorded in police databases.

8.3.6 LSD

Nationally, a total of 512 total arrests were made in relation to hallucinogens including LSD and psilocybin (mushrooms). Consumer and provider arrests slightly increased from 2008/09 compared to 2009/10 (Figure 52). The majority of these arrests continued to be recorded in QLD, followed by WA and NSW. The total number of arrests in relation to this class of drug appear to be increasing at a marginal rate.

Figure 52: Number of hallucinogen consumer and provider arrests, 2005/06-2009/10

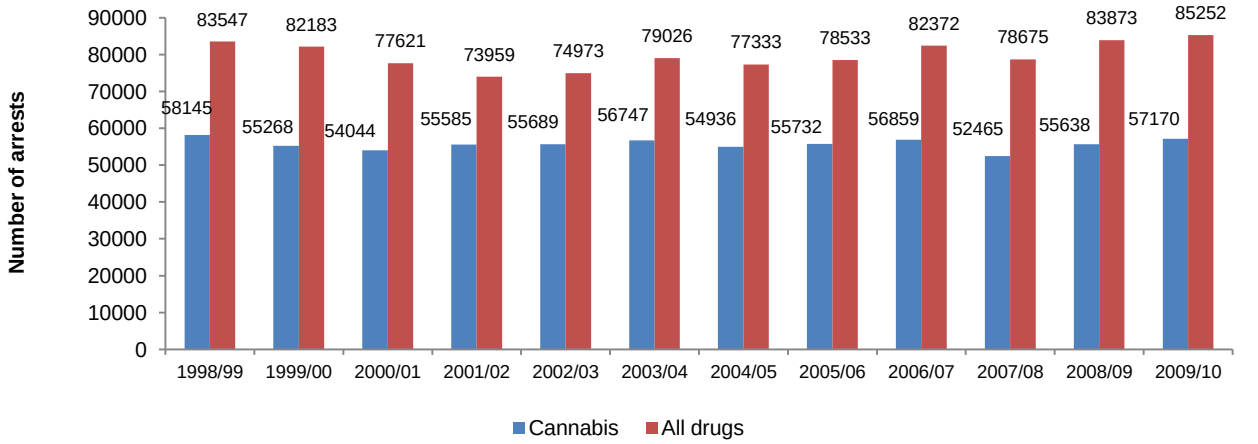


Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were not available at the time of publication.

8.3.7 Cannabis

Cannabis arrests continue to account for the majority of all drug-related arrests in Australia. Numbers have remained relatively stable in the past nine years, indicating little change in enforcement of cannabis-related offences during this period (Figure 53).

Figure 53: Number of cannabis and all drug consumer and provider arrests, 1998/99-2009/10



Source:(Australian Bureau of Criminal Intelligence 2000; 2001; 2002; Australian Crime Commission 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011)
Note: Data for 2010/11 were not available at the time of publication

9 SPECIAL TOPICS OF INTEREST

- **Heavy smoking Index nicotine dependece** score was calculated for participants for the first time in 2011. A quarter (24%) of daily REU smokers scored 4 or above indicating high nicotine dependence.
- **Pleasure, happiness and quality of life scale** was asked of participants in 2011. REU endorsed 'listening to music' as most important to their pleasure and happiness life rankings and 'being with friends' as most important to their overall quality of life ranking.
- **Online drug-related activity** was a topic of interest in this group for 2011 with 60% of REU reporting going on line to get information about drugs. Ecstasy was the most common drug that was used to source information from the internet.
- **Sleep patterns** of REU were investigated in 2011. Most REU reported that their quality of sleep in the past month was good (32%). However, 39% of REU reported a problem with their sleep and 30% reported using sleep medication in the past month.
- In 2011, participants were asked questions regarding **dependence on ecstasy** based on the Severity of Dependence (SDS) scale. The median score of the scale was 0, with 17% of the sample reporting a cut –off of three or more and 10% reporting a cut-off of four or more both indicating dependence.

9.1 Heavy Smoking Index nicotine dependence

For the first time in 2011, EDRS participants who smoked daily were asked two questions from the Fagerstrom test for nicotine dependence, known as the Heavy Smoking Index (HSI) (n=275). These questions included 'How soon after walking do you smoke your first cigarette?' and 'How many cigarettes a day do you smoke?'. The responses were then scored on a four category scheme (0,1,2,3) for both time to the first cigarette of the day (≤5, 6-50, 31-60 and 61+ min) and average daily consumption of cigarettes (1-10, 11-20, 21-30, 31+ cigarettes). The sum of these scores was computed and a cut-off score of 4 or more was used to indicate high nicotine dependency (Heatherton et al., 1989).

As seen in Table 120, a fifth (21%) of the national sample who commented reported smoking their first cigarette within five minutes of waking and one-third between five to 30 minutes of waking. One-third of daily smokers reported smoking between 11-20 cigarettes a day and 51% between 10 or less cigarettes a day. The mean HSI score was 2.14 (SD 1.65). A quarter (24%) of daily smokers scored 4 or above indicating high nicotine dependence.

Table 120: Heavy Smoking Index for nicotine dependence, by jurisdiction, 2011

Time till first cigarette	National 2011 N=275	NSW n=55	ACT n=37	VIC n=56	TAS n=22	SA n=33	WA n=15	NT n=4^	QLD n=53
Within 5 minutes (%)	**21**	15	8	20	27	27	40	75	21
5-30 mins (%)	**34**	38	32	43	32	21	13	0	38
31-60 mins (%)	**16**	16	11	9	14	15	27	0	25
60+ mins (%)	**30**	31	49	29	27	36	20	25	17
Number of cigarettes smoked a day	**N=275**	**n=55**	**n=37**	**n=56**	**n=22**	**n=33**	**n=15**	**n=4^**	**n=53**
10 or less cigarettes (%)	**51**	58	62	43	50	49	47	25	47
11-20 cigarettes (%)	**33**	24	27	41	27	30	40	50	38
21-30 cigarettes (%)	**14**	15	11	14	18	18	13	0	13
31 or more cigarettes (%)	**3**	4	0	2	5	3	0	25	2
High dependence*	**N=275**	**n=55**	**n=37**	**n=56**	**n=22**	**n=33**	**n=15**	**n=4^**	**n=53**
(%)	**24**	20	16	25	32	24	33	50	23
Mean score	**2.14**	**2**	**1.5**	**2.3**	**2.4**	**2.2**	**2.4**	**3.5**	**2.3**

Source: EDRS REU interviews, 2011
* score of 4 or above

9.2 Pleasure, happiness and quality of life scale

There is need to understand more about the extent to which drug use fits into the broader life experiences of the individuals who use drugs. Repeated studies of community samples suggest that family life, close personal relationships and social networks are important factors which are associated with a better or worse quality of life (e.g. Myers and Diener 1996). Little is known about how a person‟s quality of life might be influenced by their drug use; although there is reason to suspect the effect may be negative (Ventegodt and Merrick 2003), possibly because drug use has a negative impact on family life and social networks.

Drugs are used to enhance the pleasure of the user. The type of pleasure may vary with the drug involved but it would seem evident that using drugs is intended to achieve a particular desired experience (relaxation, stimulation, a feeling of warmth and disinhibition). However, there have been few studies which have documented the extent to which actual use is associated with greater pleasure. Pleasure itself is associated with some related concepts. Thus experiences of pleasure should lead to greater happiness which, in turn, should lead to a better quality of life. Of course, it is possible that some activities which lead to pleasure may reduce happiness (happiness being a longer term experience) and even the quality of life. It is possible that drug use enhances the experience of pleasure, has little impact on happiness and a negative impact on the quality of life.

The scales were constructed from interview data with university students and involved respondents reporting the most important things that influence their pleasure, happiness and quality of life.
Participants were first asked to rate their quality of life as a whole on the scale below.

Very bad **0 1 2 3 4 5 6 7 8 9 10** excellent
average

All of the states are fairly similar with respondents generally reporting that their QOL is good but not excellent (Table 121)

Table 121: Overall Quality of Life Score (0 = very bad and 10 = excellent), 2011

	National N=508	NSW N=87	ACT N=66	VIC N=94	TAS N=64	SA N=74	WA N=20	NT N=10	QLD N=93
QoL Mean score	7	8	8	7	7	7	8	8	7

Source: REU EDRS interviews

Using the scale below, participants were then asked the contribution of 15 life aspects to each of the three concepts: pleasure, happiness, and QOL .

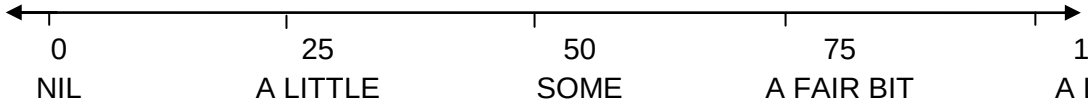


Table 122 shows the ranking and participants' mean rating score for the contribution of 15 life aspects to pleasure, happiness and QOL. For taking drugs, the mean contribution to pleasure was 75, to happiness 68 and to QOL 51. This downward trend across the three concepts was also reported for the normative sample of university students but all three of the mean scores for taking drugs were considerably lower than for the EDRS participants (i.e. pleasure 28, happiness 14, and QOL 11). See jurisdictional reports for jurisdictional information and rankings.

Table 122: Self-reported ranking* of life aspects that contribute to pleasure, contribute to happiness and contribute to quality of life (0 = nil and 100 = a lot), 2011

Ranking (mean score)	Pleasure ranking National N=567	Happiness ranking National N=567	Quality of life ranking National N=567
Listening to music	1 (85)	1 (82)	3 (76)
Being with friends	2 (83)	2 (82)	1 (80)
Having sex	3 (83)	3 (80)	4 (75)
Travel to new places	4 (80)	4 (76)	8 (71)
Eating a good meal	5 (79)	8 (73)	5 (74)
Good sleep	6 (76)	5 (76)	2 (77)
Personal achievement	7 (75)	6 (74)	6 (73)
Taking drugs	8 (75)	10 (68)	14 (51)
Having lots of money	9 (75)	7 (73)	7 (73)
Being with my partner	10 (70)	9 (71)	9 (70)
Being with my family	11 (66)	11 (65)	12 (69)
Drinking alcohol	12 (63)	14 (57)	15 (45)
Doing physical activity/exercise	13 (62)	12 (63)	11 (69)
Cooking	14 (60)	15 (54)	13 (55)
Work/education/ study	15 (59)	13 (58)	10 (69)

Source: REU EDRS interviews, 2011
*ranking is based on 2 decimal places

9.3 Online drug-related activity

For many of us, use of the internet has become part of everyday life. We use it to find out information, communicate with others, and undertake commercial transactions. Undoubtedly, those who use illicit drugs will undertake these types of activities in respect of their drug use:

> *'In recent years, the volume of illicit sales of narcotic drugs and psychotropic substances through websites has risen, making the internet a major source of drugs for drug abusers.'*
>
> (The international Narcotics Control Board quoted in submission to the Parliamentary Joint Select Committee on Cyber-Safety by the Australian Customs and Border Protection Service, July 2010)

However, little is known about the extent to which illicit drug users in Australia use the internet to find out information about illicit drugs, share information, and buy drugs and drug ingredients. Understanding the use of online marketing and knowledge sharing has become more pressing with the increasing trend towards so called 'designer drugs' or research chemicals and drugs marketed as 'legal highs'. Uninformed users may incur health and legal consequences (Schmidt et al, 2010). Not only are the drugs themselves being marketed and traded but key experts in the legal sector have voiced their concern about the growing market for drug precursors:

> *'People cooking for themselves – is this because of reduced availability (supply) or because recipes are so readily available on the net – similar as looking for a chocolate cake recipe.*
>
> *There is availability of precursors and equipment to manufacture ... don't even need to be able to read as u-tube and videos demonstrate the process....*
>
> *Internet has brought the ability to source interstate and even overseas.'*

There is huge potential for the internet and other electronic mediums to be used as a way of relating health and safety messages (Belenko et al., 2009). The success of such messages will rely heavily on an increased understanding of the online drug market.

In 2011, REU were asked about online drug-related activity. To place this activity in context, participants were first asked how often they got drugs and how often they went online (i.e. generally and not specifically about drugs). The majority of participants (80%) reported using the internet daily in the six months preceding the interview (see Table 123). Particpants were also asked to report how often they obtained drugs to which the majority answered between weekly (43%), to fortnightly (26%) to monthly (23%). Only eight percent of the national sample reported obtaining drugs daily.

Table 123: Frequency of going online in the previous six months, 2011

	National N=570	NSW n=97	ACT n=79	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD n=103
How often did you go online last month (%)									
Daily	**80**	81	90	74	75	78	71	100	82
At least weekly	**9**	9	6	10	5	9	11	0	11
At least fortnightly	**3**	2	1	2	7	3	0	0	3
At least monthly	**3**	3	1	7	1	1	4	0	1
Never	**6**	4	1	7	12	9	14	0	4

Source: EDRS REU interviews, 2011

Sixty percent of participants reported going online to get information about drugs. The frequency at which this was reported to occur was between less than monthly (49%) to at least monthly (24%; See Table 124). The main drug investigated online was ecstasy (52%) followed by LSD (5%) and cannabis (5%). A tenth (10%) of those that commented, reported posting information about drugs online at a frequency of less than monthly (52%) to at least monthly (26%). Of those that did post drug information, the main drug posted about was ecstasy (58%) followed by cannabis (14%). Two percent (n=11) of those that commented reported buying ingredients online at a low frequency of less than monthly (64%) or monthly (36%). No main drug was specified. Buying drugs online was reported by nine percent of those that commented, at a frequency of less than monthly (55%) to monthly (23%). Ecstasy (30%) and cannabis (21%) were the main drugs reported for buying drugs online. Four percent (n=21) of the national sample that commented reported selling drugs online, at a low frequency of monthly (33%) to less than monthly (29%). Cannabis (n=9) was the drug most reported as being sold online by participants. Other drug related activities were reported by 2% (n=9)of those that commented. These other activities included: looking up drug and alcohol service information and ordering of drug testing kits.

Table 124: Drug related activities online reported by REU, in the previous six months, 2011

	National N=534	NSW n=93	ACT n=78	VIC n=94	TAS n=66	SA n=69	WA n=24	NT n=11	QLD n=99
Online drug related activities(%)									
Get information about drugs	**60**	68	67	63	35	59	63	27	63
Post information about drugs	**10**	15	8	12	0	10	13	0	12
Buy ingredients	**2**	3	4	4	0	0	1	9	3
Buy drugs online	**9**	8	6	13	2	13	13	18	7
Sell drugs	**4**	5	3	3	0	10	4	9	2
Other	**2**	1	1	4	0	1	0	0	2

Source: EDRS REU interviews, 2011

Ecstasy was the most common drug that the internet was used to source information, with over 55% of REU who commented reporting that this was the main drug for which they searched the internet for information. It was also the drug about which most participants posted about, and the drug most commonly bought online.

Table 125: Bought legal highs in the last six months, 2011

In the last six months did you go on line to :	National N=533	NSW n=93	ACT n=78	VIC n=94	TAS n=65	SA n=69	WA n=24	NT n=11	QLD n=99
Bought substances sold as 'legal highs' in last six months	**N=247** **48**	n=41 44	n=34 56	n=46 41	-	n=43 49	n=12 75	n=8^ 75	n=63 41

Source: EDRS REU interviews, 2011

Websites were the most commonly used medium for online drug related activity, followed by search engines and online forums (see Table 126). Myspace and Twitter were only reported to have been used by few (n<5) participants are mediums for online drug related activity in this sample.

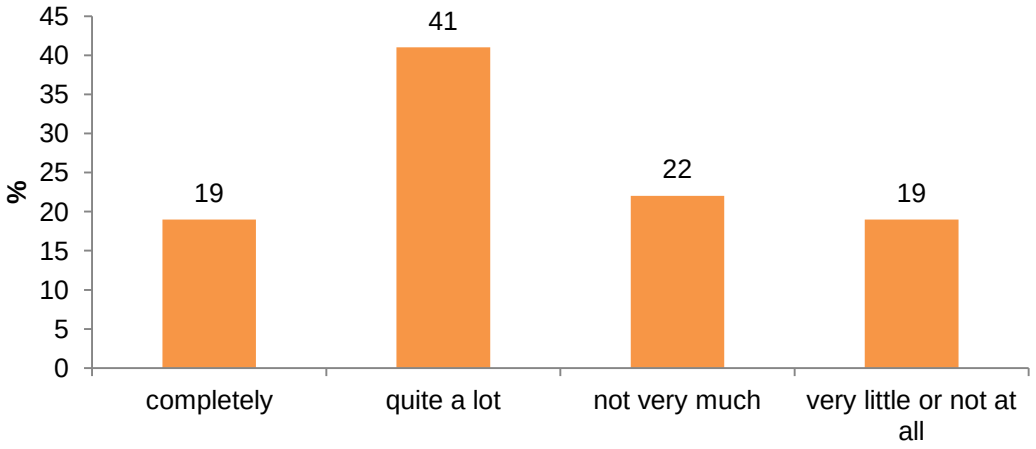
Table 126: Mediums used for online drug related activity among participants, 2011

Activities	National N=395	NSW n=70	ACT n=56	VIC n=72	TAS n=61	SA n=45	WA n=16	NT n=3	QLD n=72
Website (%)	**61**	74	64	58	15	69	75	67	78
Less than monthly	**40**	29	50	52	44	45	50	50	29
Search engine (%)	**45**	57	34	50	18	44	67	33	57
Less than monthly	**45**	33	47	47	36	45	60	100	51
Online forum (%)	**30**	39	27	28	10	27	46	0	42
Less than monthly	**35**	33	47	50	67	8	17	0	30
Blog site (%)	**8**	16	11	6	3	2	15	0	8
Less than monthly	**34**	36	17	50	0	100	100	0	17
Facebook (%)	**32**	34	34	28	28	50	46	33	22
Less than monthly	**35**	46	28	20	35	46	33	100	25
Email (%)	**9**	6	0	14	3	11	21	67	13
At least monthly	**37**	50	0	30	0	0	33	50	67

Source: EDRS REU interview, 2011

Among those who commented (n=392), over half (56%) responded that text messaging was their preferred method of arranging to get ecstasy (see Figure 54).

Figure 54: Self-reported dependency on text messaging to obtain ecstasy and similar drugs among REU in the previous six months, 2011



Source: EDRS REU interviews, 2011

9.4 Sleep patterns

Any drug that passes the blood-brain barrier has the potential to alter the quality and/or architecture of sleep. It has been well documented that ecstasy users hold differing sleep patterns to controls (Allen et al., 1993; McCann et al. 2007; Parrott 2000, 2006; Dughiero et al., 2001; Morgan et al. 2002; Carhart- Harris et al., 2009). The areas of impact of sleep include: Decreased stage 2 sleep (Allen et al., 1993; McCann et al., 2007) decreased total sleep time (Allen et al., 1993) and trends towards decreased REM onset latency (ROL) (Allen et al., 1993; McCann et al., 2007) have been recorded in two relatively large samples of ecstasy users.

The Pittsburgh Sleep Quality Index (PSQI) has been selected for use in the EDRS in 2011 due to its sound psychometric properties and dual ability for use in research and clinical settings with case and control samples. Meta-analyses have shown that patients suffering from sleep disorders score at least five on the PSQI and healthy controls at least two. In a study by Carhart-Harris et al (2009) ecstasy users scored significantly higher on the global PSQI than controls, however were found not to have suffered significant serotonergic damage as indexed by sleep. In the REUQ 2011, the PSQI combined with additional sleep pattern questions are being asked to a sample of REU who engage in regular poly drug use. These questions are to assess the type of sleep problems experienced within this sample, the extent to which different areas of life are being affected by sleep problems and to examine which medications or substances are being used to treat sleep problems.

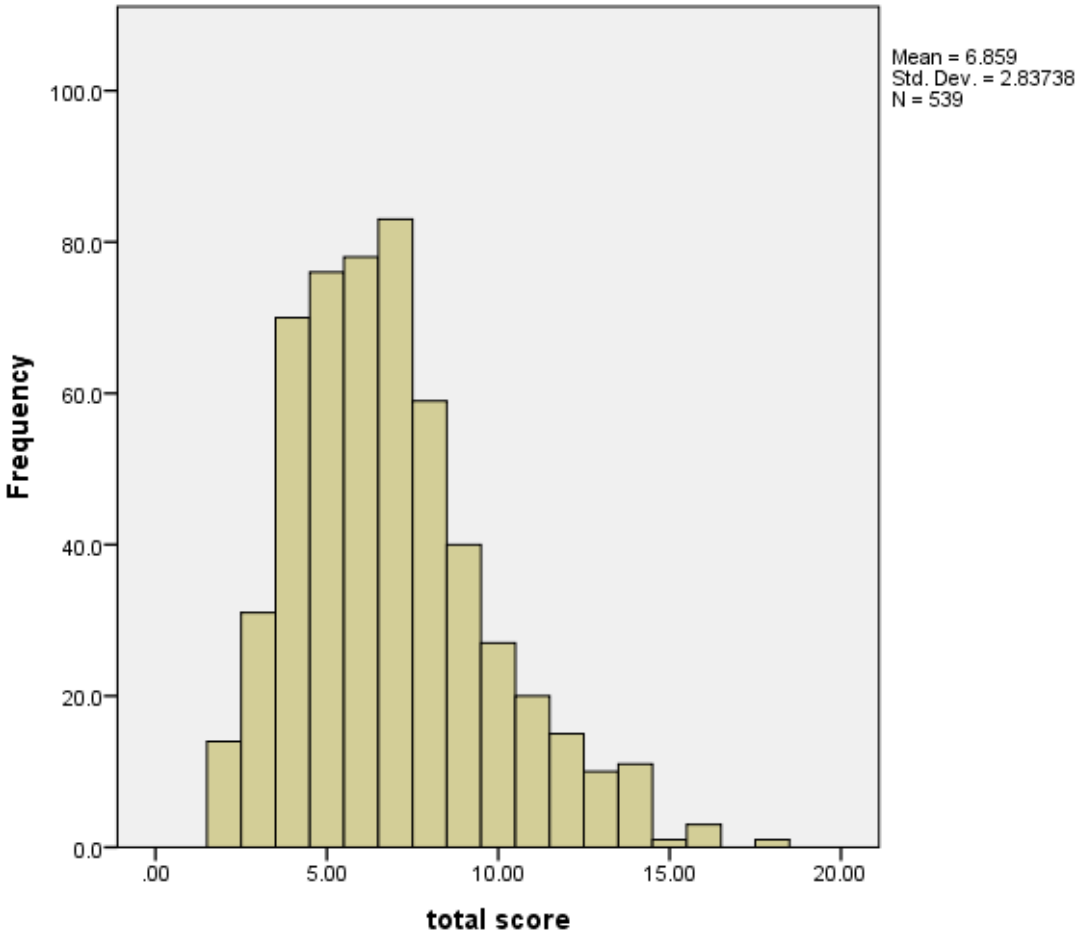
The PSQI global mean scores for REU was 6.9 (2.84) with VIC scoring the highest of 7.7 (2.74; see Table 127 & see Figure 55). Seventy-nine percent of REU scored five or above which has been indicative of sleep disorders in the literature Buysse et al., (1998).

Table 127: Pittsburgh Sleep Quality Index mean scores for REU, 2011

	National N=539	NSW n=98	ACT n=77	VIC n=101	TAS n=72	SA n=76	WA n=26	NT n=10	QLD N=79
PSQI global scores (Mean; SD)	**6.9 (2.84)**	6.3 (2.49)	6.8 (2.92)	7.7 (2.74)	6.4 (2.80)	7.1 (3.06)	7.4 (3.07)	5.9 (2.60)	6.65 (2.84)

Source: EDRS REU interviews, 2011

Figure 55: Pittsburgh Sleep Quality Index frequency mean scores for REU, 2011



Source: EDRS REU interviews, 2011

The majority of REU in 2011 reported that their overall quality of sleep over the past month had been between fair (22%), good (32%) and very good (20%; see table Table 128). In support of these findings, REU reported a median satisfaction score out of 10 (10 being very satisfied) of seven for weeknights and six for weeknights. Given the common nature of poly drug use for this group occurring on weekends, supports the notion that hours of sleep and sleep satisfaction would be less on weekends (see Table 129 & Table 130).

Table 128: Quality of sleep as reported by REU in the past month, 2011

	National N=545	NSW n=99	ACT n=79	VIC n=101	TAS n=68	SA n=76	WA n=28	NT n=11	QLD N=83
Quality of sleep past month (%)									
Very poor	**5**	5	3	8	3	7	4	9	4
Poor	**16**	10	19	20	16	20	18	9	15
Fair	**22**	21	24	25	18	15	36	36	23
Good	**32**	38	27	26	37	36	32	18	31
Very good	**20**	21	24	18	24	21	4	18	21
Excellent	**4**	4	4	3	3	3	7	9	7

Source: EDRS REU interviews, 2011

Table 129: Sleep satisfaction rating (median out of 10) as reported by REU, 2011

	National N=549	NSW n=99	ACT n=78	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD N=81
Satisfaction of Sleep (median out of 10)									
Weekdays	**7**	7	7.5	6	7	7	7	7	7
Weekends	**6**	6	6	6	7	6	5.5	7	6

Source: EDRS REU interviews, 2011
[#] 1 is very dissatisfied to 10 very satisfied

Table 130: Number of hours of sleep reported by REU, 2011

	National N=532	NSW n=92	ACT n=73	VIC n=101	TAS n=74	SA n=74	WA n=28	NT n=10	QLD N=81
Number of hours sleep generally (median; range)									
Weeknights	**7.5 (1.5-20)**	7.5 (3-14)	8 (4-10)	7 (1.5-11)	8 (4-11)	7.25 (2.5-11)	6.75 (5-9)	7.5 (5-12)	6 (3-10)
Weekends	**6 (3-10)**	7 (0-12)	7 (2-12)	7 (0-12)	8 (2-11)	6 (0-12)	6 (0-12)	8 (3-20)	6 (0-10)
Number of hours needed not to feel sleepy (median; range)	**8 (2-12)**	8 (2-11)	8 (2-12)	8 (4-12)	8 (4-10)	8 (4-12)	7 (6-10)	8 (5-10)	8 (5-10)

Source: EDRS REU interviews, 2011

Almost two-fifths (39%) of the national sample reported having a problem with their sleep to which life satisfaction and energy level were the areas indentified as being most affected (see Table 131).

Table 131: Self reported problem with sleep and ratings of areas affected by sleep problems (median out of 10) as reported by REU, 2011

	National N=552	NSW n=99	ACT n=79	VIC n=101	TAS n=75	SA n=76	WA n=28	NT n=11	QLD N=83
Problem with your sleep (%)	**39**	39	38	51	31	37	46	18	35
If yes, how much has it affected (median out of 10[#])	**N=214**	**n=39**	**n=30**	**n=50**	**n=23**	**n=28**	**n=13**	**n=2**	**n=39**
Satisfaction	**6**	6	6	6	7	7	6	3	7
Energy level	**6**	6	6	6	5	6	7	3	6
Mood	**5**	5	5	5.5	5	6	6	5.5	5
Concentration	**5**	4	5	5	3	5	2	3.5	6
Relationships	**5**	5	5	6	4.5	6	4	5	5
Memory	**4**	2	4	5	2.5	6	3	3.5	3
Overall wellbeing	**4**	3.5	4	4	4.5	5	1	2.5	3

Source: EDRS REU interviews, 2011
[#] 1 (not at all) through to 10 (to a great extent)

Forty-four percent of the national REU sample reported that drugs have impacted negatively on their sleep quality (see Table 132). Possibly in lieu of that, 30% of REU have reported taking sleep medication in the month prior to interview. Valium (diazepam) was the medication most reportedly used by REU, followed by other medications not included on the list such as St John's Worts and cold and flu medications, followed by Xanax (alprazolam) and Temazepam (Table 133).

Table 132: Self reported negative impact of drug use on sleep in REU, 2011

	National N=539	NSW n=98	ACT n=79	VIC n=90	TAS n=75	SA n=76	WA n=26	NT n=11	QLD N=84
Drug use impacted negatively on sleep quality (%)	**44**	46	51	50	28	42	58	36	44

Source: EDRS REU interviews, 2011

Table 133: Use of sleep medication in REU in the past month, 2011

How often taken sleep medication in past month (%)	N=537	n=98	n=79	n=89	n=75	n=76	n=26	n=11	n=83
Not in past month	**70**	78	75	55	73	68	77	73	68
Less than once a week	**16**	11	17	18	15	21	4	0	18
Once or twice a week	**7**	8	5	11	8	4	12	18	4
Three or more times a week	**7**	3	4	15	4	7	8	9	11
Medication used last time* (%)	**N=152**	**n=18**	**n=19**	**n=39**	**n=20**	**n=23**	**n=6^**	**n=3^**	**n=24**
Valium (diazepam)	**29**	11	32	23	50	39	33	33	21
Other	**20**	11	16	21	25	22	0	33	25
Xanax (alprazolam)	**16**	33	5	26	0	9	0	0	21
Temazepam (generic)	**7**	6	16	10	0	9	0	0	4

Source: EDRS REU interviews, 2011

9.5 Ecstasy Dependence

The question as to whether it is possible to be dependent on ecstasy is a controversial one. Currently, in the DSM-IV-TR, it is possible to be diagnosed with ecstasy dependence (coded as either amphetamine dependence or hallucinogen dependence), and there are clear case studies in the literature of people who are dependent on ecstasy. Animal models have demonstrated that dependence on ecstasy is biologically plausible. However, findings in relation to ecstasy dependence should be interpreted with caution due to the fact that there has been limited research of this syndrome (see Topp, Hall, & Hando, 1997; Degenhardt, Bruno & Topp, 2010).

To date, internationally, there have been a small number of studies of rates of dependence in ecstasy users. Studies from the US household survey suggest a prevalence rate of past-year dependence in approximately 3.6-3.8% of ecstasy users in the general population. An early NDARC study suggests a lifetime prevalence rate of 64% in similar types of REU interviewed in the EDRS.

In 2011, the participants in the EDRS were asked questions from the Severity of Dependence Scale (SDS) adapted to investigate ecstasy dependence. The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with and anxiety about use. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe et al., 2002). A total score was created by summing responses to each of the five questions. Possible scores range from 0 to 15.

Two cut off scores are presented below of three or more and four or more. A cut-off score of 3 or more was used as these scores have been recently found in the literature to be a good balance between sensitivity and specificity for identifying problematic dependent ecstasy use (Bruno, Gomez & Matthews, 2011). Seventeen percent of REU obtained a score of three and above. The cut off of four and above is a more conservative estimate which has been used previously in the literature as a validated cut-off for methamphetamine dependence (Topp & Mattick, 1997; Bruno et al., 2009). Ten percent of REU participants scored four or above. There was no significant gender differences regarding mean stimulant SDS score and those who scored three or four or above.

The median SDS score was 0 (range=0-12). Half the number of participants (50%) obtained a score of zero on the ecstasy SDS, and one-tenth (18%) obtained a score of 1 on the scale: thus, the majority of respondents reported no or few symptoms of dependence in relation to ecstasy use. These findings are supported by reponses of the majority of participants (77%) reporting ‘never or almost never’ thinking that their use of ecstasy was out of control and 86% reporting that they would find it ‘not difficult to stop or miss a prospective dose of ecstasy’.

REFERENCES

AHMED, S. N. AND L. PETCHOVSKY (1980). "ABUSE OF KETAMINE (LETTER)." BRITISH JOURNAL OF PSYCHIATRY 137: 303.

ANDREWS, G. AND T. SLADE (2001). "INTERPRETING SCORES ON THE KESSLER PSYCHOLOGICAL DISTRESS SCALE (K10)." AUSTRALIAN AND NEW ZEALAND JOURNAL OF PUBLIC HEALTH 25(6): 494-497.

AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2000). AUSTRALIAN ILLICIT DRUG REPORT 1998-99. CANBERRA, AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE.

AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2001). AUSTRALIAN ILLICIT DRUG REPORT 1999-2000. CANBERRA, AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE.

AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2002). AUSTRALIAN ILLICIT DRUG REPORT 2000-2001. CANBERRA, AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE.

AUSTRALIAN CRIME COMMISSION (2003). AUSTRALIAN ILLICIT DRUG REPORT 2001-02. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CRIME COMMISSION (2004). AUSTRALIAN ILLICT DRUG DATA REPORT 2002-03. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CRIME COMMISSION (2005). AUSTRALIAN ILLICIT DRUG DATA REPORT 2003-04. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CRIME COMMISSION (2006). AUSTRALIAN ILLICIT DRUG DATA REPORT 2004-05. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CRIME COMMISSION (2007). AUSTRALIAN ILLICIT DRUG DATA REPORT 2005/06. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CRIME COMMISSION (2008). AUSTRALIAN ILLICIT DRUG DATA REPORT 2006-07. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CRIME COMMISSION (2009). AUSTRALIAN ILLICIT DRUG DATA REPORT 2007-08. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CRIME COMMISSION (2010). ILLICIT DRUG DATA REPORT 2008-09. CANBERRA, AUSTRALIAN CRIME COMMISSION.

AUSTRALIAN CUSTOMS BORDER AND PROTECTION SERVICE (2010). AUSTRALIAN CUSTOMS AND PROTECTION SERVICE ANNUAL REPORT 2009-10. CANBERRA, COMMONWEALTH OF AUSTRALIA.

AUSTRALIAN CUSTOMS SERVICE (2007). AUSTRALIAN CUSTOMS SERVICE ANNUAL REPORT 2006-07. CANBERRA, COMMONWEALTH OF AUSTRALIA.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2002). 2001 NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY: DETAILED FINDINGS. CANBERRA, AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2005). NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY 2004 - DETAILED FINDINGS. CANBERRA, AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2008). 2007 NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY: DETAILED FINDINGS. DRUG STATISTICS SERIES NO. 22. CAT. NO. PHE 107. CANBERRA, AIHW.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2009). ALCOHOL AND OTHER DRUG TREATMENT SERVICES IN AUSTRALIA 2007-08: REPORT ON THE NATIONAL MINIMUM DATA SET. DRUG TREATMENT SERIES NO. 9. CAT. NO. HSE 73. CANBERRA, AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2010). ALCOHOL AND OTHER DRUG TREATMENT SERVICES IN AUSTRALIA 2008-09: REPORT ON THE NATIONAL MINIMUM DAT SET. DRUG TREATMENT SERIES NO. 10 CAT. NO. HSE 92., AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE.

BABOR, T., J. DE LA FLUENTE, ET AL. (1992). THE ALCOHOL USE DISORDERS IDENTIFICATION TEST: GUIDELINES FOR USE IN PRIMARY HEALTH CARE.

BABOR, T. AND J. HIGGINS-BIDDLE (2000). "ALCOHOL SCREENING AND BRIEF INTERVENTION: DISSEMINATION STRATEGIES FOR MEDICAL PRACTICE AND PUBLIC HEALTH." ADDICTION 95: 677-86.

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. DEGENHARDT, ET AL. (2004). AUSTRALIAN DRUG TRENDS 2003: FINDINGS FROM THE ILLICIT DRUG REPORTING SYSTEM (IDRS). . SYDNEY, NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE, UNIVERSITY OF NSW.

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.

CALDICOTT, D., F. CHOW, ET AL. (2004). "FATALITIES ASSOCIATED WITH THE USE OF GAMMA-HYDROXYBUTYRATE AND ITS ANALOGUES IN AUSTRALIASIA." MEDICAL JOURNAL OF AUSTRALIA 181(6): 310-313.

COMMONWEALTH DEPARTMENT OF COMMUNITY SERVICES AND HEALTH (1988). STATISTICS ON DRUG ABUSE IN AUSTRALIA 1988: AN INFORMATION DOCUMENT FOR USE IN ASSOCIATION WITH THE NATIONAL CAMPAIGN AGAINST DRUG ABUSE. CANBERRA, AUSTRALIAN GOVERNMENT PUBLISHING SERVICE.

COMMONWEALTH DEPARTMENT OF HEALTH AND FAMILY SERVICES (1996). 1995 NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY: SURVEY RESULTS. CANBERRA, COMMONWEALTH DEPARTMENT OF HEALTH AND FAMILY SERVICES.

COMMONWEALTH DEPARTMENT OF HEALTH, H., LOCAL GOVERNMENT AND COMMUNITY SERVICES, (1993). 1993 NATIONAL DRUG HOUSEHOLD SURVEY. CANBERRA, COMMONWEALTH DEPARTMENT OF HEALTH, HOUSING, LOCAL GOVERNMENT AND COMMUNITY SERVICES.

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: 1077-1083.

DILLON, P., J. COPELAND, ET AL. (2003). "PATTERNS OF USE AND HARMS ASSOCIATED WITH NON-MEDICAL KETAMINE USE." DRUG AND ALCOHOL DEPENDENCE 69: 23-28.

FORSYTH, A. J. M. (1996). " PLACES AND PATTERNS OF DRUG USE IN THE SCOTTISH DANCE SCENE." ADDICTION 91: 511-521.

FURUKAWA, T. A., R. C. KESSLER, ET AL. (2003). "THE PERFORMANCE OF THE K6 AND K10 SCREENING SCALES FOR PSYCHOLOGICAL DISTRESS IN THE AUSTRALIAN NATIONAL SURVEY OF MENTAL HEALTH AND WELL-BEING." PSYCHOLOGICAL MEDICINE 33: 357-362.

HALL, W. AND W. SWIFT (2000). "THE THC CONTENT OF CANNABIS IN AUSTRALIA: EVIDENCE AND IMPLICATIONS." AUSTRALIAN & NEW ZEALAND JOURNAL OF PUBLIC HEALTH 24: 503-508.

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.

HURT, P. H. AND E. C. RITCHIE (1994). "A CASE OF KETAMINE DEPENDENCE (LETTER)." AMERICAN JOURNAL OF PSYCHIATRY 151(5): 779.

JANSEN, K. L. R. (1990). "KETAMINE: CAN CHRONIC USE IMPAIR MEMORY?" INTERNATIONAL JOURNAL OF ADDICTIONS 25: 133-139.

JANSEN, K. L. R. (2000). KETAMINE, DREAMS AND REALITIES. FLORIDA, MULTIDISCIPLINARY ASSOCIATION FOR PSYCHEDELIC STUDIES.

KAMAYA, H. AND P. R. KRISHNA (1987). "KETAMINE ADDICTION (LETTER)." ANAESTHESIA 67(5): 861-862.

KERLINGER, F. N. (1986). FOUNDATIONS OF BEHAVIORAL RESEARCH. JAPAN, CBS PUBLISHING LIMITED.

KESSLER, R. C., G. ANDREWS, ET AL. (2002). "SHORT SCREENING SCALES TO MONITOR POPULATION PREVALENCES AND TRENDS IN NON-SPECIFIC PSYCHOLOGICAL DISTRESS." PSYCHOLOGICAL MEDICINE 32: 959-976.

MATHERS, B., L. DEGENHARDT, ET AL. (2008). "GLOBAL EPIDEMIOLOGY OF INJECTING DRUG USE AND HIV AMONG PEOPLE WHO INJECT DRUGS: A SYSTEMATIC REVIEW." THE LANCET 372.

MCLAREN, J., W. SWIFT, ET AL. (2008). "CANNABIS POTENCY AND CONTAMINATION: A REVIEW OF THE LITERATURE." ADDICTION 103(7): 1100-1109.

MOORE, N. N. AND J. M. BOSTWICK (1999). "KETAMINE DEPENDENCE IN ANESTHESIA PROVIDERS." PSYCHOSOMATICS 40(4): 356-359.

NICHOLSON, K. AND R. BALSTER (2001). "GHB: A NEW AND NOVEL DRUG OF ABUSE." DRUG AND ALCOHOL DEPENDENCE 63: 1-22.

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.

REINERT, D. F. AND J. P. ALLEN (2002). "THE ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT): A REVIEW OF THE RECENT RESEARCH." ALCOHOLISM: CLINICAL & EXPERIMENTAL RESEARCH 26(2): 272-279.

ROXBURGH, A. AND L. BURNS (IN PRESS). DRUG-INDUCED DEATHS IN AUSTRALIA, 2008, NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE, UNIVERSITY OF NEW SOUTH WALES.

ROXBURGH, A. AND L. BURNS (IN PRESS). DRUG-RELATED HOSPITAL STAYS IN AUSTRALIA, 1993-2008. SYDNEY, NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE,

UNIVERSITY OF NEW SOUTH WALES.

SAUNDERS, J. B., O. G. AASLAND, ET AL. (1993). "DEVELOPMENT OF THE ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT): WHO COLLABORATIVE PROJECT ON EARLY DETECTION OF PERSONS WITH HARMFUL ALCOHOL CONSUMPTION." ADDICTION 88: 791-804.

SIEGEL, S. AND N. J. CASTELLAN (1988). NONPARAMETRIC STATISTICS FOR THE BEHAVIOURAL SCIENCES. SINGAPORE, MCGRAW-HILL.

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.

SOYKA, M., G. KRUPINSKI, ET AL. (1993). "PHENOMENOLOGY OF KETAMINE INDUCED PSYCHOSIS." SUCHT 5: 327-331.

STAFFORD, J., L. DEGENHARDT, ET AL. (2005). AUSTRALIAN DRUG TRENDS 2004: FINDINGS FROM THE ILLICIT DRUG REPORTING SYSTEM (IDRS). SYDNEY, NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE, UNIVERSITY OF NEW SOUTH WALES.

STATISTICS, A. B. O. (2006). NATIONAL HEALTH SURVEY: SUMMARY OF RESULTS 2004-2005. CANBERRA, AUSTRALIAN BUREAU OF STATISTICS.

TOPP, L., C. BREEN, ET AL. (2004). "ADAPTING THE ILLICIT DRUG REPORTING SYSTEM (IDRS) METHODOLOGY TO EXAMINE THE FEASIBILITY OF MONITORING TRENDS IN PARTY DRUG MARKETS." DRUG AND ALCOHOL DEPENDENCE 73(2): 189-197.

TOPP, L. AND S. DARKE (2001). NSW PARTY DRUG TRENDS 2000: FINDINGS OF THE ILLICIT DRUG REPORTING SYSTEM PARTY DRUGS MODULE. SYDNEY, NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE, UNIVERSITY OF NEW SOUTH WALES.

TOPP, L., J. HANDO, ET AL. (1998). ECSTASY USE IN AUSTRALIA. SYDNEY, NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE, UNIVERSITY OF NEW SOUTH WALES.

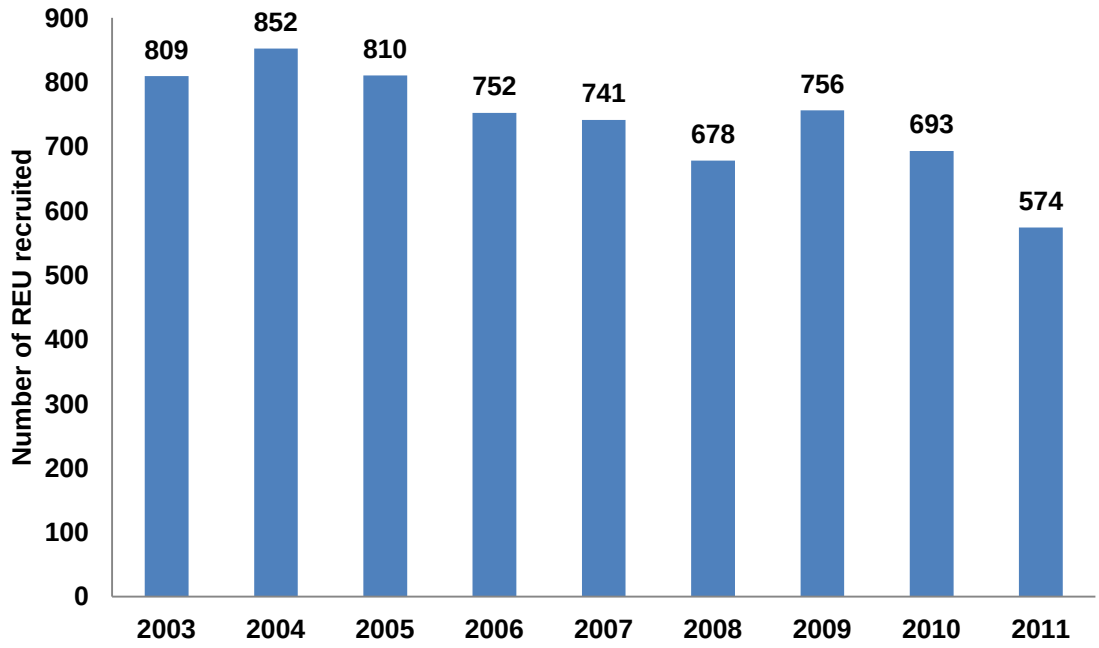
TOPP, L., J. HANDO, ET AL. (2000). "ECSTASY USE IN AUSTRALIA: PATTERNS OF USE AND ASSOCIATED HARMS." DRUG AND ALCOHOL DEPENDENCE 55: 105-115.

WHITE, B., C. DAY, ET AL. (2006). "PREVALENCE OF INJECTING DRUG USE AND ASSOCIATED RISK BEHAVIOUR AMONG REGULAR ECSTASY USERS IN AUSTRALIA." DRUG AND ALCOHOL DEPENDENCE 83(210-217).

APPENDICES

Appendix A: Recruitment of REU over time, 2003-2010

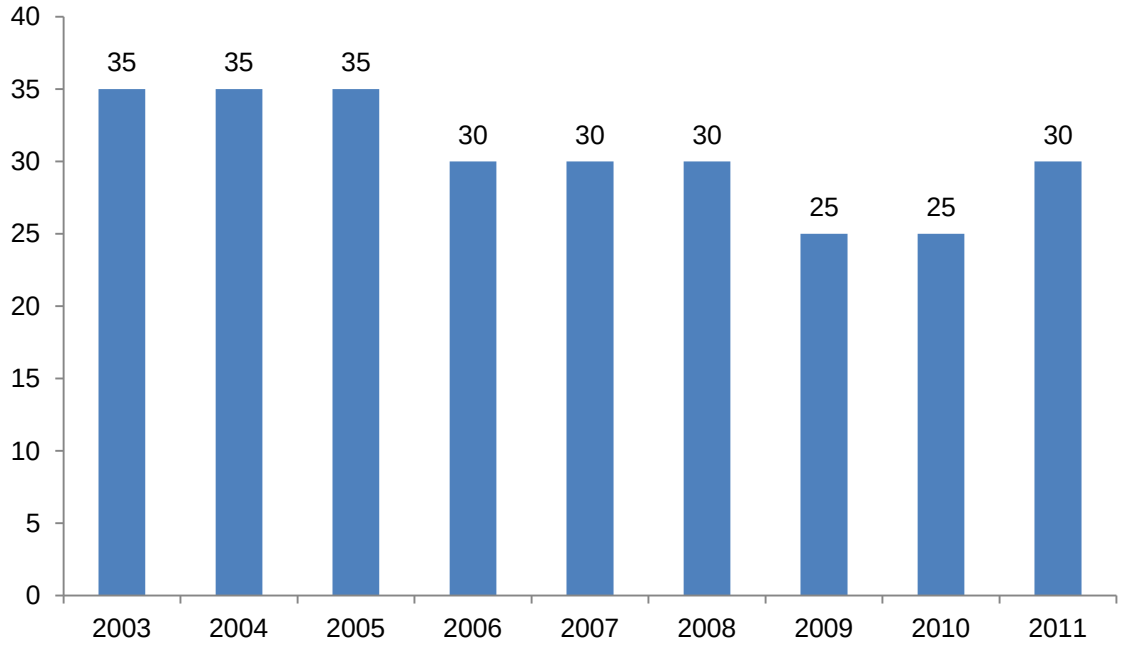
Figure A1: Recruitment of REU over time, 2003-2011



Source: REU participant interviews, 2003-2011

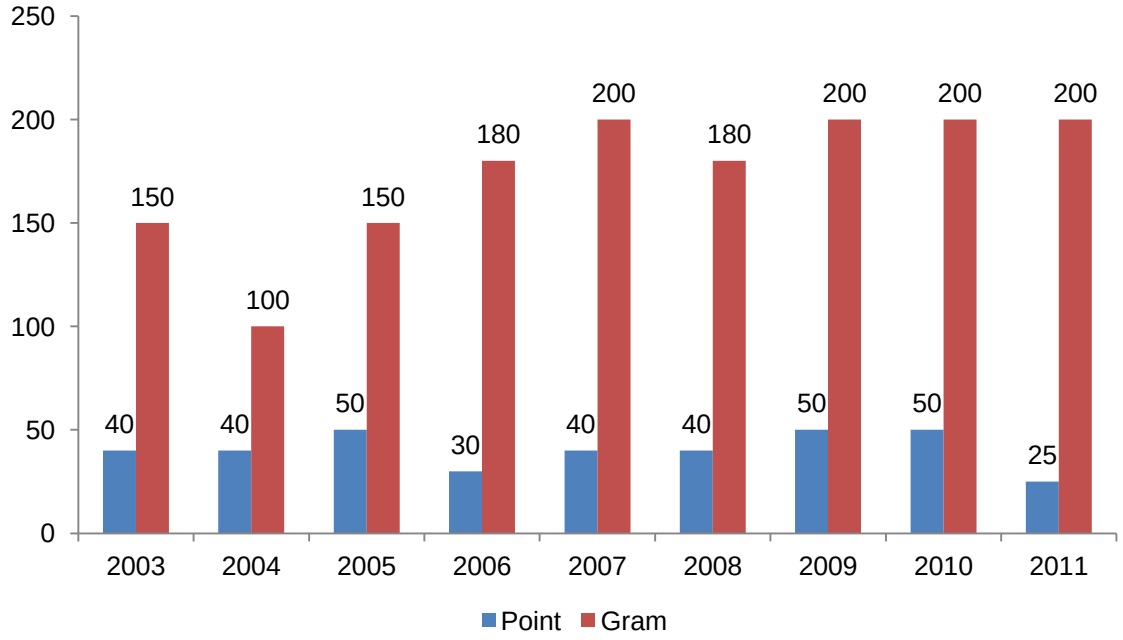
Appendix B: Price trends of ecstasy and related drugs, 2003-2011

Figure B1: Median price of an ecstasy pill, 2003-2011



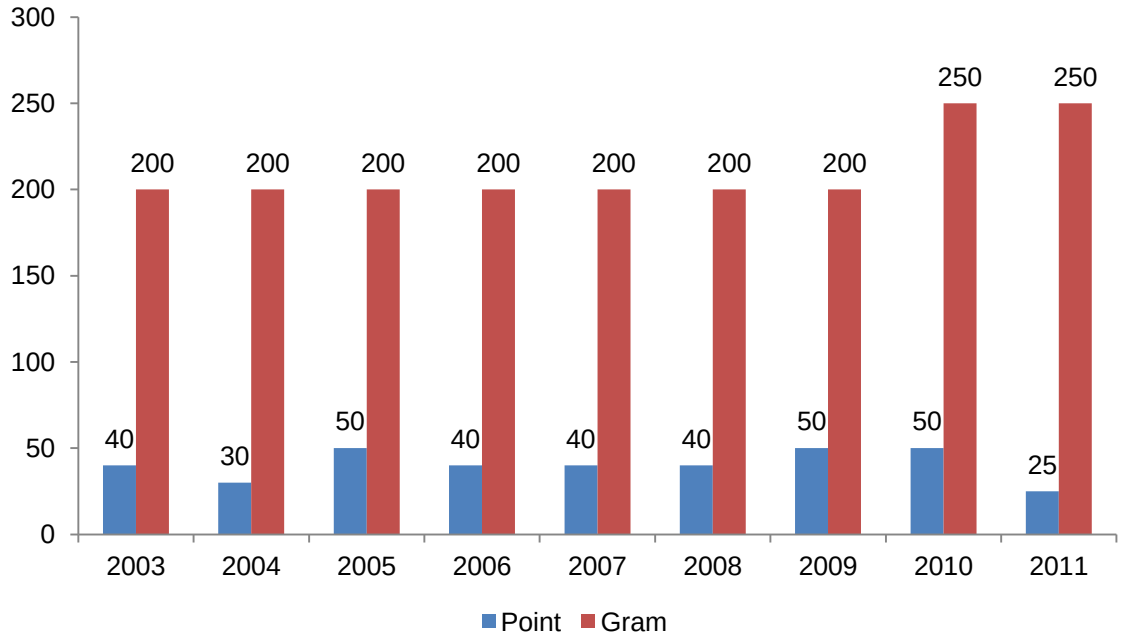
Source: REU participant interviews, 2003-2011

Figure B2: Median price of methamphetamine powder (speed), 2003-2011



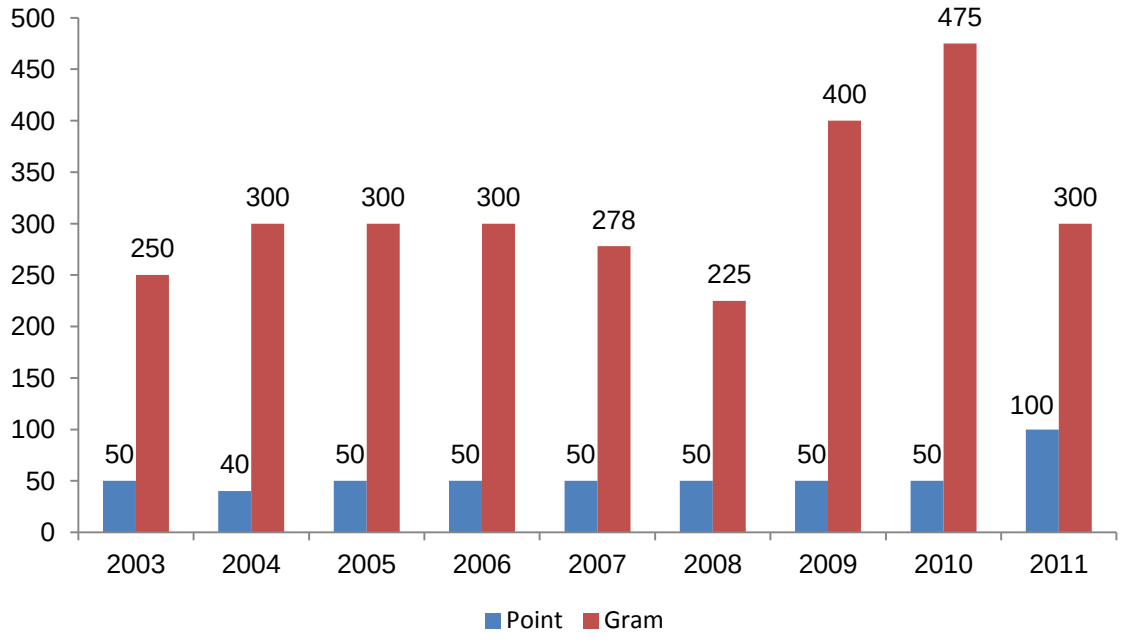
Source: REU participant interviews, 2003-2011

Figure B3: Median price of methamphetamine base, 2003-2011



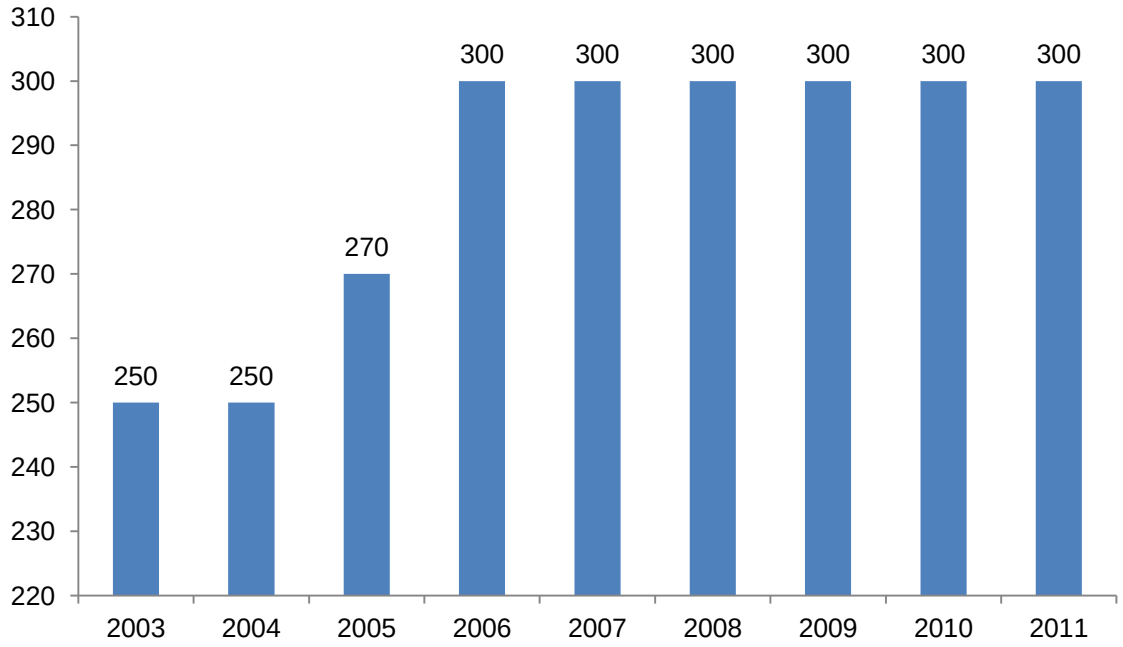
Source: REU participant interviews, 2003-2011

Figure B4: Median price of ice/crystal, 2003-2011



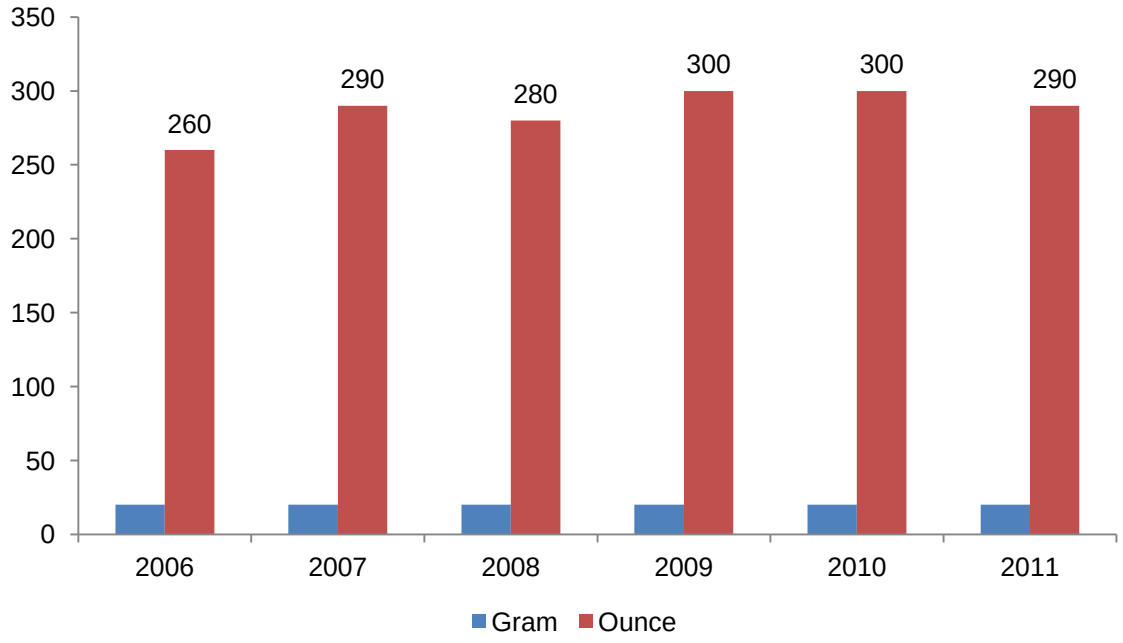
Source: REU participant interviews, 2003-2011

Figure B5: Median price of one gram of cocaine, 2003-2011



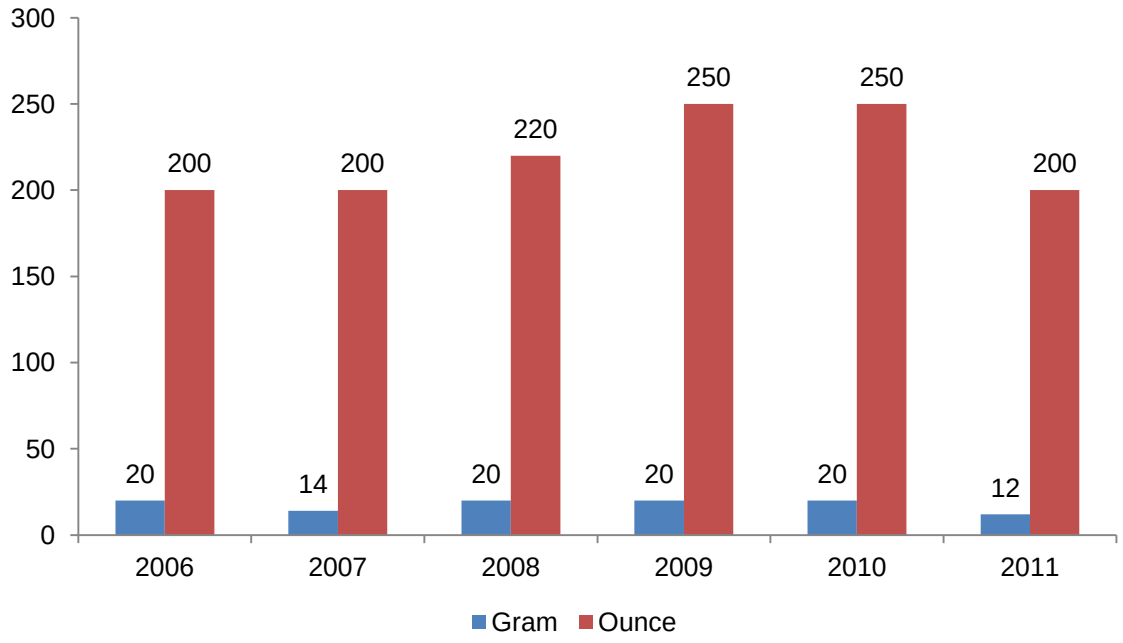
Source: REU participant interviews, 2003-2011

Figure B6: Median price of hydroponic cannabis, 2006-2011



Source: REU participant interviews, 2006-2011

Figure B7: Median price of bush cannabis, 2006-2011



Source: REU participant interviews, 2006-2011