

Victorian Drug Trends 1998

**Findings from the Melbourne arm of the Illicit Drug
Reporting System (IDRS)**

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CONTENTS

CONTENTS	ii
LIST OF TABLES	iv
LIST OF FIGURES	vi
ACKNOWLEDGMENTS	vii
EXECUTIVE SUMMARY	9
1.0 INTRODUCTION	12
1.1 STUDY AIMS	12
2.0 METHOD	13
2.1 SURVEY OF INJECTING DRUG USERS (IDU)	13
2.2 KEY INFORMANT STUDY	14
2.2.1 FACE VALIDITY OF KEY INFORMANT REPORTS	16
2.3 OTHER INDICATORS	17
3.0 CURRENT DRUG SCENE AND RECENT TRENDS	20
3.1 OVERVIEW OF THE SAMPLE OF INJECTING DRUG USERS	20
3.2 DRUG USE HISTORY OF THE IDU SAMPLE	21
3.3 HEROIN	25
3.3.1 PRICE	25
3.3.2 AVAILABILITY	26
3.3.3 FORM AND PURITY	26
3.3.4 PATTERNS OF HEROIN USE	28
3.3.5 SUMMARY OF HEROIN TRENDS	32
3.4 AMPHETAMINES	33
3.4.1 PRICE	33
3.4.2 AVAILABILITY	33
3.4.3 FORM AND PURITY	33
3.4.4 PATTERNS OF AMPHETAMINE USE	35
3.4.5 SUMMARY OF AMPHETAMINE TRENDS	36
3.5 COCAINE	37
3.5.1 PRICE	37
3.5.2 AVAILABILITY	38
3.5.3 FORM AND PURITY	38
3.5.4 PATTERNS OF COCAINE USE	39
3.5.5 SUMMARY OF COCAINE TRENDS	40
3.6 CANNABIS	41
3.6.1 PRICE	41
3.6.2 AVAILABILITY	41
3.6.3 FORM AND PURITY	41
3.6.4 PATTERNS OF CANNABIS USE	42
3.6.5 SUMMARY OF CANNABIS TRENDS	45
3.7 OTHER DRUGS	45
3.7.1 IDU SURVEY	45
3.7.2 KEY INFORMANT STUDY	46
3.7.3 SUMMARY OF OTHER DRUG TRENDS	47
4.0 DRUG-RELATED ISSUES	48
4.1 IDU SURVEY	48
4.2 KEY INFORMANT STUDY	50
4.3 OTHER INDICATORS	52

4.4 SUMMARY OF DRUG-RELATED ISSUES	58
5.0 DISCUSSION	59
6.0 REFERENCES	63

LIST OF TABLES

<i>Table 1. Demographic characteristics of the injecting drug user (IDU) sample (n= 293).</i>	20
<i>Table 2. Drug use history of IDU sample (n=293).</i>	24
<i>Table 3: Modal prices of heroin in Melbourne as reported in the IDU survey components of the 1997 and 1998 IDRS studies.</i>	25
<i>Table 4. Mean purity level of heroin seizures in Victoria.</i>	28
<i>Table 5. Victorian School Students Drug Use Survey 1992, 1996; proportion of respondents who reported using various illicit drugs within the past month by year level.</i>	29
<i>Table 6. Distribution, return and return rate for fixed outlets, off site services and total program: Victorian Needle and Syringe Exchange Program 1987-1996.</i>	29
<i>Table 7. Summary of trends in the price, availability, purity and use of heroin.</i>	32
<i>Table 8. Mean purity level of methamphetamine seizures in Victoria.</i>	35
<i>Table 9. Victorian School Students Drug Use Survey 1992, 1996; proportion of respondents who reported using amphetamines within the past month by year level.</i>	35
<i>Table 10. Summary of trends in the price, availability, purity and use of amphetamines.</i>	37
<i>Table 11. Modal prices of cocaine in Melbourne as reported in the 1997 and 1998 IDRS studies.</i>	37
<i>Table 12. Mean purity level of cocaine seizures in Victoria.</i>	39
<i>Table 13. Victorian School Students Drug Use Survey 1992, 1996; proportion of respondents who reported using cocaine within the past month by year level.</i>	39
<i>Table 14. Summary of trends in the price, availability, purity and use of cocaine.</i>	40
<i>Table 15. Modal prices of cannabis in Melbourne as reported by IDU in the 1997 and 1998 IDRS studies.</i>	41
<i>Table 16. Proportion of the population aged ≥14 who report ever using, or recently using cannabis (for non-medical purposes) as measured in the Victorian/National Drug Household Survey.</i>	42
<i>Table 17. Victorian School Students Survey, proportion of respondents who reported using cannabis by age group for 1992, 1996.</i>	43
<i>Table 18. Summary of trends in the price, availability, purity and use of cannabis.</i>	45
<i>Table 19. Reported experience of heroin overdose (% of respondents who have used heroin, n=284), IDU survey.</i>	48
<i>Table 20. Criminal activity reported by IDU in the last month.</i>	49
<i>Table 21. Monthly totals of non-fatal heroin overdose attended by ambulances in Melbourne, 11/97-9/98.</i>	54
<i>Table 22. Numbers of heroin-related deaths in the Victoria, 1991-1998.</i>	55

<i>Table 23. Annual number of notifications of HIV diagnoses in Victoria in which injecting drug use has been identified as the likely exposure factor, 1989-1998.</i>	56
<i>Table 24. Hepatitis C, Victoria, Notifications by year and gender, 1992-1997</i>	56
<i>Table 25. Number of arrests for cannabis, heroin, amphetamine and cocaine related offences in Victoria, 1995/96-1997/98.</i>	57
<i>Table 26. Consumer arrests as a proportion of all drug-related arrests in Victoria, 1995/96-1997/98.</i>	57
<i>Table 27. Summary of drug-related issues.</i>	58

LIST OF FIGURES

<u>Figure 1.</u> Postcode of residence of participants of IDU survey. _____	21
<u>Figure 2.</u> Relationship between the number of years since the initiation of injecting drug use and the type of drug that was first injected. _____	22
<u>Figure 3.</u> Purity of heroin seizures made by law enforcement agencies in Victoria in each quarter of the 1997/98 financial year (Source: ABCI). _____	27
<u>Figure 4.</u> Purity of amphetamine and methamphetamine seizures made by law enforcement agencies in Victoria in each quarter of the 1997/98 financial year (Source: ABCI). _____	34
<u>Figure 5.</u> Purity of cocaine seizures made by law enforcement agencies in Victoria in each quarter of the 1997/98 financial year (Source: ABCI). _____	38
<u>Figure 6.</u> Census estimate of the number of clients on the methadone program in Victoria. (Source: Victorian Department of Human Services). _____	53

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EXECUTIVE SUMMARY

In 1998 the Commonwealth Department of Health and Aged Care commissioned the National Drug and Alcohol Research Centre to conduct a national trial of the Illicit Drug Reporting System (IDRS). The aim of the IDRS is to provide a method of monitoring trends in the use of opiates, cannabis, cocaine and amphetamines. This approach to the monitoring of illicit drugs provides information about emerging trends in illicit drug use and related harms and provides the basis for identifying areas of concern that may require further investigation.

Turning Point, Alcohol and Drug Centre Inc conducted the Melbourne arm of this trial between July and September of 1998. The 1998 IDRS conducted in Melbourne consisted of:

1. A quantitative survey of a total of 293 individuals who were current injecting drug users recruited from a number of sites across the Melbourne metropolitan area.
2. Qualitative interviews with 31 key informants recruited from a variety of professional settings. Participants were selected on the basis of their perceived level of knowledge about illicit drug use, as well as having had contact with illicit drug users over the past 6 months.
3. Analysis of a range of secondary illicit drug indicators.

The data collected in these 3 phases of the study were analysed in order to identify trends in illicit drug use and related harms. For comparison these data were compared to the results obtained in the Melbourne IDRS study that was conducted in 1997.

Summary of drug trends in Victoria

The 1998 IDRS detected a number of drug trends during the past 6-12 months from analyses of the IDU survey, the key informant survey, and other indicators.

Heroin

The major trends evident for the Melbourne heroin market were a decrease in price and increase in the purity of the drug since 1997. Increased frequency of use of heroin was reported by individuals who were injecting drugs, and reports were received of an increase in recreational use and in 'burning' of the drug. There was evidence of the continuing

development of street-based markets in many locations within Melbourne. A substantial increase in the number of heroin-related fatalities occurred in Victoria from 1997 to 1998, and there was evidence of a high rate of ambulance attendance at non-fatal heroin overdoses in Melbourne during this period.

Amphetamines

Most indicators relating to amphetamines were stable including price, purity and availability. The available evidence suggests that the prevalence of amphetamine use in Melbourne is either stable or has decreased somewhat.

Cocaine

Relatively few key informants or injecting drug users were able to comment on cocaine trends. The responses of those who were able to provide such information indicated price, purity and availability was relatively stable, apart from some evidence of a reduction in price since 1997. Cocaine continues to be used relatively infrequently by individuals who are injecting drugs.

Cannabis

Most aspects of the cannabis market and patterns of use appear to be relatively stable with only a slight reduction in price and no change in availability evident between 1997 and 1998. There is evidence of a continuing trend towards the use of hydroponic production techniques in cannabis cultivation. There appear to be no major changes in the form of the drug used or the prevalence of use of the drug over this period. Cannabis remains the most widely used illicit drug within Victoria.

Other drugs

There is evidence of a continuing high rate of prescription drug use among individuals who are injecting drugs including opiates, benzodiazepines and anti-depressants. There is some evidence in the reduction of use of the benzodiazepine, flunitrazepam among individuals who inject drugs.

Drug-related issues

A number of disturbing trends are apparent in relation to health problems associated with illicit drug use. These include:

- a substantial increase in heroin-related fatalities from 1997 to 1998,
- high rates of non-fatal overdose among individuals injecting heroin, and
- poor health status and continuing high rates of infection with the hepatitis C virus among injecting drug users.

There continues to be an increase in the number of clients who are participating in the methadone program in Victoria. Police arrests have increased for offences relating to heroin and decreased for those in relation to cannabis, a trend which would appear to reflect changes in police policy and enforcement practices.

Research Implications

The findings of the 1998 IDRS suggest the following areas for further investigation:

1. Research into the observed changes in patterns of heroin use, particularly among younger people and focusing on initiation into the injecting of heroin.
2. An examination of the relationship between changes in the characteristics of the heroin market (such as price and purity) upon patterns of heroin use and related consequences. This should include research which would inform the development of approaches to reducing the harms associated with street-based heroin markets in Melbourne.
3. There is an urgent need for research into the development of more effective methods for preventing heroin-related overdose and the transmission of the hepatitis C virus among individuals who inject drugs.
4. Research examining the potency of cannabis currently being consumed in Victoria and related health implications.
5. Prevalence estimation studies that aim to provide estimates of the number of Victorians who are using heroin, amphetamines, cocaine and other illicit drugs that are difficult to measure using general population surveys.

1.0 INTRODUCTION

In 1998 the Commonwealth Department of Health and Aged Care commissioned the National Drug and Alcohol Research Centre to conduct a national trial of the Illicit Drug Reporting System (IDRS). The aim of the IDRS is to provide a method of monitoring trends in the use of opiates, cannabis, cocaine and amphetamines. This approach to the monitoring of illicit drugs provides information about emerging trends in illicit drug use and related harms and provides the basis for identifying areas of concern that may require further investigation.

The *1998 Victorian Drug Trends Report* summarises the information collected in Melbourne component of the 1998 IDRS which was conducted over the months of July to October 1998. The study replicated the methodology used in the 1997 study by incorporating: a survey of individuals who inject drugs; interviews with key informants recruited from a variety of professional settings; and the analysis of existing indicators. The information provided by these three methods has been used to draw conclusions regarding trends in illicit drug use and harm.

The findings of the 1998 National trial of the IDRS have been published in a national report presenting state comparisons (McKetin et al, 1999a) and separate South Australian and New South Wales Drug Trends Reports (Hayes et al, 1999; McKetin et al, 1999b). The results of the 1997 multi-state trial of the IDRS are also available in state reports (Cormack et al, 1998; Hando et al, 1998a; Rumbold and Fry, 1998) and in a national report (Hando et al, 1998b).

1.1 STUDY AIMS

The specific aims of the Melbourne component of the 1998 IDRS were to:

- examine trends in illicit drug use and related harms; and
- identify emerging trends that are important from a policy perspective or require further investigation.

2.0 METHOD

There are three components to the IDRS: a survey of persons who inject drugs, key informant interviews and examination of available indicators of illicit drug use and harm in the Victorian community. The methods used in each of these components are described in the following section:

2.1 SURVEY OF INJECTING DRUG USERS (IDU)

The survey involved quantitative interviews with 293 injecting drug users recruited from within the Melbourne metropolitan area, between July and September 1997. The inclusion criteria for individuals in the survey were that they must have injected at least monthly in the 6 months prior to the interview, and have resided in Melbourne for at least 12 months. Subjects were recruited using a variety of methods including posted advertisements and recruitment notices distributed through needle and syringe exchanges, and snowball methods (recruitment of friends and associates via word of mouth). Six agencies including: Dandenong Hospital AIDS Prevention & Support Unit; Turning Point Alcohol & Drug Centre; AIDS Prevention and Health Awareness Program (APHAP); St Kilda Crisis Centre; Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS); and the Western Region AIDS Prevention (WRAP) assisted the research team by participating as recruitment and interview sites for IDRS participants.

Interviews with respondents took place in needle and syringe exchanges, health or outreach services, or other locations that were convenient to the participants. The major locations for recruitment and subsequent interview were in Fitzroy, Dandenong, Footscray, Frankston, St Kilda and Glenroy.

The structured interview schedule used in the present study was based on that which was used in the 1997 IDRS study conducted in Melbourne. Minor amendments were made to this questionnaire in the form of some additional questions regarding the types of drugs used, and experience of heroin overdose. The interview schedule contained sections on demographics, drug use, price, purity and availability of drugs, crime, risk-taking behaviour, health and

general trends. The duration of the interviews was approximately 35 minutes and participants were reimbursed \$20 for their time and out of pocket expenses. Data analysis was conducted using SPSS for Windows (Version 6).

2.2 KEY INFORMANT STUDY

Key informant participants for the 1998 IDRS study were recruited using a targeted sampling methodology (Watters & Biernacki, 1989). A total of 31 key informants (15 males and 16 females) participated in telephone interviews (n = 27) and face-to-face interviews (n = 4) between the months of August and November 1998. Face-to-face interviews were conducted in situations where key informants preferred this format, or were working in close proximity to the interviewer. Fifteen (48%) participants were recruited from the pool of key informants who had taken part in the 1997 IDRS study (Rumbold & Fry, 1998). All other participants in the current study were identified and recruited on the basis of referrals received from experienced professionals in the field.

Key informants recruited for the current study included drug treatment workers (n = 12), needle exchange workers (n = 8), user group representatives (n = 3), outreach workers (n = 1), youth workers (n = 2), researchers (n = 3), ambulance officers (n = 1) and psychologists (n = 1). Participants were selected on the basis of having at least weekly contact with illicit drug users over the preceding 6 months, and/or contact with 10 or more different illicit drug users during that period.

Key informant participants were screened after they had received sample copies of the key informant interview schedule, project information sheet and consent form. This provided an opportunity for prospective participants to make an informed decision about their suitability for the study, and also allowed participants to consider questions from the interview schedule prior to their interview. The interview schedule was a structured instrument which included sections on patterns of drug use, availability of drugs, criminal behaviour and health issues. Attempts were made to recruit each of the 42 key informants who had participated in the 1997 IDRS study. A total of 27 people from this group either could not be contacted due to a change in employment, or declined to participate this year because of self-identified lack of suitability or prior commitments.

Heroin was nominated by a majority (n = 27) of Melbourne key informants as the main illicit drug used by the people with whom they had most contact. Reports on primary cannabis users were received from a small number (n = 4) of key informants, due mainly to difficulties in contacting many of the key informants who had reported on this substance in the previous study. One key informant was able to nominate amphetamines as a major drug group used by a sub-population of the people with whom they had contact. No key informants were able to report on cocaine as the main illicit drug used by the people with whom they had most contact. Where appropriate, reports on amphetamine and cannabis use in Melbourne were supplemented by information obtained from key informants reporting on heroin.

Informed consent to participate in the study was obtained verbally prior to interview. Written consent was returned to the interviewer on a standard consent form at the conclusion of the interview. Key informant interviews took an average of 36 minutes to complete (*Range* = 20-50 minutes). Detailed notes were made by the interviewer during the interview. A hands-free telephone headset was utilised in order to facilitate note-taking during the interview phase. Raw data were transcribed and coded soon after each interview had concluded, to ensure an accurate record of the information provided. Qualitative analyses of raw data were conducted using a simple consensus-driven exploration of the main themes reported by key informants (Manning & Cullum, 1994; Sarantakos, 1993). For the purpose of this study, trends were defined and reported where more than two key informants had provided reports on the same or thematically similar issues. Single reports from key informants have been presented where they were deemed reliable by the interviewer, and where the information provided contributed to an explanation of particular trends. Single reports are not intended to be interpreted as definitive evidence on particular substances or issues. Categorical data on reported estimates of price, purity and availability were entered into an Excel 5.0 database and summarised using standard descriptive statistics procedures.

The majority of key informants based their reports on information they had obtained either through client contact within their particular work place or service (n = 27), or both personal experience and client contacts (n = 4). All four key informants who were able to draw from both client and their own experiences provided reports on heroin. The specific reported sources of information included clients (n = 31), personal experience (n = 10), media (n = 7), professional activities (n = 22) and research (n = 17). Participants were confident about their knowledge of the group they were reporting on, and about the information they provided

during the interview. Most key informants (n = 25) rated their knowledge as either 'good' or 'excellent'. Similarly, most people reported that they were 'very' (n = 17) or 'moderately' (n = 10) certain about the information they had provided during their interview.

Nineteen (61%) of the 31 key informants reported 'daily' contact (5 to 7 days per week) with a range of client groups during the preceding 6 months. The mean number of reported contact days in that time period was 106 (*Range* = 24-144 days). Special populations were well represented in the sample. In the 6 months prior to interview, key informants had contact with many different client groups including: people who engage in injecting drug use (93%); youth (68%); people from non-English speaking backgrounds (68); women (58%); people in prison (52%) and indigenous peoples (45%). In addition, a number of key informants reported contact with juvenile justice clients, people from the gay and lesbian community, homeless people, male and female sex-workers, people who use steroids, and clients with dual-diagnosis issues

2.2.1 FACE VALIDITY OF KEY INFORMANT REPORTS

Most key informant participants (77%) reported having seen between 51 and more than 100 illicit drug users during the 6 months prior to interview. All of the 15 informants who reported contact with more than 100 illicit drug users in that time provided reports on heroin users. These figures are similar to those from the 1997 IDRS study (Rumbold & Fry, 1998), and seem to be generally consistent with the greater number and range of services available to people who use heroin, compared to those available for primary users of other substances such as cannabis and amphetamine.

Information from key informant reports was further validated through a process of providing feedback to those agencies which participated in the current IDRS study either as primary recruitment and interview sites, or as secondary recruitment sites. Upon completion of the key informant interview phase, an informal seminar was conducted at Turning Point Alcohol and Drug Centre for the purpose of providing feedback to participating agencies. The benefit of this seminar for agencies was that it provided a timely mechanism of relaying IDRS findings directly to those staff in contact with illicit drug users. Such findings are useful for the purpose of informing a wider range of alcohol and drug professionals about emerging trends in illicit drug use within Melbourne.

2.3 OTHER INDICATORS

The information collected from the IDU survey and key informant study was supplemented by data obtained from a range of existing indicators of illicit drug use and related harms.

Where possible data relating to trends within the 1997/98 financial year are reported, however for some indicators where current data is not available, the most recently available data has been included.

The indicators included in the current report were:

- *purity data from police seizures as collated by the Australian Bureau of Criminal Intelligence,*

The primary source relating to the purity of illicit drugs being sold in Victoria is the State Forensic Laboratory which conducts the scientific analysis of drug seizures made by the police. The drugs tested include heroin, cocaine, and amphetamines and this information is collated by the Australian Bureau of Criminal Intelligence (ABCI). Due to technical reasons the potency of cannabis in terms of THC content is not tested.

- *Survey data*

The 1996 Survey of Alcohol, Tobacco and Other Drug Use Among Victorian Secondary School Students has been conducted by the Anti-Cancer Council of Victoria (ACCV) and the Drug Treatment Services Unit of the Department of Human Services as part of the 1996 Australian School Students' Alcohol and Drugs (ASSAD) Survey. Prior to this, surveys has been conducted in 1992 (drug use) and 1993 (alcohol and tobacco use). The 1996 survey covered the following illegal drugs: cannabis, amphetamines, cocaine, narcotics, steroids, ecstasy and hallucinogens. The sample consisted of random sample of 4,729 secondary students in Government, Catholic and Independent schools at years 7 to 12. Participants were asked about frequency of drug use and basic patterns of use.

The 1995 Victorian Drug Household Survey was the second in a series of Victoria-specific surveys undertaken in conjunction with the National Drug Strategy (NDS) Household Surveys. A total sample size of 1200 individuals aged 14 and over was obtained. The survey covered the following illicit drugs: cannabis, amphetamines, hallucinogens, cocaine, ecstasy, designer drugs, and heroin. Respondents were asked whether they had ever used the drugs

and whether they had used them within the past 12 months, along with basic questions about poly-drug use.

These two surveys provide the most recent measures of the prevalence of illicit drug use within the Victorian survey.

- *data from the Victorian Institute of Forensic Medicine regarding heroin-related fatalities.*

Mortality information regarding illicit-drug related deaths was obtained from data collated by the Victorian Institute of Forensic Medicine (VIFM) and the Victorian State Coroner. This data contains the results of toxicology and pathology analyses. Almost all illicit drug related deaths in which causality is directly attributed to the use of the drug in Victoria involve the administration of heroin (usually defined as heroin overdose).

- *A database of drug overdose-related calls attended by the Melbourne Metropolitan Ambulance Service.*

This computerised database is managed by Turning Point and contains information obtained from Patient Care Records which are completed by the attending ambulance officers. Data is available from November 1997. Although the database includes overdose related calls for all types of drugs, the data set is most suited to the monitoring of non-fatal heroin related overdose. This is because the administration of Narcan (naloxone) and subsequent response provides unambiguous evidence for the involvement of the drug. Such evidence is not available for other types of illicit drugs.

- *Data from the Department of Human Services relating to the methadone program*

The Drugs and Poisons Unit (DPU) of the Department of Human Services maintains a database that records all methadone permits in Victoria. This is the major source of information regarding the characteristics of clients of the Victorian methadone program. This is an important source of information regarding treatment for opiate dependence. The database is currently under revision. The only information currently available is the total number of active permits by age and sex. The DPU uses two methods for estimating the number of methadone clients; the register of methadone permits, and a quarterly phone call to all pharmacies requesting the number of clients who are given their methadone dose on a particular day. Data from the latter source has been used in the current study.

- *Arrest data*

Data relating to drug related arrests in Victoria was obtained from data that has been collated by the Australian Bureau of Criminal Intelligence (ABCI).

- *Blood borne virus surveillance data*

Blood borne viruses, and in particular HIV/AIDS and hepatitis B and C are a major health hazard for individuals who inject drugs. An integrated surveillance system has been established in Australia for the purposes of monitoring the spread of these diseases. The Department of Human Services records notifications of diagnoses of HIV and hepatitis B and C in Victoria. There are problems with the interpretation of this data in terms of monitoring trends in the spread of the virus. For example, many injecting drug users who have been exposed to hepatitis C will not undergo testing. Nevertheless, this system is useful for surveillance purposes. HIV and hepatitis B and C prevalence is also recorded for individuals who are seen at metropolitan sexual health centres who identify themselves as injecting drug users and for injecting drug users attending needle and syringe exchange centres.

- *data from the Needle and Syringe Exchange Program*

The Needle and Syringe Exchange program was established in 1987. The Victorian program records the number of needles distributed and returned, the number of clients and some client demographics. A computerised database is managed by the Department of Human Services and is collated on a quarterly basis. This database also includes syringes purchased by pharmacies for distribution.

3.0 CURRENT DRUG SCENE AND RECENT TRENDS

3.1 OVERVIEW OF THE SAMPLE OF INJECTING DRUG USERS

A total of 293 individuals were interviewed, 11% of the sample reported participating in last year's IDRS survey. The characteristics of the 1998 sample are summarised in Table 1. The majority of the participants were male (61%) and ranged in age from 16 to 52 years with a mean age of 27 years. The majority were not currently employed. Slightly less than half had acquired trade, technical or university qualifications. Approximately one third (31%) of the respondents had never been in treatment, 37% were not currently receiving treatment but had received it in the past and 32% were currently in treatment.

Table 1. Demographic characteristics of the injecting drug user (IDU) sample (n= 293).

	Sample characteristics
Mean age (years)	27 (range 16 to 52)
Gender (% Male)	61
Ethnicity (%):	
English speaking background	98
Non-English speaking background	2
Aboriginal or Torres Strait Islander	6
Employment (%):	
Not employed	66
Full time	8
Part time/casual	14
Student	4
Home duties	8
School education (mean years)	10.6
Tertiary education (%):	
None	56
Trade/technical	31
University/college	13
Prison history (%)	33
Treatment history (%):	
Currently in treatment	32
Never been in treatment	31
Currently not in treatment but have previously	37

As shown in Figure 1, most of the respondents lived in close proximity to the six main recruiting sites of Frankston, Dandenong, St Kilda, Fitzroy, Footscray, and Glenroy. In terms of coverage of geographic areas of Melbourne, the sample was drawn from 90 suburbs within the western and northern, inner city and outer south eastern areas of Melbourne. Overall, the characteristics of the 1998 sample are similar to those surveyed in the 1997 IDRS, with the exception that they tend to be somewhat younger and less likely to have been in prison than the sample recruited in the 1997 study (Rumbold and Fry, 1998).

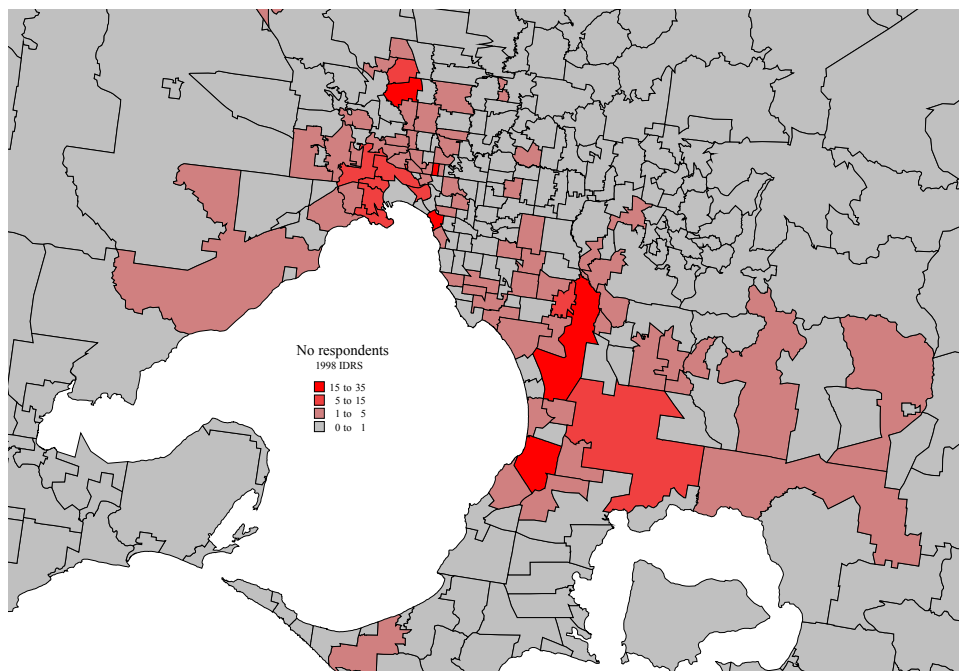


Figure 1. Postcode of residence of participants of IDU survey.

3.2 DRUG USE HISTORY OF THE IDU SAMPLE

The mean age at first injection of a drug was in the late teens (18.4 years), ranging from 9 to 38 years. The two drugs most frequently used on the first injection occasion were amphetamine (57%) and heroin (41%). As almost all of the sample reported injecting heroin (97%), this shows that the majority did so after first injecting amphetamines. The results of the 1997 IDRS suggested that within the last few years there had been shift from amphetamines to heroin as the drug which is first injected. The findings of the present survey once again support this conclusion, with over half of those who first began injecting within the past five years (57%) reporting that they first injected heroin compared to 22% of those

who first injected between 6 to 10 years ago (see Figure 2). Although some caution is required in the interpretation of these results the findings of the 1997 and 1998 surveys lend support to the conclusion there have been changes in patterns of initiation into injecting drug use in Melbourne in recent times.

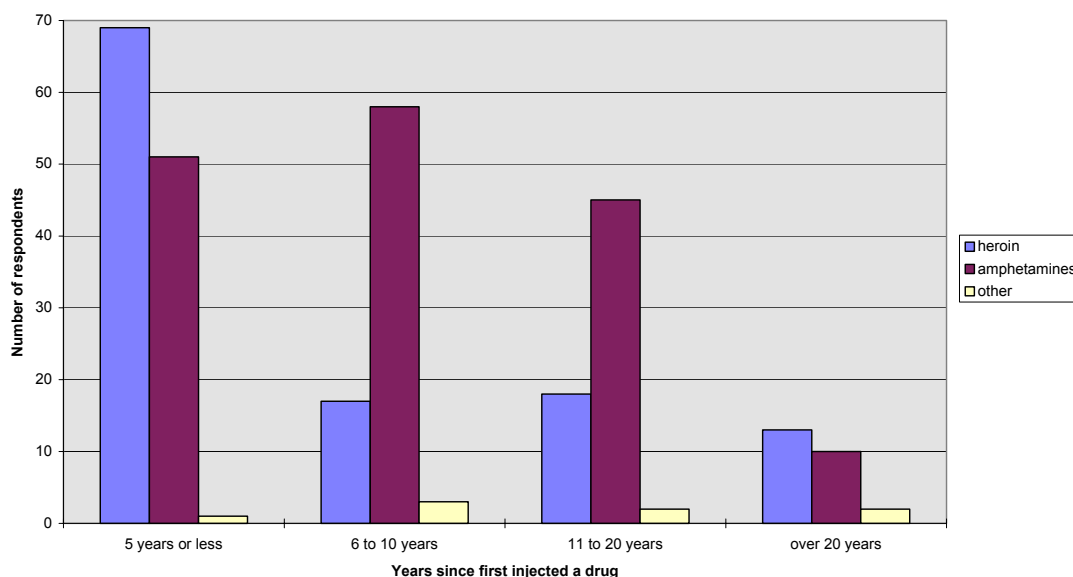


Figure 2. Relationship between the number of years since the initiation of injecting drug use and the type of drug that was first injected.

There was considerable variation in the length of experience of injecting drug use among those surveyed. Some respondents first began injecting drugs less than a year ago, the longest length of injecting experience was 36 years, and mean length of time since first injecting was 8.6 years.

The sample reported the use of a wide variety of illicit and licit drugs as shown in Table 2. Almost all of the individuals had used heroin, amphetamine, alcohol, tobacco, cannabis and benzodiazepines. There is a substantial level of polydrug use among this group. The median number of drug classes ever used was ten, with six used in the preceding 6 months. Tobacco and heroin were the drugs most frequently used on a day-to-day basis in this period.

A wide variety of drugs have been injected with a median of 2 types in the preceding 6 months. Of particular note is the significant proportion of the sample who report the injection of benzodiazepines (37% ever, 22% in the past 6 months).

There were a number of differences in the pattern of drug use reported by participants in the 1998 IDRS as compared to the 1997 Survey. In the 1998 survey the respondents reported a higher frequency of heroin use, and lower rates of cannabis, alcohol and amphetamine use and the injection of methadone, other opiates or cocaine than observed in the 1997 survey (Rumbold and Fry, 1998).

Table 2. Drug use history of IDU sample (n=293).

Drug Class	Ever used %	Ever injected (%)	Injected last 6 months %	Ever smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallowed %	Swallowed last 6 months %	Median number of days used in last 6 months by those using the drug
Heroin	98	97	93	52	21	22	3	26	10	150
Methadone	56	13	3					53	36	14**
Other opiates	66	41	16	14	2	2	0	46	28	10
Amphetamines	92	85	40	13	4	69	16	52	10	5
Cocaine	50	34	9	10	1	31	5	7	2	3
Hallucinogens	80	16	1	4	0	1	1	77	21	2
Ecstasy	44	10	3	1	0	3	1	40	16	2
Benzodiazepines	88	37	22	9	5	0	0	85	70	24
Steroids	5	3	0					3	4	6
Alcohol	98	8	0					96	78	16
Cannabis	97									90
Anti-depressants	42									60
Inhalants	34									2
Tobacco	97									180
Polydrug use (Median Drugs)	10	3	2					6		

* median number of drugs used in the past 6 months

** for those not currently in treatment

3.3 HEROIN

Trends in heroin use were established from information obtained from 27 key informants, the 94% of the IDU sample who felt confident to comment on heroin trends, and data from other indicators.

3.3.1 PRICE

The median price of heroin reported by individuals who inject drugs was \$400 per gram and \$25 per cap (small amounts of heroin wrapped in foil). Approximately half of the respondents in the IDU survey reported that the price of heroin was decreasing (49%) while 40% reported that it was stable. Table 3 summarises the modal price of heroin in Melbourne reported by the injecting drug users who participated in the 1997 and 1998 IDRS studies. This comparison shows that there has been a substantial reduction in the price of ‘caps’ (and to a lesser extent grams) of heroin being sold in Melbourne from 1997 to 1998.

Table 3: Modal prices of heroin in Melbourne as reported in the IDU survey components of the 1997 and 1998 IDRS studies.

		1997	1998
Heroin	\$/cap	30-40	20-25
	\$/gram	450	400

There was evidence of some considerable variation in price reported by the IDU depending on the source of purchase. When asked what is the main place that they usually score heroin, 57% of those who had used in the last 6 months reported obtaining it from a street dealer, 29% from a dealer’s home, and 14% from a friend. There was no significant difference in the price paid for a cap of heroin for those reporting street dealers as their main source of heroin (mean of \$29) than those buying from other sources (mean of \$32) ($t_{(df=186)}=1.9, p>.05$). This finding differs from that observed in the 1997 IDRS in which lower prices were reported for individuals whose primary source of the drug was the street market.

The prices reported by key informants for ‘cap’ and gram quantities of heroin were consistent with those reported by the IDU. A significant feature of key informant reports was the reference made ($n = 8$) to the increased availability of ‘\$50’ and ‘\$100’ heroin deals within street-based markets. These contain larger amounts of heroin than the \$20 to \$30 cap and are

typically referred to as caps or rocks. Key informants suggested that this trend could be explained by an increasing desire on the part of some heroin users to minimise their time in the street-based market. In this way, the act of purchasing larger than normal quantities of heroin, in theory, allowed those people to reduce the frequency with which they needed to engage in purchasing behaviours. The aim of this was to decrease their risk or likelihood of detection by increasing numbers of police reported to be targeting these areas. This trend may help to explain the variance observed in reported prices of heroin. The term ‘cap’ seems to be a generic descriptor used in a similar way to the term ‘deal’, in that it does not necessarily refer directly to size, amount or price. Therefore, caution must be exercised when interpreting data collected via questions about the price of caps of heroin.

3.3.2 AVAILABILITY

Almost all of the respondents on the IDU survey regarded heroin as either easy or very easy to obtain (98%), with the majority reporting either no change in availability in the past 6 months (47%) or that it was easier to obtain (34%). Similarly, the key informants reported that heroin was currently very easy to access (n = 23), and that over the last 6 months the availability of heroin had been stable to easier to obtain. This trend was explained by the existence of many market places in Melbourne from which to access this drug. Key informants (n = 13) also reported that they had perceived an increase in the number of young males dealing heroin, whereas some reports (n = 2) referred to an increase in young females dealing within certain street-based markets. Other key informants (n = 4) had not noticed any changes with regard to the types or numbers of people dealing heroin in Melbourne.

3.3.3 FORM AND PURITY

The IDU sample reported that they most commonly purchased heroin in rock (91%) rather than powder (72%) form. The most common route of administration was injection, although a significant minority (21%) reported ‘chasing the dragon’ or ‘burning’ the drug (ie. heating heroin and inhaling the resulting vapours) in the preceding 6 months. Key informants also reported the use of both powder (n = 15) as well as ‘rock’ (n = 12) and a significant number of key informants (n = 16) reported that ‘burning’ of heroin was prevalent, particularly among South East Asian and young female users. A range of factors were identified by informants to explain this trend including: the cultural acceptability of ‘burning’ amongst some quarters of the Vietnamese community, often defined by the perception that injecting is undesirable; a perception that there are less health harms associated with ‘burning’; and as a strategy utilised

when attempting to reduce or cease intravenous heroin use. One key informant reported that there was some degree of movement back and forth between intravenous heroin use and burning by some Vietnamese heroin users. This informant also stated that these fluctuations in the chosen route of administration were related in part to the social networks in which these heroin users moved, and the preferred or predominant route of administration within those networks. Reports also suggested that many people who had initially commenced heroin use through ‘burning’ eventually made a transition to intravenous use.

Purity was considered medium to high by the majority of respondents in the IDU survey, the largest proportion rating purity as medium (52%). There did not appear to be any clear changes in purity within the past 6 months as reported by the respondents with 26% describing it as stable, and 23 % describing it as fluctuating. Key informants reported that the purity of heroin was medium (n = 9) to high (n = 8), depending upon the source it was purchased from. Heroin purity was generally considered to be higher and more stable within home-based market compared to the fluctuating purity within the street-based market.

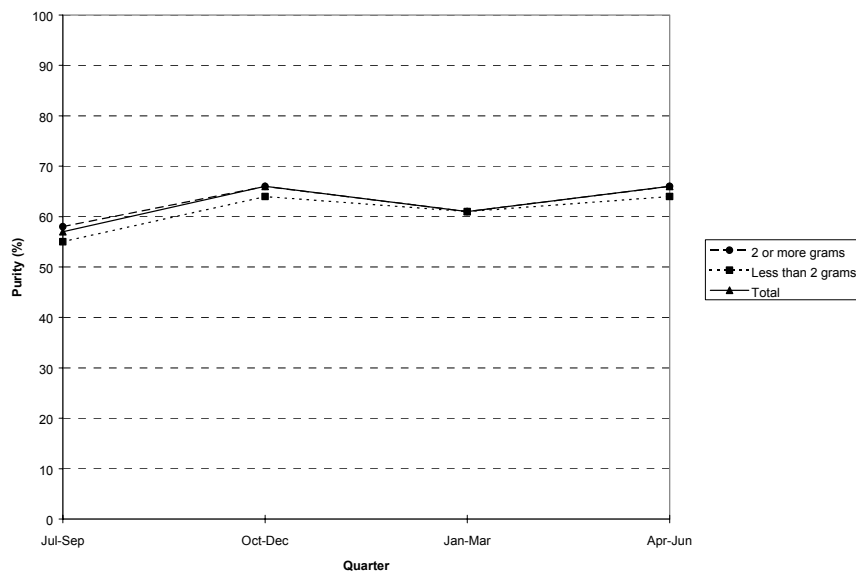


Figure 3. Purity of heroin seizures made by law enforcement agencies in Victoria in each quarter of the 1997/98 financial year (Source: ABCI).

The mean purity of heroin seized by law enforcement agencies in Victoria during the 1997/98 financial year is shown in Figure 3. The mean purity of all heroin seizures (n=831) made in

Victoria during this period was 62% (range 9-100%). As shown in this figure there was relatively little fluctuation during the year and there was little difference in the purity of the street level amounts (less than 2 grams) as compared to larger amounts (2 or more grams).

The mean purity of heroin seized in Victoria during the period 1995/96-1997/98 is summarised in Table 4. This data demonstrates a level of fluctuation in the purity of heroin being sold in the state over the period. There was a substantial increase in purity of heroin seized by police within the period from 1996/97 to 1997/98.

Table 4. Mean purity level of heroin seizures in Victoria.

	1995/96	1996/97	1997/98
Heroin	48-57% (quarterly figures)	35%	62%

(Source: Australian Bureau of Criminal Intelligence)

3.3.4 PATTERNS OF HEROIN USE

Prevalence of heroin use

The most recent survey of heroin use within the general Victorian community was undertaken within the 1995 Victorian Drug Household Survey. According to the findings of this survey 0.2% of the population aged ≥ 14 had used heroin within the past 12 months. As only a small proportion of the respondents report the use of heroin, there is a large margin of error associated with this estimate (ie 7200 people with a 95% confidence interval of 0 to 25200). As a consequence, there is little chance of detecting a change in prevalence of use over time by comparing these estimates from one survey to the next. Similar problems exist for the estimates of opiate use among Victorian school students as measured in the Victorian School Students Drug Use Survey. The reported rates of recent use of heroin or other opiates among Victorian school students in the 1992 and 1996 surveys are summarised in Table 5. No differences were observed between the 1992 and 1996 surveys, However, as in the case of the Victorian Drug Household Survey data, the detection of any changes in the prevalence of use of is difficult. Indeed, with prevalence rates as low as 1%, rounding error will account for a substantial part of the reported prevalence.

Table 5. Victorian School Students Drug Use Survey 1992, 1996; proportion of respondents who reported using various illicit drugs within the past month by year level.

	Year 7		Year 9		Year 11	
	1992	1996	1992	1996	1992	1996
Opiates	1%	1%	1%	2%	1%	1%

(Source: Victorian School Students Survey)

Other indicators

Theoretically, it is possible to obtain estimates of the prevalence of drug use within a community by applying statistical analyses to secondary data sources (for a review of this area, see Kutin, Rumbold, & Dietze, 1997). However, there have been no published research studies incorporating capture-recapture or similar methodologies that have addressed the prevalence of heroin use in Victoria. As a consequence there is no estimate currently available of the number of heroin users in Victoria based on these types of empirical studies.

Information regarding the distribution of syringes through the Victorian Needle and Syringe Exchange Program provides a crude indicator of the level of injecting drug use within the state. This data is summarised in Table 6 and demonstrates a steady increase in the number of syringes distributed in the program throughout the 1990s.

Table 6. Distribution, return and return rate for fixed outlets, off site services and total program: Victorian Needle and Syringe Exchange Program 1987-1996.

Year	Fixed outlets			Off-site			Total program		
	Dist.	Ret.	Ret. %	Dist.	Ret.	Ret. %	Dist.	Ret.	Ret. %
1987	582	271	46.6				582	271	46.6
1988	73,391	48,808	66.5				73,391	48,808	66.5
1989	216,424	115,937	53.6				216,424	115,937	53.6
1990	385,455	139,386	36.2	26,124	9,760	37.4	411,579	149,146	36.2
1991	785,017	272,548	34.7	84,802	41,107	48.5	869,819	313,655	36.1
1992	1,117,553	375,236	33.6	208,006	96,997	46.6	1,325,559	472,233	35.6
1993	1,500,674	592,814	39.5	370,955	223,005	60.1	1,871,629	815,819	43.6
1994	1,595,102	669,431	42.0	434,974	323,487	74.4	2,030,076	992,918	48.9
1995	1,616,462	681,877	42.2	493,038	380,309	77.1	2,109,500	1,062,186	50.4
1996	1,755,976	809,012	46.1	503,586	405,012	80.4	2,259,562	1,214,024	53.7

(Source: Department of Human Services)

Current patterns of heroin use

Over three quarters of the injecting drug users who were surveyed (78%) reported heroin as their main drug of choice. A total of 93% of the sample reported having injected the drug in the preceding 6 months, with users reporting using the drug on a median of 150 days in this period (approximately 6 times per week). This frequency of heroin use was consistent with the reports of the key informants in relation to the individuals with whom they have contact. Both the findings of the IDU survey and the reports of the key informants suggest that poly drug use is common among individuals who inject heroin.

The demographic profile of heroin users described by the key informants (n=27) were similar to those of the IDU sample, in regard to age (mainly 20 to 40 years of age), gender (predominantly male), ethnicity (mostly from English speaking backgrounds), level of education and employment status (low employment levels).

Trends in heroin use

Key informants offered mixed reports regarding trend changes pertaining to heroin use. Ten informants suggested that they had witnessed no changes with regard to the methods in which heroin was being used by the people who use it in Melbourne. In contrast, 12 informants reported changes including: an increase in the frequency with which people used heroin (n = 6); and an increase in the numbers of young females injecting the drug and in the number of people 'burning' heroin, particularly younger users. One of these key informants suggested that the transition from other drugs to heroin was becoming easier due to the cheap price and increased availability of heroin. This informant also indicated that there were fewer perceived harms associated with 'burning' heroin compared to intravenous use, and that in some groups the use of heroin had become more socially acceptable.

Eight informants indicated that there had been no recent changes in relation to the demography of people engaging in heroin use. Other key informants offered a different picture. Ten key informants noted that they had seen more younger heroin users, and reports were also received from informants who had noticed more females using the drug over the preceding 6 month period (n = 6).

Further to earlier reports that the choice of route of heroin administration was partly mediated by the perceived harms and peer acceptance associated with particular routes (eg. injecting,

burning, smoking), some informants indicated that the general image of heroin had recently softened (n = 2). More younger people were said to be now using heroin experimentally, due to the interaction between factors such as availability, price, purity and the fact that in some groups the social stigma which had once surrounded its use had recently abated.

Evidence of the existence of both street-based and home-based heroin market places in Melbourne, was found in key informant reports. The street-based heroin markets which exist in areas such as Fitzroy/Collingwood, St Kilda, the Central Business District, Springvale, Footscray and Dandenong were characterised as more open, visible and chaotic in nature compared to the remaining 'home-based' heroin markets. In support of this, one key informant reported that there had been a continuing shift towards street-based dealing and trafficking in Melbourne which had become popular amongst many heroin users, where in the past most heroin users would consider this as their last option if they were unable to contact their regular dealer. Another reported that relatively new street-based scenes were becoming more visible and had flourished over the last 6 months in the areas of Box Hill and Ringwood. Yet another informant pointed out that the street-based heroin market place in Melbourne had become broader and more social, such that many people engaged in the selling, acquisition and use of heroin have their entire social network participating in some way in that market place.

Some interesting differences were also noted between the street-based markets. One reliable report was obtained on a street-based market place in the Frankston area. The heroin market place in this area was characterised as a market which had increasingly moved away from a more traditional home-based style of dealing to a more recent street-based economy. This market place was defined as small but stable, and accessed by both residents and non-residents (ie. travelling from other areas) because of the perceived better quality heroin. Also of note was the fact that, compared to the nearby street-based markets that exist in areas of Springvale and Dandenong, the price of heroin in Frankston was reported as higher. The key informant indicated that many heroin users were prepared to pay extra for heroin in that market place because it was a 'safer' market relative to the other areas (ie. less police activity and less rip-offs). This was an interesting finding as the same motivations were reported to exist for participants of the West Heidelberg home-based scene to explain their preference for the safer and more stable market place in that area.

3.3.5 SUMMARY OF HEROIN TRENDS

Table 7 contains a summary of trends in the price, purity, availability and the use of heroin as ascertained in the 1998 IDRS. Heroin continues to be readily available in Melbourne, is cheaper than in 1997 and is generally of high purity. A number of street markets continue to flourish across Melbourne. When compared to 1997, there appears to be less difference between the street markets and the home base scene in relation to the price of the drug and the range of different sized deals that may be purchased. It appears that many heroin users may have increased the frequency with which they use the drug. This could be a consequence of the reduction in price observed since 1997. The findings suggest that the relatively low price and high purity levels may have contributed to an increase in the inhaling or ‘burning’ of heroin among some groups including younger, recreational users.

Table 7. Summary of trends in the price, availability, purity and use of heroin.

Price (median) Cap Gram	<ul style="list-style-type: none"> • \$ 25, Decreased • \$ 400, Decreased • Larger deals being sold in street markets
Availability	<ul style="list-style-type: none"> • Readily available, stable
Purity	<ul style="list-style-type: none"> • 62% (seizures), increase since 1996/97, stable last 6 months
Use	<ul style="list-style-type: none"> • Some evidence suggesting more widespread use • Increase in recreational use (Young people generally and young females in particular) • Increase in frequency of use among injecting drug users • Some evidence of increase in ‘burning’ • Continued development of street markets in many locations of Melbourne.

3.4 AMPHETAMINES

Thirty seven percent of respondents on the IDU survey were able to comment confidently on the price, purity and availability of amphetamines. Reports were obtained from key informants who felt confident in commenting on these issues based on their contact both with primary heroin users who had used speed recently, as well as small numbers of primary speed users.

3.4.1 PRICE

The median price reported by individuals who were injecting drugs was \$50 per gram, \$820 per ounce with most IDU reporting that the price was stable in the preceding 6 months. These prices are consistent with those reported in the 1997 IDRS (Rumbold and Fry, 1998). Some key informants reported that the price of amphetamines had increased recently, however, no reports of specific prices were provided to substantiate this.

3.4.2 AVAILABILITY

The perceptions of the IDU of the availability of amphetamines were mixed. Forty percent of respondents reported that the drug was easy to obtain, however approximately one third indicated that it was difficult. Most of the respondents indicated that the availability had not changed or had become more difficult in the preceding 6 months. Key informants indicated that the availability of the drug was stable but stated that it had become increasingly difficult to obtain amphetamines of good quality.

3.4.3 FORM AND PURITY

Ten per cent of the participants in the IDU survey reported swallowing the drug in the preceding 6 months and 40% reported having injected the drug in this period. Those who had used the drug reported a median of five days of use in the last 6 months. The amphetamine used in the last 6 months was overwhelmingly in a powder form, with only a few users reporting that they had used liquid amphetamines in that period.

The majority of IDU regarded the purity of amphetamine as medium to low. Most of those able to comment believed that the purity had either remained stable or decreased over the past 6 months. Key informants indicated that the drug was often viewed by heroin users as an expensive 'gutter' drug of poor quality/purity. The purity of amphetamines was commonly thought to be low, and was reported to have remained so for some time.

The mean purity of amphetamine and methamphetamine seized by law enforcement agencies in Victoria during the 1997/98 financial year is shown in Figure 4. The mean purity of all seizures of methamphetamine (n=168) made in Victoria during this period was 11% (range less than 1 to 70%). As shown in this figure the purity of seizures was consistently low during the year. Amphetamine seizures (n=23) tended to have a somewhat higher purity level. The mean purity of all seizures was 16% (range, less than 1 to 66%).

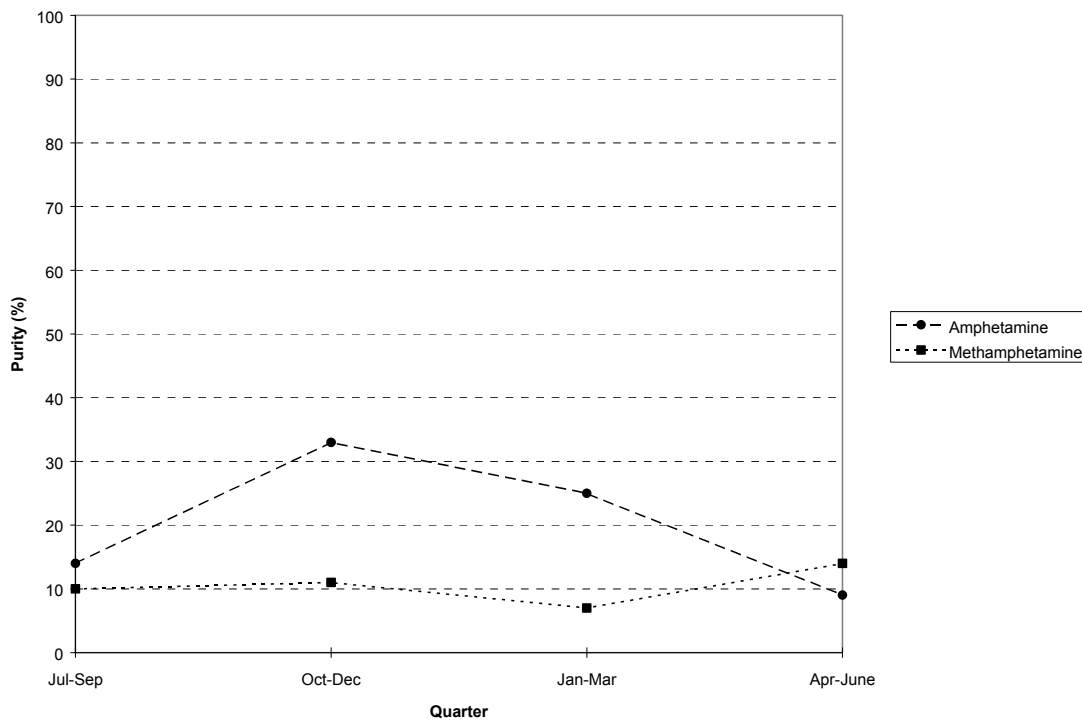


Figure 4. Purity of amphetamine and methamphetamine seizures made by law enforcement agencies in Victoria in each quarter of the 1997/98 financial year (Source: ABCI).

The mean purity of methamphetamine seized in Victoria during the period 1995/96 to 1997/98 is summarised in Table 8. This data demonstrates a level of fluctuation in the purity of methamphetamine being sold in Melbourne over this period.

Table 8. Mean purity level of methamphetamine seizures in Victoria.

	1995/96	1996/97	1997/98
Amphetamines	5-32% (quarterly figures)	5%	11%

(Source: Australian Bureau of Criminal Intelligence)

3.4.4 PATTERNS OF AMPHETAMINE USE

Prevalence of amphetamine use

The most recent survey of amphetamine use within the general Victorian community was undertaken within the 1995 Victorian Drug Household Survey. According to the findings of this survey 1.9% of the population aged ≥ 14 had used the drug within the past 12 months. The reported prevalence of recent use of amphetamines among Victorian school students in the 1992 and 1996 surveys is summarised in Table 9. No trends are apparent in these data, however, as in the case of the heroin use, the detection of any changes in the prevalence of amphetamine use is difficult due to the large amount of error that is associated with these estimates.

Table 9. Victorian School Students Drug Use Survey 1992, 1996; proportion of respondents who reported using amphetamines within the past month by year level.

	Year 7		Year 9		Year 11	
	1992	1996	1992	1996	1992	1996
Amphetamines	1%	1%	2%	2%	2%	2%

(Source: Victorian School Students Survey)

Current patterns of amphetamine use / trends in use

A number of key informants (n=8) reported that the majority of current heroin users had used amphetamines at some time in the past, but in recent times had only used it rarely. This is generally consistent with the drug use reported by the IDU sample in the current study. Almost all of the respondents in the IDU survey reported having used amphetamines, however only 5% nominated the drug as their drug of choice. Those who had used the drug reported a median of five days of use in the last 6 months. Other key informants characterised the use of amphetamines as often recreational and particular to the dance party/rave scene.

One key informant reported on contact with a group of primary amphetamine users. This group was characterised as a generally older population with an average age of around 25 years. The informant indicated that these amphetamine users were a target group of gay males who mostly resided in the inner southern suburbs of Melbourne. The group was mostly of English speaking background, had completed VCE (ie. year 12) and tertiary education, and were mostly employed. The key informant also noted that members of this client group were often not involved in treatment for drug-related problems or issues, nor did many have prior prison histories. Amphetamine use by these clients was characterised as a mostly planned recreational activity, usually attached to special events such as dance parties or ‘raves’. The informant also suspected that dependent use was prevalent within this group, but noted that this was often under-reported in this community. This informant predicted that a range of ‘dependence-related’ financial, health and legal problems may begin to become more apparent in time.

The paucity of key informant reports relating to primary amphetamine use in Melbourne during 1998, highlights the need for caution when attempting to interpret trends use from 1997 to 1998 IDRS. While available evidence suggests that the prevalence of amphetamines use in Melbourne is either stable or has decreased somewhat over the last two to three years, more information is required before firm conclusions can be made about trends in the use of this drug. One new development which was reported by some key informants (n = 6) was an increase in availability of a substance called ‘ice’. Informants defined this substance as methamphetamine crystals which are available and purchased in small sizes (eg. 0.2 gram), but they indicated that actual use in Melbourne was not widespread at present. A small number of the IDU sample (n=5) also referred to the use of this drug, and described it as more potent than other forms of amphetamines currently available.

3.4.5 SUMMARY OF AMPHETAMINE TRENDS

Trends in amphetamine price, availability, purity and use are summarised in Table 10. Few trends were evident with the price, purity and availability remaining relatively stable.

Table 10. Summary of trends in the price, availability, purity and use of amphetamines.

Price (median) Gram	\$50, stable
Availability	mixed reports, stable
Purity	11% (seizures), fluctuating since 1995/96, stable last 6 months
Use	Decreased use by IDU

3.5 COCAINE

Only a small proportion of the IDU (less than 10%) indicated that they were able to comment confidently on the price, purity or availability of cocaine. This may be taken as an indication of small number of regular cocaine users in the sample of injecting drug users. None of the key informants were able to confidently report on trends in cocaine availability, price, purity or patterns of use. Due to the small number of respondents who were able to comment of the price, purity and availability of the drug the information provided in this section should be interpreted with caution.

3.5.1 PRICE

For the respondents on the IDU survey who were able to comment on price, the median price given for a gram was \$240. The majority of these respondents believed the price had remained stable in the past 6 months. Table 11 summarises the modal price of cocaine in Melbourne reported by the injecting drug users who participated in the 1997 and 1998 IDRS studies. This suggests that there has been a reduction in the price of cocaine in Melbourne, however these estimates are based on information obtained from a relatively small number of respondents in each of the IDU surveys. None of the respondents reported the price of cocaine caps which suggests the drug is not readily available in this form in Melbourne. This contrasts substantially with the situation in Sydney (McKetin et al, 1999b).

Table 11. Modal prices of cocaine in Melbourne as reported in the 1997 and 1998 IDRS studies.

		1997	1998
Cocaine	\$/gram	300	200

3.5.2 AVAILABILITY

The majority of the respondents who were able to comment on the availability of the drug reported that it was difficult to obtain and that this had remained stable over the past 6 months.

3.5.3 FORM AND PURITY

Of the small number of respondents in the IDU survey who reported having used the drug in the last 6 months, almost all reported using it in powder form. Only 3 respondents reported using crack in the preceding 6 months. The respondents on the IDU survey described the purity of cocaine as medium to high and reported that this had not changed over the last 6 months.

The mean purity of cocaine reported by law enforcement agencies in Victoria during the 1997/98 financial year is shown in Figure 5.

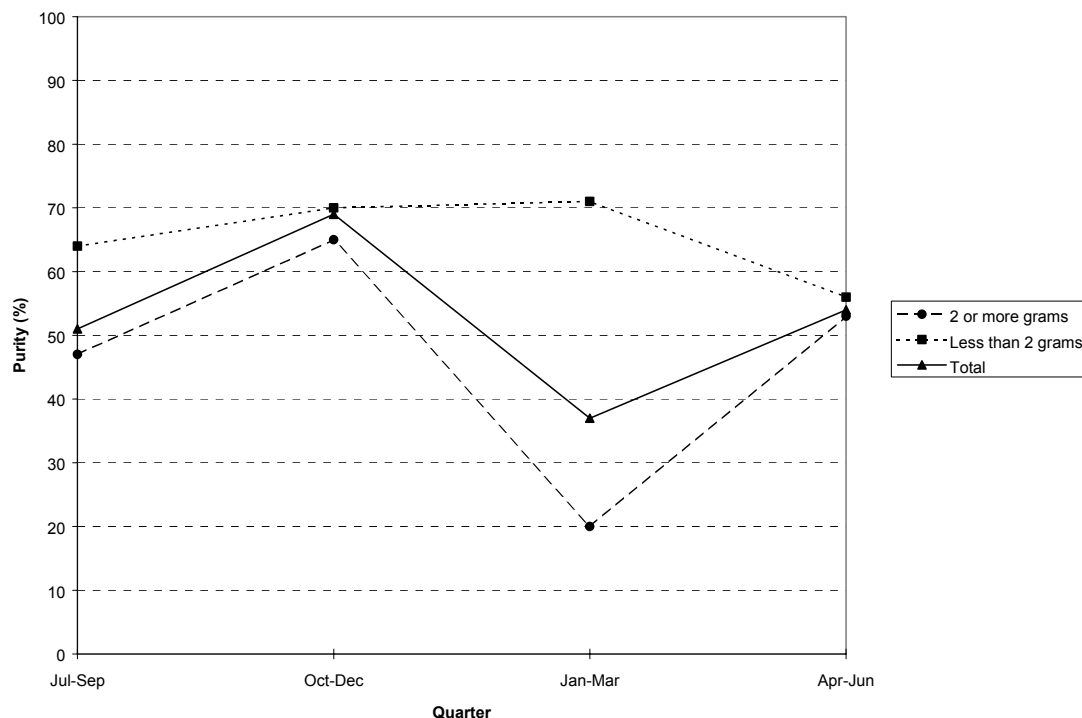


Figure 5. Purity of cocaine seizures made by law enforcement agencies in Victoria in each quarter of the 1997/98 financial year (Source: ABCI).

The mean purity of all seizures (n=35) made in Victoria during this period was 54% (range less than 7 to 91%). As shown in this figure the purity of seizures appeared to fluctuate

somewhat during the year however this could be attributed to the relatively small number of cocaine seizures that were tested during this period.

The information regarding the purity of cocaine seized in Victoria during the period 1995/96-1997/98 is summarised in Table 12. This data suggests a level of fluctuation in the purity of heroin being sold in Melbourne over the period. However, the identification of trends over this period is difficult due to the relatively small number of seizures that were tested.

Table 12. Mean purity level of cocaine seizures in Victoria.

	1995/96	1996/97	1997/98
Cocaine	43% (n=3 cases only)	37%	54%

Source: Australian Bureau of Criminal Intelligence)

3.5.4 PATTERNS OF COCAINE USE

Prevalence of cocaine use

The most recent survey of cocaine use within the general Victorian community was undertaken within the 1995 Victorian Drug Household Survey. The findings of this survey suggest that there is a low level of cocaine use within Victoria, with only 0.6 % of the population aged ≥ 14 reporting the use of the drug within the past 12 months. The reported prevalence of recent use of cocaine among Victorian school students in the 1992 and 1996 surveys is summarised in Table 13. No trends are apparent in these data. As in the case of the heroin use, the detection of any changes in the prevalence of cocaine use using these surveys is difficult due to the large amount of error that is associated with these estimates.

Table 13. Victorian School Students Drug Use Survey 1992, 1996; proportion of respondents who reported using cocaine within the past month by year level.

	Year 7		Year 9		Year 11	
	1992	1996	1992	1996	1992	1996
Cocaine use in past month	1%	1%	2%	2%	2%	1%

(Source: Victorian School Students Survey)

Current patterns of cocaine use/ Trends in cocaine use

Although half of the respondents in the IDU survey had reported the use of cocaine in their lifetime, less than 1% identified the drug as their main drug of choice. Only a small proportion reported having injected (9%) or snorted (9%) the drug in the past 6 months and those who had used the drug did so very infrequently. The majority of key informants indicated that cocaine use was not prevalent within the respective client groups they were reporting on. Of only two key informants who reported contact with current cocaine users, one indicated that they had seen two clients in the past 6 months; the other informant had seen one person in that time. Cocaine was typically characterised as too expensive for the majority of primary heroin users in Melbourne.

No reliable reports on cocaine use in Melbourne were obtained from key informant participants in the 1997 IDRS study (Rumbold and Fry, 1998). As noted, this was also the case in the 1998 IDRS study, however key informants in the current study were explicitly asked to report any contact with clients who were currently using cocaine, or clients who had talked about cocaine use in Melbourne. These additional questions were asked of each key informant in an attempt to collect evidence of even infrequent cocaine use. The lack of reports received over both years of the Melbourne arm of the IDRS study, suggest that cocaine use is not prevalent within the injecting drug user population in Melbourne. This is an interesting finding, when viewed against evidence of the increasing trend towards injection of cocaine within samples of injecting drug users in Sydney (McKetin et al, 1999b).

3.5.5 SUMMARY OF COCAINE TRENDS

Relatively few key informants or injecting drug users were able to comment on cocaine trends. The responses of those who were able to provide such information generally indicated little change in the availability, price of the drug and patterns of use of the drug as shown in Table 14.

Table 14. Summary of trends in the price, availability, purity and use of cocaine.

Price (median) Gram	\$ 200, stable last 6 months, possible decrease since 1997
Availability	difficult, stable
Purity	54% (seizures), fluctuating since 1995/96, stable last 6 months
Use	No change in use by IDU

3.6 CANNABIS

Cannabis was one of the most commonly used illicit drugs by the IDU sample with almost all of the respondents having used the drug previously and the majority (82%) were able to report on aspects of price, potency and availability. Four key informants were able to report on cannabis trends.

3.6.1 PRICE

The median price reported by the IDU for an ounce of cannabis was \$324, and \$21 for a gram which was consistent with the prices reported by the key informants. The majority of IDU and key informants reported that the price had not changed in the last 6 months.

Table 15 summarises the modal price of cannabis in Melbourne reported by the injecting drug users who participated in the 1997 and 1998 IDRS studies. This shows that the price per gram is stable over this period while the price per ounce has reduced somewhat.

Table 15. Modal prices of cannabis in Melbourne as reported by IDU in the 1997 and 1998 IDRS studies.

		1997	1998
Cannabis	\$/gram	20-25	20-25
	\$/ounce	350	320

3.6.2 AVAILABILITY

The overwhelming majority of both the IDU sample and the key informants reported that the cannabis was easy or very easy to obtain, and that the availability of cannabis had remained stable in the preceding 6 months. This was explained by the prevalence of dealers and the predominance of hydroponic cultivation techniques which are not dependent on seasonal factors which may interrupt availability and readiness of the cannabis for distribution.

3.6.3 FORM AND PURITY

The main form of cannabis used in the past 6 months was marijuana (90% of respondents) which was mostly commonly head, followed by hash (21%) and hash oil (7%). A total of 78% of the respondents who reported that the main form of cannabis used was head reported that it was produced hydroponically, while a minority of those mainly using leaf (23%)

reported that it had produced by hydroponic means. The potency of the cannabis was rated as high with most respondents stating that the potency had remained stable or had been increasing over the previous 6 months. This was also reported by the key informants.

While quantitative data relating to the potency (ie THC content) of cannabis seizures is not currently available there has been evidence of a continuing increase in hydroponic production methods. There is also evidence of the availability of more potent cannabis strains in Victoria which suggests that there is a trend towards the consumption of higher-potency cannabis through the 1990s (Australian Bureau of Criminal Intelligence, 1999)

3.6.4 PATTERNS OF CANNABIS USE

Prevalence of cannabis use

Trends in cannabis use in the 1990s were examined by comparing results of the 1992 and 1996 Victorian Secondary School Students Surveys and the 1991, 1993 and 1995 Victorian Drug Household Surveys. These results are summarised in Table 16 which shows that, although a significant minority of the Victorian community report the use of cannabis, the overall prevalence of use of the drug within the community shows little change over the period 1991-1995.

Table 16. Proportion of the population aged ≥ 14 who report ever using, or recently using cannabis (for non-medical purposes) as measured in the Victorian/National Drug Household Survey.

	1991	1993	1995
Ever used cannabis	29%	30%	28%
used cannabis in the previous 12 months (recent use)	10%	12%	11%

(Source, Victorian Drug Household Survey, Drug Treatment Services, 1998; National Drug Strategy Household Survey 1991).

A consistent finding in these surveys is that the rate of cannabis use is higher among males (15% reported using the drug within the past 12 months in 1995) than females (7% reported recent use in 1995), and is highest among persons aged 14-24 years (28% reported recent use

in 1995) with no discernible changes evident in these aspects over the period 1991-1995. However, it should be noted that the relatively small sample size for specific age groups makes it difficult to measure changes over time at this level of analysis.

The trend in cannabis use among school students as measured by the Victorian School Student Surveys during the 1990s is summarised in Table 17. This table suggests an increase in cannabis use among students in Years 7 and 9, although this trend should be viewed in light of the fact that the questions used to assess previous cannabis use differed slightly between the two surveys (Victorian Department of Human Services, 1999). Overall rates of cannabis use tended to be higher in males than females and in older students as shown in the table.

Table 17. Victorian School Students Survey, proportion of respondents who reported using cannabis by age group for 1992, 1996.

	Year 7		Year 9		Year 11	
	1992	1996	1992	1996	1992	1996
Ever used cannabis	6%	15%*	22%	33%*	41%	47%*
Used cannabis within last month	3%	6%*	12%	19%*	22%	23%

* significant difference (p<.05)

(Source: Victorian School Students Survey, Drug Treatment Services).

Current patterns of cannabis use

A total of four key informants provided reliable reports on patterns of cannabis use amongst primary cannabis users. All reports focused upon treatment populations of cannabis users. Reports on primary cannabis users were supplemented, where appropriate, with information about the characteristics and features of cannabis use within the primary heroin using population.

Key informants indicated that the treatment populations they were reporting on resided in a range of mainly suburban areas in Melbourne. This group was aged between 15 and 48 years, with the average age being mid to late twenties, and were predominantly male. It was suggested that females identified less with specialist alcohol and drug treatment services, which tended to attract more males. Recent changes in Victoria to the community-based corrections system were cited as responsible for the referral of more young males to these treatment settings. Primary cannabis users in this population were mostly from English-

speaking backgrounds, with some representation from European migrant populations. Interestingly, no key informants reported contact with clients from South East Asian backgrounds. Reported education levels within this group ranged from mid to higher secondary to some tertiary education. Employment patterns were also varied, where both blue and white collar employment was noted. Previous prison history amongst this group was rare, however those clients who had been referred through corrections or juvenile justice were said to have often had prior contact with the criminal justice system.

Key informants reported that clients commonly smoked cannabis heads (ie. the bud or flowering tip of the plant) in cones through bonges (ie. water pipes). This variety was commonly referred to as 'skunk' which is the term used to denote cannabis of particularly high potency, due mainly to hydroponic methods of cultivation and cross-breeding of potent strains to produce high quality cannabis. The use of hash and/or hash oil was reported as rare, as was the use of cannabis leaf. The use of cannabis within this group was described as mostly dependent daily use, however the quantities and frequencies of use varied widely (Range = 3-40 cones per day).

Informants noted that cannabis was commonly perceived by users as a non-problematic or non-harmful drug. Reports on cannabis use were also obtained from eight key informants who had contact with primary heroin users. The stated forms, routes, quantities and frequencies of cannabis use were consistent with those reported for primary cannabis users. Forty to 80% of primary heroin users were reported to use cannabis on a regular basis.

Trends in cannabis use

Three key informants reported that they had noticed no changes with regard to the methods in which cannabis was being used by their client group. One key informant indicated that they had witnessed more people smoking cannabis joints (ie. rolled cigarettes) when attempting to reduce or cease use. Most key informants also noted that they had not seen any changes in people using cannabis or in numbers presenting, except for those which could be explained by the marketing or specific targeting activities of their service. One informant reported that they had perceived a broadening in the age range of cannabis users, which they believed had occurred over 12 months and longer. Another noted that more older alcoholics were engaging in cannabis use to both heighten or increase the effects of alcohol, and as a strategy for reducing alcohol use.

3.6.5 SUMMARY OF CANNABIS TRENDS

A summary of cannabis trends is shown in Table 18. The price of cannabis per ounce appears to have decreased slightly compared to that reported in 1997, while the price per gram has remained stable. There appears to be a continuing trend towards hydroponic production.

Table 18. Summary of trends in the price, availability, purity and use of cannabis.

Price (median) Ounce Gram	<ul style="list-style-type: none">• \$ 324, stable to decreasing• \$ 21
Availability	<ul style="list-style-type: none">• Readily available• stable
Use	<ul style="list-style-type: none">• Continuing trend toward the use of hydroponic production

3.7 OTHER DRUGS

3.7.1 IDU SURVEY

Over a third of the injecting drug users who were interviewed reported the use of other opiates in the preceding 6 months, mainly in the form of morphine or *Panadeine forte*, which contains 30 mg of codeine per tablet. Only a small proportion of those surveyed reported injecting methadone within the past 6 months (3%).

A high proportion (75%) had used benzodiazepines in the last 6 months, with 22% reporting having injecting benzodiazepines during this period. The most commonly used benzodiazepines was diazepam (eg Valium). The use of flunitrazepam (Rohypnol) was less commonly reported when compared to the 1997 IDU survey.

A relatively high proportion of respondents reported using anti-depressants. Slightly less than half (42%) had ever used these drugs, 27% in the last 6 months. The median number of days that anti-depressants had been used in the previous 6 months was 30. Aropax and Prozac (serotonin specific re-uptake inhibitors (SSRIs) were the brands most frequently used. These findings are similar to those observed in the IDU survey in the 1997 study (Rumbold and Fry, 1998).

Approximately one fifth of the sample (20%) reported having used LSD in the previous 6 months, while 8% reported having used hallucinogenic mushrooms within this period. A total of 18% of respondents reported the use of ecstasy within last 6 months, while only a small proportion had used either inhalants (4%) or steroids (1%) during this period.

3.7.2 KEY INFORMANT STUDY

Benzodiazepines

The use of benzodiazepines was reported by key informants to occur amongst 30-60% of primary heroin users. Informants indicated that the most popular brands of benzodiazepines used included: Valium (n = 8); Temazepam (n = 7); Serapax (n = 4); and Normison (n = 1). Nitrazepam (Rohypnol) was also reported as a popular type of benzodiazepine (n = 8), however reports indicated that it had become less available for illicit use due to the recent re-scheduling of this drug to an S8 drug.

The predominant route of benzodiazepine use reported by key informants was oral (n = 6), followed by intravenous use. Informants reported that this drug type was commonly used either to heighten the effects of heroin, to substitute for heroin when not available, or for the relief of substance related symptoms (eg. sleep disorders, withdrawal, anxiety etc).

Ecstasy and LSD

Some reports were received of infrequent ecstasy and LSD use (predominantly oral) amongst younger groups of primary heroin users. Informants described the use of these drugs as usually attached to dance party or 'rave' scenes, and also noted that for many primary heroin users these drugs were considered to be too expensive. One informant noted that they had perceived an increase in the number of questions they were being asked about ecstasy by school-age female clients.

Other drugs

- Four key informants reported that they had witnessed an increase in the numbers of people accessing naltrexone within opiate-dependence treatment settings. Interestingly, one key informant from a medical clinic currently providing naltrexone treatment in Melbourne, reported that the provision of the naltrexone treatment option had attracted a different

profile of heroin dependent individuals to the centre. The informant claimed that clients seeking naltrexone treatment at this particular location were younger, had been using heroin for less than 12 months, were generally not poly-drug users, still lived at home with their family, were educated and employed, and often presented in seeking treatment with their families.

- Two informants had noticed that some of their clients reported intravenous use of liquid morphine.
- Two reports were also received on sporadic experimental ‘chroming’ (ie. inhaling vapours or fumes) of butane gas and aerosol spray packs by school-age youth.

3.7.3 SUMMARY OF OTHER DRUG TRENDS

The major trends observed in relation to other drugs were continuing high rates of injection of benzodiazepines among IDU. There was some evidence of a reduction in the use of flunitrazepam (Rohypnol) individuals who inject drugs which may be due to the re-scheduling of the drug. There was a high rate of anti-depressant use among the participants in the IDU survey in 1998, a finding which mirrored that observed in the 1997 survey.

4.0 DRUG-RELATED ISSUES

4.1 IDU SURVEY

General Health status

The mean number of health symptoms reported by respondents was high (mean 19.1, S.D 8.3.) indicating that the respondents were experiencing a number of health problems. These data are comparable to observed in the 1997 IDU survey in Melbourne (Rumbold and Fry, 1998).

Heroin overdose

The survey revealed that non-fatal heroin overdose is a common occurrence among the group of users who were surveyed and the findings are broadly similar to those observed in the 1997 IDU survey. Approximately half (52%) of the respondents who had ever used heroin reported that they had experienced one or more overdoses, 35% had been administered Narcan (on 77% of occasions by an ambulance officer) and around three quarters of all respondents had witnessed an overdose (median =3) (see Table 19).

The respondents who had previously experienced an overdose reported a median of 9 months since they last overdosed, and a median of two overdoses in total. Those who had administered Narcan reported a median period of 9 months since they were last administered the drug. In the previous 6 months, 19% had experienced an overdose and 13% had been administered Narcan. Respondents reported that at ambulance had been called 66% of the occasions at which they had last witnessed an overdose.

Table 19. Reported experience of heroin overdose (% of respondents who have used heroin, n=284), IDU survey.

Ever experienced an overdose	52%
Experienced at least one overdose in the preceding 6 months	19%
Have been administered Narcan	35%
Were administered Narcan in the preceding 6 months	13%
Have witnessed an overdose**	78%

** Proportion of all respondents (n=293)

Needle Sharing

The sharing of needles and syringes and other equipment associated with the preparation or injection of drugs is important with respect to the risk of exposure to blood borne viruses such as HIV, and hepatitis B and C (HBV, HCV). Approximately one third (33%) of the respondents reported lending a used needle in the past month, while 22% borrowed a used needle. In 34% of cases the borrowed needle had been used by only one other person. The findings are broadly similar to those observed in the 1997 IDU survey.

Criminal activity

The majority of the respondents (54%) reported involvement in some type of criminal activity in the preceding month. As shown in Table 20, property crimes (33%) and dealing (34%) were the most common crimes reported, with relatively few respondents reporting involvement in violent crime or fraud.

Table 20. Criminal activity reported by IDU in the last month.

Type of Crime	% of IDU sample
Property crime	33
Dealing	34
Fraud	11
Violent crime	4
Any Crime	54

Perception of police activity

Respondents were asked a number of questions regarding their perceptions of changes in police activity the past 6 months and the impact of these changes. Most of the respondents (70%) believed that there had been an increase in police activity over this period, and a significant proportion (50%) reported that more of their friends had been arrested.

Approximately one half reported that police activity had made it more difficult to score drugs recently.

4.2 KEY INFORMANT STUDY

Heroin-related issues

Key informants (n = 9) reported an increase in the number of heroin overdoses, and continuing financial, general and drug-related health, social and relationship problems (n = 15) over the last 6 months. Informants also indicated that blood-borne virus risk practices (eg. unsafe injecting) were persisting, and were most likely to be under-reported. Key informants who worked within Needle and Syringe Exchange Programs (NSEPs) reported evidence of the re-use of contaminated injecting equipment (eg. breaking into sharps/disposal bins for syringes) within certain street-based markets. This was thought to be occurring in part because of lack of access to NSEPs in those localities outside of normal business operating hours. Not surprisingly, informants also reported the perception that hepatitis C incidence rates had continued to increase amongst some groups of heroin users. A number of key informants (n = 6) also indicated that they had noticed an increasing number of heroin-using males presenting with dual-diagnosis morbidity.

Reports on treatment and service availability were mixed. Some key informants reported that drug and alcohol treatment options were inadequate in Victoria. Specific criticism was also leveled at the long waiting lists for residential withdrawal services and methadone maintenance programs (n = 2). A further two key informants commented on the lack of culturally appropriate treatment and related services for Vietnamese peoples who experience heroin-related problems.

The predominant types of crime reported by key informants were *dealing/trafficking* (n = 11), and *property crimes* such as break and enter, bag-snatching and shop-lifting (n = 10). Five informants reported that they had witnessed a small rise in violent crimes (eg. assaults on dealers, armed robberies) amongst the heroin users they were reporting on. The numbers of heroin users engaged in dealing or trafficking was reported to have increased over the last 6 month period, particularly amongst younger cohorts. As noted in previous sections of this report, some informants also indicated that they had noticed an increase in younger females who were involved in dealing.

Key informants reported that police activities focusing on heroin had both increased (n = 12) and fluctuated (n = 4) over the preceding 6 months. The most commonly reported features of

police action were under-cover work (n = 11), foot-patrols (n = 6) and surveillance work (n = 5).

Mixed reports were received from key informants regarding the nature of the relationship between police and the community. Some key informants (n = 5) reported that their relationship with police had been positive over the last 6 months, and that some police members made efforts to refer heroin users to appropriate services rather than adopt a strict 'law enforcement' approach. Others acknowledged that police in general were more open to the philosophy of 'harm minimisation', but were less certain whether this necessarily translated to their street-level 'harm-reduction' practices.¹

The general perception of key informants was that heroin-focused police action within street-based markets served to increase a range of blood-borne virus and overdose risks (eg. through forcing people to inject hurriedly and in isolation to avoid detection) for people participating in those market places. There was also a belief that police operations or 'blitzes' in these areas had little lasting impact upon the local heroin trade. Informants reported that police operations targeting heroin within street-based markets, have the dual effect of shifting or moving the participants of those markets, and making heroin less available in those locations. However, these effects were reported to be short-lived, due mainly to the availability of alternative market places from which heroin may be accessed.

Amphetamine-related issues

The single key informant who was able to provide a report on primary amphetamine (speed) use in Melbourne indicated that problems related to the use of this substance were under-reported. This key informant also noted that police activities relating to amphetamines had peaked in Melbourne two to three years ago.

Cannabis-related issues

Key informants reported that a range of financial, health, social and relationship problems persisted amongst the cannabis users with whom they had contact in the treatment setting. Reports were also received on the increasing numbers in this client group presenting with dual diagnosis morbidity (eg. psychoses, paranoia, ideas of reference, anxiety disorders),

¹ A discussion of the distinction between harm minimisation and harm reduction may be found in Lintzeris & Spry-Bailey (1998).

memory deficits and amotivational conditions which may be related to cannabis use sustained over long periods.

Informants indicated that the predominant crime types evident within this group were minor property crimes (eg. shoplifting) and dealing/trafficking. Police activity relating to this group was reported as stable, with special note made of the Cannabis Caution Scheme which was recently implemented in Victoria.

4.3 OTHER INDICATORS

Treatment service utilisation

DIRECT Line is a 24 hour, state wide telephone advice, counselling and referral service for individuals who are experiencing problems with alcohol. A computerised data base of call records is maintained and collated on a quarterly basis. The service receives in excess of 40,000 calls per annum and the calls regarding specific drugs may be used as indication of expressed need for counselling or referral within the community. However, the interpretation of this data is complicated by the fact that the number of calls made to the service in a given period is influenced by the level of promotion of the service and level of awareness of the service within the community. As a consequence of the introduction of a newly developed data base of call records in 1996 to 1998 there is insufficient data with which to analyse specific trends in Direct Line calls for the period of interest. However, some clear general trends are evident. These include an increase in the number of calls received throughout the 1990s and an increase in the proportion of calls from persons experiencing problems relating to drug use that is primarily related to heroin use.

The Department of Human Services funds community-based agencies to provide alcohol and drug treatment services across Victoria. The collection of client information is a mandatory requirement. A formalised client data collection system was developed in the 1980s called the Drug and Alcohol Information System (DAISy). This system was superseded by a new system in 1996. At this time an interim version of the new system, called the Alcohol and Drug Information System (ADIS) was established pending the development of a final version of ADIS. The analysis of trends will be possible following the implementation of the final version of ADIS.

The Drugs and Poisons Unit (DPU) of the Department of Human Services maintains a database that records all methadone permits in Victoria. This is the major source of information regarding the characteristics of clients of the Victorian methadone program. This is an important source of information regarding treatment for opiate dependence. The database is currently under revision. The only information currently available is the total number of active permits by age and sex. The DPU uses two methods for estimating the number of methadone clients; the register of methadone permits, and a quarterly phone call to all pharmacies requesting the number of clients who are dosed on a particular day. Data from the latter source is shown in Figure 6. This demonstrates a relatively steady increase in clients on the methadone program throughout the 1990s.

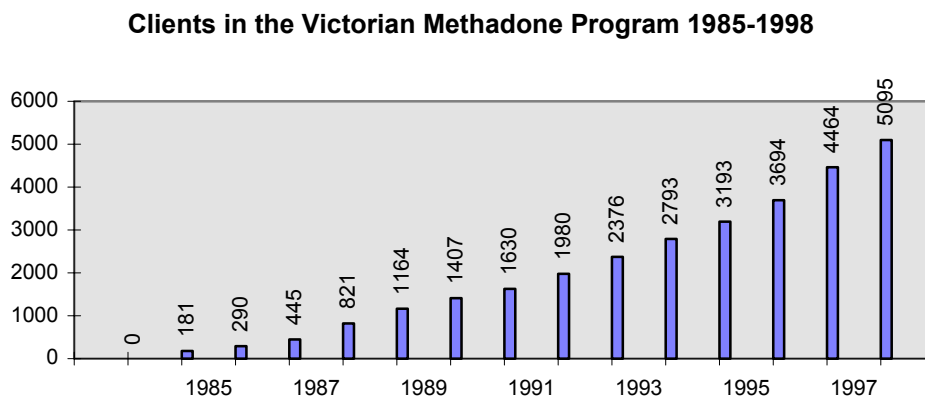


Figure 6. Census estimate of the number of clients on the methadone program in Victoria. (Source: Victorian Department of Human Services).

At present there is no source of information concerning dependent drug users who attend generalist health services such as general practitioners for counselling or other treatment services. Community Health Centres that receive funding from the Department of Human Services for alcohol and drug services do provide client information through the ADIS system that is still undergoing development. The absence of data in this area means that much of the counselling around alcohol and other drugs that occurs in the community is not captured on any existing or planned data collection system.

Heroin overdose

A data base of drug overdose related calls attended by the Melbourne Metropolitan Ambulance Service is available for the period from November 1997 onwards. Table 21 shows the monthly totals for non-fatal heroin overdose for the period 11/97-12/98.

Table 21. Monthly totals of non-fatal heroin overdose attended by ambulances in Melbourne, 11/97-9/98.

Month	definite heroin overdose		
	number	mean per day (std. deviation)	daily range
November	105	3.50 (2.47)	0-11
December	120	3.87 (2.54)	0-11
January	163	5.26 (2.89)	1-13
February	150	5.36 (3.35)	1-14
March	124	4 (1.83)	1-7
April	129	4.3 (3.26)	0-16
June	157	5.23 (2.64)	1-13
July	193	6.23 (2.68)	0-12
August	189	6.09 (3.19)	1-14
September	187	6.23 (3.09)	0-13
Total	2351	5.95 (3.72)	0-22

Note: May data is not included, Source: Turning Point Alcohol and Drug Centre

In examining Table 21, changes in the data collection system need to be taken into account. Prior to June 1998, records were selected for inclusion on the database by ambulance team managers. From June 1998 onwards records were selected by an experienced MICA (Mobile Intensive Care Ambulance) team manager at metropolitan ambulance service headquarters who searches through records of all ambulance attendances across the Melbourne metropolitan area. This means that individual biases in the record classification strategies of different team managers are no longer a factor in the database.

The data for trends in heroin-related mortality in Victoria are summarised in Table 22. This Table, based on VIFM data, shows an increasing trend in the number of heroin-related deaths in Victoria throughout the 1990s despite some fluctuations from year to year. Close inspection of Table 22 reveals a substantial increase (60%) in the number of heroin-related deaths in Victoria from 1997 to 1998.

Table 22. Numbers of heroin-related deaths in the Victoria, 1991-1998.

Year	Number of Heroin-related deaths
1991	49
1992	98
1993	59
1994	84
1995	140
1996	169
1997	168
1998	268

(Source: Victorian Institute of Forensic Medicine)

Blood borne viruses

Blood borne viruses, in particular HIV/AIDS and hepatitis B and C, represent a major health hazard for individuals who inject drugs. An integrated surveillance system has been established in Australia for the purposes of monitoring the spread of these diseases. 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 in people who inject drugs. The Department of Human Services records notifications of diagnoses of HIV and hepatitis B and C in Victoria.

Table 23 shows the trend in notifications of diagnoses of HIV where injecting drug use was identified as a risk factor in Victoria by year of diagnosis, 1989 to 1997. This Table shows that throughout this period there has been a consistently low proportion of HIV diagnoses where injecting drug use was identified as an exposure variable with a decline apparent in the second half of the decade which parallels the overall decline in the annual number of HIV diagnoses. At the end of December 1998, injecting drug use had been identified as a exposure factor in 8.1% of all HIV diagnoses and 86 (6.4%) of 1352 deaths from AIDS in Victoria. This evidence is reinforced by the results of a study of attendees at four fixed site metropolitan needle and syringe exchanges programs in Victoria in 1997 in which it was found that of 436 clients who provided blood tests 5 or 1.1% were found to be HIV positive (Victorian Department of Human Services, 1998b).

Table 23. Annual number of notifications of HIV diagnoses in Victoria in which injecting drug use has been identified as the likely exposure factor, 1989-1998.

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
number	24	35	22	20	23	20	15	14	15	13
% of HIV diagnoses	7.3	11.5	7.0	7.5	9.8	8.9	8.3	7.2	8.0	9.2

Source: Department of Human Services.

In contrast, the situation with regard to hepatitis C virus (HCV) infection among injecting drug users in Victoria is of major concern. It is not possible to make accurate estimates of the incidence rate of HCV among injecting drug users in Victoria or draw firm conclusions regarding trends. However, there is evidence of a continuing high level of prevalence of HCV infection among this group of drug users. This is demonstrated in the findings of the sentinel surveillance data for attendees at four fixed site metropolitan needle and syringe exchanges programs in Victoria in 1997 in which it was found that 51% of the sample were found to have antibodies to HCV (Victorian Department of Human Services, 1998b).

Table 24 summarises the number of notifications received for diagnoses of hepatitis C infection in Victoria from 1992 to 1997. As discussed earlier in this report, it is inappropriate to draw conclusions regarding trends in HCV infection on the basis of this data since the annual incidence cannot be accurately measured. Nevertheless, the data demonstrates that there have been a large number of diagnoses in Victoria throughout the 1990s and the available evidence suggests that the vast majority of these infections have been occurred through injecting drug use.

Table 24. Hepatitis C, Victoria, Notifications by year and gender, 1992-1997

Year	1992	1993	1994	1995	1996	1997
Female	434	985	1394	1684	1748	1848
Male	781	1602	2122	2705	2780	2996
Not specified	50	75	34	124	16	105
Total	1265	2662	3550	4513	4544	4949

Source: Department of Human Services

Arrest data

Data relating to drug related arrests in Victoria are shown in Table 25. These data show a substantial reduction in the number of arrests for cannabis offences and amphetamine offences and an increase in arrests for heroin in the period 1995/96- 1997/98. The data reported in this study relating to the prevalence of cannabis use and the cannabis market in Victoria is indicative of a relatively stable level of cannabis use within the Victorian community over this period. It is likely therefore that the reduction in cannabis-related offences is due to changes in law enforcement policies and practices, such as redirection of police resources away from minor cannabis offences (Australian Bureau of Criminal Intelligence, 1999). Indeed, one general trend which is evident in the drug arrest data for Victoria is a reduction in the proportion of arrests for offences relating to the possession or use of illicit drugs (consumer type offences) as opposed to supply-type (provider) offences. As shown in Table 26 the proportion of arrests relating to consumer offences has fallen from 78% to 66% of all illicit drug related arrests in Victoria from 1995/96 to 1997/98.

Table 25. Number of arrests for cannabis, heroin, amphetamine and cocaine related offences in Victoria, 1995/96-1997/98.

Type of offences	1995/96	1996/97	1997/98
Cannabis offences	19120	9121	9034
Heroin offences	3811	3396	5537
Amphetamines	1633	NA	744
Cocaine	36	29	32

(Source: Australian Bureau of Criminal Intelligence)

Table 26. Consumer arrests as a proportion of all drug-related arrests in Victoria, 1995/96-1997/98.

Drug Type	% Consumers	
	1995/96	1997/98
Cannabis	77%	65%
Heroin	80%	66%
Amphetamines	81%	69%
All illicit drugs	78%	66%

(source: Australian Bureau of Criminal Intelligence)

4.4 SUMMARY OF DRUG-RELATED ISSUES

A summary of the main drug-related issues to emerge from the 1998 IDRS study are summarised in Table 27. The trends that are of most concern relate to the continuing increase in heroin-related mortality, and the high rate of non-fatal heroin overdose and hepatitis C infection among injecting drug users.

Table 27. Summary of drug-related issues.

Drug-related health issues
<ul style="list-style-type: none"> • Continuing high rate of non-fatal overdose among heroin injectors
<ul style="list-style-type: none"> • Increase in heroin-related mortality (60% increase from 1997 to 1998)
<ul style="list-style-type: none"> • Continuing high rates of hepatitis C infection among injecting drug users, low prevalence of HIV among this group
<ul style="list-style-type: none"> • Reports of psychological disturbances among long-term cannabis users
<ul style="list-style-type: none"> • Steady increase in the number of clients participating in the Victorian methadone program
Crime and Police activity
<ul style="list-style-type: none"> • Increase in police activity relating to heroin
<ul style="list-style-type: none"> • Continuing high level of criminal activity among injecting drug users (primarily drug dealing and property crimes).
<ul style="list-style-type: none"> • Increase in heroin-related arrests, decrease in cannabis related arrests
<ul style="list-style-type: none"> • Ongoing trialing of diversion and cautioning approaches

5.0 DISCUSSION

Summary of main findings

Many of the trends identified in the 1998 IDRS are consistent with those that emerged from the 1997 study. Of particular note are the disturbing trends in relation to heroin. There are clear trends apparent in the development of the heroin market in Melbourne from 1997 to 1998 including a reduction in the price and an increase in the purity of the drug. The results of the 1997 IDRS provided evidence of an evolving and expanding street-based illicit drug scene with street markets operating in numerous locations across Melbourne. The findings of the present study point to the continuing development of these illicit drug markets within Melbourne, including the wider availability of the larger \$50 and \$100 deals of heroin to be purchased on the street.

These changes in the heroin market within Melbourne, and in particular the reduction in price and increase in purity of the drug would be expected to influence patterns of use of the drug within the community. While these changes are difficult to monitor, the findings of the 1998 survey suggest that the use of heroin may have increased among some groups within the community.

The relatively high level of purity of heroin being sold in Melbourne makes the administration of the drug through 'burning' (ie heating the drug and inhaling the vapours) a viable method of administration. This method is much safer than injection due to the substantially lower risk of overdose and transmission of blood borne viruses. From this point of view, the reports of some key informants of an increase in 'burning' of heroin among some population groups could be considered a positive trend. However, this may not be the case. Individuals who use the drug in this manner may still develop a tolerance to the drug and subsequent dependence. In this case, it is likely that they could then progress to injecting the drug as this is a more efficient method of administration (in terms of the drug effect) and therefore a less expensive way of maintaining a drug habit. It is possible then that if individuals begin experimenting with heroin through burning some may eventually progress to injecting it at a later time, with the risk of experiencing various types of health harm associated with injecting drug use.

The 1998 IDRS provides disturbing evidence of a continuing high level of illicit drug related harm within the Victorian community. This includes a high rate of non-fatal heroin overdose

among injecting drug users and a substantial increase in the number of heroin-related fatalities from 1997 to 1998 which continues the upward trend that has been apparent throughout this decade. The prevalence rates of the hepatitis C virus among injecting drug users remain very high, and there is evidence of an increasing demand for treatment services for individuals who are heroin dependent.

Cannabis remains the most widely used illicit drug in Victoria. It appears that the wider application of hydroponic cultivation techniques in recent years has had a major influence upon cannabis markets in Victoria. Further, there continues to be reports of an increase in the cultivation of high potency strains of cannabis. However, at present there is no empirical evidence available relating to the potency of the cannabis that is being consumed in Victoria that may be used to substantiate such reports.

Cocaine use in Melbourne appears to be relatively stable. There are a relatively low number of police seizures and arrests relating to cocaine, and little expressed demand for treatment services. Cocaine use among injecting drug users in Melbourne appears to have changed little since 1997. This situation is very different to that observed in the 1998 New South Wales IDRS in which there was clear evidence in Sydney of an increase in cocaine use among individuals who inject drugs (McKetin et al, 1999b). It is interesting to note that, unlike Sydney, there is no evidence of cocaine being sold in small amounts (caps) within the street-based markets in Melbourne. Indeed, few of the individuals who inject drugs or the key informants who were surveyed in the current study were able to comment on cocaine use.

Study limitations

As described in the Introduction of this report the objective of the IDRS is to gather evidence of emerging trends in illicit drug use and related problems within the community. This approach relies on the perceptions of individuals who are exposed to the illicit drug scene (including individuals who inject drugs and workers in the field). Although this information represents a subjective view of drug trends this information is combined with other indicators where this is possible. It is important to note that the purpose of the IDRS is not to explore and verify the emerging trends that are identified, but rather to detect the trends that warrant further investigation.

The quality and scope of the available secondary indicators of illicit drug use and harms in Victoria has continued to improve as a result of a number of initiatives that are currently under way in the health and justice sectors. The availability of additional data sets enhances the capacity of projects such as the IDRS to monitor trends in illicit-drug related issues. A major gap in information in Victoria remains in relation to monitoring the prevalence of use of illicit drugs other than cannabis. For drugs such as heroin, amphetamines and cocaine general population surveys are of limited utility for monitoring trends. In addition there is a substantial delay between the administration of these surveys and the release of the findings. The most recent data available for inclusion in the current studies relate to surveys conducted in 1995 and 1996. Some of these problems could be overcome by conducting prevalence estimation studies in Victoria. These have been used in other Australian jurisdictions and overseas and provide an alternative means of estimating the number of individuals within a community who are using particular drugs.

While further research is required in order to confirm the trends that have been identified in the current study, the findings of the present study demonstrate that the IDRS provides a valuable and unique method with which to investigate emerging trends in illicit drug use in Melbourne.

Implications for research

The findings of the 1998 IDRS suggest the following areas for further investigation:

1. Research into the observed changes in patterns of heroin use, particularly among younger people and focusing on initiation into the injecting of heroin.
2. An examination of the relationship between changes in the characteristics of the heroin market (such as price and purity) upon patterns of heroin use and related consequences. This should include research which would inform the development of approaches to reducing the harm associated with street-based heroin markets in Melbourne.
3. There is an urgent need for research into the development of more effective methods for preventing heroin-related overdose and the transmission of the hepatitis C virus among individuals who inject drugs.

4. Research examining the potency of cannabis currently being consumed in Victoria and related health implications.
5. Prevalence estimation studies that aim to provide estimates of the number of Victorians who are using heroin, amphetamines, cocaine and other illicit drugs that are difficult to measure using general population surveys.

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