NDARC Technical Report No. 89

Victorian Drug Trends 1999

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

Robyn Dwyer and Greg Rumbold

Turning Point Alcohol and Drug Centre Inc.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGMENTS

The authors would like to thank the many individuals who participated in the project and contributed their knowledge of the illicit drug scene in Melbourne. Their willingness to share their time and experiences with us is greatly appreciated.

This research was funded by the Commonwealth Department of Health and Aged Care. The national trial of the Illicit Drug Reporting System (IDRS) was managed by the National Drug and Alcohol Research Centre (NDARC). The Melbourne component of the trial was undertaken by Turning Point Alcohol and Drug Centre Inc. The authors thank the Victoria Police Drug Squad for participating in the study. The authors would also like to extend special thanks to the following individuals and organisations for their contribution to the project:

Research Assistants

- Fiona Wiltshier
- Karen Reiter
- James Dixon
- Jane Dicka
- Ian Bell

Interview Sites

- Springvale AIDS and Hepatitis Prevention Team, Springvale Community Health Centre
- AIDS Prevention and Health Awareness Program (APHAP), Youth Projects Inc.
- St Kilda Crisis Centre
- Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS)
- Western Region AIDS & Hepatitis Prevention (WRAP)
- Turning Point Alcohol & Drug Centre Inc.

Recruitment / flier distribution sites

- Melbourne Inner City AIDS Prevention Centre (MINE)
- Dandenong Hospital AIDS Prevention & Support Unit

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), following a successful pilot study of the methods in Sydney in 1996 and a multi-state trial in 1997. The 1998 national trial consisted of the complete IDRS conducted in New South Wales, Victoria and South Australia. In 1999, the complete IDRS was again conducted in New South Wales, Victoria and South Australia with the remaining states and territories collecting secondary indicator data and conducting interviews with key informants.

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 the 1999 IDRS project between July and October 1999. The project consisted of:

1. A quantitative survey of a total of 154 individuals who were current injecting drug users recruited from a number of sites across the Melbourne metropolitan area.
2. Qualitative interviews with 27 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, and/or contact with ten or more illicit drug users over the six months preceding the survey.
3. Analysis of a range of secondary indicators of illicit drug use or harms.

The data collected in these three phases of the study were analysed in order to identify trends in illicit drug use and related harms. These data were compared to the results obtained in the 1997 and 1998 Melbourne IDRS studies to assess changes over time.

Summary of drug trends in Victoria

The 1999 IDRS detected a number of trends during the preceding six to twelve months. Table A provides a summary of the trends in price, availability, purity and prevalence of use for the four main drug types.

Table A. Price, availability, purity and prevalence of use of heroin, amphetamine, cocaine and cannabis.

	Heroin	**Amphetamine**	**Cocaine**	**Cannabis**
Price				
Cap	$20-25, stable		$50, first report	
Gram	$300, decreased	$50, stable	$250, stable	$20, stable
Ounce		$750, decreased		$300, decreased
Availability	Easy Stable	Difficult Stable	Difficult Stable	Easy Stable
Purity[a]	69% Small increase	11% Stable	49% Stable	High[b] Stable[b]
Prevalence of use	Increased	Stable to decreased	Stable	Stable to increased

[a] Based on the purity of drug seizures made by federal and Victorian law enforcement agencies.
[b] Based on IDU and key informant estimates of THC potency

Heroin

The major trends evident for the Melbourne heroin market were a continuing decrease in price and increase in the purity of the drug. An increase in the amount and frequency of use of heroin was reported by individuals who were injecting drugs, and reports were received of an increase in the numbers of people using heroin and in recreational use among a wider range of social groups. The street-based heroin markets identified in the 1998 IDRS were firmly established in 1999. There was evidence of a broadening of these markets in a number of locations throughout Melbourne and the ongoing emergence of new street-based markets.

Amphetamines

The price, purity and availability of amphetamines has remained stable across the three years of the Victorian IDRS. Findings from the 1999 IDRS suggest that the prevalence of amphetamine use among injecting drug users in Melbourne is low. This was attributed to the low purity of the drug.

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 since 1997. Cocaine continues to be used infrequently by the injecting drug users accessed through the IDRS. There were some preliminary reports of the availability of caps of cocaine and some suggestion of street level selling of cocaine.

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 perceptions of availability evident between 1997 and 1999. The trend towards the use of hydroponic production techniques in cannabis cultivation continues. There appear to be no major changes in the form of the drug used. A recent survey suggests that the prevalence of use of the drug may have increased in the past few years. 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 strong evidence of the reduction of use of the benzodiazepine, flunitrazepam among individuals who inject drugs. However, this appears to have been replaced by the use of diazepam and/or temazepam.

Drug-related issues

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

- a continuing increase in heroin-related fatalities from 1998 to 1999,
- continuing increases in the occurrence of non-fatal heroin-related overdoses requiring ambulance attendance,
- an increase in demand for treatment services for individuals experiencing problems with heroin use,
- poor health status and continuing high rates of infection with the hepatitis C virus among injecting drug users,
- an increase in the number of police arrests for all drug types. In particular, arrests for offences relating to heroin have increased by 47%, and
- diminished social opportunities (employment, accommodation, social support) among people who inject drugs.

Implications for research

The findings of the 1999 IDRS suggest the following areas for further investigation:

1. Research that can inform the development of more effective means of influencing the heroin market in Victoria.

2. Research that can improve our understanding of the ways in which consumers of illicit drugs participate in the drug market.

3. Continuing monitoring of the cocaine market and patterns of use.

4. Research examining the potency and pharmacological properties of cannabis that is being grown and consumed within Victoria.

5. Research to improve understanding of the health and other social problems arising from marginalisation experienced by injecting drug users.

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), following a successful pilot study of the methods in Sydney in 1996 and a multi-state trial in 1997 (Hando and Darke, 1998; Hando et al., 1998; Hando et al., 1997). The 1998 national trial consisted of the complete IDRS conducted in New South Wales, Victoria and South Australia (McKetin et al., 1999). In addition, the feasibility of the other states and territories conducting a "core" IDRS consisting of interviews with key informants and the collection of secondary indicator data was examined. In 1999, the complete IDRS was again conducted in New South Wales, Victoria and South Australia with the remaining states and territories collecting secondary indicator data and conducting interviews with key informants.

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 are important from a policy perspective or that may require further investigation.

The *Victorian Drug Trends 1999* report summarises the information collected in the Melbourne component of the 1999 IDRS which was conducted over the months of July to October 1999. The study replicated the methodology used in the 1997 and 1998 studies 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 of illicit drug trends and drug-related harms. The information provided by these three methods has been used to draw conclusions regarding trends in illicit drug use and harm.

The reader is referred to the national report presenting state comparisons (McKetin et al., in preparation) and the individual state and territory reports. These are available as technical Reports from the National Drug and Alcohol Research Centre, University of New South Wales. Although cited by state, drug trends in the IDRS reports primarily represent trends in the capital cities of each state.

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 sections.

2.1 SURVEY OF INJECTING DRUG USERS (IDU)

The survey involved quantitative interviews with injecting drug users recruited from within the Melbourne metropolitan area, between July and September 1999. The inclusion criteria for individuals in the survey were that they must have injected at least monthly in the six months prior to the interview, and have resided in Melbourne for at least twelve months. Subjects were recruited using a variety of methods including posted advertisements and recruitment notices distributed through Needle Syringe Programs (NSPs), and snowball methods (recruitment of friends and associates via word of mouth). Six agencies: Springvale AIDS and Hepatitis Prevention Team; Western Region AIDS Prevention (WRAP); AIDS Prevention and Health Awareness Program (APHAP), Youth Projects Inc.; St Kilda Crisis Centre; Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS); and Turning Point Alcohol & Drug Centre Inc. assisted the research team by participating as recruitment and interview sites for IDRS respondents. Two other agencies: Melbourne Inner City Needle Exchange and Dandenong Hospital AIDS Prevention and Support Unit assisted with distribution of recruitment notices.

Interviews with respondents took place in Needle Syringe Programs and health or outreach services. The major locations for recruitment and subsequent interview were in Springvale, Glenroy, Footscray, Frankston, St Kilda and Fitzroy.

The structured interview schedule used in the present study was based on the schedule used in the 1998 IDRS study conducted in Melbourne. The interview schedule contained sections on demographics, drug use, price, purity and availability of drugs, crime, risk-taking behaviour, health and general trends. Minor amendments were made to the 1998 questionnaire in the form of some additional questions regarding frequency of injecting, experience of arrest, sharing of other injecting equipment and locations of drug use. The duration of the interviews

was approximately 45 minutes and participants were reimbursed $20 for their time and out-of-pocket expenses. Data analysis was conducted using SPSS for Windows (SPSS Inc., 1996).

2.2 KEY INFORMANT STUDY

A total of 27 key informants (16 males and 11 females) participated in telephone interviews (n = 20) and face-to-face interviews (n = 7) between the months of September and October 1999. Face-to-face interviews were conducted in situations where key informants preferred this format, or were working in close proximity to the interviewer. Twelve (39%) participants were recruited from the pool of key informants who had taken part in the 1998 IDRS study (Rumbold and Fry, 1999). All other participants in the current study were identified and recruited either as, replacements for 1998 participants drawn from the same agencies/services or, on the basis of referrals received from experienced professionals in the field. Attempts were made to recruit each of the 31 key informants who had participated in the 1998 IDRS study. A total of 19 people from this group either could not be contacted due to a change in employment or leave of absence, or they declined to participate this year because of self-identified lack of suitability or prior commitments.

Key informants recruited for the current study included drug treatment workers (n = 6), Needle Syringe Program workers (n = 6), User Group representatives (n = 3), outreach workers (n = 4), youth workers (n = 2), researchers (n = 2), police officers (n = 3) and a psychologist. Participants were selected on the basis of having had at least weekly contact with illicit drug users over the preceding six months, and/or contact with ten or more different illicit drug users during that period.

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.

Heroin was nominated by a majority (n = 17) 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 seven key informants. One key informant was able to nominate

amphetamines as a major drug group used by the people with whom they had contact and another key informant was able to report on cocaine as the main illicit drug used. Members of the Victoria Police Drug Squad were also able to comment on trends in heroin, cocaine, amphetamine and cannabis use in Victoria. Where appropriate, reports on amphetamine, cocaine 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 51 minutes to complete (range=20-90 minutes). Detailed notes were made by the interviewer during the interview. Raw data were transcribed and coded soon after the conclusion of the interview to ensure an accurate record of the information provided. Content analysis was used for open-ended responses (Kellehear, 1993). 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 SPSS (SPSS Inc., 1996) 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 = 21), or both personal experience and client contacts (n = 6). All four drug types were represented by the six key informants who were able to draw from both client and their own experiences. The specific reported sources of information included contact with drug users/clients (n=18), professional activities (n = 16), personal experience (n = 6), observations (n = 5) and research (n = 2). Participants were confident regarding their knowledge of the groups they were reporting on, and about the information they provided during the interview. Most key informants (n = 21) rated their knowledge as either “good” or “excellent”. Similarly, nearly all key informants reported that they were “very certain” (n = 26) about the information they had provided during their interview.

Fifteen (55%) of the 27 key informants reported daily contact (5 to 7 days per week) with a range of client groups during the preceding six months. The mean number of reported contact days in that time period was 133 (range = 10-180 days). Special populations were well

represented. In the six months prior to interview, key informants had contact with many different client groups including: people who engage in injecting drug use (96%); youth (85%); people from non-English speaking backgrounds (70%); women (56%); people with prison histories (37%) and indigenous peoples (41%). In addition, a number of key informants reported contact with young people involved with the juvenile justice system, people from the gay and lesbian community and male and female sex-workers.

2.2.1 FACE VALIDITY OF KEY INFORMANT REPORTS

Most key informant participants (67%) reported contact with between 51 and more than 100 illicit drug users during the six months prior to interview. Seventy-nine percent of the 14 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 and 1998 IDRS studies (Rumbold and Fry, 1998; Rumbold and Fry, 1999), 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 key informants and those agencies participating 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 individuals and 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 for the entire 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 Victoria Forensic Science Centre 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 (ie. THC content) is not tested.

- *Survey data*

The 1998 Victorian Drug Household Survey was the third in a series of Victoria-specific surveys undertaken in conjunction with the National Drug Strategy Household Surveys. A total sample size of approximately 1400 individuals aged 14 and over was obtained (Australian Institute of Health and Welfare, 1999). The survey covered the following illicit drugs: cannabis, amphetamines, hallucinogens, cocaine, ecstasy/designer drugs, and heroin. Respondents were asked whether they had ever used these drugs and whether they had used them within the past twelve months, along with basic questions about polydrug use. This survey provides the most recent measures of the prevalence of illicit drug use within the general population of Victoria.

- *Data from the Needle Syringe Program*

The Needle Syringe Program (NSP) was established in 1987. The Victorian program records the number of needle/syringes 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.

- *Data from the Department of Human Services relating to drug treatment (Interim ADIS)*

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. A total 16715 cases on the ADIS database represented clients receiving treatment episodes from ADIS-contributing specialist drug and alcohol agencies with an episode termination date in the financial year 1997/1998. For the specialist agencies, 14927 (89%) of the client episodes had a unique identifier which, when aggregated left a total of 7422 individual clients (unique alphacodes) of specialist agencies. The ADIS database records main drug problem for all drug-related treatment presentations.

- *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 and 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.

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

This computerised database is managed by Turning Point Alcohol and Drug Centre and contains information obtained from Patient Care Records which are completed by the attending ambulance officers. Reliable data is available from June 1998. 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 heroin. Such evidence is not available for other types of illicit drugs.

- *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 Victoria in which causality is directly attributed to the use of a drug involve the administration of heroin (usually defined as heroin overdose).

- *Blood borne virus surveillance data*

Blood borne viruses, and in particular HIV/AIDS and hepatitis B and C are a major health risk for individuals who inject drugs. An integrated surveillance system has been established in Australia for the purposes of monitoring the spread of these 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 may not undergo testing. Further, it is difficult to determine whether the notifications represent new infections or repeat testing of prevalent cases. 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 Syringe Programs (National Centre in HIV Epidemiology and Clinical Research, 1999).

- *Arrest data*

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

3.0 CURRENT DRUG SCENE AND RECENT TRENDS

3.1 OVERVIEW OF THE SAMPLE OF INJECTING DRUG USERS

A total of 154 individuals were interviewed. The characteristics of the 1999 sample are summarised in Table 1. The majority of the participants were male (62%) and ranged in age from 16 to 50 years with a mean age of 28 years. The majority were not currently employed. Slightly less than half had acquired trade, technical or university qualifications. Slightly over a third (36%) of the respondents were currently receiving drug treatment. A small proportion (7%) reported that they had used naltrexone in the past six months (prescribed by a doctor).

Table 1. Demographic characteristics of the injecting drug user (IDU) sample (n= 154).

	Sample characteristics
Mean age (years)	28 (range 16 to 50)
Gender (% Male)	62
Ethnicity (%):	
English speaking background	90
Non-English speaking background	10
Aboriginal or Torres Strait Islander	7
Employment (%):	
Not employed	70
Full time	8
Part time/casual	7
Student	3
Home duties	13
School education (mean years)	10.7
Tertiary education (%):	
None	56
Trade/technical	29
University/college	14
Prison history (%)	40
Treatment history (%):	
Currently in treatment	36

The sample was drawn from 57 suburbs within the western, northern, inner city and outer south eastern areas of Melbourne. Most of the participants lived in close proximity to the six recruitment sites of St Kilda, Springvale, Glenroy, Frankston, Footscray and Fitzroy. The characteristics of the participants in the IDU survey were generally similar to those of the

sample recruited in the 1998 IDU survey, although the 1999 sample tended to have a higher proportion of people from non-English speaking backgrounds, and a higher proportion with a prison history.

3.2 DRUG USE HISTORY OF THE IDU SAMPLE

The mean reported age at first injection of a drug was in the late teens (18.7 years), ranging from 12 to 45 years. The two drugs most frequently used on the first injection occasion were amphetamine (49%) and heroin (46%). The trend identified in the 1998 IDRS towards the use of heroin as the first drug injected was upheld in the current study. This shift was most apparent among people who commenced injecting recently. Among those injecting for less than three years, 76% reported heroin as the drug used on their first injecting occasion.

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 30 years, and mean length of time since first injecting a drug was 9.6 years. The vast majority of the sample reported that heroin was the drug that they had most often injected in the past month (92%) and the last drug that they had injected (92%). Table 2 shows that the majority of the respondents had been injecting drugs at least once per day in the previous month.

Table 2. Frequency of injection during the last month (IDU survey, n=154).

Frequency of injection during last month	**%**
Not in the last month	1
Weekly or less	14
More than weekly	18
Once a day	20
Two to three times per day	36
More than three times per day	11

Respondents were asked how much they had spent on illicit drugs the day before the interview. The responses to this question are summarised in Table 3. This shows that approximately three quarters of the sample had spent money on illicit drugs on the day before the interview and that this was most commonly between $50 and $99.

Table 3. Amount spent on illicit drugs on day prior to interview (IDU survey, n=154).

Amount	**%**
Nothing	26
Less than $20	3
$20-49	14
$50-99	21
$100-199	18
$200-399	10
$400 or more	8

Participants were also asked where they had last injected. Their responses are summarised in Table 4. This shows that half the sample had last injected in a private home while the other half had injected in a public location, most commonly a public toilet or a street/park or beach. Over half (66%) of the sample reported injecting drugs in the company of other people.

Table 4. Location in which respondents had last injected (n=154).

Location	**%**
Private home	50
Public toilet	20
Street/park or beach	14
Car	11
Other (eg car park)	5

The sample reported the use of a wide variety of illicit and licit drugs as shown in Table 5. The vast majority of the individuals who were surveyed reported heroin as their main drug of choice (80%), followed by cannabis (12%) and amphetamines (6%). Almost all of the individuals had used heroin, amphetamine, alcohol, tobacco, cannabis and benzodiazepines. There was 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 six months. Tobacco and heroin were the drugs most frequently used on a day-to-day basis in this period.

A wide variety of drugs had been injected with a median of one type in the preceding six months. Of particular note is the significant proportion of the sample who report the injection of benzodiazepines (32% ever, 19% in the past six months). There were relatively few differences in the pattern of drug use reported by participants in the 1999 IDRS as compared to the 1998 survey. In the 1999 survey the respondents reported somewhat lower rates of injection of methadone and cocaine than observed in the 1998 survey (Rumbold and Fry, 1999).

Table 5. Drug use history of IDU sample (n=154).

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 %	Used last 6 months %	Median number of days used in last 6 months by those using the drug
Heroin	99	99	96	58	22	29	6	28	14	96	160
Methadone	59	9	1					59	38	37	25*
Other opiates	63	40	16	9	2	2	1	47	28	33	10
Amphetamines	88	86	40	10	1	62	10	57	14	40	4
Cocaine	46	29	3	5	0	30	6	6	1	7	1
Hallucinogens	70	17	1	2	0	1	0	68	13	13	2
Ecstasy	40	12	5	2	1	3	0	38	16	18	3
Benzodiazepines	84	32	19	8	2	2	1	81	64	65	20
Steroids	5	5	1					1	1	1	21
Alcohol	98	7	1					97	74	74	6
Cannabis	96									86	90
Anti-depressants	41									25	100
Inhalants	28									3	3
Tobacco	99									97	180
Polydrug use (median drugs used)	**10**	**3**	**1**							**6**	

* for those not currently in treatment

3.3 HEROIN

Trends in heroin use were established from information obtained from 17 key informants, the 95% of the IDU sample who felt confident to comment on heroin trends, and data from other indicators of heroin use or harm.

3.3.1 PRICE

The median price of heroin reported by individuals who inject drugs was $307 per gram and $25 per cap (small amounts of heroin wrapped in foil). A total of 42% of the sample reported that the price of heroin had been stable over the previous six months, while 21% reported that the price had increased and 20% that it had decreased. Table 6 summarises the modal price of heroin in Melbourne reported by the injecting drug users who participated in the 1997, 1998 and 1999 IDRS studies. This comparison shows that there has been little change in the price of caps of heroin being sold in Melbourne from 1998 to 1999, although the price per gram has continued to fall.

Table 6. Modal prices of heroin in Melbourne, 1997, 1998 and 1999 IDRS studies (IDU surveys).

		1997	**1998**	**1999**
Heroin	$/cap $/gram	30-40 450	20-25 400	20-25 300

Nearly three quarters of the sample (71%) had purchased heroin in amounts other than caps or grams in the past six months. The most common amounts reported and modal purchase prices were: half-gram ($150-200); 1.7 grams ($400); “rock” ($50); quarter gram ($100); and 3.5 grams ($850).

The term “cap” remains primarily a generic descriptor. It appears to be the term for the smallest and cheapest package of heroin available for purchase. Larger packages, although sometimes also referred to as caps, are in this instance distinguished from the “cap” by specifically referring to their price (eg. $50 caps or $100 caps). Table 7 indicates that for the same price, a variety of packages or specific amounts of heroin may be purchased.

Table 7. Range of heroin purchases available for particular prices.

Price	Terms used for quantity/package of heroin purchased
$50	'rock', '5 caps', '3 caps', 'deal', 'a fifty', '4-5 caps', 'double-cap', '6 caps', '$50 cap', 'one-twelfth of a gram' (=0.83gm), '0.1gm'
$100	'8-10 caps', 'rock', 'quarter-gram', '7-8 caps', '3 caps', 'deal', '0.3gm', '15 caps', '4 caps', 'a hundred', '$100 cap'

Table 8 presents a summary of the descriptors used for the different types of purchases, the estimates of the gram weight of the purchase, and the price paid. The estimates of the weight of caps and $50/$100 deals have been derived from key informant and IDU reports on relationships between these descriptors and gram weights. For example, a number of reports indicated that around 30 caps could be produced from one gram of heroin. The modal weight of 0.03gm is derived from these (and other) reports.

Table 8. Summary of the types of heroin purchases reported in the 1999 IDU survey.

Descriptor	Gram weight estimates (mode)	Price
Cap	Mode = 0.03gm, Range 0.02 to 0.05gm	$20-25
$50 rock/deal	Modal estimate is 3-5 caps = 0.09gm - 0.15gm, Range 0.06gm to 0.2gm	$50
$100 rock/deal (quarter-gram)	Mode = 0.25gm, Range 0.12gm to 0.3gm	$100
half-gram	0.5gm	$150-200
one gram	1 gm	$300
1.7 gram	1.7 gram	$400
3.5 gram	3.5 gram	$850
quarter ounce	7 grams	$1050

The prices reported by key informants for cap (range $15-$35) and gram ($250-$400) quantities of heroin were consistent with those reported by the IDU. A significant feature of key informant reports (n = 9) was the reference made to the increased availability of the larger $50 and $100 heroin deals within street-based markets. Six key informants commented that it was harder to obtain caps of heroin and that sellers were showing a preference for selling heroin in either $50 or $100 "rocks". Key informants suggested that this trend could be explained by an increasing desire on the part of sellers to minimise their time in the street-

based market as a consequence of police activity. This contrasts with reports from the 1998 IDRS where key informants suggested the trend arose from the desire of heroin *users* to minimise their time in the street-based market (Rumbold and Fry, 1999).

3.3.2 AVAILABILITY

All of the respondents on the IDU survey regarded heroin as either easy or very easy to obtain, with the majority (66%) reporting no change in availability in the past six months. Similarly, the key informants reported that heroin was currently very easy to access (n = 16), and that over the last six months the availability of heroin had been stable (n = 15). This trend was explained by the continuing emergence and establishment of multiple market places throughout Melbourne from which to access this drug. Key informants had not observed any changes in the numbers or types of people selling heroin over the past twelve months other than fluctuations in "faces and places" as a result of temporary displacement of street markets associated with police activity. The majority of the participants in the IDU survey reported that they usually purchased the drug from a street dealer (54%). Approximately one fifth reported that they purchased the drug from a dealer's home (21%), while 8% reported purchasing the drug through a pre-arranged meeting with a dealer at a particular location or by a delivery from the dealer to their home.

3.3.3 FORM AND PURITY

A higher proportion of the IDU sample reported that they purchased heroin in "rock" (96%) rather than powder (77%) form in the previous six months. The most common route of administration was injection, although a significant minority (22%) reported "chasing the dragon" or "burning" the drug (ie. heating heroin and inhaling the resulting vapours) in the preceding six months. All key informants reported the use of "rock" with six also noting the use of heroin powder. Two key informants commented however that the "rock" was compressed powder rather than true rock and a third key informant noted that the "rock" had become "chalky" over the last six months and was no longer as solid as it had been.

The primary route of administration reported by key informants was injection although 13 reported some contact with people who smoked heroin (ie. "burning"). Burning was reported to be more common among South East Asian heroin users, in particular, young South East

Asian female users. One key informant noted that South East Asian females would often smoke heroin when in the company of others and then inject when alone or with partners as it was less socially acceptable for them to be seen to be injecting. This key informant also reported that there was some degree of movement back and forth between intravenous heroin use and "burning" by some Vietnamese heroin users. Reports also suggested that many people who had initially commenced heroin use through "burning" eventually made a transition to intravenous use as their heroin tolerance levels increased.

Purity was considered medium to high by the majority of respondents in the IDU survey, the largest proportion rating purity as medium (42%). There did not appear to be any clear changes in the perceptions of purity within the past six months as reported by the respondents on the IDU survey with 24% describing it as stable, 28% describing it as decreasing and 26% as fluctuating. Key informants also reported that the purity of heroin was medium (n = 7) to high (n = 8), with four key informants reporting purity was stable, five reporting it had decreased and six that it fluctuated. Only one key informant believed purity had increased in the preceding six months.

The average purity level of heroin seizures made by law enforcement agencies in Victoria during the 1998/99 financial year is shown in Figure 1. The mean purity of all heroin seizures tested (n=1916) during this period was 69% (range 1-100%). As shown in this figure there was relatively little fluctuation during the year apart from a slight decrease in the last quarter and there was little difference in the purity of street level amounts (less than 2 grams) as compared to larger amounts (2 or more grams).

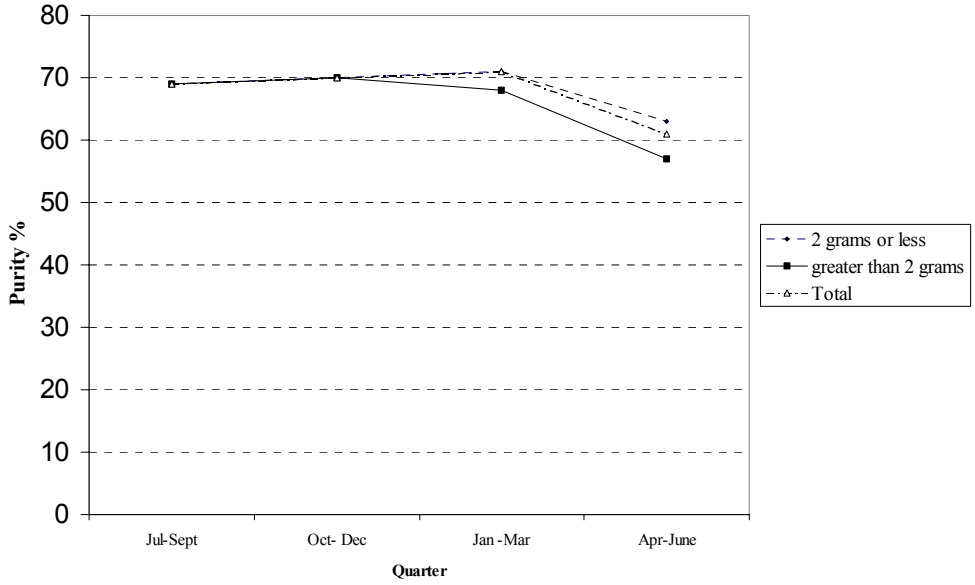

Figure 1. Purity of heroin seizures made by law enforcement agencies in Victoria in each quarter of the 1998/99 financial year (Source: Australian Bureau of Criminal Intelligence).

The mean purity level of heroin seizures made by law enforcement agencies in Victoria during the period from 1995/96 to 1998/99 is summarised in Table 9. This data demonstrates that the relatively high level of purity of heroin observed in 1997/98 has continued through 1998/99.

Table 9. Mean purity level of heroin seizures in Victoria.

	1995/96 %	**1996/97 %**	**1997/98 %**	**1998/99 %**
Heroin	48-57 (quarterly figures)	35	62	69

(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 community of Victoria was undertaken within the 1998 National Drug Strategy Household Survey. According to the findings of this survey 1% of the Victorian population aged 14 years and above had used

heroin within the past 12 months (Australian Institute of Health and Welfare, 1999). This figure is somewhat higher than the estimate of 0.2% obtained in the 1995 Victorian Drug Household Survey (Drug Treatment Services, 1996) as shown in Table 10. These findings suggest that only a small proportion of the Victorian population use heroin and that the prevalence of the use of the drug may have increased in the period between the two surveys. However it is difficult to draw firm conclusions about general trends in heroin use from these surveys. The estimates of the prevalence of heroin use which are obtained from these surveys are imprecise due to the small proportion of the sample group who report using the drug. These estimates are likely to be influenced by the reluctance of some people to report engaging in an illegal activity, and the exclusion of some groups in the sample (eg. homeless persons and those living in institutional settings).

Table 10. Proportion of the Victorian population aged 14 years or older who report ever using, or recently using heroin (for non-medical purposes) as measured in the Victorian/National Drug Strategy Household Surveys.

	1991 %	**1993 %**	**1995 %**	**1998 %**
Ever tried heroin	1.5	1.5	1.4	2.2
Used heroin within the previous 12 months (recent use)	0.1	0.2	0.2	1.0

(Source: 1995 Victorian Drug Household Survey, Drug Treatment Service; 1998 National Drug Strategy Household Survey, Australian Institute of Health and Welfare).

Other indicators

Information regarding the distribution of needle/syringes through the Victorian Needle Syringe Program provides a crude indicator of the level of injecting drug use within the state. This data is summarised in Table 11 and demonstrates a steady increase in the number of needle/syringes distributed in the program throughout the 1990s, with a 43% increase in needle/syringe distribution from 1997 to 1998.

Table 11. Distribution, return and return rate for fixed outlets, off site services and total program: Victorian Needle Syringe Program 1987-1998 (dist = distributed, ret = returned).

	Fixed outlets			Off-site			Total program		
Year	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
1997	2,344,686	1,058,686	45.2	630,006	504,439	80.1	2,974,692	1,563,125	52.5
1998	3,319,823	1,409,921	42.5	944,772	613,715	65.0	4,264,595	2,023,636	47.5

(Source: Department of Human Services)

Current patterns of heroin use

Four out of five of the injecting drug users who were surveyed (80%) reported heroin as their main drug of choice. A total of 99% of the sample reported having injected the drug in the preceding six months, with respondents reporting using the drug on a median of 160 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.

Key informant reports regarding the amount of heroin used were variable and dependent upon a number of factors including availability of money, route of administration and length of time using heroin. Three key informants estimated that the regular heroin users with whom they were in contact consumed 1-2 caps per day (at a cost of $50), four believed that regular heroin users would consume one quarter of a gram per day ($100-$150) and a further four believed this figure was closer to half a gram per day ($150-$200).

A number of key informant reports indicated that the often-made distinction between heroin users and heroin "dealers" is misleading. Heroin users were reported as frequently purchasing larger amounts of heroin, on-selling a portion and keeping the remainder for their personal needs. Through this strategy they could effectively maintain their otherwise expensive heroin use at no or low cost. For example, heroin users purchasing 1.7 grams at $400 could keep 0.5 grams for their personal use, divide the remainder into eight $50 rocks and sell these to recover their original cash outlay. This overlapping of user/dealer roles was also noted in a

recent report examining drug use among people experiencing homelessness (Hanover Welfare Services, 1999).

The demographic profile of heroin users described by the key informants (n=17) was similar to that of the IDU sample in regard to age (majority 20 to 25 years, ranging from 15-50 years of age), gender (predominantly male), ethnicity (mostly from English speaking backgrounds), level of education (average Year 10 completed) and employment status (low employment levels). With regard to gender, three key informants believed that there were approximately equal numbers of males and females actually using heroin. The key informants attributed the discrepancy between this perception and other indicators that suggest that injecting drug users are characterised by a 2:1 male to female ratio [National Centre in HIV Epidemiology and Clinical Research, 1999 #5] to the fact that male IDUs might be more likely to access drug-related services (eg. NSPs) and be involved in street-level heroin transactions, that is, "public" activities where their status as injecting drug users is visible.

A summary of the main demographic characteristics of the individuals presenting at ADIS contributing specialist agencies with heroin/opioids as the main drug problem is shown for males and females in Table 12. All but two individuals receiving opioid-related treatment presented for heroin-related problems. There were 2555 individuals receiving treatment with heroin/opioids listed as their main presenting drug problem who were included on the ADIS database in 1997/1998. The typical individual receiving opiate-related treatment was male, unemployed and aged in his late twenties and he lived with his parents or spouse, and was renting or boarding. He typically received withdrawal services as the main form of treatment and generally the episode of care was terminated for reasons other than completed treatment during 1997/1998.

Table 12. Demographic profile of male and female individuals receiving treatment presenting with heroin/opioids as their reported main drug problem - Interim ADIS 1997/1998.

Males (N=1609)	
Age	Mean = 28.7 (SD=8.1), Range = 14-61
Family origin	82% English speaking, 5% other European, 12% Asia, 2% self-identified aboriginal
Type of service given	38% counselling, 36% withdrawal, 12% specialist methadone
Employment status	10% in workforce, 66% unemployed, 16% pensioner
Marital status	66% never married, 22% married/defacto
Accommodation	38% renting, 32% boarding, 8% no fixed abode
Living conditions	25% with spouse, 2% alone with children, 21% alone, 37% parents/family
Females (N=946)	
Age	Mean = 28.4 (SD=8.1), Range = 15-72
Family origin	93% English speaking, 3% other European, 4% Asia, 4% self-identified aboriginal
Type of service given	45% counselling, 31% withdrawal, 15% specialist methadone
Employment status	17% in workforce or home duties, 47% unemployed, 28% pensioner
Marital status	52% never married, 34% married/defacto
Accommodation	55% renting, 20% boarding, 6% no fixed abode
Living conditions	36% with spouse, 11% alone with children, 17% alone, 21% parents/family

(Source: Victorian Department of Human Services)

Examination of Table 12 reveals that there are few differences in the profile of the males and females receiving heroin/opioid-related treatment in the specialist alcohol and drug agencies. There was a greater proportion of males who lived with their parents or other family and there was a larger proportion of males identified as having an Asian background compared to the females. There was also a smaller percentage of females recorded as unemployed compared to males. A larger proportion of males were in boarding-style accommodation while a larger proportion of females were in rental-style accommodation.

Trends in heroin use

Participants in the IDU survey noted several general trends in heroin use and related problems. The major themes were that there were more people using the drug and those using the drug were using larger amounts, have developed a greater tolerance to heroin and were using less of other drugs.

Key informants reported that there had been few changes in heroin use over the past twelve months other than the changes in quantities being sold. Two key informants had observed an increase in heroin "burning"/smoking among people of English-speaking backgrounds and a second key informant also reported observing a temporary increase in heroin burning. The general consensus was however that most people injected heroin and that even among younger users who may commence smoking heroin, the transition to injecting occurred quickly once tolerance increased.

One key informant identified an increase in smoking heroin among middle-class professional people who chose not to inject as they did not wish to be perceived as "junkies". This was a common theme reported by some key informants, that injecting heroin remained associated with being a "junkie" and was thus less socially acceptable. Other key informant reports suggested that heroin was becoming a more acceptable drug among a broader range of social groups (eg. young people in the dance party scene, middle-class professionals). This shift in the acceptability of heroin was also noted by key informants reporting on cocaine and cannabis users.

A feature emerging from key informant reports (n = 13) was the continuing trend of injection of benzodiazepines among heroin users, in particular *Normison*® (temazepam). Only two key informants reported limited or no use of benzodiazepines among the heroin users with whom they were in contact. Both these key informants were in contact with people currently undergoing heroin withdrawal treatment.

Key informant reports on changes in demography of heroin users were mixed. Five key informants had observed no changes, while a further four key informants reported that there had been only minor changes resulting from temporary displacement of heroin markets as a consequence of police activity. Other key informants reported that users were younger (n = 3), that there was an increase in use of heroin among middle-class professionals (n = 2), that there were more people using heroin and that they were using greater quantities (n = 2). Four out of six key informants from Needle Syringe Programs reported that the number of client contacts and needle/syringes distributed per month had doubled in the preceding twelve months.

Almost all key informants (n = 16) reported on street-based heroin markets with three key informants also providing limited reports on home-based markets. Home-based markets tended to be favoured by older heroin users. The observation in 1998 of little difference

between street and home-based markets in terms of price or purity remained true in 1999. One key informant noted however that home-based markets were less rigid in terms of the quantities of heroin available for purchase. In comparison to 1998, key informants provided fewer reports on home-based heroin markets. This is an interesting finding when it is considered that street-based markets account for just over half of heroin-related transactions of the IDU who were surveyed (46% of IDU purchased heroin from a source other than a street dealer). The highly visible nature of the street-based markets appears to have provided them with a disproportionate salience.

The most significant feature emerging from the key informant interviews was how firmly entrenched street-based heroin markets had become over the preceding twelve months. Street markets were reported to be operating in the Melbourne Central Business District (CBD), St Kilda, Fitzroy/Collingwood, Footscray, Springvale/Dandenong, Frankston and Box Hill. Key informants noted that although these sites were frequently displaced as a consequence of police activity, they would simply shift to adjoining streets or suburbs. One key informant commented that whereas twelve months ago, heroin was obtained from a limited range of specific streets within these areas, heroin users were now mentioning a broader range of adjoining streets/locations from which they purchased heroin. This was supported by a second key informant who remarked on the ongoing emergence of new markets throughout Melbourne (eg. Richmond) and the high degree of mobility of heroin markets in general. A further feature of the street-based heroin markets frequently remarked upon by key informants was the overt nature of heroin trading activities in some areas, with very public and obvious exchanges of money and heroin packages. The explicit offering of heroin as distinct from heroin users having to ask was cited by one key informant as problematic for many past heroin users. These people may have found it relatively easy to avoid their past heroin supply networks but were now being offered heroin as they walked down the street.

The social nature of the heroin market in the Melbourne CBD noted in the 1998 IDRS was again highlighted in the current study. This heroin market was characterised by the relative youth of its participants. For these youth, the street-based markets not only met their demands for heroin but provided social activity and support networks as well.

According to key informants, the price and purity of heroin was consistent across the major street-based heroin markets. The only difference appeared to be in the availability of caps

compared with “rocks” with the former less likely to be available in the Footscray, Frankston and Springvale street-based heroin markets.

3.3.5 SUMMARY OF HEROIN TRENDS

Table 13 contains a summary of trends in the price, purity, availability and the use of heroin as ascertained in the 1999 IDRS. Heroin continues to be readily available in Melbourne and the level of purity of the drug remains relatively high, even for small amounts being sold on the street. The price of small amounts (caps) has remained stable while the price of grams has fallen considerably since 1997/98.

From the first year of the conduct of the IDRS in Melbourne (1997) there has been evidence of a growing heroin market in Victoria. This increase in the available supply of heroin has been indicated by the decrease in price and increase in purity of retail purchases. The 1999 IDRS provided further evidence of the continuing development, expansion and emergence of street-based heroin markets with open selling of heroin in a number of areas of Melbourne. These markets continue to flourish across Melbourne. They appear resilient to police activity as they are highly mobile and can adjust to localised police activity through shifting to different areas or different locations within a particular area. The drug is readily available, relatively cheap, and of historically high levels of purity.

It is difficult to quantify changes in patterns of heroin use from existing surveys given the low levels of use within the general population. Nevertheless, the available evidence suggests that there has been an increase in the use of the drug among young people in Victoria, associated with both increased availability and changes in attitudes towards the drug. These changes have occurred largely among younger people and females. The findings of the current study also suggest an increase in the amount of heroin consumed by heroin users. This may be, in part, attributed to the reduction in price which has occurred over the past few years.

Table 13. Summary of trends in the price, availability, purity and patterns of use of heroin.

Price (mode) Cap Gram	 • $ 20-25, stable • $ 300, decreased
Availability	• readily available, stable
Purity	• 69% (seizures), slight increase since 1997/98, some fluctuation in the past 6 months
Use	• increase in frequency and amount of heroin use by individuals injecting the drug • increase in numbers of people using heroin • larger deals being sold in street markets • continued trend towards more young heroin users • proportion of users smoking heroin • increase in demand for injecting equipment • broadening of street-based heroin markets and emergence of new markets

3.4 AMPHETAMINES

Twenty three percent of respondents on the IDU survey were able to comment confidently on the price, purity and availability of amphetamines. One key informant was available to comment on a group of regular amphetamine users and a key informant from the Victoria Police Drug Squad was able to report on price, purity and availability of amphetamines from the perspective of supply. Where appropriate reports on amphetamine have been supplemented by information obtained from key informants reporting on heroin.

3.4.1 PRICE

The median price reported by individuals who participated in the IDU survey was $50 per gram and $750 per ounce with most IDU (80%) reporting that the price was stable in the preceding six months. Key informant reports were in accord with these findings. Table 14 summarises the modal price of amphetamine reported by the injecting drug users who participated in the 1997, 1998 and 1999 IDRS studies. The comparison shows that the price per gram has remained stable across the three years while the price per ounce appears to have decreased.

Table 14. Modal prices of amphetamine in Melbourne, 1997, 1998 and 1999 IDRS studies (IDU surveys).

		1997	1998	1999
Amphetamine	$/gram	50	50	50
	$/ounce	-	820	750

3.4.2 AVAILABILITY

The perceptions of the IDU regarding the availability of amphetamines were mixed. One third of the respondents reported that the drug was easy to obtain, however over half (55%) indicated that they had difficulty obtaining the drug. Most of the respondents indicated that the availability had not changed (50%) or had become more difficult (31%) in the preceding six months. For those who had used amphetamines in the previous six months, the drug was most commonly obtained from a friend (47%) or a dealer's home (33%). Only 8% reported a street dealer as their main source of the drug. Two key informants reported that the drug was easy to obtain given the appropriate contacts and that availability had increased slightly over the preceding six months. Two other key informants reporting on heroin users also commented that amphetamine availability may have increased recently.

3.4.3 FORM AND PURITY

Fourteen per cent of the participants in the IDU survey reported swallowing amphetamines in the preceding six months and 40% reported having injected the drug in this period. Those who had used the drug reported a median of ten days of use in the last six months. The amphetamine used in the last six months was overwhelmingly in a powder form, with only one person reporting that they had used liquid amphetamines in that period. Key informants indicated that amphetamine users were reporting the use of "crystal-meth", which was characterised as methamphetamine powder of good quality.

A small number of respondents (3%) reported the use of "ice" in the preceding six months. This drug appears as a transparent rock-like crystal (Australian Bureau of Criminal Intelligence, 1999). It is yet another form of methamphetamine (methylamphetamine hydrochloride) which has been turned into "freebase" enabling it to be smoked (ie. by heating the drug and inhaling the vapours). A key informant from the Victoria Police Drug Squad confirmed there had been some seizures of "ice" in Victoria and two key informants in contact with primary heroin users had also heard of "ice" being smoked among the users with whom they were in contact.

The majority of respondents on the IDU survey regarded the purity of amphetamines as low (58%). Most of those able to comment believed that the purity had either fluctuated (28%) or decreased (36%) over the past six months. Key informants on the other hand reported that the purity of amphetamines had increased slightly in the preceding six months (although still remaining low).

The mean purity of amphetamine and methamphetamine seized by law enforcement agencies in Victoria during the 1998/99 financial year is shown in Figure 2. The mean purity of all seizures of methamphetamine analysed (n=421) in Victoria during this period was 11% (range less than 1 to 84%). As shown in this figure the purity of methamphetamine seizures was consistently low during the year, with a slight increasing trend apparent in the second half of the financial year. Amphetamine seizures (n=30) tended to have a somewhat higher purity level. The mean purity of all seizures was 15% (range, 2 to 46%). The data shown in Figure 2 suggests an upward trend in the purity level of amphetamine seizures throughout the year. However this data should be treated with caution as these averages are based on relatively small number of seizures (less than 10 in each of the last three quarters of the year). There was no significant difference in the purity of street level amounts compared to the larger amounts (2 grams or more).

Figure 2. Purity of amphetamine and methamphetamine seizures made by law enforcement agencies in Victoria in each quarter of the 1998/99 financial year (Source: ABCI).

The mean purity of methamphetamine seized in Victoria during the period 1995/96 to 1998/99 is summarised in Table 15. This data suggests that in general the level of purity of methamphetamine sold in Victoria has been stable over the period from 1997/98 to 1998/99 and is somewhat higher than in 1995/96

Table 15. Mean purity level of methamphetamine seizures in Victoria.

	1995/96 %	**1996/97 %**	**1997/98 %**	**1998/99 %**
Methamphetamine	5-32 (quarterly figures)	5	11	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 community of Victoria was undertaken within the 1998 National Drug Strategy Household Survey. According to the findings of this survey 3.4% of the Victorian population aged 14 years and above had used amphetamines within the past twelve months (Australian Institute of Health and Welfare, 1999). This compares to 1.9% in the 1995 Victorian Drug Household Survey (Drug Treatment Services, 1996). This suggests an increase in amphetamine use within the general Victorian population. However, as we have discussed above in relation to heroin use, the detection of any changes in the prevalence of amphetamine use on the basis of such survey data is difficult due to the large amount of error that is associated with these estimates.

Table 16. Proportion of the Victorian population aged 14 years or older who report ever using, or recently using amphetamines (for non-medical purposes) as measured in the Victorian/National Drug Strategy Household Surveys.

	1991 %	**1993 %**	**1995 %**	**1998 %**
Ever tried amphetamines	6	5	6	8.7
Used amphetamines within the previous 12 months (recent use)	2.1	1.6	1.9	3.4

(Source: 1995 Victorian Drug Household Survey, Drug Treatment Service; 1998 National Drug Strategy Household Survey, Australian Institute of Health and Welfare).

Current patterns of amphetamine use / trends in use

Almost all of the respondents in the IDU survey reported having used amphetamines (88%), however only 6% nominated the drug as their drug of choice. Those who had used the drug in the preceding six months reported a median of four days of use in this period. This is consistent with comments by 11 key informants reporting on users of either cannabis or heroin that amphetamines were occasionally used by the people with whom they were in contact or had been used in the past. One key informant had noted an increase in amphetamine use among primary heroin users at a time when heroin availability had temporarily decreased again indicating that amphetamines are used by this group, but not as the main drug of choice.

A key informant in contact with a group of male sex workers who regularly used amphetamines reported that these people used the drug two to three times a week, primarily by injection. This group were characterised as in their twenties, 50% gay-identified and predominantly of English-speaking backgrounds. Polydrug use was common, including heroin, benzodiazepines, ecstasy and cannabis. Amphetamine use was characterised as "binge" in nature, that is, an intensive period of use followed by a period of non-use. The key informant reported that, in contrast to the street-based heroin markets, amphetamine buyers were more likely to be in social relationships with their dealers, that dealers were often users themselves and that buyers would frequently inject amphetamines with their dealers[1].

A summary of the main demographic characteristics of the individuals presenting at ADIS-contributing specialist treatment agencies in Victoria with amphetamines as the main drug problem is presented for males and females in Table 17. There were only 134 individuals receiving amphetamines-related treatment with amphetamines listed as their main presenting drug problem who were included on the ADIS database in 1997/1998. With such low numbers, any conclusions about demographics should be made with caution. Nevertheless, data on these individuals has been included because of the paucity of information available on clients experiencing amphetamine-related problems. The typical individual receiving amphetamines-related treatment was male, unemployed and aged in his early thirties and he lived in rental or boarding-style accommodation. He typically received counselling as the main form of treatment and terminated treatment for reasons other than treatment completion in 1997/1998.

Table 17. Demographic profile of male and female individuals receiving treatment presenting with amphetamines as their reported main drug problem - Interim ADIS 1997/1998.

Males (N=86)	
Age	Mean = 30.4 (SD=7.4), Range = 15-56
Family origin	96% English speaking, 6% self-identified aboriginal
Type of service given	60% counselling, 21% withdrawal
Employment status	30% in workforce, 55% unemployed, 13% pensioner
Marital status	57% never married, 25% married/defacto
Accommodation	44% renting, 22% boarding, 5% no fixed abode
Living conditions	29% with spouse, 27% parents/family, 27% alone
Females (N=54)	
Age	Mean = 29.9 (SD=7.6), Range = 15-66
Family origin	98% English speaking, 6% self-identified aboriginal
Type of service given	64% counselling, 29% withdrawal
Employment status	28% in workforce or home duties, 34% unemployed, 26% pensioner
Marital status	43% never married, 33% married/defacto
Accommodation	63% renting, 10% boarding, 2% no fixed abode
Living conditions	41% with spouse, 21% alone with children, 14% alone

(Source: Victorian Department of Human Services)

3.4.5 SUMMARY OF AMPHETAMINE TRENDS

Trends in amphetamine price, availability, purity and use are summarised in Table 18. Few trends were evident with the price, purity, availability and use remaining relatively stable.

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

Price (mode) Gram Ounce	 • $50, stable • $750, possible decrease
Availability	• mixed reports, stable to more difficult to obtain
Purity	• 11% (methamphetamine seizures), stable last 2 years
Use	• level of use stable and low • mainly recreational/occasional • drug of choice for only small proportion of IDU sample • small proportion reporting the use of "ice"

[1] At time of publication, this group of regular amphetamine users had shifted away from amphetamine use toward regular injection of heroin.

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 a small number of regular cocaine users in the sample of injecting drug users. Two key informants were able to confidently report on trends in cocaine availability, price, purity and patterns of use. A further two key informants could provide supplementary information on some indications of cocaine injecting among male and female sex workers. Due to the small number of respondents who were able to comment the information provided in this section should be interpreted with caution.

3.5.1 PRICE

For the few respondents in the IDU survey who were able to comment on price, the median price given for a gram was $250. The majority of these respondents believed the price had remained stable in the past six months. Key informant prices for cocaine were similar to those provided by the IDU respondents. One key informant in contact with a group of cocaine users reported that cocaine had become available in $50 caps, that the drug was being sold in these smaller amounts more frequently and that the price of cocaine had decreased in the preceding six months. Only one respondent on the IDU survey was able to provide a price for a cocaine cap, which was given as $65. Since only one IDU respondent and one key informant reported the price of cocaine caps, this suggests that the drug is not readily available in this form in Melbourne. Table 19 summarises the modal price of cocaine in Melbourne reported by the injecting drug users who participated in the 1997, 1998 and 1999 IDRS studies. The data suggests that there has been some fluctuation in the price of cocaine in Melbourne, however it should be noted that these estimates are based on information obtained from a relatively small number of respondents in each of the IDU surveys.

Table 19. Modal prices of cocaine in Melbourne, 1997, 1998 and 1999 IDRS studies (IDU surveys).

		1997	1998	1999
Cocaine	$/cap			65*
	$/gram	300	200	250

* Reported by one IDU respondent.

3.5.2 AVAILABILITY

The majority of the respondents who were able to comment on the availability of cocaine reported that it was difficult to obtain and that this had remained stable over the past six months. The two key informants reported that, although in general cocaine was difficult to obtain, it was relatively easy for those who established and maintained appropriate contacts. Both key informants believed that cocaine was becoming easier to obtain and one believed there had been an increase in street-level dealing of cocaine.

3.5.3 FORM AND PURITY

Seven percent of those who participated in the IDU survey reported having used cocaine in powder form in the past six months. Only two respondents reported using "crack" (a smokeable form of cocaine) in the preceding six months. Key informant reports indicated that cocaine was available in powder form and that the purity was high.

The mean purity level of cocaine seizures that were analysed by law enforcement agencies in Victoria during the 1998/99 financial year is shown in Figure 3. This shows that the purity level of cocaine seizures fluctuated throughout the year, with a substantial difference between the purity levels of large and small amounts occurring in the second half of the financial year.

Figure 3. Purity of cocaine seizures made by law enforcement agencies in Victoria in each quarter of the 1998/99 financial year (Source: ABCI).

The mean purity of all seizures analysed (n = 77) during this period was 49% (range 2 to 90%). The information regarding the purity of cocaine seized in Victoria during the period 1995/96-1997/98 is summarised in Table 20. This data suggests a level of fluctuation in the purity of cocaine being sold in Melbourne over the period with little difference apparent between 1997/98 and 1998/99.

Table 20. Mean purity level of cocaine seizures in Victoria.

	1995/96 %	**1996/97 %**	**1997/98 %**	**1998/99 %**
Cocaine	43 (n=3 cases only)	37	54	49

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 community of Victoria was undertaken within the 1998 National Drug Strategy Household Survey. The findings of this survey suggest that there is a low level of cocaine use within the Victorian community, with 1.3 % of the Victorian population aged 14 years and over reporting the use of the drug within the past twelve months (Australian Institute of Health and Welfare, 1999). This is somewhat higher than the estimate of 0.6% obtained in the 1995 Victorian Drug Household Survey (Drug Treatment Services, 1996).

Table 21. Proportion of the Victorian population aged 14 years or older who report ever using, or recently using cocaine (for non-medical purposes) as measured in the Victorian/National Drug Strategy Household Surveys.

	1991 %	**1993 %**	**1995 %**	**1998 %**
Ever tried cocaine	2.5	2.0	2.5	3.6
Used cocaine within the previous 12 months (recent use)	0.6	0.2	0.6	1.3

(Source: 1995 Victorian Drug Household Survey, Drug Treatment Service; 1998 National Drug Strategy Household Survey, Australian Institute of Health and Welfare)

Current patterns of cocaine use/ trends in cocaine use

Although almost half of the respondents in the IDU survey (46%) 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 (3%) or snorted (6%) the drug in the past six months and those who had used the drug did so very infrequently. The majority of key informants also indicated that cocaine use was not prevalent within their respective client groups. Cocaine was typically characterised as desirable but too expensive for the majority of primary heroin users in Melbourne. One of the two key informants who had contact with a group of cocaine users reported that this group primarily injected cocaine and used it largely on weekends. The other key informant reported that cocaine was usually snorted. A further two key informants reported that cocaine was used occasionally by the client groups with whom they were in contact when they could afford it or when it was given to them.

No reliable reports on cocaine use in Melbourne were obtained from key informant participants in the 1997 IDRS study and this was also the case in the 1998 IDRS study (Rumbold and Fry, 1998; Rumbold and Fry, 1999), despite key informants being explicitly asked to report any contact with clients who were currently using cocaine, or clients who had talked about cocaine use in Melbourne. The difficulties experienced in accessing key informants for the current study who could comment on cocaine suggests that the drug is still not readily available in Melbourne. This is an interesting finding when viewed against evidence from Sydney where cocaine injecting has become part of a common pattern of polydrug use among many injecting drug users (McKetin et al, in preparation).

3.5.5 SUMMARY OF COCAINE TRENDS

Trends in cocaine price, availability, purity and use are summarised in Table 22. Few trends were evident, other than the first report of the availability of caps of cocaine and anecdotal reports of street level selling of cocaine.

Table 22. Summary of trends in the price, availability, purity and patterns of use of cocaine.

Price (mode) Cap Gram	 • $50*, first report • $250, stable
Availability	• mixed reports, difficult to obtain, may be becoming easier
Purity	• 49%, stable last 2 years
Use	• low levels of use, stable • occasional/recreational use • desirable but too expensive for IDRS sample of individuals who inject drugs • possible increase in injecting among people attending dance parties • suggestion of street-level cocaine selling but no active markets

* Two prices were provided for cocaine caps: $50 by a key informant and $65 by one IDU respondent. As the key informant was reporting a price based on contact with ten or more cocaine users, this price has been selected as more representative.

3.6 CANNABIS

Among the IDU sample, cannabis was the second most commonly used illicit drug with almost all of the respondents having used the drug previously. The majority (82%) were able to report on aspects of price, potency and availability. All 27 key informants reported some level of cannabis use within their client groups and seven key informants were able to report confidently on cannabis trends.

3.6.1 PRICE

The median price reported by the IDU for an ounce of cannabis was $300, and $20 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 six months.

Table 23 summarises the modal price of cannabis in Melbourne reported by the injecting drug users who participated in the 1997, 1998 and 1999 IDRS studies. This shows that the price per gram has been relatively stable over this period while the price per ounce has reduced somewhat.

Table 23. Modal prices of cannabis in Melbourne, 1997, 1998 and 1999 IDRS studies (IDU surveys).

		1997	1998	1999
Cannabis	$/gram $/ounce	20-25 350	20-25 320	20 300

3.6.2 AVAILABILITY

The overwhelming majority of the IDU sample who commented on trends reported that cannabis was easy or very easy to obtain (85%), and that the availability of cannabis had remained stable in the preceding six months (70%). Among this sample, cannabis was most commonly obtained from a friend (43%) or dealers' home (37%). Key informant reports also indicated that cannabis was easy or very easy to obtain (n=5), that for the most part availability had remained stable in the last six months (n=5) and that cannabis was primarily obtained through private social/drug networks.

3.6.3 FORM AND POTENCY

The main form of cannabis used in the past six months by those participating in the IDU survey was marijuana head, that is, the flowering top sections of the plant (85% of respondents) while 35% reported having used marijuana leaf, 15% hash and 7% hash oil. Key informant reports supported this finding with all seven reporting the use of marijuana head or leaf, either grown outdoors or hydroponically. A key informant from the Victoria Police Drug Squad reported that one of every two cannabis seizures was of hydroponically grown marijuana and that hydroponic crops were becoming smaller and more widely distributed across Victoria. All seven key informants reported that the preferred method of cannabis use was smoking through "bongs" rather than "joints" (ie. cannabis cigarettes). The potency of cannabis was generally rated as high (58%) by the IDU sample with most respondents stating that the potency had remained stable (58%) or had been increasing (23%) over the previous six months. Six key informants reported that cannabis potency was high while there were mixed reports on changes in potency over the preceding six month period. Unfortunately, at the present time in Victoria, cannabis seizures are not routinely analysed for potency so there is no available empirical data available for examining trends.

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 1991, 1993 and 1995 Victorian Drug Household Surveys and the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999; Drug Treatment Services, 1996). These results are summarised in Table 24 which shows that a significant minority of the Victorian community report the use of cannabis. The prevalence of cannabis use within the general community of Victoria appears to have changed little within the period 1991 to 1995, however, the results of the 1998 survey suggest a possible increase in the use of the drug.

Table 24. Proportion of the Victorian population aged 14 years or older who report ever using, or recently using cannabis (for non-medical purposes) as measured in the Victorian/ National Drug Strategy Household Surveys.

	1991 %	**1993 %**	**1995 %**	**1998 %**
Ever used cannabis	29	30	28	35
Used cannabis in the previous 12 months (recent use)	10	12	11	18

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

A consistent finding in these surveys is that the rate of cannabis use is higher among males than females and is highest among persons aged 14-24 years (Australian Institute of Health and Welfare, 1999; Drug Treatment Services, 1996).

Current patterns of cannabis use/trends in cannabis use

The cannabis users reported on by key informants were primarily daily users although binge use was reported as common among younger users. This pattern of use among younger cannabis users most likely reflects their more limited capacity to pay for the drug. The cannabis users with whom key informants were in contact were more likely to be male (65%), have an average age of between 17-18, an average education level of Year 10 and were predominantly unemployed. Two of the seven key informants noted that cannabis users were spread throughout the community and that cannabis was becoming a more socially acceptable drug. These reports match the findings of the 1995 National Drug Household Survey which

showed the minority in favour of legalising cannabis was increasing (Makkai and McAllister, 1998).

Many of the cannabis users who were known to the key informants were polydrug users. Other drugs that were used included benzodiazepines, alcohol and occasional use of amphetamines and hallucinogens. Two key informants reported an increase in heroin injection among the young cannabis users with whom they were in contact. However, this may simply be an age-related trend. These key informants had been in contact with this group of young people since they were around 12 years old and they were now aged 15-16 years. Examination of age of first injection among those of the IDU sample aged less than 25 years shows the average age of first injection was 16 years.

A summary of the main demographic characteristics of the individuals presenting to ADIS-contributing specialist alcohol and drug agencies in Victoria with cannabis as the main drug problem is presented for males and females in Table 25. There were 879 individuals receiving cannabis-related treatment with cannabis listed as their main presenting drug problem who were included on the ADIS database in 1997/1998. The typical individual receiving cannabis-related treatment was male, unemployed and aged in his mid twenties, lived with his parents or spouse, and was boarding or renting. He typically received counselling as the main form of treatment and generally completed one episode of treatment during 1997/1998.

Table 25. Demographic profile of male and female individuals receiving treatment presenting with cannabis as their reported main drug problem - Interim ADIS 1997/1998.

Males (N=599)	
Age	Mean = 26.3 (SD=7.8), Range = 12-58
Family origin	95% English speaking, 2% other European, 4% self-identified aboriginal
Type of service given	64% counselling, 23% withdrawal
Employment status	21% in workforce, 52% unemployed, 12% student
Marital status	68% never married, 21% married/defacto
Accommodation	45% renting, 29% boarding, 3% no fixed abode
Living conditions	26% with spouse, 2% alone with children, 38% parents/family, 19% alone
Females (N=289)	
Age	Mean = 26.9 (SD=7.9), Range = 14-52
Family origin	98% English speaking, 6% self-identified aboriginal
Type of service given	67% counselling, 21% withdrawal
Employment status	30% in workforce or home duties, 30% unemployed, 20% student
Marital status	55% never married, 31% married/defacto
Accommodation	63% renting, 18% boarding, 1% no fixed abode
Living conditions	30% with spouse, 20% alone with children, 24% parents/family, 12% alone

(Source: Victorian Department of Human Services)

Examination of Table 25 reveals that there are few differences in the profile of the males and females receiving cannabis-related treatment in the specialist alcohol and drug agencies. There were larger proportions of males who had never married, lived with their parents and/or other family and lived in boarding-style accommodation compared to the females. A larger proportion of females cannabis users were in rental-style accommodation compared to the males and a smaller percentage of females were unemployed.

3.6.5 SUMMARY OF CANNABIS TRENDS

A summary of cannabis trends is shown in Table 26. The price of cannabis per ounce appears to have decreased slightly compared to that reported in 1998, while the price per gram has remained stable. There appears to be a continuing trend towards hydroponic production.

Table 26. Summary of trends in the price, availability, purity and patterns of use of cannabis.

Price (mode) Gram Ounce	 • $20, stable • $300, decreasing
Availability	• readily available • stable
Potency[a]	• high • stable
Use	• level of use stable to increasing • most widely used illicit drug • perceived as more socially acceptable • continuing trend toward the use of hydroponic production methods

[a] Based on IDU and key informant estimates.

3.7 OTHER DRUGS

3.7.1 IDU SURVEY

Approximately a third of the injecting drug users who were interviewed (34%) reported the use of other opiates in the preceding six months, mainly in the form of *Panadeine forte*® (14%) and morphine (8%). Only a small proportion of those surveyed reported injecting methadone within the past six months (1%).

A high proportion (65%) had used benzodiazepines in the last six months, with 19% reporting having injecting benzodiazepines during this period. The most commonly used benzodiazepine was diazepam (55% of benzodiazepine users had used the drug in the past six months), followed by oxazepam (10%), and temazepam (18% of benzodiazepine users). The use of flunitrazepam was less commonly reported (only 3% reported using the drug). This finding is consistent with the results of the 1998 IDU survey and suggests that the use of flunitrazepam by individuals who inject drugs has been reduced as a consequence of its rescheduling as a Schedule 8 drug.

A relatively high proportion of respondents on the IDU survey reported using anti-depressants. Slightly less than half (41%) had ever used these drugs at some time. Over a quarter (28%) reported using anti-depressants in the last six months. The median number of days of use for this group in the previous six months was 100 (or approximately 4 days out of a week). While a wide variety of different types of anti-depressants were reported, the serotonin specific re-uptake inhibitor (SSRIs) drugs, including setraline (*Zoloft®)*, paroxetine (*Aropax*®) and flouxetine (*Prozac*®), were the drugs most frequently used. These findings are similar to those observed in the IDU survey in the 1998 study (Rumbold and Fry, 1999).

Slightly more than one in ten of the respondents (12%) reported having used LSD in the previous six months, while 5% reported having used hallucinogenic mushrooms within this period. A total of 16% of respondents reported the use of ecstasy within the last six months, while only a small proportion had used either inhalants (5%) or steroids (1%) during this period.

3.7.2 KEY INFORMANT STUDY

Benzodiazepines

Key informants reporting on heroin users (n=17) uniformly reported that benzodiazepine use was common among these drug users. The remaining key informants (n=10) also noted low levels of occasional or binge use of benzodiazepines. Among younger users this was characterised as part of general drug experimentation. Although the IDU survey indicated that diazepam (*Valium*®) was the benzodiazepine most commonly used, key informants reports were more likely to refer to the use of temazepam (*Normison*®). Among heroin users, the predominant route of benzodiazepine administration was through injection (n = 11). Key informant reports also confirmed the reduction in the use of flunitrazepam (*Rohypnol*®) indicated in the IDU survey. Key informants (n = 7) reported that benzodiazepines were accessed through "doctor-shopping" and through black market street-level selling. Informants reported that benzodiazepines were used either as a substitute when heroin was unavailable, for the relief of substance related symptoms (eg. sleep disorders, withdrawal, anxiety), or to enhance or heighten the effects of other drugs.

Ecstasy and Hallucinogens

Key informants did not perceive ecstasy and hallucinogen (LSD/mushrooms) use to be common among people using heroin although these drugs were used on a few occasions or in the past. Informants reporting on stimulant (amphetamines and cocaine) and cannabis users indicated that ecstasy and hallucinogens were used occasionally by the drug users with whom they were in contact. Ecstasy use was perceived as more prevalent among younger people who were involved in the dance party or "rave" scenes. As these populations tend not to present to services, key informants were unable to confidently report on patterns or prevalence of the use of these drugs.

Other Drugs

- Four key informants reported the use of antidepressants among the populations with whom they were in contact.
- Two key informants reported the use of morphine and one the use of codeine based pharmaceuticals (*Panadeine forte*® and *Endone*®).
- Two key informants reported on occasional "chroming" (ie. inhaling vapours or fumes) of butane gas and aerosol packs by early high-school aged groups.
- One key informant reported the use of amyl nitrate among a group of gay males.

3.7.3 SUMMARY OF OTHER DRUG TRENDS

The major trend observed in the use of other drugs among the populations accessed by the IDRS was the widespread use of benzodiazepines among heroin users, with increasing rates of injection of these drugs. Use of prescribed anti-depressants was also high among the IDU sample (although noted by only four key informants) suggesting a high level of affective disorders within this population. Limited information was available regarding the so-called "party" or designer drugs (eg. ecstasy, LSD). The use of these drugs does not appear to be common among the injecting drug users accessed by the IDRS. Other drugs were also used very occasionally, if at all.

4.0 DRUG-RELATED ISSUES

4.1 IDU SURVEY

Injection related health problems.

Injection related health problems reported by the participants in the IDU survey in the previous month are summarised in Table 27. Three quarters of the respondents had experienced at least one of these problems, with scarring/bruising, and difficulty injecting being the most common problems reported.

Table 27. Injection-related health problems reported by participants in the IDU survey (n=154).

Type of problem	**%**
Prominent scarring/bruising	53
Difficulty injecting	44
Dirty hit (made me feel sick)	18
Thrombosis	8
Overdose	7
Abscesses/infections from injecting	6

Heroin overdose

The survey revealed that non-fatal heroin overdose is a common occurrence among the group of IDU who were surveyed and the findings are broadly similar to those observed in the 1998 survey. These data are summarised in Table 28. Slightly over half (54%) of the respondents who had ever used heroin reported that they had experienced one or more overdoses, 34% had been administered *Narcan*® (a fast-acting opioid antagonist given to reverse the effects of heroin in the case of an overdose) and around three quarters of all respondents (72%) had witnessed an overdose (median =3).

The respondents who had previously experienced an overdose reported a median of eight months since they last overdosed, and a median of two overdoses in total. Those who had been administered *Narcan*® reported a median period of seven months since they were last

administered the drug. In the previous six months, approximately one quarter of respondents (24%) had experienced an overdose and 16% had been administered *Narcan*®.

Table 28. Reported experience of heroin overdose (% of respondents who have used heroin, n=153, IDU survey).

Heroin Overdose Experience	**%**
Ever experienced an overdose	54
Experienced at least one overdose in the preceding 6 months	24
Have been administered *Narcan*®	34
Were administered *Narcan*® in the preceding 6 months	16
Have witnessed an overdose*	72

* Proportion of all respondents (n=154)

Polydrug use is major risk factor for overdose. In 85% of the cases of heroin-related deaths in Victoria, the individuals had also used drugs such as alcohol or benzodiazepines prior to their death (Gerostamoulos, Staikos and Drummer, 1999). In the IDU survey, the respondents were asked about their drug use on the preceding day. Their responses are summarised in Table 29. The mean number of drugs used was 1.8 with the most common drugs used being heroin and cannabis. Nineteen percent of the IDU sample had used heroin in conjunction with benzodiazepines and/or alcohol on the previous day. This is a disturbing finding given that risk of overdose is increased when heroin is used concurrently with drugs such as alcohol and benzodiazepines which depress the central nervous system. Also of concern with regard to overdose risk is the finding that 34% of the heroin-using IDU respondents usually injected the drug when they were alone.

Table 29. Drugs used on day prior to interview (IDU survey, n=154).

Type of drug	%
Heroin	73
Cannabis	44
Benzodiazepines	18
Methadone	18
Alcohol	14
Other (eg. anti-depressants)	5
Amphetamines	4
Opiates other than heroin	3

Injection Equipment Sharing

The sharing of needle/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). Slightly more than one in five (22%) of the respondents reported lending a used needle in the past month, and 9% reported using a needle after it had been used by someone else. In all of these cases it was reported that the borrowed needle had been used by only one other person (usually a sexual partner or friend). The 1999 findings suggest a lower level of needle sharing among the individuals who participated in the IDU survey than was observed in the 1997 or 1998 surveys (see Table 30).

Table 30. Proportion of sample reporting borrowing/lending used needle/syringes in the 1997, 1998 and 1999 IDRS studies

	1997 %	1998 %	1999 %
Borrowed a used N/S in past month	22	22	9
Lent a used N/S in past month	26	33	22

In comparison to the sharing of needle/syringes, the respondents reported a higher rate of sharing of other types of injecting equipment. Slightly less than half (42%) reported using other injecting equipment after someone else in the past month, most commonly spoons (38%) or filters (17%). These findings are of concern as it is possible that HCV transmission may occur through sharing of equipment other than needle/syringes.

Criminal activity

The majority of the respondents (54%) reported involvement in some type of criminal activity in the preceding month, while slightly less than half (48%) reported that they had been arrested in the previous twelve months. Among those arrested in the previous twelve months, 28% of arrests were in relation to property crime, 28% involved multiple types of charges (mostly combinations of property crime and use/possession charges), and 15% were in relation to use or possession of heroin.

As shown in Table 31, dealing (38%) and property crime (21%) were the most common crimes reported, with relatively few respondents reporting involvement in violent crime or fraud. These findings are similar to those observed in the 1998 IDU survey, although the reported rates of involvement in dealing were higher, and property crime lower in the current survey.

Table 31. Criminal activity reported by IDU in the last month (n=154).

Type of Crime	**%**
Property crime	21
Dealing	38
Fraud	16
Violent crime	10
Any Crime	54

Perception of police activity

Respondents were asked a number of questions regarding their perceptions of changes in police activity in the past six months and the impact of these changes. Most of the respondents (62%) believed that there had been an increase in police activity over this period, and a significant proportion (45%) reported that more of their friends had been arrested (53% reported that this was stable). Approximately half reported that police activity had made it more difficult to acquire drugs recently (47%), while the other half reported that their ability to obtain drugs had not changed.

4.2 KEY INFORMANT STUDY

Heroin-related issues

Key informants reported on a number of heroin-related issues. Rates of non-fatal heroin overdose were reported as unacceptably high and key informants also reported an increase in the numbers of "borderline" overdoses, that is, people who have had more than an effective or desired dose of heroin but who have not slipped into unconsciousness (Fitzgerald, Broad and Dare, 1999). These people were described as refusing transport to hospital and indeed not wanting ambulance officers to be called at all. A number of key informants reported that their services had been monitoring these people whenever possible but that workers were not always available for these functions. Concerns were expressed that these people were at high risk not only of moving further towards clinical overdose but also of being physically attacked or robbed. Suggested reasons for the unacceptably high rates of both fatal and non-fatal overdoses included the purity of available heroin, the use of benzodiazepines in conjunction with heroin and people using heroin after completion of heroin withdrawal programs or upon release from gaol.

Another prominent feature of key informant reports (n = 9) was the extent of compromised or damaged veins among the people with whom they were in contact and an associated increase of injecting into inappropriate sites such as the neck or groin. Venous damage was primarily attributed to the injection of temazepam. Five key informants commented that their client populations were knowledgeable about the health risks associated with injection of benzodiazepines. Three key informants on the other hand raised as problematic the lack of knowledge regarding safe injecting techniques among the people with whom they had the most contact. A majority of key informants (n = 12) indicated that their services had initiated "vein care" and heroin overdose education initiatives.

The substantial prevalence of hepatitis C virus (HCV) infection among injecting drug users was identified as a significant concern. Two key informants reported that there was considerable resistance to HCV testing among their client populations and consequently a lack of hepatitis C infection monitoring and management. One key informant identified a level of complacency regarding a positive HCV diagnosis, while a second key informant believed that clients perceived a positive diagnosis as a "death sentence" and consequently were reluctant to seek out this information.

Reports on sharing of injecting equipment were mixed. The majority of key informants indicated that sharing of needle/syringes occurred rarely but that spoons and filters were more frequently shared. Four key informants believed there was a considerable level of awareness regarding sharing of equipment among their client populations. Other key informants were concerned about sharing in high risk situations such as detention facilities where clean equipment was not always available.

A number of key informants remarked upon the diminished social opportunities and increasing marginalisation faced by the drug users with whom they were in contact. This was in the form of long-term unemployment, insecure accommodation and reduced access to accommodation and other services. An association between illicit drug use and marginalisation was also observed in a recent study investigating drug dependence among people experiencing homelessness (Horn, 1999).

Five key informants reported low levels of general health among the drug users with whom they were in contact. Poor nutrition and lack of sleep (as a consequence of low incomes and inadequate accommodation) were the most commonly cited contributors to poor general health. Three other key informants indicated that general health was good among the drug users with whom they were in contact. These differences most likely reflect differences in the people targeted by the services/agencies from which the key informants were drawn (eg. street outreach or youth service clients compared with clients who can afford to access private psychologists).

The perception was expressed by a number of key informants (n = 8) that there were insufficient treatment places and treatment options available for heroin users. Concern was also expressed regarding the long waiting lists for withdrawal services and therapeutic communities. Some withdrawal services require heroin users to telephone them every day until a place becomes available and this was seen by key informants as unmanageable for the majority of their clients. Key informants also drew attention to the lack of support services available for heroin users post-withdrawal. These key informant observations were in accord with the findings of the recent study regarding drug dependence among people experiencing homelessness. The study found that delays in assessment and acceptance to alcohol and drug services resulted in increased risk of harm due to ongoing access to drugs. Clients lost the motivation to continue with withdrawal and they could not meet the requirements of the daily phone call. Further problems noted in the study were inadequate follow-up after clients leave

withdrawal services and the lack of positive activities with which to occupy their time post-withdrawal (Horn, 1999).

Criminal activities among heroin users were reported as confined primarily to dealing/trafficking (n = 12) and petty property crimes such as shoplifting and burglary (n=12). Four key informants reported some violent crime among their client populations but this was seen as stable throughout the preceding twelve months. The only trend observed by key informants was the increase in crime between drug users including "standovers and rolling", that is, taking money or drugs using violence or the threat of violence (n=6) and "rip-offs", that is, taking money and not providing the desired drugs in exchange (n = 4). These activities remain unreported.

Key informants reported that levels of police activity towards heroin users fluctuated and indeed key informant reports of police activity varied widely by geographical area. Police activity was characterised as a combination of uniformed police presence on the streets and undercover operations. As with reports from 1998 IDRS key informants, police operations or "blitzes" were described as largely serving to shift participants in the heroin markets to adjoining locations resulting in a temporary reduction in availability of heroin in the targeted markets.

A number of key informants (n = 4) reported that police activity in heroin markets increased the risks of overdose and transmission of blood borne viruses as heroin users injected hurriedly in out of the way locations as well as using all of their heroin in the one injection to minimise the chances of discovery. The point was also made that fear of discovery led to unsafe disposal of used injection equipment thus resulting in harms to the broader community. Three key informants reported that the people with whom they were in contact had informed them of instances of police confiscating sterile equipment from injecting drug users.

Some of the key informants reported that at times police were violent towards drug users (n=5), that they intimidated and harassed young people on the streets (n = 5), that there had been an increase in public strip searches of young people (n = 4) and that racism, specifically towards young Vietnamese people was apparent (n = 3). It was generally recognised that drug users were reluctant to initiate formal complaints about these behaviours. Most key informants indicated that these activities varied depending on the police officers involved and there was a perceived need for community policing to counter these activities. It was suggested that increases in this type of behaviour could be attributed to high turnover in the

staffing of particular police stations and that these activities were reduced where police had opportunities to get to know the youths involved. One key informant reported of a harm reduction role played by police through advising heroin users to be careful when the available heroin was of high purity.

There was recognition by some key informants of the pressure faced by police to "deal with the drug problem" and of the frustration they felt in "not making a difference". There was also an acknowledgement of the contradictions between health concerns and law enforcement requirements.

Amphetamine-related issues

Among a group of regular amphetamine injectors, their drug use was characterised by "binge" use with problems experienced at the end of a binge relating to lack of food and sleep and psychological distress (eg. anxiety, depression, psychosis).

Key informants from the Victoria Police Drug Squad reported there had been an increase in suspect purchases of precursor chemicals for the production of methamphetamine. This correlated with the few key informant reports of a slight increase in the availability and quality of methamphetamine.

Overall however, the key informant reports suggested an increasing shift away from amphetamine use toward heroin use among the drug users with whom they had contact.

Cannabis-related issues

Reports by key informants who had contact with cannabis users within a treatment setting were mixed regarding cannabis-related problems. Most key informants noted that cannabis users presented with financial problems. Others reported diminished social relationships, inability to meet responsibilities and motivational problems. The remaining key informant was a psychologist and reported that many of the cannabis users presented with depression. This key informant estimated that 30-40% of their clients were on anti-depressant medication at presentation. There was a perception among three key informants of an increase in mental health issues among the cannabis users. However, the remaining key informants had not noticed any instances of cannabis-related psychological disturbances. Some key informants reported an increase in numbers of cannabis users presenting to services. These increases could be explained however, through specific targeting and marketing of cannabis-related services.

4.3 OTHER INDICATORS

Treatment service utilisation

In the 1997/98 financial year, 16715 cases on the ADIS database represented clients receiving treatment episodes from ADIS-contributing specialist drug and alcohol agencies with an episode termination date in that year. For the specialist agencies, 14927 (89%) of the client episodes had a unique identifier which, when aggregated left a total of 7422 individual clients (unique alphacodes) of specialist agencies.

The client's main presenting drug problem was recorded in 89% of cases for the episodes and 92% of cases for the individuals and is summarised in Figure 4. The distribution of clients across different drug types is similar for both episodes and individuals with alcohol and heroin presentations accounting for 70% of cases. Of the heroin/opioids clients, only two were identified with a main presenting drug problem for opioids other than heroin.

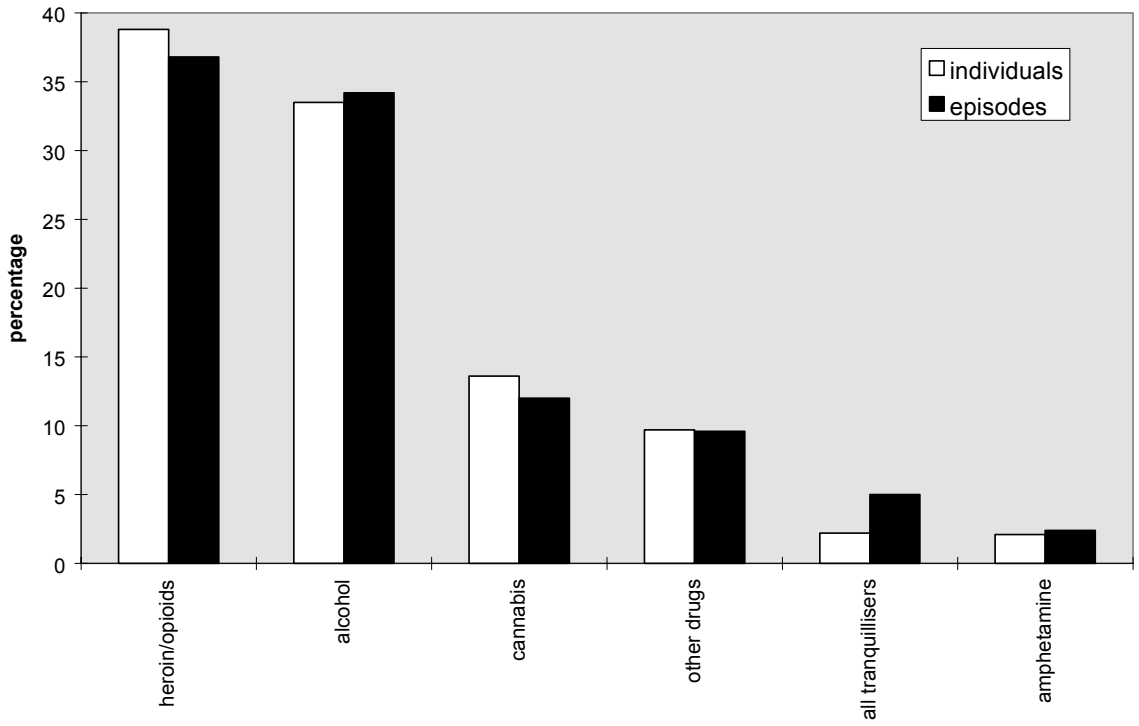

Figure 4. Distribution of clients according to main presenting drug problem - Interim ADIS 1997/1998 (Source: Victorian Department of Human Services, Drug Treatment Services).

Table 32 shows the proportion of male individuals for each of the main drug problem categories considered above. For most categories of main drug problem, the majority of individuals were male ranging from 58% of individuals receiving treatment for other drugs

(eg. cocaine, LSD) to 71% of individuals receiving treatment for alcohol problems. In contrast, for the tranquilliser presentations, the majority of individuals were female. The profile of clients presenting with a primary problem relating to heroin (opiate), cannabis, and amphetamines are presented in the relevant sections of this report.

Table 32. Proportion male for individuals in each of six different drug categories - Interim ADIS 1997/1998.

	alcohol	amphetamine	all tranquillisers	cannabis	heroin/opioids	other drugs
%	71	61	36	67	63	58

Data from the Drugs and Poisons Unit (DPU) database of all methadone permits in Victoria is shown in Figure 5. This demonstrates a relatively steady increase in clients on the methadone program throughout the 1990s. The magnitude of the increase was 20% between 1997 and 1998 and 26% from 1998 to 1999.

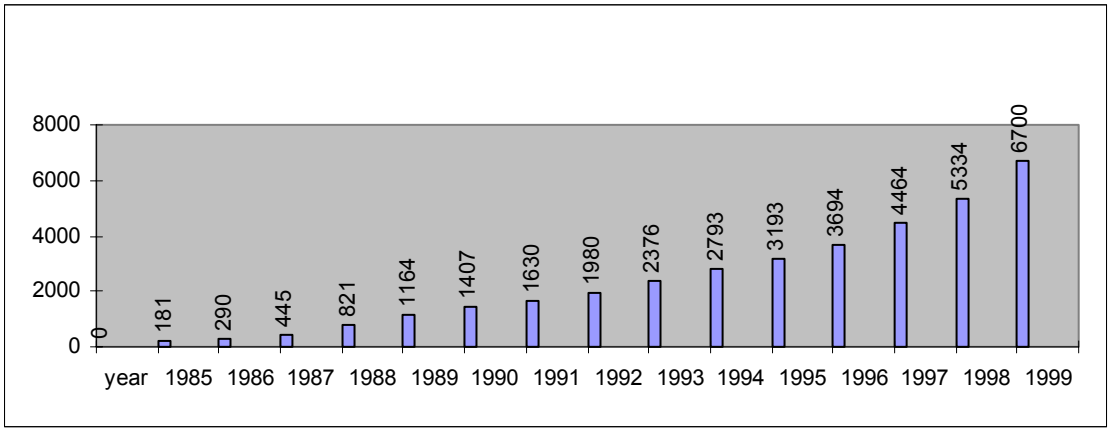

Figure 5. Census estimate of the number of clients on the methadone program in Victoria (Source: Victorian Department of Human Services).

Heroin overdose

A database of drug overdose-related calls attended by the Melbourne Metropolitan Ambulance Service is maintained by Turning Point and contains reliable data from June 1998 onwards. Table 33 shows the monthly totals for non-fatal heroin overdose for the period June 1998 to May 1999. This shows that the number of non-fatal heroin overdoses attended by ambulances in Melbourne increased steadily over this period, with a slight reduction occurring from April to May 1999.

Table 33. Monthly totals of non-fatal heroin overdose attended by ambulances in Melbourne, June 1998 to May 1999.

Month	**Heroin Overdose**		
	number	mean per day *(std. deviation)*	daily range
June 1998	157	5.23 *(2.64)*	1-13
July 1998	193	6.23 *(2.68)*	0-12
August 1998	189	6.09 *(3.19)*	1-14
September 1998	187	6.23 *(3.09)*	0-13
October 1998	264	8.52 *(3.83)*	4-19
November 1998	255	8.50 *(3.87)*	0-17
December 1998	315	10.16 *(4.94)*	3-22
January 1999	364	11.74 *(5.06)*	3-22
February 1999	325	11.61 *(4.07)*	4-25
March 1999	382	12.32 *(5.46)*	5-27
April 1999	355	11.83 *(4.78)*	3-23
May 1999	275	8.87 *(3.93)*	0-17
Total	**3262**	**8.96 *(4.69)***	**0-27**

(Source: Turning Point, Alcohol and Drug Centre)

Table 34 presents a summary of the main characteristics of the heroin overdoses attended by ambulances in Melbourne in the period between June 1998 and May 1999. This shows that the majority of overdoses occurred among males, aged in their mid to late 20s, in public locations.

Table 34. Summary of the main characteristics of non-fatal heroin overdose attended by ambulances in Melbourne, June 1998 to May 1999.

Characteristics of non-fatal heroin overdoses attended by ambulances in Melbourne (June 1998 - May 1999)	
Age of victim	mean = 26.87 range = 14-65
Gender of victim	74% male
Location of overdose	59% indoors; 59% public, 41% private
Peak day of week	Friday, Wednesday
Peak time of day	11am - 10 pm
Police attendance	12%

(Source: Turning Point Alcohol and Drug Centre)

As shown in Table 35, the areas with the highest rates of ambulance attendance for non-fatal heroin overdose in Melbourne are the Cities of Yarra, Melbourne, Port Phillip, Greater Dandenong and Maribyrnong, all areas of established street-based heroin markets.

Table 35. Local government areas with the highest number of non-fatal heroin overdoses attended by ambulances in metropolitan Melbourne, June 1998 to June 1999.

Local Government Area	**Definite heroin overdoses attended**	**% of total**
Yarra (C)	625	19.26
Melbourne (C)	461	14.21
Port Phillip (C)	279	8.60
Greater Dandenong (C)	239	7.36
Maribyrnong (C)	228	7.03
Brimbank (C)	149	4.59
Darebin (C)	109	3.35
Whitehorse (C)	107	3.29
Frankston (C)	103	3.16

(Source: Turning Point Alcohol and Drug Centre)

The data for trends in heroin-related mortality in Victoria are summarised in Table 36. 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 36 reveals a substantial increase (60%) in the number of heroin-related

deaths in Victoria from 1997 to 1998. The projected figure for 1999 (320 heroin-related deaths) demonstrates that the number of deaths of this type has continued to rise in the past year

Table 36. Numbers of heroin-related deaths in the Victoria, 1991-1999.

Year	Number of heroin-related deaths
1991	49
1992	98
1993	59
1994	84
1995	140
1996	169
1997	168
1998	268
1999	320*

(* projected figure for 1999 based on monthly averages to September, when the total was 260).
(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 risk 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 among people who inject drugs. The Health Intelligence and Disease Control Branch, Victorian Department of Human Services, records notifications of diagnoses of HIV and hepatitis B and C in Victoria.

Table 37 shows the trend in notifications of diagnoses of HIV where injecting drug use was identified as an exposure factor[2] in Victoria by year of diagnosis, 1989 to September 1999. 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 in numbers apparent in the second half of the decade which parallels the overall decline in the annual number of HIV diagnoses. At the end of September 1999, injecting drug use had been

identified as an exposure factor in 8% of all HIV diagnoses and 89 (6%) of 1385 deaths from AIDS in Victoria (Health Intelligence and Disease Control Branch, 1999). The evidence of low rates of HIV infection among IDU is reinforced by the results of a study of attendees at four fixed-site metropolitan Needle Syringe Programs in Victoria in 1998 in which it was found that of 283 clients who provided blood tests, none were found to be HIV positive (National Centre in HIV Epidemiology and Clinical Research, 1999).

Table 37. Annual number of notifications of HIV diagnoses in Victoria in which injecting drug use has been identified as the likely exposure factor, 1989 to September, 1999.

	1989	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
number	24	35	22	20	23	20	15	14	15	13	14
% of HIV diagnoses	7.3	11.5	7.0	7.5	9.8	8.9	8.3	7.2	8.0	9.2	15.5*

* as data for 1999 is incomplete no conclusions can be drawn about this apparent increase.
(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. As discussed in the Methods section, 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 Syringe Programs in Victoria in 1998 in which 54% of the sample were found to have antibodies to HCV (National Centre in HIV Epidemiology and Clinical Research, 1999).

Table 38. Prevalence of Hepatitis C and HIV infection among males and females attending NSP in Victoria 1995-1998.

	1995			**1996**			**1997**			**1998**		
	Male (n=77) %	Female (n=41) %	Total %	Male (n=128) %	Female (n=61) %	Total %	Male (n=294) %	Female (n=141) %	Total %	Male (n=193) %	Female (n=90) %	Total %
HCV	56	49	53	44	56	48	48	57	51	54	53	54
HIV	1.3	0.0	0.8	2.3	0.0	1.6	1.4	0.7	1.1	0.0	0.0	0.0

(Source: National Centre in HIV Epidemiology and Clinical Research)

[2] Includes IDU and people identifying as both male homo/bisexual and IDU

Table 39 summarises the number of notifications received for diagnoses of hepatitis C infection in Victoria from 1992 to 1998. As discussed earlier, 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 notifications in Victoria throughout the 1990s and the available evidence suggests that the vast majority of HCV infections have occurred through injecting drug use (MacDonald, Crofts and Kaldor, 1996).

Table 39. Hepatitis C, Victoria, Notifications by year and gender, 1992-1998

Year	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Female	434	985	1394	1684	1748	1848	2561
Male	781	1602	2122	2705	2780	2996	4007
Not specified	50	75	34	124	16	105	148
Total	1265	2662	3550	4513	4544	4949	6716

(Source: Department of Human Services)

Arrest data

Data pertaining to drug-related arrests in Victoria in 1998/99 are shown in Table 40. These data show an increase from 1997/98 in the number of arrests for all four drug types, with a 47% increase in the number of arrests for heroin-related offences. Cannabis-related arrests as a proportion of arrests per year for these four drug types, have declined from 78% in 1995/96 to 50% in 1998/99 while the proportion of drug arrests related to heroin offences has increased from 16% in 1995/96 to 44% in the 1998/99 period. The number of arrests for cannabis-related offences appear to have remained relatively stable since 1996/97. Given the significant levels of cannabis use within the present study and the community as a whole, it is likely that these figures indicate the deployment of police resources away from minor cannabis offences.

The IDU and key informant data reported in this study relating to the prevalence of heroin use and the heroin market is indicative of increases in both the supply of heroin in Victoria and of an increase in the numbers of heroin users. The substantial increase in arrests for heroin-related offences in the 1998/99 year may reflect these increases in prevalence of heroin use. Alternatively, the arrest data may reflect specific targeting of heroin consumers and traffickers by law enforcement agencies over this period.

Table 40. Number of arrests for cannabis, heroin, amphetamine and cocaine related offences in Victoria, 1995/96-1998/99.

Type of offences	1995/96	1996/97	1997/98	1998/99
Cannabis offences	19120	9121	9034	9286
Heroin offences	3811	3396	5537	8153
Amphetamines	1633	NA	744	1028
Cocaine	36	29	32	70

(Source: Australian Bureau of Criminal Intelligence)

As shown in Table 41, the proportion of arrests for offences relating to the possession or use of illicit drugs (consumer offences) as opposed to supply-type (provider) offences has returned to 1995/96 levels following a reduction in 1996/97. These arrest patterns may undergo change following the major expansion of drug diversion programs planned as part of the National Illicit Drug Strategy (Ministerial Council on Drugs, 1998). The objective of these programs is to divert drug users from the criminal justice system into education and treatment.

Table 41. Consumer arrests as a proportion of all drug-related arrests in Victoria, 1995/96-1998/99.

	% Consumers		
Drug Type	**1995/96**	**1997/98**	**1998/99**
Cannabis	77	65	85
Heroin	80	66	75
Amphetamines	81	69	74
All illicit drugs	78	66	79

(source: Australian Bureau of Criminal Intelligence)

4.4 SUMMARY OF DRUG-RELATED ISSUES

The main drug-related issues to emerge from the 1999 IDRS study are summarised in Table 42. The trends that are of most concern relate to the continuing increase in heroin-related morbidity and mortality, an increasing demand for treatment for heroin dependence and continuing high rates of hepatitis C infection among injecting drug users.

Table 42. Summary of drug-related issues.

Health issues
• increase in demand for treatment services for heroin dependence and problems related to cannabis use
• increase in the occurrence of non-fatal and fatal heroin overdose
• continuing transmission of hepatitis C through injecting use
• substantial levels of injection related health problems among IDU
Crime and police activity
• continuing level of criminal activity among some groups of injecting drug users (primarily drug dealing and property crime)
• evidence that law enforcement activity influences the operation of local heroin street markets but has little overall effect on supply of the drug into the state
• major expansion of diversion programs is planned

5.0 COMPARISON OF DATA FROM DIFFERENT SOURCES

The following section provides a comparison of current and emerging drug trends obtained from the IDU survey, key informants and the secondary indicator data.

In general there was good agreement between the data sources for the four main drugs. Most trends are supported primarily by IDU and key informant reports, reflecting the paucity of available secondary illicit drug indicator data. However, in cases where all three data sources were available, they showed good agreement.

The tables also highlight the limited number of trends in amphetamine, cocaine and other drug use identified in the present study. Use of these drugs is not common among the injecting drug users accessed through the IDRS and indicator data with respect to these drugs is also limited. Consequently, trend data relies heavily on key informant reports. The findings of the present study suggest that monitoring of these drugs may be better achieved among different drug user populations.

Table 43. Trends in heroin endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

HEROIN TRENDS	IDU	KI	OTHER
Price of heroin per gram ($300) decreased since 1998, price per cap ($20-25) stable	✓	✓	
Larger deals being sold on the streets	✓	✓	
Availability very easy and stable	✓	✓	
Purity medium to high, fluctuating	✓	✓	✓
Continuing proportion of users smoking heroin	✓	✓	
Increase in frequency and amount of heroin use	✓	✓	
Increase in numbers of people using heroin	✓	✓	✓
Substantial levels of benzodiazepine use among heroin injectors	✓	✓	
Continuing trend towards more young heroin users	✓	✓	
Broadening of street-based heroin markets and emergence of new markets	✓	✓	
Increase in demand for treatment services, particularly methadone		✓	✓

and detoxification services			

Table 44. Trends in amphetamine endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

AMPHETAMINE TRENDS	IDU	KI	OTHER
Price of amphetamines stable ($50 per gram)	✓	✓	
Amphetamine availability stable and difficult	✓	✓	
Purity low, may be increasing slightly	✓	✓	✓
Occasional or recreational use	✓	✓	
Drug of choice for only small proportion of IDU sample	✓	✓	
Increase in suspect purchases of pre-cursor chemicals		✓	
"Ice" available but not widespread	✓	✓	

Table 45. Trends in cocaine endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

COCAINE TRENDS	IDU	KI	OTHER
Price of cocaine stable ($250 per gram)	✓	✓	
First report of availability of cocaine cap ($50)*	✓	✓	
Availability difficult, possible slight increase in availability	✓	✓	
Purity medium and stable	✓	✓	✓
Occasional or recreational use	✓	✓	
Desirable but too expensive for IDRS sample	✓	✓	
Possible increase in injecting among people in the dance party/rave scene**		✓	
Suggestion of street-level cocaine selling but no active markets*		✓	

* Reports from only two people.
** Based on report of one KI

Table 46. Trends in cannabis endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

CANNABIS TRENDS	IDU	KI	OTHER
Price of cannabis stable per gram ($20), decreasing per ounce ($300)	✓	✓	
Availability stable and very easy	✓	✓	
Potency high, stable to increasing	✓	✓	
Use of cannabis widespread through broad cross-section of community	✓	✓	✓
Continued trend of cannabis being perceived as more socially acceptable		✓	✓
Continuation of trend towards hydroponic production	✓	✓	
Increase in people accessing services for cannabis-related issues		✓	

Table 47. Trends in other drugs endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

DRUG-RELATED ISSUES	IDU	KI	OTHER
Some use of other opiates (eg. *Panadeine Forte®,* morphine)	✓	✓	
Substantial proportion of IDU injecting benzodiazepines	✓	✓	
Substantial proportion of IDU using anti-depressants	✓	✓	
Hallucinogens and/or ecstasy used occasionally by IDRS sample	✓	✓	
Ecstasy price stable ($50-$60 per tablet)		✓	

Table 48. Trends in drug related issues endorsed (✓) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

DRUG-RELATED ISSUES	IDU	KI	OTHER
Increase in fatal and non-fatal heroin overdoses	✓	✓	✓
Substantial levels of injection-related health problems	✓	✓	
Continuing transmission of hepatitis C virus through injecting drug use		✓	✓
Diminished social opportunities (housing, employment)		✓	✓
Reduction in injection equipment sharing from 1998, but still occurring	✓	✓	
Increase in dispensing of injection equipment from NSPs		✓	✓
Increase in drug dealing	✓	✓	
Continuing moderate level of criminal activity among some injecting drug users (primarily drug dealing and property crime)	✓	✓	
Increased police activity (“blitzes”)	✓	✓	
Increased crime towards IDU (“standovers”, “rip-offs”)	✓	✓	
Arrests for cannabis and amphetamines stable			✓
Increase in arrests for heroin-related offences	✓		✓

6.0 DISCUSSION

Summary of main findings

In comparing the findings of the present study with those obtained in 1998, there appear to be few new trends apparent within the illicit drug scene in Victoria. As determined by the 1999 IDRS, the illicit drug scene among injecting drug users in Melbourne continues to be dominated by heroin, while the prevalence of amphetamine and cocaine use appears to be low among these populations. Cannabis remains the most widely used illicit drug within the Victorian community.

Heroin

The findings of the 1999 IDRS in Melbourne with regard to heroin demonstrate a continuation of trends apparent last year. The preceding twelve months has seen the ongoing development of the heroin market such that street-based markets have become entrenched in a number of locations and continue to emerge in new locations. In conjunction with this there has been a continuing downward trend on prices, relatively high purity and the purchasing of larger amounts on the street. Not surprising, these substantial changes in the market have been associated with changes in the patterns of use of the drug and related problems within the community. While the changes in the level of the use of the drug within the general community are difficult to quantify there appears to be an increase in the prevalence of heroin use among young people and an increase in the recreational use of the drug among a wider range of social groups. One consequence of these changes is a substantial increase in the demand for opioid-treatment services, including methadone, withdrawal and counselling services.

The trends described in this report have been apparent throughout the 1990s. Throughout this period heroin-related problems have continued to grow despite attempts to address these issues through enhanced state and federal funding of law enforcement, drug education and health services. It would appear likely that these increases in heroin-related harms are the result of the considerable changes in heroin supply and availability, the emergence of street-based markets and corresponding changes in the use of the drug within the community. Given the evidence of the ongoing development and expansion of the heroin market reported in the

current study there is little reason to suggest that the increasing trend in heroin-related problems within the community will be reversed in the short term.

The available evidence suggests that initiatives directed towards supply reduction (through law enforcement) and demand reduction (through education and treatment services) have not been sufficient to have had an impact upon the increasing level of heroin-related health and social problems within the community. The trends in key indicators such as price, purity and availability of the drug suggests that the heroin market has continued to thrive in Victoria in recent years. Furthermore, there is no evidence to suggest that current laws and law enforcement strategies are likely to reverse the trend. The occasional large seizures of the drug by customs and other law enforcement agencies in Australia receive considerable media attention and are generally hailed as solid evidence of the effectiveness of supply reduction efforts in this country. However, there is no empirical evidence to support such claims. Indeed these seizures would appear to have minimal impact upon the heroin market or the increasing availability of the drug within the state. The changes in the Victorian heroin market observed in the past few years have occurred within a context of high levels of global production and the continuing development of sophisticated networks of trafficking (Australian Bureau of Criminal Intelligence, 1999).

It would appear that the capacity to influence the heroin market (eg. price, availability) in Victoria through traditional law enforcement policies and practices has diminished in recent years to a point where the utility of these approaches must be questioned. At this juncture we need to examine alternative methods of influencing the market. There are a variety of initiatives that have the potential to influence the heroin market that could be trialed in Victoria. One approach is to attempt to influence the demand for the drug within the community. While increasing attention has been given to demand reduction measures through enhancing the capacity of treatment services and education programs, there continues to be evidence of unmet demand for treatment services. Other initiatives include the provision of heroin on prescription from general practitioners, and initiatives at the local community level that are directed towards influencing the functioning of street-level markets. The capacity to influence and regulate the heroin market in Victoria requires improved understanding of the ways in which consumers of illicit drugs participate in these markets. For example, it is clear that many individuals who use heroin, sell the drug to others in order to support their own drug use and that in many instances the distinction between a “user” and a “dealer” is

meaningless. This has major implications for diversion programs and for our understanding of the operation of heroin markets.

Amphetamines

Indicators of amphetamine use among injecting drug users have remained stable since 1997 and suggest that use of amphetamines is not common among this population of injecting drug users. There was some evidence of the use of the more potent, smokeable form of methamphetamine known as "ice". However this use was not widespread and at this point does not appear to be of concern from a public health perspective.

Cocaine

The 1999 IDRS results suggest that the use of cocaine among IDU has remained stable since 1997 and that such use is neither widespread nor problematic for this population. Although there were some preliminary reports of the availability of street deals of small amounts of cocaine and of street-level selling of the drug, there was no evidence that these practices are widespread. As these two market features are characteristic of the problematic cocaine injecting scene in Sydney (Malcolm et al., in preparation; McKetin, Darke and Godycka-Cwirko, 1999), it is important that this situation is monitored closely. The evidence obtained in this study suggests that the dance party/rave scene and sex work industry may be two important areas in which to monitor these changes in cocaine markets and patterns of use.

Cannabis

Key indicators of cannabis use suggest that the cannabis market remains stable and relatively strong. Cannabis continues to be the most widely used illicit drug within the community. Despite this widespread use, there are a number of areas in which we have little knowledge of the drug as it is being used in this state. Surprisingly, there is no empirical evidence available regarding the THC levels in the cannabis that is being grown and consumed. While there has been considerable conjecture on the impact of hydroponic production methods and the utilisation of different varieties upon the potency and characteristics of the drug, there is no empirical evidence of this type currently available. For a drug that is so widely used within the community it is imperative that we improve our knowledge of the characteristics of the cannabis that is being consumed.

Other drugs and drug-related issues

There was a continuing high rate of prescription drug use among injecting drug users including opiates, benzodiazepines and anti-depressants. The high reported rates of benzodiazepine use among heroin injectors are of particular concern as concurrent use of benzodiazepines poses a significant risk for heroin overdose. Insufficient data was available on the use of other drugs to allow any trends to be identified.

There has been wide media coverage and considerable community concern regarding the trend towards increasing rates of heroin-related morbidity and mortality in Victoria. Other disturbing trends in drug-related issues included the continuing problem of ongoing HCV transmission among individuals who inject drugs and health problems arising from the marginalisation experienced by people who inject drugs. Substance dependence is becoming increasingly recognised as both a major cause and consequence of marginalisation. (Hanover Welfare Services, 1999, p5). Evidence from the IDU survey, key informant interviews, and treatment records of specialist treatment agencies consistently shows that a substantial proportion of people experiencing health problems associated with illicit drug use face diminished social opportunities and increasing marginalisation. Drug use was not always identified as the cause of these problems although it was seen to exacerbate them.

Study limitations

The aim of the IDRS is to gather evidence of emerging trends in illicit drug use and related problems within the community. The approach relies on the perceptions of individuals involved in and exposed to the illicit drug scene (both individuals who inject drugs and professionals working with these groups). Although these subjective impressions are combined with other indicators where possible, given the hidden nature of illicit drug use, available indicator data is limited. Further, the IDRS gathers evidence on emerging trends among people in contact with health and other services. As this population is not necessarily representative of all illicit drug users, there are limitations on the generalisability of the present results. It is important to keep in mind however that the purpose of the IDRS is not to explore and verify the emerging trends but rather to detect trends that warrant further investigation.

Implications for research

The findings of the present study suggest the following areas for further investigation:

1. Research that can inform the development of more effective means of influencing the heroin market in Victoria.
2. Research that can improve understanding of the ways in which consumers of illicit drugs participate in the drug market.
3. Continuing monitoring of the cocaine market and patterns of use.
4. Research examining the potency and pharmacological properties of cannabis that is being grown and consumed within Victoria.
5. Research to improve understanding of the health and other social problems arising from marginalisation experienced by injecting drug users.

7.0 REFERENCES

Australian Bureau of Criminal Intelligence. (1999). *Australian Illicit Drug Report 1997-98.* Canberra: Australian Bureau of Criminal Intelligence.

Australian Institute of Health and Welfare. (1999). *1998 National Drug Strategy Household Survey. First Results.* AIHW cat no. PHE 15. Canberra: AIHW (Drug Statistics Series).

Drug Treatment Services. (1996). *1995 Victorian Drug Household Survey.* Survey Report Melbourne: Aged Community and Mental Health Division, Department of Human Services.

Fitzgerald, J., Broad, S. & Dare, A. (1999). *Regulating the street heroin market in Fitzroy/Collingwood.* Issues Series. Melbourne: Victorian Health Promotion Foundation.

Gerostamoulos, J., Staikos, V. & Drummer, O. H. (1999). *Heroin Deaths in Victoria 1999.* Melbourne: Victorian Institute of Forensic Medicine & Department of Forensic Medicine - Monash University.

Hando, J. & Darke, S. (1998). *NSW Drug Trends 1997. Findings from the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report 56. Sydney: University of NSW.

Hando, J., Darke, S., Degenhardt, L., Cormack, S. & Rumbold, G. (1998). *Drug Trends 1997. A comparison of drug use and trends in three Australian states: Results from a national trial of the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Monograph 36. Sydney: University of NSW.

Hando, J., O'Brien, S., Darke, S., Maher, L. & Hall, W. (1997). *The Illicit Drug Reporting System Trial: Final Report.* National Drug and Alcohol Research Centre Monograph 31. Sydney: University of NSW.

Hanover Welfare Services. (1999). *Drugs and Homelessness: Submission by Hanover Welfare Services to the Victorian Drug Policy Expert Committee.* Melbourne: Hanover Welfare Services.

Health Intelligence and Disease Control Branch. (1999). *Victorian Infectious Diseases Bulletin.* 2 (4). Melbourne: Public Health and Development Division, Victorian Department of Human Services.

Horn, M. (1999). *Drugs and Homelessness. Prevalence of Alcohol and Drug Dependence among People Experiencing Homelessness. An Agency Study.* Melbourne: Hanover Welfare Services.

Kellehear, A. (1993). *The Unobtrusive Researcher: A guide to methods*. Sydney: Allen & Unwin.

MacDonald, M., Crofts, N. & Kaldor, J. (1996). Transmission of hepatitis C virus: rates, routes and cofactors. *Epidemiologic Reviews* 18(2):137-148.

Makkai, T. & McAllister, I. (1998). *National Drug Strategy. Public opinion towards drug policies in Australia.* Publication Number 2206. Canberra: Commonwealth Department of Health and Family Services.

Malcolm, A., Dwyer, R., Armstrong, L., Miles, A. & van Beek, I. (in preparation). *The Okey-Doke Project: An investigation of cocaine injecting drug users.* Technical Report Sydney: Kirketon Road Centre.

McKetin, R., Darke, S. & Godycka-Cwirko, K. (1999). *New South Wales Drug Trends 1998. Findings from the Illicit Drugs Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report 72. Sydney: University of NSW.

McKetin, R., Darke, S., Hayes, A. & Rumbold, G. (1999). *Drug Trends 1998. A comparison of drug use and trends in three Australian states: Findings from the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Monograph 41. Sydney: University of NSW.

McKetin, R. et al. (in preparation). *Drug Trends 1999. A comparison of drug use and trends in three Australian states: Findings from the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report Sydney: University of NSW.

Ministerial Council on Drugs. (1998). *The National Drug Strategic Framework. 1998-99 to 2002-3. Building partnerships: A strategy to reduce the harm caused by drugs in our community.* Canberra: Commonwealth of Australia.

National Centre in HIV Epidemiology and Clinical Research. (1999). *HIV/AIDS, Hepatitis C and Sexually Transmissible Infections in Australia: Annual Surveillance Report 1999.* Sydney: National Centre in HIV Epidemiology and Clinical Research.

Rumbold, G. & Fry, C. (1998). *Victorian Drug Trends 1997: Findings from the Illicit Drug Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report 59. Sydney: University of NSW.

Rumbold, G. & Fry, C. (1999). *Victorian Drug Trends 1998: Findings from the Illicit Drugs Reporting System (IDRS).* National Drug and Alcohol Research Centre Technical Report 73. Sydney: University of NSW.

SPSS Inc. 1996. "SPSS for Windows. Standard Version," , Release 9.01 edition. Chicago: SPSS Inc.