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Victorian Drug Trends 2001

Findings from the Illicit Drug Reporting System (IDRS)



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Turning Point Alcohol and Drug Centre Inc.

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Recruitment & interview sites

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- St Kilda Crisis Centre
- Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Frankston
- Western Region AIDS & Hepatitis Prevention (WRAP), Footscray
- Turning Point Alcohol & Drug Centre Inc., Fitzroy
- Urban Mission Unit, Baptist Church, Melbourne

Recruitment only sites

- Melbourne Inner City AIDS Prevention Centre (MINE), Collingwood
- Prostitutes Collective of Victoria (PCV), St Kilda
- Foot Patrol, Melbourne CBD

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Background

In 1998 the Commonwealth Department of Health and Aged Care commissioned the National Drug and Alcohol Research Centre (NDARC) to conduct the national Illicit Drug Reporting System (IDRS), following a successful pilot study in Sydney during 1996 and a multi-state trial of core methods in 1997 (Hando & Darke, 1998; Hando, Darke, Degenhardt, Cormack, & Rumbold, 1998; Hando, O'Brien, Darke, Maher, & Hall, 1997). The 1998 IDRS study was conducted in New South Wales, Victoria and South Australia (McKetin, Darke, Hayes, & Rumbold, 1999). Each of these states applied the complete IDRS methodology (i.e. IDU survey, key informant survey, secondary indicator data).

In 1999, the complete IDRS study was again conducted in New South Wales, Victoria and South Australia, with all other remaining states and territories collecting secondary indicator data and conducting interviews with key informants. For the first time in the year 2000, all states and territories conducted the complete IDRS study, which has continued in 2001.

The aim of the IDRS is to provide a rapid and reliable method of monitoring trends related to the use of opiates, cannabis, cocaine and amphetamines. The IDRS study provides nationally comparable data with respect to emerging trends in illicit drug use and related harms, and provides a basis for better informing future policy and research initiatives.

The value of Victorian IDRS findings

There is a number of health and law enforcement indicator data sources currently available in Victoria (e.g. periodic household and school surveys, Needle & Syringe Program data, Alcohol and Drug Information System, Law Enforcement Assistance Program, Chemical Drugs Intelligence Database, non-fatal heroin overdose database). In general, routine individual analyses of these secondary sources provide important findings in relation to illicit drug use prevalence and related morbidity and mortality within Victoria. However, the majority of indicator data sources by their very nature are *lag indicators*, and therefore insufficient on their own for strategic early warning purposes. Further, these indicators are

usually only reported on their own and fail to consider other information sources which can help to provide a more complete picture of illicit drug use in Victoria.

For the last 5 years in Victoria, the IDRS has acted as a strategic early warning mechanism by doing three key things: collating indicator sources around similar time periods; supplementation of these secondary indicator data sources via collection and analysis of *lead indicators* such as that provided by direct surveys with sentinel groups (e.g. injecting drug users, key informants, experts) around drug use prices, purity, availability and current patterns of use; and the triangulation of data obtained from each of the three core methods (IDU survey, key informant interviews, secondary indicators).

Some notable recent examples where IDRS findings have informed health and law enforcement sector responses in Victoria include:

- Routine provision of information to inform and support policy development activities of Local Government areas (e.g. recent local drug strategy development processes).
- Routine provision of information to Victorian Needle and Syringe Programs in the form of an annual IDRS *Victorian Drug Trends Report* and quarterly *IDRS Drug Trend Bulletin*.
- Routine provision of study findings to the Victoria Police Drug and Alcohol Policy Coordination unit, and a source of data for the *Regional Response Unit Illicit Drug Survey*.
- Provision of data concerning benzodiazepine injection to inform recent activities/meetings of the Australian Pharmaceutical Advisory Council subcommittee on the Intentional Misuse of Pharmaceuticals (IMP).
- IDRS data assisted in informing the implementation of a 'heroin overdose and the drought' focused education and prevention strategy during early 2001 (Drugs Policy and Services, Vic Dept of Human Services).
- Benzodiazepine injection trend data from the IDRS also assisted in informing the development and implementation of a Vic Dept of Human Services education and prevention strategy targeting Temazepam injection during 2001 (Drugs Policy and Services).

- Development of a series of detailed questions around benzodiazepine injection and implemented in conjunction with the 2001 IDRS study in Victoria (report on findings forthcoming)
- *The Drug Availability Monitoring Project* an investigation of the characteristics and impact of the heroin drought in Victoria (Miller, Fry, & Dietze, 2001), funded by the Drugs Policy and Services branch, Vic Dept of Human Services. Victorian IDRS 2000 data provided a reliable baseline comparison for the drought study, and 2001 data will provide a picture of the illicit drug market place in this jurisdiction post the height of the drought.
- Victorian IDRS investigators (and those from NSW and the ACT) will commence further in-depth studies of the heroin drought impact as part of a national study to be funded by the National Drug Law Enforcement Research Fund in 2002.

A key advantage of the IDRS study is that it replicates core methods across each state and territory. At the national level, this permits the identification of emerging jurisdictional differences with respect to the operation of illicit drug markets, and enhances the capacity of health and law enforcement sectors in all jurisdictions to develop proactive responses to illicit drug problems.

Summary of 2001 Victorian drug trends

Turning Point Alcohol and Drug Centre conducted the Melbourne arm of the 2001 IDRS project between June and December 2001. The project consisted of:

- 1. A quantitative survey of 151 current injecting drug users recruited from a number of sites across the Melbourne metropolitan area.
- Semi-structured interviews with 34 key informants from a variety of professional settings, selected according to their knowledge about illicit drug use, and level of contact with illicit drug users during the six months preceding the survey.
- 3. Analysis of secondary illicit drug use indicators (e.g. blood-borne viruses, overdose, arrests, needle/syringe distribution)

Data collected via these three methods were analysed and cross-validated in order to identify illicit drug related trends in Melbourne. Where appropriate, these data were also compared to findings from the 1997 to 2000 applications of the IDRS in Melbourne. The 2001 IDRS detected a number of trends of relevance during the preceding six to twelve months. Table A provides a summary of identified trends in price, availability, purity and prevalence of use for the four main illicit drug types explored in this study – heroin, amphetamines, cocaine and cannabis.

	Heroin	Amphetamine/	Cannabis	Cocaine
		methamphetamine		
Price	• \$ 50 (reduced	\$50 per 'noint'		\$50
Cap	size and purity)	(stable)		φ30
Gram	• \$ 500		\$20 (stable)	\$250 (stable)
Ounce	(increased)	\$800 (fluctuating)	\$250 (decreasing)	
Availability	 large decrease between November 2000 and March 2001 some supply restored, but at much reduced levels 	Readily available in last 6 months	Readily available in last 6 months	Readily available in last 6 months
Purity ^b	 13%-70% fluctuated significantly 	21% increased	Medium – High ^c Stable ^c	40% slight reduction
Prevalence of use	 Mostly rock form (60%) Decrease in overall numbers Decreasing frequency & quantity of use Decrease in street-markets 	Substantial increase in prevalence of use in last 6 months Increased frequency of use Shift to methamphetamines	Commonly used drug Apparent increase in use prevalence	Increasing levels of use among IDU

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

^b Based on the purity of drug seizures made by Victoria Police.

^c Based on IDU and key informant estimates of THC potency.

Heroin use in Melbourne

The supply of heroin in Melbourne increased during the 1990s such that the drug became readily available at levels of high purity in an emergent street-based drug-using scene (Fry & Miller, 2001). However, from approximately November 2000 there were widespread anecdotal reports of a dramatic decrease in the supply of heroin available (Miller et al., 2001) which was widely referred to as the heroin 'drought'. During the period of November 2000 to March 2001, there was a substantial reduction in heroin supply in Victoria. Following March 2001 some heroin supply was re-established, but both heroin purity and availability remain significantly lower than pre-drought levels. It was within this context that the 2001 IDRS study was conducted between July to August 2001. It was found that in comparison to the 2000 IDRS there was a decrease in availability (easy - very easy 77%) and purity (32% AFP). The average price of heroin increased to \$450 per gram, however the price of a 'cap' remained at \$50, although deals were reported to be smaller than previous IDRS studies and the heroin purity was also perceived as being lower. IDU participants reported a decrease in the frequency with which they injected (average of 65 days in last 6 months) and the quantity they used. Intravenous injection still constituted the most common route of administration (91%). The principle form of heroin available is powder (60%) with 32% using rock form. Reports suggest that there was a decrease in street market activity (usual supply source for only 31%) and a corresponding increase in mobile dealing (usual supply source for 38%) in comparison to previous years.

Amphetamine and methamphetamine use in Melbourne

The 2001 IDRS study has found a number of indications that the amphetamine and methamphetamine market in Melbourne is changing currently experiencing significant change. In particular, there has been reported increase in the use of amphetamines (average days used in last 6 months was 25) and methamphetamine use (e.g. 'ice' 49%, crystalline methamphetamine 52%, paste 32%). The authors note that the distinction between amphetamines and methamphetamines in Melbourne has become problematic and many of the respondents appeared unsure of the distinction. It was also reported that the use of methamphetamines has moved from mainly recreational users to more frequent, poly-drug users. There was a large increase in the reported price of 'amphetamines' in the past year from \$50 to \$200 per gram (\$800 to \$1075 per ounce), however the most likely explanation for this is that more 2001 respondents are actually reporting on methamphetamines. Reports for gram prices of methamphetamines range from \$60 to \$400, and median price per 'point' is \$50

(range \$40-\$100) suggesting the emergence of a new market due to non-stable prices, however IDU prices stable during report were last six month. Amphetamines/methamphetamines have also become the identified drug of choice for a group of people who were primary heroin users and there was an increase in the number of people reporting injecting amphetamines from 50% from the previous year to 75% for the current study. Whilst the amphetamine market appears to be predominantly a non-street market (26% mobile dealers, 24% dealer house, 33% friends), there has been an apparent increase in street sourcing from 4% in 2000 to 15% in 2001. It was reported that both amphetamines and methamphetamines were readily available (amphetamines, easy to very easy 92%; methamphetamines, easy to very easy' 72%). Both were reported as becoming easier to obtain. These trends demonstrate a major shift in illicit drug use in Melbourne and require further research to understand the nature of this change.

Cocaine use in Melbourne

There was an increase in both the number of people reporting cocaine use during past six months (28% compared to 13% 2000) and those injecting cocaine from 6% last year to 20% this year. The price of cocaine ranged from \$200 to \$500 per gram with the average price stable at approximately \$225 per gram. There were a number of relatively new reports of cap prices (\$50, range \$50-\$200). Cocaine availability was reported to be easy to very easy (56%) and stable (56%). Cocaine purity was reported by the AFP as 59%. Cocaine remains a desirable drug, but still to expensive for most injecting drug users.

This apparent change in cocaine use in Melbourne provides an important opportunity to gather more intelligence around what appears to be the beginnings of a shift to cocaine injection in Melbourne. These findings require verification and may indeed be explained by novice stimulant users thinking that they're using cocaine when, in fact, they are using methamphetamines, or it may be the beginnings of a real shift and emergence of a new trend in Melbourne. Either way, both public health and law enforcement responses must be informed with more evidence around this

Overseas and Sydney research has shown that cocaine injection is associated with a range of severe health harms. The characteristics of the drug, such as its short duration of effect can mean that it is injected more frequently than other drugs such as heroin. Documented harms from cocaine injection include psychosis and aggression; severe skin and vein damage and increased injecting risk behaviour.

Cannabis use in Melbourne

Cannabis use in Melbourne has remained relatively stable with a small increase in the level of use and a slight reduction in ounce prices. Key informants attributed to the increased use to cannabis being used in response to the shortage of heroin. Cannabis availability, perceived potency and use frequency and quantity have remained unchanged between 1997 and 2001. Cannabis appears to be the most widely used illicit drug within Victoria, and is a common addition to the list of drugs used concurrently by injecting drug users.

Other drug use in Melbourne

The 2001 Melbourne IDRS study has yet again provided evidence of significant prescription drug use by injecting drug users (e.g. panadeine forte®, morphine, benzodiazepines and anti-depressants). In particular, substantive increases were noted in the use of morphine and benzodiazepines. Of particular concern is the continuing increase in the prevalence of benzodiazepine injection (mostly normison® capsules) amongst injecting drug users, and reports of the existence of a street-based black-market for benzodiazepines.

Other trends

The reported prevalence of anti-depressant use appears to be stable with 28% of users saying they use the prescription drugs. However, frequency of use during last 6 months has increased from 120 days last year to 165 days during the past year. This figure has climbed steadily since 1997 when the figure was 30 days.

The reported prevalence of benzodiazepine injection has increased with 40% of IDU injecting these during the past 6 months. Similarly, there has been an increase in a number of IDUs reporting ecstasy use (24- 39%) and injection (8-21%). The median price per tablet of ecstasy is \$35-50 and has been stable over past 6 months. Ecstasy availability has been easy to very easy (56%) and stable (56%), was purity has been median to high (59%) and stable (30%). Key informants have reported a cross over between the traditionally separate drug markets of rave scenes to IDUs, but ecstasy remains a primarily recreational drug. This apparent crossover of drug markets requires greater understanding which can be gained through the recruitment of a different sentinel group of drug users (e.g. designer drugs module).

Mobile drug suppliers have also increased with a continuing decline in street drug purchases, possibly in response to an increased police presence around the Melbourne street-based drug markers. The 'heroin drought' appears to have been a contributing factor in creating an environment for consolidation of pre-existing patterns of drug misuse amongst some IDU groups, and the emergence of new patterns amongst others. The need for follow-up in-depth research is indicated for the purpose of further exploring the nature and extent of these recent trends (i.e. the effects of heroin drought on drug use patterns and drug markets; and Victoria specific research into methamphetamine, cocaine and ecstasy use). It is recommended that further investigation of Melbourne's shifting illicit drug market is necessary in order to properly inform policy responses.

Drug-related health and law enforcement trends

The 2001 Melbourne IDRS study has provided evidence of a substantial change in drug related and law enforcement trends over the past year. In line with the findings of substantially reduced heroin purity, frequency and quantity of use, and numbers of heroin users this study has documented a major decrease in fatal and non-fatal heroin overdoses. However, other significant harms associated with injecting drug use (such as injection related health problems, hepatitis C virus transmission and other unsafe injecting behaviour) continue to be of major concern. Fifteen percent of IDUs reported that they had borrowed another person's used needle/syringe, 25% had passed on their own used needle/syringe and 47% had used other already used injection equipment in the last month. Overall, it was seen that there was an increasing level of criminal activity amongst some IDUs and that the background level of violence within the drug market appears to have increased. Reported involvement in crime during the month prior to interview has increased for property crime (29%), dealing (37%), fraud (15%), and violent crime (15%).

On the other hand, there has been decreased levels of police activity due to the reduction in street heroin markets. IDU reports provided a variable picture of police activity during the six months before interview with 59% reporting that it had increased, 19% reporting no change and around a quarter (27%) saying that police had made it more difficult to score.

Conclusion

The 2001 Victorian IDRS study has provide clear evidence of significant changes within the illicit drug market places of metropolitan Melbourne. In particular, the severe reduction to Melbourne's heroin supply which peaked between December 2000 and February 2001 has had a number of important effects. There has been a substantial reduction in incidence of heroin-related overdose episodes (both fatal and non-fatal) and a reduction in the frequency of heroin use as well as the number of people reporting heroin use. However, there has been and increase in the substitution use of other substances such as amphetamines, ecstasy, methamphetamines, benzodiazepines and cocaine. This appears to have consolidated trends of polydrug use which can be related to increased health problems, in particular psychosis. There have been continuing trends in the high level of health problems (such terms hepatitis C, vein damage and poor general health) experienced by the IDUs interviewed. There has been an apparent increase in the level of crime self-reported by IDUs, which was confirmed by key informants. It was further reported that overall the drug scene has become substantially more violent, both amongst drug users and towards the general public.

Implications of 2001 findings

While the aim of the IDRS study is to gather evidence that points to emerging trends in illicit drug use and related problems within the community, it is not intended as a comprehensive and detailed investigation of illicit drug trends. The role of the Melbourne arm of the IDRS study is to identify yearly illicit drug use trends, and provide recommendations regarding key areas and issues that warrant further in-depth investigation.

The findings of the 2001 Melbourne IDRS study suggest the following priority areas for future research:

- 1. Research to explore the nature of benzodiazepine use among injecting drug users, the characteristics of the illicit benzodiazepine market in Melbourne, prescribing and dispensing practices, and the health harms associated with benzodiazepine misuse.
- Improved monitoring of the characteristics and impact of amphetamine type stimulant (ATS) use in Melbourne, including an increased focus upon target groups other than injecting drug users (e.g. rave / dance scene, gay/lesbian target groups)

- 3. Further research into the growing methamphetamine use within Melbourne and its implications for treatment and law enforcement
- 4. Continued monitoring of the characteristics and impact of cocaine use within Melbourne, with an increased focus upon target groups other than injecting drug users.
- 5. Further research to gain a better understanding of the determinants of unsafe injecting, particularly for those injecting practices that increase the risk of blood-borne virus transmission (e.g. HIV, HCV and HBV).
- 6. Research examining the potency and pharmacological properties of cannabis that is being grown and consumed within Victoria.

The Melbourne arm of the IDRS study has been a rapid, reliable, cost-effective and informative mechanism for the surveillance of illicit drug trends in Victoria. It yields data that are comparable from year-to-year and across jurisdictions, and it is a study that has much to offer health and law enforcement sectors in their efforts to respond more effectively to illicit drug trends. It is particularly effective in identifying emerging illicit drug trends that require further investigation and/or policy responses.

1.0 INTRODUCTION

In 1998 the Commonwealth Department of Health and Aged Care commissioned the National Drug and Alcohol Research Centre (NDARC) to conduct the national Illicit Drug Reporting System (IDRS), following a successful pilot study in Sydney during 1996 and a multi-state trial of core methods in 1997 (Hando & Darke, 1998; Hando et al., 1998; Hando et al., 1997). The 1998 IDRS study was conducted in New South Wales, Victoria and South Australia (McKetin et al., 1999). Each of these states applied the complete IDRS methodology (i.e. IDU survey, key informant survey, secondary indicator data).

In 1999, the complete IDRS study was again conducted in New South Wales, Victoria and South Australia, with all other remaining states and territories collecting secondary indicator data and conducting interviews with key informants. For the first time in the year 2000, all states and territories conducted the complete IDRS study, which has continued in 2001. The aim of the IDRS is to provide a rapid and reliable method of monitoring trends related to the use of opiates, cannabis, cocaine and amphetamines. The IDRS study provides nationally comparable data with respect to emerging trends in illicit drug use and related harms, and provides a basis for better informing future policy and research initiatives.

The *Victorian Drug Trends 2001* report summarises data collected during the months of July through December 2000 as part of the Melbourne arm of the 2001 IDRS study. This study replicates the three-part methodology used during 1997-2000 by incorporating:

- A survey of injecting drug users,
- Interviews with key informants recruited from a variety of professional settings, and
- Analysis of secondary indicators of illicit drug trends in Victoria.

The information provided by these three data collection methods has been used to identify trends in the characteristics of and harms associated with illicit drug use in Victoria. These trends primarily relate to that observed within metropolitan Melbourne. For details regarding illicit drug trends for the whole of Victoria, readers should refer to the *Victorian Drug Statistics Handbook* (Victorian Department of Human Services, in press-b). Readers are also referred to the forthcoming 2001 IDRS national report, which presents state comparisons, and individual state and territory technical reports for further jurisdictional details. These are

available from the National Drug and Alcohol Research Centre, University of New South Wales.

2.0 METHOD

2.1 Injecting drug user (IDU) survey

Structured face-to-face interviews were conducted with injecting drug users (IDU's) recruited from within the Melbourne metropolitan area between June and August 2000. To be eligible to participate in the IDU survey, respondents must have injected at least monthly in the six months prior to interview, and have resided in Melbourne for at least twelve months. Convenience sampling was facilitated by posted advertisements and recruitment notices distributed through Needle and Syringe Programs (NSP's), and snowballing methods (recruitment of friends and associates via word of mouth).

Six agencies assisted the research team by agreeing to act as recruitment and interview sit assisting the team with the IDU survey component of the study:

- AIDS Prevention and Health Awareness Program (APHAP), Youth Projects Inc., Glenroy
- St Kilda Crisis Centre
- Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Frankston
- Western Region AIDS & Hepatitis Prevention (WRAP), Footscray
- Turning Point Alcohol & Drug Centre Inc., Fitzroy
- Urban Mission Unit, Baptist Church, Melbourne

A further three agencies assisted with the distribution of recruitment notices: Melbourne Inner City AIDS Prevention Centre (MINE), Collingwood; Prostitutes Collective of Victoria (PCV), St Kilda; and the Foot Patrol, Melbourne CBD

The structured interview schedule employed in this study replicates that used in previous IDRS studies conducted in Melbourne. The interview schedule contained core questions relating to socio-demographics, drug use, price, purity and availability of drugs, crime, risk-taking behaviour, health and general trends. The duration of the interviews was

approximately 45 minutes and participants were reimbursed \$20 for their time and out-ofpocket expenses. Ethics approval for this study was obtained from the University of Melbourne, Human Research Ethics Committee. Data analysis was conducted using SPSS for Windows Version 10.1.

2.2 Key informant survey

A total of 34 key informants (22 male, 12 female) participated in telephone (n=29) and faceto-face (n=5) interviews between the months of June and August 2001. Three (9%) participants were recruited from the pool of key informants who had taken part in both the 1998 and 1999 IDRS studies (Dwyer & Rumbold, 2000; Rumbold & Fry, 1999). Twelve (36%) participants were recruited from the pool of key informants who had taken part in the 2000 IDRS study (Fry & Miller, 2001). All other participants in the current study were recruited either as replacements for 1998/1999 participants drawn from the same agencies/services, or on the basis of referrals received from experienced professionals in the field. A total of 46 people from the pool of 1998/1999/2000 participants 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 (e.g. less direct contact with illicit drug users) or prior commitments.

Key informants enlisted for the current study included: NSP workers (n=6), drug treatment workers (n=2), user group representatives (n=4), general health workers (n=1), outreach workers (n=6), youth outreach workers (n=2), researchers (n=4), and police officers (n=9). Participants (excluding police) 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 key informant interview schedule included sections on patterns of drug use, availability of drugs, criminal behaviour and health issues.

Heroin was nominated by a majority (n=16) of Melbourne key informants as the main illicit drug used by the people with whom they had most contact. However, many of these key

informants also reported on benzodiazepines use, commenting that due to changes in drug use trends, the two drugs are almost inseparable in terms of the people who used them and market characteristics. Reports on primary cannabis users were received from 2 key informants. Five key informants were able to nominate amphetamines as a major drug group used by the people with whom they had contact, a further four key informants were able to report on MDMA / ecstasy as the main illicit drug used, and a single key informant reported on methamphetamine use. Two key informants reported on cocaine use and one reported on benzodiazepines use. Three key informants reported on inhalants as the main drugs being used. Nine members of the Victoria Police (including the Drug Squad) were also able to comment on trends in heroin, ecstasy, cocaine, inhalant, amphetamine and cannabis use in Victoria.

Key informant interviews took an average of 57 minutes to complete (range = 25-90 mins). The interviewer made detailed notes during the interview, and raw data were transcribed and coded soon after the conclusion of the interview using Microsoft Excel 2000. Content analysis was used for open-ended responses (Kellehear, 1993). Categorical data for key informant estimates of drug price, purity and availability were analysed using Microsoft Excel 2000 and SPSS for Windows V9.01 (SPSS Inc, 1996) and analysed using standard descriptive statistics procedures.

2.2.1 Validity of key informant reports

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=23), personal experience (n=3) or both (n=8). The reported sources of information included contact with drug users/clients (n=25), discussion with colleagues (n=19), and observations (n=17). 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 reported that they were "very certain" (n=23) about the information they had provided during their interview.

Eighteen (64%) of the key informants reported daily contact (5 to 7 days per week) with a range of client groups during the preceding six months. The average number of reported contact days in that time period was 122 (range = 10-180 days). Most key informant participants (55%) reported contact with between 51 and more than 100 illicit drug users during the six months prior to interview.

Special populations were well represented. In the six months prior to interview, key informants had contact with client groups including: people who engage in injecting drug use (68%); youth (84%); people from non-English speaking backgrounds (30%); and indigenous peoples (24%). In addition, a number of key informants reported contact with young people involved with the juvenile justice system and sex-workers.

2.2.2 Feedback seminar

Prior to preparation of the final Victorian Drug Trends 2001 report, a feedback seminar was held in November 2001 for key informants and the staff of participating recruitment and interview sites. The main purpose of this seminar was to provide timely dissemination of IDRS 2001 findings directly to those professionals in direct contact with illicit drug users. The seminar also served as an opportunity to test the validity of our preliminary analyses and interpretation of key informant and IDU reports about illicit drug use trends within Melbourne.

2.3 Indicator data

Information collected from the IDU survey and key informant interviews was supplemented by data obtained from a number of secondary indicator sources of illicit drug use and related morbidity and mortality. Where possible, data relating to trends for the entire year are reported, however for some indicators where current data is not available, the most recently available data has been included.

Indicator data gathered for this study included:

Drug seizure purity levels

• The Victorian Forensic Science Centre (Drugs Analysis Branch) conducts purity analyses for drug seizures made by the Victoria Police. The drugs tested include heroin, cocaine, and amphetamines, and the Australian Bureau of Criminal Intelligence (ABCI) collates this information. Within Victoria the legislation requires that cannabis be botanically identified, however potency of cannabis (i.e. THC content) determination for tetrahydrocannabinol (THC) is not a legislative requirement. However, the Victoria Forensic Science Centre commenced a research project in 2000, which includes the determination of THC purity from cannabis samples collected from drug seizures throughout Victoria. Preliminary data for items seized until Jan 2002 are included in this report.

 In previous years the IDRS study has sourced Victorian drug seizure purity data from the ABCI (includes purity analyses of Victorian seizures made by the Australian Federal police). In 2001, Victorian data were obtained directly from the Victorian Forensic Science Centre. Data for items seized after April 2001 are not included due in part to Victoria Police industrial action.

Surveys reporting on illicit drug use prevalence in Victoria

- 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 (Australian Institute of Health and Welfare, 1999). The 2001 Victorian Drug Household Survey has been conducted and results should be available in 2002.
- The Victorian School Students and Drug Use Survey was last conducted in 1999 on behalf of the Victorian Department of Human Services as part of a national survey auspiced by the Australian Cancer Society. The next Victorian School Students and Drug Use Survey is due to be conducted in 2002.
- The Australian Needle and Syringe Program (NSP) Survey has been conducted during one week of each year since 1995. It is conducted by the National Centre in HIV Epidemiology and Clinical Research on behalf of the collaboration of Australian Needle and Syringe Programs, and is designed to supplement sentinel BBV surveillance efforts via a short questionnaire on demographic and behavioural characteristics of NSP clients and serological testing of finger-prick blood samples. In 2001, the survey obtained data from 214 clients across three NSP's in Melbourne.

Needle and Syringe Program distribution and return rates

• The Victorian Needle and Syringe Program (NSP) records the number of needle/syringes distributed and returned, the number of clients and basic client demographics. An electronic database is managed by the Victorian Department of Human Services and is collated on a quarterly basis. This database also includes needles/syringes purchased by pharmacies for distribution.

Specialist drug treatment presentations

- 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 called the Alcohol and Drug Information System (ADIS). ADIS data for the period 1999/2000 is presented in this report.
- The Clients of Treatment Service Agencies (COTSA) Census A national one-day census of all specialist D&A treatment agencies that has been conducted in 1990, 1992, 1995 and 2001. Agencies are asked to provide data for all clients treated on census day: demographics (age, client type substance user or relative/friend, sex, COB, language spoken at home, employment status, residential postcode), treatment received, main drug problem, drugs injected in past 12 months. Also collects data on services provided by agencies, average number of sessions per client, average length of stay/visit. The 2001 census was conducted on 2 May 2001 across 507 agencies in all states and territories. The census sample size for 2001 was 5304.
- The Drugs and Poisons Regulation Unit 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. Data from the quarterly phone census (i.e. call to all pharmacies requesting the number of clients who are given their methadone dose on a particular day) is presented in the current report.
- DIRECT Line is a 24-hour specialist telephone service in Victoria (operated by Turning Point Alcohol & Drug Centre) that provides counselling, referral and advice about drug use and related issues. All calls to DIRECT Line are logged to an electronic database that can provide information about caller drugs of concern, calls from drug users, and calls about drug users.

Victorian Admitted Episode Dataset (VAED)

• A database of Victorian hospitalisations maintained by the Victorian Department of Human Services since 1987/88. The database records admissions (excluding elective

admissions) from all public and private hospitals. A summary of findings reported in the Victorian Drug Statistics Handbook (Victorian Department of Human Services, in press-b) is presented here.

Ambulance attendances at non-fatal drug overdoses and other episodes

• This electronic database is managed by Turning Point Alcohol and Drug Centre and contains information obtained from MAS Patient Care Records (Dietze, Cvetkovski, Rumbold, & Miller, 2000). 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 due to the availability of a biological marker of heroin involvement (i.e. the administration of *Narcan*® and subsequent patient response).

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 (Gerostamoulos & Drummer, 2001; Gerostamoulos, Staikos, & Drummer, 2000). This data contains the results of toxicology and pathology analyses conducted on homicides, suspicious deaths, suicide, drug-related deaths, motor vehicle and industrial fatalities.

Blood borne virus surveillance data

- Blood borne viruses, and in particular HIV/AIDS and hepatitis B (HBV) and C (HCV) are a major health risk for individuals who inject drugs. The National Notifiable Diseases Surveillance System has been established in Australia for the purposes of monitoring the spread of these diseases (O'Brien et al., 1999). The Department of Human Services records statutory notifications of diagnoses of HIV, HBV and HCV in Victoria.
- All newly diagnosed cases of HIV are reported to the National Centre in HIV Epidemiology and Clinical Research and reported separately (National Centre in HIV Epidemiology and Clinical Research, 2001). There are problems with the interpretation of this data in terms of monitoring incidence trends. For example, many injecting drug users who have been exposed to HCV may not undergo routine 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, HBV and HCV 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, 2001).

Drug-related arrest data

 Prior to 2000, information pertaining to drug-related arrests in Victoria was obtained for IDRS purposes from data collated by the Australian Bureau of Criminal Intelligence (ABCI). Victorian arrest data presented in the current report has been accessed from the Victoria Police Statistical Services Branch, and is derived from the Law Enforcement Assistance Program (LEAP) database established in 1993.

3.1 Overview of IDU sample

A total of 151 current injecting drug users (IDU's) were interviewed. The sample was drawn from 62 suburbs within the western, northern, inner-city and outer south-eastern areas of Melbourne. Figure 1 shows that most of the participants lived in close proximity to the six recruitment sites of St Kilda (n=24), Dandenong (n=30), Fitzroy (n=33), Frankston (n=25), Footscray (n=23) and the Central Business District (n=16). Seven percent of participants (n=11) were of 'no fixed address' or homeless at the time of interview.



Figure 1. Residential postcodes of the 2001 IDU survey sample (N=151)

The demographic characteristics of the 2001 sample are summarised in Table 1. The majority of participants were male (57%) and ranged in age from 16 to 48 years with a mean age of 28.5 years (SD 7.81). The majority of respondents were securely accommodated either living at their own residence (47%) or parents home (22%), while 8% were homeless and 17% residing at a boarding house or hostel at the time of interview. Most participants (79%) were not currently employed, however a significant proportion had acquired trade/technical (34%) or university qualifications (11%) post secondary school. The majority of participants (91%) reported that English was the main language spoken at home, with 8% indicating that they most commonly spoke other languages at home including Vietnamese (n=5), Arabic, Cantonese, German, Greek, Malaysian, Mandarin and Turkish. Nine percent (n=14) of participants identified as being aboriginal or Torres Straight islanders (ATSI).

Sample characteristics	
Age (Mean years)	28.5 (range 16 to 48)
Gender (% Male)	57
Accommodation (%): Own house / flat (includes renting) Parents house Boarding house / refuge / hostel No fixed address / homeless	47 22 17 8
Ethnicity (%): English main language spoken at home 'Other' main language spoken at home Aboriginal or Torres Strait Islander	91 8 9
Employment (%): Not employed Full time Part time/casual Student Home duties Sex worker	79 5 9 1 1 5
School education (mean years)	11
Tertiary education (%): None Trade/technical University/college	54 34 11
Prison history (%)	46
Treatment history (%): Currently in treatment	44

Table 1. Demographic characteristics of the 2001 IDU survey sample (N= 151).

Forty-three percent of the respondents were currently receiving drug treatment. The most common types of drug treatment for this group were methadone maintenance (64%) and drug counselling (14%). For the group of respondents currently in treatment (n=64) the mean length of time that they had been engaged in their current treatment type was 17 months, though this varied considerably (SD 24.26). Twenty-seven people (43%) had been in treatment six months or less, seventeen people (27%) between six to 12 months, and 15 people (24%) for two years or more.

A small proportion (6%, n=9) reported that they had used naltrexone in the past six months (prescribed by a doctor). A total of 87 participants (58%) had engaged in some form of treatment during the last six months prior to interview, the majority of whom had engaged in one (68%) to two (24%) different types.

Further analyses revealed that there were no systematic socio-demographic differences (i.e. age, treatment status, gender or education) between groups of participants recruited from the six study interview sites in 2001.

3.2 Drug use history of the IDU sample

3.2.1 Duration of injecting career

The mean reported age at first injection of a drug was in the late teens (18.14 years, SD 4.41), ranging from 9 to 34 years. The mean number of years since first injection to the present was 10 years (SD 7.20). There was considerable variation in the length of experience of injecting drug use among those surveyed. Just under a third of participants (30%) first began injecting drugs within the last five years, whereas 12% (n=18) had first started injecting 20 years ago or longer. The drugs most frequently used on the first injection occasion were heroin (54% compared to 38% in 2000 and 46% in 1999), and amphetamines (41% compared to 60% in 2000 and 49% in 1999).

3.2.2 Drug use history (last 4 weeks)

The majority of the sample reported that heroin was the drug that they had most often injected in the past month (61%), the last drug that they had injected (62%), and their drug of choice (61%). A sizeable proportion of the sample indicated that they had most injected amphetamines (32%) during the past month, and that amphetamines were the last drug injected (30%). However, fewer reported that it was their drug of choice (16%). Smaller

numbers of participants nominated other drugs such as cannabis (10%), cocaine (n=3) or ecstasy (n=8) as their drugs of choice.

Frequency of injection during last month	%
Not in the last month	2
Weekly or less	21
More than weekly	33
Once a day	15
Two to three times per day	23
More than three times per day	5

Table 2. Frequency of injection during the last month (IDU survey, N=151).

Table 3. Amount spent on illicit drugs on day prior to interview (IDU survey, N=151).

Amount (\$)	%
Nothing	39
Less than \$20	5
\$20-49	13
\$50-99	12
\$100-199	13
\$200-399	15
\$400 or more	4

Forty-three percent of respondents had engaged in drug injection at least once a day during the month prior to interview (refer to Table 2), compared to 69% of the 2000 Victorian IDRS sample (Fry & Miller, 2001). Table 3 shows that almost three quarters (71%) of the sample had purchased illicit drugs on the day before interview. A quarter of these participants (25%) had spent between \$20 to \$99 and 32% had spent more than \$100.

Table 4 shows that 60% of the IDU sample reported that they had last injected in a private home while others had injected in public locations such as public toilets (12%), the street/park or beach (9%), or in a car (15%). The usual or most frequent location of injection during the past month was private homes (66%), cars (11%), the street/parks (9%) and public toilets (9%).

Last injecting location	%
Private home	60
Public toilet	12
Street/park or beach	9
Car	15
Other (e.g. stairwell, car park)	5

Table 4. Location in which respondents had last injected (IDU survey, N=151).

Despite other indications of a shifting illicit drug market in Melbourne, the reported locations of last injection were similar to those reported by 1999 and 2000 IDU survey respondents for the IDRS study (Dwyer & Rumbold, 2000; Fry & Miller, 2001).

3.2.3 Drug use history (last 6 months & lifetime)

Table 5 shows the self-reported drug use history of the IDU survey sample over the last six months and their lifetime, as well as routes of administration and recent frequency of use. The majority of respondents reported lifetime use of tobacco (97%), heroin (99%), amphetamines (94%), cannabis (97%), alcohol (97%), and benzodiazepines (87%).

The median number of drug classes ever used by respondents was ten, while a median of six drugs had been used in the preceding six months. Tobacco and heroin were the drugs most frequently used on a day-to-day basis during the previous six months. Significant numbers had also used cannabis (88%), benzodiazepines (78%), alcohol (74%) and amphetamines (76%) in this period.

A variety of drugs had been injected with a median of two types in the preceding six months and three types ever. The most commonly reported drugs injected in the last six months were heroin (91%), amphetamines (75%), benzodiazepines (40%), ecstasy (21%) and other opiates such as morphine (31%). IDU survey respondent usage of drugs other than heroin, amphetamines, cocaine and cannabis is discussed in section 3.7 of this report.

The demographic characteristics of the Victorian 2001 IDU sample are broadly similar to previous Victorian IDU samples recruited through NSP's (Fry & Miller, 2001; Dwyer & Rumbold, 2000; Rumbold & Fry, 1999). Noteworthy trend differences observed across successive Victorian IDU survey samples are discussed in the following sections of this report.

Drug Class	Ever	Ever	Injected	Ever	Smoked	Ever	Snorted	Ever	Swallowed	Used	Median number of days
-	used %	injected	last 6	smoked	last 6	snorted	last 6	swallowed	last 6	last 6	used in last 6 months
		%	months	%	months	%	months	%	months	months	by those using the drug
			%		%		%		%	%	
Heroin	99	99	91	58	14	27	3	19	4	90	65
Methadone	71	21	6					69	44	44	180 [#]
Morphine	66	62	31	1	0	<1	0	25	9	32	5
Other opiates	58	23	9	5	1	1	1	47	27	32	14
Amphetamines	94	91	75	19	7	60	11	45	15	76	25
Cocaine	64	46	20	13	5	38	15	9	3	28	3
Hallucinogens	71	11	<1	7	2	1	<1	68	19	20	1
Ecstasy	65	31	21	3	<1	7	1	62	34	39	4
Benzodiazepines	87	55	40	9	2	0	0	81	71	78	26
Alcohol	97	8	0					94	73	74	15
Cannabis	97									88	160
Anti-depressants	49									28	165
Inhalants	31									8	2.5
Tobacco	97									97	180
Poly-drug use (Median drugs used)	10	3	2							6	

Table 5. Drug use history of IDU sample (N=151).

[#] For respondents currently engaged in methadone maintenance treatment (n=41)

3.3 Heroin use in Melbourne

Trends in heroin use were identified from information obtained from 16 key informants, the 91% of the IDU sample who felt confident to comment on heroin trends, and data from secondary indicators of heroin use and associated harms.

3.3.1 Price

The median price of heroin reported by IDU participants was \$450 per gram (n=45) and \$50 per 'cap' (n=110). The term 'cap' has previously been defined as a generic descriptor for smaller amounts of heroin available within street-based heroin markets – typically costing 20-25 for approximately 0.03gm (Dwyer & Rumbold, 2000). The heroin purchase prices reported by participants of the current study suggest that smaller 20-25 deals were rarely available in Melbourne during the first six months of 2001.

Table 6a summarises the modal (most frequently reported) price of heroin in Melbourne reported by IDU participants across the 1997 - 2001 IDRS studies. These figures show an apparent increase in 'cap' prices in Melbourne to \$50 in 2000, after a period of little change from 1998 to 1999. Rather than representing a real increase in prices of the traditional '\$20-\$25' cap (approximately 0.03gm), the modal price of \$50 per cap reported in 2000 reflects the fact that \$20-\$25 caps are now less available within Melbourne's street-based markets. Fifty-dollar caps or deals have become the smallest size heroin deal typically available within street markets. Table 6a also shows that the reported average price per gram of heroin in 2001 had increased to \$500 from an average of \$300 in the previous two IDRS studies.

Further confirmation of this may be seen in Table 6b, which shows the reported price of last amounts of heroin purchased by IDU survey participants during the previous six months. This table shows that the modal price consistently reported for the last 'cap', 'rock' and '1/8gm' purchased by participants during the last six months was \$50, and that the average price reported for the last gram of heroin purchased by respondents was around \$450-\$500.

Only 23% of the sample reported that the price of heroin had been stable over the previous six months, while 55% reported that the price had increased and 5% that it had decreased. A further 15% reported that heroin prices had fluctuated in this time. Further analysis revealed that participant perceptions of price trends were significantly related to their most frequent location of injection during the last four weeks (e.g. those who had purchased heroin from

street markets perceived that the price had increased more than those who purchased heroin from home-based markets). Compared to the 2000 Victorian IDRS study, fewer participants of the current study thought that heroin prices had been stable, while more reported price increases during the previous six months. In particular, the reported price per gram of heroin appears to have stabilized over the period 1999 to 2000, after an observed decrease over the 1997 to 1999 period.

Table 6a. Modal prices of heroin in Melbourne reported by IDU survey respondents 1997-2001.

	1997	1998	1999	2000	2001
Heroin					
\$/cap	30-40	20-25	20-25	50^{a}	50
\$/gram	450	400	300	300	500

^a The modal 'cap' price reported for 2000 refers to a larger quantity of heroin to that reported in previous years

Table 6b shows a further breakdown of prices reported by IDU survey participants for various quantities of heroin they had purchased within the last six months. Modal prices reported for 'cap'/'rock' and gram amounts are consistent with those reported in Table 6a. Table 6b also reveals that the range of prices reported for purchased quantities of heroin is quite variable. This is a reasonably clear indication of a general lack of stability within the heroin market place across Melbourne during the first half of 2001.

Table 6b. IDU reported prices for heroin quantities purchased during previous 6 months (Vic IDRS 2001)

			modal	price
Amounts of heroin purchased (last 6 months)	n	(%)	price (\$)	range (\$)
last cap	87	(35)	50	20-100
last rock	54	(35)	50	40-400
last 1/8 gram	14	(01)	300	100-350
last ¼ gram	8	(05)	100	70-150
last ½ gram	31	(29)	250	150-280
last gram	21	(14)	450-500	120-700

Key informant reports of the prices for cap (range \$50-\$100) and gram (\$250-\$1000) quantities of heroin were generally consistent with those reported by IDU survey respondents. Two key informants reported that prices ranged a maximum of \$1400/gram at the height of the heroin drought. All key informants reported that the price had initially increased over the past twelve months (during the peak of heroin drought) and had then decreased somewhat

over the past six months. It was reported that prices were still markedly higher than 12 months ago. Fifty percent of key informants reported that prices fluctuated regularly.

Heroin prices reported by IDU survey respondents were consistent with Victorian price data available from ABCI sources for 2000/2001 (Australian Bureau of Criminal Intelligence, 2001).

3.3.2 Availability

The majority of IDU respondents reported heroin as either easy (41%) or very easy (36%) to obtain at the moment (July-August 2000), while others indicated that it is difficult (17%) to very difficult (2%) to access. When asked if heroin availability had changed during the past six months, a third reported it had been more difficult to obtain (33%), whereas others reported that availability had been stable (25%), easier (14%) or fluctuated (25%) during that time.

Most participants reported that they usually scored/purchased heroin from mobile dealers (38%) or street dealers (31%), while others accessed heroin at the dealer's home (18%) or friends (9%). Interestingly, more IDU's in 2001 reported that they had purchased heroin from mobile dealers, than did the 2000 (24%) and 1999 IDRS participants (8%) – providing a clear indication of an increasing shift in patterns of heroin procurement in Melbourne.

Key informants reported that heroin was currently easy to access (80%), and that over the last six months the availability of heroin had been easier (n=4) or had fluctuated (n=5). It was reported by key informants that over the past twelve months availability of heroin has markedly declined, with a small recovery during the past six months. Key informants (n=6) explained that street-based market places throughout Melbourne had declined and a significant proportion of heroin dealing had moved to home-based or mobile phone based market. Most key informants (n=8) had observed a decrease in the overall number of people using heroin in last twelve months. Four key informants further explained that they had seen a decrease in older users, however they also acknowledged that younger novice users were still appearing at the same rate. Almost all of the key informants commented that since the beginning of the heroin drought there has been an increase in the level of violence permeating the drug market.
3.3.3 Form and purity

A higher proportion of the IDU sample reported that they purchased heroin rock (60%) compared to powder (32%) in the previous six months. The most common route of administration was injection (91%), however a significant minority (14%) reported 'smoking' the drug (i.e. heating heroin and inhaling the resulting vapours) in the preceding six months.

Consistent with IDU reports, the primary route of administration identified by key informants was injection although most (n=7) reported some contact with people who smoked heroin (i.e. 'burning') although they reported the reduction in this behaviour from previous years. Key informants that had contact with heroin smokers 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.

Heroin purity was reported as low (75%) by the majority of respondents in the IDU survey, with only 4% reporting that heroin purity was high. Participants perceived that heroin purity had mostly decreased (58%) or fluctuated (20%) within the past six months, while others indicated that it had been stable (11%) or increasing (8%) during that time.

Most key informants reported that the purity of heroin was low (n=11). The majority of key informants reported that heroin purity and decreased over the past six months and was still fluctuating (n=5). All of the key informants reported that heroin purity had massively declined over the past twelve months. Some (n=4) reported that purity had increased over the past six months, but heroin purity had not returned to anywhere near the levels seen prior to the heroin drought.

The average purity level of heroin seizures (for <1gm and >1gm amounts) made by law enforcement agencies in Victoria during 1998 to 2001 is shown in Figure 2. Purity figures shown here do not represent the purity levels of all heroin seizures made during this time period – only those that have been analysed. Figure 2 shows that the purity of heroin has gradually fallen since 1998 from a peak of around 70% in December 1998, down to 40% in December 2000, followed by a sharp decline to 13% in February 2001 before rising again and then resuming its downward trend.



Figure 2. Monthly purity of heroin seizures by Victorian law enforcement, Jan 1998 – April 2001 (Victoria Forensic Science Centre).

Figures available from a small number of Australian Forensic Police (AFP) seizures in Victoria during the period July 2000 to June 2001, show that the average level of purity for tested quantities of two grams or less was 42% (n=5) (range 32% to 69%), whereas one tested seizure of greater than two grams of heroin was 71% pure.

The mean purity level of heroin seizures made by law enforcement agencies in Victoria during the 1998 to 2001 year to date period is summarised in Table 7. These data demonstrate the decline in heroin purity from a high of nearly 70% in 1998 down to just under 35% as recorded in year to date seizures made in the first six months of 2001.

Table 7. Average yearly purity level of heroin seizures in Victoria (Jan 1998 to June 2001).

	1998	1999	2000	2001
	%	%	%	%
Heroin	68.5	60.3	47.3	34.4

Source: Victorian Forensic Science Centre, Chemical Drugs Intelligence Database

3.3.4 Patterns of heroin use

Prevalence of heroin use

Data on the prevalence of drug use in the community is typically derived from large-scale population surveys. The most recent household surveys from which estimates of heroin use within the community are available include: the 1998 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 1999), the 1995 Victorian Drug Household Survey (Drug Treatment Services Unit, 1996), and the 1999 Victorian School Students and Drug Use survey (Victorian Department of Human Services, in press-a). Readers are referred to these sources for details or to Fry & Miller (2001) for a summary.

Recent work by Hall and colleagues (2000) using convergence estimates based on indicator data suggests that the median number of dependent heroin users in Australia in 1998 was 74,000 (range 67,000 – 92,000). The population prevalence of dependent heroin use in Australia was reported at 6.9 per 1000 adults aged between 15-54 years. Further analyses show that the estimated number of 19,600 opioid dependent persons in Victoria accounts for 27% of the national estimate, compared to NSW where 35,400 represent 48% of the national estimate. Hall and colleagues (2000) conclude that there has been an overall increase in the number of dependent heroin users in Australia during the 1990's.

Other indicators

Information regarding the distribution of needles/syringes through the Victorian Needle and Syringe Program (NSP) provides a crude indicator of the level of injecting drug use within the state. These data are summarised in Table 8.

	Fixed outlets		Off-site			Total program			
Year	Dist.	Ret.	Ret. %	Dist.	Ret.	Ret. %	Dist.	Ret.	Ret. %
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
1999	4,036,784	1,859,417	46.1	1,237,445	721,664	58.3	5,274,229	2,581,081	48.9
2000	4,935,900	2,256,483	45.7	1,240,006	900,965	72.7	6,175,906	3,157,448	51.1

Table 8. Victorian Needle Syringe Program distribution and return rates 1995-2000.

Source: Victorian Needle & Syringe Program, Department of Human Services

2000 figures continue to show a steady increase in the number of needle/syringes distributed in the program throughout the 1990s, with a 15% increase in needle/syringe distribution from 1999 to 2000, compared to 24% increase over the previous year. Table 8 also demonstrates that return rates remained relatively stable overall and that off-site NSPs appear to have higher return rates than fixed outlets.

Additional NSP related indicators of injecting drug use are available from the Australian NSP Survey conducted annually through the National Centre in HIV Epidemiology and Clinical Research (2000). In addition to the NCHECR finger-prick blood samples and self-reported risk behaviour information (refer to section 4.3.4 of this report), the 2000 national survey of NSP clients collected self-report information regarding the last drug injected by clients. Eighty seven percent of the 214 NSP clients recruited from 3 NSP sites in Victoria reported that they had last injected heroin, while seven percent identified amphetamines. Only one person reported that they last injected methadone, and two people reported morphine.

Current patterns of heroin use

The majority (61%) of participants of the IDU survey reported that heroin was their main drug of choice. A total of 91% of the sample reported having injected the drug in the preceding six months, with respondents reporting using the drug on a median of 65 days in this period – representing a large decrease on the median of 176 days reported in 2000. A decline of this order is consistent with what one would expect in the context of a severe reduction to heroin supply in Melbourne.

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. Nine 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 each), three believed that regular heroin users would consume greater amounts, ranging from one quarter of a gram per day (\$100-\$150) to half a gram per day (\$150-\$200). Eight key informants identified that availability of heroin had impacted markedly on the amount people are using at the moment due to the shortage of high-quality heroin.

The demographic profile of heroin users described by the key informants (n=16) was similar to that of the IDU sample in regard to age (majority 20 to 25 years, ranging from 11-60 years of age), gender (predominantly male 65%), ethnicity (mostly from English speaking backgrounds), level of education (average Year 10 completed) and employment status (low

employment levels). With regard to gender, key informants tended to estimate a greater proportion of females using heroin than in previous IDRS studies and three key informants believed that there were approximately equal numbers of males and females actually using heroin.

Trends in heroin and other drug use

IDU survey participants were asked to provide additional reports on trends relating to the number and type of people using heroin and other illicit drugs, the frequency and quantity of use, or new types of drugs being used by friends. This section not only reports on trends in heroin use, but discusses trends of use for other drugs due to the fact that when IDUs answer questions surrounding drug trends they only perceive one illicit drug market. Of the 63% (n=94) of this group who were able to identify changes regarding the types/number of people using heroin, the major themes reported were: more younger heroin users (22%); a shift from heroin use to speed (19%); and generally less heroin use (17%) due to the drop in purity and the lack in availability.

Fifty-nine percent (n=89) reported that they had noticed recent changes in the frequency and/or quantity of heroin and other drug use. The major trend reported was that people were generally using less heroin due to its poor quality (29%), however many also noted that some people were actually purchasing and using more heroin because they were spending more money due to increased prices and lower purity of heroin.

Sixty percent (n=90) reported that there had been a recent change in the types of drugs being used by their friends. The majority (70%) reported that there had been a large shift to speed or methamphetamine use, while others (23%) also noted that many had commenced intravenous use of benzodiazepines. Other trends reported by smaller groups of respondents included: a shift to the use of ecstasy (n=11); morphine use (n=6); and use of available substitution therapies (n=5).

Key informants reported that there had been significant changes in heroin use over the past twelve months due to the chronic shortage of heroin, particularly in the early part of 2001. Major changes reported by key informants included: an overall decrease in the number of people using heroin (particularly older users), a major increase in the use of benzodiazepines and amphetamines by this group of people, the decline in the street based trading of heroin, and a significant increase in the level of violence in the drug market.

Key informant reports on changes in the demography of heroin users reflected localised trends. Most key informants (n=11) had observed few changes over the past six months, while two key informants reported that there had been minor changes in the ethnicity of users according to the location where the key informant worked. However, key informants portray very different trends in regard to the 12-month period, incorporating the heroin drought. All key informants reported significant decline in the overall number of heroin users due to the restricted availability of heroin. Interestingly, a number of key informants (n=5) reported that this decline occurred mostly within the older heroin using population and that younger users continue to commence heroin use. It was further stated that these older users had moved to pharmacological maintenance treatments (such as methadone and buprenorphine). Two key informants reported that this was because older users couldn't handle the heroin available during the drought so they mostly moved to methadone maintenance. As mentioned previously, for those people still using heroin, the major trend associated with these changes was that the incidence of polydrug use (particularly benzodiazepines and amphetamines) increased across the board. Five key informants noted a large increase in the number of users engaging in sex work to pay for their heroin. In addition, two key informants noted that the definition of sex work within this group of people was highly problematic because many younger vulnerable users traded sexual favours for drugs, protection, or even somewhere to sleep. This issue was also noted recently in a US study into HIV risk behaviours (Dennis, Wechsberg, McDermeit, Campbell, & Rasch, 2001).

Key informants (n=16) reported the heroin drought has led to significantly less street dealing and more home-based and mobile phone dealing. Two key informants reported that homebased markets tended to be favoured by older heroin users. In contrast to the 1998, 1999 and 2000 IDRS studies, key informants noted that there had been a significant decline in the purity of heroin over the past twelve months, with a slight increase over the past six months.

As with the previous 1998, 1999 and 2000 studies, street markets were reported to be operating in the Melbourne Central Business District (CBD), St Kilda, Fitzroy/Collingwood, Footscray, Springvale/Dandenong, Richmond, Frankston and Box Hill. One key informant noted that there was an emerging market in Kensington, which appeared to be mostly related to police activity in the neighbouring suburb of Footscray (Operation Reform). Other key informants (n=6) noted that although these sites were frequently displaced as a consequence of police activity, they would shift to adjoining streets or suburbs. Six key informants commented that heroin users were talking about a broader range of street-based locations from which they purchased heroin.

A further change in the street-based heroin markets remarked upon by key informants (n=3) was that the overt nature of heroin trading activities in some areas had become less obvious. Four key informants commented that the bulk of street-based heroin dealing was 'on-selling' by users to finance their own habits and that the distinction commonly drawn between heroin 'users' and 'dealers' is often false. Two police key informants noted that there has been a significant decrease in the amount of heroin involved in larger transactions. Fewer amounts but more deals. They reported that this was a response to judicial perception of amounts being important and it also allows for more money to be made from the same amount of heroin. According to key informants, the price and purity of heroin varies significantly both across and within different street-based heroin markets at any given time.

3.3.5 Summary of heroin trends

Table 9 contains a summary of trends in the price, purity, availability and the use of heroin as ascertained in the 2001 IDRS study conducted in Melbourne. Heroin supply experienced considerable fluctuations, including the "heroin drought". Heroin continues to be less available in Melbourne than in previous years and the level of purity also remains low in comparison to previous years. The beginning of this trend towards reduced purity levels was noted in the last IDRS (see Fry & Miller, 2001). The price of gram amounts has risen to \$500 in 2001, while the reported average 'cap' price of \$50 became the minimum size deal available and these deals were smaller and less pure than in previous IDRS studies.

Price (mode)	
Cap	• \$ 50 (reduced size and purity, minimum size deal)
Gram	• \$ 500 (increased)
Availability	• large decrease between November 2000 and March 2001
	• some supply restored, but at much reduced levels
Purity	• 13%-70%
	• fluctuated significantly
Use	• Mostly rock form (60%)
	Decrease in overall numbers
	• Decreasing frequency & quantity of use
	• Decrease in street-markets
	Increase in mobile dealing
	• Increase in poly-drug use, particularly amphetamines and
	benzodiazepines

Table 9. Summary of heroin price, availability, purity and use trends in Melbourne 2001.

Since 1997 the IDRS study has provided evidence of the continuing expansion of street-based heroin markets in Victoria. However, this most recent IDRS has documented a significant reduction in heroin supply and a corresponding rise in price and decrease in purity.

The available evidence suggests that the use of heroin continues to occur within a broad spectrum of Victorians, however due to the heroin drought many heroin users have moved to substitute heroin with other drugs. More broadly there has been a shift to mobile dealers and can move away from the street markets seen over previous IDRS studies. This change in the drug market would appear to be a combination of factors including: law enforcement initiatives initially and a change in economies of scale for heroin dealers in the light of a severe supply shortage (i.e. reducing the number of levels involved in the supply of heroin).

3.4 Amphetamine and methamphetamine use in Melbourne

Sixty four percent of IDU survey respondents were able to comment confidently on the price, purity and availability of amphetamines. Four key informants were available to comment on amphetamine users as well as one key informant from the Victoria Police Drug Squad. Where appropriate, reports on amphetamine have been supplemented by reports from key informants.¹ Forty nine percent of IDU survey respondents were able to comment confidently on the price, purity and availability of methamphetamines.

3.4.1 Price

The median price reported by individuals who participated in the IDU survey was \$200 per gram (n=59) and \$1075 per ounce (n=4), with most IDU (60%) reporting that the price had been stable in the preceding six months. A further 16% indicated that amphetamine prices had decreased in this time, while 8% reported an increase. Reported amphetamine prices were highly variable, ranging between \$40 to \$600 for gram amounts, and \$175 to \$3500 for ounce amounts (n=4).

Additional reports (n=31) were received which indicated that 0.1 gram amounts or 'points' cost \$50 at present. Victorian IDU participants were not able to report on the price of 1/8 grams of amphetamines, however highly variable reports were received on the last purchase prices of quarter grams (median \$140, range \$50-\$900, n=4), half grams (median \$120, range \$50 - \$250, n=30), grams (median \$200, range \$40 - \$600, n=40), and 'eightballs' (median \$330, range \$150 - \$650, n=6).

Amphetamine prices reported by key informants were for a cap (range \$40-\$50) and a gram (range \$200-\$ 250). Three key informants reported that amphetamines were also being sold in a purer form called 'points', where deal sizes were much smaller. Key informants reported that the price of amphetamines had shown a significant decrease during the past twelve

¹ In the past, the IDRS has used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. Throughout the 1980s, the form of illicit amphetamine most available in Australia was amphetamine sulfate (Chesher, 1993). Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine (rather than amphetamine) steadily increased until methamphetamine clearly dominated the market. In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs, known by terms such as 'ice', 'shabu', 'base' and 'crystal meth', are also methamphetamine. However, IDUs still answer questions regarding amphetamines as well as methamphetamines. Therefore, both amphetamine and methamphetamine will be used in this IDRS to refer to the drugs available in this class.

months and had stabilised over the last six months. All key informants identified this price change has been related to the heroin shortage.

Methamphetamine prices reported by IDUs were very similar to amphetamine prices, reinforcing the possibility that they are in fact talking about the same substances. Fifty four (36%) people were able to comment on the price of a 'point' (median \$50, range 40-80). Twenty three respondents reported that a gram of ice cost a median of \$220 (range 6-400) and 17 respondents reported that the median price they last paid for a gram of ice was \$240. Price information obtained from IDU survey respondents was consistent with Victorian methamphetamine price data available from ABCI sources for 2000/2001 (Australian Bureau of Criminal Intelligence, in press). The single methamphetamine key informant reported that methamphetamines currently cost \$300 per gram, \$180 per half gram and \$40 per cap. It was reported that this price had been stable over the past twelve months.

Whilst the findings reported in Table 10 appear to describe a large increase in the price of amphetamines, what these findings are actually reporting use the change in drug type being used and that methamphetamines are sold in much smaller quantities than traditional amphetamines.

Table 10. Modal prices of amphetamines in Melbourne reported by IDU survey sample 1997-2001.

	1997	1998	1999	2000	2001
Amphetamine					
\$/point	-	-	-	-	50
\$/gram	50	50	50	50	200
\$/ounce	-	820	750	800	1075 ^a

^a based on n=4 reports ranging from \$175 to \$3500

3.4.2 Availability

Most respondents who were able to report on amphetamine trends (n=96) reported that the drug was easy (43%) or very easy (49%) to obtain at present (July August 2001), and only 5% of people reported difficulty in obtaining the drug. Most of the respondents indicated that the availability had been either stable (50%) or easier (32%) 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 (33%), mobile dealer (26%), dealer's home (24%) or street dealer

(15%). Four key informants reported that amphetamines were very easy to obtain at the moment and that availability had become easier over the past six months.

Most respondents who were able to report on methamphetamine trends (n=74) reported that the drug was easy (45%) or very easy (27%) to obtain at present (July August 2001), and only 7% of people reported difficulty in obtaining the drug. Most of the respondents indicated that the availability had been either stable (37%) or easier (35%) in the preceding six months. For those who had used amphetamines in the previous six months, the drug was most commonly obtained from a mobile dealer (30%), dealer's home (25%), friend (22%) or street dealer (14%). Methamphetamine availability was reported by the key informant to be easy and to have become easier during the prior twelve months, particularly during the heroin shortage.

3.4.3 Form and purity

Fifteen per cent of the participants in the IDU survey reported swallowing amphetamines in the preceding six months and 75% reported having injected the drug in this period (compared to 50% in 2000 and 40% in 1999). Those who had used the drug reported a median of 25 days of use in the last six months (or four times a month). Participants used a variety of different amphetamine forms during the last six months, including powder (74%), liquid (7%), crystalline amphetamine (52%), paste (32%) and licit prescriptions (3%). However, the types used by participants most often during this period were powder form (54%), crystalline amphetamine (16%) and paste varieties (10%).

Increases from 2000 to 2001 were also noted in relation to lifetime amphetamine smoking (15% to 19%) and amphetamine smoking during last six months (4% to 7%). However, lifetime snorting (70% to 60%) and snorting during last six months (20% to 11%) had dropped between 2000 to 2001. Seventy-six percent of 2001 IDU participants reported having used amphetamines in the last six months compared to 53% of the 2000 sample and 40% of the 1999 sample. Fifty-two percent (n=78) of respondents reported the use of 'ice' or 'shabu' (smokeable crystals) in the preceding six months (compared to only 9% in 2000).

In contrast to the previous IDRS, twenty-two key informants reported the use of methamphetamines (methylamphetamine hydrochloride) such as 'ice' or 'shabu' (smokeable crystals) in the preceding six months. One key informant reported that ice and Shabu were in fact the same substance. No key informants reported on 'crystal meth', however, one key informant did report that the ice they were encountering was crystalline. The single

methamphetamine key informant reported that methamphetamine purity was currently medium and had increased in the previous six months.

The majority of IDU survey respondents regarded the current purity of amphetamines as medium (29%) to high (34%), while 15% reported that it was low or fluctuating (16%). Most of those able to comment believed that the purity had either been stable (23%) or increased (28%) over the past six months. Others reported that purity had decreased (19%) or fluctuated (21%) in this time. Most key informants (n=4) reported that amphetamine purity was currently high and that this purity had increased during last six months. This represents a significant contrast to the previous IDRS where all key informants reported that amphetamine purity was consistently. Fifty three percent of IDU survey respondents regarded the current purity of methamphetamines as high to medium (19%) to while 19% reported that it was low or fluctuating (16%). Most of those able to comment believed that the purity had either been stable (26%) or increased (20%) over the past six months.

There were no Australian Federal Police (AFP) amphetamine seizures in Victoria tested for the July 2000 to June 2001 period.² Data available from the Australian Customs Service (ACS) show that during the period 1 July 2000 to 30 June 2001 there were 9 amphetamine and four methamphetamine seizures made by the Australian Customs in Victoria. Of the four methamphetamine seizures made (from a total of 15 Australia wide), three of these were reported to have the physical appearance of crystals and one of powder.³ The majority of Australian methamphetamine seizures made by the ACS during the 2000/2001 financial year were of the crystalline variety, representing 12 (80%) out of a total of 15 seizures and 82,103.6 grams (98%) out of a the 83,377.2 grams total.

Australian Bureau of Criminal Intelligence records of the purity of methamphetamine seizures made by the Australian Federal Police in Victoria show that the average purity of the small number of seizures tested (n=4 of 2gms) during July 2000-June 2001 was 24% (range 4% to 74%).

The mean purity of amphetamines/methamphetamines seized by law enforcement agencies in Victoria between the 1998 and 2001 financial years is shown in Figure 3. The mean purity of all seizures of amphetamine/methamphetamine analysed in Victoria during this 2000/01 was 21% (range less than 1 to 86%). As shown in Figure 3, the purity of

² Australian Bureau of Criminal Intelligence

³ Source: Australian Customs Service seizure records

amphetamine/methamphetamine type seizures fluctuated markedly, that showed a fairly consistent upward trend, which was noted in the 2000 IDRS.



Figure 3. Purity of amphetamine/methamphetamine seizures by Victorian law enforcement, Jan 98 – Jun 01 (Victoria Forensic Science Centre).

The mean purity of amphetamine/methamphetamine seized in Victoria during the period 1995/96 to 1999/00 is summarised in Table 11. This data suggests that overall the average level of purity of amphetamine/methamphetamine seized and tested in Victoria has been stable over the period from 1997/98 to 1998/99 and has continued to increased since 1999/00.

Table 11. Mean purity level of methamphetamine seizures in Victoria 95/96 to 00/01.

	1996/97	1997/98	1998/99	1999/00	2000/01
	%	%	%	%	%
Methamphetamine	5	11	11	15	21

Source: Australian Bureau of Criminal Intelligence and Victoria Forensic Science Centre.

3.4.4 Patterns of amphetamine and methamphetamine use

Prevalence of amphetamine and methamphetamine 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% 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 2% in each of the previous years of the 1995 Victorian Drug Household Survey in 1991, 1993 and 1995 (Drug Treatment Services Unit, 1996). The 2001 Victorian Drug Household Survey has been conducted and results should be available in 2002.

The reported prevalence of amphetamine use derived from the Victorian School Students & Drug use Survey showed that 4% to 7% of respondents reported lifetime use of amphetamines between years 7 to 12, with more males reporting use and a peak in years 10 and 11 (Victorian Department of Human Services, in press-c). The next Victorian School Students and Drug Use Survey is due to be conducted in 2002.

Current patterns of amphetamine and methamphetamine use / trends in use

The majority (94%) of IDU survey respondents reported lifetime use of amphetamines (compared to 90% in 2000), while 16% nominated the drug as their drug of choice (compared to 5% of the 2000 sample). Those who had used the drug in the preceding six months reported a median of 25 days of use in this period (compared to six in 2000).

Key informants in this survey overwhelmingly identified an increase in amphetamine use. Most of them attributed this increase to the decreased availability of heroin. Key informants reported that the incidence and prevalence of polydrug use incorporating amphetamines has increased markedly and that these polydrug users also use other drugs such as benzodiazepines, ecstasy and cannabis. The In contrast to the findings of previous IDRS studies, some key informants (n=2) reported that amphetamine use was a regular, daily occurrence, whereas in the past amphetamine use was characterised as sporadic and binge-like in nature (Fry & Miller, 2001). Key informants identified that, in contrast to previous years and due to the heroin drought, there has been a consolidation of drug dealing with more heroin dealers now supplying amphetamines and methamphetamines than previously. Key informants reported that dealers were still likely to be users themselves.

The majority (52%) of IDU survey respondents reported using methamphetamines in the past six months. Key informants reported that methamphetamine use increased markedly during the height of heroin drought and most reported that is that declined somewhat to current levels.

3.4.5 Summary of amphetamine and methamphetamine trends

Trends in amphetamine price, availability, purity and use are summarised in Table 12. whilst the reported price, purity and availability of amphetamines remained stable across the first four years of the Victorian IDRS, there have been a number of emerging trends noted. Findings from the 2001 IDRS study suggested that the prevalence of amphetamine and methamphetamine use among injecting drug users in Melbourne has increased markedly, and that whilst these drugs are predominantly sourced through social networks and home-based dealers, street dealing is on the increase. It is apparent from IDU reports that the purity of methamphetamines has increased and that it is now easier to obtain. A significant number of respondents indicated that they had purchased pure 0.1gm amounts ('points') of amphetamines (costing \$50) and pure gram amounts (costing \$220) during the first six months of 2001, confirming trends identified in the previous IDRS, methylamphetamine hydrochloride ('ice', 'shabu') those emerge within the injecting drug scene in Melbourne. Further in-depth investigation of this trend is warranted.

Table 12. Summary of amphetamine and methamphetamine price, availability, purity and use trends in Melbourne 2000.

Price (mode)	
Amphetamines	• \$200 (stable)
Gram	• \$1075 (stable)
Ounce	
Methamphetamines	
Point	• \$50 (stable)
Gram	• \$220 (stable)
Availability	• easy-very easy (92%)
	• mostly home-based dealers, increasing street market
	• Significant rise in methamphetamine availability
Purity	• 21% (slight increase)
-	• 53% of IDUs record high methamphetamine purity
Use	Level of use has increased
	• Large shift to methamphetamine ('ice') use
	• More crystalline amphetamines and paste
	• Drug of choice for more primary heroin users
	• Increase in injecting of amphetamines
	• Increase in street and mobile dealing
	Much easier to obtain
	Price has remained stable
	• Quantities sold have changed ('points')

3.5 Cocaine use in Melbourne

Eighteen percent of IDU survey respondents (n=27) were able to comment confidently on the price, purity and availability of cocaine. This is in contrast to previous IDRS where only 6% (n=9) survey respondents were able to comment on cocaine trends. Two key informants reported on cocaine use exclusively and another three key informants were able to confidently report on trends in cocaine availability, price, purity and patterns of use.

3.5.1 Price

The median price reported by participants (n=20) for a gram of cocaine was \$250 (range \$200 - \$1000), while the median price reported for a 'cap' of cocaine was \$50 (n=5, range \$50-\$200). The median price reported by five participants for the last cocaine cap purchased was \$100 (range \$50 - \$100), and the median price reported for the last gram of cocaine purchased by participants (n=15) was \$225 (range \$200 - \$500). Thirteen (48%) of the 27 participants who were knowledgeable about cocaine reported that prices had remained stable in the past six months. Fewer respondents reported that cocaine prices had increased (n=6) or decreased (n=1) in this time. Key informants reported that the price of cocaine varied between \$250 and \$400 per gram and \$6000 per ounce. It was reported that this price had remained stable over the past twelve months. Eight key informants reported that cocaine remained too expensive for the IDUs they were in contact with. Table 13 summarises the modal price of cocaine in Melbourne reported by the injecting drug users who participated in the 1997, 1998, 1999, 2000 and 2001 IDRS studies. These data suggest that there has been some fluctuation in the price of cocaine in Melbourne, however it is not possible to identify clear trends due to the consistently small number of price reports obtained in each of the IDU surveys during this time period.

Table 13. M	odal prices o	f cocaine in Melbourne	reported by IDU surve	y respondents 1997-2000
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	1997	1998	1999	2000	2001
Cocaine \$/cap \$/gram	300	200	65 ^a 250	80 ^b 250	50° 200

^a n=1

^b n=3 (range \$50-\$250)

^c n=5 (range \$50-200)

3.5.2 Availability

The majority of the respondents who were able to comment on the availability of cocaine (n=27) reported that it was easy to very easy (56%, n=15) to obtain, and that this had remained stable (56%) over the past six months. Nine individuals reported that cocaine was difficult to obtain at present. For those who had used cocaine in the previous six months, the drug was most commonly obtained from mobile dealers (n=8), friends (n=7), dealer's home (n=6) or street dealers (n=4). As with previous IDRS studies key informants reported that although in general cocaine was difficult to obtain, it was relatively easy for those who established and maintained appropriate contacts. It was reported that cocaine was fluctuated over the past twelve months. One key informant reported that cocaine was becoming increasingly available in the club scene.

3.5.3 Form and purity

Thirty one percent (n=46) of those who participated in the IDU survey reported having used cocaine in powder form in the past six months (compared to 14% in 2000), and 11 respondents (7%) reported using "crack" (a smokeable form of cocaine). The principal route of administration reported for recent cocaine use (last six months) was injecting (20%, n=30), whereas in the 2000 IDRS study it was reported as snorting (8%). More IDU survey participants reported recent cocaine injection in 2001 (20%, n=30) compared to 6% (n=9) in 2000 and 3% (n=3) of 1999 participants. Further investigation of this apparent trend is warranted. Reported lifetime cocaine use was higher in 2001 (64%) compared to 2000 (51%) and 1999 (46%), as was lifetime injection of cocaine (46% compared to 36% and 29% respectively). Reported frequency of use was very low for this time period (median 3 days), suggesting non-dependent, sporadic use patterns.

Reports obtained on cocaine purity (from the 27 respondents who were knowledgeable) were variable. Seven individuals indicated that cocaine purity was 'high' at present, while nine reported it as 'medium' and seven 'low'. Eight out of the 27 participants (30%) reporting on cocaine trends reported that the levels of cocaine purity had been stable during the last six months, while others reported that it had decreased (n=6), fluctuated (n=3) or increased (n=3) during this period. The two key informants reported that cocaine purity was medium and had remained stable over the past six months. A total of 21 AFP cocaine seizures in Victoria were tested during the October-December 2000 quarter. The average purity recorded for these seizures was 65% (range 44% to 69%).

The mean purity levels of cocaine seizures analysed by law enforcement agencies in Victoria between January 1998 and June 2001 are shown in Figure 4. It can be seen that purity levels of cocaine seizures have fluctuated substantially throughout this period and that there can be substantial differences between the purity levels of large (>1gm) and small (<1gm) amounts reported for seizures tested.



Figure 4. Purity of cocaine seizures by Victorian law enforcement in each quarter of 1998-2001 (Victoria Forensic Science Centre).

The mean purity of all seizures analysed (n=103) during this period was 40% (range <1 to 86%). The purity levels of cocaine seized in Victoria during the period 1995/96-2000/01 are summarised in Table 14. 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 2000/01.

Table 14. Mean purity level of cocaine seizures in Victoria for 95/96 to 00/01.

	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01
	%	%	%	%	%	%
Cocaine	43 (n=3 cases only)	37	54	49	53	40

Source: Australian Bureau of Criminal Intelligence and Victoria Forensic Science Centre.

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 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). The 2001 Victorian Drug Household Survey has been conducted and results should be available in 2002. This is somewhat higher than the estimate of 0.6% obtained in the 1995 Victorian Drug Household Survey (Drug Treatment Services Unit, 1996). The Victorian School Students & Drug Use Survey showed similarly low reported lifetime prevalence of cocaine use, ranging from between 2% to 4.5% of participants in years 7 to 12 (Victorian Department of Human Services, in press-b). The next Victorian School Students and Drug Use Survey is due to be conducted in 2002.

Current patterns of cocaine use / trends in cocaine use

Although more than half of the respondents in the IDU survey (64%) reported lifetime use of cocaine, only three of these people identified the drug as their main drug of choice. The majority of key informants indicated that cocaine use was not prevalent within their respective client groups. Over one quarter (28%) of IDUs surveyed reported having used cocaine in the previous six months and one fifth reported having injected the drug. Both these findings are higher than previous IDRS studies. However, consistent with the findings from previous Melbourne IDRS studies, cocaine was typically characterised as desirable but too expensive for the majority of primary heroin users in Melbourne. Whilst the majority of key informants still indicated that cocaine use was not prevalent within their respective client groups, some key informants reported that cocaine use had increased particularly within certain groups of people. Thus, whilst there is an apparent increase in the level of use of cocaine reported by IDUs some of the responses appear to be incongruous. This may be partially be explained by some confusion amongst street level IDUs surrounding what drug they are using. As seen in the previous drug category, it is common for respondents to incorrectly identify methamphetamines as amphetamines. It is possible that at least part of the increase in reported cocaine use in this survey may be explained by this phenomenon and the authors emphasise the need for further in-depth research into cocaine use in Victoria.

One key informant reported an increase in the injecting of cocaine and that the new cocaine users were former heroin users that had moved to cocaine due to the heroin drought. It was further reported by the number of key informants (n=3) that because of increase in price of heroin, cocaine has now become economically viable as an alternative. However, as with previous studies, the 2001 Melbourne arm of the IDRS study was able to access few key informants who could comment on cocaine, which may suggest that the drug is still not readily available within IDU networks in Melbourne, but that this trend is changing.

Whilst not definitive, the increasing trend in cocaine use that has been demonstrated in the current study and the observed prevalence of use among this group in Sydney (McKetin et al., 2000) and the associated severity of health problems (Malcolm, Dwyer, Armstrong, Miles, & van Beek, 2000) confirm the value of the Victorian Department of Human Services funded development of cocaine preparedness training programs for alcohol and drug workers (Clark & Roeg, 2000). The recent study by van Beek, Dwyer & Malcolm (2001) details many of the harms associated cocaine use. These include: overdose, dependence syndrome, paranoia, harms associated with high frequency injecting, increased risky behaviour, and cocaine related psychotic disorder. It is envisaged that continued conduct of the IDRS study will serve as a crucial early warning indicator of cocaine use amongst IDU's in Melbourne.

3.5.5 Summary of cocaine trends

Trends in cocaine price, availability, purity and use are summarised in Table 15. In general, the evidence obtained suggests that cocaine use remains infrequent amongst IDU's in Melbourne. This appears to be mostly due to high prices and the lack of availability in street-based drug markets, as well as the ready availability of good quality methamphetamines. The trends noted in this study remained unclear, particularly in relation to the characteristics of these new cocaine users, but these changes appear to be opportunistic use brought on by the shortage in heroin supply. What is clear is that cocaine use in Melbourne is changing and that requires timely further research.

Price (mode)	
Cap	• \$50 (range \$50-200) (stable)
Gram	• \$225 (range \$200-500) (stable)
Availability	• easy to very easy (56%)
	• stable (56%)
Purity	• 40% (fluctuating)
	• Medium to high purity (59%),
	• stable (30%)
Use	• Increased levels of use, but still low
	overall (28%)
	• Increased levels of injecting (28%)
	• Remains desirable but too expensive for
	most IDUs
	• Appears to have increased only in some
	populations
	• Trends are not clear and require further
	research
	• No evidence of street-based dealing

Table 15. Summary of cocaine price, availability, purity and use trends in Melbourne 2001.

3.6 Cannabis use in Melbourne

Cannabis was the second most commonly used illicit drug by IDU survey respondents (lifetime use 97%), with 88% of respondents having used cannabis during the previous six months. The majority (77%) were able to report on aspects of price, potency and availability. Twenty-one key informants reported some level of cannabis use within their client groups, and five key informants were able to report on cannabis trends. Two key informants reported exclusively on cannabis.

3.6.1 Price

The median price reported by IDU survey participants for an ounce of cannabis was \$250, and \$20 for a gram. Price reports for cannabis ounces ranged between \$150 and \$500 (n=55), however most prices reported were between \$250 to \$350 (n=37). A significant number of price reports were received for other amounts of cannabis including: quarter ounces (Mode \$80, range \$50-\$100, n=57) and half ounces (Mode \$150, range \$120-\$180, n=15). Reports were also received for hash amounts including a gram (\$25, range \$20-\$60, n=10) and cap of hash oil (\$50, range \$30-\$50, n=4). Key informants reported \$25-50 for a gram and \$250-400 for an ounce of cannabis. The majority of IDU and key informants reported that the price had not changed in the last six months. Most respondents reported that prices had fallen and 7% that they had fluctuated during this time.

The observed price ranges reported by participants for various amounts of cannabis were uniformly small, indicating the existence of an entrenched and stable cannabis market place. While average prices reported by IDU survey respondents were typically lower than Victorian cannabis price data available from ABCI sources for 2000/2001, the range of prices reported were consistent (Australian Bureau of Criminal Intelligence, in press).

Table 16 summarises the modal price of cannabis in Melbourne reported by the IDU survey participants from 1997-2001 IDRS studies. This shows that the price per gram has been relatively stable over this period while the price per ounce trend is that of continued reduction.

	1997	1998	1999	2000	2001
Cannabis					
\$/gram	20-25	20-25	20	20	20
\$/ounce	350	320	300	280	250

Table 16. Modal prices of cannabis in Melbourne reported by IDU survey respondents 1997-2001.

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 (97%), and that the availability of cannabis had remained stable in the preceding six months (80%) or had been easier (10%). This group commonly obtained cannabis from a friend (36%) or dealers' home (22%). Small numbers of people reported that they grew their own supply (n=4), obtained cannabis from friends free of charge (n=11), or had purchased from a street dealer (n=8). Key informant reports indicated that cannabis was very easy to obtain (n=7), that for the most part availability had remained stable in the last six months (n=7) and that cannabis was primarily obtained through private social/drug networks.

3.6.3 Form and potency

Participants had used a variety of different forms of cannabis during the six months prior to interview, including: hydroponically grown cannabis (82%); outdoor grown cannabis (70%); hashish (31%) and hashish oil (11%). The types used most commonly were hydroponic (70%) and outdoor (14%). Similarly, key informant reports suggested that the majority of cannabis users used marijuana head or leaf and that this was either grown outdoors or hydroponically. Key informants from the Victoria Police Drug Squad reported that there had been some heroin dealers moving to cultivating cannabis because of the heroin shortage. All key informants reported that the preferred method of cannabis use was smoking through "bongs" (i.e. water pipes) rather than "joints" (i.e. self-rolled cannabis cigarettes).

The potency of cannabis was generally rated as medium (22%, n=25) to high (69%, n=69) by the IDU sample, with most respondents stating that the potency had remained stable (71%) or had been increasing (13%) over the previous six months. Thirteen percent of respondents reported that cannabis potency had fluctuated during this time. Most key informants also reported that cannabis potency was high and that there were no changes in potency over the preceding six-month period.

Whilst current legislation in Victoria requires that cannabis be botanically identified, purity determination for tetrahydrocannabinol (THC) is not a legislative requirement. However, the Victoria Forensic Science Centre commenced a research project in 2000, which includes the determination of THC potency from cannabis samples collected from drug seizures throughout Victoria. To date, 273 samples have been collected and the THC potency determined. The samples have been divided into categories determined by the knowledge of the cultivation technique applied: hydroponic (n=92), soil (n=39) and unknown cultivation technique (n=142).

Figure 5. shows the THC purity for different cultivation types seized by Victoria Police. The average THC purity for all cultivation types was found to be 11.9% (range 1.9% THC to 22.9% THC). Hydroponically grown samples were found to have an average THC purity of 12.0% (range 3.9% THC to 22.4% THC), whilst soil grown samples were found to have and average THC purity of 9.6% (range 3.5% THC to 14.4% THC). Samples with an unknown cultivation type obtained an average THC purity of 12.0% (range 1.9% THC).



Figure 5. THC purity of different cultivation types for cannabis seizures in Victoria, 2000- Jan 2002 (n=273) (Victoria Forensic Science Centre).

In addition, Hall and Swift (2000) have presented evidence to suggest that claims of a large increase in THC (tetrahydrocannabinol) potency of cannabis may be refuted. They suggest that the greater prevalence in use of more potent forms of cannabis (e.g. heads), and earlier initiation of cannabis use may better explain the reportedly higher rates of cannabis-related morbidity among young adults and adolescents.

3.6.4 Patterns of cannabis use

Prevalence of cannabis use

A significant minority of the Victorian community report personal cannabis use. The prevalence of recent cannabis use (last 12 months) within the general community of Victoria appears to have changed little within the period 1991 (10% reported by the National Drug Household Survey) to 1995 (11% reported by the Victorian Drug Household Survey). However, the results of the 1998 survey show an apparent increase in the use of the drug (17.8%), and a similar increase is evident in the prevalence of reported lifetime cannabis use from 1991 (29%) to 1998 (35.3%). Recent analyses of data from the Australian School Students' Alcohol and Drugs Survey (Lynskey, White, Hill, Letcher, & Hall, 1999) suggest that there has been a general increase in the prevalence of cannabis use among Australian youth since the early 1990s.

Similarly, the 1999 Victorian Secondary School Students and Drug Use survey showed that reported lifetime cannabis use ranged from 5% (year 7) to 32% (year 12) amongst respondents (Victorian Department of Human Services, in press-b). As previously stated, The next Victorian School Students and Drug Use Survey is due to be conducted in 2002.

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 Unit, 1996).

Current patterns of cannabis use / trends in cannabis use

IDU survey respondents were very frequent cannabis users, with a median of 160 days use during the last six months (6.7 times per week). The twenty-one key informants that reported some level of cannabis use within their client groups believed that an average of 77% of their clients used cannabis. The cannabis users that key informants reported on were daily users although sporadic binge use was reported to be common among younger users, probably due to limited finances. A number of key informants (n=10) reported that cannabis was being used

as a substitute for heroin during the heroin drought and its overall use had increased. The cannabis users with whom key informants were in contact were slightly more likely to be male (57.5%), have an average age of between 17-22, an average education level of Year 9 and were predominantly unemployed.

Cannabis users were commonly characterized by key informants as poly-drug users who would often also use benzodiazepines, alcohol and occasionally heroin, amphetamines and hallucinogens. Both key informants (n=2) also reported occasional heroin use among the young cannabis users with who they were in contact. Both key informants were in contact with cannabis users as young as 14 years of age.

3.6.5 Summary of cannabis trends

A summary of cannabis trends is shown in Table 17. The Melbourne cannabis market and patterns of use continue to be relatively stable, showing a small increase in the number of people reporting use, which was attributed to the shortage of heroin supply. There was a slight reduction in ounce prices from 2000. Reported cannabis availability, perceived potency and use frequency and quantity have remained unchanged between 1997 and 2001. Cannabis appears to be the most widely used illicit drug within Victoria, and is commonly used concurrently with a range of other illicit drugs by injecting drug users.

Price (mode) Gram Ounce	 \$20 (stable) \$250 (decreasing)
Availability	• Readily available in last 6 months
Potency ^a	Continuing between medium - high
Use	 Level of use increased Used as a substitute for heroin during supply shortage Most widely used illicit drug Perceived as more socially acceptable Accessed mostly through social networks or home-grown Cannabis commonly used concurrently with other drugs

Table 17. Summary of cannabis price, availability, purity and use trends in Melbourne 2000.

^aBased on IDU and key informant estimates.

3.7 Other drug use in Melbourne

3.7.1 Other opiates

As with the 2000 IDRS, half (50%) of the IDU's interviewed reported the use of other opiates in the preceding six months. Due to be consistent increase in morphine use being reported over the past IDRS studies, the current study employed separate questions for morphine and other opiates for the first time⁴. Sixteen percent of the total sample (32% of those reporting other opiates use, n= 48) reported morphine use and 24 used were *Panadeine forte*® (47%) (24% of total sample) and morphine (32%) (16% of total sample). The reported recent injection of opiates other than heroin increased in 2001 (40% in the past six months) compared to 24% in 2000 and 16% in 1999. Reported lifetime use via oral routes of administration of other opiates was 47%, and recent (last 6 months) oral use was 27%. Reported lifetime use via oral routes of administration of morphine was 25%, and recent (last 6 months) oral use was 9%. Overall however, frequency of use during the last six months was low for both other opiates and morphine (14 and 5 days over the past six months respectively).

Seventy one percent of the 2001 sample reported lifetime use of methadone (compared to 66% of the 2000 sample). Similarly, the number of IDU's reporting lifetime injection of methadone increased from 17% in 2000 (n=26) to 21% in 2001 (n=32). While the apparent increase in reported lifetime injection of methadone is concerning, it is difficult to interpret these findings without more information regarding the circumstances of this use (e.g. state of residence, source of methadone, preparation methods, concurrent treatment). It is worth noting that only 6% of the 2001 IDU sample reported injection of methadone during the last six months prior to interview (compared to 3% of the 2000 sample and 1% in 1999). Whilst this is consistent with recent reports of low levels of methadone injection amongst Melbourne methadone clients, Lintzeris et al (1999), it would appear to be a consistently increasing trend.

Methadone syrup was used by 43% of respondents, and Physeptone tablets by 5% of respondents during the previous six months. For the 41 people currently engaged in methadone maintenance treatment, the median number of days they had used methadone in the last six months was 180 (i.e. every day).

⁴ this means that some comparisons with previous IDRS are not possible.

Nineteen key informants reported that their client base used morphine and other opiates such as *MS contin*®. Key informants reported that between 5% and 70% of their client base regularly used morphine, however the most common estimate of morphine use (n=11) was 10-15%. Four key informants reported that morphine availability had reduced recently and two key informants reported that the administration of morphine is a cause for concern because users do not know how to filter properly and do not have access to proper filtering systems. Key informants reported that each tablet sells for around \$50 and that the use of morphine and other opiates had increased during the heroin drought.

3.7.2 Benzodiazepines

Most participants (78%) had used benzodiazepines in the last six months, with 40% reporting intra-venous use (compared to 36% in 2000 and 19% in 1999, 55% ever), and 71% oral routes of administration during this period. Of the group who had used benzodiazepines, the types most commonly used in the preceding six months were temazepam (45%), diazepam (38%), and oxazepam (9%) (e.g. *Serepax*®). Figure 6 reports benzodiazepine injection trends between 1997 and 2001. It can be seen that the percentage of IDUs reporting benzodiazepine injection has steadily risen. The types of benzodiazepines most commonly injected by IDU survey respondents included temazepam (41%), diazepam (22%) and oxazepam (9%).

The 2001 IDRS has seen key informants (n=24) reporting a major increase in the injecting of benzodiazepines. Whilst increases were reported in the 1999 and 2000 IDRS studies, key informants reported that the heroin drought had led to the major increase in the injection of benzodiazepines among heroin users, in particular *Normison*® (temazepam). Key informants (n=10) expressed concern at the serious nature of problems associated with injecting *Normison*®, such as vein damage and increased likelihood of overdose. Six key informants had also noted that many heroin dealers were now exchanging *Normison*® for heroin. Four key informants reported that around 50% of benzodiazepines use was now injecting and one key informant reported that 20 Normison tablets were being sold on the street for \$300.

Informants reported that benzodiazepines were used as a substitute when heroin was unavailable, for the relief of substance related symptoms (e.g. sleep disorders, withdrawal, anxiety), or to enhance or to supplement/heighten the effects of heroin or other drugs (when unable to purchase their preferred amount). This was particularly identified by key informants (n=6) as being the case for temazepam (*Normison*®). One key informant noted that there was an increase in Southeast Asians injecting into the groin, which they believed to be a cultural phenomenon, possibly associated with the stigma attached to injecting drug use

in that community. Key informants (n=6) suggested that benzodiazepines were accessed through "doctor-shopping" and through black market street-level selling.



Figure 6. Benzodiazepine injection 1997 to 2001

3.7.3 Anti-depressants

Over a quarter (28%) of IDU's reported that they had used anti-depressants during the preceding six months. Slightly less than half (49%) reported lifetime use. The median number of days of use for this group in the previous six months was 165 (compared to 120 in 2000). While a wide variety of different types of anti-depressants were reported, the serotonin specific re-uptake inhibitor (SSRIs) varieties were used most by this group (62%), and included: setraline (*Zoloft*®), paroxetine (*Aropax*®) and flouxetine (*Prozac*®, *Lovan*®).⁵ A further twenty-six percent of people who had used anti-depressants during the previous six months had been using tricyclic antidepressant (TCA) drugs including: doxepin (*Deptran*®), dothiepin (*Prothiaden*®), and amitriptyline (*Typtanol*®).

⁵ Contrary to these figures, a recent study by McManus and colleagues (2000) has reported an increase in SSRI prescriptions and a 25% drop in TCA's in Australia.

Fifteen key informants reported the use of antidepressants among the populations with who they were in contact, in contrast to two key informants in 2000 IDRS study. This would appear to be a notable increase and key informants (n=4) report that antidepressant use increased markedly during the heroin drought.

3.7.4 Ecstasy

A total of 39% of respondents reported ecstasy use within the last six months, and 65% had used it at least once in their lifetime (compared to 51% in 2000 and 40% in 1999). Thirty one percent of IDU's interviewed reported that they had injected ecstasy before (15% in 2000), and 21% had done so within the six months prior to interview (8% in 2000). The primary route of administration of ecstasy for this group during the last six months was oral (34%).

In contrast to the previous IDRS, key informants (n=14) reported that ecstasy use had become far more wide spread and some key informants (n=2) reported that they had observed a cross over between the traditionally separate drug markets of 'raves' and the street drug market. Whilst there have been increases noted, many (n=7) key informants did not perceive ecstasy use to be common among primary heroin users and attributed the increased levels of ecstasy use within this to the shortage of heroin. Nineteen key informants reported that a proportion of their client group had used ecstasy in the past six months. Four key informants reported exclusively on ecstasy use (two outreach workers, a user group representative, and one police officer). Ecstasy use was still perceived to be more prevalent among younger people who were involved in the dance party or "rave" scenes.

The ecstasy users reported on by key informants were primarily weekend users and other drug users used ecstasy when it was available and affordable, often as a substitute for heroin or amphetamines. It was reported that ecstasy users were more likely to be male (60%), with one key informant reporting an increase in the number of young women taking ecstasy. Key informants reported an age range of 12 to 30 years old with an average of 17, which appears to be lower than previous IDRS studies. Similarly, key informants reported an average education level of year 12, which was lower than previous IDRS findings. Key informants reported that whilst a higher proportion of ecstasy users were in full time work or study, these estimates were also lower than previous years. Whilst the four key informants noted that most ecstasy users experienced few problems associated with their drug use and did not really consider themselves as illicit drug users, two key informants reported that more clients were presenting with anxiety and panic attacks after long-term use (5-7 yrs). It was reported that the price of ecstasy had decreased, that it was easy to obtain and had become easier. Key

informants reported that one ecstasy tablet cost \$35-50 or \$300 for 10 tablets. It was also reported that the purity of ecstasy remained low, however the advent of testing kits (EZ-test) had improved knowledge of what drug was being purchased. Victoria Police key informants reported that ecstasy has become of greater interest since the previous IDRS and that greater resources are being allocated to its detection and seizure, particularly due to the heroin drought. Key informant reports on ecstasy prices (i.e.\$30-\$50 per tablet) were consistent with that available from ABCI sources for 2000/2001 (Australian Bureau of Criminal Intelligence, in press).

Australian Bureau of Criminal Intelligence records of the purity of ecstasy seizures made by the Australian Federal Police in Victoria show that the average purity of the seizures tested (n=8) during July 2000-June 2001 was 34% (range 11% to 49%).



Figure 7. Purity of ecstasy seizures by Victorian law enforcement in each quarter of 1998-2001 (Victoria Forensic Science Centre).

The average purity level of ecstasy seizures analysed by law enforcement agencies in Victoria during the 2000/01 financial year (n=168) was 31% (range 1.4% to 86.8%) which was similar to previous two years. The average purity level of ecstasy seizures analysed by law

enforcement agencies in Victoria during the 1999/00 financial year (n=85) was 33.8% (range 11.3% to 84.4%), and figures for 1998/99 were 28% (n=60) (range 2% to 84%).

3.7.5 Other drugs

Small numbers of respondents had used inhalants (8%) during the six months prior to survey, which represents a small increase over the previous year (5%). Twenty percent of respondents reported having used LSD/trips in the previous six months, while 13% reported having used hallucinogenic mushrooms within this period. Seventy one percent of the sample reported lifetime use of hallucinogens, and 11% had injected this drug type at some time in the past. Reported frequency of use was low at a median of once during the last six months.

In addition, one key informant reported that injecting Unison sleep gel was popular during the heroin drought and one ecstasy key informant also commented on the common use of Nitrous bulbs in the rave scene. Two key informants reported the use of Ketamine within the party drug scene and another two key informants reported the use of antipsychotics.

SPECIAL REPORT: Inhalants

The practice of inhaling vapours or fumes, sometimes called "chroming" is not strictly an illegal practice. During the course of key informant interviews, a number of interviewees (n=5) identified inhalants use as a problem that was of increasing concern. This was particularly the case for police informants. Twenty key informants reported that the drug users that they had contact with engaged in inhalants use. Key informant estimates ranged between five and 50% of contacts and nine key informants reported that inhalants use was increasing. Three key informants were able to comment specifically on inhalants use (one representative of Victoria police, one outreach worker, and one researcher). Thirty one percent of IDU respondents reported ever having used inhalants and eight percent report having used inhalants over the past 6 months.

Key informants reported that this group of drug users particularly unique because of their age. The three key informants reported and age range of 11-21 and an average age of 14. It was further reported that between 50% and 80% of inhalants users were male and that long-term problematic use is most often seen in younger men. However, it was also reported that there has been increased proportion of younger women using inhalants.

Key informants reported that the substances commonly used included: paint (most common), glue, butane/lighter fluid, and petrol. They reported that there were two major modes of administration of inhalants use: direct inhalation of the substance, and spraying the substance into a bag and inhaling the vapours/fumes from the bag. In the case of chroming, key informants reported that the second method is most preferable so that the psychoactive ingredients (usually the propellants of the spray can) can be inhaled without ingesting the active ingredients of the can. The use of spray cans is designed to access the propellant which includes butane.

One key informant reported that whilst adults see inhalants use as being stigmatised, youth may not see it that way. This was supported by the Victorian Department of Human Services school survey (Victorian Department of Human Services, in press-a) which found that 34% of year seven students reported having tried inhalant use. The key informant expanded by saying that inhalant use varies significantly across different locations and subcultures.

There are a number of significant side effects associated with inhalants use that were identified by the key informants. These included: overdose (usually involving concomitant use of inhalants and alcohol), mental health problems, and asphyxiation (usually from falling into the bag). The major harm associated with inhalants use his sudden death. However, it is not often identified in autopsy procedures and there is no code for death from inhalants. In addition to this, all inhalants tend to be different combinations of active ingredients and the major problem is that inhalant users go through a process of trial and error to find out which combination suits them best.

One key informant also noted that the greatest harm associated with inhalants use is adults' reaction to it. It was reported that adults don't understand using these substances as a drug and often find it frightening. However, this key informant reported that inhalant use has been described as a very enjoyable experience. Effects are instantaneous, of short duration, easily titrated, have similar effects to other central nervous system depressants, involve visual/aural distortions, and often involves fantasies.

The major issue identified with inhalants use by key informants was lack of reliable information and resources for people dealing with inhalants users. It was believed that this lack of clear and concise information can lead to many problems surrounding inhalants users and appropriate treatment of both key situations and longer-term issues associated with their drug use. There are currently no central resources to deal with inhalants in Victoria and there are very few treatments available worldwide and the knowledge surrounding inhalants is generally poor level.

3.7.5 Summary of other drug trends

The 2001 Melbourne IDRS study has yet again provided evidence of significant prescription drug use by injecting drug users (e.g. panadeine forte®, morphine, benzodiazepines and anti-depressants). There is also substantial evidence of misuse of these drug types.

Of particular concern is the continuing increase identified in the prevalence of benzodiazepine injection (mostly *Normison*® capsules) amongst injecting drug users, and reports of the existence of a street-based black-market for benzodiazepines. Similarly, the sustained increase in the illicit use of morphine also presents a major concern. Further research is planned to investigate this issue in greater detail.

4.1 IDU survey

4.1.1 Injection related health problems.

Injection related health problems reported by the participants in the IDU survey in the previous month are summarised in Table 18. Three quarters (75%) of respondents had experienced at least one type of these problems, with scarring/bruising (47%), and difficulty injecting (49%) being the most common problems reported. The median number of injection-related health problems was two.

Type of problem	%
Prominent scarring/bruising	47
Difficulty injecting	49
Dirty hit (made me feel sick)	17
Thrombosis	10
Overdose	7
Abscesses/infections from injecting	7

Table 18. Injection-related health problems reported by participants in the IDU survey (N=151).

4.1.2 Heroin-related overdose

Self-reported overdose experience data for the years 1997 to 2001 are summarised in Table 19. More than half (58%) of the 2001 respondents reported that they had experienced one or more heroin overdoses ever, 45% had been administered *Narcan*® (a fast-acting opioid antagonist given to reverse the effects of heroin in the case of an overdose), and most respondents (77%) had witnessed an overdose. The respondents who had previously experienced an overdose reported a median of sixteen months since they last overdosed, and a median of three overdoses in total. Those who had been administered *Narcan*® reported a median period of nine months since they were last administered the drug. Of those participants who had used heroin, fifteen percent had experienced an overdose at least once within the previous six months and 10% had received *Narcan*® in that time.
Table 19. Reported experience of heroin overdose for IDU survey respondents 1997 to 2001.

	1997	1998	1999	2000	2001
Heroin Overdose Experience					
Lifetime overdose	138 (56%)	148 (52%)	83 (54%)	83 (55%)	88 (58%)
Lifetime receipt of Narcan®	51 (37%)	99 (35%)	52 (34%)	64 (42%)	68 (45%)
Overdose last 6 mths	42 (17%)	54 (19%)	37 (24%)	40 (27%)	20 (13%)
Received Narcan® last 6 mths	25 (10%)	37 (13%)	25 (16%)	29 (20%)	19 (13%)
Have witnessed an overdose [*]	194 (76%)	229 (78%)	111 (72%)	128 (85%)	116 (77%)

^{*} Proportion of all respondents in 1997 (N=254), 1998 (N=293), 1999 (N=154), 2000 (N=152) and 2001 (N=151)

Table 19 shows that reported lifetime experience of overdose by IDU respondents remained relatively stable between 1997 and 2001. However, reported recent experience of overdose (within last six months) has decreased from 2000 (27%) to 2001 (13%), as has receipt of Narcan (20% in 2000 to 13% in 2001). Similarly, less IDU survey respondents in 2001 reported having ever witnessed another person's overdose compared to the previous Melbourne IDRS study.

Type of drug	% ¹
Heroin	40
Cannabis	56
Benzodiazepines	33
Methadone	20
Alcohol	29
Cocaine	1
Amphetamines	21
Opiates other than heroin	6

Table 20. Drugs used on day prior to interview (IDU survey, N=151).

¹ Respondents were permitted to report more than one drug type

IDU survey respondents were asked about their drug use on the preceding day. Their responses are summarised in Table 20. The median number of drugs used was two with the most common drugs used being cannabis (56%) and heroin (40%). Further analyses revealed that 25% of the IDU sample had used heroin in conjunction with benzodiazepines and/or alcohol on the previous day. Sixty-six percent of survey respondents had used two or more different drugs on the day before their interview.

Poly-drug use is major risk factor for overdose. In 2000, 83% of heroin-related deaths in Victoria (n=331), post-mortem toxicology analyses revealed that the individuals had also used drugs such as alcohol (32%) or benzodiazepines (55%) prior to their death (Gerostamoulos & Drummer, 2001).

4.1.3 Injection equipment sharing

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

A quarter of the respondents reported lending a used needle to someone else in the past month, and 15% reported borrowing and using someone else's used needle. With respect to borrowing another person's used needle, 22 of the 23 participants (96%) who reported doing this in the last month indicated that the borrowed needle had been used by only one other person (usually a sexual partner or close friend). For those people who had loaned their own used needles to other people during the last month (n=37), most of this group (54%) had done so only once. The 2001 findings suggest an decrease in the level of needle sharing among the individuals who participated in the IDU survey compared to that observed in the 2000 survey (see Table 21).

Table 21. Reported IDU sample used needle/syringe borrowing/lending 1997-2001.

Risk practice	1997	1998	1999	2000	2001
Borrowed a used N/S in past month	22	22	9	19	15
Lent a used N/S in past month	26	33	22	35	24

In comparison to the sharing of needle/syringes, respondents also reported generally higher rates of sharing of other types of injecting equipment. Slightly less than half (47%) reported using other injecting equipment after someone else in the past month, most commonly spoons (38%), filters (12%), tourniquets (12%) and water (17%). These findings are of concern as it is possible that HCV transmission may occur through sharing of equipment other than needle/syringes (Crofts, Jolley, Kaldor, Van Beck, & Wodak, 1997).

4.1.4 Criminal activity

Sixty percent of participants reported involvement in some type of criminal activity in the preceding month, and 60% reported that they had been arrested in the previous twelve months. Among those arrested in the previous twelve months (n=91), 39% of arrests were in relation to property crime, 9% were in relation to use or possession, 11% for dealing/trafficking and 8% related to violent crime. Twenty-six percent of this group reported multiple (two or more) types of charges (mostly combinations of property crime and use/possession charges).

As shown in Table 22, dealing (37%) and property crime (29%) were the most common crimes reported, with fewer respondents reporting involvement in violent crime (15%) or fraud (15%).

Type of Crime	%
Property crime	29
Dealing	37
Fraud	15
Violent crime	15
Any Crime	60

Table 22. Criminal activity reported by IDU during the last month (N=151).

4.1.5 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 (59%) believed that there had been an increase in police activity over this period (particularly focused upon Melbourne's major street-based drug markets), however significant numbers reported that this had been stable (19%) or that there had been less activity in this period (9%).

Forty three percent of respondents also reported that more of their friends had been arrested recently, while 54% indicated that things had been stable in this regard. Interestingly, most participants (70%) reported that police activity had had no effect on the difficulty of acquiring drugs recently, whereas 27% reported that it had.

4.1.6 Attributions around heroin drought

Eighty seven percent of IDU respondents reported that heroin was harder to get recently. Most participants reported that heroin had first started to become harder to obtain in December 2000 (26%) and January 2001 (32%). However, significant numbers reported also experiencing difficulties during November 2000 (12%) and February 2001 (13%). This suggests that the shortage of heroin supply was not uniform across different heroin markets, both in terms of location and different drug networks. At the time of interview (June – August) 77% off respondents indicated that the availability of heroin had not yet returned to normal, while 20% reported that it had. Reports varied as to the timing of the return of heroin availability with 8% (n=11) suggesting that it had returned in June 2001.

A recent study into the heroin drought by Miller, Dietze & Fry (2001) found that the most common reasons suggested by participants for the shortage of heroin supply were drug market manipulation (39%) and police activity (37%). It was also common for participants to list market manipulation and police activity as a combination of factors. Other attributions included the effect of natural disasters (such as 'drought's and floods, 4%), the Chinese new year (3%) and the value of the Australian dollar (3%).

4.2 Key informant survey

4.2.1 Heroin-related issues

Key informants reported on a number of heroin-related issues. They reported that rates of fatal and non-fatal heroin overdose had dropped markedly, mostly due to the heroin drought. The major trend identified by key informants in relation to heroin users has been the move to polydrug use (particularly benzodiazepines and amphetamines) and this pattern of use becoming entrenched.

Many key informants (n=16) also reported on the extent of venous damage among the people with whom they were in contact. This was attributed to increasing numbers of IDU injecting into inappropriate sites such as the neck or groin and the injection of prescription drug preparations (in particular oil-based temazepam) not intended for intravenous use, which was mostly attributed to the shortage of heroin. Whilst some key informants (n=2) commented that their client populations were knowledgeable about the health risks associated with injection of benzodiazepines, others (n=8) reported a lack of knowledge regarding safe injecting techniques among the people with whom they had the most contact. As has been the case in each of the previous five years of the Melbourne IDRS, the prevalence of hepatitis C virus (HCV) infection among injecting drug users was identified as a significant concern.

Whilst four key informants reported an improvement in needle risk-taking behaviour, three key informants identified the sharing of equipment with partners and needle re-use there as continuing trends. The majority of key informants indicated that sharing of needle/syringes occurred rarely (except in desperate circumstances) but that spoons, filters and water were more frequently shared. Three key informants reported that injecting episodes are much more bloody due to benzodiazepine injecting and the use of larger bore needles. One key informant also reported that some confusion around hepatitis C remained and many IDUs are sick of hearing about it and tend to tune out.

Five key informants reported that insecure accommodation and reduced access to accommodation was a major problem – an issue also raised in the 1999 and 2000 study. Three key informants reported that initial declines in health due to the shortage of heroin and subsequent withdrawal have now been alleviated. Inadequate accommodation was the most commonly cited contributors to poor general health.

The majority of key informants (n=11) reported that there were insufficient treatment places and options available for heroin users. In particular, informants noted that there was a lack of methadone treatment available due to the significantly increased demand following the heroin drought. One trend that key informants (n=8) reported as being important in regards to treatment seeking behaviour was that during the heroin drought it was predominantly older users that moved to methadone treatment. It was reported by key informants (n=6) that proportionately few users sought the detox/rehab treatment option, preferring to go onto maintenance programs such as methadone and particularly buprenorphine. Key informants (n=2) also reported that naltrexone treatment had declined in popularity. One key informant also reported that their waiting list has reduced from six weeks to 24 hours, because there has been a reduction in the number of people seeking detox. The key informant expanded on this reporting that the drought means that heroin users had moved to alternative drugs and that many people using alternative drugs do not perceive that they need to detox.

Overall, key informants reported that due to the heroin drought there had been a decrease in drug dealing and an increase in property crimes, fraud, and particularly violent crime. Six key informants reported that there had been a decrease in a number of heroin users dealing tend to key informants reported that it had been stable. Eight key informants reported that there has been an increase in fraud amongst heroin users, mostly through the crime of doctor shopping in order to obtain benzodiazepines or morphine. Nine key informants reported major increases in violent crime among their client populations, aimed at both other users as well as the wider community. The key informants identified this increase as being related to the increase in amphetamine use and increased levels of desperation due to the heroin shortage. Three key informants reported that the level of violent crime had doubled. One key informants reported that this level of background violence has led to workers being placed in greater risk.

Key informants reported that levels of police activity focused on heroin users had decreased significantly from the previous IDRS, mostly due to the heroin drought and that this trend had been stable over the past six months. Police activity was characterised as a combination of uniformed police presence on the streets and undercover operations. As with reports from previous IDRS studies, 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. Concomitantly, complaints about police harassment reported by key informants had decreased notably.

4.2.2 Amphetamine-related issues

Key informants reported that amphetamine use had increased markedly due to the heroin drought and that this trend of polydrug use has now become entrenched. In contrast to previous IDRS studies where amphetamine use was characterised as binge use, key informants report that amphetamine use is now characterised by regular use. Key informants reported that there were significant problems associated with this move towards more regular amphetamine use. These problems included: clients presenting with anxiety and panic attacks, violence, potential suicide, homelessness, and psychotic episodes. In particular, psychological and psychiatric well-being is significantly compromised. Overall, the key informants reports suggested an increasing shift towards amphetamine use carried with it significant problems, particularly higher levels of violence and psychotic/psychological disturbances.

4.2.3 Cannabis-related issues

Reports by key informants (n=2) who had contact with cannabis users within a treatment setting suggested that there was an increase in the number of cannabis users self presenting with more psychological disturbances. In particular, an increased incidence of paranoia and motivational problems. Some key informants reported that access to detox and rehabilitation services for cannabis users remains an important issue, as there are insufficient resources to deal with this problem. In addition, user perceptions that there are few problems associated with cannabis use tend to compound the trend that cannabis users who experience problems ultimately do not receive treatment. One key informant also identified high rates of pregnancy in the young female cannabis users as particularly problematic in the treatment setting.

4.3 Other indicators

There is a range of data sources that are useful secondary indicators of illicit drug use and related health and other harms. Data from select indicator sources are presented in this section, including: specialist drug treatment service utilisation; ambulance attendances at non-fatal heroin-related overdose episodes; heroin-related fatalities; BBV transmission; and drug-related arrests.⁶

4.3.1 Specialist drug treatment presentations

Alcohol and Drug Information System (ADIS)

In the 1999/2000 financial year, 25536 cases on the Alcohol and Drug Information System (ADIS) database represented clients receiving treatment episodes (n=42,037) from 88 Victorian Government funded specialist drug and alcohol agencies. Client numbers using other forms of treatment such as private practitioners or private clinics are not included in this database (Victorian Department of Human Services, 2001).⁷

ADIS data for the 1999/2000 financial year show that nearly a third of the Victorian clients presented with primarily alcohol related problems (31%, n=6764). More than a third of clients presented with primarily opioid/heroin related problems (36%, n=7846), 15% (n=3484) with primary cannabis problems, 3% (n=647) for tranquilliser and 3% (n=759) for amphetamines problems. A further six percent (n=1367) of clients for other drug problems (e.g. cocaine, ecstasy, hallucinogens, inhalants).

During the 1999/2000 financial year, the majority of clients (85%, n=20,029) presented for only one type of primary drug problem, with 8% presenting for two or more. The most common combination of primary drugs for those people presenting on different occasions for different drugs was opioids and cannabis (Victorian Department of Human Services, 2001).

Overall, 64% of ADIS clients recorded were male. Similarly, for most categories of main drug problem, the majority of clients were male ranging from 62% for amphetamines, 64% for opioids, 67% for alcohol, and 70% for cannabis problems. In contrast, during the 1999/2000

⁶ Readers are referred to the Victorian Drug Statistics Handbook (Victorian Department of Human Services, in press-a) for a comprehensive discussion of available sources of Victorian illicit drug indicator data.

⁷ For detailed ADIS findings readers are referred to 'Victorian Department of Human Services (2001). Alcohol and Drug Information System (Interim) Annual Report 1999/2000 – June 2001. Melbourne, Author.'

financial year there were more treatment episodes for women for tranquilisers (57%) and other drug presentations (54%).

Individuals with cannabis (Mean age = 25) or opioid problems (Mean age = 27) were generally younger than those with alcohol (Mean age = 35) or tranquiliser problems (mean age = 35). Further details from descriptive analyses undertaken across demographic variables for each main drug problem may be found in the ADIS 1999/2000 Annual Report (Victorian Department of Human Services, 2001).

Clients of Treatment Service Agencies (COTSA) Census

The 2001 COTSA census was conducted on 2 May 2001 across 507 agencies in all states and territories. Participating agencies reported that a total of 5304 clients were treated on census day. The 2001 COTSA census provides a picture of what has changed over the past 11 years (1990 – 2001) and also allows a national overview with an agency response rate of around 90%. However, because the COTSA census is a one-day census it only represents a sample of the population, unlike other indicators, such as the National Minimum Data Set. Furthermore, because the COTSA census is conducted sporadically it does not include clients who only received a methadone dose on census day and therefore under-represents treatment for opiate dependence. Similarly, because the COTSA census does not capture GP treatment it may also further under-represent treatment for drug-related issues.

The Victorian sample comprised 1003 clients across 76 agencies, 947 (94%) of whom were identified as drug users. Figure 8 shows a proportional breakdown of the main drug problem of Victorian substance users at COTSA census days in 1995 and 2001.



Figure 8. Main drug problem of Victorian substance users at COTSA census days in 1995 and 2001 (Source: Shand & Mattick, in press).

Drugs and Poisons Unit (DPU) pharmacy census

Data from the Drugs and Poisons Regulation Unit (DPRU) within Victorian Department of Human Services database of all methadone permits in Victoria is shown in Figure 9. The DPRU conducts a routine phone census of all pharmacies to monitor the numbers of clients who have been given methadone doses on a particular day. This demonstrates a relatively steady increase in clients on the methadone maintenance therapy (MMT) program from July quarter census figures across the 1997 to 2000 period, with a decline evident as at July 2001.

In fact, the July quarter census figures from 1997 to 2000 have each represented a net increase in MMT client numbers during this time, whereas the July 2001 figure of 7421 represents a net decrease of 605 clients. A part of this decrease may be explained by the fact that 276 people were recorded in buprenorphine treatment. However, there remains a net decrease in MMT client numbers of 329. Another possible factor may be an unexpected feature of the reduced heroin supply in Melbourne whereby there may have generally been lower rates of heroin dependency to sustain the continued net increase in new MMT clients. A further possible explanation which was also mentioned by key informants is reflected in the April 2001 census which actually represented the largest net increase in MMT clients, n=243, compared to previous census periods (Jan 2001 n=11, October 2000 n=124, and July 2000 n=105) which may indicate that there was an initial shift to MMT in the early stages of the drought and then a shift back away when people either commenced the use of other substances, such as amphetamines/methamphetamines (as indicated by key informants), or were able to self-manage or avoid withdrawal via increasing use of benzodiazepines and morphine (as seen in usage data reported in this study). However, to be able to confirm these hypotheses data should be collected regarding the numbers of people entering detoxification and other forms of opioid dependence treatment during this time.



Figure 9. Census estimate of the number of Victorian methadone clients, July 1997 to July 2001 (Source: Victorian Department of Human Services).

DIRECT line calls

DIRECT Line call data for the period October 2000 to September 2001 shows that a total of 22060 calls were made by drug users (in comparison to 9000 in 2000), and that the most common illicit drugs of current use by callers were heroin (20%) and cannabis (22%). Similarly, the most commonly identified illicit drugs of concern were heroin (18%) and cannabis (19%).

Drug user callers to DIRECT Line were less likely to be currently using amphetamine type stimulants such as amphetamines (8%), cocaine (<1%) and ecstasy (3%), and were also less frequently concerned about these drugs (amphetamines 7%, cocaine <1%, ecstasy 3%). Six percent (n=1274) of drug user callers to DIRECT Line reported that they were currently using benzodiazepines, and this drug class was identified as a drug of concern in 5% (n=1469) of calls between October 2000 and September 2001.

Interestingly, the quarterly breakdown of caller data reveals that there were large declines in the numbers of callers who had been using heroin from Oct-Dec 2000 (n=1682) through Jan-Mar 2001 (n=984), Apr-Jun 2001 (n= 965) and Jul-Sep 2001 (n=885). Similarly, after the Oct-Dec 2000 period (n=2003) significantly fewer callers were concerned about heroin through Jan-Mar 2001 (n=1111), Apr-Jun 2001 (n=1129) and Jul-Sep 2001 (n=1028).

Overall call numbers are significantly higher than those reported for previous quarters. This may at least partly be explained by the fact that the number of total DIRECT Line calls have

increased from the 1999/2000 to 2000/2001 financial years, and also that significant numbers of callers identify poly-drug use scenarios.

4.3.2 Hospitalisations (Victorian Admitted Episode Dataset)

Opioid-related

The VAED records show that of a total of 2318 opioid related hospital admissions during 1999/00, more than 50% of which (n=1199) were for dependent use. This represents less admissions compared to the 1998/99 total of 2543, which consisted of relatively more cases due to dependence (n=1448) and harmful use (n=130) compared to 1999/00 figures. Most people hospitalised during 1999/00 were male (63%) and aged between 15-44 years (Victorian Department of Human Services, in press).

Stimulant-related

Amphetamines and methamphetamines are included in the general stimulant diagnostic category within VAED records. These records show that the number of stimulant related inpatient hospitalisations in Victoria appear to have increased from 174 in 1998/99 to 281 in 1999/00. Most people hospitalised during 1999/00 were male (61%) and aged between 15-34 years, and around 50% of hospitalisations were for intoxications/poisoning rather than dependence (13%). A further 31% of stimulant related hospitalisations during this period were for psychotic, mental and behavioural disorders (Victorian Department of Human Services, in press).

Cannabis-related

Psychotic disorders associated with cannabis use accounted for more than half (n=229) of the cannabis related hospitalisations in Victoria in 1999/00, followed by dependence and harmful use. Most people (71%) admitted were male and aged 15-24 years (Victorian Department of Human Services, in press).

Benzodiazepine-related

VAED records reveal an increase in the number of benzodiazepine related hospitalisations over the 1990s, peaking at 2176 in 199/00. Most admissions (61%) were female and aged 25-49 years, however in 1999/00 slightly more younger males were hospitalised compared to previous years (Victorian Department of Human Services, in press).

4.3.3 Drug-related Ambulance attendances

Non-fatal heroin-related overdose

A database of Melbourne Metropolitan Ambulance Service (MAS) attendances at drugrelated overdose episodes is maintained by Turning Point and contains reliable data from June 1998 onwards. Figure 10 shows the monthly totals for non-fatal heroin overdose for the period June 2000 to April 2001.



Figure 10. Monthly totals of non-fatal heroin overdoses in Melbourne, June 2000 to April 2001. (Source: Cvetkovski, Dietze & McElwee, 2001).

Monthly numbers of non-fatal heroin overdoses attended by ambulances in Melbourne have declined sharply since the recent peak of 294 in December 2000. The highest recorded monthly total of 461 occurred in December 1999. As at April 2001 (the most recent data available) the number of definite non-fatal heroin overdose episodes was 69. The December 2000 to February 2001 period (where the sharpest decline in non-fatal overdose episodes is observed) is regarded as the peak period of the severe reduction to Melbourne's heroin supply (Miller, Fry & Dietze, 2001).

Further analyses conducted by Cvetkovski et al., (2001) to compare ambulance data for the Jan – Apr 00 and Jan – Apr 01 periods revealed the following:

- A significantly lower average daily overdose rate of 3 per day (SD 2.31) during Jan-Apr 01 compared to 12 per day (SD 5.34) in Jan-Apr 2000.
- No difference in age of overdose victims between periods.
- Majority of overdoses occurring in public spaces in both periods.
- Significant increase in proportion of female overdose cases from 22% during Jan-Apr 2000 to 32% during Jan-Apr 2001.
- Significant increase in proportion of police attendances from 16% of episodes during Jan-Apr 2000 to 21% during Jan-Apr 2001.
- Significant increase in proportion of overdose victims transported to hospital by ambulance during Jan-Apr 2001 (17%) compared to the Jan-Apr 2000 period (21%).

Amphetamine/methamphetamine mentions

The database maintained by Turning Point also records and other drugs are mentioned in a patient care record (PCR). However, in contrast heroin where there are definitive clinical symptoms of overdose (such as a positive response to naloxone α pinpoint pupils), these cases only report when the drug names are recorded by the ambulance officers on the PCR. Therefore, the figures reported here and in the following sections can only be interpreted as indicators and would significantly under report the actual number of people seen by ambulance officers who had used these drugs. In addition, reports by ambulance officers of amphetamine involvement do not include methamphetamine.



Figure 11. Monthly totals of ambulance attendances where amphetamines were mentioned in Melbourne, July 2000 to April 2001. (Source: Cvetkovski, Dietze & McElwee, 2001).

Figure 11 reports the monthly totals of ambulance attendances where amphetamine use was mentioned in Melbourne, July 2000 to April 2001. It can be seen that ambulance attendances where amphetamine use was recorded fluctuated with the peak during the December 2000-January 2001 period, which corresponds to period identified by most IDUs as the beginning of the shortage of heroin supply.

Cocaine mentions

Figure 12 reports the monthly totals of ambulance attendances where cocaine use was mentioned in Melbourne, July 2000 to April 2001. It can be seen that ambulance attendances where cocaine use was recorded fluctuated with peaks in November 2000 and March 2001. However, these numbers are too small to provide clear trends.



Figure 12. Monthly totals of ambulance attendances where cocaine was mentioned in Melbourne, July 2000 to April 2001. (Source: Cvetkovski, Dietze & McElwee, 2001).

Ecstasy mentions

Figure 13 reports the monthly totals of ambulance attendances where ecstasy use was mentioned in Melbourne, July 2000 to April 2001. As observed with amphetamines, it can be seen that ambulance attendances where ecstasy use was recorded fluctuated with the peak during the December 2000-January 2001 period, which corresponds to period identified by most IDUs as the beginning of the shortage of heroin supply.



Figure 13. Monthly totals of ambulance attendances where ecstasy was mentioned in Melbourne, July 2000 to April 2001. (Source: Cvetkovski, Dietze & McElwee, 2001).

4.3.4 Drug deaths

Heroin-related

The data for trends in heroin-related mortality in Victoria are summarised in Table 23. This table, based on Victorian Institute of Forensic Medicine data, shows an increasing trend in the number of heroin-related deaths in Victoria throughout the 1990s despite some fluctuations from year to year. These figures also show the dramatic decline in numbers of heroin-related fatalities from 331 in 2000 to the year-to-date figure of around 40 for 2001.

Year	Number
1991	49
1992	98
1993	59
1994	84
1995	140
1996	169
1997	166
1998	268
1999	359
2000	331
2001 ^a	40

Table 23. Numbers of heroin-related deaths in the Victoria, 1991-2001 (Victorian Institute of Forensic Medicine)

^a 2001 year-to-date figure (at 28/12/01) may be revised after all toxicology results are processed

Figure 14 presents the monthly breakdown of VIFM overdose deaths figures from December 1999 to September 2001. These numbers reveal the beginnings of a decline in heroin-related deaths from a peak of 40 in July 2000, falling to 19 in December 2000 and continuing to drop sharply through to just three in of February 2001. As at 28/12/01 the cumulative number of heroin deaths in Victoria was 40, suggesting that since the September 2001 there had been a further seven fatalities attributed to heroin–related overdose.

While the sharp decline in fatalities through December 2000 to a low in February 2001 is consistent with the timing of the severest period of reduction in heroin supply (Miller et al, 2001), it is important to remember that the incidence of heroin-related overdose deaths had already started to decline since July 2000.



Figure 14. Monthly heroin overdose deaths in Victoria, December 1999 to September 2001. (Source: Victorian Institute of Forensic Medicine).

Victorian Institute of Forensic Medicine data (Gerostamoulos & Drummer, 2001) showed that heroin fatalities in Victoria during 2000 were typically male (81%) with an average age of 30. These data also show that in 2000, 63% of fatalities were HCV positive and 47% unemployed. In 2000, 12 percent of fatalities (n=41) occurred within the suburb of Melbourne, six percent in St Kilda (n=20), seven percent in Footscray (n=24), and six percent (n=21) in Richmond. Of further note was that toxicological findings showed that benzodiazepines were detected in 55% of all cases in 2000, and the use of cannabis has also increased in 2000 with 34% of fatalities involving cannabis use in addition to heroin (Gerostamoulos & Drummer, 2001).

Recently released Australian Bureau of Statistics data on opioid overdose deaths for 2000 (Degenhardt, 2001) suggest that Victoria still has the highest overdose rate in Australia at 122.9 per million persons (see Figure 15). This figure (n=263) represents a 25% decrease on the rate of 163.9 per million estimated for 1999 (n=347), and is higher than the national rate of 84.8 per million persons aged 15 to 44 years. Seventy-eight percent of deaths attributed to opioids among those aged 15-44 years were males.



Figure 15. Number of opioid overdose deaths among 15-44 year olds in Victoria, 1988-2000 (Source: Degenhardt, 2001).

4.3.5 Blood borne virus transmission

Blood borne viruses (HIV, hepatitis B and C) represent a major health risk for individuals who inject drugs. An integrated surveillance system has been established in Australia for the purposes of monitoring the spread of these 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 Victorian Department of Human Services records notifications of diagnoses of HIV and hepatitis B and C in Victoria.

Table 24 shows the trend in notifications of diagnoses of HIV where injecting drug use was identified as an exposure factor⁸ in Victoria by year of diagnosis, 1989 to end of 2000. 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 factor (Victorian Department of Human Services, 2000).

At the end of 2000, injecting drug use had been identified as an exposure factor in 8% of all Victorian HIV infections (i.e.334 people). Injecting drug use without male-to-male sexual contact has been stable at around three to four percent of all diagnoses (Victorian Department of Human Services, 2000). The evidence of low rates of HIV infection among IDU is reinforced by the results of a study of attendees three fixed-site metropolitan Needle Syringe Programs in Victoria in 2000 in which it was found that of 292 clients who provided blood

⁸ Includes the exposure categories of *injecting drug use* and *homosexual/bisexual and injecting drug use*

tests, only 1 (0.3%) was found to be HIV positive (National Centre in HIV Epidemiology and Clinical Research, 2001, see Table 25).

Table 24. Annual number of notifications of HIV diagnoses in Victoria where injecting drug use has been identified as the likely exposure factor, 1990 to 2000.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Number	35	22	20	23	20	15	14	15	15	18	18
% of HIV diagnoses	11.5	7.0	7.5	9.8	8.9	8.3	7.2	8.0	10.1	13	9.0

Source: Victorian 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. 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 three fixed site metropolitan Needle and Syringe Programs in Victoria in November 2000 in which 62% of the sample were found to have antibodies to HCV (National Centre in HIV Epidemiology and Clinical Research, 2001, see Table 25).

Hocking and Crofts (2001) reported that in 2000, 198 new cases of HIV were diagnosed in Victoria (89% male). They note that this is the highest annual number of notifications since 1994 and is a 41% increase on the 1999 total of 140. Table 24 shows that 9% of these 198 new cases (n=18) occurred with individuals where injecting drug use (including the exposure category 'homosexual/bisexual and injecting drug use') was identified as a likely exposure factor. Hocking and Crofts (2001) also point out that while there has been a decrease from 1999 (n=12) to 2000 (n=7) in the numbers of new cases reporting injecting drug use and male-to-male sexual contact, the number of new notifications involving injecting drug use alone has increased in this time (5 in 1999 to 11 in 2000). Hocking and Crofts (2001) conclude that while it may be too early to say whether the increase in new HIV cases in Victoria is a real trend or due to random variation, prevention efforts must continue and new targeted strategies devised and implemented as the epidemic continues to evolve.

		1997 1998 1999		1999			2000					
	Male (n=294) %	Female (n=141) %	Total %	Male (n=193) %	Female (n=90) %	Total %	Male (n=135) %	Female (n=69) %	Total %	Male (n=177) %	Female (n=115) %	Total %
HCV	48	57	51	54	53	54	60	58	60	64	59	62
HIV	1.4	0.7	1.1	0.0	0.0	0.0	1.5	0.0	1.0	0.6	0	0.3

Source: National Centre in HIV Epidemiology and Clinical Research

Table 26 summarises the number of notifications received for diagnoses of hepatitis C infection in Victoria from 1997 to 2000. The data demonstrates that there have been a large number of notifications in Victoria since 1997, with an apparent reduction from 1999 to 2000.

Table 26. Victorian hepatitis C notifications by year, 1997-2000

	1997	1998	1999	2000
Hepatitis C - acute	11	54	76	78
Hepatitis C – not further specified	4977	6299	6279	5845
Total	4988	6353	6355	5923

Source: Victorian Department of Human Services (Tobin, 2001)

Victorian year-to-date data available for 2001 (1 January to 4 December) suggest that this number may have dropped further, with the provisional number of hepatitis C (unspecified) notifications estimated at 4972.⁹ These findings are consistent with recent analyses conducted over national data that have shown that HCV prevalence may be declining among IDU (MacDonald et al., 2000). However, carriage rates at the levels observed here remain unacceptably high.

4.3.6 Arrest data

Data pertaining to drug-related arrests in Victoria during 1996/97 to 2000/01 are shown in Table 27. Data reported for the 1999/00 and 2000/01 periods were obtained from the Victoria Police Law Enforcement Assistance Program (LEAP) database, whereas data reported for previous years were obtained from the ABCI.

⁹ Communicable Diseases Network Australia – National Notifiable Diseases Surveillance System (personal communication 2001) <u>http://www.health.gov.au/pubhlth/cdi/nndss/year053.htm</u>

Table 27. Number of arrests for cannabis, heroin, amphetamine and cocaine related offences in Victoria, 1996/97-2000/01.

Type of offences	1996/97 ^a	1997/98 ^a	1998/99 ^a	1999/00 ^b	2000/01 ^b
Cannabis offences	9121	9034	9286	7354	6800
Heroin offences	3396	5537	8153	5952	4418
Amphetamines	NA	744	1028	910	1274
Cocaine	29	32	70	42	117

^a Source: Australian Bureau of Criminal Intelligence

^b Source: Law Enforcement Assistance Program database (LEAP), Victoria Police, Statistical Services Branch

These data show an apparent continuing decrease from 1998/99 to 2000/01 in the number of arrests for cannabis and heroin offences, after a period of increase since 1996/97. However, the past year has seen an increase in both amphetamine and cocaine related offences. This would appear to be in line with other trend data reported in this study which has indicated that amphetamine and cocaine related issues are increasing in response to the heroin drought (Miller et al, 2001). Further, the increase in amphetamine related offences may also be due to the shift in the market and a corresponding change in policing priorities. Victoria Police has been targeting clandestine laboratories and is far more aware of the increase in amphetamine usage. In contrast, Table 28 shows that the proportion of consumer arrests as a proportion of all drug-related arrests in Victoria has dropped from 1999/00 to 2000/01 for all the categories. This drug use most notable in cannabis related offences and was identified in the previous IDRS has been expected due to the continued expansion of drug diversion programs, the objective of which is to divert drug users from the criminal justice system into education and treatment.

Advice received from the Victoria Police Statistical Services Branch suggests that 1999/00 arrest data reported here may differ from that published by the ABCI, due to the dynamic nature of the LEAP database. It is difficult to interpret the uniform reduction in arrest numbers shown in Table 27.¹⁰ While the database is a valuable source of information regarding drug arrests, the interpretation of trends requires the recognition of the impact of changes in policy and levels of enforcement. These changes at both state and local levels make interpretation particularly difficult and suggest that this form of data must be presented in the context of appropriate specialist interpretation for use in monitoring trends in illicit drug use in the community.

¹⁰ Corrected Victorian arrest data soon to be published, as part of the annual ABCI *Australian Illicit Drug Report* should provide a more accurate picture.

Table 28. Consumer arrests as a proportion of all drug-related arrests in Victoria, 1996/97-2000/01.

	% Consumers							
Drug Type	1997/98 ^a	1998/99 ^a	1999/00 ^b	2000/01 ^b				
Cannabis	65	85	86	65				
Heroin	66	75	69	62				
Amphetamines	69	74	69	62				
Cocaine				23				
All illicit drugs	66	79	77	64				

^a Source: Australian Bureau of Criminal Intelligence

^b Source: Law Enforcement Assistance Program database (LEAP), Victoria Police, Statistical Services Branch

4.4 Summary of drug-related issues

The main drug-related issues to emerge from the Melbourne arm of the 2001 IDRS study include:

- Clear evidence of the heroin 'drought'
- Increased reports from IDU's of injecting-related health problems (e.g. injection-site scarring, infections and other damage).
- A large decrease in the number of heroin-related fatalities in 2000.
- A substantial decrease in the occurrence of non-fatal heroin-related overdoses requiring ambulance attendance.
- High rates of hepatitis C virus infection among injecting drug users, coupled with persistent unsafe injecting behaviour.
- Increased IDU involvement in crime (mostly dealing and property crimes).
- A decrease in police activities focused on street-level IDUs.
- A high and often unmet demand for treatment services for individuals experiencing problems with heroin use.
- The shift from heroin related offences to amphetamine and cocaine related offences.
- A large increase in the number of calls to Direct line.
- A small decrease in MMT members, following a peak period during the height of the heroin drought.

5.1 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 of focus – heroin, amphetamines, cocaine and cannabis. Most trends are supported primarily by IDU and key informant reports, reflecting the general paucity of available secondary illicit drug indicator data. However, in cases where all three data sources were available, these typically showed good agreement.

Heroin trends

HEROIN TRENDS	IDU	KI	OTHER
\$50 deals now minimum purchase amount	\checkmark	✓	~
Decrease in availability in purity and availability	\checkmark	✓	~
Availability easy and fluctuating	~	✓	
Low to medium purity	~	✓	~
Decrease in frequency and amount of heroin use	~	✓	~
Decrease in numbers of people using heroin	~	✓	~
Increasing levels of benzodiazepine use among heroin injectors	~	✓	~
Decline in street-based heroin markets	~	~	
Continuing increase in use of mobile dealers and dealers' homes as heroin source	~	~	
Decrease in demand for treatment services, particularly methadone and detoxification services		~	~

Table 29. Heroin trends identified in IDU reports, key informant reports, and other indicator sources.

Following decreasing heroin prices and increasing purity since the commencement of the IDRS, the Melbourne heroin market experienced a reversal in almost all trends, particularly price purity and availability. The beginning of this trend was observed in the 2000 Melbourne IDRS study, where it reported that variables appeared to have stabilised recently following

increasing trends for the prior three years. Of particular note is the disappearance of heroin deals under \$50 and a major reduction in heroin purity since the 1999 IDRS, which was indicated in the 2000 study which reported the start of a continuing downward trend in purity. Consistent with the description of the heroin drought (Miller et al, 2001), heroin availability was dramatically reduced during the period November 2000-March 2001, following which there was some supply re-established, but heroin availability remains significantly lower than previous IDRS studies. It was also observed that there was a major shift away from street heroin markets towards mobile dealers and dealer residences. Heroin injectors used the drug less frequently and in smaller amounts and there were smaller numbers of heroin injectors overall.

Amphetamine/methamphetamine trends

Table 30. Amphetamine/methamphetamine trends endorsed (\checkmark) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

AMPHETAMINE TRENDS	IDU	KI	OTHER
Price of amphetamines/methamphetamines stable (\$50 per gram)	~	✓	
Increasing availability of pure amphetamines/methamphetamines (smaller deals, higher prices)	~	~	~
Amphetamine/methamphetamines availability increase	~	✓	
Purity medium-high (increased)	~	~	~
Increasing frequency of use by IDU	~	\checkmark	~
Drug of choice for growing proportion of IDU sample	~	~	
"Ice" availability increased	~	\checkmark	
More street trading of amphetamines/methamphetamines			

Whilst the reported price, purity and availability of amphetamines remained stable across the first four years of the Victorian IDRS, the current study has shown a major change in the use of amphetamines/methamphetamines in Melbourne. Most notable of the trends observed in this IDRS study has been a shift to methamphetamine use from heroin and amphetamine use. IDUs now often mistakenly believe they are using amphetamines, when they are in fact using methamphetamines, which is why amphetamine and methamphetamine trends are reported together. Findings from the 2001 **IDRS** suggest the prevalence that of amphetamine/methamphetamines use among injecting drug users in Melbourne has increased markedly, and that the drug, whilst predominantly sourced through social networks and homebased dealers, is being increasingly traded in street markets. The prevalence of amphetamine/methamphetamines use in Melbourne has previously been interpreted as due to the typically low purity of the drug in this jurisdiction. The 2000 IDRS has seen an increase in purity levels of amphetamines/methamphetamines reported from law enforcement, IDUs and key informants. A significant number of respondents indicated that they had purchased pure 0.1gm amounts ('points') of amphetamines/methamphetamines (costing \$50) and pure gram amounts (costing \$220) during 2001. The trends observed in relation to amphetamine and methamphetamine use in this study remain somewhat unclear and require further investigation, particularly in relation to determining what substances IDUs are using.

Cocaine trends

COCAINE TRENDS	IDU	KI	OTHER
Price of cocaine stable (\$250 per gram)	~	~	
Infrequent use by IDUs (increasing)	~	\checkmark	~
Unreliable reports for smaller quantities	~	√	
Availability difficult (becoming easier)	~	\checkmark	
Purity medium and stable	~	√	~
Desirable but too expensive for IDU sample	~	\checkmark	
No evidence of street cocaine market	✓	~	

Table 31. Cocaine trends endorsed (\checkmark) *by injecting drug users (IDU) and other indicators (OTHER).*

The 2001 IDRS has seen an increase in the number of key informants and injecting drug users able to comment on Melbourne cocaine trends. The price of cocaine appears to have remained stable (\$250 per gram, \$50 per cap), however due to the increasing price of heroin, cocaine has become a more attractive drug and subsequently it has been observed in this study that the reported use of cocaine has increased. As with amphetamines and methamphetamines, these trends remain unclear and require further in-depth investigation into which substances are being used and the nature of that use.

Cannabis trends

CANNABIS TRENDS	IDU	KI	OTHER
Price of cannabis ounce decreased (\$250)	✓		
Availability stable and very easy	\checkmark	✓	
Accessed through social networks (not street based)	~	~	
Potency medium – high and stable	\checkmark	✓	
Use of cannabis widespread through broad cross-section of community (increasing prevalence)	~	~	~
Increase in people accessing services for cannabis-related issues		✓	
Cannabis users characterized as poly-drug users	\checkmark	✓	
Increase in use due to heroin shortage	\checkmark	~	

Table 32. Cannabis trends endorsed (\checkmark) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

The Melbourne cannabis market and patterns of use continue to be relatively stable with only a slight reduction in ounce prices. However, there has been an increase in the number of IDUs reporting cannabis use, frequency of use and quantity used, which was attributed to the reduction in heroin supply. Cannabis availability and perceived potency have remained unchanged between 1997 and 2001. Cannabis appears to be the most widely used illicit drug within Victoria, and is a common addition to the list of drugs used concurrently by injecting drug users.

Other drug trends

The 2001 Melbourne IDRS study has yet again provided evidence of significant prescription drug use by injecting drug users (e.g. morphine, benzodiazepines, panadeine forte®, and anti-depressants). Of particular concern is the apparent increase identified in the prevalence of benzodiazepine injection (mostly normison capsules) amongst injecting drug users, and reports of the existence of a street-based black-market for benzodiazepines.

Table 33. Trends in other drugs endorsed (\checkmark) by injecting drug users (IDU), key informants (KI) and other indicators (OTHER).

OTHER DRUG USE	IDU	KI	OTHER
Increased use of other opiates (e.g. Panadeine Forte®, morphine)	\checkmark	✓	
Continuing increase of benzodiazepines injecting (i.e. normison capsules)	\checkmark	✓	
Apparent increase in morphine injection	\checkmark	√	
Existence of street-level black market in benzodiazepines	\checkmark	✓	
Substantial proportion of IDU using anti-depressants	\checkmark	√	
Sizeable minority of IDU have used ecstasy recently (increasing)	\checkmark	√	
Increasing injection of ecstasy	\checkmark	\checkmark	
Ecstasy readily available	\checkmark	√	
Recent prevalence and frequency of hallucinogen use low	\checkmark	✓	
Increasing 'chroming'		~	

Drug-related health and law enforcement trends

Table 34. Drug related health and law enforcement trends identified in IDU reports, key informant reports, and other indicator sources.

DRUG-RELATED ISSUES	IDU	KI	OTHER
Major decrease in fatal and non-fatal heroin overdoses	~	~	~
Continuing substantial levels of injection-related health problems	~	~	
Continuing transmission of hepatitis C virus among IDU		✓	~
Persistent levels of unsafe injecting behaviour	~	✓	~
Increasing level of criminal activity among some injecting drug users (primarily property crime and violent crime)	\checkmark	~	~
Increased crime and violence towards IDU (standovers and rip-offs)	✓	~	
Decreased police activity	~	~	~
Poor general health and social functioning among many IDU		~	
Substantial levels of injection-related health problems	\checkmark	~	~

The 2001 Melbourne IDRS study has provided evidence of a substantial change in drug related and law enforcement trends over the past year. In line with the findings of

substantially reduced heroin purity, frequency and quantity of use, and numbers of heroin users this study has documented a major decrease in fatal and non-fatal heroin overdoses. However, other significant harms associated with injecting drug use (such as injection related health problems, hepatitis C virus transmission and other unsafe injecting behaviour) continue to be of major concern. Overall, it was seen that there was an increasing level of criminal activity amongst some IDUs and that the background level of violence within the drug market appears to have increased. On the other hand, there has been decreased levels of police activity due to the reduction in street heroin markets.

5.2 Study limitations

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

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

Further, the IDRS study principally gathers evidence on emerging trends among people in contact with drug treatment, health and other services. As this population is not necessarily representative of all illicit drug users (e.g. those who do not routinely access such services, recreational/non-dependent illicit drug users), the generalisability of the present results is limited. Another key limitation of the IDRS methodology is that it only describes drug issues within metropolitan Melbourne and fails to provide a comprehensive picture of drug use issues across the whole state of Victoria. To provide such a comprehensive picture the IDRS methodology would need to be expanded to regional areas of Victoria, possibly incorporating a key informant component only in the initial phones. Similarly, the current IDRS methodology does not cover many of the 'sentinel groups' that engage in illicit drug use (such

as the rave culture or inhalant users) and such groups constitute significant proportions of drug users in the population that require further monitoring.

5.3 Implications of the findings for future research

While the aim of the IDRS study is to gather evidence that points to emerging trends in illicit drug use and related problems within the community, it is not intended as a comprehensive and detailed investigation of illicit drug trends. The role of the Melbourne arm of the IDRS study is to identify yearly illicit drug use trends, and provide recommendations regarding key areas and issues that warrant further in-depth investigation.

The findings of the 2001 Melbourne IDRS study suggest the following priority areas for future research:

- 1. Research to explore the nature of benzodiazepine use among injecting drug users, the characteristics of the illicit benzodiazepine market in Melbourne, prescribing and dispensing practices, and the health harms associated with benzodiazepine misuse.
- 2. Improved monitoring of the characteristics and impact of amphetamine type stimulant (ATS) use in Melbourne, including an increased focus upon target groups other than injecting drug users (e.g. rave / dance scene, gay/lesbian target groups)
- 3. Further research into the growing methamphetamine use within Melbourne and its implications for treatment and law enforcement
- 4. Continued monitoring of the characteristics and impact of cocaine use within Melbourne, with an increased focus upon target groups other than injecting drug users.
- 5. Further research to gain a better understanding of the determinants of unsafe injecting, particularly for those injecting practices that increase the risk of blood-borne virus transmission (e.g. HIV, HCV and HBV).
- 6. Research examining the potency and pharmacological properties of cannabis that is being grown and consumed within Victoria.

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

illicit drug trends. It is particularly effective in identifying emerging illicit drug trends that require further investigation and/or policy responses.

Turning Point Alcohol & Drug Centre is committed to ensuring that this important early warning system for illicit drug trends continues to provide quality information to stakeholders, and will be focusing future efforts on those opportunities that exist for improving this study locally.

Each jurisdiction has demonstrated that the core IDRS methods are a cost-effective way to conduct strategic early warning research around illicit drug trends. However, we have also witnessed significant changes within illicit drug markets across jurisdictions that will mean that our early warning mechanisms will need to evolve to keep in step. The five years of Victorian experience with the Illicit Drug Reporting System has established a solid base to build upon. There is significant future potential for value adding.

The IDRS is a well-established and familiar part of the illicit drug research landscape in Victoria. However, there are specific opportunities for improving the conduct, uptake and application of Victorian IDRS findings in both the health and law enforcement sectors:

- Inclusion of a 'Designer Drugs Module' (recently trialed in NSW, QLD and SA) as part of the core Melbourne IDRS study (including a specific focus upon cocaine, methamphetamines, ecstasy and other designer drugs). The changes that have been described in this report indicates what appears to be the beginnings of a shift to cocaine injection in Melbourne, which requires verification. For example, this trend may be explained by novice stimulant users thinking that they're using cocaine when in fact it is methamphetamine, or it may be the beginnings of a real shift and emergence of a new trend in Melbourne. Further evidence around this trend is required to inform public health and law enforcement responses.
- Incorporating a designated law enforcement key informant survey in order to improve on IDRS reporting of specialist Victoria Police knowledge about illicit drug trends.
 Preliminary discussions have been held with representatives from the Victoria Police Drug and Alcohol Policy Coordination division with a view to strengthening collaborative links.
- Improving the means by which IDRS findings are disseminated to the health and law enforcement sectors generally. Planning is underway to establish a formal mechanism for

feedback to these sectors (e.g. through annual IDRS seminars conducted locally and/or special briefing sessions with key stakeholders).

• Exploring the feasibility of expanding the IDRS methodology to regional areas in Victoria (e.g. Ballarat/Bendigo, Geelong, Northeast, Western district, La Trobe Valley) where there is currently scant information available regarding illicit drug use trends. Planning is underway for a pilot study of key informant interviews in select regional areas as a first phase to this expansion.

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