R. Jenkinson and B. Quinn

VIC DRUG TRENDS 2006
Findings from the
Illicit Drug Reporting System (IDRS)

NDARC Technical Report No. 274

VICTORIAN DRUG TRENDS 2006



Findings from the Illicit Drug Reporting System (IDRS)

Rebecca Jenkinson and Brendan Quinn

Turning Point Alcohol and Drug Centre Inc.

NDARC Technical Report No. 274

ISBN 978 0 7334 2470 0 ©NDARC 2007

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. All other rights are reserved. Requests and enquiries concerning reproduction and rights should be addressed to the information manager, National Drug and Alcohol Research Centre, University of New South Wales, Sydney, NSW 2052, Australia.

TABLE OF CONTENTS

LIST O	F TABLES	iii
LIST O	F FIGURES	v
ACKNO	OWLEDGEMENTS	vi
ABBRE	VIATIONS	vii
	TIVE SUMMARYv vary of 2006 Victorian drug trends	
1.0	Introduction	1
2.0	METHOD	. 2
2.1.	Survey of injecting drug users (IDU)	
2.2.	Survey of key experts (KE)	
2.3.	Other indicators	
3.0	RESULTS	. 6
3.1.	Overview of the IDU sample	. 6
3.2.	Drug use history and current drug use	. 8
4.0	HEROIN	12
4.1.	Price	
4.2.	Availability	
4.3.	Purity	
4.4.	Use	
4.5.	Heroin-related harms	
4.6.	Treatment	
4.7.	Summary of heroin trends	
5.0	METHAMPHETAMINE	27
5.1.	Price	
5.2.	Availability	29
5.3.	Purity	
5.4.	Use	34
5.5.	Methamphetamine-related harms	37
5.6.	Summary of methamphetamine trends	40
6.0	COCAINE	42
6.1.	Price	
6.2.	Availability	
6.3.	Purity	
6.4.	Use	
6.5.	Key expert reports	
6.6.	Cocaine-related harms	
6.7.	Summary of cocaine trends	47
7.0	CANNABIS	
7.1.	Price	
7.2.	Availability	
7.3.	Potency	
7.4.	Use	
7.5.	Cannabis-related harms	
7.6.	Summary of cannabis trends	54

8.0	OPIOIDS	55
8.1.	Methadone	55
8.2.	Buprenorphine & buprenorphine/naloxone	55
8.3.	Morphine	
8.4.	Oxycodone	59
8.5.	Other opioids	60
9.0	OTHER DRUGS	
9.1.	Ecstasy and related drugs	
9.2.	Benzodiazepines	
9.3.	Antidepressants	65
9.4.	Alcohol and tobacco	66
9.5.	Other drugs	67
10.0	ASSOCIATED HARMS/DRUG-RELATED ISSUES	69
10.1.	Sharing of injecting equipment among IDU	
10.2.	Blood-borne viral infections	
10.3.	Location of injections	
10.4.	Injection-related health problems	72
10.5.	Substance-related aggression	
10.6.	Mental health issues	
10.7.	Driving risk behaviour	
10.8.	Recent use and expenditure on illicit drugs	77
10.9.	Criminal and police activity	
10.10.	General health care	82
10.11.	Services requested	83
10.12.	General trends	84
10.13.	Summary of associated harms/drug-related issues	85
11.0	DISCUSSION	
11.1.	Comparison of data from different sources	
11.2.	Heroin	
11.3.	Methamphetamine	
11.4.	Cocaine	87
11.5.	Cannabis	88
11.6.	Other opioids	88
11.7.	Other drug trends	89
11.8.	Drug-related health and law enforcement trends	89
12.0	STUDY LIMITATIONS	90
13.0	IMPLICATIONS	90
REFEI	RENCES	93

LIST OF TABLES

Table A: Price, availability, purity and prevalence of use for heroin,	
methamphetamine, cocaine and cannabis in Melbourne, Victoria, 2006	Xi
Table 1: Demographic characteristics of the IDU survey sample	7
Table 2: Injection history, drug preferences and poly-drug use of IDU	8
Table 3: Drug use history of the 2006 Vic IDRS IDU sample (N=150)	
Table 4: Price of most recent heroin purchases by IDU, 2006	
Table 5: Heroin and other opioids: consumer and provider arrests, Victoria	
and national, 2004-2005 ⁺	19
Table 6: Reported experience of heroin overdose for IDU survey respondents,	20
Table 7: Summary of heroin price, availability, purity and use trends in Melbourne,	20
2006	26
Table 8: Price of most recent methamphetamine purchases by IDU, 2006	29
Table 9: Amphetamine-type stimulants: consumer and provider arrests,	
Victoria and national, 2004-2005+	37
Table 10: Summary of methamphetamine price, availability, purity and use	
trends in Melbourne, 2006	41
Table 11: Prices of last purchase of cocaine in Melbourne reported by IDU	
survey respondents 1997-2006	
Table 12: Cocaine: consumer and provider arrests, Victoria and national, 2004-2005+	45
Table 13: Summary of cocaine price, availability, purity and use trends in	
Melbourne, 2006	
Table 14: Price of most recent cannabis purchases by IDU, 2006*	48
Table 15: Cannabis: consumer and provider arrests, Victoria and national,	
2004-2005+	53
Table 16: Summary of cannabis price, availability, purity and use trends in	
Melbourne, 2006	
Table 17: IDU self-reported injecting risk practices (past month), 1999-2006	69
Table 18: Annual number of notifications of HIV diagnoses in Victoria where	
injecting drug use has been identified as the likely exposure factor, 1995-2005	70
Table 19: Prevalence of HCV & HIV infection among NSP clients, Vic, 2003-2005	
Table 20: Self-reported BBVI status, IDU survey, 2006	
Table 21: Location in which 2006 IDU respondents had last injected (N=142) ⁺	
Table 22: Injection-related health problems (past month) reported by participants	14
in the 2005 and 2006 IDU surveys	72
Table 23: Proportions reporting injection-related health problems specific to	14
each drug type (last month), 2006	73
Table 24: Substance-related aggression in the six months preceding interview:	13
after which drugs?	75
Table 25: Driven soon after taking illicit drugs (past six months), 2005 & 2006	
Table 26: Drugs used on day prior to interview (IDU survey, 2004-2006) ⁺	
Table 27: Amount spent on illicit drugs on day prior to interview (IDU survey,	70
2004-2006)	78
Table 28: Criminal activity reported by IDU during the last month, 2001-2006	
Table 29: Police activity as reported by IDU, 2003-2006	
Table 30: Heroin trends endorsed (✓) by injecting drug user (IDU) reports,	ΟI
key expert (KE) reports, and other indicator sources (OTHER)	86
ney expert (131) reports, and other indicator sources (O 111111)	$_{\rm 00}$

Table 31: Methamphetamine trends endorsed (✓) by injecting drug user (IDU)	
reports, key expert (KE) reports, and other indicators (OTHER)	87
Table 32: Cocaine trends endorsed (✓) by injecting drug user (IDU) reports,	
key expert (KE) reports, and other indicators (OTHER)	87
Table 33: Cannabis trends endorsed (✓) by injecting drug user (IDU) reports,	
key expert (KE) reports, and other indicators (OTHER)	88
Table 34: Trends in other opiate use endorsed (✓) by injecting drug user (IDU)	
reports, key expert (KE) reports, and other indicators (OTHER)	88
Table 35: Trends in other drug use endorsed (✓) by injecting drug user (IDU)	
reports, key expert (KE) reports, and other indicators (OTHER)	89
Table 36: Drug-related health and law enforcement trends identified by injecting	
drug user (IDU) reports, key expert (KE) reports, and other indicator	
sources (OTHER)	89

LIST OF FIGURES

Figure 1:	Residential postcodes of the 2006 IDU survey sample (N=150)	6
Figure 2:	Median price of a gram and cap of heroin estimated from IDU purchases, 1997-2006	. 13
Figure 3:	Average purity of heroin seizures by Victorian law enforcement,	
	July 2005-June 2006	15
Figure 4:	Number of days of heroin use in preceding six months, 1997-2006	17
Figure 5:	Monthly totals of non-fatal heroin overdose in Melbourne,	
	Jan 2004-Dec 2005 (excluding Jun-Jul 2004)	21
Figure 6:	Opioid-related hospital admissions, Victoria and national,	
	1999/00-2004/05	
Figure 7:	Heroin-related deaths in Victoria, 1991-2005	23
Figure 8:	DirectLine calls where drug of concern identified as heroin or other	
	opioids*, 1999-2005	24
Figure 9:	Census estimate of the number of Victorian pharmacotherapy	
	consumers, Jan 2000 to Oct 2006	25
Figure 10:	Proportion of IDU reporting methamphetamine use in the past six	
	months, 2000-2006	. 27
Figure 11:	Average purity of methamphetamine seizures by Victorian law	
_	75 7 5	33
Figure 12:	Number of days used past six months (median) by	
		35
Figure 13:	DirectLine calls where drug of concern identified as	
-	amphetamines and/or other stimulants, 1999-2005	. 38
Figure 14:	Monthly totals of ambulance attendance where amphetamines were	•
T.' 4.5	mentioned in Melbourne, Jan 2004-Dec 2005 (excluding Jun-Jul 2004)	39
Figure 15:	Amphetamine-related hospital admissions, Victoria and national,	40
Eigen 16.	1999/00-2004/05	40
riguie 10.	Average purity of cocaine seizures by Victorian law enforcement, July 2005-June 2006	13
Eiguro 17.	DirectLine calls where drug of concern identified as cocaine, 1999-2005	
_	Cocaine-related hospital admissions, Victoria and national,	40
riguie 16.	1999/00-2004/05	17
Figure 10.	Price of cannabis* in Melbourne reported by IDU survey respondents	· • /
i iguic 17.	1997-2006	49
Figure 20:		
_	Cannabis-related hospital admissions, Victoria and national,	55
i iguite 21.	1999/00-2004/05	54
Figure 22:		<i>J</i> 1
1 18410 22.	(past six months), 2001-2006	58
Figure 23	Purity of ecstasy seizures by Victorian law enforcement,	
1 18410 25.	Jul 2005-Jun 2006	61
Figure 24	Monthly totals of ambulance attendance where ecstasy was	
- 150110 2 11	mentioned in Melbourne, Jan 2004-Dec 2005 (excluding Jun-Jul 2004)	63
Figure 25	Proportion of IDU reporting benzodiazepine use and	55
-0	injection (past six months), 1997-2006	64
	, u //	

ACKNOWLEDGEMENTS

The Australian Government Department of Health and Ageing funded the 2006 Melbourne arm of the Illicit Drug Reporting System (IDRS) study. The national IDRS study is coordinated by the National Drug and Alcohol Research Centre (NDARC), in Sydney, NSW.

We are extremely grateful to the injecting drug users and key experts who participated in this study by providing important information about their experiences and knowledge of illicit drug use in Melbourne. We would also like to thank Craig Fry, Jennifer Johnston, Robyn Dwyer, Bernadette McGrath, Annie Haines, Diane Beck and Anna Guthrie for their considerable contributions and support, and their assistance in recruiting and interviewing study participants.

Special thanks go to the following organisations for contributing space and/or staff time in assisting the team in recruiting and interviewing for the IDU survey component of the study:

- Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Frankston
- Health Information Exchange/Access Health, St Kilda
- Open Family, Footscray
- South East Alcohol and Drug Services (SEADS), Dandenong
- Turning Point Alcohol & Drug Centre, Fitzroy

Thanks also go to Mark Stoové, Stefan Cvetkovski, Susan Clemens, Sharon Matthews, Rebecca Monahan, Cate Quinn, Malcolm Dobbin and Amanda Roxburgh for assisting in access to and the collation of indicator data, to Paul McElwee for database development and assistance, and to Louisa Degenhardt, Jennifer Stafford, Susannah O'Brien, Emma Black and Matthew Dunn at NDARC for assistance as National Coordinators of the IDRS and EDRS studies during 2006.

ABBREVIATIONS

ACC Australian Crime Commission

ADIS Alcohol and Drug Information Service

A&TSI Aboriginal and/or Torres Strait Islander

BBVI Blood-borne viral infections

BZD Benzodiazepine

EDRS Ecstasy and related Drugs Reporting System

HBV Hepatitis B virus

HCV Hepatitis C virus

IDRS Illicit Drug Reporting System

IDU Injecting drug user(s)

KE Key expert(s)

MAS Metropolitan Ambulance Service

NDARC National Drug and Alcohol Research Centre

NHMD National Hospital Morbidity Database

NSP Needle and Syringe Program

PBS Pharmaceutical Benefits Scheme

PCR Patient Care Record

PDI Party Drug Initiative

VIFM Victorian Institute of Forensic Medicine

EXECUTIVE SUMMARY

Background

In 1998 the Australian Government Department of Health and Ageing commissioned the National Drug and Alcohol Research Centre (NDARC) to implement a national Illicit Drug Reporting System (IDRS), following a successful pilot study in Sydney during 1996 and a multi-state trial in 1997 (Hando, O'Brien, Darke, Maher & Hall, 1997; Hando & Darke, 1998; Hando, Darke, Degenhardt, Cormack & Rumbold, 1998). The 1998 IDRS study was conducted in New South Wales, Victoria and South Australia (McKetin, Darke, Hayes & Rumbold, 1999), with each state undertaking an IDU survey, key expert survey, and analysis of available secondary indicator data.

In 1999, the IDRS study was replicated in New South Wales, Victoria and South Australia, with all other remaining states and territories participating through the collection of secondary indicator data and completion of key expert interviews. In 2000, the IDRS became a truly national drug trend monitoring system when all states and territories conducted the complete study.

The aim of the IDRS study is to monitor emerging trends related to the use of heroin, methamphetamine, cocaine and cannabis. The IDRS study provides nationally comparable data with respect to patterns of illicit drug use and related harms, and provides a basis for better informing future policy and research initiatives.

The value of Victorian IDRS findings

Available Victorian health and law enforcement indicator data sources provide important information in relation to illicit drug use prevalence and related morbidity and mortality within this jurisdiction. However, the majority of these data sources are by nature *lag indicators* (where the most recent data available may be up to 12 months old in some cases), and therefore insufficient on their own for strategic early warning purposes.

Since 1997 in Victoria, the IDRS has been a strategic early warning mechanism concerning illicit drug trends because it has strived to supplement available secondary indicator data sources with *lead indicators* (such as that provided by direct surveys with sentinel IDU groups and key experts) of drug prices, purity, availability and current patterns of use. Findings from successive IDRS studies conducted in metropolitan Melbourne have informed health, law enforcement and community sector responses to illicit drugs in Victoria since 1997. Some recent examples of where the IDRS methodology or Victorian data have been used include:

- in the development of research into cocaine markets in Victoria and New South Wales (Shearer, et al. 2005);
- in the development of research into the use of drugs among populations of at-risk youth in Melbourne (the YDRS study, currently being undertaken);

¹ For specific examples of how previous Victorian IDRS findings have been utilised please refer to: Fry & Miller, 2001 & 2002; Jenkinson, Fry & Miller, 2003; Jenkinson, Miller & Fry, 2004; and Jenkinson & O'Keeffe, 2005 & 2006.

- in the development of research into benzodiazepine and pharmaceutical opiate misuse and links to crime in Victoria, Tasmania and NT (results pending);
- in research into the course and consequences of the heroin shortage in Victoria (Dietze, et al. 2003);
- in drug trend monitoring research on patterns and characteristics of psychostimulant use in Melbourne (Johnston, et al. 2004);
- in the review of the Victorian Drug Treatment Service System (Ritter, et al. 2003);
- in Stage One of Australia's Drug Policy Modelling Project (DPMP) (Moore, Caulkins, & Dietze, 2005);
- in policy development and review activities and inquiries conducted by the Victorian Government (Drugs and Crime Prevention Committee, 2004 & 2006; Di Natale & Ritter, 2003);
- in the annual *Victorian Drug Statistics Handbook* (Victorian Department of Human Services, 2006a).

Victorian IDRS data has also been disseminated widely via conferences, community forums, posters, magazine articles, and peer-reviewed publications.

A key advantage of the IDRS study is that it has replicated core methods across each state and territory over a number of years (this is the tenth year the study has been conducted in Melbourne). At a national level, this has permitted the identification of emerging jurisdictional differences with respect to illicit drug markets, and in turn has enhanced the capacity of health and law enforcement sectors to develop proactive responses to illicit drug issues.

Summary of 2006 Victorian drug trends

Turning Point Alcohol and Drug Centre conducted the Melbourne arm of the 2006 IDRS study between June and October 2006. The project consisted of:

- 1. a structured survey of 150 current injecting drug users recruited from a number of sites across the Melbourne metropolitan area;
- 2. semi-structured interviews with 58 key experts from a variety of professional settings, selected according to their knowledge about illicit drug use, and level of contact with illicit drug users during the six months preceding the survey;
- 3. analysis of secondary illicit drug use indicators.

Data collected via these three methods were analysed in order to identify illicit drugrelated trends in Melbourne for the 2005/06 year. Where appropriate, these data were also compared to findings from the 1997 to 2005 applications of the IDRS in Melbourne.

The 2006 IDRS study detected a number of trends of relevance during the preceding six to twelve months. Table A provides a summary of identified trends in price, availability, purity and prevalence of use for the four main illicit drug types explored in this study – heroin, methamphetamine, cocaine and cannabis. These are discussed in turn, along with summary details on other drug trends and associated harms/drug-related issues.

Heroin

Over half (59%, n=88) of the IDU survey respondents reported that heroin was their main drug of choice, and 76% (n=114) reported having used and injected heroin during the preceding six months. Prevalence of recent heroin use by Melbourne IDU respondents decreased in 2006 (76% compared to 89% in 2005, 86% in 2004 and 90% in 2003).

Respondents reported using heroin on a median of 56 days during the past six months, with one-fifth (21%, n=24) reporting using heroin on a daily basis during that time. As with prevalence of recent heroin use, frequency of use also decreased in 2006, reaching the lowest level reported since the IDRS study commenced in Melbourne in 1997.

In 2006, respondents reported paying (median price): \$40 for a cap, \$110 for a quarter-gram, \$200 for a half-gram, and \$350 for a gram (on the last occasion of purchase). The reported price of heroin remained relatively stable in 2006, although the median price for a gram increased slightly. The most popular purchase amount of heroin was a half-gram (n=43), followed by a cap (n=33).

Current heroin purity was reported as medium (44%, n=42) to low (34%, n=33) by the majority of IDU respondents who commented (n=96). The majority of key experts (KE) commenting on heroin purity also reported that it was low (n=10) or medium (n=8). As in previous years, a higher proportion of the Melbourne IDU sample reported that they had most commonly used heroin rock (94%), compared to powder (6%) during the previous six months.

The majority of IDU respondents who commented on the availability of heroin (n=97) reported it as either very easy (57%, n=55) or easy (30%, n=29) to obtain at the time of interview, and that availability had been stable over the past six months (52%, n=50). Most participants who commented on where they usually source their heroin (n=93) reported that they usually purchased from known dealers (65%), street dealers (28%), or friends (27%). Participants were also asked about the venues (locations) where they normally scored heroin, with most reporting an agreed public location (54%), dealer's home (30%), or street market (29%). Key experts confirmed that heroin availability was easy to very easy to obtain, and that mobile dealing had become entrenched and is far more common than street dealing in many areas.

Two percent of IDU (n=3) reported having experienced a heroin overdose within the previous six months, and 1% (n=2) had received Narcan during that time, a reduction since 2005. Most key experts noted that overall the level of non-fatal heroin overdose was low, and five indicated that overdose rates had recently decreased.

While heroin reportedly remained very easy to access in Melbourne in 2006, and over half of the IDU sample reported that heroin was their main drug of choice, both the reported prevalence and frequency of heroin use by IDU decreased this year, as did reports of recent heroin overdose. Heroin purity levels remained low and the price was stable to increasing. These trends in heroin use will continue to be monitored.

Table A: Price, availability, purity and prevalence of use for heroin, methamphetamine, cocaine and cannabis in Melbourne, Victoria, 2006

memaniphe	Heroin	Methamphetamine	Cocaine	Cannabis		
		•				
Price Cap/point Gram	\$40 \$350 Stable- increasing	\$35-50 \$200 Stable prices	\$50 \$350 (\$300-500) Stable prices	Gram \$20 (hydro) Ounce \$200 (hydro) Stable-decreasing		
Availability	 Availability very easy to easy Stable Mostly accessed through known dealers 	Availability (speed & crystal meth/ice) generally easy/ very easy and stable	 Availability stable Sourced from friends or known dealers 	 Cannabis readily available Stable Accessed through social networks 		
Purity	 Average purity 17% (range 0-69%)^a Average purity stable-decreasing^a Purity medium to low^b 	 Average purity 19% (range 5% to 46%)^a Purity variable^b 	 Average purity 37% (range 15% to 77%)^a Average purity relatively stable past six years^a 	 Purity medium to high^b Stable potency^b 		
Use	 Mostly rock form (94%) Decreasing prevalence and frequency of use 	 Prevalence of use of speed and base stable among IDU, while use of crystal meth/ice increased Frequency of use stable-increasing 	Cocaine use remains infrequent among Melbourne IDU (median 2 days use)	 Most commonly used illicit drug Used concurrent ly with other drugs 		

^a Based on the purity of drug seizures made by Victoria Police (Forensic Services Department)

Methamphetamine

Different forms of methamphetamine are currently available in Australia. For the past five years the IDRS study has collected information on the use, price, purity and availability of three main forms of methamphetamine: speed, base and crystal meth/ice, along with information on the use of amphetamine liquid and pharmaceutical stimulants (e.g. dexamphetamine, Ritalin).

As in previous years, almost the entire sample (97%) of IDU survey respondents reported having used at least one of the three main forms of methamphetamine (speed,

^b Based on IDU estimates of purity/ THC potency

base or crystal meth/ice) during their lifetime, and 81% (n=121) reported use during the previous six months (speed 71%, crystal meth/ice 53%, and base 15%). Nine percent of the sample also reported recently using pharmaceutical stimulants (prescribed or not prescribed), and three percent reported using amphetamine liquid. Reported prevalence of use of both speed and base remained relatively stable in 2006, while the use of crystal meth/ice increased (although frequency of use remained low).

As in 2005, key experts commented that methamphetamine use is still very prevalent amongst IDU in Melbourne, and the majority reported increases in methamphetamine use during the past six months.

Injecting was reported to be the most commonly used route of administration of methamphetamine by IDU during the past six months (78%, n=117). Smaller numbers reported smoking (24%, n=36), snorting (13%, n=19), and swallowing (7%, n=11) methamphetamine during that time.

Those who had used methamphetamine during the past six months reported a median of 16 days of use (speed 13 days, crystal meth/ice 5 days, base 3 days, and liquid 3 days), while fifteen respondents reported using methamphetamine between every second day and daily during that time. All key experts commenting on frequency of use reported that infrequent, recreational and/or binge use was more common amongst methamphetamine users, and that injecting and smoking were the preferred routes of administration.

In 2006, the reported median price for a point of each of the three forms of methamphetamine was: speed \$35, base \$50, and crystal meth/ice \$50 (the purer forms were slightly more expensive). Most reported that prices had been stable over the past six months.

The majority of IDU survey participants reported that methamphetamine (particularly speed and crystal meth/ice) was currently easy to very easy to access, and availability had been stable over the past six months. In terms of sourcing methamphetamine, most reported scoring from known dealers or friends.

Reports of methamphetamine purity were variable, particularly in the case of speed powder, where similar proportions of IDU reported that the purity was either low (23%), medium (34%), or high (25%). Most reported that crystal meth/ice was of medium to high purity, while there were too few reports on the purity of base to identify trends.

A number of key experts reported an increase in mental health issues among methamphetamine users (particularly crystal meth/ice users). In addition, some IDU reported that they had experienced substance-related aggression following the use of these drugs.

Findings from the 2006 IDRS study suggest that the prevalence of methamphetamine use (in particular speed) among injecting drug users in Melbourne is quite high. Whilst frequency of methamphetamine use remains lower than for other drug types, patterns of use will continue to be monitored given the potential harms associated with the use of this drug.

Cocaine

Although over half (59%, n=88) of the respondents to the 2006 IDU survey reported lifetime use of cocaine, only two participants (1%) identified cocaine as their main drug of choice.

Nineteen percent (n=28) of the IDU surveyed reported having used cocaine during the previous six months, with the reported principal routes of administration being injecting (13%, n=20), and snorting (11%, n=16). Among those who reported using cocaine during the past six months, frequency of use was very low (median 2 days), suggesting irregular, opportunistic use patterns.

In 2006, four participants commented on the current price of a gram of cocaine, reporting that this quantity currently costs \$350 (range \$300-500), and two participants reported that a half-gram of cocaine currently costs \$150-200. No participants were able to comment on current cap prices, but one participant reported that a point of cocaine currently costs \$50.

Three of the five respondents (60%) who commented on current cocaine purity reported that it was high at present. Another respondent reported that the purity of cocaine was medium (20%, n=1), and the other that it fluctuated (20%, n=1). Most reported that cocaine purity had been stable (60%, n=3) during the previous six months.

Four of the six participants (67%) who commented on cocaine availability reported that it was currently easy to access, while the other two participants (33%) noted it was very easy. All six respondents reported that availability had been stable during the previous six months. Respondents most commonly reported buying cocaine from friends (33%, n=2) or known dealers (33%, n=2).

Whilst the prevalence of recent cocaine use by the IDU surveyed increased slightly in 2006 (19% compared to 15% in 2005 and 10% in 2004), and 21 key experts reported occasional use of cocaine by 'a few' of their clients, the use of cocaine amongst the IDU sample in Melbourne still remains low and infrequent and appears to be fairly opportunistic.

The expansion of drug trend monitoring research to other sentinel groups (e.g. psychostimulant users) will provide a clearer picture of cocaine trends in Melbourne.

Cannabis

Cannabis use in Melbourne continued to remain relatively stable. Almost all of the 2006 Melbourne IDU participants (97%, n=145) reported having used cannabis in their lifetime and 83% reported cannabis use in the preceding six months (compared to 86% in 2005, 80% in 2004, and 88% in both 2003 and 2002). Cannabis was reported to be the most widely used illicit drug by IDU respondents during the previous six months, and the most frequently used in terms of number of days (median 180 days, i.e. daily use).

As in previous years, the overwhelming majority of IDU who commented on cannabis thought it easy to very easy to obtain, and that availability had remained stable in the preceding six months. Cannabis was commonly accessed through social networks, and, as in previous years, the type most commonly used was hydroponic cannabis (95%).

In 2006, median prices reported for hydroponic cannabis (on the most recent occasion of purchase) were: a gram \$20, three grams \$50, a quarter-ounce \$70, a half-ounce \$140, and an ounce \$200. Prices reported for these quantities remained relatively stable in 2006, although the median price of an ounce decreased slightly.

The potency of hydroponic cannabis was described as high (60%) to medium (34%), while the potency of bush/naturally-grown cannabis was generally rated at medium (43%).

Eleven key experts reported that cannabis was the primary drug of choice amongst the drug users with whom they had the most contact. In addition, in 2006 many key experts (n=22) reported that cannabis was commonly used as a secondary drug in combination with heroin and/or methamphetamine.

Other drugs

The 2006 Melbourne IDRS study has again provided evidence of widespread prescription drug use by participating injecting drug users (e.g. benzodiazepines, morphine, methadone, buprenorphine and antidepressants). The majority of IDU (71%) reported having used benzodiazepines during the six months prior to interview, and most (69%) mainly obtained their benzodiazepines licitly. In 2006, reported rates of recent benzodiazepine injection remained relatively stable (9%, n=14, compared to 6%, n=9 in 2005), and frequency of benzodiazepine injection remained very low.

In 2006 participants were also asked about their use of both buprenorphine (Subutex) and buprenorphine/naloxone (Suboxone). Half (50%, n=75) of the IDU respondents reported buprenorphine use (prescribed or non-prescribed) during the past six months and 38% reported injecting the drug during that time. The median number of days of buprenorphine use during the past six months was 80 days (or close to every second day). Sixteen percent (n=24) reported both lifetime and recent use of the combination buprenorphine/naloxone drug, and 7% (n=10) reported recent (past six months) injection. Reported methadone use was relatively stable in Melbourne in 2006.

Around one-third (35%) reported using morphine during the past six months and the preferred method of use was injecting. The types of morphine most commonly used by IDU respondents who reported recent use were MS Contin and Kapanol. Close to one-third (27%) also reported recent use of oxycodone, although frequency of both morphine and oxycodone use was low.

Prevalence of antidepressant use in 2006 appears to be relatively stable, with 27% of IDU reporting that they used these drugs in the past six months. Median frequency of use during that time was 32 days.

Almost one-quarter (24%) of respondents also reported ecstasy use within the past six months, although frequency of use remained low. The primary route of administration of ecstasy for this group during the last six months was oral (19%). Recent inhalant and hallucinogen use was relatively uncommon among this group.

In 2006 key experts also reported steroid use and injection among some of their clients, stating that there was a need to promote harm reduction strategies among this population.

Associated harms/drug-related issues

Twelve percent of the 2006 IDU respondents reported that they had borrowed another person's used needle/syringe during the past month and 17% reported having loaned their own used needle/syringe during that time. One-third (35%) reported using other injecting equipment (such as a spoon/mixing container or water) after someone else during the past month. Both IDU and key expert reports suggest that rates of injecting equipment sharing decreased in 2006.

Self-reported recent experience of heroin overdose and receipt of Narcan also decreased in 2006; however, other significant harms associated with injecting drug use (including injection-related health problems and blood-borne viral infections such as hepatitis C) continue to be of concern.

In 2006 a significant proportion of the IDU sample also reported driving soon after taking an illicit drug(s), most commonly after using heroin, cannabis or speed.

Overall, it was seen that the level of self-reported criminal activity amongst IDU was relatively stable in 2006. Key experts also reported that, in general, crime levels had remained stable. Both IDU and key experts reported that police activity had also been stable during the past six months. The majority of IDU participants (75%) reported that police activity had had no effect on the difficulty of acquiring drugs recently.

Conclusions

The 2006 Victorian IDRS study has again provided evidence of both changes and stability within the illicit drug marketplaces of metropolitan Melbourne.

The demographic characteristics of the 2006 Melbourne IDU sample were strikingly similar to those reported in previous years (which is not unexpected given that the recruitment strategies remained the same). Also consistent with previous surveys, the majority of the sample reported that heroin was the drug they injected most often (48%), the last drug they injected (45%), and their drug of choice (59%), although these proportions were lower than those reported in previous years.

Reports from both IDU and KE suggest that there have been some recent changes in the heroin market in Melbourne. While heroin reportedly remained very easy to access in 2006, and over half of the IDU sample reported that heroin was their main drug of choice, both the reported prevalence and frequency of heroin use by IDU decreased this year (to some of the lowest levels reported since the IDRS study commenced in Melbourne in 1997). Heroin purity levels remained low and the price was stable to increasing. These trends in heroin use and associated outcomes will continue to be monitored.

Findings from the 2006 study suggest that methamphetamine use was widespread among the injecting drug users interviewed in Melbourne; however, frequency of use remains lower than for other drug types. As in 2005, these drugs (in particular speed and crystal meth/ice) were reportedly easy to obtain and were predominantly sourced through known dealers and friends (social networks). Some key experts noted that there had been an increase in mental health issues associated with methamphetamine use, and some IDU reported that they had experienced substance-related aggression following the use of these drugs. Given some of the potential harms associated with the use of methamphetamine, these trends will continue to be monitored.

Among the IDU surveyed in Melbourne, prevalence and frequency of cocaine use remains low. This may be due to the lack of availability, the cost, and possibly the widespread availability and use of other drug types in this city. In contrast, cannabis was the most widely used illicit drug by participating Melbourne IDU, and the most frequently used in terms of number of days. The Melbourne cannabis market and patterns of use continue to be relatively stable.

The 2006 study has again provided evidence of significant prescription drug use by injecting drug users (e.g. benzodiazepines, morphine, methadone, buprenorphine, and

antidepressants). There is also evidence of misuse of these drug types by some of the IDU surveyed. In 2006 IDU also reported experiencing injection-related harms specific to these drug types.

Whilst some great improvement in health outcomes for IDRS participants were observed in 2006, including reductions in non-fatal heroin overdoses and rates of needle/syringe sharing, continuing trends in the level of injection-related health problems experienced by IDU (such as vein damage, poor general health and hepatitis C) have again been reported. Further research is needed to investigate strategies that could potentially reduce some of these risks and harms.

The experience in Melbourne has shown that the IDRS is an effective drug trend monitoring system and is valuable for informing policy and research.

Implications of 2006 findings

While the aim of the IDRS study is to monitor emerging trends in illicit drug use and related outcomes, it is not intended as a comprehensive and detailed investigation of illicit drug markets. The role of the Melbourne arm of the IDRS study is to identify yearly illicit drug use trends, and provide recommendations regarding key issues that warrant further monitoring and/or in-depth investigation.

The findings of the 2006 Melbourne IDRS study suggest the following priority areas:

- 1. continued monitoring of illicit drug markets for trends in price, purity, availability, patterns of drug use, and related outcomes;
- 2. expansion of Victoria's routine drug trend monitoring, through new methods and new sentinel groups, to improve the understanding of intersecting drug markets and related outcomes;
- 3. further research to monitor the characteristics and impact of psychostimulant use in Melbourne, along with consideration of the impact of these drug types upon both health and law enforcement sectors:
- 4. further research into the injection of steroids and the risks and harms associated with this practice;
- 5. further research into drug-driving, particularly in regard to peoples' understanding of impairment and the circumstances in which they drive soon after taking illicit drugs;
- 6. further research to explore the nature and extent of prescription drug use among injecting drug users in Melbourne, and the health harms associated with prescription drug misuse;
- 7. further research to gain a better understanding of the determinants of both unsafe injecting and sex practices, particularly for those practices that increase the risk of blood-borne viral infections (e.g. HIV, HCV and HBV).

Since 1997, the Melbourne arm of the national IDRS study has proven to be a reliable, cost-effective and informative mechanism for the monitoring of illicit drug trends in this city. It yields data that are comparable from year-to-year and across jurisdictions, and it is a study that has much to offer health and law enforcement sectors in their efforts to respond more effectively to illicit drug trends.

1.0 Introduction

In 1998 the Australian Government Department of Health and Ageing commissioned the National Drug and Alcohol Research Centre (NDARC) to implement a national Illicit Drug Reporting System (IDRS), following a successful pilot study in Sydney during 1996 and a multi-state trial in 1997 (Hando, O'Brien, Darke, Maher & Hall, 1997; Hando & Darke, 1998; Hando, Darke, Degenhardt, Cormack & Rumbold, 1998). The 1998 IDRS study was conducted in New South Wales, Victoria and South Australia (McKetin, Darke, Hayes & Rumbold, 1999), with each state undertaking an IDU survey, key expert survey, and analysis of available secondary indicator data.

In 1999, the IDRS study was replicated in New South Wales, Victoria and South Australia, with all other remaining states and territories participating through the collection of secondary indicator data and completion of key expert interviews. In 2000, the IDRS became a truly national drug trend monitoring system when all states and territories conducted the complete study. This is the tenth year that the IDRS study has been conducted in Melbourne.

The aim of the IDRS study is to monitor emerging trends related to the use of heroin, methamphetamine, cocaine and cannabis. The IDRS study provides nationally comparable data with respect to patterns of illicit drug use and related harms, and provides a basis for better informing future policy and research initiatives.

The Victorian Drug Trends 2006 report summarises data collected during the months of June through October 2006 as part of the Melbourne arm of the 2006 IDRS study. The findings of this report pertain primarily to the 2005/06 financial year, unless otherwise indicated. The report provides an outline of the methods utilised in collecting data for this period, and then presents a socio-demographic and drug use history overview of the IDU sample. The main study findings are then presented for recent trends in the use of heroin, methamphetamine, cocaine, cannabis, and other drugs. Following this, drug-related harms, general health, and other issues of significance are examined. The report concludes with a summary and discussion of the main findings and implications.

For details regarding illicit drug trends for the whole of Victoria, readers should refer to the annual *Victorian Drug Statistics Handbook* (Victorian Department of Human Services, 2006a). Readers are also referred to the forthcoming *Australian Drug Trends 2006* monograph for national IDRS data and jurisdictional comparisons (available from the National Drug and Alcohol Research Centre, University of New South Wales, Sydney).

2.0 METHOD

This study replicates the IDRS methodology used annually since 1997, incorporating: a survey of injecting drug users; interviews with key experts recruited from a variety of professional settings; and analysis of secondary indicators of illicit drug trends in Victoria. The information provided by these three methods has been used to identify trends and outcomes associated with illicit drug use in Victoria. These trends primarily relate to those observed within metropolitan Melbourne for the 2005/06 financial year.

2.1. Survey of injecting drug users (IDU)

Structured face-to-face interviews were conducted with 150 current injecting drug users (IDU) recruited from metropolitan Melbourne between June and July 2006. To be eligible to participate, respondents must have injected at least monthly in the six months prior to interview, and have resided in Melbourne for at least the previous twelve months. Convenience sampling was facilitated by posted advertisements and recruitment notices distributed throughout Needle and Syringe Programs (NSPs), as well as snowballing methods (recruitment of friends and associates via word of mouth).

Five agencies assisted the research team as recruitment and interview sites for the IDU survey component of the study:

- Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Frankston
- Health Information Exchange/Access Health, St Kilda
- Open Family, Footscray
- South East Alcohol and Drug Services (SEADS), Dandenong
- Turning Point Alcohol & Drug Centre, Fitzroy

The structured interview schedule employed in this study comprised core questions used in previous IDRS studies conducted in Melbourne. The interview schedule contained questions relating to demographics, drug use, the price, purity and availability of drugs, crime, risk-taking behaviour, health, and general trends. The average duration of each interview was approximately 35 minutes and participants were reimbursed \$30 for their time and out-of-pocket expenses. Ethics approval for this study was obtained from the Victorian Department of Human Services, Human Research Ethics Committee, and the Peninsula Health Human Research and Ethics Committee. Data analysis was conducted using SPSS for Windows Version 14.0.

2.2. Survey of key experts (KE)

A total of 58 key experts (23 female, 35 male) participated in face-to-face and phone interviews between the months of July and October 2006. Twenty-seven participants (47%) were recruited from the pool of key experts who had taken part in previous IDRS or EDRS studies (Jenkinson & O'Keeffe, 2005, 2006; Jenkinson, Miller & Fry, 2004; Jenkinson, Fry & Miller, 2003; Fry & Miller, 2001, 2002; Dwyer & Rumbold, 2000; Rumbold & Fry, 1999). All other participants in the study were recruited as replacements for or alternatives to previous participants drawn from the same agencies/services, on the basis of referrals received from professionals in the field, or as individuals representing agencies/services not previously surveyed.

Key experts involved in the 2006 study consisted of: NSP and/or outreach workers (n=10), drug treatment workers (n=9), Koori drug and alcohol workers (n=1), mobile drug safety workers (n=1), methadone/buprenorphine workers (n=1), youth workers (n=1), researchers (n=5), medical practitioners (n=2), health service managers (n=3), pharmacists (n=2), general health workers (n=3), forensic clinicians (n=1), ambulance paramedics/first aid workers (n=3), forensic scientists (n=1), law enforcement personnel (n=9), government representatives (n=4), community workers (n=1), and legal representatives (n=1). Excluding law enforcement personnel, participants were selected on the basis of having had average weekly contact with illicit drug users over the preceding six months, and/or contact with ten or more different illicit drug users during that period, and/or expert knowledge in one or more areas relating to the use, possession, manufacture and/or trafficking of illicit substances.

Whilst some key expert participants were screened after they had received sample copies of the key expert interview schedule, project information sheet and consent form – providing them with the opportunity to consider whether they would be able to address questions from the interview schedule – other key experts were deemed eligible after telephone screening and did not wish or request to receive an advance copy of materials. The key expert interview schedule included sections on patterns of drug use, price, purity and availability of drugs, criminal behaviour and health and lifestyle issues.

Heroin was again nominated by most of the surveyed Melbourne key experts as the main illicit drug used and the main illicit drug of choice for people with whom they had contact. Several key experts also identified cannabis as the main illicit drug used by their clients. Two key experts identified methamphetamine as the main drug used by their clients, another illicit buprenorphine, and another steroids. However, several key experts reported that it was difficult to identify one main drug of use among their clients, and instead cited multiple substances/combinations of drugs used, including: heroin and methamphetamine; heroin, methamphetamine and cannabis; heroin and morphine; heroin, cocaine and methamphetamine; and methamphetamine and buprenorphine. Key experts also reported that in addition to these drugs, some of the clients with whom they had contact were using ecstasy, cocaine, and prescription drugs such as buprenorphine, methadone, benzodiazepines and morphine.

Key expert interviews took an average of 55 minutes to complete (range 30-90mins). Detailed notes were made by the interviewer during each interview, and raw data was transcribed and coded soon after the conclusion of the interview using Microsoft Excel. Content analysis was used for open-ended responses (Kellehear, 1993). Categorical data for key expert estimates of drug price, purity and availability were analysed using Microsoft Excel.

2.3. Other indicators

Primary information collected from the IDU survey and key expert interviews was supplemented by data obtained from a number of secondary indicator sources of illicit drug use and related morbidity and mortality. Where possible, data relating to trends for the 2005/2006 financial year are reported, unless otherwise indicated. For secondary indicators where current data is not available, the most recently available data has been included.

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

Surveys reporting on illicit drug use prevalence in Victoria

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

Drug seizure purity levels

 The Drug Analysis Branch of the Victoria Police Forensic Services Department conducts purity analyses for all drug seizures made by the Victoria Police. Since 2001, the Victoria Police Forensic Services Department has provided drug purity data for inclusion in the IDRS report. This report presents data for the 2005/2006 financial year.

Drug-related arrest data

• Information pertaining to drug-related arrests in Victoria has been obtained from the Australian Crime Commission (ACC). The Victoria Police and the Australian Federal Police provide arrest data to the ACC for the *Illicit Drug Data Report*. This report presents drug-related arrest data for the 2004/2005 financial year (2005/2006 data was not available at the time of publication).

Specialist drug treatment presentations

- The Victorian Department of Human Services funds community-based agencies to provide specialist alcohol and drug treatment services across the state. The collection of client information is a mandatory requirement and occurs via a formalised client data collection system called the Alcohol and Drug Information System (ADIS). The ADIS data presented in this report represents courses of treatment (not client numbers) for the period 2004/2005.
- The Drugs and Poisons Regulation Group of the Victorian Department of Human Services maintains a database that records all methadone, buprenorphine and buprenorphine-naloxone permits in Victoria. This is the major source of information regarding the characteristics of consumers of the Victorian pharmacotherapy programs and is an important source of information regarding treatment for opiate dependence. Data from the quarterly phone census of client numbers for the period Jan 2000-Oct 2006 is presented in the current report.
- DirectLine is a 24-hour specialist telephone service in Victoria (operated by Turning Point Alcohol & Drug Centre) that provides counselling, referral and advice about drug use and related issues. All calls to DirectLine are logged to an electronic database that can provide information about caller drugs of concern, calls from drug users, and calls about drug users. This report presents data for the period 1999-2005.

Ambulance attendances at non-fatal drug overdoses and other episodes

 Turning Point Alcohol and Drug Centre manages an electronic drug-related ambulance attendance database, comprising information obtained from the Melbourne Metropolitan Ambulance Service (MAS) Patient Care Records (Dietze, Cvetkovski, Rumbold, & Miller, 2000). Reliable data is available from June 1998 (with missing data for the periods May-July 2001, October 2002-February 2003, and June-July 2004). Although the database includes overdose-related calls for all types of drugs, the dataset is best suited to the monitoring of non-fatal heroin-related overdose, due to the availability of a biological marker of heroin involvement (i.e. the administration of Narcan and subsequent patient response). Data for the period January 2004 to December 2005 are presented in this report.

NHMD (National Hospital Morbidity Database)

• The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. It is a collection of electronic records for admitted patients in public and private hospitals in Australia. *Principal diagnosis* (the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of care in hospital) has been reported. This report presents drug-related (opioid, amphetamine, cocaine & cannabis) hospital admissions for Victoria and Australia, 1999/00 - 2004/05 (Roxburgh & Degenhardt, 2006).

Heroin-related fatalities

• Mortality information from heroin-related deaths was obtained from data collated by the Victorian Institute of Forensic Medicine (VIFM) (Woods, et al., 2006). This report presents 1991-2005 VIFM data.

Blood-borne viral infections surveillance data

- Blood-borne viral infections (BBVI), such as HIV/AIDS and hepatitis B (HBV) and C (HCV), are a major health risk for individuals who inject drugs. The Communicable Diseases Section, Public Health Branch of the Department of Human Services, records notifications of infectious diseases in Victoria. This report presents findings from the Department of Human Services HIV and HCV surveillance data.
- The Australian Needle and Syringe Program (NSP) Survey has been conducted yearly by the National Centre in HIV Epidemiology and Clinical Research since 1995. It is designed to supplement sentinel BBVI surveillance efforts via a short questionnaire on demographic and behavioural characteristics of NSP clients and serological testing of finger-prick blood samples. In 2005, the survey obtained data from 194 participants across five NSPs in Melbourne. (National Centre in HIV Epidemiology and Clinical Research, 2006).

3.0 RESULTS

3.1. Overview of the IDU sample

A total of 150 current injecting drug users (IDU) were interviewed in 2006. The sample was drawn from 53 suburbs across the inner, western, northern and outer south-eastern suburbs of Melbourne (see Figure 1). Most of the participants lived in close proximity to the five recruitment sites. The number of people recruited from each site were: St Kilda n=31; Dandenong n=25; Fitzroy n=37; Frankston n=31; and Footscray n=26.

2006 IDRS
No. of pericipants
10 to 18
15 to 10
11 to 5

Source: IDRS IDU interviews

Figure 1: Residential postcodes of the 2006 IDU survey sample (N=150)

The demographic characteristics of the 2006 sample are summarised in Table 1. The majority of participants were male (61%) and ranged in age from 18 to 58 years, with a mean age of 31 years (SD 7.45). Over half of the respondents were securely accommodated, either living in their own residence (51%) or parent's home (15%), while 21% were residing at a boarding house or hostel and 7% were homeless at the time of interview. Most participants (89%) were not currently employed; however, a significant proportion had acquired trade/technical qualifications (41%), and a smaller number university qualifications (7%) post-secondary school. The majority of participants (93%) reported that English was the main language spoken at home, with only 7% indicating that they most commonly spoke other languages, including Vietnamese, Cantonese and German. Seven percent (n=10) of participants identified as being of Aboriginal and/or Torres Straight Islander (A&TSI) origin.

Table 1: Demographic characteristics of the IDU survey sample

Tuble it Belliographic characteristics of		
Characteristic	2005	2006
	N=150	N=150
Age (yrs)	31 (range 20 to 49)	31 (range 18 to 58)
Sex (% male)	60	61
Heterosexual (%)	87	85
Accommodation (%):		
Own house/flat (includes renting)	43	51
Parents' house	17	15
Boarding house/hostel	27	21
Shelter/refuge	3	3
No fixed address/homeless	5	7
Employment (%):		
Not employed	81	89
Full-time	8	2
Part-time/casual	5	9
Home duties	4	-
Student	1	-
Currently engaged in sex work (%)	8	9
A&TSI (%)	6	7
School education (yrs)	10	10
Tertiary education (%):		
None	47	51
Trade/technical	47	41
University/college	7	7
Currently in drug treatment (%)	40	40
Prison history (%)	53	59

Source: IDRS IDU interviews

A total of 100 participants (67%) had engaged in some form of drug treatment during the six months prior to interview. Of these people, 73% had engaged in one type of treatment and 27% in two or more different treatment types during that period. Forty percent of the 2006 respondents (n=60) were currently receiving drug treatment. The most common types of drug treatment for this group were methadone maintenance (48%), buprenorphine maintenance (37%) and Suboxone maintenance (13%). For the group of respondents currently in treatment (n=60), the mean length of time that they had been engaged in their current treatment type was 25.9 months, although this varied considerably (SD 32.3). Twenty-five people (42%) had been in treatment for six months or less, 16 people (27%) between six to 24 months, and 19 people (32%) for more than two years.

3.2. Drug use history and current drug use

3.2.1. Duration of injecting career

The mean reported age for first injection of a drug was in the late teens (18.3 years, SD 4.9), ranging from 10 to 40 years. The mean number of years since first injection to the present was 12.8 years (SD 6.7). There was considerable variation in the length of experience of injecting drug use among those surveyed (range 1-35 years). Ten percent of participants (n=15) reported first injecting drugs within the last five years, with one-third (33%, n=50) reporting first injecting 6-10 years ago, and another third (n=50) reporting first injecting 15 or more years ago. The drugs most frequently used on the first injection occasion were heroin (51% compared to 53% in 2005, 43% in 2004, 45% in 2003, 44% in 2002 and 54% in 2001), and amphetamines (46% compared to 43% in 2005, 53% in 2004, 50% in 2003, 51% in 2002 and 41% in 2001).

3.2.2. Drug use history (last 4 weeks)

Around half (48%) of the sample reported that heroin was the drug they had injected most often during the past month, that it was the last drug they had injected (45%), and their drug of choice (59%). Fewer respondents (29%) indicated that they had most often injected methamphetamine during the past month, and that methamphetamine was the last drug injected (27%). In 2006, the proportions of participants reporting heroin as the drug injected most often and last drug injected were lower than in the previous year (69% and 68% respectively), while a corresponding increase in the proportions reporting methamphetamine and some of the pharmaceutical drugs was observed (see Table 2). Seventeen percent of the sample reported that methamphetamine was their drug of choice, while 11% reported that their preferred drug was cannabis. Smaller numbers of participants nominated other drugs as their drug of choice.

Table 2: Injection history, drug preferences and poly-drug use of IDU

Variable 2. Injection instory, drug preferences and pory drug use of 120								
Variable	2005	2006						
	N=150	N=150						
Age first injection (years)	19 (range 9-39)	18 (range 10-40)						
First drug injected (%)								
Heroin	53	51						
Amphetamine	43	46						
Cocaine	1	1						
Other opioids	1	1						
Drug of choice (%)								
Heroin	68	59						
Methamphetamine	13	17						
Cannabis	12	11						
Morphine	1	1						
Cocaine	2	1						
Other drugs	4	9						
Drug injected most often in last month (%)								
Heroin	69	48						
Methamphetamine	19	29						
Morphine	2	5						
Buprenorphine	8	14						
Other drugs	2	2						

Table 2: Injection history, drug preferences and poly-drug use of IDU (continued)

Variable	2005	2006
	N=150	N=150
Last drug injected (%)		
Heroin	68	45
Methamphetamine	15	27
Morphine	2	6
Cocaine	1	1
Buprenorphine	13	19
Frequency of injecting in last month (%)		
Weekly or less	23	11
More than weekly	37	35
Once a day	14	21
Two to three times per day	17	21
More than three times per day	9	11

Source: IDRS IDU interviews

Over half (53%) of the 2006 respondents reported having engaged in drug injection at least once a day during the month prior to interview (refer to Table 2), compared to 40% observed in 2005, 51% in 2004 and 49% in 2003 (Jenkinson & O'Keeffe, 2005 & 2006; Jenkinson, Miller & Fry, 2004).

3.2.3. Drug use history (last six months & lifetime)

Table 3 shows the self-reported drug use history of the IDU survey sample over the six months prior to interview, and lifetime, as well as routes of administration and recent frequency of use. The majority of respondents reported lifetime use of heroin (100%), tobacco (99%), methamphetamine (97%), cannabis (97%), alcohol (97%), and benzodiazepines (89%).

Tobacco (98%), cannabis (83%), methamphetamine (81%) and heroin (76%) were the drugs most commonly used during the previous six months. Significant numbers also reported using alcohol (74%) and benzodiazepines (71%) during that time. The drugs most commonly reported to be injected during the past six months were methamphetamine (78%), heroin (76%), buprenorphine (38%) and morphine (32%).

As noted in previous Melbourne IDRS studies, poly-drug use was the norm for IDU survey respondents. Those who reported heroin as their drug of choice (59%, n=88) most commonly reported using tobacco (98%), heroin (97%), cannabis (80%), alcohol (74%) and benzodiazepines (66%) during the past six months. Those who reported methamphetamine as their drug of choice (17%, n=26), most commonly reported using tobacco (100%), speed (96%), cannabis (85%), alcohol (77%), benzodiazepines (77%), and crystal meth/ice (54%) during that time.

Table 3: Drug use history of the 2006 Vic IDRS IDU sample (N=150)

Drug Class	Ever used	Ever injected %	Injected last 6 mths	Days injected in last 6 mths*	Ever smoked	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed+ %	Swallowed last 6 mths ⁺ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Heroin	100	100	76	56	53	9	15	3	25	4	76		56
Homebake heroin	12	11	3	8	3	1	2	1	2	0	3		16
Any heroin (inc. homebake)	100	100	76		54	9	15	3	25	4	76		
Methadone (prescribed)	67	17	2	26					66	31	31	180	172
Methadone (not prescribed)	35	14	3	1					31	8	10		2
Physeptone (prescribed)	3	1	0	0	0	0	0	0	3	0	0	0	0
Physeptone (not prescribed)	13	11	2	10	0	0	0	0	9	1	2		10
Any methadone (inc. Physeptone)	78	31	7	7					77	35	37		120
Buprenorphine (prescribed)	65	39	17	74	1	0	1	1	65	31	32	150	90
Buprenorphine (not prescribed)	46	40	29	24	1	0	0	0	15	5	29		24.5
Any buprenorphine (exc. buprenorphine-naloxone)	84	61	38	72	1	0	1	1	71	36	50		80
Buprenorphine-naloxone (prescribed)	11	1	1	2.5	0	0			11	11	11	14	12
Buprenorphine-naloxone (not prescribed)	5	5	5	2.5	0	0			1	1	5		4.5
Any buprenorphine-naloxone	16	7	7	2.5	0	0			12	12	16		6.5
Morphine (prescribed)	21	14	5	90	1	0	1	0	17	5	7		70
Morphine (not prescribed)	61	57	29	4.5	1	0	2	0	29	8	31		5
Any morphine	69	61	32	6	1	0	2	0	37	11	35		7
Oxycodone (prescribed)	11	5	3	48	1	1	1	1	10	3	5		34.5
Oxycodone (not prescribed)	45	41	23	3	1	0	1	0	14	3	24		4.5
Any oxycodone	49	41	25	4	1	1	1	1	22	7	27		5.5
Other opioids (not elsewhere classified)	23	7	1	10	2	0	0	0	20	8	8		6

Source: IDRS IDU interviews

[^] Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting *Among those who had used/injected

^{*}Refers to/includes sublingual administration of buprenorphine
Category includes speed powder, base, crystal/ice and amphetamine liquid (does not include pharmaceutical stimulants)

Table 3: Drug use history of the IDU sample, 2006 (continued)

Drug Class	Ever used %	Ever injected %	Injected last 6 mths	Days injected in last 6 mths*	Ever smoked	Smoked last 6 mths %	Ever snorted	Snorted last 6 mths %	Ever swallowed ⁺	Swallowed last 6 mths ⁺ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Speed powder	93	91	68	14.5	21	9	61	12	43	6	71		13
Base/point/wax	30	29	14	3	5	3	1	0	3	1	15		3
Ice/shabu/crystal	79	75	49	5	37	17	4	1	6	3	53		5
Amphetamine liquid	22	19	3	3					5	0	3		3
Any form methamphetamine#	97	94	78	15.5	46	24	63	13	45	7	81		16
Pharmaceutical stimulants (prescribed)	4	1	0		0	0	1	0	3	1	1		13.5
Pharmaceutical stimulants (not prescribed)	26	13	5		0	0	3	1	18	3	8		1.5
Any form pharmaceutical stimulants	28	13	5	1.5	0	0	3	1	20	5	9		2
Cocaine	59	45	13	2	10	3	35	11	7	1	19		2
Hallucinogens	67	11	1	3	3	0	3	0	65	7	7		5
Ecstasy	70	37	10	2	3	1	11	1	66	19	24		3
Benzodiazepines	89	33	9	3	5	1	1	0	87	71	71		50
Alcohol	97	7	0	0					97	74	74		15
Cannabis	97										83		180
Antidepressants	56	3	1	1					56	27	27		32
Inhalants	25										4		6.5
Tobacco	99										98		180

Source: IDRS IDU interviews

[^] Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting
* Among those who had used/injected
+ Refers to/includes sublingual administration of buprenorphine
Category includes speed powder, base, crystal/ice and amphetamine liquid (does not include pharmaceutical stimulants)

4.0 HEROIN

In 2006, 76% (n=114) of the IDU sample reported heroin use during the preceding six months, and 59% (n=88) reported that heroin was their main drug of choice. Prevalence of recent heroin use decreased in 2006 (76% compared to 89% in 2005, 86% in 2004 and 90% in 2003).

Price, purity and availability of heroin were identified from information obtained from 65% of the IDU sample (n=97) who felt confident to comment on heroin trends.

4.1. Price

In 2006, respondents reported that the current median price of a 'cap' of heroin was \$50 (n=68), and a gram was \$350 (n=42).

Prices paid for heroin by Melbourne IDU on the last occasion of purchase are presented in Table 4. The median and modal (most frequently reported) price, price range, and the number of respondents who reported purchasing each amount during the past six months are reported.

In 2006 respondents reported paying (median price): \$40 for a cap, \$110 for a quarter-gram, \$200 for a half-gram, and \$350 for a gram (on the last occasion of purchase). The reported price of heroin was relatively stable in 2006 (see Table 4). The most popular purchase amount of heroin was a half-gram (n=43), followed by a cap (n=33).

Table 4: Price of most recent heroin purchases by IDU, 2006

Amount	Median price*	Modal price*	Price range*	Number of	
	\$	\$	\$	purchasers*	
Cap	40	40	30-100	33	
	(45)	(50)	(20-100)	(80)	
Quarter- gram	110 (100)	100 (100)	100-180 (50-200)	12 (22)	
Half-gram	200 (175)	200 (200)	125-250 (100-300)	43 (71)	
Gram	350 (310)	350 (400)	180-450 (200-400)	23 (34)	

Source: IDRS IDU interviews

Data presented in Figure 2 shows the most recent purchase price (median) of heroin in Melbourne from 1997-2006. The reported price of a cap of heroin (≈0.1gram) has remained relatively stable since 2000, at \$40-50. The reported price per gram of heroin has fluctuated more during this time, peaking at \$450 in 2001 (during the reported reduction in heroin supply in Melbourne). Between 2002-2004 gram prices again decreased; however, more recently another increase in the reported median price of a gram of heroin has been observed.

^{* 2005} data is presented in brackets

2002 2003 2004

Figure 2: Median price of a gram and cap of heroin estimated from IDU purchases, 1997-2006

Source: IDRS IDU interviews

1998

1999

2000 2001

0

Two-fifths (41%) of those who commented on the price of heroin (n=96) reported that it had been stable over the previous six months (compared to 61% who reported it as stable in 2005, 59% in 2004, 66% in 2003 and 49% in 2002). A greater proportion of participants in the 2006 sample reported that the price of heroin had increased during the past six months (30% in 2006, compared to 17% in 2005, 9% in 2004, 14% in 2003 and 28% in 2002), or that it had fluctuated (17%) during that time. A further 12% reported that the price had recently decreased (compared to 11% in 2005, 21% in 2004, 13% in 2003 and 10% in 2002).

Key experts reported that, depending on the dealer, the price for a cap ranged from \$25-50. Few key experts were able to comment on the price per gram of heroin; however, those who did reported a price range of \$300-500 per gram or \$400-450 for 1.7 grams. Most key experts indicated that the price of heroin had remained stable during the past six months. Five key experts reported fluctuations in the heroin market, four noted that the price had increased, and two reported that the price had decreased.

4.2. Availability

The majority of IDU respondents who commented on the availability of heroin (n=97) reported it as either very easy (57%, n=55) or easy (30%, n=29) to obtain at the time of interview (June-July 2006), with a smaller number indicating that it was difficult (13%, n=13) to access. When asked if heroin availability had changed during the past six months, around half (52%, n=50) reported that availability had been stable. Close to one-quarter claimed that heroin was easier to obtain (23%, n=22), and another quarter that it was more difficult (22%, n=21). Three percent thought heroin availability fluctuated during that time.

Most of the participants who commented on where they sourced their heroin (n=93), reported that they usually scored/purchased from known dealers (65%). Around one-quarter also reported purchasing from street dealers (28%) or friends (27%). Participants

were also asked the venues (locations) where they normally scored, with most reporting an agreed public location (54%), dealer's home (30%), or street market (29%).

Of the key experts who were able to comment on the availability of heroin, four reported that it was 'easy' to access, whilst most reported that heroin was currently 'very easy' to access. It was noted that ease of access to heroin was often dependent on the quality of the drug – heroin of poor quality was generally perceived to be easier to access, whereas heroin of a higher purity was much harder to obtain. In relation to changes in heroin availability, eight key experts noted that heroin had become more difficult to access in the previous six months, seven reported that heroin had become easier to access and another seven reported that heroin availability had remained stable. One key expert reported fluctuations in the availability of heroin throughout the past six months.

A few key experts mentioned the occurrence of an annual 'mini heroin drought', which reportedly begins just before Christmas and continues into the first few months of the following year. Two key experts noted that in 2006 this recurrent period seemed longer than usual, though no specific reason could be identified. Consistent with results of previous IDRS reports, patterns of heroin availability differed across different markets.

Heroin trafficking/importing

In 2006 key experts again commented on the high prevalence of mobile heroin dealing, which some attributed to increased police activity. Two key experts stated that this now entrenched form of trade (mobile dealing) had led to an increase in the number of 'runners' used to make exchanges and transport heroin. Using runners is essentially a means of 'spreading the load', and is achieved via more people transporting/trafficking smaller quantities of heroin.

Increased police activity and the resultant mobile dealing was reported to have had a noticeable effect on the visible heroin market in regions such as the CBD, Springvale and Footscray, with less dealing observed on the streets in those areas. Other key experts reported that street markets were generally still evident. For example, one key expert noted an increased number of people selling heroin on the street and in some housing commission estates.

One key expert stated that some Vietnamese clients were targeted by police as dealers, despite potentially not dealing at all, while another key expert reported an increase in the number of African people selling heroin in the western suburbs.

The vast majority of key experts felt unable to comment on the manufacture and importation of heroin. Those who did comment believed that heroin continued to be imported into Australia rather than produced within the country, and suggested that heroin was manufactured in Asia. One key expert reported a reduction in the importation of heroin from other countries, attributed primarily to significant 'busts' in both Australia and Asia in previous years, and a shift towards the manufacture and importation of more 'synthetic' drugs, such as ecstasy and methamphetamines.

4.3. Purity

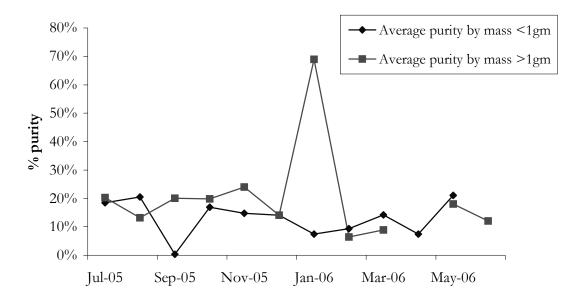
In 2006, 73% (n=110) of the IDU sample reported using heroin rock during the past six months, and 35% (n=52) reported using heroin powder. As in previous years, a higher proportion of the IDU sample reported that they had most commonly used heroin rock (94%), compared to powder (6%) during the previous six months (Jenkinson and O'Keeffe, 2005 & 2006; Jenkinson, Miller, & Fry, 2004).

Current heroin purity was reported as medium (44%, n=42) to low (34%, n=33) by the majority of respondents who commented (n=96). Fourteen percent (n=13) reported that heroin purity had fluctuated and 8% (n=8) reported that heroin purity was currently high. When asked about changes in heroin purity over the past six months, responses were varied. Approximately two-fifths (40%) perceived that heroin purity had increased, while another third (29%) reported a decrease. Twenty percent reported that heroin purity had mostly been stable over the past six months, and 11% reported that it had fluctuated during that time.

The average purity level of heroin seizures (for <1gm and >1gm amounts) made by law enforcement agencies in Victoria during the 2005/2006 financial year is shown in Figure 3. Purity figures shown here represent the purity levels of all heroin seizures made during that time period.

The overall average purity level of seizures analysed between July 2005-June 2006 was 17% (range 0% to 69%). The purity of heroin seizures was relatively stable (between 10%-20%) over this period, although in January 2006 the average purity of larger seizures (>1gm) increased to 69%. The average purity of heroin seizures made during 2005/2006 was lower than that observed in the previous three years (28% in 2004/2005; 31% in 2003/2004; 26% in 2002/2003); and remains much lower than that reported during the height of the heroin supply in Melbourne- 68% in 1998, 60% in 1999, 47% in 2000 (Jenkinson & O'Keeffe, 2006).

Figure 3: Average purity of heroin seizures by Victorian law enforcement, July 2005-June 2006



Source: Victoria Police Forensic Services Department

Most key experts (n=11) reported that powder was the main form of heroin used by their clients. Four key experts noted that both rock and powder were used, and two reported that rock was the more prevalent form of heroin used by clients.

In 2006, key expert opinions regarding the purity of heroin differed greatly to those of the previous year. The majority of key experts able to comment reported that heroin purity was currently low (n=10). Eight reported that it was medium, three reported purity

fluctuations, and one indicated that purity was medium to low. Unlike in the 2005 IDRS study, no key experts reported heroin purity to be high. Emphasising reports of a lack of 'high quality' heroin were the responses from eight key experts who reported a recent decrease in purity (compared to only three in 2005). Eight key experts reported a recent increase in heroin purity, five key experts reported that heroin purity had remained stable and two indicated fluctuations.

One key expert reported that the low purity of heroin was directly responsible for decreased rates of heroin overdose.

4.4. Use

4.4.1. Prevalence of heroin use

The most recent survey of heroin use in the general community of Victoria was undertaken within the 2004 National Drug Strategy Household Survey. According to the findings from this survey, 0.3% of the Victorian population aged 14 years and over had used heroin within the past 12 months (Australian Institute of Health and Welfare, 2005). A small proportion (0.2%) also reported using other opiates/opioids during that time. Findings reported in the 2004 survey also estimate that 0.4% of the Victorian population aged 14 years and over had injected drugs during the past 12 months (Australian Institute of Health and Welfare, 2005).²

Additional indicators of injecting drug use are available from the Australian NSP Survey conducted annually through the National Centre in HIV Epidemiology and Clinical Research (National Centre in HIV Epidemiology and Clinical Research, 2006). In addition to finger-prick blood samples and self-reported risk behaviour information, the 2005 national survey of NSP clients collected self-report information regarding the last drug injected by participants. Half (54%) of the 194 NSP clients recruited from five NSP sites in Victoria reported that they had last injected heroin (59% in 2004; 58% in 2003; 57% in 2002; 58% in 2001; and 87% in 2000), while 23% identified amphetamine (16% in 2004; 24% in 2003; 23% in 2002; 24% in 2001; and 6% in 2000). The proportions reporting the last drug injected as heroin or amphetamine in the 2005 NSP survey are very similar to those reported in this year's IDRS IDU survey (heroin 45% and methamphetamine 27%).

4.4.2. Current patterns of heroin use

Over half (59%) of the IDU survey respondents reported that heroin was their main drug of choice, and 76% (n=114) reported having used and injected heroin during the preceding six months. Prevalence of recent heroin use by Melbourne IDU respondents decreased in 2006 (76% compared to 89% in 2005, 86% in 2004 and 90% in 2003).

The most common route of heroin administration by IDU in the preceding six months was injection (76%), with 9% reporting smoking the drug (i.e. heating heroin and inhaling the resulting vapours) and 4% reporting swallowing it.

Respondents reported using heroin on a median of 56 days during the past six months, with one-fifth (21%, n=24) reporting using heroin on a daily basis during that time. As with prevalence of recent heroin use, frequency of use also decreased over the past three years, and in 2006 it reached the lowest level reported since the IDRS study commenced in Melbourne (median 56 days; see Figure 4).

_

² The sample was based on households, therefore homeless and institutionalised persons were not included in the survey.

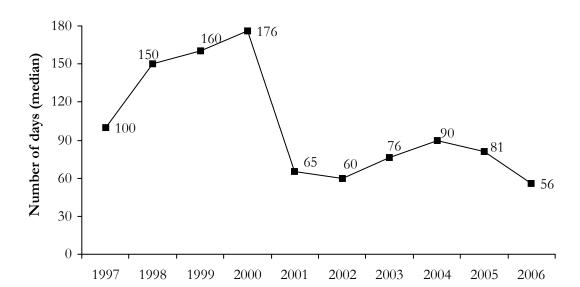


Figure 4: Number of days of heroin use in preceding six months, 1997-2006

Source: IDRS IDU interviews

Key experts again reported that the frequency and amount of heroin used differed greatly between clients, and was affected by multiple variables such as an individual's financial situation, heroin availability, proximity to pay day, social circumstances, and commitments such as work or school. Several key experts also reported that clients involved in treatment – primarily pharmacotherapy programs – were not using large quantities or using as frequently as other users.

Of the key experts who reported habitual use, most estimated that the majority of their clients were daily users, using anywhere between one and six times per day. Key experts noted an enormous range of usage patterns amongst heroin users, providing a range of 0.4 of a gram to 2 grams per day (as opposed to 0.3 of a gram to 1 gram per day in 2005). Other key experts reported clients spending \$50-\$200 per day on heroin. One key expert stated that some clients were reporting heroin habits of \$800 per day; however, this KE noted that this amount was questionable because it did not reflect the clients' lifestyles. It was suggested that reporting such a costly heroin habit might simply be an attempt to obtain extra medication when participating in withdrawal programs.

In contrast to the 2005 IDRS report, many key experts reported the existence of clients who were only occasional or recreational users; however, they were generally reported to be the minority. Key experts noted that some clients used heroin weekly or fortnightly, and supplemented their non-heroin using days with drugs such as cannabis, benzodiazepines and pharmacotherapies. Such users might simply be opportunistic 'pay day' users, or as one key expert noted, clients who were previously abstinent for a period of time and had started 'dabbling' again. One key expert reported the existence of binge heroin users who obtain fifty fits (needles/syringes) from an NSP at one time and then use recreationally and/or at parties.

As noted in previous IDRS reports, the overwhelming majority of key experts reporting on heroin identified injection as the primary route of administration. Of the key experts who were aware of clients smoking heroin, estimates ranged from 5-15% of clients. Several of these key experts again noted that smoking was more common in Vietnamese

or South-East Asian communities, often when individuals are first using heroin before proceeding to injection as the primary route of administration. One key expert mentioned that some users smoke heroin to control their use and/or addiction, whilst another reported that NSP staff discuss alternative routes of administration with users to promote vein care; however, this KE noted that it was very difficult for heroin users to 'go backwards'. One key expert reported that smoking had decreased over time, whereas another stated that more people were currently smoking heroin when compared to previous years.

When including all responses regarding the age range of heroin users, key experts reported a range of 12-85 years old. A more conservative age range of 13-65 was supported by the majority, reflecting the range provided in 2005. Additional demographic details of heroin users were also similar to those of previous years in relation to gender (again predominantly male, 50-80%), level of education (majority left during or on completion of Year 9 or 10) and employment (majority were unemployed and/or on sickness benefits). However, some key experts noted that many heroin users were employed (up to 50% of clients) and represented a range of occupations in a variety of industries. Many of these key experts mentioned that employed heroin users generally occupied part-time or casual jobs such as factory workers, machine operators, or positions in hospitality. One NSP worker stated that the service became 'very busy' around 5-5:30pm, and another that lunchtimes were also busier periods, suggesting that some heroin users worked '9 to 5' jobs. Some key experts indicated that a minority of heroin users worked in the sex industry, and some were also secondary and tertiary students.

Key expert reports regarding ethnicity suggested that although the majority of heroin users in many areas were from English speaking backgrounds, there were a range of additional nationalities, specific to regions or suburbs. For example, some key experts noted users in specific locales from Asian and European backgrounds. Only a small minority of heroin users were reported to be of Aboriginal or Torres Strait Islander origin. In contrast to the 2005 IDRS report, only one key expert observed an increase in users of African origin.

Key experts reported that many (30-99%) of their clients had previously come into contact with the criminal justice system. Some reported that the likelihood of client contact with police increased with age. Some key experts mentioned that contact with the criminal justice system could have been a result of drug use; however, this was not always the case. Several key experts also reported that many of their clients had previously been incarcerated.

Many key experts indicated some degree of poly-drug use amongst heroin users, reporting use of a variety of licit and illicit substances in addition to heroin, including: methamphetamine, cannabis, benzodiazepines, both licit and illicit pharmacotherapies, ecstasy, morphine and other opiates, alcohol and tobacco. Several key experts reported that heroin users sought alternative drugs when they were unable to obtain heroin of an acceptable quality, or when they were unable to access heroin at all.

In addition to poly-drug use, unsafe injecting was listed by key experts as an example of a high-risk behaviour practiced by some heroin users. Risky practices included: injecting into unsafe parts of the body (such as the groin or eye), injecting in one/the same spot on the body, injecting alone, using non-sterile needles and injecting equipment, sharing injecting equipment, and not having enough equipment to filter properly. One key expert mentioned that some clients reported using cigarette filters for filtering their drugs. Nevertheless, key experts generally perceived heroin users – particularly the older and

more experienced users – to be 'quite insightful' and educated in regard to injecting-related harms and safe methods of use.

Several key experts were able to comment on age differences amongst heroin users. Older users were generally perceived to be more 'organised' and 'regular', and used less frequently and in smaller quantities in comparison to younger users. Younger users were described as more 'frantic' and more prone to poly-drug use, experimentation, and bingeing on a variety of licit and illicit substances; however, such activity was reported to be dependent on drug availability and the user's financial situation. One key expert mentioned that a user's age might affect the type of substances consumed in addition to heroin. For example, younger users might be more likely to use methamphetamine, whereas older users might prefer morphine. Key experts in Collingwood and Richmond reported a higher prevalence of older users in those areas.

4.5. Heroin-related harms

4.5.1. Law enforcement

Table 5 details consumer (e.g. possession/use) and provider (e.g. trafficking/manufacture) arrests for heroin and other opioids during 2004-2005 (Victoria and Australia). During that financial year over half (58%) of the arrests made in Australia for heroin and other opioid offences occurred in Victoria (data provided by the Australian Crime Commission)³. In Victoria the total number of consumer and provider arrests for heroin and other opioids remained relatively stable since 2003-2004 (n=2079 in 2003-2004).

Table 5: Heroin and other opioids: consumer and provider arrests, Victoria and national, 2004-2005⁺

	Victoria (n)	Australia (n)	% of national arrests
Consumer	1156	2051	56.4
Provider	772	1207	64.0
TOTAL*	1928	3304	58.3

Source: Australian Crime Commission

odice. Tustranan crime commission

^{*} Includes those offenders for whom consumer/provider status was not stated

⁺²⁰⁰⁵⁻²⁰⁰⁶ data not available at the time of publication

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

4.5.2. Health

Self-reported overdose

Self-reported overdose data for the years 1997 to 2006 are summarised in Table 6. The majority (64%) of the 2006 respondents reported that they had ever experienced one or more heroin overdoses, 50% had been administered Narcan (a fast-acting opioid antagonist given to reverse the effects of heroin in the case of an overdose), and three-quarters of the respondents (75%) had witnessed another person's overdose. The respondents who had previously experienced an overdose reported a median of 48 months (or 4 years) since they last overdosed, and a median of two overdoses in total. Those who had been administered Narcan also reported a median period of 48 months since they were last administered the drug. Of the respondents to the 2006 survey, 2% (n=3) reported having experienced at least one overdose within the previous six months, and 1% (n=2) had received Narcan during that time.

Table 6: Reported experience of heroin overdose for IDU survey respondents, 1997 to 2006

Heroin overdose*	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Lifetime	138	148	83	83	88	96	90	89	89	96
overdose	(56%)	(52%)	(54%)	(55%)	(58%)	(62%)	(59%)	(59%)	(59%)	(64%)
Lifetime receipt of Narcan	51 (37%)	99 (35%)	52 (34%)	64 (42%)	68 (45%)	80 (51%)	75 (49%)	75 (50%)	62 (41%)	75 (50%)
Overdose last 6 mths	42	54	37	40	20	17	12	15	16	3
	(17%)	(19%)	(24%)	(27%)	(13%)	(11%)	(8%)	(10%)	(11%)	(2%)
Received Narcan last 6 mths	25 (10%)	37 (13%)	25 (16%)	29 (20%)	19 (13%)	14 (9%)	8 (5%)	10 (7%)	10 (7%)	2 (1%)
Witnessed	194	229	111	128	116	131	126	116	128	113
overdose	(76%)	(78%)	(72%)	(85%)	(77%)	(85%)	(83%)	(77%)	(85%)	(75%)

Source: IDRS IDU interviews

Table 6 shows that reported lifetime experience of heroin overdose by IDU respondents was relatively stable between 1997 and 2006. However, reported recent experience of overdose (within last six months) has decreased since 2000, as has receipt of Narcan. In 2006, the proportion of IDU respondents who reported recent overdose (2%, n=3) reached its lowest level since the IDRS study commenced in Melbourne in 1997. For the most part, reports of having ever witnessed another person's overdose have been relatively stable in Melbourne since 1997 (between 72%-85%).

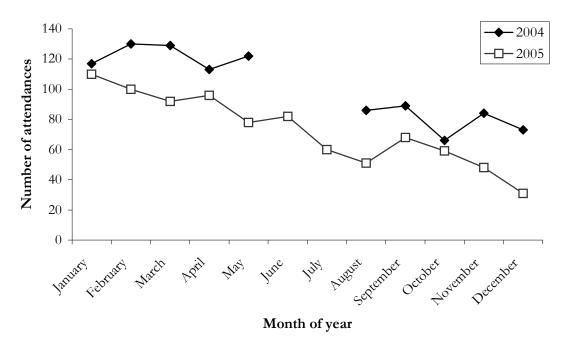
^{*} Proportion of all respondents in 1997 (N=254), 1998 (N=293), 1999 (N=154), 2000 (N=152), 2001 (N=151), 2002 (N=156), 2003 (N=152), 2004 (N=150), 2005 (N=150), 2006 (N=150)

Non-fatal heroin overdose attended by ambulance

A database of Melbourne Metropolitan Ambulance Service (MAS) attendances at drugrelated overdose episodes is maintained by Turning Point Alcohol and Drug Centre and contains reliable data from June 1998 onwards. Figure 5 shows the monthly totals of non-fatal heroin overdose for the periods of January 2004-December 2005 (excluding Jun-Jul 2004).

During 2005 there were 875 non-fatal heroin overdoses attended by the Metropolitan Ambulance Service, and in 2004 there were a total of 1009. During 2005, the number of non-fatal heroin overdoses attended each month steadily declined, from 110 recorded in January, to a low of 31 recorded in December that year (the most recent data available). In both years (2004 & 2005) the average estimated age of cases was 31 years (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre).

Figure 5: Monthly totals of non-fatal heroin overdose in Melbourne, Jan 2004-Dec 2005 (excluding Jun-Jul 2004)



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

Monthly numbers of non-fatal heroin overdoses attended by ambulances in Melbourne remain significantly lower than the peak of 461 recorded in December 1999 (Jenkinson, Miller & Fry, 2004).

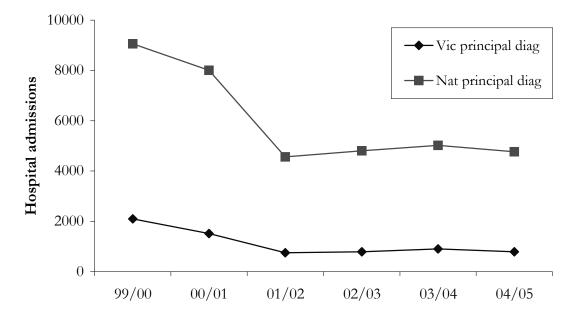
Hospital admissions

The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. Opioid-related hospital admissions for Victoria and Australia (among persons aged 15-54 years) are presented in Figure 6. *Principal diagnosis* refers to the diagnosis established (after study) to be chiefly responsible for occasioning the patient's episode of care in hospital.

It is evident from this data that the number of opioid-related hospital admissions, both in Victoria and nationally, decreased between 1999/00-2001/02. This is consistent with

both IDU and KE reports of a reduction in Melbourne's heroin supply during that period (Jenkinson, Fry & Miller, 2004). Since that time the number of opioid-related hospital admissions has remained relatively stable, both in Victoria and across Australia. Opioid-related hospital admissions account for the highest proportion of drug-related admissions (compared to amphetamine, cocaine and cannabis).

Figure 6: Opioid-related hospital admissions, Victoria and national, 1999/00-2004/05



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

Heroin-related deaths

The data for trends in heroin-related mortality in Victoria are summarised in Figure 7. This figure, based on Victorian Institute of Forensic Medicine data (Woods, et al. 2006), shows an increasing trend in the number of heroin-related deaths in Victoria throughout the 1990s, before a dramatic decline in numbers between 2000 (n=331) and 2001 (n=50). The sharp decline in fatalities from 2000 to 2001 is consistent with the timing of what is known was a severe period of reduction in Melbourne's heroin supply (Miller, Fry & Dietze, 2001). During 2001 to 2004 the number of heroin-related deaths in Victoria again increased (to figures similar to those seen in the early-mid 1990s), although more recently (in 2005) the number of deaths again decreased (to n=71), and remain much lower than the peak of 359 reported in 1999.

Figure 7: Heroin-related deaths in Victoria, 1991-2005

Source: Victorian Institute of Forensic Medicine (Report No. 9: April 2006)

4.6. Treatment

Alcohol and Drug Information System (ADIS)

Data on people seeking treatment from specialist alcohol and drug agencies⁴ in Victoria is collected via the Alcohol and Drug Information System (ADIS). During 2004/05, 48,311 courses of treatment were delivered to clients⁵ in Victorian specialist alcohol and drug services. Of this, approximately 22% of the courses of treatment delivered to clients were for heroin-related problems, making heroin the most frequently occurring main presenting drug problem after alcohol (37%) and cannabis (23%). Approximately 6% of courses of treatment were for amphetamine-related problems (Source: ADIS Database, Victorian Department of Human Services, analysis by Turning Point Alcohol and Drug Centre Inc., unpublished data).

DirectLine calls

DirectLine is a 24-hour specialist telephone service in Victoria (operated by Turning Point Alcohol & Drug Centre) that provides counselling, referral and advice about drug use and related issues. All calls to DirectLine are logged to an electronic database that can provide information about caller drugs of concern, calls from drug users, and calls about drug users. Call numbers provide an indication of the level of concern about particular drug types.

During 2005 DirectLine responded to 2,574 calls where heroin was identified as a drug of concern. This represents 10% of all drug-identified calls to DirectLine in that year (Turning Point Alcohol and Drug Centre Inc., unpublished data). The proportion of drug-related calls where heroin was identified steadily decreased from 1999-2002, and has remained stable to decreasing since (see Figure 8).

-

⁴ Federal and state government funded.

⁵ Clients in specialist alcohol and drug services include both drug users and non-users. Non-users may include partner, family or friends.

An additional 7,287 calls were made in 2005 where other opioids were identified as a drug of concern. This represents 29% of all drug-identified calls in that year (Turning Point Alcohol and Drug Centre Inc., unpublished data). In comparison with heroin, the proportion of drug-identified calls regarding other opioids⁶ generally increased up to 2003, and has been relatively stable since.

- Heroin **L3**7 Other opioids % of drug identified calls 0

Figure 8: DirectLine calls where drug of concern identified as heroin or other opioids*, 1999-2005

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

*Other opioids include methadone, buprenorphine, morphine and codeine. Analgesics (not further defined), and paracetamol were also included in this category. It is important to note that methadone- and buprenorphine-related calls may be regarding licit use and not necessarily illicit use.

Pharmacotherapy consumers

Data from the Victorian Department of Human Services Drugs and Poisons Regulation Group records of methadone, buprenorphine and buprenorphine/naloxone consumers (in Victoria) are shown in Figure 9. The Drugs and Poisons Regulation Group conducts a routine phone census of all pharmacies to monitor consumer numbers.

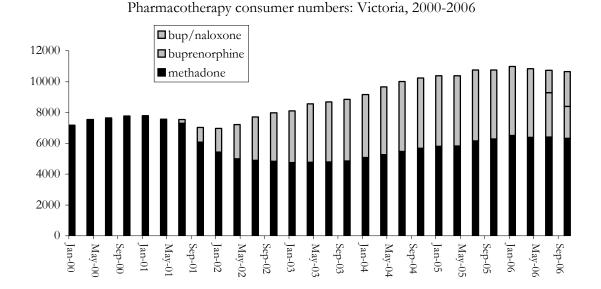
This demonstrates a relatively steady decrease in the number of consumers registered on the methadone maintenance program from April 2001 (n= 7,571) to January 2003 (n= 4,745), and a concomitant increase in the number of consumers registered on buprenorphine (Subutex) during that time. In 2003 the number of consumers registered on methadone maintenance stabilised at approximately 4,800, before increasing again during 2004-2006. Approximately 4,500 consumers were registered on buprenorphine (Subutex) between April 2004 and April 2006; however, since that time there has been a dramatic reduction in the number of consumers registered on this drug. This decrease in the number of buprenorphine consumers coincides with the introduction of a second buprenorphine preparation in Australia, the buprenorphine/naloxone combination drug

_

⁶ Other opioids include: licit and illicit methadone, buprenorphine, morphine and codeine. Analgesics (not further defined) were also included in this category, as was paracetamol. Therefore, this grouping is not strictly 'other opioids'.

(Suboxone). Suboxone was approved by the Therapeutic Goods Administration (TGA) on July 27th 2005 (Lintzeris et al, 2006), and became available on the Pharmaceutical Benefits Scheme (PBS) on April 1st 2006 (Australian Government Department of Health and Ageing, 2006). Since that time a large proportion of buprenorphine consumers have been transferred to buprenorphine/naloxone. In October 2006 there were 6,323 consumers registered on methadone, 2,265 consumers registered on the combination buprenorphine/naloxone product (Suboxone), and 2,075 consumers registered on buprenorphine (Subutex) in Victoria.

Figure 9: Census estimate of the number of Victorian pharmacotherapy consumers, Jan 2000 to Oct 2006



Source: Drugs and Poisons Regulation Group, Victorian Department of Human Services

Of the 60 IDU participants who were currently in treatment, the majority (48%) reported that the main type of drug treatment they were in was methadone maintenance. The other main treatment types were buprenorphine (Subutex) maintenance (37%) and buprenorphine/naloxone (Suboxone) maintenance (13%).

Key experts reported that a range of clients (10-100%) were in treatment. Primary treatments were reported to be pharmacotherapies and counselling, followed by detox/rapid detox, withdrawal and NA meetings.

In 2006 key experts noted that the new pharmacotherapy Suboxone was introduced, and that there was a rapid uptake in treatment with this drug. The introduction of Suboxone initiated a variety of responses from key experts. Some reported positive client reactions towards the pharmacotherapy, such as the potential for unsupervised dosing, whereas others reported that some clients claimed they were 'forced' to change to Suboxone from buprenorphine (Subutex), and consequently transferred back to methadone or other forms of treatment.

Consistent with IDRS reports of previous years, one key expert reported client use of naltrexone implants. An additional key expert reported that 'almost all' clients were on

benzodiazepines, whereas another mentioned that 'some' clients were on pain management medication, such as morphine.

With regard to changes to treatment-seeking behaviour, five key experts reported increases in the number of clients seeking treatment. Three key experts attributed this increase in treatment-seeking to a decrease in heroin quality and availability. One key expert reported a decreased demand for detox, whereas another noted that withdrawal waiting lists were getting longer.

One key expert mentioned that it is difficult for users to find \$35 per week to fund their pharmacotherapy treatment, and it is especially hard for couples to find \$70 per week when they are also supporting children.

Additional information regarding the introduction of Suboxone can be found in subsequent sections of this report. This is a new, yet important issue that will continue to be monitored in future IDRS studies.

4.7. Summary of heroin trends

Table 7 contains a summary of trends in the price, purity, availability and use of heroin as ascertained in the 2006 Victorian IDRS study.

Heroin is reported as very easy to obtain at present, and availability has generally been stable over the past six months. The reported prices of cap and gram amounts of heroin were stable to increasing in 2006 and the current purity of heroin was reported as medium to low. Prevalence and frequency of recent heroin use by participating Melbourne IDU decreased in 2006.

Table 7: Summary of heroin price, availability, purity and use trends in Melbourne, 2006

Price	
Cap	• \$40 (stable)
Gram	• \$350 (stable-increasing)
Availability	• Very easy (57%), easy (30%)
	• Stable (52%)
	Mostly accessed through known dealers (65%)
Purity	Average purity 17% (range 0%-69%) ^a
	• Medium (44%) to low (34%) ^b
	• Increasing (40%), decreasing (29%), stable (20%) ^b
Use	Mostly rock form (94%)
	Decreasing prevalence of use
	Decreasing frequency of use

^a Based on purity of drug seizures made by Victoria Police (Victoria Police Forensic Services Department)

^b Based on IDU reports

5.0 METHAMPHETAMINE

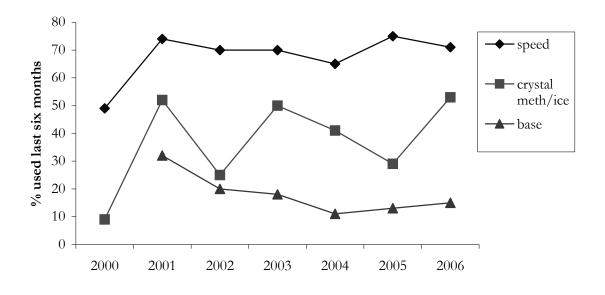
Different forms of methamphetamine are currently available in Australia. For the past five years the IDRS study has collected information on the use, price, purity and availability of three main forms of methamphetamine: speed, base and crystal meth/ice, along with information on the use of amphetamine liquid and pharmaceutical stimulants (e.g. dexamphetamine, Ritalin).

As in previous years, almost the entire sample (97%) of IDU survey respondents reported having used at least one of the three main forms of methamphetamine (speed, base or crystal meth/ice) in their lifetime, and 81% (n=121) reported use during the previous six months (speed 71%, crystal meth/ice 53%, and base 15%). Nine percent of the sample also reported recently using pharmaceutical stimulants (prescribed or not prescribed), and three percent amphetamine liquid.

Lifetime injection of speed was reported by 91% of the sample, crystal meth/ice (75%), base (29%), liquid (19%) and pharmaceutical stimulants (13%). Recent injection of speed (last six months) was reported by 68% of the sample, crystal meth/ice (49%), base (14%), liquid (3%) and pharmaceutical stimulants (5%).

Speed powder remains the most commonly used and injected form of methamphetamine by Melbourne IDU respondents. Prevalence of use of both speed and base remained relatively stable in 2006, whilst the use of crystal meth/ice reportedly increased (see Figure 10), although frequency of use of this form remained low (less than once a month).

Figure 10: Proportion of IDU reporting methamphetamine use in the past six months, 2000-2006



Source: IDRS IDU interviews

In 2006 there was a significant amount of media coverage regarding 'ice', the crystalline form of methamphetamine, and, as such, this was a regular topic of discussion in key expert interviews – much more than in previous years – with a diverse range of views and observations supplied by respondents from a variety of services. However, crystal meth/ice was not the only form of methamphetamine discussed – key experts also commented on speed powder and methamphetamine in general. As in 2005, most key experts (n=51) were able to provide some comment on methamphetamine use, trafficking and/or production. It is important to note that when key expert reports refer to 'methamphetamine', it includes all possible derivatives, such as speed powder, base and crystal meth/ice, unless otherwise stated.

In 2006 43% (n=65) of the IDU sample were able to comment confidently on the price, purity and availability of speed powder, 18% (n=27) could comment on crystal meth/ice, while only 1% (n=2) could comment on base.

5.1. Price

Prices paid for the three forms of methamphetamine (i.e. speed, base and crystal meth/ice), by Melbourne IDU on the last occasion of purchase are presented in Table 8. The median and modal (most frequently reported) price, price range, and the number of respondents who reported purchasing each quantity in the past six months, are reported.

Speed

Just under half (43%, n=65) of the respondents were able to comment on the current price of speed. The median price of the most recent purchase of a 'point' of speed (n=10) was \$35 (range \$20-\$50), a half-gram (n=32) was \$100 (range \$50-\$150), and a gram (n=12) was \$200 (range \$100-\$200). Prices reported for all three quantities of speed have remained relatively stable since 2003.

Half-grams were the most commonly purchased quantity of speed by respondents (n=32) in the last six months, followed by grams (n=12) and points (n=10). The majority (80%, n=32) of respondents who commented on the price of speed reported stable prices over the last six months, while 8% (n=5) said there was an increase in price, and another 8% (n=5) reported that the price of speed had fluctuated during that time.

Base

Only one respondent reported purchasing a 'point(s)' of base during the past six months, paying \$50 on the last occasion. Another respondent reported purchasing a gram(s) of base during that time for \$180, and a half-gram(s) for \$100. One respondent reported that the price of base had been stable recently, while the other reported that it had increased.

Crystal meth/ice

On the most recent purchase occasion, the current median price reported for a gram of crystal meth/ice (n=3) was \$200 (range \$200-\$350). Thirteen respondents reported purchasing a 'point(s)' of crystal meth/ice during the past six months, all paying \$50 on the last occasion. Prices reported for crystal meth/ice by IDU participants were relatively stable in 2006, although once again few participants reported purchasing these quantities during the past six months.

The majority of participants who responded to the questions regarding the price of crystal meth/ice (n=27) reported that it had remained stable over the past six months (70%, n=19), while 18% (n=5) reported that the price of crystal meth/ice had increased during that time.

Table 8: Price of most recent methamphetamine purchases by IDU, 2006

Amount	Median			Number of
	price*	price*	\$	purchasers*
	\$	\$		n
Speed				
Gram	200	200	100-200	12
	(200)	(200)	(100-250)	(23)
Half gram	100	100	50-150	32
	(100)	(100)	(70-180)	(36)
Point (0.1 gram)	35	30 ^a	20-50	10
	(40)	(50)	(20-50)	(33)
Base				
Gram	180	180	180	1
	(150)	(100°)	(100-300)	(3)
Point (0.1 gram)	50	50	50	1
	(45)	(40 ^a)	(40-50)	(2)
Ice				
Gram	200	200	200-350	3
	(300)	(180°)	(180-400)	(4)
Point (0.1 gram)	50	50	50	13
	(50)	(50)	(40-50)	(5)

Source: IDRS IDU interviews

In 2006 five key experts reported on the price of methamphetamine. One key expert reported that the price was generally \$250 for one gram; however, prices of methamphetamine often differed according to amounts and purities. For example, thirteen grams of a substance containing 7% methamphetamine and 2% MDMA cost \$2200, whereas 0.1 of a gram of a substance containing 25% methamphetamine cost \$100, and 0.9 of a gram of a substance containing 18% methamphetamine and 3.5% MDMA cost \$250.

The remaining key experts reported exclusively on different forms of methamphetamine. Two key experts reported that crystal meth/ice sold for \$50 a point, and another noted that one gram of crystal meth/ice cost between \$350 and \$500, or \$10 for a point or 'bump'. An additional key expert reported that speed powder cost \$100 for half a gram and \$50 for a point, whereas the price of ice fluctuated.

Two key experts reported that the price of methamphetamine had remained stable, while another key expert reported that prices had fluctuated during the last six to twelve months.

5.2. Availability

The majority of IDU reported that methamphetamine (particularly speed and crystal meth/ice) was currently easy to very easy to access, and availability had been stable over the past six months. In terms of source of methamphetamine, most people reported scoring from known dealers or friends.

Four key experts reported that methamphetamine was currently easy to obtain, and one reported it was very easy to obtain. In contrast to the 2005 IDRS report, a large number of key experts (n=22) were able to comment on changes regarding the availability of different forms of methamphetamine. Seven key experts reported that methamphetamine

^{* 2005} data is presented in brackets

^a Multiple modes exist. The smallest value is shown.

in general was easier to obtain, and two reported that the availability of methamphetamine had remained stable. Four key experts reported that the availability of speed powder had increased, and six indicated that crystal meth/ice was easier to obtain. One key expert also mentioned that it had become easier to obtain speed powder in some regional areas than in previous years.

Speed

The overwhelming majority of IDU respondents who commented on the availability of speed (n=65) reported that it was either very easy (59%, n=38), or easy (29%, n=19) to obtain at present, with 12% (n=8) reporting difficulty in obtaining the drug. Most indicated that the availability had remained stable (69%, n=45) in the previous six months, with 12% (n=8) reporting that it had become more difficult, and 11% (n=7) that it had become easier during that time.

Participants who commented on where they sourced their speed during the past six months (n=65), reported that they scored/purchased from known dealers (49%, n=32) and friends (46%, n=30). One-quarter (25%, n=16) also reported purchasing from acquaintances during that time, and 20% (n=13) from street dealers. Participants were also asked what venues (locations) they normally scored at, with most reporting an agreed public location (52%, n=33), dealer's home (31%, n=20), or friend's home (23%, n=15).

Base

Of the two respondents who were able to comment on the availability of base, one reported that it was currently easy to score, and that availability has been stable over the past six months. This respondent reported usually scoring from a mobile dealer. The other respondent to this section reported that base was currently difficult to obtain, and had become more difficult recently. This respondent reported usually scoring from a dealer's home or an agreed public location.

Crystal meth/ice

Of the 27 respondents to this question, the majority reported that crystal meth/ice was easy (44%, n=12) or very easy (37%, n=10) to obtain at present (compared to last year when most (62%) reported that it was difficult to obtain). In 2006, five respondents (19%) reported that crystal meth/ice was difficult to obtain. Seventy percent (n=19) reported that the ease of access had remained stable over the last six months, while six participants (22%) reported access as becoming more difficult.

Most participants who commented on where they sourced their crystal meth/ice during the past six months (n=29), reported that they scored/purchased from known dealers (54%, n=14). Smaller numbers reported purchasing from friends (19%, n=5), unknown dealers (15%, n=4) and street dealers (15%, n=4). Participants were also asked what venues (locations) they normally scored at, with most reporting an agreed public location (58%, n=15) or dealer's home (19%, n=5).

Methamphetamine manufacture and trafficking/importation

In 2006, seven key experts reported an increase in the amount of clandestine methamphetamine laboratories discovered in Victoria. It was reported that these labs were created by people from a diverse range of backgrounds, and were situated throughout the state, in both rural and urban areas. Key experts indicated that it was virtually impossible to provide any general demographics regarding specific locales and the type of people who created clandestine labs. Sizes ranged from smaller, 'Beavis and Butthead' or 'Mum and Pop', laboratories, to much larger laboratories associated with

organised crime. Most of these key experts reported that speed powder was the primary type of methamphetamine produced/discovered at these laboratories, though crystal meth/ice was sometimes present. Firearms were also reported to be commonly found at these locations.

Key experts noticed an increasing prevalence of the cutting agent dimethyl sulphone at clandestine laboratories in 2006. Dimethyl sulphone does not char like glucose when burned; therefore it may be cut with methamphetamine to enable it to be smoked. To counter the rising number of methamphetamine laboratories discovered annually in Victoria, some key experts recommended that Victoria implement a program to monitor and restrict the sale of precursor chemicals (primarily pseudoephedrine) in pharmacies, similar to 'Project Stop' which currently operates in Queensland.

Two key experts reported that most precursors for methamphetamine production were imported from China. They also noted an increase in clandestine laboratories in Asia, stating that Asian illicit drug manufacturers are moving away from heroin towards methamphetamine production, primarily because there is more money to be made from methamphetamine than heroin. Key experts indicated that precursor materials are available in Australia for the production of methamphetamine; however, there are tighter controls around such substances in Australia as opposed to the controls in Asia.

A few key experts reported that more people were selling methamphetamine. One key expert reported that, like heroin, most methamphetamine trafficking was accomplished via mobile phones, and that there was not a significant street market for methamphetamine in Melbourne. This notion was supported by another key expert who reported that there was no street market for methamphetamine in Melbourne, indicating that these drugs were sold mostly in private, social venues. One key expert noted that police activity eradicating high-profile methamphetamine manufacturers and traffickers had encouraged more 'middle level' dealers to become involved in the drug market.

5.3. Purity

Participants reported using a variety of methamphetamine forms during the past six months, including speed powder 71% (75% in 2005, 65% in 2004, 70% in 2003, 70% in 2002), crystal meth/ice 53% (29% in 2005, 41% in 2004, 50% in 2003, 26% in 2002), methamphetamine base 15% (13% in 2005, 11% in 2004, 18% in 2003, 19% in 2002), amphetamine liquid 3% (5% in 2005, 2% in 2004, 5% in 2003, 7% in 2002) and pharmaceutical stimulants 9% (9% in 2005, 9% in 2004, 6% in 2003).

Reports of methamphetamine purity were variable, particularly in the case of speed powder, where similar proportions of IDU reported that the purity was currently low (23%), medium (34%), or high (25%). Most reported that crystal meth/ice was of medium to high purity, while there were too few reports on the purity of base to identify trends. Participants generally reported that the purity of methamphetamine (speed and crystal meth/ice) had been stable to decreasing over the past six months.

Speed

As in previous years, reports on the current purity of speed were variable. Of those who commented (n=65), one-third (34%, n=22) reported that the current purity of speed was medium, 25% (n=16) reported that it was high, 23% (n=15) reported it was low, and 19% (n=12) reported that the purity currently fluctuated. In 2006 respondents reported that the purity of speed had remained stable during the previous six months (35%, n=23), decreased (34%, n=22), or fluctuated (22%, n=14); again highlighting the disparate responses to this section.

Base

Only two respondents were able to comment on the purity of base. One respondent reported that current purity of base was high, and had increased during the previous six months. The other respondent reported that the purity of base was currently low, and had recently decreased.

Crystal meth/ice

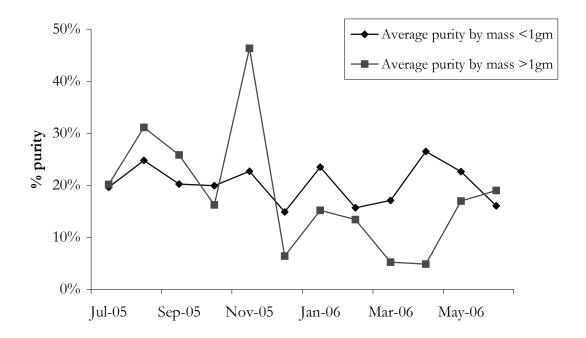
Of the 27 people who commented on this section, most reported that the purity of crystal meth/ice was medium (44%, n=12) to high (30%, n=8). One-third of the respondents (33%, n=9) reported that the purity of crystal meth/ice had been stable over the past six months, while another third (33%, n=9) believed it had decreased, and 22% (n=6) reported that it had fluctuated during that time.

The average purity of <1gm and >1gm methamphetamine seizures by law enforcement agencies in Victoria during 2005/2006 financial year is shown in Figure 11. All Victorian seizures are tested for purity. As shown in Figure 11, the average purity of smaller seizures (<1gm) was relatively stable over the 12-month period, while the average purity of the larger (>1gm) seizures was more variable.

The mean purity of all seizures of methamphetamine analysed in Victoria during the 2005/2006 financial year was 19% (range 5% to 46%), compared to 21% reported in 2004/2005, 31% reported in 2003/2004, 33% reported in 2002/2003, 20% reported in 2001/2002 and 21% reported in 2000/2001 (Jenkinson & O'Keeffe, 2006).

There were very few amphetamine seizures (as opposed to methamphetamine seizures) made by law enforcement agencies in Victoria during 2005/2006 financial year. The purity of the small amount of amphetamine seized was generally very low (<10%). (Unpublished data: Victoria Police Forensic Services Department).

Figure 11: Average purity of methamphetamine seizures by Victorian law enforcement, July 2005-June 2006



Source: Victoria Police Forensic Services Department

In contrast to the 2005 IDRS, in 2006 ten key experts were able to comment on the purity of crystal meth/ice or methamphetamine in general. No key experts were able to comment exclusively on the purity of speed. Three key experts reported that crystal meth/ice purity had decreased; with one of these noting a significant drop in the last 12 months from 70-80% purity, to 25-40%. This key expert stated that an emerging trend in 2006 was the cutting of ice with dimethyl sulphone. Conversely, two key experts reported an increase in the quality of crystal meth/ice.

Two additional key experts reported that methamphetamine purity had remained stable; while another indicated that the quality of methamphetamine fluctuated. One key expert reported that the purity of methamphetamine ranged from approximately 5% at street level, to 70% in clandestine laboratories.

In 2006 key experts supplied a variety of responses regarding forms of methamphetamine reportedly used by clients. Eight key experts reported that clients were using a relatively even mixture of both speed powder and crystal meth/ice. Twelve key experts reported that most clients used speed powder with a smaller proportion using crystal meth/ice, whereas three key experts reported that clients mainly used crystal meth/ice with a smaller percentage using speed. One key expert reported that base was the main form of methamphetamine used by clients in the inner west of Melbourne.

Eight key experts noted that while a large proportion of clients reported crystal meth/ice as the main form of methamphetamine used, they questioned the authenticity of such claims for a variety of reasons, including: the availability of a variety of different forms, colours and names of methamphetamine which could potentially cause confusion among users; clients presented with behaviour that did not necessarily reflect crystal meth/ice use (behaviour that was not unpredictable or violent, for example); using ice was a popular drug craze, therefore users may have been trying to identify themselves with this

trend; other forms of methamphetamine may have been combined with cutting agents (such as dimethyl sulphone) to give substances the appearance of ice; and methamphetamine manufacturers/dealers/traffickers might have marketed alternative substances as 'ice' to stimulate business.

5.4. Use

5.4.1. Prevalence of methamphetamine use

The most recent survey of methamphetamine use in the general community of Victoria was undertaken within the 2004 National Drug Strategy Household Survey. According to the findings of this survey, 2.8% of the Victorian population aged 14 years and over had used methamphetamine (non-medical) within the past twelve months (Australian Institute of Health and Welfare, 2005).⁷

Data from the 2004 Victorian Youth Alcohol and Drug Survey (Premier's Drug Prevention Council, 2005) found that of the 16-24 year olds surveyed (N=6,005), 15% reported having used methamphetamine in their lifetime and 10% reported use in the 12 months prior to the survey. The main forms of methamphetamine used were powder (87%) and crystal (19%) and most respondents reported snorting (72%) or swallowing (59%) these drug types (Premier's Drug Prevention Council, 2005).

5.4.2. Current patterns of methamphetamine use

Almost all 2006 IDU survey respondents reported lifetime use of at least one form of methamphetamine (speed 93%, crystal meth/ice 79%, base 30%, and amphetamine liquid 22%), while 17% nominated methamphetamine as their drug of choice.

Over three-quarters (81%, n=121) of IDU survey respondents reported using methamphetamine during the past six months (speed 71%, crystal meth/ice 53%, base 15%, and liquid 3%). Overall, although there was a reported increase in the prevalence of crystal meth/ice use this year, the number of respondents reporting use of at least one form of methamphetamine remained stable (81%, compared to 79% in 2005, 71% in 2004, 79% in 2003).

Injecting was reported to be the most commonly used route of administration of methamphetamine during the previous six months (78%, n=117). Smaller numbers reported smoking (24%, n=36), snorting (13%, n=19) and swallowing (7%, n=11) methamphetamine during that time.

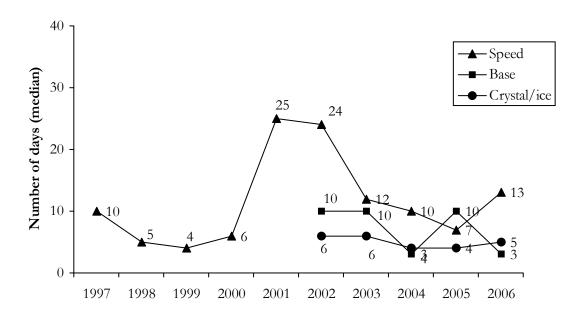
Those who had used methamphetamine during the past six months reported a median of 16 days use (speed 13 days; crystal meth/ice 5 days; base 3 days; and liquid 3 days). Fifteen respondents to the 2006 IDU survey reported using methamphetamine between every second day and daily during the previous six months.

Whilst frequency of speed use increased slightly in 2006 (see Figure 12), it still remains much lower than that reported during 2001-2002 (which was the time of the reported reduction in heroin in Melbourne).

_

⁷ The sample was based on households, therefore homeless and institutionalised persons were not included in the survey.

Figure 12: Number of days used past six months (median) by IDU participants – speed, base and crystal/ice, 1997-2006*



Source: IDRS IDU interviews

Eighteen key experts reported changes in methamphetamine use during the previous six months. Ten reported a general increase in methamphetamine use, five reported an increase in crystal meth/ice use, and one noted that speed use had become more prevalent. A few key experts attributed this perceived increase in methamphetamine use to a decrease in heroin quality and/or availability; with one key expert mentioning that clients who normally identified as heroin users were using methamphetamine to supplement the lack of 'decent' heroin. This key expert also remarked that there might not have been increases in methamphetamine use, just increases in the number of people presenting as methamphetamine users. This notion was supported by another key expert who suggested that users might have simply become more aware of available health services, particularly with the large amount of media attention in 2006 concerning the issue of methamphetamine – in particular ice – use. One key expert also suggested that ice might be popular because it has more 'value for money'. For example, an ecstasy pill might be purchased for \$30 and last eight hours, whereas a point of ice might be purchased for \$50 and last for at least twenty-four hours.

In contrast, one key expert reported that methamphetamine use had generally fluctuated, and another reported that while crystal meth/ice use had decreased in Melbourne's eastern regions, methamphetamine use had fluctuated in general. Three key experts reported no changes in methamphetamine use during the previous six months, and one reported no change in speed use.

All seven key experts commenting on frequency of use reported that infrequent, recreational and/or binge use was more common than regular/daily use among methamphetamine users. One key expert noted that while most methamphetamine use was generally irregular, younger users demonstrated more sporadic and opportunistic use when compared to older methamphetamine users. For example, older users might purchase larger quantities and use over time, whereas younger users were more likely to

^{*} Data not available for base and crystal/ice prior to 2002

score and use immediately. This key expert noted that such spontaneous use could be more risky and detrimental to an individual's health. No key experts were able to comment on specific quantities of methamphetamine used by clients.

Of the key experts who commented on route of administration, smoking and injecting were reported to be the most popular methods of consuming methamphetamine. Most key experts indicated that clients were more likely to inject speed rather than smoke it, whereas both injecting and smoking (via glass pipes) were associated with crystal meth/ice administration. Two key experts reported that route of administration was sometimes dependent on the user's age, stating that younger people were more likely to inject methamphetamine than older users. One NSP worker noted that a lot of clients probably smoked ice; however, these users were not easily accessed by NSP staff. Another key expert suggested that smoking ice might reduce the uptake of injecting behaviour.

According to most key experts, poly-drug use appeared to be a major component of methamphetamine use. Key experts citing methamphetamine as a primary substance noted that other drugs commonly used were alcohol, cannabis and benzodiazepines, the latter particularly for the 'comedown'. Methamphetamine was also frequently identified by key experts as a secondary substance, with proportions of clients using methamphetamine in addition to at least one other substance ranging from 'a few' to 'most'.

Key experts also noted that methamphetamine was used by a diverse group of people; with one key expert stating that methamphetamine use 'crosses all borders and social groups'. This was emphasised by different populations of drug users employing different methods of administering methamphetamine. For example, one key expert stated that ice was usually smoked in the gay clubbing community and injecting the substance was perceived to be 'dirty', whereas some NSP workers indicated that injecting ice had become more 'acceptable' and it was widespread amongst users in their regions. One key expert reported that methamphetamine use was becoming more popular amongst many drug-using populations, and noted that there were a small proportion of problematic or 'high-end' methamphetamine users – namely ice injectors – whose social functioning was significantly poor. This notion was supported by another key expert, who suggested that the small population of problematic methamphetamine users failed to demonstrate adherence to positive, ongoing commitments in life, such as employment, education and relationships. This group of users was also reported to exhibit more prominent and adverse health problems compared to other, less frequent, methamphetamine users. Some of these problems included 'meth mouth', violent and irrational behaviour, and other overt signs of physical and mental health deterioration.

Finally, one key expert highlighted the need to identify effective treatment approaches for methamphetamine users. This key expert stressed that treatment options were currently available for methamphetamine users; however, it was noted that this client group was often difficult to engage when attempting to treat specific problems, as opposed to heroin-using clients, for example. Consequently, this key expert recommended that more attention be directed towards determining adequate treatment for methamphetamine users and their families.

5.5. Methamphetamine-related harms

5.5.1. Law enforcement

Table 9 details consumer (e.g. possession/use) and provider (e.g. trafficking/manufacture) arrests for amphetamine-type stimulants, during 2004-2005 (in Victoria and Australia). During that financial year just over one-fifth (22%) of the arrests made in Australia for amphetamine-type stimulant offences occurred in Victoria (data provided by the Australian Crime Commission)⁸. In Victoria the total number of consumer and provider arrests for amphetamine-type stimulants remained relatively stable since 2003-2004 (N=2,240 in 2003-2004).

Table 9: Amphetamine-type stimulants: consumer and provider arrests, Victoria and national, 2004-2005+

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

Source: Australian Crime Commission

5.5.2. Health

DirectLine calls

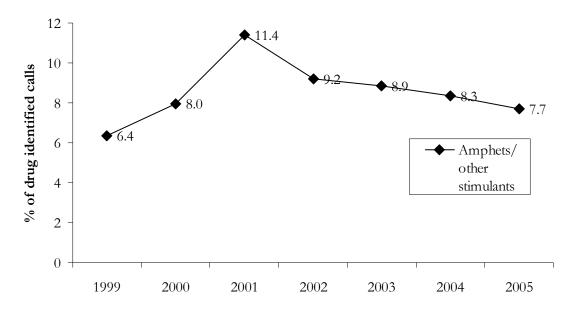
During 2005 DirectLine responded to 1,942 calls where amphetamines and/or other stimulants were identified as a drug of concern. This represents eight percent of all drug-identified calls to DirectLine in that year (Turning Point Alcohol and Drug Centre Inc., unpublished data). The proportion of drug-related calls where amphetamines and/or other stimulants were identified has gradually declined since 2001 (see Figure 13).

^{*}Includes those offenders for whom consumer/provider status was not stated

^{+ 2005-2006} data not available at the time of publication

⁸ Proportions (%) should be interpreted with caution due to the lack of uniformity across states and territories in the recording and storing of data on illicit drug arrests.

Figure 13: DirectLine calls where drug of concern identified as amphetamines and/or other stimulants, 1999-2005

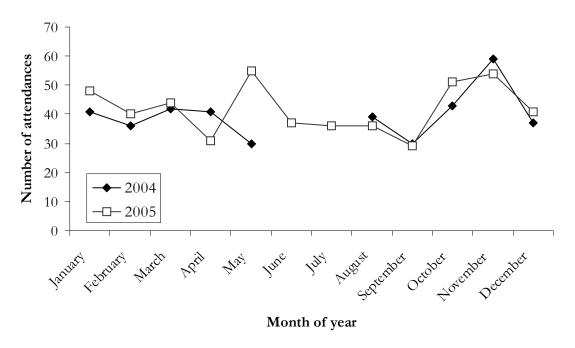


Source: DirectLine, Turning Point Alcohol and Drug Centre Inc (unpublished data)

Amphetamine-related events attended by ambulance

The database maintained by Turning Point also records other drugs (in addition to heroin) that are mentioned in a patient care record (PCR). However, in contrast to heroin overdose, where there are definitive clinical symptoms of overdose (such as pinpoint pupils and a positive response to naloxone), these cases only report when the drug names are recorded by the ambulance officers on the PCR. Therefore, the figures reported here and in the following sections (cocaine and ecstasy) should only be interpreted as indicators and would significantly under-report the actual number of people seen by ambulance officers who had used these drugs.

Figure 14: Monthly totals of ambulance attendance where amphetamines were mentioned in Melbourne, Jan 2004-Dec 2005 (excluding Jun-Jul 2004)



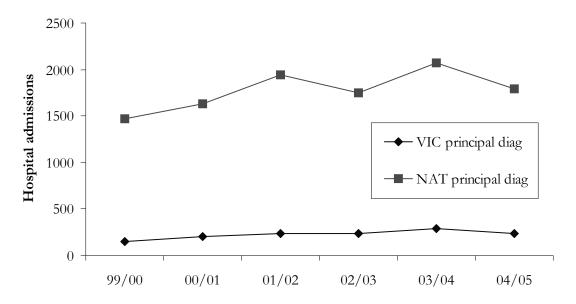
Source: Metropolitan Ambulance Service and Turning Point Alcohol and Drug Centre

Figure 14 reports the monthly totals of ambulance attendances where amphetamine use was mentioned in Melbourne, January 2004-December 2005 (excluding Jun-Jul 2004). Ambulance attendances where amphetamine use was recorded were relatively stable, ranging between approximately 30-60 per month during this time. In 2005 there were a total of 502 attendances where amphetamine use was mentioned, and in 2004 there were a total of 398. In 2005 the average estimated age of cases was 28yrs and in 2004 it was 27yrs (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre).

Hospital admissions

The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. Amphetamine-related hospital admissions for Victoria and Australia (among persons aged 15-54 years) are presented in Figure 15. It is evident from this data that the number of amphetamine-related hospital admissions has generally been stable-increasing over the period of analysis, although a slight decrease was observed in 2004/05.

Figure 15: Amphetamine-related hospital admissions, Victoria and national, 1999/00-2004/05



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

5.6. Summary of methamphetamine trends

Trends in methamphetamine price, availability, purity and use are summarised in Table 10. Findings from the 2006 IDRS study suggest that the prevalence of methamphetamine use among injecting drug users in Melbourne is high; however, frequency of use remains lower than the levels reported during 2001-2002. As in previous years, these drugs were predominantly sourced through known dealers and friends (social networks).

Table 10: Summary of methamphetamine price, availability, purity and use trends in Melbourne, 2006

in Weibourne, 2000	Speed	Base	Crystal/ice			
Last price paid						
Point Median Mode Gram Median Mode Availability	\$35 \$30 a \$200 \$200 n=65	\$50 [^] \$50 [^] \$50 [^] \$180	\$50 \$50 \$200^ \$200^ n=27			
Availability	 Very easy (59%) - easy (29%) Stable (69%) Scored from known dealer (49%), friend (46%) 	 Easy (50%), difficult (50%) Scored from dealer's home (50%), mobile dealer (50%) 	 Easy (44%), very easy (37%), difficult (19%) Stable (70%) Scored from known dealer (54%), friend (19%) 			
		easy to very easy and stab om known dealers or frier				
Purity	n=65 • Current purity variable: medium (34%), high (25%) low (23%) • Purity stable (35%), decreased (34%), fluctuated (22%)	n=2 • Purity high (50%), low (50%)	n=27 • Purity medium (44%) to high (30%) • Purity stable (33%), decreased (33%), fluctuated (22%)			
Use	 Prevalence of use of speed and base use was relatively stable in 2006, while prevalence of use of crystal meth/ice increased (although frequency of use remains low) Frequency of methamphetamine use was around once a fortnight (median days =16) Price has remained stable 					

^a Multiple modes exist. The smallest value is shown ^ Small numbers reported (n<10)

6.0 COCAINE

Nineteen percent of the Melbourne IDRS survey respondents (n=28) reported using cocaine during the past six months; however, only six respondents were able to comment on the price, purity and availability of this drug. Data collected from the six people who were able to comment on cocaine have been included in this report; however, it is difficult to draw many conclusions, or to identify clear trends from such a small sample. Cocaine use by the IDU surveyed in Melbourne still appears to be fairly opportunistic.

In 2006 no key experts were able to report *exclusively* on cocaine, but some key experts were able to comment on the availability, price, purity and/or patterns of cocaine use.

6.1. Price

In 2006 four IDU were able to comment on the current price of a gram of cocaine, reporting that this quantity currently costs \$350 (range \$300-500), while two participants reported that the current price for a half-gram of cocaine was \$150-200. No participants could comment on current cap prices, but one participant reported that a point of cocaine currently costs \$50. Few participants reported having actually purchased these quantities during the previous six months. One respondent reported purchasing a gram(s) during the past six months, paying \$400 on the last occasion of purchase, another bought a half-gram(s) for \$200, and a third respondent reported buying a point(s) of cocaine for \$50 during that time. In 2006 three of the six respondents to this section (50%) reported that the price of cocaine had remained stable during the past six months, while others reported that it had fluctuated (17%, n=1), or that they did not know if the price had changed during that time (33%, n=2).

Table 11 summarises the last purchase price of cocaine in Melbourne reported by the injecting drug users who participated in the 1997-2006 IDRS studies. Although data collected in Melbourne over the past ten years suggests that the price of a cap of cocaine ranges from \$50-100, and a gram of cocaine ranges from \$200-400, it is not possible to identify clear trends due to the consistently small number of price reports obtained in each of the IDU surveys during this period of time.

Table 11: Prices of last purchase of cocaine in Melbourne reported by IDU survey respondents 1997-2006

C		1	1000	2000	2001	2002	2002	2004	2005	2006
Cocaine	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Cap (\$)										
median	60	80	60	80	100	65			50	
mode	50 a	50 a	60	80	100	30a			50	
range	50-	50-			50-	30-				
O	200	100			200	110				
purchasers	3	3	1	1	5	4			1	
(n)										
Gram (\$)										
median	325	220	230	238	225	200	250	200	350	400
mode	400	200	220 a	250	200	150 a	250	200	270 a	400
range	200-	175-	220-	150-	200-	150-		200	270-	
U	500	400	240	250	500	450			400	
purchasers	12	21	2	6	15	7	1	2	3	1
(n)										

Source: IDRS IDU interviews

^a Multiple modes exist. The smallest value is shown

6.2. Availability

Four of the six participants (67%) who responded to this section reported that cocaine was currently easy to access, while the other two participants (33%) stated that cocaine was currently very easy to access. All respondents (n=6) reported that availability had been stable during the previous six months.

Respondents most commonly reported buying cocaine from friends (33%, n=2) or known dealers (33%, n=2), and in terms of the scoring (buying) location, participants reported that they usually scored from a dealer's home (33%, n=2) or agreed public location (33%, n=2).

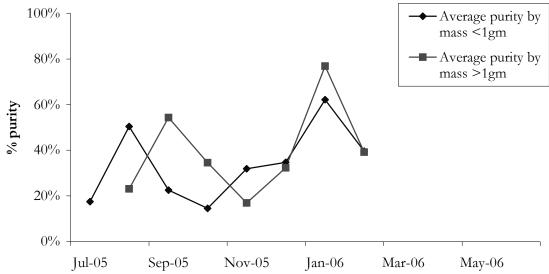
6.3. Purity

Eighteen percent (n=27) of those who participated in the 2006 IDU survey reported having used cocaine in powder form during the past six months (compared to 14% in 2005, 7% in 2004, 13% in 2003, and 16% in 2002) and 4 respondents (3%) reported using "crack" (a smokeable form of cocaine). The principal routes of administration reported for recent cocaine use (last six months) were injecting (13%, n=20) and snorting (11%, n=16).

Three of the five respondents (60%) who commented on current cocaine purity reported that it was high at present. Another respondent reported that the purity of cocaine was medium (20%, n=1), and the other that it fluctuated (20%, n=1). Most reported that cocaine purity had been stable (60%, n=3) during the previous six months.

The average purity levels of cocaine seizures analysed by law enforcement agencies in Victoria during the 2005/2006 financial year are shown in Figure 16. During the period March-June 2006 there were no seizures of cocaine.

Figure 16: Average purity of cocaine seizures by Victorian law enforcement, July 2005-June 2006



Source: Victoria Police Forensic Services Department

The mean purity of all seizures analysed during this period was 37% (range 15% to 77%), compared to 42% in 2004/05, 40% in 2003/04, 27% in 2002/03, 38% in 2001/02 and 40% in 2000/01. Hence, whilst there was some variability in the purity of cocaine seized by Victoria Police during 2005/06 (see Figure 16), the average purity of cocaine seizures in this jurisdiction has generally ranged from approximately 30-40% since 2000/01 (Jenkinson & O'Keeffe, 2006).

6.4. Use

6.4.1. Prevalence of cocaine use

The most recent survey of cocaine use within the general community of Victoria was undertaken within the 2004 National Drug Strategy Household Survey. The findings of this survey suggest a low level of cocaine use within the Victorian community, with 1.2% of the Victorian population aged 14 years and over reporting use of this drug within the past 12 months (Australian Institute of Health and Welfare, 2005).9

Data from the recent Victorian Youth Alcohol and Drug Survey (Premier's Drug Prevention Council, 2005) indicates that, of the 16-24 year olds sampled (N=6,005), reported use of cocaine was infrequent, with 6% reporting ever having used cocaine, and 3% reporting use in the 12 months prior to survey.

6.4.2. Current patterns of cocaine use

Although over half of the respondents to the IDU survey (59%, n=88) reported lifetime use of cocaine, only two people (1%) identified cocaine as their main drug of choice. Nineteen percent of the IDU surveyed reported having used cocaine in the previous six months, and 13% reported having injected the drug during that time. Among those who reported using cocaine during the past six months, frequency of use was very low (median of 2 days), suggesting irregular, opportunistic use patterns.

6.5. Key expert reports

Despite the fact that the price of cocaine remained too expensive for many drug users, twenty-one key experts reported that 'a few' of their client base used cocaine occasionally or recreationally (an increase in comparison to results from the 2005 report). Two of these key experts reported cocaine as a primary drug (in addition to at least one other drug) for a very small number of clients. Most (n=10) key experts reported no changes regarding patterns of use. Of those who could report on the predominant form of cocaine used by clients, most (n=13) key experts indicated that it was powder; only one key expert noted that approximately 10% of cocaine users reported using what they believed was crack cocaine.

One key expert reported that the price of cocaine was as low as \$250 per gram, while another noted that clients had reported an increase in price. One key expert reported a decrease in cocaine purity in comparison to previous years, from 60-70% five to seven years ago, to 40-50% in 2006. Route of administration for cocaine was usually snorting, although one key expert noted that some clients might swallow cocaine, and two reported that injecting was an option. Two key experts reported an increased prevalence of cocaine use. One reported regular use of cocaine at clubs on the weekends, rather than just at large functions, such as Christmas parties. However, cocaine was generally reported to be a secondary substance in these situations.

_

⁹ The sample was based on households, therefore homeless and institutionalised persons were not included in the survey.

Whilst the prevalence of recent cocaine use by the IDU surveyed increased slightly in 2006 (19% compared to 15% in 2005 and 10% in 2004), and 21 key experts reported occasional use of cocaine by 'a few' of their client base, the use of cocaine amongst the IDU sample in Melbourne still remains low and infrequent and appears to be fairly opportunistic.

6.6. Cocaine-related harms

6.6.1. Law enforcement

Table 12 details consumer (e.g. possession/use) and provider (e.g. trafficking/manufacture) arrests for cocaine during 2004-2005 (in Victoria and Australia). During that financial year approximately one-fifth (21%) of the arrests made in Australia for cocaine offences occurred in Victoria (data provided by the Australian Crime Commission)¹⁰. In Victoria the total number of consumer and provider arrests for amphetamine-type stimulants have remained relatively stable since 2003-2004 (n=85 in 2003-2004).

Table 12: Cocaine: consumer and provider arrests, Victoria and national, 2004-2005+

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

Source: Australian Crime Commission

6.6.2. Health

DirectLine calls

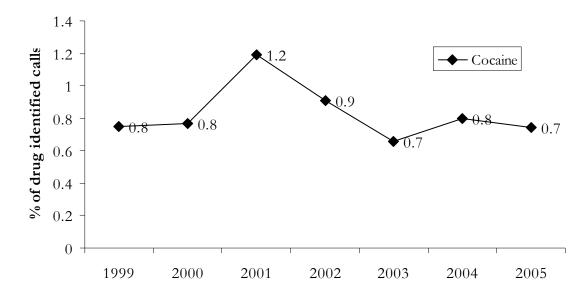
During 2005 DirectLine responded to 186 calls where cocaine was identified as a drug of concern. This represents less than one percent of all calls made to DirectLine during that time where a drug of concern was cited (Turning Point Alcohol and Drug Centre Inc., unpublished data). The proportion of drug-related calls where cocaine was identified has remained very low (around 1%) during the past seven years (see Figure 17).

^{*}Includes those offenders for whom consumer/provider status was not stated

⁺²⁰⁰⁵⁻²⁰⁰⁶ data not available at the time of publication

¹⁰ Proportions (%) should be interpreted with caution due to the lack of uniformity across states and territories in the recording and storing of data on illicit drug arrests.

Figure 17: DirectLine calls where drug of concern identified as cocaine, 1999-2005



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

Cocaine-related events attended by ambulance

In 2005 there were a total of 48 ambulance attendances in Melbourne where cocaine use was mentioned (there were 26 in total in 2004 and 23 in 2003). The estimated average age of cases in 2005 was 28 years (which was similar to the 30 years reported in 2004 and 29 years in 2003) (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre). As noted in previous years (Jenkinson & O'Keeffe, 2005 & 2006; Jenkinson, Miller & Fry, 2004), these numbers are too small to provide clear trends, but generally indicate that people who are using cocaine in Melbourne are not coming into contact with the ambulance service.

Hospital admissions

The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. Cocaine-related hospital admissions for Victoria and Australia (among persons aged 15-54 years) are presented in Figure 18. It is evident from this data that the number of cocaine-related hospital admissions in Victoria was relatively stable between 1999/00-2002/03, but has since increased (in 2003/04 and 2004/05). Nationally, the number of cocaine-related hospital admissions increased between 1999/00 and 2001/02, and then significantly decreased in 2003. Since that time the number of cocaine-related hospital admissions across Australia has again steadily increased (in both 2003/04 and 2004/05). The number of cocaine-related hospital admissions is much lower than for opioids or amphetamines.

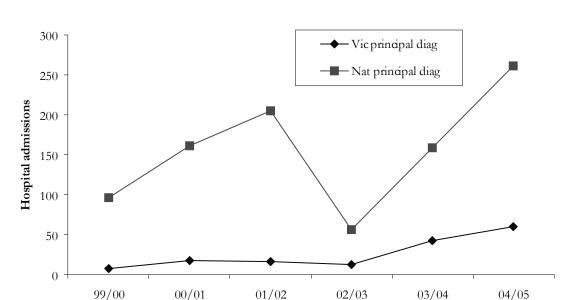


Figure 18: Cocaine-related hospital admissions, Victoria and national, 1999/00-2004/05

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

6.7. Summary of cocaine trends

Trends in cocaine price, availability, purity, and use are summarised in Table 13. In general, it appears that cocaine use remains infrequent amongst IDU in Melbourne. Only six people (4% of the IDU sample) could comment on the price, purity and availability of cocaine. This may be due to the lack of availability, the cost, and possibly the widespread availability and use of other drug types in Melbourne.

Table 13: Summary of cocaine price, availability, purity and use trends in Melbourne, 2006

- · · - - ,	
Price	
Point	• \$50
Gram	• \$350 (range \$300-500)
	Stable
Availability	• Easy (67%, n=4)
	• Stable (100%, n=6)
Purity	Average purity 37% (range 15% to 77%) ^a
	• Stable (60%, n=3) ^b
Use	• Slight increase in prevalence of use last 6 months
	(19%)
	• Very low frequency of use (median 2 days out of
	180), suggesting opportunistic use patterns
	Sourced from friends or known dealers
	Trends are not clear and require further research

^a Based on purity of drug seizures made by Victoria Police (Victoria Police Forensic Services Department)

^b Based on IDU reports

7.0 CANNABIS

Cannabis was the most commonly used illicit drug by IDU survey respondents in the last six months (83%, n=124), with 97% of respondents reporting having used cannabis in their lifetime. Two-thirds of the respondents to the 2006 survey (63%) were able to report on aspects of cannabis price, potency and availability.

For the past four years questions related to cannabis have been asked separately for hydroponic cannabis and bush/naturally-grown cannabis. Most respondents to the 2006 survey had used hydroponic cannabis in the past six months (81%), while 37% reported having used bush/naturally-grown cannabis during that time.

Eleven key experts reported that cannabis was the primary drug of choice amongst the drug users with whom they had the most contact. As in previous years, many key experts (n=27) reported that cannabis use within their client groups was prevalent. Cannabis was commonly reported to be used as a secondary drug in combination with heroin and/or methamphetamine.

7.1. Price

Prices paid for hydroponic and bush/naturally-grown cannabis on the last occasion of purchase by Melbourne IDU are presented in Table 14. The median and modal (most frequently reported) price, and the number of respondents who reported purchasing each quantity during the past six months are reported.

Table 14: Price of most recent cannabis purchases by IDU, 2006*

Amount	Hydro median price (\$)	Hydro modal price (\$)	Hydro no. of purchasers	Bush median price (\$)	Bush modal price (\$)	Bush no. of purchasers
Ounce	200 (250)	200 (250)	21 (30)	(200)	(200)	- (4)
Half-ounce	140 (130)	150 (120a)	18 (22)	90 (140)	90 (70 °)	1 (3)
Quarter-ounce	70 (70)	70 (70)	61 (55)	70 (60)	70 (80)	5 (7)
Three grams	50 (50)	50 (50)	32 (37)	50 (50)	50 (50)	2 (2)
Gram	20 (20)	20 (20)	53 (75)	10 (20)	10 (20)	5 (20)

Source: IDRS IDU interviews

Prices of cannabis in Melbourne reported by IDU survey participants in the 1997-2006 IDRS studies are shown in Figure 19. This shows that the reported price of a gram of cannabis has been stable over this period, while the price per ounce has steadily declined.

^{*2005} data in brackets

^a Multiple modes exist. The smallest value is shown

Figure 19: Price of cannabis* in Melbourne reported by IDU survey respondents 1997-2006

Source: IDRS IDU interviews

1997

1998

1999

0

* 2003-2006 prices reflect those for hydroponic cannabis only (the form used most often). Any increase may be due to this distinction

2001

2002

2003*

2004* 2005* 2006*

2000

Hydroponic cannabis

Median prices reported for hydroponic cannabis on the most recent occasion of purchase were: gram \$20; three grams \$50; quarter-ounce \$70; half-ounce \$140; and ounce \$200. Prices reported for these quantities of hydroponic cannabis remained relatively stable in 2006, although the median price of an ounce decreased slightly.

During the previous six months, the majority of respondents who reported having used hydroponic cannabis (n=121) reported purchasing quarter-ounces (50%) and grams (44%). Other quantities of hydro purchased included 3 grams, often referred to as '3 for \$50' (26%), and ounces (17%).

The majority of IDU who commented on trends reported that the price of hydroponic cannabis had not changed (78%, stable) during the past six months, while smaller numbers indicated that prices had decreased (6%), or fluctuated (10%) during that time.

Bush/naturally-grown cannabis

In terms of bush/naturally-grown cannabis, median prices reported on the most recent occasion of purchase were: gram \$10; three grams \$50; quarter-ounce \$70; half-ounce \$90. The majority (86%) of those able to comment on bush/naturally-grown cannabis reported that prices had been stable during the past six months. The most common purchase quantities of bush/naturally-grown cannabis in the past six months were quarter-ounces and grams.

While many key experts noted that they do not usually discuss the price of drugs with their clients, five key experts did comment on the price of cannabis. Three key experts reported that the price for a quarter-ounce of cannabis could be \$70 or above. Another reported an approximate cost of \$80 per quarter-ounce, though noted that clients usually bought whatever amount they could afford at the time. One key expert reported that three grams of cannabis could be obtained for \$50. While unable to report on any exact prices of cannabis, an additional key expert perceived the drug to currently be 'pretty cheap'. Six key experts reported that the price of cannabis had remained stable, whereas one assumed that the price had increased. One key expert reported that some younger users were selling cannabis to support their own use.

7.2. Availability

Hydroponic cannabis

The overwhelming majority of the IDU sample who commented on the availability of hydroponic cannabis (n=93), reported that it was very easy (71%) or easy (25%) to obtain, and that the availability of this form of cannabis had remained stable during the preceding six months (85%). This group commonly purchased cannabis from friends (61%), known dealers (46%), or acquaintances (22%). The locations (or venues) where people normally purchased hydroponic cannabis included a friend's home (42%), dealer's home (30%), or an agreed public location (29%).

Bush/naturally-grown cannabis

Approximately half of those who were able to comment on the availability of bush/naturally-grown cannabis (n=14) reported that it was easy (29%) to very easy (29%) to obtain at present. The remaining 43% reported that this form of cannabis was difficult to obtain at present. Close to three-quarters (71%) reported that the availability of bush cannabis had been stable during the past six months. This group commonly purchased this type of cannabis from friends (46%), acquaintances (31%), or unknown dealers (23%). The locations (or venues) that people normally purchased bush cannabis from included a friend's home (31%), an agreed public location (31%), or home delivery (31%).

Consistent with results of previous years, key experts reported that cannabis remained very easy to obtain in 2006, and availability had been stable. One key expert noted that cannabis was the 'number one' seized drug.

7.3. Potency

Participants had used a variety of different forms of cannabis during the six months prior to interview, including: hydroponically grown cannabis (81%), bush/naturally-grown cannabis (37%), hash (9%) and hash oil (7%). As in previous years, the type most commonly used was hydroponic (95%).

Hydroponic cannabis

The potency of hydroponic cannabis was generally rated as high (60%, n=55), or medium (34%, n=31) by the IDU who commented (n=92), with most respondents stating that the potency had remained stable (64%, n=59). Sixteen percent of respondents (n=15) reported that the potency of hydro cannabis had increased, while 14% (n=13) believed it had fluctuated during this time.

Bush/naturally-grown cannabis

The potency of bush/naturally-grown cannabis was generally rated as medium (43%, n=6) by the respondents who commented on this section (n=14), while others reported that it was currently high (29%, n=4), or low (21%, n=3). Most respondents stated that the potency of bush cannabis had remained stable (71%, n=10) over the previous six months.

The majority of key experts reported that the most common form of cannabis used was hydroponic, and noted that it was less common to hear about people using 'home-grown' or 'bush' cannabis. Of those who could comment on the purity of cannabis, key experts generally perceived it to be high and stable. Two key experts reported that the high purity of cannabis could be attributed to hydroponic production of the drug. One of these noted that the purity of hydroponic cannabis was increasing, and that a lot of users, dealers and manufacturers of cannabis were diverting to 'hydro'.

7.4. Use

7.4.1. Prevalence of cannabis use

The most recent survey of cannabis use within the general community of Victoria was undertaken within the 2004 National Drug Strategy Household Survey. The findings of this survey suggest that cannabis is the most commonly used illicit drug within the Victorian community, with 9.8% of the Victorian population aged 14 years and over reporting use of the drug within the past 12 months (Australian Institute of Health and Welfare, 2005).¹¹

Data from the 2004 Victorian Youth Alcohol and Drug Survey (Premier's Drug Prevention Council, 2005) show that cannabis was the most frequently and widely used illicit drug by the 6,005 young people surveyed. Approximately half (48%) of the 16-24 year olds sampled reported lifetime use of cannabis, and over one-quarter of the sample (27%) reported use in the 12 months prior to the survey. Alcohol and tobacco were reported to be the drugs most commonly used at the same time as cannabis.

7.4.2. Current patterns of cannabis use

IDU survey respondents who reported cannabis use in the past six months (n=124) reported using this drug on a median of 180 days during that period (i.e. daily use). In terms of illicit drugs being reported on in the IDRS, cannabis remains the most frequently used drug.

Ten key experts who commented on cannabis trends reported that most of their clients were daily smokers. Amounts of cannabis used ranged from one gram to a quarter-ounce per day – a much wider range than that reported in 2005. Two key experts remarked that they discussed amounts clients used in terms of 'bongs' or 'cones' rather than grams, providing ranges of 5-40 bongs and 6-12 cones per day. This amount could fluctuate depending on availability and price. One key expert also suggested that amounts used may depend on how many people were smoking together – if more people were smoking together they would use more cannabis. One key expert reported that mental health issues associated with cannabis use could be attributed to increasing amounts of cannabis used, and changing methods of use (such as increased use of smoking bongs compared to joints).

_

¹¹ The sample was based on households, therefore homeless and institutionalised persons were not included in the survey.

In contrast to the previous year, several key experts indicated that many daily users were constant smokers, generally using 'all day'. One key expert mentioned that these constant smokers were usually unemployed, out of school, and were unable to maintain work or relationships. Others used cannabis just a few times a day, whilst some clients used cannabis on a social or recreational basis on the weekends. Key experts had much less contact with social or recreational users in comparison to clients using on a daily basis.

Two key experts reported that cannabis users who attend school were likely to base their use around the school day, using before, after and on weekends. It was noted that some clients might use at school; however, such use was described as rare and difficult, as school authorities generally became aware of this behaviour relatively quickly. These key experts also reported that many young cannabis users might have substance-using parents or siblings, and/or have grown-up in families or environments where use of cannabis and other drugs was perceived to be 'normal' behaviour.

The majority of primary cannabis users were believed to be smoking cannabis with the use of bongs, while some smoked joints. Key experts indicated that it was rare to hear of clients swallowing cannabis; however, one key expert reported that staff at their service encouraged cannabis-using clients to swallow the substance as a harm minimisation measure.

As reported in the 2005 IDRS, key experts indicated that a high proportion of all clients were using cannabis; however, few actually received treatment primarily for cannabis use. Some key experts attributed this in part to a 'normalisation' of cannabis use by both users and society. One key expert stated that drug use is secondary to issues such as accommodation, physical and/or mental health, emotional problems, unemployment, and legal issues.

For most clients cannabis was used as part of a poly-drug use regime. Drugs used in addition to cannabis included: alcohol, tobacco, heroin, methamphetamine, (speed and crystal meth/ice), ecstasy and benzodiazepines. One key expert reported that some cannabis users were also daily 'chromers'.

7.5. Cannabis-related harms

7.5.1. Law enforcement

Table 15 details consumer (e.g. possession/use) and provider (e.g. trafficking/manufacture) arrests for cannabis during 2004-2005 (in Victoria and Australia). During that financial year 14% of the arrests made in Australia for cannabis offences occurred in Victoria (data provided by the Australian Crime Commission). ¹² In Victoria the total number of consumer and provider arrests for cannabis have remained relatively stable since 2003-2004 (N=7,620 in 2003-2004).

¹² Proportions (%) should be interpreted with caution due to the lack of uniformity across states and territories in the recording and storing of data on illicit drug arrests.

Table 15: Cannabis: consumer and provider arrests, Victoria and national, 2004-2005+

	Victoria (n)	Australia (n)	% of national arrests
Consumer	5,064	44,248	11.4
Provider	2,157	8,626	25.0
TOTAL*	7,221	53,053	13.6

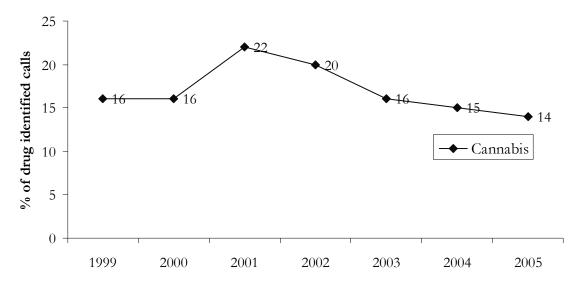
Source: Australian Crime Commission

7.5.2. Health

DirectLine calls

During 2005, DirectLine responded to 3,449 calls where cannabis was identified as a drug of concern. This represents 14% of all drug-identified calls to DirectLine during that year (Turning Point Alcohol and Drug Centre Inc., unpublished data). The proportion of drug-related calls where cannabis was identified has gradually decreased since 2001, when cannabis-related calls peaked at 22% (see Figure 20).

Figure 20: DirectLine calls where drug of concern identified as cannabis, 1999-2005



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

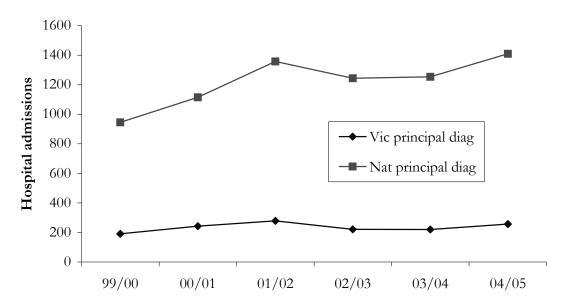
Hospital admissions

The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare. Cannabis-related hospital admissions for Victoria and Australia (among persons aged 15-54 years) are presented in Figure 21. It is evident from this data that the number of cannabis-related hospital admissions in Victoria has been relatively stable over the period of analysis.

^{*}Includes those offenders for whom consumer/provider status was not stated

⁺²⁰⁰⁵⁻²⁰⁰⁶ data not available at the time of publication

Figure 21: Cannabis-related hospital admissions, Victoria and national, 1999/00-2004/05



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

7.6. Summary of cannabis trends

A summary of cannabis trends is shown in Table 16. The Melbourne cannabis market and patterns of use continue to be relatively stable. Reported cannabis availability and perceived potency remained relatively unchanged between 1997 and 2006. In terms of the number of users, cannabis was the most widely used illicit drug by participating Melbourne IDU, and the most frequently used in terms of number of days.

Table 16: Summary of cannabis price, availability, purity and use trends in Melbourne, 2006

Price	
(median)	• \$20 (hydro); \$10 (bush)
Gram	• \$200 (hydro)
Ounce	Prices stable-decreasing
Availability	• Hydro readily available last six months (easy-very easy 96%), stable
	(85%)
	Bush very easy to easy (58%) and stable (71%)
Potency	• Hydro high (60%) to medium (34%) ^a
	Bush medium (43%) ^a
	Stable potency
Use	Most widely used illicit drug by IDU sample (prevalence 83%)
	Most frequently used illicit drug in terms of number of days (daily)
	use)
	Cannabis commonly used concurrently with other drugs
	Accessed primarily through social networks (i.e. friends)

^a Based on IDU estimates of THC potency

8.0 OPIOIDS

8.1. Methadone

For the purposes of the IDRS study, the category 'methadone' includes methadone syrup and methadone in tablet form (known as Physeptone). Seventy-eight percent of the 2006 IDU sample reported lifetime use of methadone, which is similar to the proportions reported over the past four years.

Approximately one-third of respondents (31%, n=29) reported lifetime injection of methadone; however, very few respondents (7%, n=10) reported injection of methadone during the six months prior to interview (3% in 2005, 5% in 2004, 2% in 2003, 3% in 2002, 6% in 2001). Four key experts reported contact with some clients who inject methadone. Two of these key experts noted increased rates of methadone injection, though one attributed this to methadone-injecting individuals who had moved to Victoria from NSW.

Prescribed methadone syrup was reported to have been used by 31% of respondents (n=47) during the previous six months, and non-prescribed methadone syrup by 10% of respondents (n=15) during that time. Three respondents (2%) reported using non-prescribed Physeptone tablets during the past six months, but there were no respondents who reported using prescribed Physeptone tablets during that time. Of those who reported using any form of methadone during the past six months (n=55), the majority (85%) reported mostly using prescribed (licit) methadone syrup. The median number of days use for those who reported using any form of methadone during the past six months (n=55) was 120 days. Frequency of non-prescribed methadone use during the past six months was very low, with a median of only two days reported, while for those who were enrolled in a methadone maintenance program during that time (n=47) a median of 172 days use was reported.

Only one respondent was able to answer questions about the price and availability of non-prescribed (illicit) methadone. This respondent reported purchasing 100ml of solution for \$20 during the past six months from a street dealer, and noted that prices and availability had remained stable for them during that time. The 2006 findings suggest very low levels of non-prescribed methadone use among the Melbourne IDU sample.

8.2. Buprenorphine & buprenorphine/naloxone

Until recently the only buprenorphine preparation available in Australia for the treatment of opioid dependence was Subutex, a sublingual tablet containing only buprenorphine (the mono product). A second sublingual preparation, Suboxone, containing buprenorphine and naloxone (the combination product) was approved by the Therapeutic Goods Administration (TGA) on July 27th 2005 (Lintzeris et al, 2006), and became available on the Pharmaceutical Benefits Scheme (PBS) on April 1st 2006 (Australian Government Department of Health and Ageing, 2006). The combination product was developed to limit the abuse potential of buprenorphine by reducing the potential for injection, especially by opioid-dependent users who are not in treatment (Lintzeris et al, 2006). The advantage of Suboxone for some consumers is the potential for unsupervised dosing.

The following section summarises findings from the 2006 IDU survey regarding the use of: (i) buprenorphine (Subutex) and (ii) buprenorphine/naloxone (Suboxone):

(i) Buprenorphine

In 2006, most (84%, n=126) of the IDRS respondents reported lifetime use of buprenorphine (Subutex), and 50% (n=75) reported using this drug during the past six months. As in previous years, respondents were also asked about both prescribed and non-prescribed use of buprenorphine. In terms of use during the past six months, 32% of the sample reported having used prescribed buprenorphine, and 29% reported having used non-prescribed buprenorphine during that time. A smaller proportion of the 2006 sample reported using prescribed buprenorphine during the past six months (32%), compared to last year (49% in 2005). This may be due to the recent introduction of the combination buprenorphine/naloxone drug (Suboxone). Over half (60%) of the respondents who reported using buprenorphine during the past six months had mostly obtained it via a prescription in their own name.

Of the sample of 150 IDU respondents, 71% had swallowed buprenorphine ever and 36% had done so recently (in the last 6 months). The median number of days of buprenorphine use in the last six months was 80 days (almost every second day).

Sixty-one percent of the respondents reported injecting buprenorphine in their lifetime (63% in 2005; 56% in 2004; 51% in 2003; 37% in 2002), and 38% reported doing so during the last six months (39% in 2005; 43% in 2004; 39% in 2003; 33% in 2002). For those who reported injecting their prescribed buprenorphine (17%, n=26), a median of 74 days (out of 180 days) was reported, while a median of 24 days was reported for those injecting non-prescribed buprenorphine (29%, n=44).

(ii) Buprenorphine/naloxone

As noted previously, the combination drug (Suboxone) became available on the PBS on April 1st 2006, just two months prior to the conduct of this year's IDU survey (which was conducted during June-July 2006). Nevertheless, participants in the 2006 study were asked about their use of Suboxone (both lifetime and past six months).

Sixteen percent (n=24) reported both lifetime and recent use of the combination buprenorphine/naloxone drug, and 7% (n=10) reported recent (past six months) injection. The median number of days of Suboxone use during the past six months was 6.5 days, and injection was 2.5 days.

Respondents were also asked about both prescribed and non-prescribed use of Suboxone. Eleven percent (n=16) reported using prescribed (i.e. a prescription in their own name) Suboxone during the past six months, while 5% (n=8) reported using non-prescribed Suboxone during that time. Two-thirds (67%, n=16) of the respondents who reported using Suboxone during the past six months reported that they mostly obtained it licitly (i.e. with a prescription in their own name).

In 2006 most key experts (n=33) were able to comment on the use of buprenorphine amongst clients, along with trends resulting from the introduction of Suboxone.

Eight key experts reported that between 'most' and 'all' of the clients at their service or in their area had been transferred from buprenorphine (Subutex) to the combination buprenorphine/naloxone product (Suboxone). Some key experts reported numerous problems associated with this transfer – the main issue involved buprenorphine prescribers receiving inconsistent or little to no information about Suboxone or its effects, resulting in 'messy' transfers. One key expert reported that some clients had experienced severe withdrawal symptoms as a result. A few key experts indicated that clients were 'forced' to transfer to Suboxone from buprenorphine (Subutex), whereas others were reportedly not even told that they had been transferred and were administered Suboxone unknowingly. Key experts described a noticeable lack of

'collaborative practice' on behalf of doctors and pharmacists towards clients. One key expert even mentioned that clients had reported instances of doctors handing out pharmacotherapy scripts to people in the waiting room who were anticipating private consultations.

Key experts indicated that these cases of apparent non-voluntary transfers to Suboxone created additional problems, particularly related to illicit buprenorphine use. Problems identified were: an increase in price of 'black market' buprenorphine when availability decreased, and an increase in the number of people hoarding buprenorphine (Subutex) in case they were forced to transfer to Suboxone. Three key experts stated that 'a lot' of clients had switched back to methadone after being transferred to Suboxone. An additional key expert reported that 4mg tablets of Suboxone were being sold illicitly for \$5 in one particular street market. One key expert reported two common client complaints regarding Suboxone: it wears off too quickly, and it fails to provide the same effect as buprenorphine (Subutex). However, this key expert did note that such complaints could simply be myth.

In contrast, four key experts reported little to no illicit Suboxone use. One key expert reported that more clients were seeking information regarding Suboxone as a treatment option, and another mentioned that clients were expressing positive interest in Suboxone.

Of those who commented on the prevalence of buprenorphine use, thirteen key experts reported that the large majority of buprenorphine clients were using the substance licitly, eleven stated that both licit and illicit use was evident, and four key experts reported that illicit buprenorphine use was more common than licit use among their clients.

Continuing the trend established in the 2005 IDRS report, key experts reported higher rates of illicit buprenorphine use in the southern metropolitan region. These key experts reported the presence of a buprenorphine street market in that area, though demonstrated contrasting views regarding availability of the substance. One remarked that buprenorphine was 'very easy' to obtain and becoming easier, whereas the other indicated that it was 'easy' to obtain, but was becoming more difficult to access, primarily due to the introduction of Suboxone. Two key experts indicated that buprenorphine continued to be one of the primary drugs used by IDU in that region. One key expert also reported that there was a buprenorphine street market in the inner suburbs of Melbourne, although not to the same extent as in some of the outer southern suburbs.

Health issues primarily associated with the injection of buprenorphine were of significant concern to many key experts, who commented on vein damage, dangerous injecting practices, and Candida eye infections. Additional information concerning injection-related harms and health problems can be found in subsequent sections of this report.

One key expert mentioned that it is difficult for consumers to find \$35 per week to fund their pharmacotherapy treatment, and it is especially hard for couples to find \$70 per week when they are also supporting children.

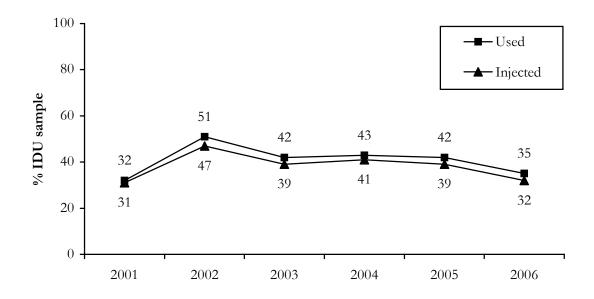
Finally, three key experts reported that incarcerated clients were concerned about getting 'stood-over' for buprenorphine in prison, and were therefore transferring to methadone.

8.3. Morphine

Over two-thirds (69%) of the IDU surveyed reported lifetime use of morphine, and 35% reported using it during the past six months. The preferred method of use of morphine amongst the 2006 IDRS sample was injecting, with 61% reporting lifetime injection and 32% reporting injecting morphine during the past six months. Thirty-seven percent of the sample reported ever swallowing morphine, and 11% reported doing so in the past six months.

Reported prevalence of use and injection of morphine during the past six months remained stable during 2003-2005, but decreased slightly this year (see Figure 22). Frequency of morphine use in the last six months has remained low and stable since 2003, with a median of 7 days or around 'once a month' reported (5 days in 2005, 6 days in 2004, 7 days in 2003). The median frequency of morphine injection in 2006 was 6 days (5 days in 2005 & 2004, 6 days in 2003).

Figure 22: Proportion of IDU reporting morphine use and injection (past six months), 2001-2006



Source: IDRS IDU interviews

Thirty-one percent of the 2006 IDRS sample reported using non-prescribed morphine during the past six months, and 7% used prescribed morphine during that time. Of the group who had used morphine during the past six months, the majority (84%) mostly used non-prescribed morphine. The types of morphine most commonly used by IDU respondents who reported recent use were MS Contin (68%), and Kapanol (24%).

Only 10% of the IDU sample (n=9) felt confident enough to comment on the price and availability of non-prescribed (illicit) morphine. Given this small number of respondents, any trends should be once again be interpreted with caution.

Four respondents reported that 100mg of morphine currently costs \$50 (range \$50-60). Three people reported having purchased 100mg of non-prescribed MS Contin for \$20-50 during the past six months, another two purchased 60mg for \$20-40, and one person reported purchasing 30mg for \$30. Another respondent reported purchasing 50mg of non-prescribed Kapanol for \$45 during that time. Two-thirds (67%, n=6) of those who could comment on the price of non-prescribed (illicit) morphine reported that it had been stable during the past six months.

Approximately half (56%, n=5) of the respondents reported that non-prescribed morphine was easy or very easy to obtain at the time of interview, while the other half (44%, n=4) thought that it was difficult or very difficult to access. Five respondents believed availability had been stable over the past six months, while another three reported that non-prescribed morphine had become easier to access during that time. Most reported sourcing their morphine from friends (67%, n=6) or known dealers (22%, n=2).

Contrary to the previous year, in 2006 there was a significant increase in the number of key experts (n=27) who reported contact with clients using morphine. MS Contin and Oxycontin were reported to be the most popular brands, though clients were also reported to be using Kapanol.

Also in contrast to the 2005 IDRS, there was a diverse range of responses regarding the licit or illicit nature of the morphine clients were using. Seven key experts reported that licit morphine was the most common, five reported that illicit use was more prevalent, and another five reported that both licit and illicit use of morphine existed amongst clients. Key experts often referred to 'illicit use' as the injection of prescribed medication; however, two key experts also identified an increased street or 'black' market for morphine in their respective areas. Other key experts reported that clients obtained morphine by 'doctor shopping'.

Numbers of clients using morphine ranged from 'a few' (including very small percentages of clients) to 'half'. Of those who could comment on the route of administration, most key experts reported that injection of morphine was most popular. Two key experts noted that swallowing morphine was the more prevalent route of administration, though injection of the substance did occur. Two key experts stated that clients often used morphine due to decreased quality and availability of heroin, and one key expert reported that some clients used 'morphine maintenance' instead of methadone.

One key expert noted that clients were seeking harm minimisation information regarding the injection of morphine, particularly due to an increased awareness of associated problems such as vein damage.

Additional information concerning injection-related harms and health problems can be found in subsequent sections of this report.

8.4. Oxycodone

Almost half (49%) of the IDU surveyed reported lifetime use of oxycodone, and 27% (n=40) reported using it during the past six months (compared to 17% in 2005). Twenty-five percent of the 2006 sample reporting injecting oxycodone during the past six months (compared to 15% in 2005) and 7% reported swallowing the drug during that time. Frequency of oxycodone use during the past six months was low, with a median of 5.5 days (out of 180) reported. The median frequency of oxycodone injection in 2006 was 4 days, which is the same as that reported in 2005.

The form of oxycodone most commonly used by this group during the past six months was non-prescribed (illicit) oxycodone (82%, n=32), while 18% (n=7) reported that they most often obtained oxycodone via a prescription in their own name. The main brand of oxycodone reported to be used by respondents was OxyContin.

Only 4% of the 2006 IDU sample (n=6) felt confident enough to comment on the price and availability of non-prescribed (illicit) oxycodone. Once again, given this small number of respondents, any trends should be interpreted with caution.

Four participants reported that 40mg of oxycodone currently costs \$20 (range \$15-25), and five reported that 80mg currently costs \$40 (range \$30-50). Half of the respondents (50%, n=3) reported that prices of non-prescribed oxycodone had been stable during the past six months. Most (n=5) felt that non-prescribed oxycodone was difficult to access, and that availability had been stable (n=4). Those who did purchase oxycodone (n=4) reported usually buying from friends or known dealers.

8.5. Other opioids

Close to one-quarter (23%, n=35) of the IDU sample reported lifetime use of other opiates, with smaller numbers (7%, n=10) reporting ever injecting them.

Eight percent of the IDU interviewed (n=12) reported using other opiates during the previous six months (12% in 2005, 27% in 2004), and the majority (n=8) reported obtaining these licitly. The primary mode of administration of other opiates during the past six months was swallowing (8%), with 1% reporting injecting them during that time. The main type of other opioid used by these respondents was Panadeine Forte (n=6), and, as reported in past years, the overall frequency of use during the last six months was low, with a median of 6 days reported (or 'once a month').

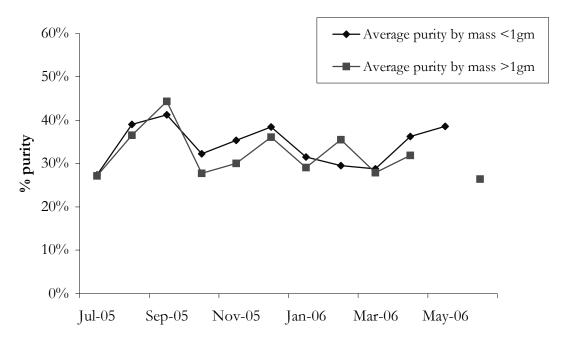
9.0 OTHER DRUGS

9.1. Ecstasy and related drugs

Over two-thirds (70%) of survey participants reported having used ecstasy at least once in their lifetime and almost one-quarter (24%) reported ecstasy use within the last six months (compared to 30% in 2005, 23% in 2004, 25% in 2003, 31% in 2002, 39% in 2001). Thirty-seven percent of IDU interviewed reported that they had injected ecstasy before (37% in 2005, 33% in 2004, 44% in 2003, 36% in 2002, 31% in 2001, 15% in 2000), and 10% had done so within the six months prior to interview (12% in 2005, 8% in 2004, 12% in 2003, 14% in 2002, 21% in 2001, 8% in 2000). The primary route of administration of ecstasy for this group during the last six months was oral (19%), and the median number of days on which ecstasy was used during that time was 3 days.

The average purity level of ecstasy seizures analysed by law enforcement agencies in Victoria during the 2005/06 financial year was 33% (range 26% to 44%) (see Figure 23). The average purity of ecstasy seizures was relatively stable during this 12 month period, and the overall average purity was similar to that recorded in the previous seven financial years: 30% in 2004/05, 32% in 2003/04, 30% in 2002/03, 31% in 2001/02, 31% in 2000/01, 34% in 1999/00, and 28% in 1998/99.

Figure 23: Purity of ecstasy seizures by Victorian law enforcement, Jul 2005-Jun 2006



Note: Data is unavailable for May 2006 (Average purity by mass > 1gm) and June 2006 (Average purity by mass < 1gm).

Source: Victoria Police Forensic Services Department

Many key experts again reported that the vast majority of clients with whom they worked continued to engage in extensive poly-drug use, with ecstasy use not uncommon among their clients (n=41). However, most key experts reported that ecstasy continued to be used primarily by younger clients and generally only occasionally or recreationally. One key expert reported that between 'a few and half' of their clients used ecstasy, two

reported 'half', and three key experts reported that 'most' clients used ecstasy. Key experts generally believed ecstasy to be a secondary substance. Ten key experts reported no changes regarding ecstasy use, five reported an increase in the number of people using the substance, and two key experts reported a decrease.

Of the key experts commenting on ecstasy route of administration, most stated that clients administered the drug orally. Five key experts reported that a minority of clients injected ecstasy. One key expert noted that injection of ecstasy was acceptable amongst people looking for value for money; however, they observed that route of administration is often dependent on context of use. For example, injecting ecstasy might not be appropriate for people wishing to dance all night because the effects are not as prolonged when compared to oral administration. This key expert noted that injecting ecstasy users were often difficult to access because they were not the 'usual' people accessing NSP or other health services. This key expert indicated that it is therefore important to take measures that may minimise harms associated with the injection of recreational/party drugs, such as ensuring that needle bins are available at events and nightclubs.

One law enforcement key expert reported the availability of fake ecstasy pills that contained little to no MDMA, and instead contained substances such as methamphetamine, ketamine and even caffeine. However, in 2006 the availability of these pills had decreased in comparison to previous years. An additional key expert reported seeing 'a lot' of methamphetamine tablets at clandestine laboratories throughout Victoria.

Ambulance paramedics listed various short-term health-related harms resulting from ecstasy use, including increased heart rate and blood pressure, bad 'trips', sore jaws and symptoms resulting from drinking too much water (hyponatremia). One ambulance paramedic also reported that people were dangerously consuming Viagra and ecstasy simultaneously.

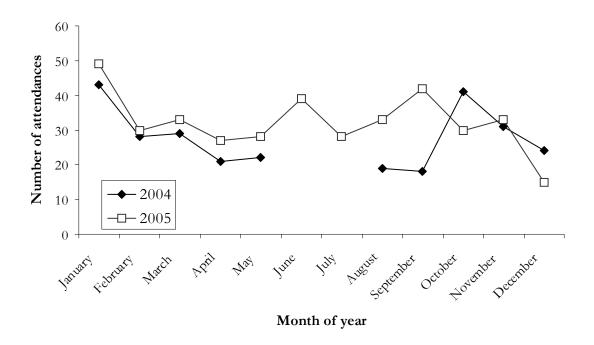
9.1.1. Health

Ecstasy-related events attended by ambulance

Figure 24 reports the monthly totals of ambulance attendances where ecstasy use was mentioned in Melbourne, January 2004-December 2005 (excluding June-July 2004). Ambulance attendances where ecstasy use was recorded ranged between approximately 20-50 per month during 2004-2005, peaking in January each year.

In 2005 there were a total of 387 attendances where ecstasy use was mentioned, a larger number than in previous years (N=276 in 2004, N=191 in 2003, and N=174 in 2002). In 2005 the average estimated age of cases was 23yrs, which is comparable to previous years (24yrs in 2004 & 25yrs in 2003) (analysis by S. Cvetkovski, Turning Point Alcohol and Drug Centre).

Figure 24: Monthly totals of ambulance attendance where ecstasy was mentioned in Melbourne, Jan 2004-Dec 2005 (excluding Jun-Jul 2004)



Note: Data is unavailable for June and July 2004.

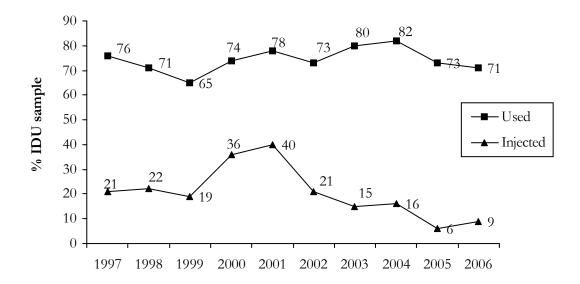
Source: Metropolitan Ambulance Service and Turning Point Alcohol and Drug Centre

While the IDU surveyed in the 2006 IDRS study were able to provide some information on ecstasy trends in Melbourne, a clearer picture of ecstasy use can be gained through contact with other sentinel groups, such as psychostimulant or 'party drug' users. For the past four years the Ecstasy and Related Drugs Study (EDRS; formerly the Party Drugs Initiative), which employs a similar methodology to the IDRS study, has been conducted in every Australian jurisdiction. One component of this study involves the collection of information from regular ecstasy users (REU), on patterns of use, price and availability of ecstasy, as well as on the use of methamphetamine, cocaine, GHB, LSD, and ketamine. Results from the 2006 EDRS study will be available in early 2007.

9.2. Benzodiazepines

Almost three-quarters of the 2006 IDU participants (71%, n=107) reported using benzodiazepines during the past six months, with 9% reporting intravenous use (see Figure 25), and 71% oral routes of administration during this period. Prevalence of benzodiazepine use remained stable in 2006 (71%, compared to 73% in 2005); however, reported frequency of use increased (50 days in 2006, compared to 24 days in 2005 and 30 days in 2004).

Figure 25: Proportion of IDU reporting benzodiazepine use and injection (past six months), 1997-2006



Source: IDRS IDU interviews

The proportion of IDU who reported benzodiazepine injection steadily rose from 1999 to 2001; however, since that time there has been a considerable reduction in the number of respondents reporting using this mode of administration. The reduction in benzodiazepine injection in 2002 was probably reflective of changes made on May 1st 2002 to the prescribing authority for temazepam on the Pharmaceutical Benefits Scheme (PBS) (Breen et al., 2003), and also the impact of the Victorian Department of Human Services, Temazepam Injection Prevention Initiative, which was implemented in November 2001 (Dobbin, 2002). More recently (in March 2004) all gel-cap temazepam formulations were withdrawn from the market (Wilce, 2004).

In 2006, reported rates of recent benzodiazepine injection remained relatively stable (9%, n=14, compared to 6%, n=9 in 2005), and frequency of benzodiazepine injection remained low with a median of 3 days reported (7 days in 2005).

Half (53%, n=80) of the IDU sample reported using prescribed benzodiazepines during the past six months, and 31% (n=47) reported using non-prescribed (illicitly obtained) benzodiazepines during that time. Of those who reported using benzodiazepines during the past six months (n=107), 69% (n=74) reported mostly obtaining them via a prescription in their own name.

Of the group who had used benzodiazepines, the types most commonly used in the preceding six months were diazepam, e.g. Valium (60%), Antenex (8%) and alprazolam, e.g. Xanax (13%).

The majority of key experts reported that they were in contact with clients using benzodiazepines (BZDs). Key experts estimated that between a 'few' and 'most' clients were using BZDs, with the most common forms being Xanax, Alprazolam and Valium, followed by Serepax, Mogadon and Rivotril. Consistent with the 2005 report, in 2006 several key experts mentioned that Xanax had become the most popular BZD for many users, and that its popularity – in terms of both licit and illicit use – was continuing to increase. One key expert insisted that people used Normison/Temazepam gel capsules

when other BZDs were difficult to obtain, despite the manufacture of these capsules ceasing in 2004. In contrast, two key experts reported that the use of Temazepam gel capsules had decreased because the substance was no longer being produced.

Contrary to the 2005 IDRS report, in 2006 many key experts reported that benzodiazepine use had increased. There were multiple reasons attributed to this: BZDs were more readily available on the street or from the 'black market', licit BZDs were easier to obtain, and BZDs were used as substitute substances due to the decrease in both heroin quality and buprenorphine availability. Those key experts who discussed the BZD street market stated that, when not trading substances, a 2mg Xanax tablet can cost between \$5-20. Additionally, several key experts insisted that 'doctor-shopping' was prevalent. Some key experts stated that many users obtained BZDs legitimately, but consumed them 'inappropriately', by bingeing for example, which key experts described as problematic because it was 'bombing them out'. One key expert reported that they were aware of people stealing and selling BZD prescriptions.

Five key experts reported that BZD use had decreased. Three of these specifically indicated that the injection of BZDs had decreased, whilst another stated that the number of users with BZDs as a primary substance had reduced. Five key experts reported that BZD use had remained stable.

Most key experts stressed that, among poly-drug users, benzodiazepines were common secondary substances. This was particularly evident amongst key experts who nominated heroin as the main illicit drug used by people with whom they had the most contact. One key expert stated that older heroin users on pharmacotherapies were over-prescribed BZDs and were not undergoing any other form of treatment. It was suggested that users of methamphetamine and ecstasy required BZDs to counter the effects of withdrawal and comedowns.

In regard to modes of administration, most key experts reported that oral ingestion of benzodiazepines was most common. One key expert stated that many injecting drug users chose to take BZDs orally because they were usually injecting 'something else', or their veins were too damaged from injecting substances such as buprenorphine and morphine. However, it is important to note that many key experts insisted that injection of BZDs was still prevalent and problematic. Similar to the previous point, one key expert raised the issue of people injecting BZDs into dangerous areas of the body – such as the groin – because their other veins were already significantly damaged.

Additional details regarding injection-related health problems can be found in subsequent sections.

9.3. Antidepressants

Over one-quarter (27%, n=40) of the IDU sample reported that they had used antidepressants during the preceding six months, and 56% reported lifetime use. The median number of days of use for this group in the previous six months was 32 days (compared to 120 in 2005, 108 in 2004, 160 in 2003, 90 in 2002, 165 in 2001, and 120 in 2000). A wide variety of antidepressants were reported to have been used by this group during the past six months, including Avanza (48%), Zoloft (7%), Lexapro (7%), Mirtazon (7%), and Deptran (7%). Antidepressants were reportedly most often acquired through licit means during the past six months (87%, n=33).

The majority of key experts (n=30) reported use of antidepressants among their clients, which consolidates the trend identified in previous IDRS reports. Types of antidepressants used by clients included Deptran, Lexapro, Efexor and SSRIs (Selective Serotonin Reuptake Inhibitors). Most key experts reported that 'a few' clients were using

antidepressants, four reported 'half', three reported 'between a few and half', and four key experts noted that 'most' clients were using antidepressants.

The majority of key experts reported 'no changes' to antidepressant use in the previous six months. In contrast, two indicated that use had increased, and another reported fluctuations in antidepressant use. Three key experts reported that 'both licit and illicit' use of antidepressants was prevalent among clients, whereas most stated that use was, again, predominantly licit. Only one key expert reported knowledge of clients injecting antidepressants in addition to oral administration.

Despite most key experts reporting licit antidepressant use, a few noted that some clients demonstrated 'inappropriate' use. Such use may involve sharing prescribed antidepressants, and one key expert stated that some clients purposefully overdose after hoarding a significant number of tablets, an issue previously raised in the 2005 report. An ambulance paramedic also reported that some people use antidepressants in combination with Viagra and ecstasy.

One key expert noted that antidepressants were typically used by clients presenting with alcohol, amphetamine or cannabis as a primary drug of use, whereas another noted that antidepressants were 'useless' when used in conjunction with cannabis.

One key expert reported an increased social acceptance of antidepressant use, though a pharmacist noted that benzodiazepines are usually more popular than antidepressants among people who use pharmacotherapies.

9.4. Alcohol and tobacco

Almost the entire IDU sample reported tobacco use during the previous six months (98%, n=147), with the majority (95%, n=139) reporting daily use (180 days).

Three-quarters (74%, n=111) of the 2006 IDU survey respondents reported alcohol use during the previous six months. The median number of days of alcohol use for this group was 15 days (or just over once a fortnight), although 10% (n=11) reported drinking alcohol on a daily basis.

The majority of key experts (n=44) noted some degree of alcohol use amongst clients. Reports regarding proportions of clients using alcohol varied immensely, ranging from 'a few' (n=6) to 'all' (n=4). Sixteen key experts did not observe any changes during the past six months regarding alcohol use, whereas four reported increased use. Two of these attributed increased alcohol use to a decrease in heroin quality and/or availability earlier in the year, a notion supported by an additional key expert who stated that clients used alcohol – 'the staple drug' – to replace other drugs when they are unobtainable.

Many key experts cited alcohol as a common component of poly-drug use, associated with a multitude of harms. Binge drinking was also reported to be a significant issue for many clients. One ambulance paramedic stated that alcohol is the greatest cause of violence, and causes such direct and indirect harms as vomiting, unconsciousness, fights/assaults and other crimes, falls and vehicle accidents. Another key expert noted that many people do not class alcohol as a drug, and therefore fail to recognise any dangers associated with its use. Two key experts reported that 24-hour liquor licensing is particularly problematic, because a greater consumption of alcohol over an extended period of time increases the occurrence of adverse consequences. One key expert stated that alcohol users represent the broadest range of demographics of any drug. Finally, one key expert reported that the public needs to be educated – and perceptions need to be changed – with regard to types of drugs related to crime, because alcohol plays a major

role in many crimes, and the licit status of alcohol appears to mask this fact for many people.

9.5. Other drugs

Twenty-five percent of IDU respondents reported having ever used inhalants; however, only a very small number (4%) had used inhalants during the six months prior to interview (2% in 2005; 3% in both 2004 and 2003; 8% in both 2002 and 2001). 'Spray paint' and nitrous oxide (or 'bulbs') were the types of inhalants most commonly used by this group during the previous six months.

Many key experts (n=22) were able to comment on the use of inhalants amongst clients; however, such use was generally perceived to be rare, sporadic, and by youth. Three key experts reported that inhalant use had increased or become more publicly visible, and one indicated a decrease; however, most reported no changes regarding inhalant use. One key expert stated that more information needed to become available regarding the effects of inhalant use.

Sixty-seven percent of the 2006 IDU sample reported lifetime use of hallucinogens, and 11% had injected hallucinogens at some time in the past. Only small numbers of respondents reported having used LSD/'trips' (5%) or hallucinogenic mushrooms (4%) during the previous six months. Reported frequency of hallucinogen use was low, with a median of 5 days reported during the last six months.

Several key experts were able to comment on the use of hallucinogens, such as LSD and magic mushrooms. In 2006 20 key experts reported that 'a few' clients used hallucinogens, though frequency of hallucinogen use was 'rare'. Key experts reported hallucinogen use to be largely recreational and/or part of a poly-drug repertoire. One ambulance paramedic stated that hallucinogens were making a 'comeback', in mid-late 2005, and they were beginning to be seen more on weekends at parties. This key expert attributed the increased prevalence of hallucinogen use to the belief that PAD (Passive Alert Detection) dogs are unable to detect hallucinogenic substances, as opposed to drugs such as ecstasy, cannabis and amphetamines.

In 2006 GHB was not discussed extensively. One key expert reported that clients had stopped talking about the substance in the last six months. Two other key experts identified GHB as a recreational poly-drug substance, while another mentioned having a client who used GHB regularly; up to 5-6 times per day in addition to methamphetamine. This key expert remarked that it was very difficult finding treatment for a client in such a unique situation.

One ambulance paramedic also reported a case of a person using benzylpiperazine (BZP). BZP is a piperazine with stimulant effects. Though prohibited in Victoria, this substance is legal and sold in New Zealand, and in pill form is commonly referred to as 'party pills'.

Several key experts commented on the market or use of steroids in 2006, with one key expert identifying steroids as a primary drug of choice for clients. This key expert stated that steroid users were usually eighteen years of age or older (though some were aged 16-17 years), the majority (80-90%) were male, and they originated from all over Victoria. Most of this key expert's steroid-using clients were employed, of various nationalities, and there were also many users from the gay community. Two key experts noticed increases in the number of steroid users accessing NSPs throughout the previous 12 months; one increase was only 'slight', whereas the other was reportedly 'enormous'. This latter increase was presumed to be due to an increased emphasis on image enhancement in society, additionally encouraged by sports events such as the Commonwealth Games

held in Melbourne early in 2006. In contrast, another key expert stated that NSP staff were giving out the same number of syringes despite noticing a decrease in steroid users.

Reflecting on results of the 2005 IDRS, there was again concern amongst key experts regarding safe use and health risks associated with steroid use. Key experts noted that many steroid users do not identify as drug users because they often fail to replicate stereotypes maintained by other drug users, such as physical deterioration, for example. Steroids also do not have the same degree of stigma that other illicit substances do. As a result, steroid users had much less contact time with NSP staff, and it is therefore more difficult to communicate safe use and health messages to this unique drug-using group. Key experts indicated that steroid users often failed to associate their drug use with harms such as blood-borne viruses, and although sharing needles is reportedly uncommon, one key expert noted that sharing other injecting equipment is a significant issue. In addition, it was reported that first-time injectors were at risk because they might think it necessary to inject into veins, instead of into specified 'safe' muscle sites.

While overdose was not reported to be an issue with steroid users, one key expert identified a myriad of potential side effects that increase in likelihood with an increase in frequency and quantity of steroid use. Side effects are numerous, and include acne, kidney, liver and heart problems, baldness, and gynecomastia (breast enlargement) in males, to name a few.

In reference to the illicit steroid market, key experts stated that steroids were reportedly 'very easy' to obtain, and were becoming easier. One key expert reported that steroid pills were flooding the market, which was fortunate from a harm minimisation perspective because there is no 'high' associated with steroid use, therefore users can swallow the pills and obtain the same physical effect(s) instead of injecting steroids in liquid form. Another key expert maintained that steroids were very easy to obtain in prison.

Key experts reported that poly-drug use was generally uncommon amongst steroid users, because using drugs that reduce muscle mass is counterproductive.

10.0 ASSOCIATED HARMS/DRUG-RELATED ISSUES

10.1. Sharing of injecting equipment among IDU

The sharing of needles/syringes and other equipment associated with the preparation and injection of drugs carries significant risk of exposure to BBVI such as HIV, and hepatitis B and C (HBV, HCV) (Crofts, Aitken, & Kaldor, 1999).

Seventeen percent of respondents (n=26) reported loaning a used needle to someone else during the past month, and 12% (n=18) reported borrowing someone else's used needle during that time. With respect to borrowing another person's used needle during the past month, all but one of the participants (94%, n=17) indicated that the borrowed needle had been used by only one other person (usually a regular sexual partner or close friend).

Further analyses found that those who reported using someone else's used needle during the past month, were older (34.4 versus 30.7 years; p<0.05), and less likely to identify as heterosexual (67% versus 87%; p<0.05), compared to those who did not report borrowing a needle during that time. This group were also significantly more likely to report using other injecting equipment after someone else (p<0.001), and to have experienced injection-related harms such as scarring/bruising (p<0.05) and difficulty injecting (p<0.05) during the past month.

Fifty percent of participants who had loaned their own used needles to other people during the last month (n=26), reported having done so once, 35% twice, and 15% had done so three or more times.

Reports of both borrowing and loaning used needles were generally stable to decreasing compared to that observed in previous IDRS surveys (see Table 17).

Table 17: IDU self-reported injecting risk practices (past month), 1999-2006

Risk practice (past month)	1999	2000	2001	2002	2003	2004	2005	2006
Borrowed a used N/S (%)	9	19	15	17	10	11	15	12
Lent a used N/S (%)	22	35	24	22	24	21	23	17
Used spoon/mixing container after someone else (%)	38	46	38	43	41	41	46	31
Used filter after someone else (%)	17	18	12	15	24	13	27	9
Used tourniquet after someone else (%)	7	11	12	13	7	13	11	6
Used water after someone else (%)		33	17	23	24	32	33	19
Used any injecting equipment after someone else (%)	43	53	47	49	43	46	50	35

Source: IDRS IDU interviews

In 2006 there was a decrease in the proportion of respondents who reported sharing other types of injecting equipment (compared to previous years). In total, 35% (n=52) of the sample reported using other injecting equipment after someone else during the past month (compared to 50%, n=75 in 2005). The injecting equipment most commonly used after someone else included spoons (31%), and water (19%).

10.2. Blood-borne viral infections

Blood-borne viral infections (HIV, hepatitis B and C) represent a major health risk for individuals who inject drugs. An integrated surveillance system has been established in Australia for the purposes of monitoring the spread of these infections. The sharing of equipment for injecting illicit drugs has infrequently resulted in HIV transmission in Australia, but transmission of the hepatitis C virus continues to occur at very high rates among people who inject drugs.

The Communicable Diseases Section, Public Health Branch, Department of Human Services, records notifications of infectious diseases in Victoria. Table 18 shows the trend in Victorian notifications of HIV diagnoses, where injecting drug use was identified as the exposure category, by year of diagnosis, 1995 to 2005. This table shows that throughout this period there have been a consistently low proportion of HIV diagnoses where injecting drug use was identified as the exposure category. At the end of 2005, injecting drug use had been identified as an exposure factor in only 4% of all Victorian HIV infections (Victorian Department of Human Services, 2006b).

Table 18: Annual number of notifications of HIV diagnoses in Victoria where injecting drug use has been identified as the likely exposure factor, 1995-2005

, ,	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Number (n)	15	14	15	13	6	10	11	5	10	8	10
% of HIV diagnoses	8	7	8	9	5	7	5	2	4	4	4

Source: Jenkinson & O'Keeffe, 2006; Victorian Department of Human Services, 2006b

The evidence of low rates of HIV infection among IDU is reinforced by the results of a study of attendees at five fixed-site metropolitan Needle and Syringe Programs in Victoria in 2005, in which less than one percent of 178 respondents provided blood tests that were found to be HIV positive (see Table 19) (National Centre in HIV Epidemiology and Clinical Research, 2006).

In contrast, the situation with regard to the hepatitis C virus (HCV) among injecting drug users in Victoria is of major concern, as there is evidence of a continuing high level of prevalence of HCV infection among this group. This is demonstrated in the findings of the sentinel surveillance data for attendees at fixed site metropolitan Needle and Syringe Programs in Victoria in 2005, in which 67% of the sample (69% in 2004; 66% in 2003; 58% in 2002; and 70% in 2001) were found to have antibodies to HCV (see Table 19) (National Centre in HIV Epidemiology and Clinical Research, 2006).

Table 19: Prevalence of HCV & HIV infection among NSP clients, Vic, 2003-2005

	2003		2004			2005			
	Male n=144	Female n=90	Total n=237*	Male n=122		Total n=189*	Male n=102		
HCV %	66	66	66	67	74	69	63	72	67
HIV %	0.7	1.1	0.8	0.8	0	0.5	1.0	0	0.6

Source: National Centre in HIV Epidemiology and Clinical Research, 2006

^{*}Total includes people whose sex was not reported or reported as transgender

The Communicable Diseases Section, Public Health Branch, Department of Human Services, also collects data on notifications received for HCV infection (newly acquired and not further specified). The Communicable Diseases Section received 2,783 notifications of hepatitis C infection in 2006, 3,019 notifications in 2005, and 3,024 notifications in 2004 (Victorian Department of Human Services, 2007). The number of hepatitis C infection notifications remained relatively stable over the past three years, with carriage rates remaining unacceptably high and indicative of persisting levels of unsafe injecting practices amongst some IDU.

In 2006 IDRS survey participants were also asked about BBVI testing history and status. Almost the entire sample (99%, n=148) reported having previously been tested for hepatitis C, while 95% (n=142) reported previously being tested for hepatitis B, and 95% (n=142) reported being tested for HIV.

Participants' self-reported BBVI status is presented in Table 20. Sixty percent (n=89) of those who had previously been tested for HCV reported that their most recent test was positive. Ten percent of the 2006 IDU sample also reported that they had previously been treated for hepatitis C with anti-viral therapy.

Much smaller numbers reported testing positive for HBV or HIV on their most recent occasion of testing (see Table 20). Small numbers also reported that they did not know or could not remember the result of their most recent test.

Table 20: Self-reported BBVI status, IDU survey, 2006

Result of most recent test*	Negative %	Positive %	Other %	DK/can't remember
HCV (n=148)	30	60	3	6
HBV (n=142)	84	4	6	6
HIV (n=142)	96	1	1	3

Source: IDRS IDU interviews

Most reported that their main reasons for being tested for BBVI were: as a matter of routine (25%), at the insistence of a health professional (19%), it seemed like a good/responsible thing to do (10%), or they believed they may have been exposed through injecting (7%).

Participants were also asked about hepatitis B vaccination. Fifty-two percent (n=78) of the 2006 IDU sample reported having been vaccinated against hepatitis B, and the majority (85%) of those reported that they completed the vaccination schedule.

71

 $^{\rm 13}$ Numbers do not necessarily reflect the true incidence of the disease

^{*} Of those ever tested (self-reported)

10.3. Location of injections

Table 21 shows that 61% of the IDU sample reported that they had last injected in a private home, while others reported last injecting in public locations, such as public toilets (16%), the street/park or beach (9%), or in a car (9%). Likewise, the usual or most frequent location of injection during the past month was in a private home (69%); with close to one-third of the sample reporting most often injecting in public locations, including public toilets (12%), the street/park or beach (10%), or in a car (6%).

Table 21: Location in which 2006 IDU respondents had last injected (N=142)⁺

Last injecting location	9/0
Private home	61
Public toilet	16
Street/park or beach	9
Car	9
Other (e.g. abandoned building)	5

Source: IDRS IDU interviews

The reported locations of last injection were similar to those reported in previous IDRS studies (Jenkinson & O'Keeffe, 2006 & 2005; Jenkinson, et al, 2004).

10.4. Injection-related health problems

Reports by the participants in the IDU survey of injection-related health problems in the previous month are summarised in Table 22. Over two-thirds (70%, n=105) of respondents reported experiencing at least one type of these problems, with scarring/bruising (49%), and difficulty injecting (43%) being the most common problems reported. The median number of injection-related health problems during the past month was two.

Table 22: Injection-related health problems (past month) reported by participants in the 2005 and 2006 IDU surveys

Type of problem (%)	2005 (N=149)	2006 (N=150)
Prominent scarring/bruising	48	49
Difficulty injecting	46	43
Dirty hit (made me feel sick)	19	23
Thrombosis	7	8
Abscesses/infections from injecting	7	3
Overdose	1	3

Source: IDRS IDU interviews

⁺ Missing data for eight respondents

The proportions reporting experiencing injection-related health problems in 2006 were similar to those reported in previous years (Jenkinson & O'Keeffe, 2005 & 2006). In 2006, participants were also asked if they had injected benzodiazepines, methadone, buprenorphine, Suboxone, or morphine during the last month, and, if so, if they had experienced any injection-related problems specific to those drug types during that time. The number of participants who reported recently injecting those drug types, and the proportion who reported experiencing problems, are shown in Table 23.

Table 23: Proportions reporting injection-related health problems specific to each

drug type (last month), 2006

Injection	Benzodiazepines	Methadone	Buprenorphine	Suboxone	Morphine
problems (%)	(n=5)	(n=3)	(n=46)	(n=7)	(n=25)
No problems	20 (n=1)	-	22 (n=10)	29 (n=2)	36 (n=9)
Abscess/infection	-	-	9 (n=4)	14 (n=1)	4 (n=1)
Dirty hit	-	33 (n=1)	30 (n=14)	29 (n=2)	8 (n=2)
Scarring/bruising	40 (n=2)	33 (n=1)	48 (n=22)	29 (n=2)	40 (n=10)
Thrombosis	-	-	13 (n=6)	-	-
Swelling of arm	20 (n=1)	33 (n=1)	33 (n=15)	-	16 (n=4)
Swelling of leg	-	-	4 (n=2)	-	-
Swelling of hand	20 (n=1)	33 (n=1)	11 (n=5)	-	8 (n=2)
Swelling of feet	-	-	4 (n=2)	-	4 (n=1)
Dependence	40 (n=2)	33 (n=1)	41 (n=19)	-	24 (n=6)
Difficulty finding veins to inject into	60 (n=3)	67 (n=2)	48 (n=22)	14 (n=1)	28 (n=7)

Source: IDRS IDU interviews

In contrast to last year, 2006 key expert comments regarding needle risk-taking behaviours were generally positive and suggested that clients were benefiting from information regarding safe injecting practices. One key expert reported no needle risk-taking behaviours among clients, while three others reported that the majority of clients were generally well educated about the risks of sharing needles and do not share as a result. In addition, one key expert reported a reduction in needle risk-taking behaviours, whereas another reported that these behaviours had remained stable throughout the last six to twelve months. Several other key experts mentioned that the presence of NSPs and the provision of sterile injecting equipment were improving safe injecting practices among clients.

However, key experts again cited on-going injection-related issues such as general vein damage, abscesses and ulcers, and problems with injecting sites. One key expert reported that the prevalence of abscesses had increased, whereas two reported decreases, one because of a reduction in clients injecting benzodiazepines and buprenorphine. One key expert reported that people had begun injecting around their eyes, but could not provide a reason for the emergence of this during the past year. Another key expert noted cases

of females experiencing mastitis from injecting into the breast. A few key experts reported that some clients were injecting into their groins, and were experiencing 'significant' injection-related injuries as a result. Two key experts noted that some women were continuing to inject/use drugs while pregnant.

Six key experts reported increases in the number of injuries resulting from clients injecting 'pills', including buprenorphine, Suboxone, benzodiazepines and morphine. In contrast, two key experts reported reductions in injection-related harms following the introduction of wheel/pill filters and education about why and how to use them. Nevertheless, a few key experts again stressed that despite continued high demand for the supply of filters, some clients did not use them – or reused them – because of the high prohibitive cost, or because they were unable to access services supplying filters outside of business hours.

One key expert noted that people injecting prescription drugs containing talc powder were at risk of suffering pulmonary hypertension. When a substance containing talc is injected, the talc lodges in the lung and acts as an irritant, producing an inflammatory response. When an individual continues to inject substances that contain talc, blood vessels are destroyed/clogged and blood is unable to pass through the lungs. Pressure in the pulmonary artery is consequently increased, leading to pulmonary hypertension. This key expert stressed the need for treatment and intervention for individuals facing or experiencing this problem.

Three key experts again raised the issue of fungal eye infections (Candida ophthalmitis) as a consequence of the diversion and injection of buprenorphine. One of these key experts reported that the prevalence of this problem had increased. In 2006, the Department of Human Services distributed a variety of cards to health services highlighting the dangers of Candida resulting from buprenorphine diversion and injection; therefore it will be important to monitor the issue in subsequent IDRS studies.

The issue of injection-related harms in Victoria's prison population was again raised in 2006. One key expert working with parolees reported that incarcerated individuals had no access to sterile needles in prison, therefore were sharing needles among themselves. This key expert also described reports of prisoners sharpening needles on non-sterile objects. Practices such as these present an extreme risk of HCV infection amongst incarcerated drug users. This issue was also raised by other key experts, who noted that previously incarcerated drug users who accessed their services were often more likely to report HCV infection when compared with other drug users.

Several key experts were also able to comment on general rates of blood-borne viruses among clients. All reported that the prevalence of HCV and other viruses was still significant – one key expert stated that a 'huge' percentage of clients had HCV and another reported that 'most' presented with the virus – but that rates of blood-borne viruses had remained steady throughout the previous six to twelve months. One key expert reported that rates of HIV amongst injecting drug users had increased at their service, but attributed this problem to MSM (men who have sex with men) having unprotected sex. Another key expert reported knowledge of individuals with HIV, though again stated that these cases were a result of unsafe sex.

Finally, one key expert noted that intravenous drug use is not 'acceptable' amongst some drug-using sub-groups. Injecting a substance is often perceived to be 'dirty', therefore some users will inject secretly as a result. This key expert raised a number of concerns associated with these 'secret' injecting practices, including: where are they learning to inject?, where are they getting harm reduction information from?, and where are they obtaining equipment to inject? This issue was particularly relevant for a few key experts

concerned about injecting drug users in rural settings. Confidentiality, anonymity and privacy were reported to be significant problems to injecting drug users attempting to access services in rural areas; it was noted that in some instances one person may access a relevant service (such as an NSP) for multiple users, therefore not every individual will receive adequate information concerning safer drug use. In addition, users in rural settings might travel long distances to other health services to combat problems of confidentiality, anonymity and privacy. Such effort may involve a significant amount of time and resources. Hence, users might not be able to access these services as often as required to obtain sterile injecting materials, or they might not access these services at all. Users might then share and/or use non-sterile injecting equipment as a result.

10.5. Substance-related aggression

In 2006 participants were asked about substance-related aggression (verbal and physical) in the six months preceding interview. Thirty-two percent (n=48) of the sample reported that they had become verbally aggressive (threatening, shouting, abusive) while under the influence of alcohol and/or any other drug during the last six months, and 33% (n=50) had done so while withdrawing/coming down from one or more drugs during that time. Seven percent (n=11) reported having become physically aggressive (shoving, hitting, fighting) while under the influence of alcohol and/or any other drug in the last six months, and 6% (n=9) had done so while withdrawing/coming down from one or more drugs during that time. Participants were asked which drug/s had been used prior to becoming aggressive, with most reporting alcohol, speed, heroin, and crystal meth/ice (see Table 24).

Table 24: Substance-related aggression in the six months preceding interview: after which drugs?

Drugs used prior (%)	Verbal aggression- under influence (n=48)	Verbal aggression- withdrawing/ coming down (n=50)	Physical aggression- under influence (n=11)	Physical aggression- withdrawing/ coming down (n=9)
Alcohol	48	10	54	22
Speed	21	48	9	44
Heroin	25	30	9	22
Crystal meth/ice	10	12	36	22
Cannabis	15	10	9	-
Benzodiazepines	15	6	9	-
Base	-	-	-	-
Cocaine	-	-	-	-
Ecstasy	2	2	-	-
Morphine	2	2	-	-
Buprenorphine	6	8	-	-
Methadone	-	4	-	-

Source: IDRS IDU interviews

10.6. Mental health issues

Close to half (41%, n=61) of the IDU survey respondents reported that they had experienced a mental health problem(s) during the past six months, most commonly depression (57%, n=35), anxiety (28%, n=17), and schizophrenia (13%, n=8). Seventy percent of the IDU who reported having experienced a mental health problem(s) during that time reported having attended a health professional for this. Health professionals consulted by these participants (n=43), included general practitioners (70%), psychiatrists (26%), psychologists (16%), social workers (16%) and counsellors (14%).

Of the forty-two key experts who commented on mental health, approximately one-third (n=15) reported increases in mental health issues. Key experts provided a variety of reasons regarding these reported increases. In four cases it was possibly due to increased client contacts, with more people generally presenting at a service, or simply an agency's expansion of services. For example, one service increased contact with schools, which resulted in more self-referrals from students. One key expert maintained that the government's 'no wrong door' policy had increased numbers of clients presenting with mental health issues, whereas another reported more people travelling from regional areas to access their service in the western suburbs. However, key experts did acknowledge that – particularly in these instances – increased numbers of clients presenting with mental health issues did not necessarily mean that more people were experiencing them.

A large number of key experts who reported increases in mental health issues – specifically drug-induced psychosis – attributed the problem to increased methamphetamine use. Two of these key experts reported that many clients experiencing mental health issues as a result of methamphetamine use had previously been heroin users. Key experts suggested that these users began using methamphetamine due to a decline in heroin quality and availability. In contrast, two key experts cited heavy cannabis use as the cause of increased mental health issues, while another two attributed increases to poly-drug use. Most other key experts reported that rates of mental health issues amongst clients had remained stable. Several noted that rates of dual diagnosis were high. No key experts reported decreases in mental health issues.

Reports on proportions of clients with mental health issues (diagnosed and undiagnosed) ranged between 10-100%. Key experts again identified depression and anxiety as the most dominant forms of mental illness; however, in 2006 schizophrenia was also listed as a major mental health issue affecting a significant number of clients. Key experts listed a large variety of additional mental illnesses endured by clients, including: drug-induced psychosis, bipolar disorder, post-traumatic stress disorder (PTSD), mood disorders, self-harm, paranoia, personality disorders and acquired brain injury (ABI). In this last instance one key expert stated that although clients obtained ABI from all types of drugs, alcohol was the main cause of this affliction. Another key expert reported that some individuals had experienced brain damage following oxygen deprivation during overdose. In addition, a key expert working primarily with steroid users reported that 'the odd' steroid user presented with muscle dysmorphia – an obsessive fear of being small.

Finally, one key expert reported that workers at a service in the western suburbs had been performing psychological assessments on chroming individuals. They determined that the cognitive function of these individuals – such as short-term memory loss – had been noticeably impaired.

10.7. Driving risk behaviour

For the past two years, IDU survey respondents have been asked about driving risk behaviour. Fifty-six percent (n=84) of the 2006 IDU sample reported that they had driven a car during the past six months. Of those, 13% (n=11) reported that they had driven while 'under the influence' (over the limit) of alcohol during that time, on a median of two occasions. One-quarter of drivers (26%, n=22) reported being random breath tested (RBT) during the past six months, with two respondents (9%) reporting being found over the legal limit on one or more occasions during that time.

Of those who reported that they had driven a car during the past six months (n=84), 74% (n=62) reported that they had driven soon after taking an illicit drug (i.e. a non-prescribed drug) during that time. Most reported that they had driven soon after taking heroin (58%, n=36), cannabis (44%, n=27), or speed (42%, n=26) during the past six months (see Table 25). Participants were also asked how long after taking an illicit drug they commenced driving (on the last occasion), and a median of one hour was reported.

Table 25: Driven soon after taking illicit drugs (past six months), 2005 & 2006

After which illicit drugs* (%)	2005 (n=71)	2006 (n=62)
Heroin	80	58
Cannabis	49	44
Speed	29	42
Crystal meth/ice	4	15
Buprenorphine	13	16
Benzodiazepines	10	11
Ecstasy	6	3

Source: IDRS IDU interviews

10.8. Recent use and expenditure on illicit drugs

IDU survey respondents were asked about their drug use on the preceding day. Their responses (along with those reported in 2004 and 2005) are summarised in Table 26. Ninety-one percent of respondents (n=137) reported using at least one drug type on the day preceding interview (median two drug types, range one to six) with the most commonly used drugs being cannabis (44%), heroin (37%) and alcohol (23%). Sixty-two percent of survey respondents (who had used drugs on the day prior to interview) had used two or more different drugs.

^{*} Among those who had driven soon after taking an illicit drug

Table 26: Drugs used on day prior to interview (IDU survey, 2004-2006)⁺

Type of drug %	2004 (N=150)	2005 (N=150)	2006 (N=150)
Cannabis	51	48	44
Heroin	49	45	37
Alcohol	26	25	23
Benzodiazepines	39	27	18
Buprenorphine	25	25	17
Methadone	13	12	11
Suboxone	-	-	3
Morphine	7	7	6
Other opiates	4	0	1
Antidepressants	12	14	1
Speed	10	9	15
Base	0	0	0
Crystal meth/ice	1	0	1
Cocaine	1	1	1

Source: IDRS IDU interviews

Over half (58%) of the sample reported purchasing illicit drugs on the day prior to interview. In terms of their illicit drug expenditure, 23% of the 2006 sample had spent \$20 to \$99, and 31% had spent more than \$100 (see Table 27). The median amount spent on illicit drugs on the day prior to interview (by those who had spent money) was \$100.

Table 27: Amount spent on illicit drugs on day prior to interview (IDU survey, 2004-2006)

Amount (\$)	2004 (N=150) %	2005 (N=150) %	2006 (N=146) %
Nothing	32	40	42
Less than \$20	5	7	4
\$20-49	17	12	13
\$50-99	13	15	10
\$100-199	23	13	13
\$200-399	5	8	10
\$400 or more	5	4	8

Source: IDRS IDU interviews

^{*}Respondents were permitted to report more than one drug type

10.9. Criminal and police activity

Self-reported criminal activity

Forty-eight percent of IDU participants (n=70) who responded to this section reported involvement in some type of criminal activity during the preceding month, and 53% (n=80) reported that they had been arrested during the previous twelve months (53% in 2005, 55% in 2004). Forty-four percent of arrests were in relation to property crime, 23% to use/possession, 19% to violent crime, 14% for dealing/trafficking, and 10% were in relation to a driving offence. Twenty-nine percent of respondents who had been arrested during the past 12 months reported multiple (two or more) types of charges (mostly combinations of property crime and use/possession).

As shown in Table 28, dealing (35%) and property crime (20%) were the most common crimes reported in the last month, with fewer respondents reporting involvement in fraud (5%) or violent crime (2%). Self-reported crime prevalence was relatively stable since 2005.

Table 28: Criminal activity reported by IDU during the last month, 2001-2006

Type of crime	2001 (N=151)	2002 (N=155) ¹	2003 (N=150) ²	2004 (N=147) ³	2005 (N=147) ³	2006 (N=147)
Property crime (%)	29	39	35	28	26	20
Dealing (%)	37	41	40	30	25	35
Fraud (%)	15	14	7	8	4	5
Violent crime (%)	15	9	10	8	7	2
Any crime (%)	60	63	59	53	48	48

Source: IDRS IDU interviews

The majority of key experts also reported that crime levels among IDU had remained stable over the previous twelve months, with no significant changes regarding the levels of property crime, low-level dealing, or fraud. Six key experts (including two law enforcement personnel) noted an increase in violent crime, such as assaults (n=3) and armed robberies (n=1). One key expert reported a slight increase in the use of needles as weapons, though this crime generally only existed among users. Two key experts

¹ Missing data for one respondent; ² Missing data for two respondents; ³ Missing data for three respondents

reported that the prevalence of violent crimes against both fellow users and the general public had increased due to the use of 'ice'; however, other key experts (n=5) stressed the key role played by alcohol in many violent crimes, with one medical practitioner insisting that alcohol is 'the greatest cause of violence'. Three key experts reported that violent crimes, including bag snatching (n=1) and armed robberies (n=1), had decreased in the previous twelve months. Additionally, many key experts mentioned that domestic violence was a significant issue for many of their clients and their families or partners. It was noted that domestic violence often goes unreported, which is problematic when attempting to determine rates and changes regarding the prevalence of this type of crime. One key expert noted that poly-drug users suffering mental health issues might be more likely to commit crimes while intoxicated.

Some key experts (n=8) reported that driving offences were common among clients. Driving offences listed by key experts included: speeding, underage driving, driving while intoxicated, driving while disqualified, and driving an unregistered vehicle.

Small numbers of key experts also reported other types of crime among their client groups, such as illegal sex work. It was also predicted that increasing levels of difficulty accessing Centrelink services might lead to increasing levels of crime.

Dealing and trafficking

Most key experts reported that trafficking and dealing activity had been stable among IDU throughout the previous twelve months. The increased use of mobile phones to traffic drugs was a theme again raised in 2006. There was a general belief that street dealing had decreased due to a variety of reasons, including increased 'mobile dealing', increased police presence and activity (particularly recent action targeting the heroin trade in some areas), and the implementation of 'Project Reduction' in the Footscray/Maribyrnong area, which is discussed more extensively in the following section. One key expert observed that the sale of heroin in the CBD was currently more 'meet and greet' than dealers blatantly offering/selling the substance, while another reported that more people were dealing from home. A few key experts reported a continuing police presence and blitzes in some suburbs, resulting in a dramatic decrease in dealing in those areas. It was noted, however, that dealing activity might have simply moved to alternative locations.

Perception of police activity

IDU survey respondents were asked a number of questions regarding their perceptions of changes in police activity during the past six months, and the impact of these changes. Approximately half of the respondents (49%) believed that police activity had been stable during that period, while 39% reported that police activity had increased recently (39%). Only three percent of respondents reported that there had been less police activity during the past six months (see Table 29). Although three-quarters of the participants (75%) reported that police activity had had no effect on the difficulty of acquiring drugs recently, 24% reported that it had made it more difficult.

Table 29: Police activity as reported by IDU, 2003-2006

·	2003 N=152	2004 N=150	2005 N=150	2006 N=150
Police activity in last 6 months %		2 1 200		2 (200
More activity	59	60	52	39
Stable	32	26	35	49
Less activity	3	3	3	3
Don't know	6	11	10	9
More difficult to obtain drugs recently %				
Yes	20	27	30	24
No	76	71	68	75

Source: IDRS IDU interviews

Similar to the results of previous IDRS studies, many key experts in 2006 reported that police activity had remained stable. Other key experts, however, reported an increase in law enforcement activity, including increases in the street presence of both undercover and uniformed police, the presence of mounted police, the use of sniffer or 'Passive Alert Detection' (PAD) dogs, and the number of police patrols and vehicles in various regions. Several key experts noted that the Commonwealth Games in Melbourne in early 2006 temporarily boosted police numbers, particularly in the CBD. One law enforcement key expert reported that police activity had decreased as a result of a number of factors including limited staff, time and resources.

'Project Reduction' was identified as a significant issue by a number of key experts in 2006, particularly for clients and services in the Footscray/City of Maribyrnong area. This law enforcement initiative was announced through the media in June 2006, and involves the option of exclusion zones being imposed upon drug offenders when sentenced. Some key experts considered the use or potential use of exclusion zones problematic. One key expert observed that, following the implementation of Project Reduction, the number of people presenting at their service had decreased, whereas the amount of crime in surrounding areas had increased. Another key expert noted that Project Reduction has the potential to undermine harm reduction policies or initiatives: in their opinion it targets vulnerable people and causes them to disconnect from health services. One example given to illustrate this was that exclusion zones might create complications for individuals trying to access pharmacotherapy programs by forcing them to move to other areas in which there may be extensive waiting lists. It was also noted that Project Reduction might encourage normalisation of discrimination against drug users and/or offenders. In addition, it was reported that communication between Victoria Police and health services prior to the introduction of Project Reduction had been minimal, making it difficult for health service staff to educate or prepare clients for the program's implementation. The implementation and outcomes associated with Project Reduction will be monitored in future IDRS studies.

As in previous years, some key experts reported that the relationship between some police and clients remained problematic. A number of key experts reported continuing policing around Needle and Syringe Programs, drug and alcohol agencies, and other health services such as chemists, a theme echoed in previous years. One key expert commented that the amount and type of policing in the area could affect the number of clients accessing a service. Another key expert reported that, in one area, law enforcement personnel were adopting an unofficial 'Project Reduction role', sometimes forcing people to prove why they were in the area. Other key experts mentioned that

clients reported police-associated problems such as searches in public places, intensive questioning and name collecting, and the confiscation of money and possessions without issuing receipts. Some key experts indicated that law enforcement personnel coming in from other suburbs/areas were more of an issue for their clients than local police, who were usually more aware of the local community issues. Other key experts also raised the importance of developing relationships between law enforcement personnel and IDU. One reported that a high turnover of law enforcement personnel in the CBD is problematic in terms of attempts to maintain positive, healthy relationships between police, drug and alcohol services, and clients. In contrast, however, another key expert noted that there is now better communication between police and service providers in the CBD. An example of this was that police usually give a 'heads-up' to service providers when there are blitzes that may target injecting drug users, particularly when these blitzes may affect additionally marginalised groups, such as the homeless.

Indeed, a number of key experts provided positive reports regarding police in their respective areas. One key expert from Melbourne's north-east region reported ongoing close relationships between service providers and the police regarding drug users in the area; police in this region generally avoided 'two-bit' users, unless they were involved in additional crime(s). Two key experts mentioned that new police anti-family violence strategies appeared very successful, with these programs having additional positive results of a better understanding of drug users by the police. Further, one key expert also noted an increase in positive client reports regarding police.

10.10. General health care

The majority of key experts noted that while there had been no significant changes to the type or number of health-related issues amongst IDU in the previous six to twelve months, many of their clients do experience a range of ongoing health problems. Such health problems include poor nutrition or malnutrition, being underweight, sleep disorders (such as insomnia), constipation, cellulitis, sepsis, skin problems, and kidney, heart and liver problems resulting from drug use. A few key experts noted that poor diet was particularly problematic for methamphetamine users due to a decreased appetite, compounded by the fact that services providing free food are generally only operational during the day. A number of key experts specifically commented on an increase in both Type 1 and 2 diabetes, particularly in older individuals and those with HCV. One key expert noted high levels of misinformation amongst IDU regarding HCV treatment, whereby many clients believe treatment can only be accessed if they stop using. This key expert also reported that a lot of naivety existed regarding the various genotypes of HCV, with some hepatitis C positive clients believing they were able to share equipment if the other person/people also had HCV.

Many key experts reported that, in addition to unsafe injecting practices, clients were continuing to expose themselves to blood-borne viral infections (BBVIs) and sexually transmitted infections (STIs) through unprotected sex, with unplanned pregnancies (and resulting abortions) also consequences associated with unsafe sex practices.

Of the key experts able to comment on changes to rates of heroin overdose during the last six to twelve months, three reported that rates had remained stable, whereas five key experts noted that the number of heroin overdoses had decreased. Despite reports of high rates of overdose in some specific areas, overall, key experts reported that overdose rates were low.

In regard to overdose rates for drugs other than heroin, one key expert reported an increase in the number of non-fatal methamphetamine overdoses in their area. An ambulance paramedic noted that overdoses were currently frequently associated with

poly-drug use, reporting that it was rare to attend an overdose resulting from the ingestion of only one substance, such as heroin. Other key experts mentioned that some users are dangerously consuming both heroin and benzodiazepines simultaneously. Two key experts reported that some individuals are combining Viagra with other drugs, such as ecstasy and methamphetamine. Another key expert reported that rates of prescription drug overdoses needed to be monitored, comparing the significance of this problem to the issue of heroin overdose in recent years.

One key expert stated that 'many' women on pharmacotherapies are experiencing a 'pseudo-menopause'. This key expert hypothesised that the long-acting nature of methadone in particular might affect the hypothalamus, leading to decreased activity and thus less oestrogen production. It was also noted that menopausal symptoms (such as not making oestrogen) may have implications for osteoporosis risk.

Finally, two key experts commented on the issue of 'unrousable snorers'. Essentially, these individuals are users of central nervous system depressants (such as heroin, alcohol and GHB) who appear to be asleep, however are actually 'unconscious and dying'. These key experts believe education should be provided to the public to inform them of the problem and how they are able to assist an individual who appears to be in this state.

10.11. Services requested

Consistent with the results of previous IDRS reports, in 2006 key experts identified unstable accommodation and difficulty accessing long-term and emergency accommodation as major problems continually faced by clients. Key experts noted that securing stable accommodation was particularly problematic for transient individuals with drug use or related issues, as well as mental illness. Key experts also reported that an individual's situation could remain unchanged or even become worse when placed in housing that reflects their previous, problematic accommodation.

Also consistent with previous IDRS reports was the 'chronic' issue of poor oral hygiene among clients, exacerbated by a lack of efficient, available dental services for drug-using populations. One key expert also reported that access to General Practitioners was becoming more difficult for clients, particularly because the number of bulk-billing doctors had decreased in some areas. Key experts also identified a need for more health services to be accessible outside of business hours, especially on weekends, and reported that extensive waiting lists continue to exist for various treatment services, including pharmacotherapies, withdrawal and detox.

Many key experts reported that a large number of clients experienced financial hardship, and consequently required vouchers for food and petrol. Key experts in contact with injecting drug users specified that many clients also found it difficult to pay for sterile injecting equipment – wheel filters in particular – and pharmacotherapy treatment. In addition, several key experts reported that many clients experienced legal issues – some described it as a 'huge' problem comparable to problems associated with accommodation and oral hygiene – and found it difficult to access cheap or free legal assistance and advice.

While one key expert reported an increase in Vietnamese clients at their agency, due primarily to an increase in resources/services specifically targeting this group, some key experts reported that generally NSPs have barriers accessing three specific populations of drug-using individuals: young people, Indigenous Australians and people from non-English speaking backgrounds. This key expert indicated that services such as NSPs need strategies to access individuals representing these groups. Key experts also reported that rural services needed to be improved so that individuals in these areas have better access

to adequate injecting equipment and relevant information, without being concerned about issues of confidentiality, anonymity and privacy.

Finally, despite clients engaging in and exhibiting knowledge of safe injecting practices, key experts noted that many individuals still require information regarding HCV and other BBVIs, particularly in relation to the different genotypes of HCV.

10.12. General trends

IDU survey participants were also asked about any recent changes (last six months) in the number or type of people using drugs, the frequency and quantity of use, and the types of drugs being used by their friends.

Forty-five percent of the IDU sample reported that there had been recent changes in the number or type of people using drugs. The main changes reported by these participants were: an increase in the overall number of people using (44%), an increase in younger people using (24%), and a decrease in the number of people using (21%).

Thirty-seven percent had observed changes in the frequency and quantity of drugs that people use. Fifty-seven percent reported that people were using more in terms of quantity (which a number of people attributed to the poor quality and/or availability of other drugs, particularly heroin). Thirty-nine percent of the sample also indicated that people were using more frequently (39%). Smaller numbers (13%) noted that people were using less in terms of quantity.

Forty-one percent stated that there had been recent changes in the types of drugs their friends had been using. Of this group, many (58%) reported a general increase in the use of speed or crystal meth/ice, while others (39%) noted an increase in the use of prescription drugs (such as buprenorphine, morphine and benzodiazepines). Once again, a number of people attributed the increased use of these prescription drugs to the decreased quality and/or availability of heroin.

10.13. Summary of associated harms/drug-related issues

The main drug-related issues to emerge from the Melbourne arm of the 2006 IDRS study include:

- Changes in patterns of drug use were observed, most notably a decrease in prevalence and frequency of recent heroin use among the IDU sample.
- The majority of IDU were poly-drug users. Sixty-two percent of survey respondents
 who had used drugs on the day prior to interview had used two or more different
 drugs.
- High rates of hepatitis C virus infection were reported among injecting drug users, although rates of needle/syringe sharing decreased.
- There were continuing reports of injection-related health problems (e.g. prominent scarring/bruising and difficulty injecting).
- Substance-related aggression was reported by many, and was most commonly attributed to the use of alcohol, speed, heroin, and crystal meth/ice.
- Mental health issues (in particular depression and anxiety) were commonly reported.
- Having driven soon after taking an illicit drug was commonly reported by IDU.
- Self-reported criminal activity was stable.
- Key experts again noted that the most frequently requested services and issues raised by clients were access to stable accommodation, access to affordable dental services, and access to affordable pharmacotherapy treatment and injecting equipment (in particular filters).

11.0 DISCUSSION

11.1. Comparison of data from different sources

The following section provides a comparison of current and emerging drug trends obtained from the injecting drug user survey, key expert reports, and the secondary indicator data. In general there was good agreement between the data sources for the four main drugs of focus – heroin, methamphetamine, cocaine and cannabis. Most trends are supported primarily by IDU and KE reports, reflecting the general paucity of available secondary illicit drug indicator data for drugs other than heroin. However, in cases where all three data sources were available, these typically showed good agreement.

11.2. Heroin

Table 30: Heroin trends endorsed (\checkmark) by injecting drug user (IDU) reports, key expert (KE) reports, and other indicator sources (OTHER).

HEROIN TRENDS	IDU	KE	OTHER
Price stable (to increasing) last six months	✓	✓	
Median price of cap \$40 (range generally \$20-50)	✓	✓	
Availability very easy to easy	✓	✓	
Medium to low purity	✓	✓	✓
Purity variable last six months	✓	✓	
Frequency of use decreased	✓	✓	
Number of people using heroin decreased	✓	✓	
Injection primary route of administration	✓	✓	
Source known dealers, mobile dealers	✓	✓	

Findings from the 2006 study suggest that there have been some recent changes in the heroin market in Melbourne. While heroin reportedly remained very easy to access in 2006, and over half of the IDU sample reported that heroin was their main drug of choice, both the reported prevalence and frequency of heroin use by IDU decreased this year (to some of the lowest levels reported since the IDRS study commenced in Melbourne in 1997). Heroin purity levels remained low and the price was stable to increasing. These trends in heroin use associated outcomes will continue to be monitored.

11.3. Methamphetamine

Table 31: Methamphetamine trends endorsed (\checkmark) by injecting drug user (IDU) reports, key expert (KE) reports, and other indicators (OTHER).

METHAMPHETAMINE TRENDS	IDU	KE	OTHER
Prevalence of methamphetamine use high among Melbourne IDU	✓	✓	✓
Frequency of use stable (to increasing)	✓	✓	
Price of methamphetamine relatively stable	✓	✓	
Half grams and points commonly purchased weights	✓	✓	
Availability very easy/easy and stable	✓	✓	
Purity variable	✓	✓	✓
Predominantly sourced through known dealers and friends	✓	✓	

Findings from the 2006 IDRS study suggest that the prevalence of methamphetamine use (in particular speed) among injecting drug users in Melbourne is quite high. Whilst frequency of methamphetamine use remains lower than for other drug types, patterns of use will continue to be monitored given the potential harms associated with the use of these drugs. As in previous years, these drugs were reportedly easy to obtain and were predominantly sourced through known dealers and friends.

11.4. Cocaine

Table 32: Cocaine trends endorsed (\checkmark) by injecting drug user (IDU) reports, key expert (KE) reports, and other indicators (OTHER).

COCAINE TRENDS	IDU	KE	OTHER
Price of cocaine stable	✓		
Prevalence and frequency of use relatively stable	✓	✓	✓
Availability stable	✓	✓	
Principal routes of administration injecting and snorting	✓	✓	
Purity medium to high	✓	✓	✓
Sourced from friends or known dealers	✓		

Amongst the IDU surveyed in Melbourne, prevalence and frequency of cocaine use remains low. This may be due to the lack of availability, the cost, and possibly the widespread availability and use of other drug types in this city. In 2006, only six injecting drug users were able to comment on cocaine trends in Melbourne. Those who could comment reported that the purity was generally medium to high and both the price and availability were relatively stable.

11.5. Cannabis

Table 33: Cannabis trends endorsed (\checkmark) by injecting drug user (IDU) reports, key expert (KE) reports, and other indicators (OTHER).

CANNABIS TRENDS	IDU	KE	OTHER
Prevalence of cannabis use among IDU high	✓	✓	✓
Prices stable-decreasing	✓	✓	
Availability easy to very easy (stable)	✓	✓	
Accessed through social networks	✓	✓	
Potency generally medium to high (stable)	✓	✓	
Most commonly used form hydroponic	✓	✓	
Frequency of use high (daily use reported)	✓	✓	
Cannabis users characterized as poly-drug users	✓	✓	✓

The Melbourne cannabis market and patterns of use continue to be relatively stable. Reported cannabis availability and perceived potency remained relatively unchanged between 1997 and 2006. In terms of the number of users, cannabis was the most widely used illicit drug by participating Melbourne IDU, and the most frequently used in terms of number of days.

11.6. Other opioids

The 2006 Melbourne IDRS study has again provided evidence of significant prescription drug use by the participating injecting drug users. There is also evidence of misuse of these drug types by some of the IDU surveyed. Given the potential health harms associated with the injection of these drug types, further research is planned to investigate these issues in greater detail, and to look at strategies that may help to reduce related harm.

Table 34: Trends in other opiate use endorsed (\checkmark) by injecting drug user (IDU) reports, key expert (KE) reports, and other indicators (OTHER).

OTHER OPIATE TRENDS	IDU	KE	OTHER
Methadone use relatively stable	✓	✓	✓
Use of buprenorphine decreased, with a corresponding increase in the use of Suboxone	✓	✓	✓
Reported diversion and injection of some prescribed drugs	✓	✓	✓
Increase in oxycodone use, frequency of use remains low	✓	✓	
Widespread use of morphine, although frequency of use low	✓	✓	

11.7. Other drug trends

Other prescription drugs such as benzodiazepines and antidepressants were also reported to be widely used by the participating injecting drug users, and key experts commented on steroid use and injection among some groups. As with cocaine, ecstasy use was reported to be infrequent amongst this group. Inhalant and hallucinogen use was also reported to be uncommon.

Table 35: Trends in other drug use endorsed (\checkmark) by injecting drug user (IDU)

reports, key expert (KE) reports, and other indicators (OTHER).

OTHER DRUG TRENDS	IDU	KE	OTHER
Benzodiazepine use and injection relatively stable	✓	✓	
Antidepressant use common	✓	✓	
Inhalant and hallucinogen use relatively uncommon among this group	✓	✓	
Recent ecstasy use relatively stable in this user group	✓	✓	
Primary route of ecstasy administration oral	✓	✓	
Purity of ecstasy relatively stable			✓
Increase in number of steroid users accessing injecting equipment		✓	

11.8. Drug-related health and law enforcement trends

Table 36: Drug-related health and law enforcement trends identified by injecting drug user (IDU) reports, key expert (KE) reports, and other indicator sources (OTHER).

DRUG-RELATED ISSUES	IDU	KE	OTHER
Large proportion of IDU experiencing injection-related health problems	✓	✓	
Levels of unsafe injecting behaviour stable-decreasing	✓	✓	
Number of non-fatal heroin overdoses decreasing	✓	✓	✓
Incidence of mental health issues (most commonly depression and anxiety) stable to increasing		✓	
Large proportion of IDU reported driving soon after taking illicit drugs	✓		
Self-reported crime levels stable	✓	✓	

Harms associated with injecting drug use continue to be of concern. While the number of non-fatal heroin overdoses decreased, the majority of IDU (70%) reported experiencing at least one type of injection-related health problem during the past month. The incidence of mental health issues was reported to be stable to increasing.

12.0 STUDY LIMITATIONS

The aim of the IDRS study is to monitor emerging trends in illicit drug use and related issues within the community. The study is not designed to provide a definitive or detailed explication of these trends. Rather, the primary purpose of the IDRS findings is to (where appropriate) inform future policy and research responses to the public health and law enforcement challenges presented by illicit drug use in each state and territory within Australia.

The IDRS approach relies on the perceptions of expert individuals involved in and exposed to the illicit drug scene (both individuals who inject drugs and professionals working with these groups). Where possible, these reports are compared against secondary indicators. However, given the hidden nature of illicit drug use, the availability of reliable indicator data is often limited.

Further, the IDRS study principally gathers evidence on emerging trends among people in contact with drug treatment, health and other services (e.g. the IDU interviews are primarily conducted at Melbourne Needle and Syringe Programs). As this population is not necessarily representative of all illicit drug users (e.g. those who do not routinely access such services, and recreational/non-dependent illicit drug users), the generalisability of the present results is limited. Another key limitation of the IDRS methodology is that it only describes drug use issues within metropolitan Melbourne and fails to provide a comprehensive picture of drug use issues across the whole state of Victoria. To provide such a comprehensive picture, the IDRS methodology would need to be expanded to regional areas of Victoria.

13.0 IMPLICATIONS

While the aim of the IDRS study is to monitor emerging trends in illicit drug use and related outcomes, it is not intended as a comprehensive and detailed investigation of illicit drug markets. The role of the Melbourne arm of the IDRS study is to identify yearly illicit drug use trends, and provide recommendations regarding key issues that warrant further monitoring and/or in-depth investigation.

The findings of the 2006 Melbourne IDRS study suggest the following priority areas:

1. Continued monitoring of illicit drug markets for trends in price, purity availability, patterns of drug use, and related outcomes.

The IDRS study has again demonstrated its value as an informative and reliable drug trend monitoring study. It provides comparable data relating to illicit drug use and related outcomes, in a timely and cost-effective manner. Data from recent years have highlighted the dynamic nature of the illicit drug markets in Melbourne and the need to monitor fluctuations and the way these may impact on patterns of drug use. For example, if the prevalence and frequency of heroin use continues to decrease, and methamphetamine continues to be very easy to access (a trend observed in 2006), both patterns of drug use, and in turn health-related issues and treatment-seeking behaviours may change. The continued monitoring of illicit drug markets is therefore vital, and will add to our understanding of patterns of drug use and our ability to inform strategic policies and limit any associated harms.

2. Expansion of Victoria's routine drug trend monitoring, through new methods and new sentinel groups, to improve the understanding of intersecting drug markets and related outcomes.

The experience in Victoria and nationally has shown that the IDRS methodology can be extended to other sentinel groups of drug users for the purpose of monitoring trends in different market segments. For example, the IDRS drug trend monitoring methods have been successfully adapted for the purpose of exploring benzodiazepine use among IDU (Breen, et al. 2003), and to explore patterns of drug use among party drug/psychostimulant users (Stoovè, Laslett & Barratt, 2005; Johnston, et al. 2004). In 2006 the IDRS methodology was also adapted for a research study with at-risk young people living in Melbourne (the YDRS Study). Expansion of core methods from existing monitoring systems to other important groups of drug users (e.g. new initiates to intravenous drug use) or drug market settings not currently included in such monitoring (e.g. rural/regional markets) should also be investigated. Further, the feasibility of incorporating new data collection methods such as web-based surveys (successfully implemented in the Victorian Psychostimulant Monitoring Project and the Cocaine Markets Study)¹⁴ might also be considered as a means of enhancing sampling and market coverage of existing core monitoring systems.

3. Further research to monitor the characteristics and impact of psychostimulant use in Melbourne, along with consideration of the impact of these drug types upon both health and law enforcement sectors.

Whilst the IDRS study is able to monitor trends in psychostimulant use among regular injecting drug users, it cannot provide information on psychostimulant use and related outcomes among all sentinel groups of interest. The annual national Ecstasy and related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative) and the Cocaine Markets Study (completed in 2005) provide important additional information about these drug markets in other sentinel groups of drug users (i.e. regular ecstasy users, regular cocaine users). However, given the evidence among the IDRS sample of widespread use of methamphetamine, and the anecdotal reports that the use of these drug types could be associated with negative effects (such as methamphetamine-related mental health issues and substance-related aggression), further research is required to gain a greater understanding of these drug types. In turn, health and law enforcement professionals working with drug-using populations may be required to develop informed strategies to manage people who may experience negative effects due to the use these drugs.

4. Further research into the injection of steroids and the risks and harms associated with this practice.

In 2006 key experts reported steroid injection among some client groups, stating that there was a need to promote harm reduction strategies among this population. A greater understanding of the patterns of steroid use and injection, and the potential harms associated with this practice, would help to inform effective harm reduction strategies.

_

¹⁴ Johnston, et al., 2004; Shearer, et al., 2005.

5. Further research into drug-driving, particularly in regard to peoples' understanding of impairment and the circumstances in which they drive soon after taking illicit drugs.

In 2006 three-quarters of those who had driven a car during the past six months reported having driven soon after taking an illicit drug during that time, most commonly after using heroin, cannabis or speed. Findings from this study suggest that there is not one particular group at risk of drug-driving, and across-the-board education about how different drugs affect driving ability should be provided to IDU. Further research into peoples' understanding of impairment, and the circumstances in which they drive soon after taking illicit drugs, would also help to inform the development of effective education resources.

6. Research to explore the nature and extent of prescription drug use among injecting drug users in Melbourne, and the health harms associated with prescription drug misuse.

Given the continuing reports of diversion and injection of prescription pharmaceuticals by some participants, further research into patterns of use, and factors that would reduce the harms associated with the injection of these drug types is needed.

7. Further research to gain a better understanding of the determinants of unsafe injecting and sex practices, particularly for those that increase the risk of blood-borne viral infections (e.g. HIV, HCV and HBV).

Although rates of needle/syringe sharing reportedly decreased in 2006, injection-related health problems continued to be reported by both IDU and key experts, and hepatitis C carriage rates remain unacceptably high. On-going emphasis on strategies to reduce the rates of needle/syringe and other injection equipment sharing is needed (particularly among some groups), and the development and dissemination of harm reduction resources should continue to be a priority.

Since 1997, the Melbourne arm of the national IDRS study has proven to be a reliable, cost-effective and informative mechanism for the monitoring of illicit drug trends in Victoria. It yields data that are comparable from year-to-year and across jurisdictions, and it is a study that has much to offer health and law enforcement sectors in their efforts to respond more effectively to illicit drug trends.

REFERENCES

- Australian Government Department of Health and Ageing (2006). New Listings on the Pharmaceutical Benefits Scheme. Minister for Health and Ageing, Tony Abbott, Media Release. 31 March 2006.
- Australian Institute of Health and Welfare. (2005). 2004 National Drug Strategy Household Survey: State and Territory supplement. AIHW cat. no. PHE 61. Canberra: AIHW.
- Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Fry, C., Duquemin, A., Fischer, J., Gray, B., & Jenkinson, R. (2003). *The impact of changes in the availability of publicly subsidised 10mg temazepam gel caps in Australia*. NDARC Technical Report No. 158. Sydney: National Drug and Alcohol Research Centre.
- Crofts, N., Aitken, C. K., & Kaldor, J. M. (1999). The force of numbers: why hepatitis C is spreading among Australian injecting drug users while HIV is not. *Medical Journal of Australia*, 171(3), 165-166.
- Dietze, P. M., Cvetkovski, S., Rumbold, G., & Miller, P. (2000). Ambulance attendance at heroin overdose in Melbourne: The establishment of a database of ambulance service records. *Drug and Alcohol Review*, 19(1), 27-33.
- Dietze, P., Miller, P., Clemens, S., Matthews, S., Gilmour, S., & Collins, L. (2003). *The course and consequences of the heroin shortage in Victoria*. Sydney, Australia: University of NSW.
- Di Natale R, Ritter A (2003). The costs and benefits associated with methadone take-away doses. Melbourne: Drugs Policy and Services Branch, Victorian Department of Human Services. Protected Document.
- Dobbin, M. (2002). The Victorian Temazepam Injection Prevention Initiative. *The Health of Victorians The Chief Health Officer's Bulletin*, 2(1), 13-16.
- Drugs and Crime Prevention Committee (2004). *Inquiry into Amphetamine and Party Drug'*Use in Victoria Final Report. Melbourne, DCPC, Parliament of Victoria.
- Drugs and Crime Prevention Committee (2006). Inquiry into the Misuse/Abuse of Benzodiazepines and Other Forms of Pharmaceutical Drugs in Victoria—Interim Report. Melbourne, DCPC, Parliament of Victoria.
- Dwyer, R., & Rumbold, G. (2000). Victorian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS) (National Drug and Alcohol Research Centre, Technical Report No 89). Sydney: University of NSW.
- Fry, C., & Miller, P. (2001). Victorian Drug Trends 2000: Findings from the Melbourne arm of the Illicit Drug Reporting System (IDRS) Study. National Drug and Alcohol Research Centre Technical Report No. 108. Sydney: National Drug and Alcohol Research Centre.
- Fry, C., & Miller, P. (2002). Victorian Drug Trends 2001: Findings from the Melbourne arm of the Illicit Drug Reporting System (IDRS) Study. National Drug and Alcohol Research Centre Technical Report No. 129. Sydney: University of NSW.

- Hando, J., & Darke, S. (1998). NSW Drug Trends 1997. Findings from the Illicit Drug Reporting System (IDRS). National Drug and Alcohol Research Centre Technical Report 56. Sydney: National Drug and Alcohol Research Centre, University of NSW.
- Hando, J., Darke, S., Degenhardt, L., Cormack, S., & Rumbold, G. (1998). *Drug Trends* 1997: A comparison of drug use and trends in three Australian states (NDARC monograph no. 36). Sydney: National Drug and Alcohol Research Centre.
- Hando, J., O'Brien, S., Darke, S., Maher, L., & Hall, W. (1997). *The Illicit Drug Reporting System Trial: Final Report.* National Drug and Alcohol Research Centre Monograph 31. Sydney: National Drug and Alcohol Research Centre, University of NSW.
- Jenkinson, R., Fry, C., & Miller, P. (2003). Victorian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS). NDARC Technical Report No. 145. Sydney: National Drug and Alcohol Research Centre.
- Jenkinson, R., Miller, P., & Fry, C. (2004). Victorian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS). NDARC Technical Report No. 175. Sydney: National Drug and Alcohol Research Centre.
- Jenkinson, R. & O'Keeffe, B. (2005). Victorian Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS). NDARC Technical Report No. 212. Sydney: National Drug and Alcohol Research Centre.
- Jenkinson, R. & O'Keeffe, B. (2006). Victorian Drug Trends 2005: Findings from the Illicit Drug Reporting System (IDRS). NDARC Technical Report No. 256. Sydney: National Drug and Alcohol Research Centre.
- Johnston J., Laslett A-M., Miller P., Jenkinson R., Fry, C., & Dietze P. (2004). Victorian Psychostimulant Monitoring Project: Trialing Enhanced Drug Trend Monitoring of Melbourne Psychostimulant Markets. Fitzroy: Turning Point Alcohol & Drug Centre.
- Kellehear, A. (1993). The Unobtrusive Researcher: A Guide to Methods. St. Leonards, NSW, Australia: Allen & Unwin.
- Lintzeris, N., et al. (2006). National Clinical Guidelines and Procedures for the Use of Buprenorphine in the Treatment of Opioid Dependence. http://www.health.vic.gov.au/dpu/downloads/guidelines-buprenorphine.pdf
- McKetin, R., Darke, S., Hayes, A., & Rumbold, G. (1999). Drug Trends 1998. A comparison of drug use and trends in three Australian states: Findings from the Illicit Drug Reporting System (IDRS). National Drug and Alcohol Research Centre Monograph No. 41. Sydney: National Drug and Alcohol Research Centre University of NSW.
- Miller, P., Fry, C., & Dietze, P. (2001). A study of the impact of the heroin 'drought' in Melbourne: Results of the Drug Availability Monitoring Project (DAMP). Melbourne: Turning Point Alcohol and Drug Centre Inc.
- Moore, T., Caulkins, J. & Dietze, P. (2005). Bulletin No. 8: Illicit drugs in Australia: What do we know about the role of price? *DPMP Bulletin Series*. Fitzroy: Turning Point Alcohol and Drug Centre.
- National Centre in HIV Epidemiology and Clinical Research. (2006). *Australian NSP Survey, National Data Report 2001-2005*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW.

- Premier's Drug Prevention Council (2005). Victorian Youth Alcohol and Drug Survey: 2004: Illicit Drug Findings. Victorian Government Department of Human Services, Melbourne, Victoria.
- Ritter, A., Berends, L., Clemens, S., Devaney, M., Richards, J., Bowen, K., & Tiffin, R. (2003). *Pathways: A review of the Victorian drug treatment service system.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre.
- Roxburgh, A. and Degenhardt, L. (2006) *Drug-related hospital stays in Australia 1993-2005*. Sydney: National Drug and Alcohol Research Centre.
- Rumbold, G., & Fry, C. (1999). Victorian Drug Trends 1998: Findings from the Melbourne Trial of the Illicit Drug Reporting System (IDRS). NDARC Technical Report 73. Sydney: National Drug and Alcohol Research Centre.
- Shearer, J., Johnston, J., Kaye, S., Dillon, P., & Collins, L. (2005). *Characteristics and dynamics of cocaine supply and demand in Sydney and Melbourne*. National Drug Law Enforcement Research Fund, Monograph Series No. 14.
- Stoovè, M.A, Laslett, A-M., Barratt, M.J. (2005). Victorian trends in ecstasy and related drug markets 2004: Findings from the Party Drugs Initiative (PDI). NDARC technical report no. 226. Fitzroy, Victoria, Turning Point Alcohol and Drug Centre.
- Victorian Department of Human Services. (2006a). The Victorian Drug Statistics Handbook 2006: Patterns of drug use and related harm in Victoria. Victorian Government Publishing Service.
- Victorian Department of Human Services. (2006b). Surveillance of Notifiable Infectious Diseases in Victoria: HIV/AIDS Monthly Surveillance Report. Prepared by Guy & Devadason, Communicable Diseases Section, Public Health Branch, Department of Human Services.
- Victorian Department of Human Services. (2007). *Notifications of Infectious Diseases*. Victorian Summary Report 1 January to 11 January 2007. Communicable Diseases Section, Public Health Branch, Department of Human Services.
- Woods, J., Gerostamoulos, D., Drummer, O, & Cordner, S. (2006). *Heroin Deaths in Victoria: 2005*. Report No. 9: April 2006. Victorian Institute of Forensic Medicine, Department of Forensic Medicine, Monash University.
- Wilce, H. (2004). Temazepam capsules: what was the problem? *Australian Prescriber*; 27: 58-9.