

WA Drug Trends 2001



Findings from the
Illicit Drug Reporting System
(IDRS)

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NDARC Technical Report No. 134

ISBN 1 877027 11 1
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CONTENTS

LIST OF TABLES iii
LIST OF FIGURESiv
LIST OF APPENDICESv
ACKNOWLEDGMENTSvi
LIST OF ABBREVIATIONSvii
EXECUTIVE SUMMARY..... viii

1.0 INTRODUCTION..... 1

1.1 Study aims 1

2.0 METHOD..... 2

2.1 Survey of injecting drug users..... 2
2.2 Key informant survey..... 3
2.3 Other indicators..... 4
2.4 Data analysis 5

3.0 AN OVERVIEW OF THE IDU SAMPLE 6

3.1 Demographics 6
3.2 Drug use history 7

4.0 HEROIN..... 10

4.1 Price..... 11
4.2 Availability..... 11
4.3 Purity 12
4.4 Use..... 13
4.5 Summary of heroin trends..... 17

5.0 METHAMPHETAMINE 18

5.1 Price..... 19
5.2 Availability..... 20
5.3 Purity 20
5.4 Use..... 22
5.5 Summary of amphetamine trends..... 25

6.0 COCAINE..... 26

6.1 Price..... 26
6.2 Availability..... 26
6.3 Purity..... 27
6.4 Use..... 27
6.5 Summary of cocaine trends..... 29

7.0	CANNABIS.....	30
7.1	Price.....	30
7.2	Availability.....	30
7.3	Potency.....	31
7.4	Use.....	31
7.5	Summary of cannabis trends	33
8.0	OTHER DRUGS	34
8.1	Ecstasy.....	34
8.2	Other opiates	36
	8.2.1 <i>Methadone</i>	36
	8.2.2 <i>Morphine and ‘other’ opiates</i>	37
	8.2.3 <i>Homebake</i>	38
8.3	Benzodiazepines	40
8.4	Anti-depressants.....	41
8.5	Summary of other drug trends.....	42
9.0	DRUG-RELATED ISSUES	43
9.1	Treatment	43
9.2	Overdose.....	44
9.3	Crime	47
9.4	Needle sharing behaviour	53
10.0	SUMMARY AND CONCLUSION	56
10.1	Summary	56
10.2	Methodological considerations	58
10.3	Implications for research.....	58
11.0	REFERENCES	59
12.0	APPENDICES	61

LIST OF TABLES

Table 1: Summary of drug trends in WA, 2001	ix
Table 2: Demographic characteristics of the IDU sample	7
Table 3: Frequency of injecting among IDU sample	8
Table 4: Drug use history of IDU sample	9
Table 5: Number of WA respondents in the ‘Australian Needle and Syringe Program Survey’ who nominated heroin as ‘last drug injected’	14
Table 6: Summary of trends in the price, availability, purity and use of heroin	17
Table 7: Number of WA respondents in the ‘Australian Needle and Syringe Program Survey’ who nominated amphetamine as ‘last drug injected’	22
Table 8: Summary of trends in the price, availability, purity and use of amphetamines	25
Table 9: Summary of trends in the price, availability, purity and use of cocaine	29
Table 10: Summary of trends in the price, availability, potency and use of cannabis	33
Table 11: Profile of homebake use in 2000 and 2001	39
Table 12: Main brand of benzodiazepines used by IDU in the six months prior to interview	41
Table 13: Number of WA methadone program participants, by age and gender, July 2000 to June 2001	44
Table 14: Number of charges laid in WA for drug and non-drug offences, by quarter, 2000.....	49
Table 15: Number of charges laid in WA for possession/use offences by drug type, by quarter, 2000	49
Table 16: Number of charges laid in WA for sell/supply offences by drug type, by quarter, 2000	49
Table 17: Location of most recent injection as reported by IDU.....	54
Table 18: Location of <i>usual</i> injection as reported by IDU.....	54
Table 19: Number of needles and syringes distributed in WA, by quarter and outlet, July 2000 to June 2001.....	55

LIST OF FIGURES

Figure 1: Purity of heroin seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001	12
Figure 2: Number of heroin seizures analysed by law enforcement agencies in WA, by weight of seizure, 2000/2001	13
Figure 3: Number of persons participating in WA methadone programs, by quarter, July 1998 to June 2001	14
Figure 4: Number of heroin-related calls to ADIS, by quarter, July 1999 to June 2001	15
Figure 5: Purity of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by quarter, July 1999 to June 2001	21
Figure 6: Number of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by weight of seizure, 2000/2001	21
Figure 7: Number of amphetamine-related calls to ADIS, by quarter, July 1998 to June 2001	23
Figure 8: Purity of cocaine seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001	27
Figure 9: Number of cocaine-related calls to ADIS, by quarter, July 1998 to June 2001	28
Figure 10: Number of cannabis-related calls to ADIS, by quarter, July 1998 to June 2001	32
Figure 11: Purity of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001	34
Figure 12: Number of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001	35
Figure 13: Number of ecstasy-related calls to ADIS, by quarter, July 1998 to June 2001	36
Figure 14: Number of calls to ADIS in relation to each of the four drug types studied, by quarter, July 1998 to June 2001	43
Figure 15: Narcotic overdose-related calls to ambulance, by month, July 1998 to June 2001	45
Figure 16: Number of suspected heroin-related fatalities in WA, by quarter, July 1998 to June 2001	46

Figure 17: Annual opioid overdose deaths in WA, among those aged 15-44 years, 1995–2000	46
Figure 18: Rate of opioid overdose deaths per million population, among those aged 15-44 years, 1999 and 2000.....	47
Figure 19: Number of charges laid in WA for opioid-related possess/use and sell/supply offences, 1998-2000.....	50
Figure 20: Number of charges laid in WA for amphetamine possess/use, sell/supply and manufacture/grow offences, 1998-2000.....	51
Figure 21: Number of charges laid in WA for cannabis possess/use, sell/supply and manufacture/grow offences, 1998-2000.....	52
Figure 22: Number of charges laid in WA in relation to ‘other drug offences’, 1998-2000.....	52
Figure 23: Number of needles and syringes dispensed in WA, 1991-2000.....	55

LIST OF APPENDICES

Appendix 1: Place of residence identified by IDU survey respondents	61
Appendix 2: Number of needle and syringes dispensed in WA, by type of outlet, 1991-2000	62
Appendix 3: A summary of the major findings by drug type	63

ACKNOWLEDGMENTS

This research was funded by the Commonwealth Department of Health and Ageing (CDHA), formerly the Commonwealth Department of Health and Aged Care (CDHAC), with subsidiary funding for the IDU survey provided by the National Drug Law Enforcement Research Fund (NDLERF). The IDRS is coordinated nationally by the National Drug and Alcohol Research Centre (NDARC) and the author would like to thank Libby Topp, the National Coordinator (IDRS), for her support and assistance throughout the study.

The authors would also like to thank the many individuals and organisations who provided assistance during the project. These include:

The injecting drug users and key informants who participated in the project, for sharing their knowledge and experience of the illicit drug scene in Perth. Thanks also go to all the agencies that provided assistance with the recruitment of IDUs for participation in the project.

The members of the WA IDRS Advisory Group: Senior Sergeant Steve Guest (Alcohol and Drug Coordination Unit, WA Police Service), Dr David Indermaur (Crime Research Centre, University of WA), Assoc Prof Steve Allsop (Next Step Specialist Drug and Alcohol Services), Mr Greg Swensen (WA Drug Abuse Strategy Office), and Mr Justin Woodruff (WA Substance Users Association).

The organisations who generously provided indicator data for inclusion in the report: the Australian Bureau of Criminal Intelligence (ABCI); the Disease Control Branch, Sexual Health Program of the Health Department of WA; the West Australian Pre-hospital Care Research Unit; the Pharmaceutical Services Branch of the Health Department of WA; the WA Drug Abuse Strategy Office; the Crime Research Centre, UWA; Next Step Specialist Drug and Alcohol Services; the Alcohol and Drug Information Service; the WA Police Service.

Special thanks to Brian and Mike for conducting many of the interviews, Paul Catalano (NDRI) for compilation of the mapping data and Dr Anne Bartu (Next Step Specialist Drug and Alcohol Services) for comments on an earlier draft of the report.

LIST OF ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
ATSI	Aboriginal or Torres Strait Islander
CDHA	Commonwealth Department of Health and Ageing
CRC	Crime Research Centre, University of WA
HDWA	Health Department of WA
IDRS	Illicit Drug Reporting System
IDU	Injecting Drug Users
KI	Key Informant
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NESB	Non-English Speaking Background
NDRI	National Drug Research Institute
WA	Western Australia
WAPS	WA Police Service
WADASO	WA Drug Abuse Strategy Office
WAPRCU	WA Pre-Hospital Care Research Unit

EXECUTIVE SUMMARY

In 2001 the Commonwealth Department of Health and Ageing (CDHA) commissioned the National Drug and Alcohol Research Centre (NDARC) to conduct the second national Illicit Drug Reporting System (IDRS). All states and territories, with the exception of the Northern Territory, again completed the three components of the full IDRS. Additional funding was again secured through the National Drug Law Enforcement Fund (NDLERF) to complement core funding from the Commonwealth Department of Health and Aged Care. This additional funding enabled the non-core jurisdictions to undertake the IDU component of the study. NDLERF funding was also provided to allow for a second year of data collection on dance drugs in Qld and NSW. SA also undertook a second year of data collection in this area with funding provided by the Drug and Alcohol Services Council (DASC).

The 2001 IDRS aims to provide a means by which to identify any emerging drug-related trends and potential harms associated with such trends. It can also be used as a means to identify areas requiring further investigation. As in previous years a specific emphasis was placed on the use of heroin, amphetamines, cocaine and cannabis.

The National Drug Research Institute has conducted the WA component of the IDRS since 1999. This report represents the third year of involvement in the IDRS for WA and the second year in which all three IDRS data sources were used. These were:

1. Quantitative interviews with 100 injecting drug users.
2. Qualitative interviews with 30 key informants (KIs) who have regular contact with IDU and are employed in health, outreach, law enforcement, research and other professions.
3. Analysis of a range of indicator data from survey, health and law enforcement sources.

The data were collated and analysed to identify trends in illicit drug use in WA, and more specifically the Perth metropolitan region.

Demographics and use patterns

Although this report represents just the second year of data collection directly from IDU in WA, some trends clearly emerged. While in 2000, the frequency of injecting was higher among those aged over 25 compared to those 25 years or less at the time of interview, this was not the case in 2001. This is probably the result of more frequent injecting of methamphetamine, usually associated with younger users, and a decrease in heroin availability resulting in decreased frequency of injecting by older users than was the case in 2000.

Consistent with this, the trend observed in other jurisdictions (McKetin et al., 2000), of a difference between these two age groups in terms of the first drug they injected, was observed in WA in the 2001 study. Although amphetamine still represented the first drug injected for the overwhelming majority of this year's IDU respondents, heroin was significantly more likely to be nominated as the first drug injected by those aged over 25 years at time of interview.

Summary of drug trends in WA

The WA component of the 2001 IDRS identified a number of trends in illicit drug use within the six months preceding the study; these are reported in Table 1.

Table 1: Summary of drug trends in WA, 2001

	Heroin	Methamphetamine	Cocaine	Cannabis
Price (\$)				
Packet/point	50-100	50	50	25 stick/foil
1/4 gram	200			50 bag
1/2 gram	400			250 oz (includes
gram	750	250 (powder) 350 (crystal)	300 (based on just 5 purchases)	both hydro & non- hydro purchases)
Change	Increased	Stable	Cannot determine (limited purchases)	Stable
Availability	Difficult Dramatically reduced	Very easy Stable to increasing	Limited Stable although somewhat higher than in 2000	Very easy Stable
Purity	49%	23%	33%	Very high potency Stable to increasing
Use	Decreased Switch to other drug use	Widespread Increased numbers using	Uncommon and predominantly infrequent	Widespread Mainly hydro used

Heroin

The data indicates that WA has been affected by the so-called 'heroin drought' seen throughout Australia since late last year. The impact of this 'drought' has been a substantial reduction in the availability and use of heroin and a considerable increase in its price. Although the average purity of seizures analysed has remained reasonably constant throughout the years the IDRS has been conducted in WA, IDU and KI perceptions were that heroin purity at the time of interview was low, and had reduced in the six months prior to interview.

The reduced availability of heroin appears to have resulted in a substantial fall in the number of opioid overdoses observed in WA. Both the number of calls to the ambulance service for attendance at non-fatal narcotic overdoses and the number of suspected heroin-related fatalities have fallen. It is interesting to note, however, that there was a reduction in both the number and rate per million population of fatal opioid-related fatalities observed among those aged 15-44 years in 2000. This reduction precedes the period during which the so-called 'heroin drought' commenced and may represent a reduction in the use of heroin which pre-dates the effects of this drought.

Amphetamines

As was predicted in the 1999 WA IDRS and observed in the 2000 study, the use of methamphetamine has continued to increase. Use of this drug is now considered widespread with an increase in the number of users, particularly younger users, and a more diverse range of people using the drug also. While crystal meth has clearly emerged as the main form of methamphetamine used by respondents in this study, other potent forms of the drug have also emerged onto the WA drug market. The average purity of seizures analysed has remained constant between the 2000 and 2001 studies, although IDU perceptions about current purity were determined by what form of the drug they were referring to. Crystal meth and paste were generally regarded as being of higher purity than powder and, as noted in 2000, tended to be associated with higher prices.

Cocaine

The IDU survey conducted as part of the 2001 IDRS has provided preliminary evidence of an increase in the use of cocaine, a trend that has not been detected in other existing WA data such as calls to the ADIS line. A significant increase in both lifetime use and use in the six months prior to interview was observed with this change coinciding with reports of a moderate increase in the proportion of IDU surveyed reporting cocaine use in other jurisdictions (Topp et al., in prep). The level of use reported in WA remained infrequent with cocaine still generally considered difficult to obtain although slightly less so than was reported in 2000.

Cannabis

There was little change observed in the price, availability and use of cannabis between the 2000 and 2001 studies, with the drug remaining the most frequently used illicit drug among the IDU surveyed. An increase in potency from medium to high in 2000 to very high in 2001 was noted. However, this is based on the subjective experience of IDU only, as no routine tests of cannabis potency are conducted. A reduction in the number of cannabis-related possession/use charges laid in WA in 2000 and a continuation of the reduction in the number of cannabis-related calls to the ADIS line were also noted.

Other drugs

The main finding in relation to the use of other drugs was the dramatic increase in the use of homebake – a home-made heroin alternative made from codeine-based pharmaceuticals. This increase most likely represents a shift to the use of homebake as a substitute for heroin during the period of reduced heroin availability. Furthermore, among those who identified heroin as their drug of choice, there was a significant increase in the proportion reporting the use of methadone which may support claims made in this report that some primary heroin users moved into methadone treatment as the drought began to take hold.

Although the use of prescription drugs remained high among the IDU surveyed in 2001, there was a reduction in the proportion of IDU respondents who reported the use of benzodiazepines, morphine and/or 'other opiates' in the six months prior to interview. Conversely, there was a significant increase in the proportion of IDU who reported methadone injection in the same period.

Drug-related issues

There has been a sustained increase in the number of calls made to the ADIS line in relation to amphetamines throughout the three years the IDRS has been conducted in WA, while the number of calls made in relation to heroin has reduced. The reduction in heroin-related calls to ADIS has been particularly evident since July 2000 and coincided with an observed reduction in the number of heroin-related overdoses.

There was a reduction in the total number and proportion of drug-related charges laid in 2000, the most recent data available, compared to 1999. In 2001, compared to 2000, there was a reduction in the number of IDU who reported having been arrested in the 12 months prior to interview. As noted in the 2000 IDRS report, drug dealing was the most common criminal activity reported by IDU in the month prior to interview while property offences replaced possession/use as the single most commonly reported reason for arrest in the preceding 12 months.

Research Implications

The findings of the WA component of the 2001 IDRS suggest several areas that could be further investigated in subsequent data collections for the IDRS.

- Expansion of the IDRS questionnaire to facilitate data collection specific to each of the various forms of methamphetamine available and a more thorough examination of problems associated with the use of more potent forms of this drug.
- The continued high rate of sharing injecting equipment is of concern. Further investigation into the exact nature of this ‘sharing’, and the perception of risks associated with it, is warranted.
- Further monitoring and investigation into the use of cocaine among WA injecting drug users. While injectors may not be the ideal sentinel group by which to determine trends in the use of cocaine there has been a detectable increase in use among this group that should continue to be monitored.
- Further monitoring and investigation into the re-emergence of homebake use observed in the state particularly given that such re-emergence was not detected in other data sources such as Drug Use Monitoring in Australia (DUMA) and ADIS data. To enable researchers to determine more accurately whether the use of homebake has remained confined to WA the 2002 IDU questionnaire, which is used nationally, will be amended to include questions about this drug.

1.0 INTRODUCTION

The IDRS aims to provide a national coordinated approach to monitoring data on the use of opioids, cocaine, methamphetamine and cannabis, and is intended to act as a strategic early warning system that identifies emerging drug problems of state and national concern. Rather than describe such phenomena in detail, the IDRS is designed to be timely and sensitive to emerging drug trends thereby providing direction for more detailed data collection.

The primary funder of the IDRS has been the Commonwealth Department of Health and Ageing (CDHA). One years seeding funding was secured through the National Drug Law Enforcement Research Fund (NDLERF) to complement the core funding from CDHA in 2000 and enabled the IDU survey component to be conducted in WA, Tasmania, the ACT, Queensland and the NT. This additional funding was repeated in 2001 and enabled the IDU survey component to be repeated in WA, Tasmania, the ACT and Queensland. The IDRS was not funded in the NT in 2001 although a comparable study was conducted in that jurisdiction (O'Reilly, 2002). Additional funds were again provided to enable the second year of the so-called 'dance drug' users survey in NSW, Qld and SA. Dance drug users have been included in the study as this group were considered to be another important sentinel group with different characteristics and drug use patterns from those of the IDU. Whilst NDLERF funding was provided for both years of the NSW and Qld surveys, SA involvement was made possible by funding from the Drug and Alcohol Services Council in that state.

This report presents the findings of the third year of data collection in WA. Results are summarised according to the four main drug types, with the use of 'other drugs' also reported. A summary report of the findings of the *2001 Australian Drug Trends* will be published (Topp et al., in prep) and will provide an abbreviated national overview of illicit drug scenes and recent trends. The results of the individual states and territories will also be published as separate *Drug Trends Reports*, available as NDARC Monographs.

1.1 *Study aims*

The specific aims of the WA component of the 2001 IDRS were to:

- examine trends in illicit drug use in Perth for 2001;
- identify any emerging illicit drug trends in Perth that warrant further investigation;
and
- specifically determine the extent to which a shortage of heroin was observed in the Perth region.

2.0 METHOD

Three data collection methods are used in the IDRS; a survey of injecting drug users (IDU), a key informant (KI) survey of professionals working in the field, and an examination of existing indicator data. These methods provide an effective means to determine drug trends and the triangulation of the data sources allows validation of observed trends across the different data sources. Injecting drug users are surveyed as they are regarded as a sentinel group for detecting illicit drug trends due to their increased exposure to many types of illicit drugs. IDU, irrespective of their drug of choice, often have first hand knowledge of the price, purity and availability of the other main illicit drugs under study. Key informants are interviewed as they provide contextual information on drug use patterns and other drug-related issues, including health. Indicator data are collected as they provide the quantitative support for the trends in drug use detected by the other methods.

Data collected as part of this year's study were compared with the findings from 2000 (Hargreaves & Lenton, 2001) and 1999 (Hargreaves & Lenton, 2000) to determine what changes have occurred in WA over this three year period. Comparisons with 1999 WA data is somewhat limited as only the key informant survey and analysis of existing indicator data were conducted in that year. Direct comparisons have been made with the 2000 data where possible.

2.1 *Survey of Injecting Drug Users*

A survey of 100 IDU was conducted in July and August 2001. The sample was recruited from the Perth metropolitan area and the locations of 'place of residence' identified by IDU are reported in Appendix 1.

Subjects were recruited through an advertisement in the street press and through flyers distributed through needle and syringe programs (NSPs), outreach agencies and other services in contact with IDU. Snowballing techniques were also utilised. Potential participants were screened upon contact with researchers to ensure they fulfilled the entry criteria, namely having injected at least monthly in the six months prior to interview and residing in the Perth area for not less than 12 months prior to interview. Ethics approval was granted from the Curtin University Human Research Ethics Committee (HR5/99), which permitted interviews to be conducted with participants aged 16 years or over. Preference was given to IDU who were not currently involved in treatment as it was regarded that these individuals would have greater contact with the 'drug scene' than their treatment population counterparts. Interviews were conducted at a venue convenient to the IDU including coffee shops, shopping centres and service agencies.

Some advisory group members and other reviewers have previously made comment as to the limitations of extrapolating findings from 100 IDU to all IDU in WA. The authors agree with these concerns, however, note that the data collected here is not intended to represent the IDU population as a whole, but rather provide a means by which to monitor trends in drug use over time. It is, therefore, important that the demographics of this sample remain relatively constant from year to year to provide consistency in data, rather than seek a sample more representative of the theoretical IDU population, particularly in a sample of limited size such as this one. As a result, efforts were made to interview IDU of a similar demographic profile

(see Table 2) to those interviewed in 2000 by using the same recruitment strategies as adopted that year.

The interview administered consisted of a standardised structured questionnaire, which was a slightly modified version of the questionnaire used nationally in 2000 and used previously in NSW (McKetin, Darke & Kaye, 2000), SA (Humeniuk, 2000) and Victoria (Dwyer & Rumbold, 2000). Included in this questionnaire were sections on demographics, drug use, price, purity and availability of the four main drug types, crime, risk-taking, health and general drug trends. Interviews took approximately 30 minutes to conduct and participants were reimbursed \$30 for out of pocket expenses associated with attending the interview.

The characteristics of the IDU sample are presented in Section 3 below.

2.2 Key Informant Study

Thirty key informant interviews were conducted in June 2001. Eligibility for participation in the study was at least weekly contact with illicit drug users in the six months prior to interview and/or contact with 10 or more illicit drug users in that time. For consistency of data, key informants who were interviewed as part of the 1999 and 2000 IDRS were interviewed again in 2001. Where former key informants were unavailable or no longer employed in the field, respondents were sought who held a similar position to those previously interviewed and fulfilled the selection criteria. Additional key informants were provided through snowballing techniques and/or through referral by advisory group members.

Written consent was obtained by fax prior to participation in the survey as most key informant interviews were conducted over the telephone. Interviews took approximately 30 minutes to administer with key informants asked to answer questions about drug use patterns, drug availability, criminal behaviour, health and other issues affecting the illicit drug users with whom they had contact. Responses were noted during the interview and transcribed in full as soon as practicable after its completion.

The key informant group consisted of 11 male and 19 female respondents. Of these 30 individuals, 11 identified that they were involved in the drug treatment field, five were general health workers, five were involved in outreach, three were either NSP workers and/or user group representatives, two were involved in research and one worked specifically as a youth worker. Three others were employed within the law enforcement/criminal justice sector - two as police officers and one as a legal representative.

Although only 29% of key informants reported their level of contact with users was between five and seven days per week (50% in 1999 and 37% in 2000), the overall level of contact was similar to that reported in 2000 (93.3 days, $sd=41.3$, range=26-180 days in 2001 compared to 87.5 days, $sd=44.8$, range=26-180 days in 2000). Only three key informants (10%) had had contact with 20 IDU or less in the six months prior to interview and almost half ($n=13$) had been in contact with more than 100 IDU in that time. Contact with IDUs was predominantly through work (63%) with the remainder of key informants having contact with illicit drug users through both work and social/personal contact.

Key informants were asked to identify the main illicit drug used by the drug users they had been in contact with during the last six months. In the previous two years heroin was the drug

most commonly mentioned, however, this year it was methamphetamine. The number of key informants able to report on primary methamphetamine users has increased from four in 1999, to 10 in 2000 and then 19 in 2001. Conversely only seven key informants were able to comment on primary heroin users, with one other reporting on primary morphine users. The remaining three key informants reported on cannabis users with whom they were in contact. As in the previous two years there were no key informants who were able to report on IDU contacts who were primary cocaine users.

Key informants identified contact with a range of special populations within the six months prior to interview. The special populations predominantly referred to were IDU (n=15), women (n=5), people in custody (n=4) and/or youth (n=4). Sex workers were also mentioned (n=2), as were Aboriginals (n=2), people in a residential rehabilitation setting and people with dual diagnosis issues were also mentioned by one key informant each. Key informants were 'moderately' (40%) to 'very certain' (60%) of the information they provided.

2.3 Other Indicators

Secondary data sources were examined to complement and validate the data collected from both the IDU and key informant surveys. Data were utilised when they could provide indicators of illicit drug use and related harms, and included law enforcement data, national survey data and health data.

The selection criteria to determine what sort of indicator data should be included in the IDRS were developed in the pilot study (Hando et al., 1997). Information is provided in financial year format to cover the same time period as that covered by the study. Note, however, that because of time lags in collecting and analysing data at the source agencies some indicator data from the 2000 calendar year are reported. It was recommended that databases providing indicator data should meet at least four of the following criteria:

- be available at least annually
- include 50 or more cases
- provide brief details of illicit drug use
- be collected in the main study site (ie. in the city or State of the study)
- include details on the four main illicit drugs under investigation

Data sources that fulfilled these criteria and have subsequently been included in all of the WA IDRS reports are:

- telephone advisory service data from the Alcohol and Drug Information Service (ADIS)
- data on possess/use, sell/supply, manufacture/grow and import/export charges provided by the Crime Research Centre (CRC)
- drug purity and seizure data from the Australian Bureau of Criminal Intelligence (ABCI)
- statewide rates of opioid-related fatalities provided by the Australian Bureau of Statistics (ABS)
- data on suspected heroin-related fatalities in WA, from the WA Chemistry Centre, provided by the WA Drug Abuse Strategy Office (WADASO)

- drug overdose-related calls attended by the WA Ambulance Service provided by the WA Pre-hospital Care Research Unit (WAPCRU)
- treatment admission data from Next Step Specialist Drug and Alcohol Services
- number of patients on the methadone program (both Government and community-based programs) provided by Next Step Specialist Drug and Alcohol Services and the Pharmaceutical Services Branch of the HDWA
- needle and syringe program distribution statistics from the Sexual Health Program, HDWA

2.4 Data Analysis

Qualitative data collected as part of the key informant survey were analysed using the word processing and table facilities of Microsoft Word (Windows® 2000 Professional). Quantitative data from the IDU and key informant survey were analysed using SPSS 10.0 for Windows®. For all quantitative analysis alpha was set at .05. Where Confidence Intervals are documented in relation to prevalence rates they are reported at the 95% confidence level. Where overlap exists between the Confidence Intervals it should be assumed that there is no significant difference between the reported rates. Confidence Intervals were calculated using Pepi Statistical Programs for Epidemiologists V3.0.

3.0 AN OVERVIEW OF THE IDU SAMPLE

3.1 *Demographics*

One hundred injecting drug users were interviewed in metropolitan Perth and surrounding areas during July and August 2001. The mean age of the sample surveyed was 28.1 years (sd=7.4, range=17-48 years), similar to the 2000 sample who were aged 28.3 years (sd=8.0, range=16-51 years). Just under two-thirds of this year's sample were male (63%) similar to the 71% in 2000 ($\chi^2=3.108$, df=1, n.s.). The difference in the age of male and female respondents surveyed approached significance (mean age 29.2 years and 26.2 years respectively, $t=-1.979$, df=98, $p=.051$). Some 6% of the sample identified themselves as being of ATSI descent with 5% having done so in 2000.

As with last year's study, a preference was given to those individuals not currently in treatment as these IDU were considered to be more active in the drug scene than their 'in treatment' counterparts. Whilst just 24 individuals were in treatment at the time of interview, 39 IDU had been in some form of drug treatment in the six months prior to interview. One in five respondents (20%) had been on methadone at some time in the six months prior to interview, including 17 people still currently in this form of treatment. A recent history of drug counselling was also common, with 20 IDU involved at some point in the preceding six months and five currently. Eight individuals had undergone detoxification, three had been to a therapeutic community, two had commenced the buprenorphine trial and one had attended narcotics anonymous in the six months although no IDU were still involved in these treatments at the time of interview. Seven IDU had used naltrexone in the six months prior to interview, six having done so as part of a treatment program. While the remaining person did not specify the source of their naltrexone, they did indicate that they had not received naltrexone as part of a treatment program.

There was no significant difference in the length of contact with treatment programs between male and female respondents (29.5 months and 14.1 months respectively, $t=-1.076$, df=22, n.s.). The overall length of treatment was, on average, just under two years (23.7 months, sd=34.0, range=1-120 months).

The majority (61%) of the IDU sample were unemployed at the time of interview with 28% in employment either on a full-time (n=10), or part time/casual basis (n=18). An average of 11.5 years of formal schooling (sd=1.3, range=8-13 years) was reported. This is identical to the average duration of schooling reported in 2000 (10.5 years, sd=1.3, range=6-12 years) once allowance was made for the extra year of kindergarten included in 2001. Over half (51%) of the IDU surveyed this year indicated that they had completed some form of post secondary education in 2001 representing a significant increase from the 2000 sample ($\chi^2=21.000$, df=1, $p=.000$). Educational attainment consisted of 35 having completed a trade/technical certificate with a further 16 achieving a university/college qualification.

No difference was observed between the 2000 and 2001 study in relation to the number of IDU who had ever been imprisoned. A third of respondents (34%) had been imprisoned at some time, with male respondents significantly more likely to report having been in prison than female respondents (43% and 19% respectively, $\chi^2=4.934$, df=1, $p=.026$).

Table 2 provides an overview of the demographic characteristics of the injecting drug users surveyed in both years.

Table 2: Demographic characteristics of the IDU sample (n=100)

Characteristic	2000	2001	Significance
Age (mean yrs)	28.3	28.1	n.s.
Gender (% male)	71	63	n.s.
Employment (%)			
Not employed	65	61	n.s.
Full time	12	10	
Part time / casual	17	18	
Student	6	5	
Home duties	0	3	
Sex industry worker	n/a	3	
School education (mean yrs completed)*	10.5	11.5	n.s.
Tertiary education (%)			
None	70	49	p=.000
Trade/technical	21	35	
University/college	9	16	
Currently in drug treatment (%)	20	24	n.s.
Ever been in prison (%)	34	34	n.s.

* In 2001 an extra year was added to the total number of years of formal school education (to include kindergarten/pre-school year)

3.2 Drug use history

The mean age of first injection was 17.8 years (sd=3.9, range=9-32 years) with no significant difference observed between male and female respondents (17.7 and 18.0 years respectively, $t=.314$, $df=97$, n.s.). While the range of ages reported for first injection was diverse, the majority of IDU (94%) had first injected by the age of 25. As also observed in the 2000 sample, individuals aged 25 or less at the time of interview were significantly younger at first injection than those IDU who were over 25 years at time of interview (16.2 vs 19.0 years, $t_{unequal}=-4.036$, $df=97$, $p=.000$). It should be noted that this data is subject to censoring because older respondents have had more years in which to have commenced injecting. While the mean age at first injection for those aged over 25 years at the time of interview was slightly lower in 2001 than in 2000 (19.0 years compared to 20.7 years) this difference failed to reach significance ($t_{unequal}=1.839$, $df=112$, n.s.). The mean age of first injection for those aged 25 or less was identical in both samples (16.2 years).

Not surprisingly, there was variation within the sample with regards to the frequency of injection reported. Of the 99 IDU who indicated how often they had injected in the previous month, the majority (70%) had used less than daily. The frequency with which IDU injected in the month prior to interview is presented in Table 3. Unlike the 2000 study, there was no significant difference between the rates of injecting reported between those aged 25 or less and those over 25 years at time of interview ($t=-.987$, $df=97$, n.s.). This is probably the result of an increase in frequency of methamphetamine injection, usually associated with younger

users, and a decrease in heroin availability resulting in decreased frequency of injecting by older users than was the case in 2000.

Table 3: Frequency of injecting among IDU sample (n = 99)

Frequency of injecting in month prior to interview	% of respondents
Weekly or less	22.2
More than weekly but less than daily	47.5
Once a day	15.2
Two to three times a day	12.1
More than three times a day	3.0
Total	100.0

The vast majority of IDU (72%) identified amphetamine as the first drug they injected, representing a significant increase from the proportion who reported this in the 2000 study (58%; $\chi^2=6.938$, $df=1$, $p=.008$). Conversely, there was a significant reduction in the proportion of IDU who reported heroin as their first drug injected from 33% to 22% ($\chi^2=5.473$, $df=1$, $p=.019$). Heroin was significantly more likely to be nominated as the first drug injected by IDU over 25 years old at time of interview ($n=19$) than those aged 25 or less ($n=3$; $\chi^2=8.446$, $df=1$, $p=.004$). Two IDU stated that they had first injected morphine while other opiates, cocaine, ecstasy, and crank (a mixture of cocaine and amphetamine) were each nominated as the first drug injected by one person each.

When respondents were asked to identify their drug of choice, amphetamine was the most popular, with a significant increase noted in the number of IDU who reported a preference for this drug (42 in 2001 compared to 23 in 2000; $\chi^2=20.384$, $df=1$, $p=.000$). Heroin was the second most popular drug, although a significant reduction was observed in the number of IDU who nominated heroin as their drug of choice, from 57 in 2000 to 34 in 2001 ($\chi^2=21.583$, $df=1$, $p=.000$). Ecstasy was nominated by seven IDU, cocaine by five, cannabis by four and other opiates and alcohol by one IDU each. Two individuals were unable to nominate a favourite and four had a preference for a combination of drugs taken together. Although heroin was predominantly identified as the drug of choice in 2000 (57%) it is unclear whether the results of the 2001 study represent a shift away from heroin as the preferred drug, are a function of the increased cost and difficulty associated with obtaining the drug, or merely reflect the preference of the particular population surveyed.

Methamphetamine was the drug most commonly injected in the month prior to interview, with a significant increase observed in the proportion of IDU who reported this from 44 IDU in 2000 to 71 in 2001 ($\chi^2=31.818$, $df=1$, $p=.000$). Less than a quarter of IDU ($n=23$) had used heroin most often in the month prior to interview compared to 54 in 2000. This clearly represents a shift in drug use in WA since last year, although it is not clear whether it represents a general trend towards increased amphetamine use, highlights the reduced availability of heroin within the drug market, or both.

The various drugs used, the routes of administration utilised and the average number of days each drug was used in the last six months are presented in Table 4. (Note that IDU may nominate multiple methods of drug administration).

Table 4. Drug use history of IDU sample (n=100)

Drug Class	Ever used	Ever injected	Injected in last 6 months	Ever smoked	Smoked in last 6 months	Ever snorted	Snorted in last 6 months	Ever swallowed	Swallowed in last 6 months	Mean no. of days used in last 6 months*	Used in last 6 months
1. Heroin	80	77	51	43	5	24	4	21	3	61	55
2. Methadone	45	28	15					42	27	110	29
3. Morphine	62	58	32	6	1	5	1	31	13	15	32
4. Other opiates	37	22	4	17	1	4	0	25	7	11	10
5. Amphetamines	100	100	92	35	16	76	31	67	29	77	92
6. Cocaine	76	54	20	16	2	49	14	13	4	13	32
7. Hallucinogens	91	22	1	4	0	1	0	88	20	6	22
8. Ecstasy	84	61	27	3	1	28	10	79	43	11	50
9. Benzodiazepines	64	31	14	6	1	5	3	63	49	54	51
10. Alcohol	94	6	0					94	83	50	83
11. Cannabis	98									111	91
12. Anti-depressants	52									84	28
13. Inhalants	42									9	14
14. Tobacco	87									176	81
15. Homebake	52	52	32							22	34

*for those who had used the drug in the last six months. Daily use would equal 180.

4.0 HEROIN

It is important to point out that the price, purity, availability and use of heroin in WA has been impacted upon dramatically by a shortage of the drug. This shortage has been observed in this state as well as nationally. To determine the existence of the so-called 'heroin drought' all IDU were asked to comment on whether the drug had been harder to obtain than usual and 65% were able to do so. The overwhelming majority (95%; n=62) indicated that heroin had been more difficult to obtain. January 2001 was the month most commonly cited (n=26) as the time when a difficulty in accessing the drug became apparent. Most IDU (80%, n=48) nominated the period from December 2000 to February 2001 as the period when heroin first became more difficult to obtain. Over half (58%) of the IDU felt able to comment on whether heroin availability had returned to normal yet, with most (81%, n=47) indicating that it had not. Of those who felt that availability had returned to normal (n=11), most felt that it had done so in May or June 2001 (45% and 27% respectively).

Level of knowledge in relation to the price, purity and availability of heroin among the IDU surveyed was lower than that reported in 2000, with only half of those surveyed able to comment on these issues. Compared to previous years, fewer key informants reported on the use of heroin as the primary drug used by the drug users with whom they were in contact (8 in 2001, 13 in 2000 and 16 in 1999). One of the eight key informants interviewed reported on *opioid* users rather than *heroin* users specifically, given the prevalence of morphine and other opioid use among the IDU population with whom they were in contact.

The heroin/opioid key informant group comprised of three general health workers, two outreach workers and one NSP worker. A youth worker and a legal representative were also interviewed about heroin users they were in contact with and both indicated that it was difficult to determine a predominant primary drug used by their client population. They reported that they were now in contact with an equal proportion of heroin and amphetamine users, and this represented a change from the previous dominance of heroin use among their contacts.

Frequency of contact with IDU ranged from two to seven days per week, with an average of 101 contact days in the preceding six months (sd=42.6, range=52-180 days). The majority of key informants (75%) reported contact with over 50 IDU in that period with most of these (83%) seeing more than 100 IDU in that time.

Key informants were familiar with heroin and other opioid using IDU throughout the Perth area although some agencies were restricted to servicing the inner-city and surrounding suburbs. All key informants reported contact with IDU who were, on average, in their early to mid-twenties with just an NSP worker reporting a slightly older average age. More male than female heroin users were reported on, with 75% of key informants indicating that the ratio of male to female IDU seen by them was 2:1.

The mean age of the IDU respondents surveyed who had used heroin most often in the month prior to interview (n=23) was significantly higher at 36.2 years (sd=7.9, range=21-48 years) than the 30.6 years reported in 2000 (sd=7.5, range=18-49 years; $t=-2.982$, $df=75$, $p=.004$). However, the male to female ratio of this subset was similar to the population reported on by key informants with 61% male and 39% female. It may be that the heroin users interviewed as part of the IDU survey were more involved in the drug scene and by virtue of this somewhat older than those individuals reported on by key informants. This increased involvement may

also be reflected in their ability to access heroin within a market of reduced availability such as that observed at the time of interview.

4.1 Price

Only 39 IDU were able to report on the price of a gram of heroin (compared to 55 in 2000). Of these, eight indicated that the price was \$800 per gram. Some six IDU indicated that the price was less than \$500, with the remainder indicating prices between \$500 and \$1000 per gram. Of those who had purchased a gram of heroin in the six months prior to interview (n=19) the median price paid was \$750, representing a \$300 increase from the median price paid by IDU in 2000. Most IDU (79%) paid between \$600 and \$900 for their last gram purchased. These prices are consistent with data from WA Police Service covert drug purchases which suggest that the price of a gram of heroin was between \$600 and \$850. Additionally, two key informants commented on heroin prices being between \$600 and \$1000 per gram.

The cost of a 'packet' of heroin was nominated by 27 IDU with two sizes and prices nominated, a \$50 or a \$100 packet. Nineteen IDU had purchased packets of heroin in the preceding six months with 12 individuals purchasing only \$50 packets, two purchasing only \$100 packets and five having purchased both sizes. These prices are consistent with those reported by WAPS which indicated that the \$50 refers to the purchase price for 0.05gm and the higher figure (their data indicates a \$60-80 price range) is the price of a point (0.1gm). However, there is anecdotal evidence to suggest that the amount of drug in, and/or purity of, such purchases have decreased as a result of the heroin shortage.

In 2000, packets were the size of deal most commonly purchased, however, 'half weights' and 'quarters' were more commonly purchased (25 and 24 IDU respectively) in 2001. A median purchase price of \$400 for half weights was reported with prices between \$300 and \$450 at last purchase accounting for most (76%) of the prices provided. Quarter gram purchases were made at a median of \$200 with most IDU (92%, n=22) having spent between \$150 and \$250. This perhaps supports the suggestion that people needed to purchase larger quantities of heroin to achieve the same effect because of the decreased purity associated with reduced availability of the drug. None of the key informants commented on these size deals and WAPS price data for 'half' and 'quarter weights' were also unavailable.

Of the 49 IDU able to comment on the price of heroin, most (73%, n=36) considered that the price had increased in the six months prior to interview with a further 10% indicating a fluctuation in price in that time. Four key informants commented on heroin price with most indicating that the price had increased (n=3). Seven IDU and one key informant reported that the price of heroin had remained stable.

4.2 Availability

Heroin was considered 'very easy' to obtain by just 16% (n=8; 95% CI: 7.0%, 28.6%) of those able to comment on present availability (n=51) in 2001, significantly lower than the 77.5% (n=62; 95% CI: 66.8%, 86.1%) of IDU able to comment in 2000. An additional 31% indicated that heroin was currently 'easy' to get. In comparison to data collected in 2000, over half (53%, n=27) of respondents indicated that heroin was 'difficult' (n=21) or 'very difficult'

(n=6) to obtain at present (compared to 0 and 1 respectively in 2000). Most of the IDU able to comment (67%, n=33) indicated that heroin had become more difficult to obtain in the last six months, which supports claims that there has been a shortage of heroin in WA. A slight change in the means of scoring was also reported with most of the heroin users who had purchased in the last six months (n=48) scoring from either a dealers home (35%), a mobile dealer (31%) or through a friend (21%). In 2000, over half (51%) of respondents reported purchasing heroin primarily from mobile dealers, with dealers' homes accounting for 20% and friends just 13% of the means by which IDU most often scored.

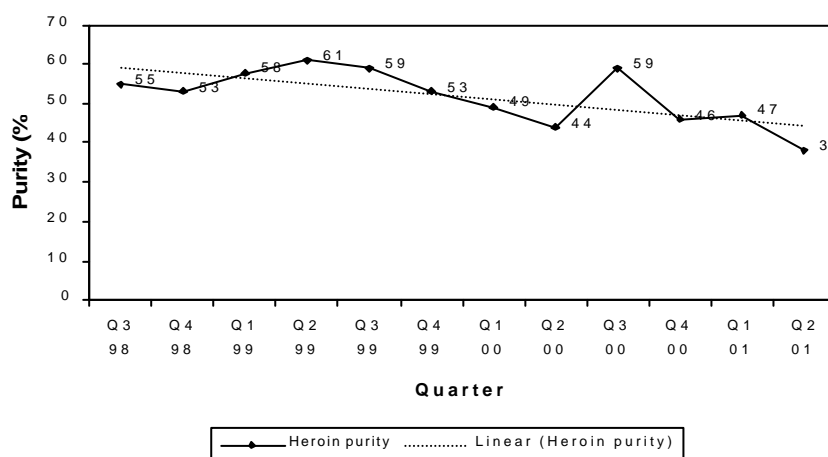
The key informants who were able to comment on heroin availability (n=5) were divided with heroin considered 'easy' (n=2) and 'difficult' (n=3) to purchase. Key informants were more cohesive as to whether heroin availability had changed in the last six months with 66% of those able to comment (n=6) indicating that it was more difficult to obtain. One KI indicated that the market was stable and one other indicated a degree of fluctuation.

4.3 Purity

Only 48 IDU were able to comment on the current purity of heroin available in Perth. Of these, most (67%) considered that heroin purity was low. Key informants supported this suggestion with almost all of those able to comment saying that heroin was currently of low purity. Additionally, 77% (n=36) of IDU and 66% (n=4) of key informants able to comment reported that the purity of heroin had decreased in the last six months.

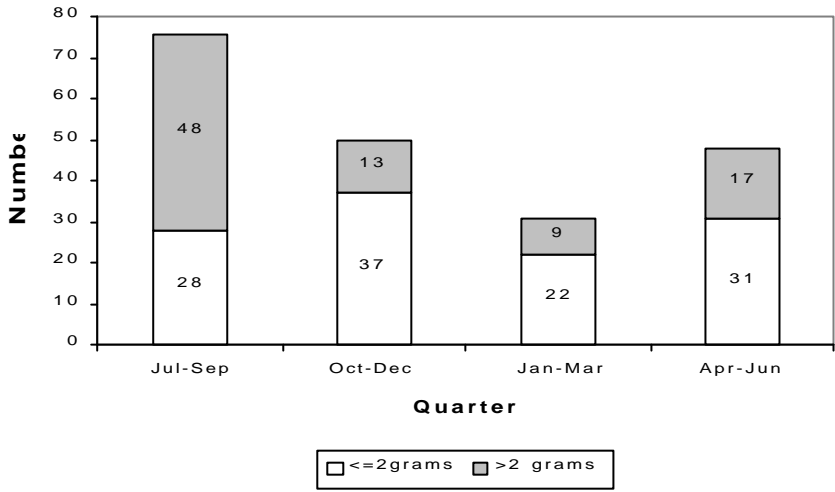
ABCI data would appear to conflict with IDU and KI reports with just a 4% reduction observed in the average purity of seizures analysed between the 2000 and 2001 studies. Whereas heroin was considered 'medium' to 'high' purity by IDU in the 2000 study (average purity 53%, range 0.1% to 79%) it was considered 'low' in the 2001 study (average purity 49%, range 3% to 88%). Figure 1 represents the average purity of heroin seizures analysed by quarter for the past three financial years and indicates that there has been a slight reduction in the average purity observed during that period.

Figure 1: Purity of heroin seizures analysed by law enforcement agencies in WA, by quarter, July 1999 to June 2001 (Source: ABCI)



It is not clear how representative the seizures submitted for analysis were of the purity of heroin available in Perth, particularly as there was a noticeable reduction in the actual number of seizures submitted for analysis. The number of seizures analysed fell from 386 in 1999/2000 to 205 in 2000/2001. While the reasons for this are unclear, the result is that the lower number of seizures analysed, and the fact that analyses conducted are unlikely to be a purely random sample of all seizures made, calls into question the extent to which this data is truly reflective of heroin purity on the streets of Perth in 2001. The numbers of heroin seizures submitted for analysis in each quarter of the 2000/2001 financial year are represented in Figure 2.

Figure 2: Number of heroin seizures analysed by law enforcement agencies in WA, by weight of seizure, 2000/2001 (Source: ABCI)



4.4 Use

Prevalence of heroin use

The prevalence of heroin use among injecting drug users in WA has been informed by data collected as part of the *Australian Needle and Syringe Program Survey* on respondents’ ‘last drug injected’. Table 5 represents a reduction in the number and proportion of injecting drug users who reported that heroin was the last drug they had injected prior to completion of the survey in 2000. As data collection for this study tends to occur in October each year it is unlikely that the data reflects the effects of the observed reduction in heroin availability as most IDU able to comment (80%, n=48) did not notice that heroin had become difficult to obtain until some time between December 2000 and February 2001. Consequently it may reflect a reduction in the prevalence of heroin use prior to the effects of any reduced availability, or be the result of an increase in the prevalence of methamphetamine use observed in WA since early 2000 (see Section 5).

Table 5: Number of WA respondents in the *Australian Needle and Syringe Program Survey* who nominated heroin as ‘last drug injected’ (Source: National Centre for HIV Epidemiology and Clinical Research)

Year	Numbers reporting heroin as ‘last drug used’	Total number of responses	Percentage of responses (%)
1995	13	30	43
1996	56	83	67
1997	32	48	67
1998	101	161	63
1999	57	86	66
2000	71	143	50

There is also some contradiction in other local indicators with a continued increase over time in the number of IDU enrolled in methadone programs (Figure 3) but a dramatic decrease in the number of heroin-related calls made to the ADIS line (Figure 4). However, it is possible that the recent reduction in heroin availability has resulted in more people accessing treatment programs particularly as the ‘drought’ began to take effect, and this has artificially increased the number of people in treatments such as methadone. Figure 3 indicates that such an initial move to methadone treatment may have occurred with an increase observed in the number of people enrolled on the program between the final quarter of 2000 and the first quarter of 2001. This increase was of short duration, however, with less people enrolled on the program in the second quarter of the year. Given that all indicators suggest heroin was less available, it is possible that demand for treatment places reduced as people’s tolerance to heroin was reduced by an inability to access the drug. However, another possible confounder is that there was an increase in persons participating in methadone in the first quarter or each of the preceding years so it may be a seasonal effect. Calls made to the ADIS line, however, tend to reflect the level of concern among users and their partners or family members. The reduction of such calls is therefore more likely to be a consequence of reduced availability and subsequent reduced use of the drug.

Figure 3: Number of persons participating in WA methadone programs, by quarter, July 1998 to June 2001 (Source: Next Step and HDWA)

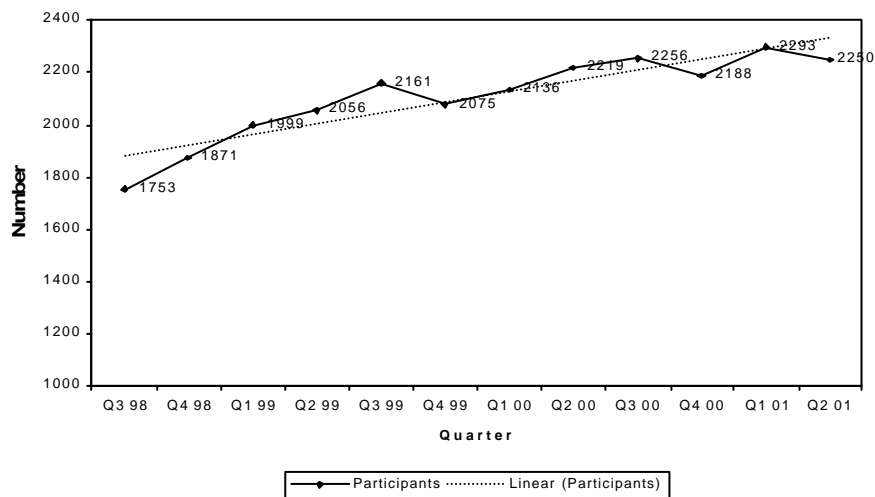
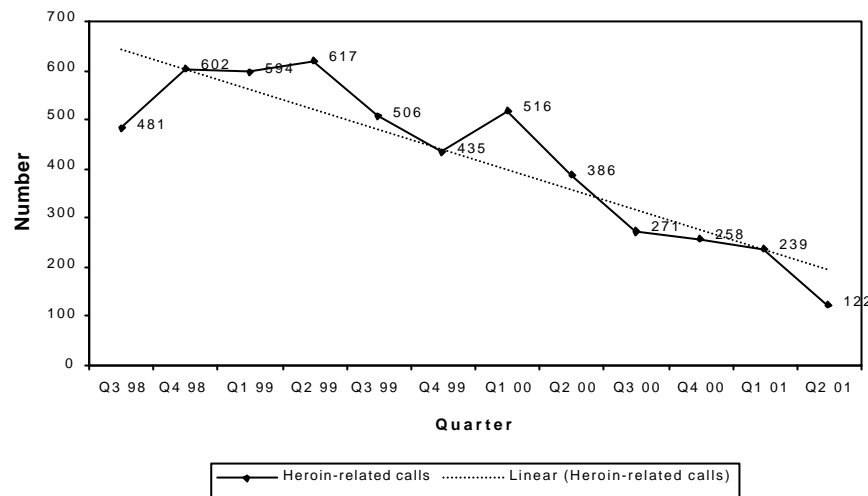


Figure 4: Number of heroin-related calls to ADIS, by quarter, July 1998 to June 2001
(Source: Alcohol and Drug Information Service)



Current patterns of heroin use

All key informants reported that they were in contact almost exclusively with intravenous users of heroin. Five key informants reported that the IDU they were in contact with tended to use daily but specified that this often included the use of morphine, homebake and/or benzodiazepines either in place of, or in conjunction with, heroin due to the drug's reduced availability. The remainder indicated that the level of use varied and this diversity was reflected to some extent by IDU reports of frequency of injection in the last month. Among those who had injected heroin most often in the previous month (n=23), the most common response was 'more than weekly but not daily' (n=8, 35%) with 'once daily' use the second most commonly reported (n=7, 30%). The remainder used weekly or less (n=4) or more than twice a day (n=4). The frequency of use for this subset was lower than that reported in 2000 where 63% reported daily use of heroin (n=34) compared to 48% in 2001 (n=11), perhaps reflecting the impact of reduced heroin availability.

It is perhaps interesting to note that this level of use was similar to that reported by the IDU who identified heroin as their drug of choice (n=34). Of these, most (65%, n=22) had injected heroin most often in the month prior to interview, 29% had injected amphetamine most often, one had injected morphine most often and one had injected another drug (crank). Frequency of injection reported by IDU who identified heroin as their drug of choice was also similar to that reported by IDU who had injected heroin most often in the month prior to interview with 41% injecting more than weekly but not daily, 26% reporting daily use, 9% two to three times a day and 9% more than three times a day.

In conjunction with a reduction in the frequency of heroin use there was also a significant reduction in the mean number of days of use. Whereas heroin was used for a mean of 101 days in the six months prior to interview in 2000 this fell to 60.5 days in 2001 ($t=3.407$, $df=120$, $p=.001$). This further demonstrates the changing profile of heroin use in WA resulting from the reduced availability of the drug in 2001.

Given the problems IDUs reported in accessing heroin during the first six months of 2001, it is unremarkable that key informants were unable to specify what form of heroin was being used. Just two KIs nominated the use of powder with the remainder referring to a range of

drugs used as substitutes or supplements to heroin. Some 55 IDU had used heroin at least once in the six months prior to interview, with 51 reporting the use of powder. Of the IDU who had used powder, most (65.5%) reported this was the main form of heroin they had used in the preceding six months. Although use of rock heroin was nominated by 48 IDU, only a third of those (34.5%) who had used it identified it as their main form used in that time.

As noted in 2000, key informants reported that the use of drugs other than heroin/morphine was common among the primary opioid users they were reporting on. Benzodiazepines, cannabis and amphetamine were again the drugs most commonly identified by key informants. Benzodiazepine use was noted by all eight KIs with reports that the distinction between licit and illicit use of such drugs was often difficult to determine. Cannabis use was also common (reported by 7KI) however the proportion of heroin users using the drug and the level of use reported varied greatly. Use of amphetamine was also reported by almost all key informants (88%), with such use noted particularly in relation to periods when heroin was scarce (n=3) and/or among people on opioid-related treatment programs (n=2). Two-thirds (65%) of the 23 IDU who had used heroin most often in the month prior to interview identified use of methamphetamines to some extent in the first six months of 2001. Although all IDU who nominated heroin as their drug of choice had used the drug in the six months prior to interview, a high proportion (79%) also reported the use of methamphetamine.

For IDU who had used heroin most often in the month prior to interview

Unlike in 2000, the use of morphine (predominantly MS Contin) and/or homebake was mentioned by the majority (75%, n=6) of key informants. Use of these drugs was considered to be a surrogate during periods of reduced heroin availability. The use of methadone, morphine and/or homebake were all noted by IDU who identified heroin as the drug they had used most often in the month prior to interview (n=23). Of these, 15 IDU were currently on a methadone program, 16 (70%) had used morphine, five (22%) had used other opioids, and 18 (78%) had used homebake to some extent in the preceding six months. Given the recent heroin shortage, however, it is not possible to determine what aspect of this 'other drug use' is a function of reduced heroin availability and what may represent the nature of polydrug use by primary heroin users. The use of homebake does, however, support claims of reduced availability especially given the drug's history of use in WA, where use decreased dramatically as heroin availability and purity increased (see Section 8.2.3).

For IDU who identified heroin as their drug of choice

The 34 IDU who identified heroin as their drug of choice also indicated use of methadone, morphine and homebake in the six months prior to interview. Sixteen of these IDU were currently on a methadone program, one other had been on a methadone program in the six months prior to interview and a further six had used methadone to some extent over this period. Two-thirds (68%) had used morphine, two-thirds had also used homebake (65%) and three-quarters (77%) had used benzodiazepines in the six months prior to interview.

Treatment population

The number of IDU interviewed who were in treatment at the time of interview was once again restricted. Those currently in treatment (n=24), were predominantly on methadone (n=17), five were involved in drug counselling (three of whom had used heroin in the last six months), and two were on naltrexone. Most of this treatment sample identified heroin as their drug of choice (83%, n=20), two thirds (67%) stated that it was the drug they had injected most often in the month prior to interview and 58% indicated that it was the drug they had most recently injected.

Heroin use trends

The majority (70%, n=16) of the 23 IDU who had used heroin most frequently in the month prior to interview suggested that the number of people using the drug had changed during the six months prior to interview. An even greater proportion (83%) considered that there had been changes in the frequency and/or quantity of heroin used and 65% reported that the type of drug being used had changed. The general view was that given the reduced availability of heroin there has been a subsequent decrease in the number of people using the drug with a switch to the use of speed or other drugs noted. This coincides with the pattern of use identified by respondents who had used the drug in the first six months of 2001. Key informants reported little change in the demographic profile of the heroin users with whom they were in contact but observed a change in the pattern of drug use and types of drugs used brought about as a result of the heroin drought.

4.5 Summary of heroin trends

A summary of heroin-related trends is provided in Table 6.

Table 6: Summary of trends in the price, availability, purity and use of heroin

Price	<ul style="list-style-type: none">• \$750 a gram, \$400 half weight, \$200 quarter gram• Increased
Availability	<ul style="list-style-type: none">• Difficult to obtain• Availability dramatically reduced
Purity	<ul style="list-style-type: none">• 49% seizures [54% in 2000]• IDU and KI report low purity, decreasing
Use	<ul style="list-style-type: none">• Decrease in the number of users• Switch to the use of other drugs in place of heroin because of reduced availability

5.0 METHAMPHETAMINE

In the past, the IDRS has used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. Throughout the 1980s, amphetamine sulphate was the form of illicit amphetamine most available in Australia (Chesher, 1993). Following the legislative controls on the distribution of the main precursor chemicals introduced in the early 1990s (Wardlaw, 1993), illicit manufacturers were forced to rely on different recipes for 'cooking' amphetamine. Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine, rather than amphetamine sulphate, steadily increased until methamphetamine clearly dominated the market. In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine. The more potent forms of this family of drugs, known by terms such as ice, shabu, base and crystal meth, are also methamphetamine. Many of these forms are crystalline in nature although the term paste is used to describe a form of methamphetamine that is tacky and viscous in nature. Consequently, the term methamphetamine will now be used in the IDRS to refer to the drugs available in this class, and the distinction will be drawn between the 'powder' form that has traditionally been available in Australia, and the more potent forms 'ice, crystal meth, shabu or paste' that have become increasingly available in recent years and more widely used. In this report the terms 'crystal meth' and 'paste' are used to refer to the more potent forms as these are the terms used by IDU in this state. Where the term amphetamine is used it represents the terminology of key informants or the indicator data reports. Any reference made to pharmaceutical amphetamine, specifically dexamphetamine, is made in relation to illicit use of these pharmaceuticals.

The overwhelming majority (92%) of the IDU surveyed in 2001 had used methamphetamine on at least one occasion in the six months prior to interview, representing a significant increase from the 85% who reported its use in 2000 ($\chi^2=3.843$, $df=1$, $p=.05$). An increase in the number of key informants able to report on primary amphetamine users has been observed and could lend support to the suggestion that there has been an upsurge in the use of methamphetamine in WA. The increase in the number of key informants able to report on methamphetamine users has been persistent, rising from just four key informants able to comment in 1999, to 10 in 2000 and 19 in 2001. As noted in Section 4.0, an additional two key informants who reported on primary heroin users stated that their client population had undergone a change in profile during the six months prior to interview with the number of methamphetamine users accessing their services now equivalent to that of heroin users.

Of the 19 key informants who reported on primary methamphetamine users, the most common profession was drug treatment workers ($n=8$, 42%) with a further three (16%) involved in the general health area. An additional eight KI, two each from NSP, outreach, research and law enforcement, were also interviewed. The majority of key informants (88%) had contact with over 50 IDU in the six months prior to interview and eight (53%) of these key informants in contact with over 100 IDU in that time.

Key informants were familiar with IDU who were predominantly in their twenties and residing throughout the metropolitan area. Most key informants (84%) had contact with more male than female IDU with males accounting for, on average, 65% of their contacts. This demographic profile is very similar to the IDU interviewed who nominated methamphetamine as the drug they had used most often in the month prior to interview. These methamphetamine users were also, on average, 25 years old ($n=72$; $sd=5.2$, $range=17-42$ years) and predominantly (65%) male.

The most common form of methamphetamine use reported by key informants (79%) was of crystalline methamphetamine, which is more commonly referred to as 'crystal meth', although the use of a variety of other forms of methamphetamine was also reported. Powder and crystal meth, were the two most commonly reported forms used in the six months prior to interview by the 92 IDU who had used methamphetamine (95% and 92% respectively). Approximately three-quarters of the total sample were able to comment on aspects of the price, purity and availability of either of these forms. The use of 'paste' was also common, reported by 61% of those who had used methamphetamine in the six months prior to interview. Illicit use of prescription amphetamine, predominantly dexamphetamine, was also reported by 38 (41%) of the amphetamine-using IDU.

5.1 Price

Given the range of forms available within the methamphetamine market, IDU were asked to comment on aspects of price, purity and availability for both powdered and crystalline or paste forms of the drug. Most IDU were able to comment on at least one form of the drug.

Powder

IDU reported a range from \$100 to \$400 as the price of a gram of powder. Of those who had made such a purchase in the six months prior to interview, most (59%, n=20) paid between \$200-\$250 and a further nine (26%) paid \$300-\$350 at last purchase. Grams and half-grams were the most commonly purchased deals, purchased by 34 and 31 IDU respectively. Median price of the last purchased gram of powder was \$250 and for a half-gram it was \$150. Points (approx 0.1gm) of methamphetamine powder were also commonly purchased with 26 IDU having purchased one in the six months prior to interview at a median price of \$50 at last purchase. 'Eight-balls' (equivalent to approximately 3.5 grams) of powder were also purchased (n=17) at a median cost of \$650. The median price of a gram of powder was \$50 higher than the median price reported in 2000. However, only 25% of the IDU able to comment (n=77) believed that the price of methamphetamine had increased during the last six months, and 65% considered it stable.

Crystal meth/paste

The prices reported for 'crystal meth' or 'paste' purchases were approximately \$100 higher than those reported for powder with a median price of \$350 a gram paid by the 24 IDU who had purchased such an amount in the last six months. For the 28 IDU who purchased half-grams in the preceding six months the median price of last purchase was \$200. Points were the most common purchase, with 35 IDU having bought such an amount. While point deals of crystal/paste were of the same median price (\$50) as points of powder there was suggestion that the amount of drug provided for \$50 varied according to the form of the drug purchased. Eight-balls of crystal/paste were purchased (n=15) at a median cost of \$800 for most recent purchase in the six months prior to interview. Most (62%) of the IDU able to comment on the price of these two forms of the drug (predominantly in relation to crystal) considered the price stable. An increase in price within the last six months was noted by 21%, with 12% reporting a decrease in price paid. As prices were not broken down by the form of drug used in the 2000 study it is not possible to compare prices paid for the various forms of methamphetamine between the two years.

Only eight key informants were able to comment on prices of amphetamine with no consensus among them as to whether there had been changes in price within the last six

months. Prices provided by key informants were consistent with those reported by IDU but were not distinguished by drug form. The drug prices provided from WAPS covert drug purchases are also not distinguished by form of methamphetamine purchased but report that the price of a street gram (0.7gm) is between \$220-250, suggesting this may be for purchases of powder.

5.2 Availability

A similar proportion of IDU were able to comment on the current availability of powder as were able to comment in relation to crystal or paste (80% and 77% respectively). Almost all IDU (93%) considered powder either 'very easy' (79%) or 'easy' (14%) to obtain at present. The majority (88%) also considered that crystal/paste was 'very easy' (66%) or 'easy' (22%) to purchase. The availability of methamphetamine in its various forms was considered stable to increasing, by 61% and 23% respectively of those reporting on the availability of powder and 55% and 35% respectively of those reporting on crystal. All 19 key informants reporting on primary amphetamine users were able to comment on the current availability of amphetamine indicating that it was 'very easy' (n=16) or 'easy' (n=3) to obtain. Most key informants (65%, n=11) felt that the availability of amphetamine had increased during the first six months of 2001.

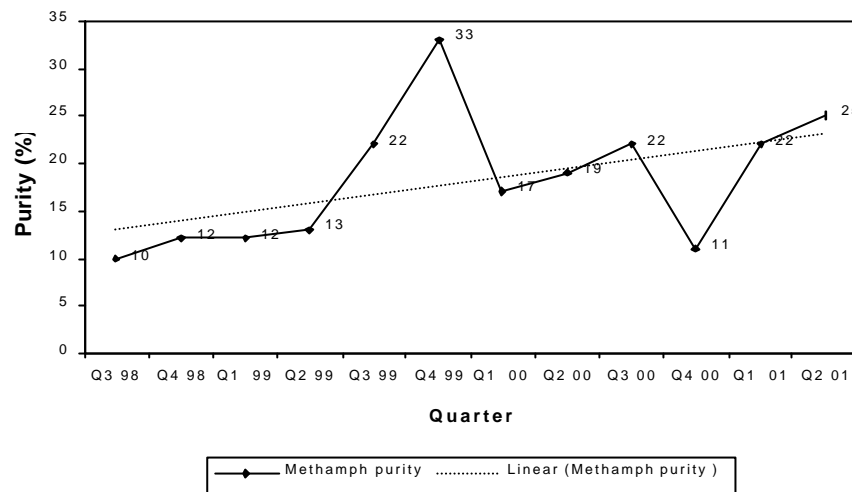
As with last year there was no obvious preference in terms of where IDU usually purchased their methamphetamine. Some IDU scored primarily through friends, with 27% of those who had bought powder and 34% of those who bought crystal or paste having done so. Drug acquisition from mobile dealers (28% of powder and 26% of crystal/paste purchasers) and the dealer's home (27% and 21% respectively) was also common. Few IDU purchased from a street dealer with only four IDU reporting on powder and five reporting on crystal meth indicating that this was the predominant means by which they scored methamphetamine.

As observed in the 2000 report, the use of crystal meth was widespread among the IDU sample and in 2001 represented the form of methamphetamine most often used by the IDU surveyed. Of the 100 people surveyed in 2001, 85% had used crystal meth to some extent in the six months prior to interview, with most of those who had used it (69%) indicating that this was the form they had used most often. Although powder was used by more IDU than crystal meth, it was significantly less likely to be identified as the form of methamphetamine used most often (31%; $\chi^2=54.633$, $df=1$, $p=.000$). As mentioned in Section 5.0, the use of paste and illicit use of prescription amphetamine was also common, used by 56% and 38% of the total sample respectively.

5.3 Purity

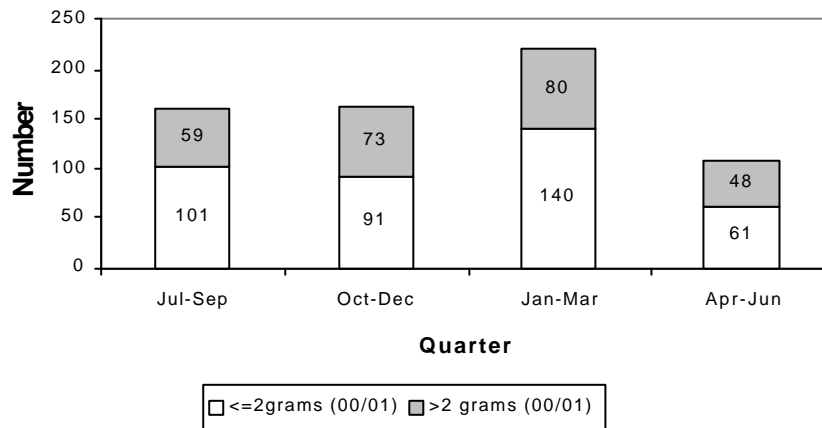
Illicit amphetamine seizures analysed included both amphetamine and methamphetamine and the proportion of seizures relating to methamphetamine increased from 84% in 1998/1999, to 95% in 1999/2000 and 98% in 2000/2001. While the average purity of illicit amphetamine seizures analysed in WA has increased since the 1998/1999 financial year (see Figure 5), no change was observed between 1999/2000 and 2000/2001. In both these years an average of 23% was reported.

Figure 5: Purity of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001 (Source: ABCI)



While there has been a reduction in the number of heroin seizures submitted for analysis between the 1999/2000 and 2000/2001 financial years, the number of illicit methamphetamine seizures analysed in the same period has increased from 490 to 668 seizures. The number of seizures submitted for analysis, in each quarter, is presented in Figure 6.

Figure 6: Number of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by weight of seizure, 2000/2001 (Source: ABCI)



NB - these numbers do not represent the total number of seizures made, but rather the number of seizures submitted for analysis.

IDU perceptions about the purity of the methamphetamine they had used in the six-month period prior to interview varied according to whether they reported on the use of powder or crystal/paste. Higher levels of purity were generally related to crystal meth (and/or paste) than powder with 68% of those reporting on crystal (n=51) indicating that it was currently of high purity compared to just 38% (n=31) reporting high purity for powder. Conversely, a quarter (26%, n=21) of IDU reporting on the purity of powder reported that it was currently low

purity compared to just 8% (n=6) reporting this in relation to crystal. Some 10 key informants were able to comment on the current purity of methamphetamine with most (70%) reporting that purity was currently high. As key informants reported on illicit methamphetamine generally, it is not clear whether they were reporting on the purity of powder or crystal meth.

There was some disagreement among IDU as to what changes in purity had occurred in the first six months of 2001, with conflicting reports made in relation to the purity of powder. Of the 76 IDU able to comment, 23 (30%) considered that purity had increased, 19 (25%) that it was stable, 20 (26%) that it had decreased and 14 (18%) that it had fluctuated. Only slightly less conflict was reported in relation to any changes in the purity of crystal meth over the last six months with 33 IDU (43%) suggesting that it had remained stable, 19 (25%) that it had increased, 12 (16%) that it had decreased and 12 (16%) stated that it had fluctuated. Key informant responses were equally diverse with five key informants indicating that the purity of amphetamine had increased, four that purity was stable and one indicating a fluctuation in purity over the last six months. This suggests that overall the general trend in amphetamine purity during the six months prior to interview was stable to increasing for both the powder and crystal/paste forms of the drug.

5.4 Use

Prevalence of amphetamine use

In the *Australian Needle and Syringe Program Survey* for 2000, amphetamine was once again the second most commonly reported ‘last drug injected’, representing 23% of the responses (see Table 7).

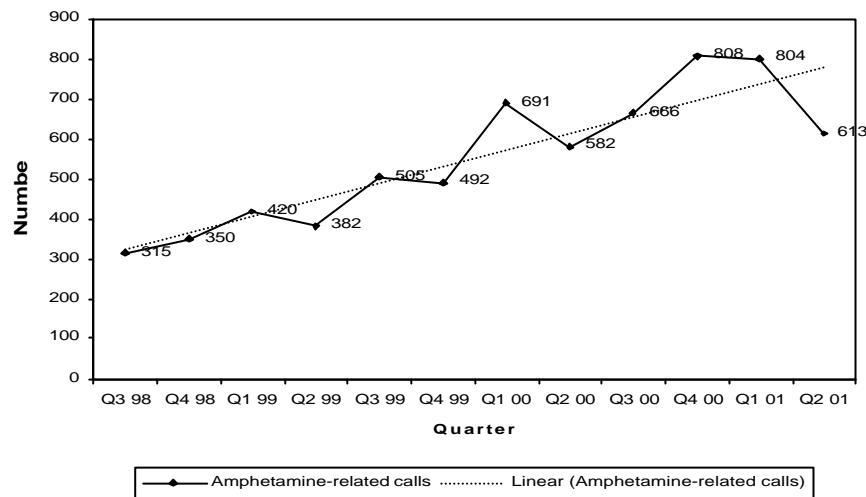
Table 7: Number of WA respondents in the *Australian Needle and Syringe Program Survey* who nominated amphetamine as ‘last drug injected’ (Source: National Centre for HIV Epidemiology and Clinical Research)

Year	Numbers reporting speed as ‘last drug used’	Total number of responses	Percentage of responses
1995	10	30	33
1996	12	83	14
1997	6	48	13
1998	35	161	22
1999	16	86	19
2000	33	143	23

Even though a slight increase in the proportion of IDU who reported amphetamine as their last drug injected was observed in 2000, the IDU survey conducted as part of this study suggests that such use is now even more commonplace. Almost three-quarters (73%) of the IDU surveyed as part of this study indicated that the last drug they had injected prior to interview was amphetamine. While it could be argued that this high rate of recent methamphetamine use is a feature of the IDU sample interviewed, other recent indicator data suggest that an increase in use of methamphetamine has not been restricted to the IDU sample surveyed.

One of the most notable indicators of increased methamphetamine use in WA is the increased number of calls made to the ADIS line in relation to this drug. Not only has amphetamine become the drug most commonly inquired about of the four main drug types studied in the IDRS, but the number of calls has continued to increase even though the number of other calls, such as those relating to heroin and cannabis, have fallen.

Figure 7: Number of amphetamine-related calls to ADIS, by quarter, July 1998 to June 2001 (Source: ADIS)



Current patterns of amphetamine use

Methamphetamine was used on at least one occasion in the period January to June 2001 by an overwhelming majority (92%) of the IDU population surveyed in this year's IDRS. The proportion of IDU in this year's study who had used methamphetamine was even higher than that reported for cannabis (91%), alcohol (83%) or tobacco (81%). Frequency of use in terms of the number of days of use was, however, less than that reported for cannabis and tobacco.

For those IDU who had used methamphetamine in the preceding six months, the average number of days of use was 77 days, approximately three days per week (sd=58.9, range=1-180 days), representing more than double the number of days reported in 2000 where use was a mean of 37 days ($t_{unequal}=-5.150$, $df=163$, $p=.000$). This higher frequency of use may be due to the fact that daily use was the most common singular response provided (12%, $n=11$). For the 72 IDU who identified methamphetamine as the drug they had injected most often in the month prior to interview, most (75%) reported injecting more often than weekly, with 16 (22%) having injected on a daily basis (6 injected once per day and 10 did so 2-3 times a day). Half (50%, $n=36$) of those who had used methamphetamine most often in the month prior to interview had used the drug on the day prior to interview.

As mentioned in Section 5.2, the use of powder and crystal meth was reported by a similar proportion of the overall IDU sample (87% and 85% of IDU respectively). Over two-thirds (69%) of those who had used crystal meth nominated it as the form they most often used. Conversely, just 31% of those who had used powder reported that this was the form they had used most often in the six months prior to interview. The use of paste was also common with 56% of all IDU surveyed reporting its use in the previous six months, three of whom nominated this as the form of methamphetamine they used most often. Over a third (38%) had used illicit prescription amphetamine (mainly dexamphetamine) although only one indicated

this was their main form used. Almost a quarter (23%) had used amphetamine in liquid form, with just one indicating it was the form they had used most often, and 4% had used licit prescription amphetamine.

All 100 IDU surveyed in 2001 reported the use and injection of methamphetamine at least once in their drug using careers, with 92% reporting use between January and June 2001. Various routes of administration were adopted by IDU who had used methamphetamine in the last six months. Injection was the predominant route reported, with all IDU having used that route at least once. Snorting and swallowing in the preceding six months were both reported by a third (34% and 32% respectively), and smoking was reported by 17% (n=16). These proportions are similar to those reported by the IDU for whom methamphetamine was their most commonly injected drug in the month prior to interview. Again all 'primary' methamphetamine users (n=72) had injected, 40% (n=29) had snorted, 36% (n=26) had swallowed and 18% (n=13) had smoked the drug.

Key informants were familiar with primary methamphetamine users with a similar use profile to these methamphetamine users. Most (95%) reported contact predominantly with injectors but also mentioned snorting, swallowing and smoking of the drug. A level of use from once every six months up to daily was indicated. As with the IDU survey, crystal meth was the form most often identified by key informants as the form preferred by their IDU contacts (74%). Key informants also identified the use of other forms of the drug, including powder, liquid and the illicit use of dexamphetamine.

Poly-drug use was common among the methamphetamine users with whom key informants were in contact. Cannabis was the drug most often mentioned with 14 (74%) key informants indicating that over half of the amphetamine users they were in contact with would use cannabis to some extent. All key informants made reference to heroin use by 'primary' amphetamine users, with varying proportions of users and frequencies of use reported. Further, seven key informants indicated that they were in contact with IDU who had switched to methamphetamine use because of the reduced availability of heroin. Ecstasy and alcohol use were also reported however the proportion of users involved and the level of such drug use varied greatly.

Key informant observations were supported by reports from IDU who had injected methamphetamine most often in the month prior to interview (n=72). These reports indicated that high proportions of 'primary' methamphetamine users had also used cannabis (94%), and/or ecstasy (63%) to some degree in the six months prior to interview and were very similar to the proportions reporting such use in 2000 (93% and 64% respectively). A significant reduction in the proportion of primary methamphetamine users who had also used alcohol (85% vs 95%, $\chi^2=16.01$, $df=1$, $p=.000$), heroin (38% vs 50%, $\chi^2=4.500$, $df=1$, $p=.034$) and/or benzodiazepines (43% vs 57%, $\chi^2=5.712$, $df=1$, $p=.017$) was observed.

Amphetamine use trends

Of the 72 primary methamphetamine injectors, the majority (74%, n=53) considered that there had been some change observed in relation to the demographics of methamphetamine users during January to June 2001. These changes tended to relate to an increase in the overall number of users (58%), especially younger users (30%) and an increase in the diversity of people using the drug, including more 'mainstream' users (21%). Some 50 IDU reported on changes in frequency and quantity of methamphetamine use, 37 of whom indicated that an increase in both had been observed during the preceding six months. Fewer IDU (n=23)

commented on changes in the types of drugs being used although most responses related to a shift from heroin use to speed use (n=10) or a shift between the various forms of methamphetamine (n=9). The overall trend of increased numbers of methamphetamine users was also supported by key informant comments, with over half (53%) indicating there had been an increase and that users were younger (16%, n=3) particularly with more young women using (16%).

5.5 Summary of amphetamine trends

A summary of the methamphetamine-related trends identified by IDU, key informants and indicator data is provided in Table 8.

Table 8: Summary of trends in the price, availability, purity and use of amphetamines

Price	<ul style="list-style-type: none"> • Gram of powder \$250, gram of crystal \$350 • Points \$50 (amount varies with form purchased) • Price stable
Availability	<ul style="list-style-type: none"> • Very easy to obtain (both crystal and powder) • Availability stable to increasing • Preference for crystal meth
Purity	<ul style="list-style-type: none"> • 23% seizures [23% in 2000] • IDUs perception is that crystal is higher purity than powder
Use	<ul style="list-style-type: none"> • Use widespread, diverse population of users • Increased number of users (both as a result of the reduced availability of heroin and a general overall increase) • More young users • Frequency of use increasing (77 days use in 2001 up from 37 days in 2000)

6.0 COCAINE

Even though a third (32%) of the IDU surveyed as part of the 2001 WA IDRS indicated that they had used cocaine in the six months prior to interview, most (84%) had done so on no more than seven days. Consequently only a minority of IDU were able to comment on aspects of the price, purity and availability of cocaine. As noted in previous IDRS reports there were no key informants able to comment on primary cocaine injectors in 2001. The following section is therefore based on information provided by those IDU able to comment and is supplemented, where possible, with local indicator data and comments made by key informants.

6.1 Price

The gram price of cocaine provided by the 13 IDU able to comment ranged from \$250 to \$600 per gram, although most (n=11) placed the cost between \$300 and \$500. These prices are somewhat higher than the prices reported by IDU who had actually purchased such amounts in the January to June 2001 period. The median price paid for a gram at last purchase, as reported by the five IDU who had made such a purchase was \$300 (range=\$250-350). This price represents a \$50 increase from the median price reported in 2000 but given the limited number of purchases reported in both years (5 in 2001 and 4 in 2000) caution must be exercised in determining whether this represents an actual increase in price. Further, the price of a gram purchase reported in 2001 is somewhat higher than the price provided by the WA Police Service data where a range in price from \$180-\$240 was reported.

A limited number of purchases of other size deals of cocaine were also reported. Just four IDU nominated the purchase of 'bags' or 'points' of cocaine at a cost of \$50 each, while two IDU had purchased a half-weight with a considerable difference between the prices paid (\$125 and \$350) and one IDU had bought a quarter gram (for \$250). As it is not clear at what point in the preceding six months these purchases were made it is not apparent whether they represent market influences on price over time. Just 10 IDU were able to comment on changes in the price of cocaine in the six months prior to interview with the price considered stable (n=4) to increasing (n=4) by most.

Of the 32 IDU who had used cocaine in the six months prior to interview only 14 provided specific information about where they usually scored the cocaine they had used. The remainder indicated that they seldom use cocaine and their use had been a one-off event. Responses were diverse with scoring through friends (n=5), from the dealer's home (n=4), or through a mobile dealer (n=3) or street dealer (n=2) all nominated. Five other IDU indicated that they usually scored through other means but did not specify how.

6.2 Availability

It is difficult to determine whether there has been an increase in the availability of cocaine since 2000 due to the low proportion of respondents who reported on its availability in both years (15% in 2001 and 16% in 2000). There was disparity as to the availability of cocaine in 2001, with just over half of those able to comment (53%, n=8) reporting that it was 'easy' (n=6) to 'very easy' (n=2) to obtain at present (compared to 4 and 0 respectively in 2000). The remainder thought that cocaine was 'difficult' (n=3) to 'very difficult' (n=4) to obtain at

the moment (compared to 10 and 2 respectively in 2000), which may suggest that cocaine is slightly less difficult to obtain than it was in 2000.

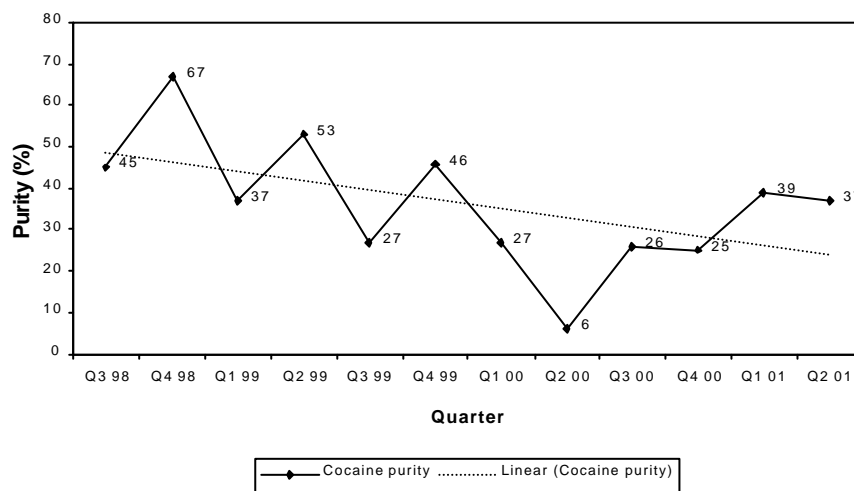
Fewer IDU were able to comment on changes in availability of cocaine (n=11) however opinion was more uniform in this regard, with the majority (82%, n=9) considering that availability had remained stable in the six months prior to interview.

6.3 Purity

The IDU who were able to comment on the current purity of cocaine (n=13) disagreed as to the purity of the drug with equal numbers (n=5) reporting that purity was ‘high’ or ‘low’, and three IDU indicating that it was currently of ‘medium’ purity. Two-thirds (n=6) of those able to comment on changes in purity considered it as stable during the six months prior to interview. No key informants were able to comment on aspects of purity.

Average purity of the seizures analysed in the 2000/2001 financial year was 33%, almost identical to the average purity reported in 2000 (34%). Figure 8 suggests there has been a general decline in the purity of cocaine seizures analysed in WA although as mentioned previously, meaningful comparison and interpretation of the data is difficult given the low number of seizures analysed each year (59 in 1998/1999, 11 in 1999/2000 and 28 in 2000/2001). Consequently it is difficult to determine what, if any, trends exist in relation to the purity of cocaine in WA.

Figure 8: Purity of cocaine seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001 (Source: ABCI)



6.4 Use

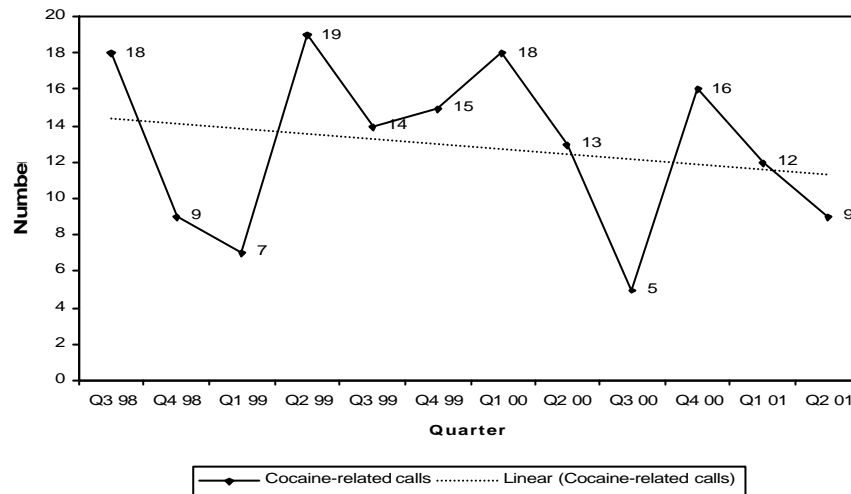
Prevalence of cocaine use

As with last year there is little information currently available about the incidence of cocaine injection among injecting drug users in WA. Data collected for the *Australian Needle and Syringe Program Survey* identifies that just one of the 143 respondents surveyed in 2000 indicated that cocaine was the last drug they had most recently injected prior to completion of

the survey. Further there were just two reports of cocaine as the ‘last drug injected’ in the IDU survey conducted as part of this year’s IDRS study in WA.

Little information on the prevalence of cocaine use is available from the number of calls made to the ADIS line in relation to use of the drug. As shown in Figure 9 the number of these cocaine-related calls made to the service has remained consistently low.

Figure 9: Number of cocaine-related calls to ADIS, by quarter, July 1999 to June 2001
(Source: ADIS)



Current patterns of cocaine use

A significantly higher proportion of the IDU sample reported the use of cocaine in the six months prior to interview in 2001 than did so in 2000 (32% vs 22% respectively, $\chi^2=5.828$, $df=1$, $p=.016$). The use of powder was most often reported with the majority (78%) indicating that this was the main form of cocaine they had used. Some 10 IDU reported the use of a crystalline form of cocaine, more commonly referred to as ‘crack’, with half of these indicating that this was the form of cocaine they had most often used in the six months prior to interview. Given the low frequency of use reported by some IDU and the prevalence of crystal meth it may be that IDU are reporting on the use of high quality crystal meth rather than the use of crack per se. Also given the only one in 10 of those who identified crack use indicated having smoked any form of cocaine in the last six months it is unlikely that the others had in fact used crack at all. Two IDU, who had used cocaine only once, were unable to specify the form of cocaine used.

As with the sample interviewed in 2000, cocaine use was infrequent for the majority (84%, $n=27$) of those who had used the drug. Use ranged from once ($n=10$) in the preceding six months to daily ($n=1$) use although this IDU specified that their main use of cocaine was in the form of ‘crank’ (cocaine and speed), which they injected daily. The median number of days use was 2.5 days although two IDU reported that they had used on 20 days, one on 60 days and one other on 75 days. No significant difference in the mean number of days used between 2000 and 2001 was observed (5.9 and 13.4 days respectively, $t=-8.86$, $d=47$, $n.s.$).

Injection was the most common means of administration in the six months prior to interview with 20 IDU (63%) indicating that they had used this method. This represented a significant increase from the proportion of IDU who reported cocaine injection in the six months prior to

participation the 2000 study (n=12; $\chi^2=6.061$, df=1, p=.014), not surprising given the significant increase observed in the number of IDU who used cocaine in the six months prior to interview. Sixteen (80%; 95% CI: 56.3%, 94.3%) of those who had injected cocaine indicated that this was the sole route of administration they had utilised during the six months prior, similar to the two-thirds (67%) in 2000 (95% CI: 34.9%, 90.1%). Thirteen IDU indicated that they had snorted cocaine in the same period with nine (69%) indicating that this was the sole method by which they had administered cocaine. The remaining seven IDU reported using multiple methods to administer cocaine. Only two IDU mentioned smoking any form of cocaine in the six months of January to June 2001 and as noted earlier this suggests that use of crack was unlikely given that the drug must be smoked in order to be bio-available.

Twice as many of the key informants were able to comment on cocaine use in 2000 than in 2001 (20% vs 40% respectively). Nearly all of these key informants indicated that use of cocaine was occasional or a one-off event. Four key informants indicated that approximately 10% of their IDU contacts would have used cocaine in the six months prior to interview. Some key informants mentioned the route of administration used as snorting (n=5) and/or injecting (n=4). Just one key informant reported swallowing as a preferred method of administration.

Cocaine use trends

As in 2000, it was difficult to determine what trends exist in relation to cocaine use as limited comments were made by the IDU sample and key informants surveyed. However, it does appear that there is preliminary evidence of an increase in cocaine use among WA IDU. Although IDU and key informants who work with IDU are perhaps not ideally suited to comment on trends in relation to cocaine use, the use of cocaine among this population should continue to be monitored to see whether this trend emerges more clearly. It may be more appropriate to speak to non injectors to access trends in cocaine use and future data collection which accesses individuals who use cocaine on a regular basis may be required to attain a more detailed picture of trends in cocaine use.

6.5 Summary of cocaine trends

Although data was limited, the trends that were identifiable in relation to the price, availability, purity and use of cocaine are reported in Table 9. Caution should be exercised in interpreting these figures due to the limited number of comments made.

Table 9: Summary of trends in the price, availability, purity and use of cocaine

Price	<ul style="list-style-type: none"> • \$300 a gram (based on just 5 purchases) • \$50 deals/points are also available
Availability	<ul style="list-style-type: none"> • Limited • Although reported as stable it is considered that the availability of cocaine is somewhat higher than last year
Purity	<ul style="list-style-type: none"> • 33% purity [34% in 2000]
Use	<ul style="list-style-type: none"> • One third of IDU surveyed had used at least once in last six months although level of use was low • Injection common

7.0 CANNABIS

The majority of IDU (80%) were able to comment on some aspects of the price, potency and availability of cannabis. Just three key informants reported on 'primary' cannabis users in 2001 compared to eight in 2000 and 10 in 1999. However, it is important to note that the use of other drugs was also common among these contacts, that is, they were illicit drug users who used a range of drugs including cannabis. Most of the remaining key informants (85%, n=23) were able to comment on aspects of cannabis use among their IDU contacts and consequently the information provided by them is used where appropriate. The IDU and KI data collected has been corroborated with indicator data where such data exists.

7.1 Price

IDU were asked to provide prices for cannabis over the January to July period and to also nominate the price paid for their most recent cannabis purchase within that time frame. The price of an ounce of cannabis was reported on by 63 IDU with a range of prices from \$150 to \$400 reported. A difference between the ounce prices for hydroponic and non-hydroponic (bush) cannabis was noted by most IDU and it is likely that prices at the higher end relate to the purchase of hydroponic cannabis. Police data supports this, with the price of a non-hydroponic ounce reported as between \$130 and \$150, and hydroponic up to \$500 per ounce.

The median purchase price paid by the 28 IDU who had purchased ounces of cannabis, predominantly hydroponic, in the six months prior to interview was \$250. It is worth noting that although 12 IDU had paid \$250 for their last ounce purchase, almost as many had paid \$300 (n=7) to \$350 (n=4) at last purchase. As most (78%) of the IDU who reported cannabis use indicated that they most often used hydroponic cannabis, the majority of prices reported relate to purchases of that form of the drug. Consequently, it is more likely that hydroponic ounces were between \$250 and \$350. Half-ounce purchases were also quite common with 19 IDU paying a median price of \$150 at last purchase.

Bags of cannabis (cannabis packaged in plastic cash change bags) were the size of deal most commonly purchased. A third of all IDU (32%) had purchased bags paying a median price of \$50 for them. Smaller bags, foils and sticks (with terminology dependent upon the way in which the drug is packaged) were also purchased with 14 IDU having paid \$25 for such deals. The amount of cannabis contained in these packages varies but is generally one to two grams. Two of the three key informants also reported that \$25 represented the price of foils/sticks and police data indicates that bags/foils/sticks represent a gram size deal costing \$20 for non-hydroponic and \$50 for hydroponic.

Most (82%) of the IDU able to comment (n=77) considered that the price of cannabis had remained stable in the six months prior to interview. Just one key informant was able to comment and also considered that the price had remained stable.

7.2 Availability

Cannabis was once again considered 'very easy' to obtain by most IDU (79%, n=63) able to comment and all three key informants reporting specifically on cannabis users. IDU

considered the high level of availability had remained stable (82%, n=66) throughout the six months prior to interview.

Of the 91 IDU who had used cannabis in the six months prior to interview, 81 identified the place they usually scored from, with scoring through a friend the most common method by which the drug was accessed (51%, n=41). Less common, although reported by similar numbers of IDU were, scoring cannabis from a dealer's home (16%, n=13), being given the drug as a gift from friends (15%, n=12) or from a mobile dealer (14%, n=11).

7.3 Potency

Cannabis potency was considered 'very high' by the majority (78%, n=63) of the IDU able to comment. Most (90%, n=71) considered that cannabis potency was stable (75%, n=59) to increasing (14%, n=12) during the six months prior to interview. Just one key informant was able to comment on cannabis potency and considered that potency currently fluctuated and had done so throughout the six months.

As reported in previous WA IDRS reports, there are no routinely reported indicators of cannabis potency available. Consequently it is not possible to refute or support the perceptions of IDU as to the potency of cannabis available at present.

7.4 Use

Prevalence of cannabis use

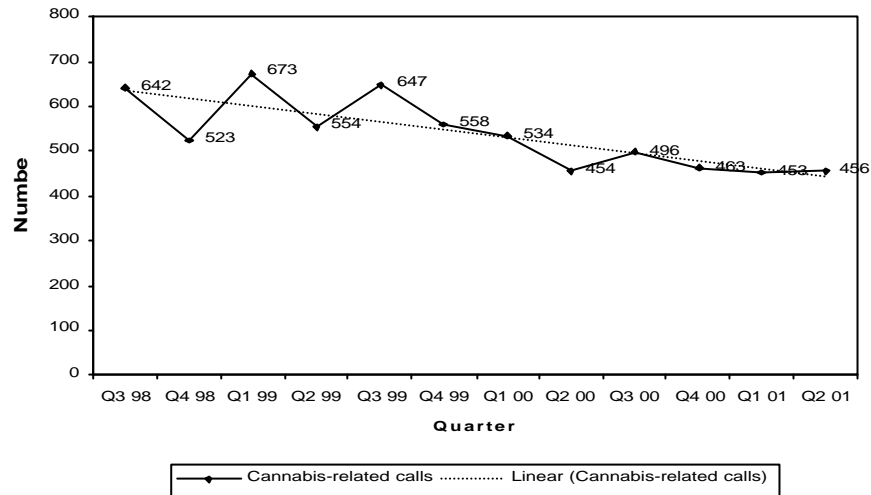
In the most recent *National Household Survey* (AIHW, 1999), WA respondents reported significantly higher levels of cannabis use than the national average. This was the case for both lifetime (44.8% vs 39.3%, $\chi^2=9.123$, df=1, p=.003) and recent use (22.3% vs 17.9%, $\chi^2=9.323$, df=1, p=.002) of the drug.

More recent data on the prevalence of cannabis among school students is available from the 1999 Australian School Students Alcohol and Drugs (ASSAD), a national survey of school students aged 12 to 17 years. The data indicates that over a third (38.3%) of respondents in WA who completed this survey (n=3458) reported having used cannabis on at least one occasion in the year prior to participation. Use in the month prior to completion of the survey was also common with 20.4% of respondents having done so. Lifetime use and use in the year preceding the survey was observed to be higher among rural school students than metropolitan students (45% vs 36% lifetime and 39% vs 31% last year respectively). Although cannabis had remained the most commonly used illicit drug in both the 1996 and 1999 surveys, a significant reduction in the lifetime use of cannabis was observed from 1996 to 1999 (p .01) among the WA school student population (Public Health Division, HDWA, 2001).

There has also been a decline in the number of calls made to the ADIS line in relation to cannabis, as was originally reported in the *WA Drug Trends 2000* report. Although this trend has continued into the 2001 study the rate of decline has abated and since the October to December 2000 quarter the number of calls has stabilised (Figure 10). Cannabis calls previously represented the most common type of call in relation to the four main drug types

under investigation but have been surpassed by amphetamine-related calls since January 2000.

Figure 10: Number of cannabis-related calls to ADIS, by quarter, July 1998 to June 2001 (Source: ADIS)



Current patterns of cannabis use

Cannabis has continued to be the most commonly used illicit drug among the IDU interviewed as part of the study, as it is among the general population (Fitzsimmons & Cooper-Stanbury, 2000). In the 2001 IDRS the proportion of IDU who reported cannabis use in the six months prior to interview (91%) was very similar to that reported for methamphetamine use (92%). However, cannabis was associated with the highest frequency of use among the illicit drugs at a median of 111 days use, almost identical to the frequency of use in 2000 (110 days). Forty (44%) of the IDU who had used cannabis in the six months prior to interview indicated that their use of the drug was on a daily basis, similar to the 32% who reported daily use of the drug in 2000.

IDU who had used cannabis in the six months prior to interview were asked to nominate the forms of cannabis they had used in that period. Most IDU reported the use of hydroponic cannabis (97%), with the use of non-hydroponic cannabis also common (88%). As IDU were not asked to differentiate between the use of hydroponic and non-hydroponic forms of the drug in 2000 a direct comparison cannot be made. However, 94% of those who had used cannabis in the 2000 survey (n=90) indicated that they had used hydroponic and/or bush cannabis. Just over a third (36.3%) of those who had used cannabis had also used hash at some point in the six months prior to interview and 16 (17.6%) had used hash oil, very similar to the proportions reported in 2000 (28.9% and 23.3% respectively). Most (78%) of the IDU who nominated use of hydroponic cannabis indicated that this was the form of cannabis they used most often. Bush (non-hydroponic cannabis) was less likely to be nominated as the main form of cannabis used with just over a quarter doing so (26%, n=21). Only one IDU indicated that hash oil was the form of cannabis they had used most often between January and June 2001.

Most of the key informants reporting on other primary drug users (88%) mentioned cannabis use among their IDU contacts and their comments were combined with those made by the three key informants reporting on primary cannabis users. Consequently these 26 key

informants reported contact with cannabis users with a similar level of use to that reported by the IDU sample, ranging from weekly to daily use. Both hydroponic cannabis and bush use were also noted although it was often specified that hydroponic cannabis was the form used predominantly.

Cannabis use trends

The key informants who reported on primary cannabis users (n=3) indicated that there had been no observable change in the profile of the cannabis users with whom they were in contact. Use of drugs other than cannabis was, however, reported by all three key informants. The use of heroin, amphetamines, benzodiazepines, ecstasy and/or alcohol were all reported to varying degrees and for varying proportions of the key informants’ contacts. It is not suggested that the use of such drugs is common among cannabis users generally, but rather that contacts of KIs, many of whom were drug injectors, represented a group of individuals for whom cannabis was simply *one* illicit drug used rather than the *only* illicit drug used. The key informants reporting on primary cannabis users were employed in counselling and outreach roles and therefore tended to work with clients who were involved in the drug scene and were poly-drug users.

7.5 Summary of cannabis trends

A summary of cannabis trends identified predominantly by IDU, with confirmation by key informants and indicator data where possible, are represented in Table 10.

Table 10: Summary of trends in the price, availability, potency and use of cannabis

Price	<ul style="list-style-type: none"> • Gram price \$25 a foil/stick (1-2 grams) \$50 a bag • Ounce price Median price \$250 (includes both hydroponic and non-hydroponic purchases) • Stable
Availability	<ul style="list-style-type: none"> • Very easy to obtain • Stable
Potency	<ul style="list-style-type: none"> • Very high (based on subjective evaluation) • Stable to increasing
Use	<ul style="list-style-type: none"> • Use widespread • Hydroponic cannabis used most often • Some hash and hash oil use

8.0 OTHER DRUGS

8.1 Ecstasy

As the focus of the IDRS is on heroin, methamphetamines, cocaine and cannabis, IDU and key informants are not asked specifically about aspects of the price, purity and availability of ecstasy as part of the IDRS. The 'dance drug' study component of the IDRS focuses on these aspects of ecstasy use but is currently only conducted in NSW, Qld and SA. Consequently, local indicator data was used to determine these aspects of ecstasy use in WA. Such information is supplemented, where possible, by general comments made by both key informants and IDU.

Price

Information provided by the WAPS, relating to the price of covert ecstasy purchases, suggests that the price varies from \$25 to \$70 per tablet. As noted in 2000, discount prices apply for the bulk purchase of ecstasy tablets with the price falling to \$15-20 per tablet for such purchases. According to the ABCI, 'bulk' purchases refer to any single purchase of more than 25 tablets.

Purity

There appears to be some degree of consistency in the average purity of the phenethylamine seizures (which includes drugs such as MDMA, MDA and MDEA) analysed by the ABCI (see Figure 11). Although the number of seizures analysed over the last three financial years has fluctuated dramatically (Figure 12), it is important to note that these numbers represent the number submitted for analysis and not the total number of seizures made. As in previous years there was a considerable range in purity observed in the seizures analysed in the 2000/2001 financial year, ranging from 5% to 63% phenethylamine similar to the 1.4%-70% in 1999/2000 and 1%-63% in 1998/1999. No obvious cycle from low purity in spring to higher purity in summer was observed in the 2000/2001 data although this had been observed in earlier years and demonstrated in Figure 11. As monthly data was not available a more in depth analysis into any seasonal variation in purity was not possible.

Figure 11: Purity of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001 (Source: ABCI)

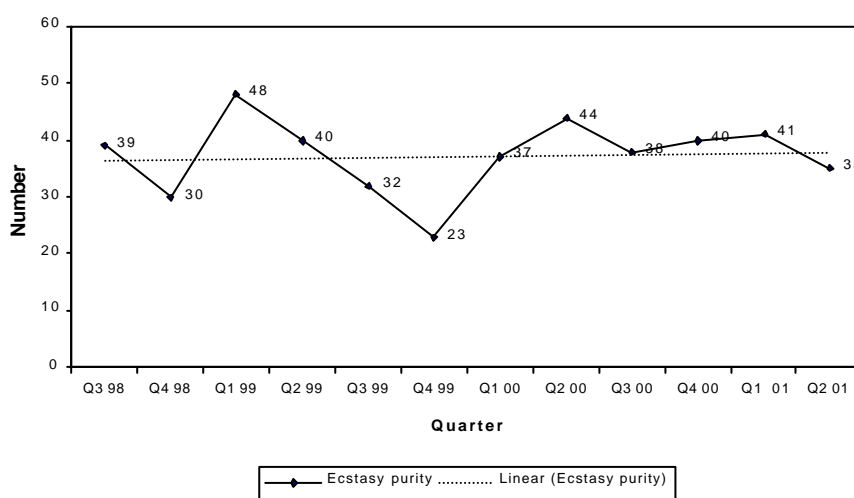
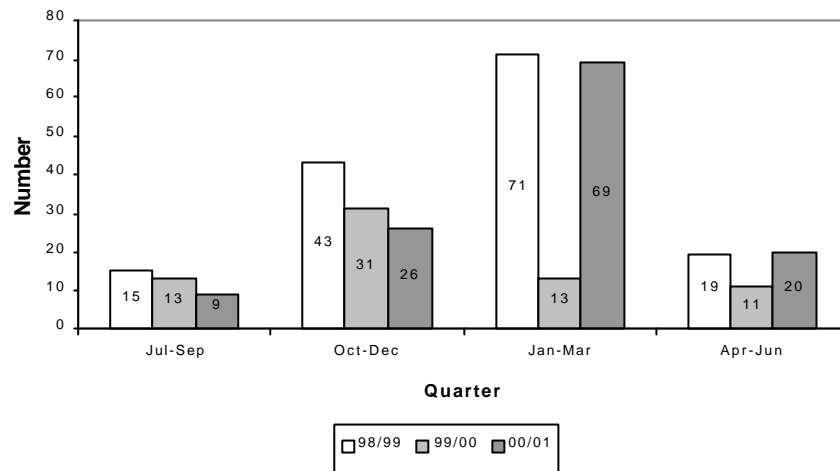


Figure 12: Number of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2001 (Source: ABCI)



Use

Only 50 of the IDU sample said that they had used ecstasy in the last six months. It is important to note here that IDU may not be the most appropriate sentinel group to interview in relation to trends in ecstasy use. Even among injectors, the predominant route of administration utilised was oral administration so non-injectors may be more appropriate to interview about such trends. The information about ecstasy use collected from the IDU sample and presented here needs to be interpreted with caution. It should be recognised that this information is not representative of the broad population of ecstasy users, many of whom do not regularly inject (Lenton et al., 1997).

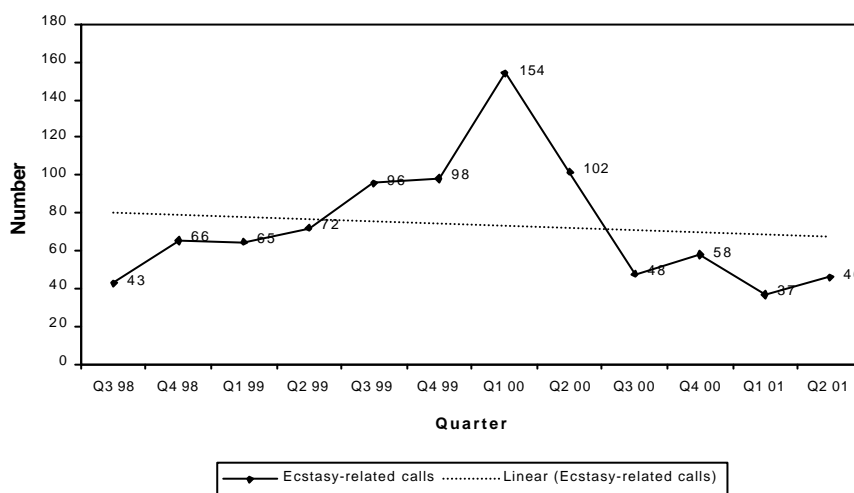
In 2001 just one IDU nominated that ecstasy was the first drug they had ever injected with three such reports noted in 2000. Ecstasy as the drug of choice was nominated by seven IDU this year with three such nominations last year. There was no significant difference in the proportion of the 2001 IDU sample who indicated that they had ever used ecstasy or had done so within the six months prior to interview to the number who did so in 2000 (ever used - 84% and 82% respectively, $\chi^2=.271$, $df=1$, n.s. and recent use - 50% and 45% respectively, $\chi^2=1.010$, $df=1$, n.s.). As noted earlier, the frequency of use observed in 2001 was low but was similar to that reported in 2000 (10.7 days vs 14.1 respectively; $t=.803$, $df=83$, n.s.).

The proportion of IDU who reported on the use of varying routes of administration in the six months prior to interview was also similar to those reported in 2000. Oral administration was again the most commonly utilised with 86% of those who had used ecstasy having used the route ($n=43$ in 2001) similar to the 91% in 2000 ($n=41$). Over half (54%, $n=27$) reported intravenous use in the period January to June 2001, very similar to the 53% in 2000 ($n=24$). Snorting (20%) and smoking (2%) of ecstasy was also reported although much less frequently (20% and 4% respectively in 2000).

Most key informants (77%, $n=23$) referred to the use of ecstasy among their illicit drug using contacts. Estimates as to the proportion of people using the drug ranged from 5% to 50% with most key informants (61%, $n=14$) indicating that use was occasional or recreational in nature. Oral administration was the route of administration most often reported.

Although no specific comments were made in relation to trends in ecstasy use, it would appear that the profile of use among the IDU population surveyed has remained reasonably stable between the two years studied. Few reports on changes in the profile of ecstasy use were made by either key informants or IDU but conflicted where they were made. Two key informants suggested that there has been an increase in availability of ecstasy while two others (one IDU and one KI) reported that ecstasy users had now shifted to using speed either in addition to or instead of ecstasy. While not confirming the suggestion that the level of ecstasy use may have been affected by a move away from the drug there was an observable reduction in the number of calls made to the ADIS line in the 2000/2001 financial year. Data for the three years since the IDRS commenced in WA does, however, indicate that the decline has been moderate throughout this period (Figure 13).

Figure 13: Number of ecstasy-related calls to ADIS, by quarter, July 1998 to June 2001
(Source: ADIS)



8.2 Other opiates

8.2.1 Methadone

Some 45 IDU had used methadone at some point, with almost two-thirds of these (64%, n=29) indicating that they had done so in the six months prior to interview. The use of methadone occurred on a mean of 110 days (sd=73.5, range=1-180 days), not significantly different from the 75 days of use in 2000 (sd=70.7, range=1-180 days; $t=-1.625$, $df=46$, n.s.). Daily use of methadone in the six months prior to interview was reported by 31% (n=9) of those who had used the drug in that period, not significantly different to the 21% (n=5) reporting daily use in 2000 ($\chi^2=3.368$, $df=1$, n.s.).

Use of licit (n=21) and illicit (n=9) methadone as well as licit (n=5) and illicit (n=5) Physeptone[®] was nominated by IDU. As one in five of the IDU surveyed had been in a methadone treatment program at some point between January and June 2001, licit methadone was most commonly identified as the primary form of methadone used. Six other IDU identified illicit methadone as their primary form of the drug with two others nominating illicit Physeptone[®].

Almost all (93%) of the 29 IDU who had used methadone in the previous six months reported oral administration of the drug. What may be of concern is that over half (52%, n=15) indicated that they had injected methadone at least once representing a significant increase from the number who reported methadone injection in 2000 (33%, n=8; $\chi^2=6.879$, df=1, p=.009). However, the numbers here are very small and need to be interpreted with caution.

The most notable increase in methadone use was related to IDU who nominated heroin as their drug of choice. Whereas just 28.1% (n=16, 95% CI: 17.0%, 41.5%) of those who reported heroin as their drug of choice in 2000 had also used methadone, this increased significantly to 67.6% (n=23, 95% CI: 49.5%, 82.6%) in 2001. Most of the use among this subset of IDU related to methadone treatment and perhaps supports claims made elsewhere in the report about an initial move to treatment among primary heroin users as the drought began to take effect (Section 4.4).

8.2.2 Morphine and 'other' opiates

In the 2000 IDRS, IDU were asked to indicate whether they had ever used 'other opiates', and if they had used such drugs within the six months prior to taking part in the survey. This category of drugs was broken down more specifically in 2001 with questions firstly relating to the use of morphine and then 'other opiates'. Thus in 2001 the 'other opiates' category did not include morphine. The reason for this distinction was that the 2000 IDRS revealed that some jurisdictions, most notably the Northern Territory and Tasmania, recorded a higher prevalence of morphine use than heroin use (Bruno & McLean, 2001; O'Reilly & Rysavy, 2001). Furthermore, morphine represents the predominant 'other opiate' used in most of the remaining jurisdictions. Consequently not all data collected in this years study is directly comparable to information gathered in the 2000 study.

Over a third (37%) of respondents indicated that they had used morphine (n=32) and/or some other opiate (n=10), at some point in the six months prior to interview, five respondents having used both in that period. It is interesting to note that the proportion reporting the use of opiates other than heroin or methadone represents a significant reduction in the proportion of IDU who reported such use in 2000 (37% vs 51%; $\chi^2=8.408$, df=1, p=.004).

Morphine

Morphine represented the first drug ever injected for two IDU, the last drug injected prior to interview for two and the drug used most often in the month prior to interview for one IDU. Lifetime use of morphine was reported by 62% of the sample with most (94%, n=58) reporting that they had injected the drug. Just under a third of the sample (n=32) indicated that they had used the drug in the six months prior to interview, and most of these IDU (72%, n=23) indicated that their use was illicit in nature. Of the 32 IDU who had used morphine in the last six months, all had injected, 41% (n=13) had swallowed, and just one had smoked and/or snorted the drug in that time. The number of days of use in the last six months was quite low with an average of 15 days (sd=32.4, range=1-180 days) reported. As IDU respondents were only asked to identify their drug use in relation to the generic term 'morphine', rather than indicate specific brands used, no comparison to the main brands used in 2000 was possible. However, among the 14 key informants who noted some degree of morphine use among their drug using contacts MS Contin[®] was identified as the primary brand used by all seven key informants who nominated a specific brand, with three also noting the use of Morphine Tartrate[®].

Other opiates

Other opiates represented the first drug injected for just one IDU and the drug of choice for one other. The lifetime and recent use of 'other opiates' (which included codeine, opium, etc) was less prevalent than the use of morphine with just over a third of respondents (37%) indicating that they had ever used such drugs and one in 10 having used them recently. Frequency of use was also lower than that reported for morphine (11.2 days, $sd=6.9$, range=3-20 days). Swallowing (70%) was the main method by which recent users of other opiates had administered the drug, however four (40%) had injected. One IDU mentioned smoking other opiates during the six months and identified opium as their main 'other opiate' used. Just three other IDU nominated the main other opiate they had used as oxycodone ($n=2$) or codeine ($n=1$), with the remaining six IDU unable to specify.

The use of other opiates was uncommon among key informants with just one mentioning such use among their IDU contacts. Oxycodone in the form of Endone[®] and Proladone[®] was the other opiate specified by this key informant.

8.2.3 Homebake

In this section the term 'homebake' is used to describe the end product of an illicit drug manufacturing process, usually within domestic kitchens, using codeine-based pharmaceuticals to make heroin and/or morphine. The manufacturing process involves the initial extraction of codeine from these pharmaceuticals which produces a crystalline powder that is subsequently converted to morphine. Further processing turns the morphine into heroin in the form of a dark paste which requires dilution to enable injection. Depending upon the skill of the 'baker' the end result is usually a combination of heroin, morphine and codeine although varying amounts of hazardous chemicals used in the manufacturing process may also be present (Reynolds et al., 1997).

Questions about the use of homebake have been routinely added to WA IDRS data collection as use of this drug appears to have remained predominantly restricted to opioid users in this state. The reasons for this appear to be three-fold: demand for heroin during times of limited supply of powder heroin; geographical isolation; and historical and social factors, notably the community knowledge about homebake manufacture which was carried by immigrants from New Zealand in the late 1980's (Reynolds et al., 1997).

A reduction in the reported use of homebake was noted in the mid 1990's as the availability of heroin increased in WA (Reynolds et al., 1997) but there does appear to have been some resurgence in its use as a result of the reduced availability of heroin observed in this state. As a result, homebake use within the WA context was considered worthy of lengthier discussion as part of this years report.

While only six IDU indicated that they had used homebake in the six months prior to interview in 2000, there was a significant increase observed in the 2001 study with 34 IDU indicating such use ($\chi^2=139.007$, $df=1$, $p=.000$). As most (94%, $n=32$) of the homebake use reported was intravenous in nature there was a subsequent increase in the prevalence of homebake injection within the six months prior to interview ($\chi^2=119.858$, $df=1$, $p=.000$). Although not representing as dramatic an increase there was also a significant increase in the lifetime use of homebake reported from 42% to 52% ($\chi^2=4.105$, $df=1$, $p=.043$) with a resultant increase in the number of reports of IDU ever having injected homebake ($\chi^2=5.002$, $df=1$, $p=.025$).

More revealing is the change in the prevalence of homebake use among IDU who either nominated heroin as their ‘drug of choice’, or had ‘used heroin’ in the preceding six months. Of those (n=57) who identified heroin as their drug of choice in the 2000 study just 9% (n=5) indicated that they had used homebake in the six months prior to study. Comparatively, two-thirds (65%, n=22) of the 34 IDU who identified heroin as their drug of choice in 2001 had also used homebake ($\chi^2=29.306$, $df=1$, $p=.000$). Of the 78 IDU who had used heroin in the last six months in 2000 just 6% (n=5) had also used homebake in that period unlike 2001 where over half (56%, n=31) of those who had used heroin (n=55) had also used homebake ($\chi^2=38.281$, $df=1$, $p=.000$).

The number of days on which homebake was used in the six months prior to interview was similar in both 2000 and 2001 (20.6 days and 22.1 days respectively [n.s.]) although it is important to note that the frequency of use reported in 2000 was based on just three reports. These results are present in Table 11 below.

Table 11: Profile of homebake use (n=100)

Aspect of use	2000	2001	Significance
Ever used	42%	52%	p=.043
Ever injected	41%	52%	p=.025
Use in last six months	6%	34%	p=.000
Injection in last six months	6%	32%	p=.000
Frequency of use in last six months (no. of days use)	20.6*	22.1	n.s.
Heroin drug of choice with use of homebake in last six months	9%	65%	p=.000
Heroin and homebake use in the last six months	6%	56%	p=.000

*NB-this figure is based on just 3 respondents

Apart from reports from the IDU who had used homebake, there were comments made by five (17%) key informants in relation to the use of this drug. Interestingly, all of these key informants had contact with large numbers of IDU, with four involved in outreach or a similar role, and the fifth as a police officer. These key informants indicated that homebake had re-emerged onto the WA drug market for a while and was being utilised primarily when heroin was unavailable.

This information clearly represents a re-emergence in homebake use, particularly among IDU who had identified heroin as their drug of choice, and may support claims made in Section 4.4 about such use being the result of the decreased availability of heroin observed in the state since late 2000/early 2001. It is interesting to note that the trend was not detected in other WA data sources such as calls to ADIS. Even though questions about homebake were not routinely asked in the IDRS in other jurisdictions, any homebake use would have been detected in relation to reports of the use of ‘other opiates’. Consequently, interstate comparisons were possible and determined that the use of homebake remained restricted to WA during the period of study.

8.3 Benzodiazepines

A significant reduction in the proportion of IDU who reported benzodiazepine use was observed among the 2001 sample compared to the proportion who reported such use in the 2000 study in both lifetime use of benzodiazepines and use within the six months prior to interview. The proportion reporting lifetime use fell from 81% to 64% over the two years ($\chi^2=18.778$, $df=1$, $p=.000$) and use in the last six months use fell from 72% to 51% ($\chi^2=21.875$, $df=1$, $p=.000$).

There was also a reduction in the number of IDU who reported daily use of benzodiazepines for the six months prior to study, from 15 to just four ($\chi^2=9.490$, $df=1$, $p=.002$). No significant difference was noted in the overall frequency of use, however, with use occurring on a mean of 53 days ($sd=61.81$, $range=1$ to 180 days; 71 days in 2000; $t_{unequal}=1.374$, $df=107$, $n.s.$). Oral administration was the most common method of use reported with almost all IDU (96%, $n=49$) indicating that they had used this method at some point in the previous six months. Injecting was reported by the same proportion (29%) of IDU who indicated this means of administration in 2000 although there was a significant reduction in the proportion of IDU who indicated that they had ever injected benzodiazepines from 41% in 2000 to 31% in 2001 ($\chi^2=4.134$, $df=1$, $p=.042$).

There was a distinction made between the use of licit and illicit benzodiazepines in this year's IDRS with IDU asked to indicate whether their use in the six months prior to interview was primarily licit or illicit. Similar numbers of IDU indicated the use of licit and illicit benzodiazepines (36 and 33 IDU respectively). Almost all (97%, $n=35$) of those who had used licit benzodiazepines indicated that this was their main form of benzodiazepine use whereas half that proportion (48%, $n=16$) indicated that their primary use of benzodiazepines was illicit in nature.

IDU were asked to specify the main brand of benzodiazepines they had used in the six months before interview. Diazepam was the benzodiazepine most commonly reported with a third of the total sample ($n=32$) having used it. Most of these IDU (87.5%, $n=28$) indicated that Valium[®] was the specific brand of diazepam they had used. Similar proportions reported licit and illicit use of Valium[®] (54% and 56% respectively). Temazepam was identified as the main benzodiazepine used by six IDU, five of whom indicated that their use was primarily licit. Oxazepam was also reported as the primary benzodiazepine used by six IDU, five of whom reported the use of Serepax[®] specifically with the other using Murelax[®]. Again most oxazepam use was licit in nature with just one IDU indicating that their primary benzodiazepine use was of illicitly obtained Serepax[®]. The main benzodiazepines used in both 2000 and 2001 are presented in Table 12.

Table 12: Main brand of benzodiazepines used by IDU in the six months prior to interview (n=51)

Main benzodiazepine used	Licit use	Illicit use	Total for 2001 (n=51)	Total for 2000 (n=72)
Valium®	19	9	28	16
Temazepam [Ⓢ]	5	1	6	8
Serepax [Ⓢ]	4	1	5	6
Diazepam [Ⓢ]	2	2	4	6
Mogadon [Ⓢ]	3	-	3	8
Murelax [Ⓢ]	1	-	1	-
Rohypnol [Ⓢ]	-	1	1	8
Not specified	1	2	3	20
Total number	35	16	51	72

All key informants reported on benzodiazepine use among their illicit drug using contacts although the proportions who used and the extent to which such use occurred varied dramatically. The main route of administration reported was oral although the intravenous use of benzodiazepines, predominantly temazepam, was reported by 12 key informants (40%). Key informants were asked to specify whether this use was licit or illicit in nature and several indicated that it was often difficult to distinguish between them. They argued distinction was difficult given the propensity for using these drugs at levels over the prescribed amounts, not using in accordance with the prescription, distributing prescriptions to others and/or doctor shopping.

8.4 Anti-depressants

The profile of anti-depressant use reported by the IDU population surveyed in 2001 was very similar to that reported by respondents in the 2000 study. Anti-depressant use was again prevalent with over half (52%, 54% in 2000) reporting ever having used these drugs and 28% (32% in 2000) reporting use within the six months prior to interview. There was no significant difference in the mean number of days of use reported (83.5 days in 2001 and 99.9 in 2000) with a similar proportion reporting daily use in both years, 32% (n=9) in 2001 and 34% (n=11) in 2000.

As in the 2000 study, the type of anti-depressant most commonly used were serotonin specific reuptake inhibitors (SSRIs). Most (77%, n=17) of the IDU able to nominate the brand of the anti-depressant they used reported anti-depressants within this type. The five other IDU able to comment reported their main anti-depressant use was tricyclic anti-depressants.

Use of anti-depressants among those who had used these drugs in the six months prior to interview (n=28) was predominantly licit in nature. Most (90%, n=19) 'licit users' were able to specify the brand of anti-depressant they had used with SSRIs the most common (74%). All five IDU who reported use of tricyclic anti-depressant identified themselves as licit users

of the drug. While this represents a reduction in the number who reported the use of this type of anti-depressant in 2000 (n=10) it is still problematic given that tricyclics are considered more toxic than SSRIs and have been found to relate to a higher rate of heroin-related overdose (Darke & Ross, 1999). As all five of these respondents reported heroin use in the six months prior to interview, three on 15 days or less, one on 70 days and one other on an almost daily basis (172 days), clearly there remains cause for concern.

8.5 Summary of other drug trends

The most significant finding in this year's IDRS, in relation to the use of 'other drugs', is the dramatic increase observed in the use of homebake, which was particularly evident among IDU who nominated heroin as their drug of choice. This increase most likely represents a shift to the use of homebake as a substitute for heroin during the period of reduced heroin availability observed in WA as of late 2000/early 2001.

Once again a key finding in relation to the use of 'other drugs' among the 2001 IDU sample was the notable level of prescription drug use. Benzodiazepines were the most commonly used prescription drug in the six months prior to interview (n=51), followed by morphine (n=32), methadone (n=29) and anti-depressants (n=28). It is important to note that although the majority of this use was identified as being licit in nature, this only referred to the drugs being obtained on prescription. As noted by some key informants, it is often problematic to make a clear distinction between the licit and illicit use of these pharmaceuticals. This is especially so given that these drugs are often used at levels over the prescribed amounts, not in accordance with the prescription, distributed to others and/or gained through doctor shopping.

Intravenous use was most commonly associated with the use of morphine (100%) and homebake (94%) although the injection of ecstasy was also quite common (54%). Benzodiazepine injection was less often reported (27%) and, as also noted by key informants last year, related predominantly to the use of Temazepam® and to a lesser extent for Valium®.

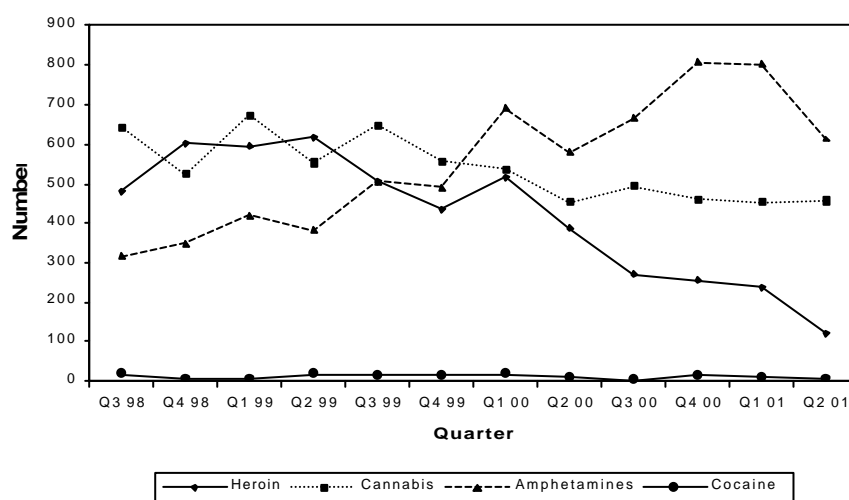
9.0 DRUG-RELATED ISSUES

9.1 Treatment

There was a substantial reduction in the total number of telephone calls made to the ADIS line in relation to the four main drug types under investigation. The number of these calls had remained consistent during the 1998/1999 and 1999/2000 financial years (6206 & 6366 calls respectively) but fell to 5691 calls for 2000/2001. More importantly, the proportions of ADIS calls relating to each of the four main drug types under investigation also changed. As with 1999/2000 data, amphetamine-related calls were the most common, with the proportion of such calls having increased significantly from 24% (95% CI: 22.6%, 24.7%) in 1998/1999, 36% (95% CI: 34.5%, 36.8%) in 1999/2000, up to 51% (95% CI: 49.5%, 52.1%) in 2000/2001. As indicated in Figure 14 there has been a continued increase in the number of calls relating to amphetamine throughout this period although the number of calls relating to cannabis and heroin has fallen. Another sharp increase in the number of amphetamine-related calls was observed in the final quarter of 2000 and continued into the first quarter of 2001. November (n=285) and January (n=320) were the specific months within these two quarters with the highest number of calls. Interestingly this period coincides with the period when most IDU reported that it had first started to become harder to obtain heroin.

Cannabis-related calls represented the second most common type of call for these four drug types in 2000/2001 as they did in 1999/2000, accounting for a third of such calls in both years (33% and 34% respectively). There was also no change in the proportion of calls made in relation to cocaine with this drug again representing just 1% of calls made in relation to these four drug types. A significant reduction was, however, observed in the proportion of calls made in relation to heroin in the 2000/2001 period accounting for just 16% (n=890; 95% CI: 14.7%, 16.6%) of the calls made. Heroin-related calls had previously represented 37% (n=2294; 95% CI: 35.8%, 38.2%) of such calls in 1998/1999 and 29% (n=1843; 95% CI: 27.8%, 30.1%) in 1999/2000.

Figure 14: Number of calls to ADIS in relation to each of the four drug types studied, by quarter, July 1998 to June 2001 (Source: ADIS)



As discussed earlier (Section 4.4) there has been a decline in the proportion of calls relating to heroin even though there does continue to be an increase in the number of people receiving

methadone maintenance treatment. This is not surprising given that enrolment in methadone tends to occur several years after the commencement of heroin use (Caplehorn, 1992) and as such the number of people enrolled in methadone more likely represents the increase in people who first started injecting heroin several years ago. Alternatively, this increase may reflect an increase in treatment-seeking behaviour as a result of the reduced availability of heroin observed since late 2000 to early 2001. The number of patients, by age and gender, enrolled in both government and community methadone programs are represented in Table 13.

Table 13: Number of WA methadone program participants, by age and gender, July 2000 to June 2001 (Source: Next Step and Pharmaceutical Services, HDWA)

Age	2000				2001			
	Jul-Sept		Oct-Dec		Jan-Mar		Apr-Jun	
	M	F	M	F	M	F	M	F
<20	21	33	17	29	19	29	18	23
20-24	205	168	199	160	209	162	194	161
25-29	247	194	238	176	269	188	250	177
30-34	224	160	210	154	217	157	210	163
35-39	164	185	249	182	252	180	259	177
40+	384	191	386	187	406	205	405	213
Total 00/01	2256		2187		2293		2250	
Total 99/00	2163		2078		2139		2222	
Total 98/99	1753		1871		1999		2056	

9.2 Overdose

IDU who reported lifetime use of heroin (n=80) were asked if they had ever overdosed on the drug, with 40% (n=32) indicating that they had experienced at least one overdose. A median of four overdoses were reported (mean=5.8, sd=8.8, range=1-50 times) with the most recent overdose experience, on average, 30 months prior to interview (sd=31.6, range=3-120 months). The most recent heroin overdose experience recorded in the 2001 study was three months prior to interview unlike in 2000 where 14% of those who had overdosed reported their most recent overdose was within the month prior to interview. This reduction in recent overdose experience is likely to be the result of both the reduced availability and purity of the drug and coincides with the reduction in the number of overdoses observed in WA in 2001 and possibly also reflects the increase in number of people involved in treatment.

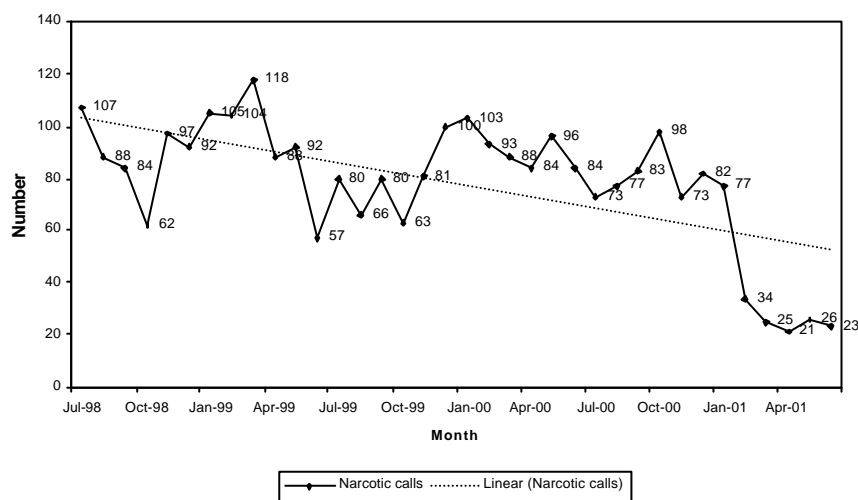
Morphine-related overdose was much less common with just four (6.5%) of the 62 IDU who had ever used the drug indicating that they had overdosed on it (mean=4.2, sd=4.3, range=1-10 times). No recent morphine overdoses were reported, with the most recent such overdose having occurred 18 months prior to interview (mean=49.5 months, sd=23.2, range=18-72 months). As IDU were not asked specifically about experience of morphine overdose in the 2000 study it is not possible to make any comparison.

Over half (53.1%, n=17) of the IDU who had overdosed on heroin had been administered Narcan® on at least one occasion of overdose. The median time since most recent Narcan® administration was more than two years prior to participation in the study (mean=29.3

months, sd=21.0, range=6-84 months) even after the removal of two outliers whose most recent Narcan® administration was 10 and 17 years ago. With these outliers included the most recent experience of administration was almost four years ago (mean=44.9 months, sd=50.5, range=6-204 months).

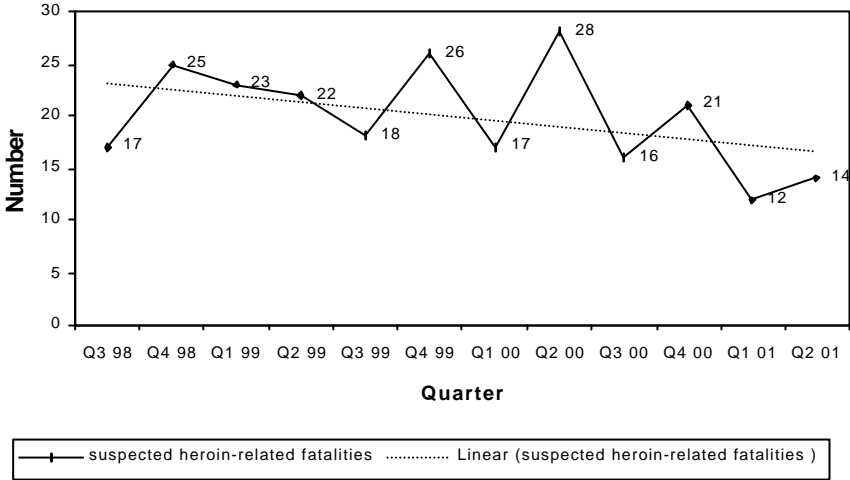
Presence at another person’s overdose was common among the IDU sample with 70% having witnessed at least one overdose event, a very similar proportion to the 73% who reported this in the 2000 study ($\chi^2=.457$, df=1, n.s.). Although there was no difference in the average time since their most recent experience of another’s overdose between the 2001 and 2000 studies (19.2 and 13.1 months respectively) there was a significant reduction in the proportion of the IDU sample who had witnessed another person overdose in the month prior to interview (7% compared to 22%, $\chi^2=13.112$, df=1, p=.000). This is not surprising given the decline in heroin purity and availability since January 2001 and the reduction in frequency of heroin use reported as a result. Figure 15 represents the number of calls made to the WA Ambulance Service in relation to attendance at a narcotic overdose-related event and demonstrates the existence of a drastic reduction in the number of such calls in 2001.

Figure 15: Narcotic overdose-related calls to ambulance, by month, July 1998 to June 2001 (Source:WAPCRU)



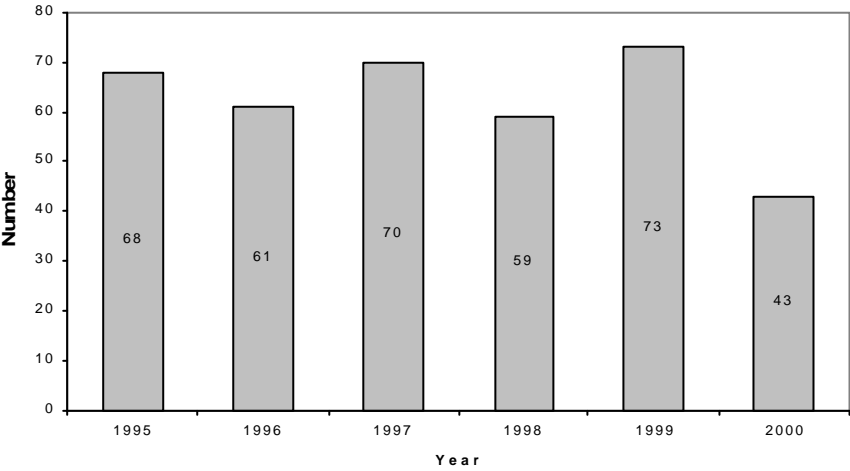
As depicted in Figure 16, the number of suspected heroin-related fatalities has also declined with the number of suspected deaths for January to June 2001 (n=26) approximately half that of the same period in 2000 (n=45). It is important to remember that these figures represent ‘suspected’ fatalities rather than cases confirmed by the coroner and are therefore subject to change following coronial investigation. However, it is clear that a substantial reduction has occurred in such fatalities.

Figure 16: Number of suspected heroin-related fatalities in WA, by quarter, July 1998 to June 2001. (Source: WADASO)



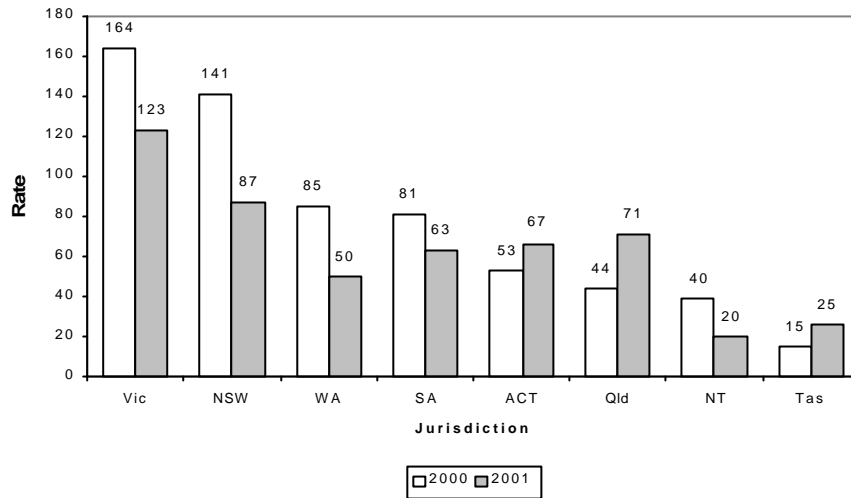
Of interest is the observed reduction in the number of opioid-related fatalities among those aged 15-44 years for the year 2000 (Figure 17). Monthly data reveals that the reduction in the number of fatalities was observed throughout the year rather than confined to the latter months. As a result, this decrease could indicate that less people were using heroin either as the result of a reduction in the availability of heroin prior to the emergence of the so-called ‘drought’ or through a reduction in demand for the drug. It may also indicate that overdose prevention and management programs have been effective in reducing the number of fatalities observed.

Figure 17: Annual opioid overdose deaths in WA, among those aged 15-44 years, 1995-2000 (Source:ABS)



There was also a dramatic reduction observed in the rate per million population these opioid overdose deaths represented. WA recorded the third highest rate in 1999 at 85.0 per million population but fell to sixth highest at 49.8 per million population in 2000. The rates by jurisdiction for both 1999 and 2000 are illustrated in Figure 18.

Figure 18: Rate of opioid overdose deaths per million population, among those aged 15-44 years, 1999 and 2000 (Source: ABS)



9.3 Crime

IDU and key informant reports

The IDRS focuses on four categories of crime, specifically property offences, drug dealing, fraud and crimes involving violence, and asks IDU about their involvement in such crimes. Recent involvement in criminal activity was common among the IDU population surveyed with similar proportions of IDU reporting that they had committed an offence in the month prior to interview in both 2000 and 2001 (61% and 69% respectively; $\chi^2=2.69$, $df=1$, n.s.). As observed in the 2000 study, there was no difference in the level of offending ($t=.150$, $df=1$, n.s.) and/or type of offences committed by male and female respondents.

For the purposes of the IDRS, dealing was defined as having *sold* drugs to another person and represented the most common offence committed in the month prior to interview (90%, $n=62$). Over half (56.5%, $n=39$) of those who had offended indicated that dealing was their sole offence, virtually the same proportion who reported this in the 2000 study (54%, $n=33$). Where other single offences were noted, three IDU nominated fraud, two reported property crime and one reported violent crime as their sole offence type committed in the previous month. Almost a quarter of the overall IDU sample (24%) indicated that they had committed crimes within two or more categories in the month prior to interview. Most ($n=17$) nominated crimes within two of the categories in the previous month with the combination of dealing and property crime or fraud being the most common, reported by seven IDU each. Six IDU reported that they had committed offences within three of these categories and one IDU had committed offences within all four categories in the month prior to interview.

As noted in Section 3.1, a third (34%) of the total IDU sample had previously been convicted of an offence, with male respondents significantly more likely to report having been in prison than female respondents (43% and 19% respectively, $\chi^2=4.934$, $df=1$, $p=.026$). Among these IDU, the majority (59%, $n=20$) had also been arrested in the 12 months prior to interview and a further 13 respondents were also arrested in that period. No difference was observed in the rate of arrest reported for male and female respondents ($\chi^2=.098$, $df=1$, n.s.). Whereas possession/use offences represented the most common reason for arrest reported in 2000

(n=15), property crime was the most common in 2001 with a third (n=11) of those arrested having been charged with such an offence in the 12 months prior to taking part in the study. Of these 11 IDU, five indicated that property offences were the sole basis of their arrest while the other six were arrested in relation to multiple offences. Possession/use offences accounted for just four arrests, two solely for possession/use and the other two in conjunction with other offences. Five IDU were arrested in relation to crimes involving violence (down from nine such reports in the 2000 study) and four for fraud. Other reasons for arrest included traffic offences (such as driving under the influence or whilst suspended), disorderly conduct and/or prostitution.

The majority (90%) of IDU surveyed were able to comment on police activity in the six months prior to interview with such activity considered stable (47%) to increasing (49%) in that time. Even though half of those able to comment considered that police activity had increased, most IDU (82%, n=79) reported that this had not made it any harder for them to score recently. A quarter of IDU surveyed, however, did indicate that more of their friends had been 'busted'. Key informants reports also corroborated IDU reports about police activity being stable (n=10) to increasing (n=8).

Expenditure on drugs

Respondents were asked how much money they had spent on illicit drugs the day prior to interview to determine an average expenditure. Interviews were conducted on all days of the week in an attempt to avoid bias towards purchases made on particular days. Just under half of the sample (n=49) indicated that they had spent some money on the day prior to their interview with \$50 and \$100 the two most commonly reported amounts spent. This is perhaps not surprising given that several of the drugs under examination in the IDRS are sold as \$50 and/or \$100 deals. Although the median amount spent was the same as reported in 2000 (\$100 both years) the mean amount spent in 2001 was considerably higher at \$208 (sd=321.7, range=\$10-\$2000) than the mean of \$103 (sd=78.8, range=\$20-\$300) spent in 2000 ($t_{unequal} = -4.459$, $df=100$, $p=.000$). Although 12 IDU indicated they had spent more than \$200 on illicit drugs on the day prior to interview, which was double the number who reported this last year, it did not represent a significant increase (95% CI: 13.3%, 38.9% and 4.3%, 23.0% respectively).

Law enforcement data

There was a slight decrease in the number of drug-related charges laid by police in WA from 9,657 in 1999 to 9,273 in 2000 even though there was an increase in the total number of charges laid. Consequently the proportion of drug-related charges has also dropped significantly to 11.05% (95% CI: 10.8%, 11.3%), compared to 12.2% (95% CI: 11.9%, 12.4%) in 1999 and 11.5% (95% CI: 11.3%, 11.7%) in 1998. Unlike previous years of IDRS data collection, the proportion of drug and non-drug charges laid in 2000 remained reasonably consistent throughout the year, without the increase in the proportion of charges laid during the April-June quarter observed in both 1998 and 1999. The exact reason for this anomaly was unclear and it remains to be seen whether this anomaly will continue in future. Table 14 represents the quarterly data for drug-related and all charges laid in 2000. (It is important to point out that this data is only available on an annual basis therefore the 2000 data represents the most recent data available).

Table 14: Number of charges laid in WA for drug and non-drug offences, by quarter, 2000 (Source: CRC)

Quarter	Drug charges	All charges	% drug charges
Jan – Mar	2347	21631	10.85
Apr – Jun	2340	20721	11.29
Jul – Sep	2465	20527	12.01
Oct - Dec	2121	21063	10.07
Total	9273	83942	11.05

Table 15 represents the number of charges laid by each of the drug types under investigation with cannabis again the drug for which the majority of possession/use charges were laid. No change was observed in the possession of cocaine in 2000 with just one such charge in 2000, none in 1999 and one in 1998.

Table 15: Number of charges laid in WA for possession/use offences by drug type, by quarter, 2000 (Source: CRC)

Drug type	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Nov	Year total
Cannabis	502	471	489	406	1868
Specified drugs	57	56	62	75	250
Opiates	29	30	18	12	89
Unspecified (narcotic)	9	29	14	5	57

NB. Specified drugs relate to psychotropic substances and includes amphetamines, MDMA, LSD and steroids.

Cannabis was also the drug type for which most sell/supply charges were laid (see Table 16). Although more sell/supply charges were laid in relation to unspecified drugs (n=395) this category contains multiple drug types and offences.

Table 16: Number of charges laid in WA for sell/supply offences by drug type, by quarter, 2000 (Source: CRC)

Drug type	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Nov	Year total
Cannabis	66	79	77	49	271
Specified drugs	34	42	39	56	171
Opiates	20	16	12	27	75
Cocaine	0	0	0	3	3

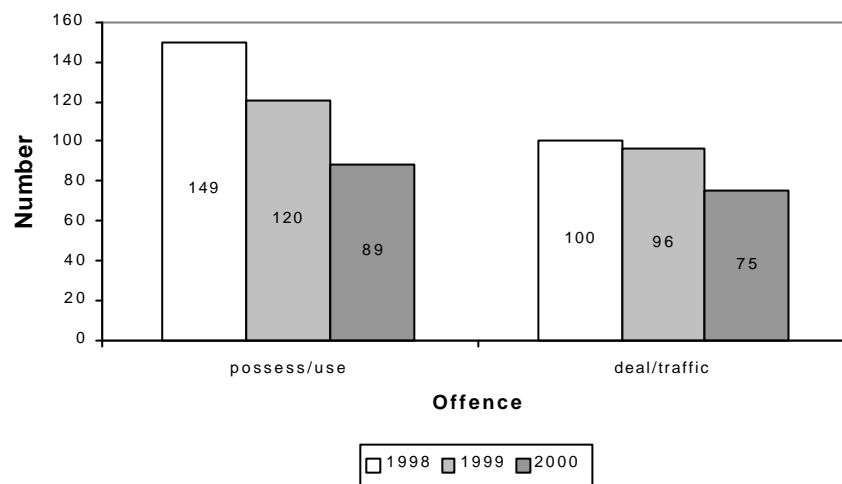
NB. Specified drugs relate to psychotropic substances and includes amphetamines, MDMA, LSD and steroids

Opiates

There was a slight, albeit insignificant, reduction in the proportion of drug-related charges relating to opiates, with 166 (1.8%; 95% CI: 1.5%, 2.1%) charges laid in 2000 compared to 217 (2.2%; 95% CI: 2.0%, 2.6%) in 1999. Of these predominantly heroin-related charges, just

over half (54%) related to possess/use and a further 45% to sell/supply offences. The remaining two charges (1%) related to importation charges. These proportions are almost identical to those reported last year (55%, 44% and 1% respectively). Opiate-related charges represented just 3.9% of the possess/use charges and 14.4% of the sell/supply charges laid in 2000 where drug type was specified, very similar to the proportions recorded in 1999 and 1998 (4.3% and 4.6% for possess/use and 17.7% and 18.3% for sell/supply respectively). Figure 19 represents the number of such charges laid in the period for the years 1998 to 2000.

Figure 19: Number of charges laid in WA for opioid-related possess/use and sell/supply offences, 1998-2000 (Source: CRC)



Specified drugs

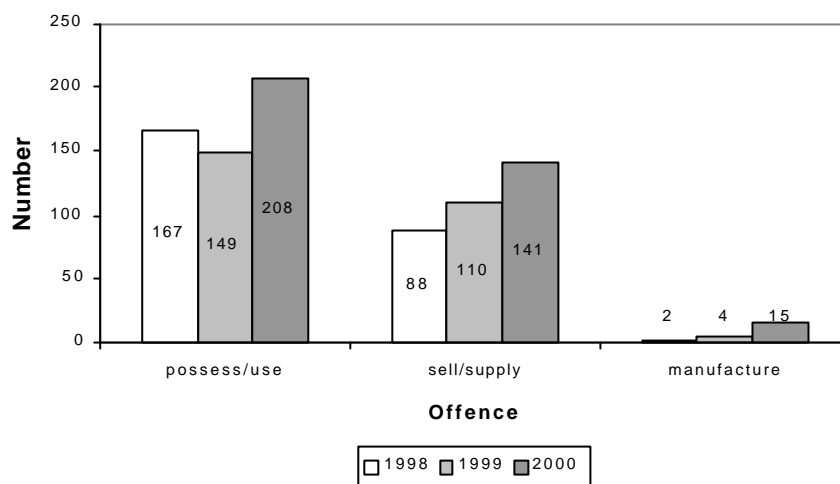
Specified drugs refers to a category that includes amphetamines, MDMA, LSD and steroids and a significant increase in the number of charges laid in relation to specified drugs was observed in 2000. Some 436 charges were laid in 2000 (4.7%; 95% CI: 4.3%, 5.2%), compared to 324 (3.3%; 95% CI: 3.0%, 3.7%) in 1999 and 313 (3.31%; 95% CI: 3.0%, 3.7%) in 1998. Of the 436 charges laid, over half (57%, n=250) related to possession/use offences, accounting for 4.8% of all possession/use charges laid in 2000. Most (83%, n=208) of the possess/use charges laid for specified drugs were in relation to amphetamine possession (n=199) or use (n=9).

The proportion and number of sell/supply charges relating to specified drugs also appeared to increase in 2000. A total of 171 specified drug-related charges were laid in relation to this type of offence, representing 18.6% of all such charges compared to the 134 (15%) such charges recorded in 1999, however the increase was not significant (95% CI: 16.2%, 21.4% and 12.7%, 17.5%). As with possession/use, the majority (82%) of sell/supply charges for specified drugs related to the sell/supply of amphetamines.

No import/export charges were laid in relation to specified drugs in 2000, however, the number of manufacturing charges increased. Just four charges were laid in 1999, representing 0.5% of all manufacture/grow charges laid that year, rising to 15 charges or 3.5% of manufacture/grow charges laid in 2000. All 15 of these charges related to the manufacture of amphetamine.

The number of charges laid for each of these offence types in relation to amphetamines is provided in Figure 20.

Figure 20: Number of charges laid in WA for amphetamine possess/use, sell/supply and manufacture/grow offences, 1998-2000 (Source: CRC)



Cocaine

As in previous years in WA, the proportion of charges laid in 2000 in relation to cocaine was minimal. Just four charges, from the total 9273 drug-related charges laid, were in relation to cocaine (0.04%) with just six in 1999 and 14 in 1998. Of the four cocaine-related charges laid in 2000, one was laid in relation to a possess/use offence and the remaining three were sell/supply charges.

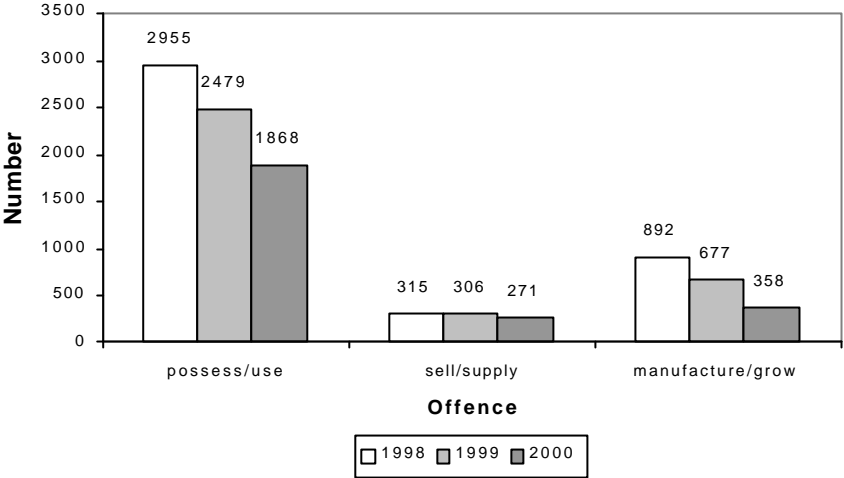
Cannabis

Given that cannabis is the most commonly used illicit drug in WA, as it is nationally, it is not unexpected that the majority of drug-related charges laid related to this drug. As already indicated, the majority of possess/use charges (85%, n=1868) where drug type was specified related to cannabis. It is interesting to note that there has been a reduction in the actual number of charges this represented even though the proportion was very similar to that reported in 1999 (89%, n=2479). This reduction was consistent with the number of cautions issued since the implementation of the state-wide cannabis cautioning scheme as of March 2000.

There has also been a significant reduction in the proportion of charges laid for manufacture/grow offences, with just 433 (4.7%) such charges laid in 2000 (95% CI: 4.2%, 5.1%) compared to 720 (7.5%) in 1999 (95% CI: 7.0%, 8.0%). Although the majority (82.7%; 95% CI: 77.8%, 86.1%) of these 433 charges related to the manufacture/grow of cannabis this still represented a significant reduction in the proportion of such charges from that reported in 1999 (93.9%; 95% CI: 91.9%, 95.5%).

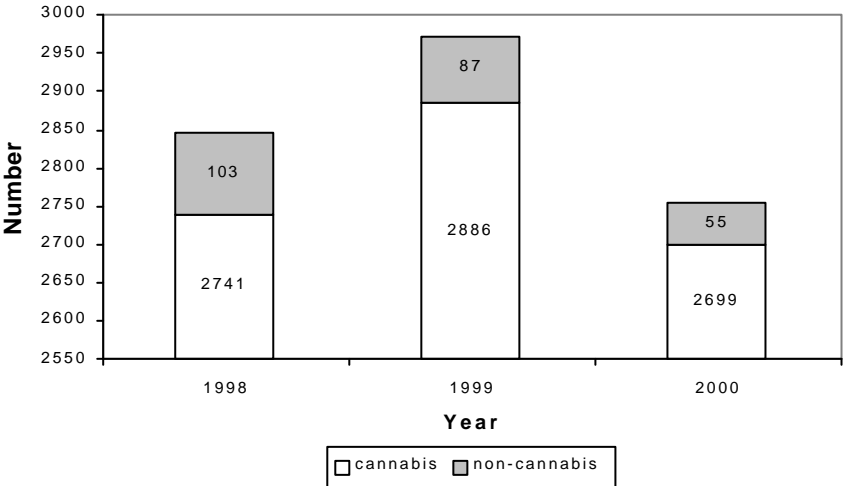
Cannabis accounted for over half (52.4%, n=271) of sell/supply charges where the drug type was specified (n=517) which was similar to the proportion reported in 1999 (57%). The numbers of charges laid for sell/supply, plus those for possession/use and manufacture/grow offences, are represented in Figure 21.

Figure 21: Number of charges laid in WA for cannabis possess/use, sell/supply and manufacture/grow offences, 1998-2000 (Source: CRC)



As noted in previous IDRS reports, cannabis also accounted for the majority of charges laid for ‘other drug offences’. These ‘other drug offences’ relate primarily to the possession of implements associated with drug use but also include offences such as forging and/or uttering forged prescriptions. Given most of these other charges related to the possession of smoking implements they have generally been considered cannabis-related. Figure 22 represents the total number of charges laid in relation to these ‘other drug offences’ divided into the number relating to possession of a smoking implement (cannabis) and the number not related to such possession (non-cannabis).

Figure 22: Number of charges laid in WA in relation to ‘other drug offences’, 1998-2000 (Source: CRC)



9.4 Needle Sharing Behaviour

IDU were asked to comment on any risk-taking behaviours they had undertaken in the month prior to interview as part of their injecting practices. Almost a quarter of IDU (23%) reported that they had used a needle after someone else had already used it in that period, very similar to the proportion who reported this in 2000 (22%). Where IDU reported using a needle after someone else, it was primarily on one (n=7) or two (n=8) occasions. However, four IDU had done so on 3-5 occasions in the month preceding interview, one other 6-10 times and three others on more than 10 occasions. Most IDU (87%, n=20) indicated that when they did use a needle after someone else it was after just one other person had used it. Two more indicated that the needle they had used had been used by two others prior to them using it. Of even greater concern is that one respondent indicated that they had used a needle after more than 10 people had already used it. As with last year, the majority of those who had used a needle after someone else had done so after their regular sex partner (n=12) or close friend (n=9) (13 and 7 respectively in 2000).

Not only was use after someone else quite common among IDU but so too was the lending of needles to someone else after the respondent had already used, with a quarter of IDU having done so in the previous month. Five of the IDU who had allowed someone else to use their needle after they had first used it indicated that they had done so once, a further five had done so twice, nine on 3-5 occasions, one on 6-10 occasions and five had done so on more than 10 occasions.

Use of other types of injecting equipment after someone else had already used it was far more common than needle-sharing with 59 respondents indicating that they had done so. Multiple responses were often provided with spoons or other mixing containers (50%), water (46%) and filters (44%) the most commonly reported items shared. These were also the most common responses provided in 2000 (45%, 34% and 27% respectively). The sharing of tourniquets was also quite common with 20 IDU having shared them (15 in 2000) and just two indicating that they had shared swabs in the previous month. As reported in the 2000 study, it is important to point out that many IDU indicated that they were not actually sharing contaminated equipment. For example, many noted that only one person was responsible for the 'mix' so nobody else touched the equipment, or pointed out that all the equipment was clean and unused. Notwithstanding these views it is important to note that recent research (Carruthers, 2001) suggested that many injectors may unwittingly engage in behaviours where there is a risk of hepatitis C transmission when using with others.

Experience of at least one type of injection-related problem was common among the population surveyed with three-quarters of the respondents reporting at least one. Of the IDU who experienced problems in the previous month, difficulty injecting (64%) and/or prominent scarring or bruising (63%) were the most common. Thrombosis (24%), dirty hits (23%) and abscesses or infections resulting from injection (12%) were also reported. Overdose experience in the month prior to interview was also reported by five IDU, four of whom identified the drug on which they had overdosed. Two IDU indicated they had overdosed on methamphetamine, one reported an anti-depressant overdose, and one other stated pills but did not specify which type. The remaining person did not specify the drug on which they had overdosed although it was evident from earlier responses that it was not heroin. Recent experience of one (n=30) or two (n=29) of these problems accounted for the majority (79%) of responses, although nine IDU had experienced three problems, six had experienced four

and one had experienced five such complications within the month prior to participation in the study.

The intravenous administration of a drug in a public location is considered as a factor which may exacerbate the occurrence of difficulties associated with injecting given that the conditions of such an environment will often be far from ideal. Of the total population surveyed there were 14 IDU who indicated that their most recent injection had occurred in a public place representing a significant reduction from the proportion who reported ‘public’ use in the 2000 study ($n=30$; $\chi^2=21.007$, $df=1$, $p=.000$). Locations of the most recent injection reported in both years are presented in Table 17.

Table 17: Location of most recent injection as reported by IDU

Location	2000	2001
Private home	64	86
Car	13	7
Street, park or beach	12	3
Public toilet	5	4
‘Shooting room’	2	0
Workplace	2	0
Other venue	2	0

As a result of the concerns raised about the high proportion of IDU who reported injection in a public place in the 2000 study the questionnaire was expanded. This expansion included questions about the location in which IDU had *usually* injected in the month prior to interview as well as those about the location of their most recent injection. Usual locations are provided in Table 18 and indicate that 12% of the population surveyed had routinely used a public environment during the month prior to interview. Of these 12 IDU, two-thirds ($n=8$) had experienced at least one injection-related problem in that month. Three IDU reported that they had experienced one problem, three more had experienced two problems and the remaining two IDU reported three different problems in that time.

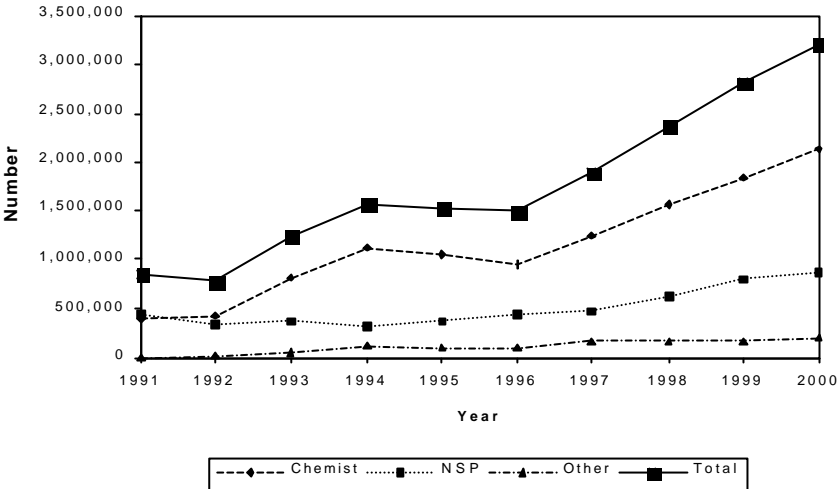
Table 18: Location of usual injection as reported by IDU

Location	Number of IDU
Private home	88
Car	8
Public toilet	4

NSP data

There has been a continued increase in the number of needles and syringes distributed annually in WA as indicated in Figure 23. Although the majority of injecting equipment (65%) is still distributed through pharmacies in this state, the proportion distributed through other sources, particularly needle and syringe programs, is gradually increasing.

Figure 23: Number of needles and syringes dispensed in WA, 1991-2000 (Source: HDWA)



NB. 'Other' in this instance refers to hospitals, community health centres, vending machines and other outlets.

The number of needles and syringes distributed during the 2000/2001 financial year is provided in Table 19 by type of outlet responsible for distribution. A detailed breakdown of distribution for the period 1991 to 2000 is provided in Appendix 2. It is interesting to note that there was a large increase observed in the October to December quarter, particularly for pharmacies. However, it is suspected that this represents an increase in the ordering of stock for that period rather than any increase in demand which also accounts for the reduction in number in the subsequent quarter.

Table 19: Number of needles and syringes distributed in WA, by quarter and outlet, July 2000 to June 2001 (Source: HDWA)

Quarter	Pharmacy	NSPs	Hospital	Community Health Centre	Vending Machine	Other	Total
Jul-Sep 00	504,759	226,985	38,335	3,000	-	10,201	783,280
Oct-Dec 00	584,747	238,676	45,030	8,000	-	7,126	883,579
Jan-Mar 01	484,453	222,411	25,000	7,500	1,645	6,018	747,027
Apr-Jun 01	460,032	214,924	26,915	7,500	6,245	8,554	724,170
Total	2,033,991	902,996	135,280	26,000	7,890	31,899	3,138,056
(Percent)	(65%)	(29%)	(4%)	(0.8%)	(0.2%)	(1%)	(100%)

10.0 SUMMARY AND CONCLUSION

10.1 Summary

The main trends to emerge from the 2001 IDRS are reported below by drug type. Some general trends also emerged, including a change in the frequency of injection among different age groups. While in 2000, the frequency of injecting was higher among those aged over 25 compared to those 25 years or less at the time of interview this was not the case in 2001. This is probably the result of an increase in frequency of methamphetamine injection, usually associated with younger users, and a decrease in heroin availability resulting in decreased frequency of injecting by older users than was the case in 2000.

Consistent with this, the trend observed in other jurisdictions (McKetin et al., 2000), of a difference between these two age groups in terms of the first drug they injected, was observed in WA in the 2001 study. Although amphetamine still represented the first drug injected for the overwhelming majority of this year's IDU respondents, heroin was significantly more likely to be nominated as the first drug injected by those aged over 25 years at time of interview.

Heroin

One of the major findings in this year's study was that WA has been affected by the so-called 'heroin drought' seen throughout Australia since late last year. The impact of this 'drought' has been a substantial reduction in the availability of heroin and a considerable increase in the price of the drug from \$450 per gram in 2000 to \$750 per gram in 2001. Although the average purity of the heroin seizures analysed in the 2000/2001 financial year remained reasonably consistent with that observed in the 1999/2000 year (49% and 53% respectively), there was a marked reduction in the number of such analyses made. IDU and KI perceptions of heroin purity, however, were that it was low at time of interview and had reduced throughout the six months prior to interview.

A reduction in the proportion of IDU who had used heroin in the six months prior to interview and a reduction in the frequency of use among those who had used the drug were also noted. Interestingly, less IDU respondents identified heroin as their 'drug of choice' in this year's study, although among those who did, the use of methadone and homebake increased. It would appear that as the drought began to take hold some primary heroin users moved into methadone treatment while others transferred to a range of different opioid-type drugs, particularly homebake.

The reduced availability of heroin appears to have resulted in a substantial fall in the number of opioid overdoses observed in WA. Both the number of calls to the ambulance service for attendance at non-fatal narcotic overdoses and the number of suspected heroin-related fatalities have fallen. It is interesting to note, however, that there was a reduction in both the number and rate per million population of fatal opioid-related fatalities observed among those aged 15-44 years in 2000. In 1998 the rate was 69.4 per million (n=59 fatalities), which rose to 85.0 per million in 1999 (n=73), and then fell to 49.8 per million in 2000 (n=43). This reduction precedes the period during which the so-called 'heroin drought' commenced and may represent a reduction in the use of heroin which pre-dates the effects of this drought.

Methamphetamines

The most evident trend observed in 2001 in relation to methamphetamine was that the drug, particularly crystal meth, had become increasingly available and more widely used in WA. This was further reflected by the increased number of key informants able to report on primary methamphetamine users, from four in 1999, to 10 in 2000 and 19 in 2001.

Among the IDU interviewed in the 2001 study, methamphetamine was the most frequently used of all drugs, including alcohol, tobacco, and cannabis. In 2000 methamphetamine was the third most commonly used drug. As well as the increase in proportion of IDU who had used the drug there was also an increase in the frequency of such use. Furthermore, there was a perception that there had been an overall increase in the number and diversity of users.

The availability of various other potent forms of methamphetamine was also noted in WA in 2001, most notably paste (a tacky and viscous form of the drug). As noted in 2001, there was a clear distinction between the purity of amphetamine and methamphetamine seizures analysed, with methamphetamine seizures representing almost all (98%) of these seizures. IDU generally associated higher purity with both crystal meth and paste, with higher prices paid for these forms of the drug than for purchases of powder.

Cocaine

The IDU survey provided preliminary evidence of an increase in the use and injection of cocaine among IDU in Perth, with an increased proportion of those surveyed having used the drug in the six months prior to interview. Frequency of cocaine use among this population was, however, still low for most of those who had used the drug, with an average of just 2.5 days use in the preceding 180 days.

While IDU may not be the most appropriate sentinel group to survey in relation to trends in cocaine use, this preliminary evidence suggests that further investigation into the use of cocaine among this population, as well as non-injecting drug users, is warranted.

Cannabis

Very little change in the profile of cannabis was observed between the 2000 and 2001 studies. The only notable change was a substantial reduction in the number of charges laid in relation to the possession/use of cannabis between the 1999 and 2000 data. (As this data is only available on an annual basis 2000 represents the most recent data available). The reduction observed was consistent with the number of cautions issued under the state-wide cannabis cautioning scheme introduced in WA in March 2000, where those who receive a caution do not receive a charge and consequently do not appear in the data.

Other drugs

The most significant finding in this year's IDRS in relation to the use of 'other drugs' is the dramatic increase observed in the use of homebake, especially among IDU who nominated heroin as their drug of choice. A shift to the use of homebake as a result of reduced heroin availability caused by the 'heroin drought' is the most likely explanation for this increase in homebake use. Among IDU who identified heroin as their drug of choice, there was also a significant increase in the proportion reporting the use of methadone which may support

claims that some primary heroin users moved into methadone treatment as the drought began to take hold.

10.2 *Methodological considerations*

The 2001 IDRS represents the third year of the key informant survey and indicator data collection but only the second year of data collection from IDU. Limited amendments were made to the IDU questionnaire to reflect trends observed in the 2000 study and suggestions made by key stakeholders who had attended a presentation of results of the 2000 study. Consequently not all IDU data is directly comparable across both years but these amendments have enabled more specific information to be gathered in relation to issues such as methamphetamine use, treatment history and drug expenditure. As new data is collected it will improve the ability to more confidently identify emerging drug trends, identify areas worthy of further consideration and also possible additions to the questionnaire to reflect such trends.

10.3 *Implications for research*

The findings of the WA component of the 2001 IDRS suggest several areas that could be further investigated in subsequent data collections for the IDRS.

- Expansion of the IDRS questionnaire to facilitate data collection specific to each of the various forms of methamphetamine available and a more thorough examination of problems associated with the use of more potent forms of this drug.
- The continued high rate of sharing injecting equipment is of concern. Further investigation into the exact nature of this ‘sharing’, and the perception of risks associated with it, is warranted.
- Further monitoring and investigation into the use of cocaine among WA injecting drug users. While injectors may not be the ideal sentinel group by which to determine trends in the use of cocaine there has been a detectable increase in use among this group that should continue to be monitored.
- Further monitoring and investigation into the re-emergence of homebake use observed in the state particularly given that such re-emergence was not detected in other data sources such as Drug Use Monitoring in Australia (DUMA) and ADIS data. To enable researchers to determine more accurately whether the use of homebake has remained confined to WA the 2002 IDU questionnaire, which is used nationally, will be amended to include questions about this drug.

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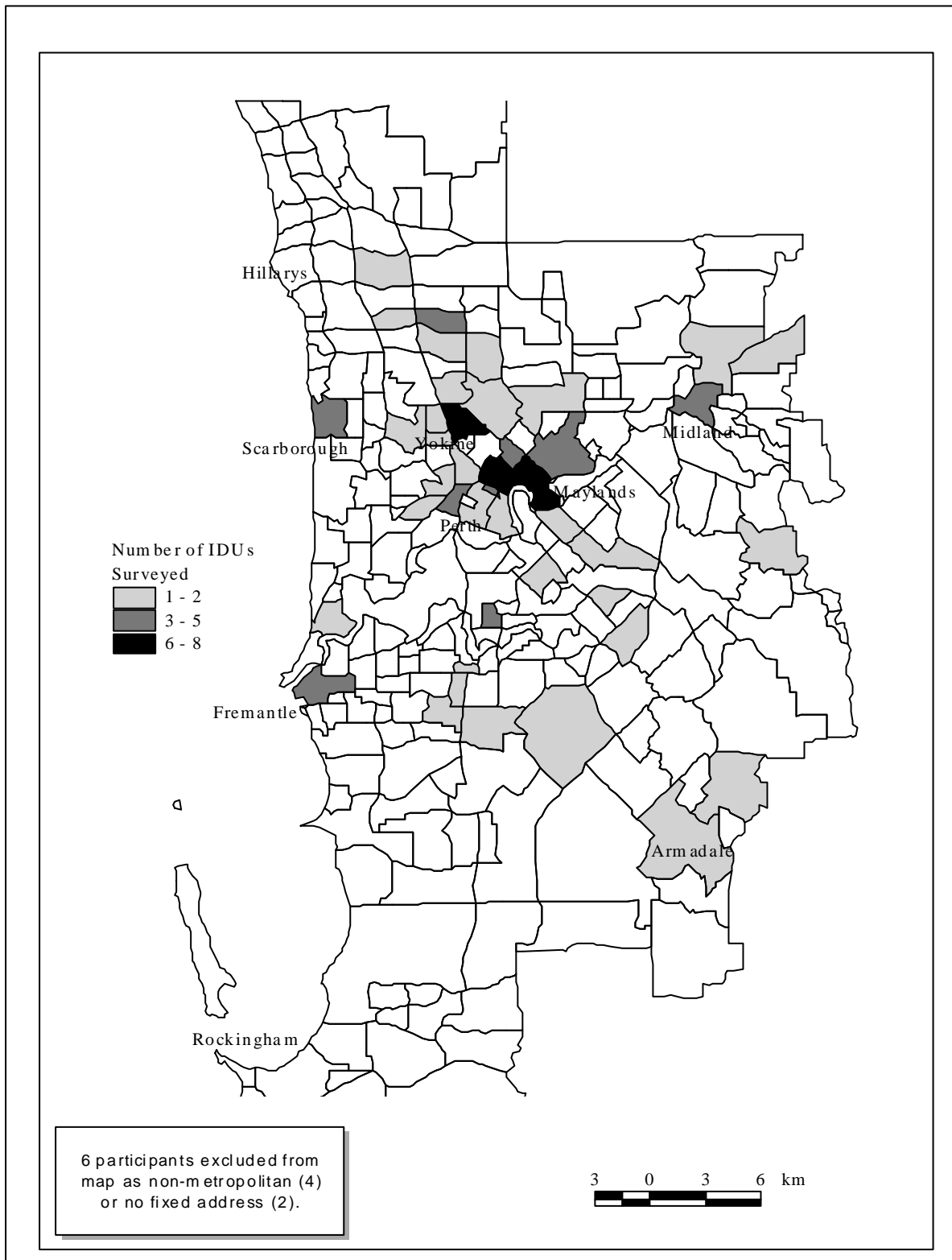
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12.0 APPENDICES

Appendix 1: Place of residence identified by IDU survey respondents



Appendix 2: Number of needle and syringes dispensed in WA, by type of outlet, 1991-2000 (Source: Disease Control Branch, Sexual Health Program, HDWA)

Year	Chemist	NSPs	Hospital	Community Health Centre	Vending Machine	Other	Total
1991	394,820	444,225	2,560	1,000	2,385	200	845,190
1992	420,150	349,806	7,400		1,920		779,276
1993	817,025	372,234	3,570	750	50,491	530	1,244,600
1994	1,132,440	322,983	39,985	6,605	63,535	2500	1,568,048
1995	1,057,575	369,671	35,940	3,000	61,030	2770	1,529,986
1996	955,845	447,750	40,275	4,500	45,960	4540	1,498,870
1997	1,239,355	479,308	80,180	3,800	83,340	8005	1,893,988
1998	1,568,321	626,882	82,460	9,500	70,960	12,065	2,370,188
1999	1,849,047	799,776	96,465	15,700	37,590	18,701	2,817,279
2000	2,135,691	870,599	146,145	23,500	-	32,742	3,208,677

Appendix 3: A summary of the major findings by drug type

The table below summarises the key drug trends by drug type and indicates the main source of this information (X).

Drug trend	IDU	KIS	Other
Heroin:			
Price increased dramatically	X	X	X
Availability reduced	X	X	X
Purity low	X	X	
Decrease in heroin use	X	X	X
Move to the use of other drugs	X	X	
Amphetamine:			
Higher prices associated with more potent forms	X		
Very readily available	X	X	
Purity stable	X	X	X
Availability of a variety of forms of methamphetamine	X	X	X
Use widespread	X	X	X
Cocaine:			
Limited availability	X		
Slight increase in use but still not common	X	X	X
Cannabis:			
Price determined by form of cannabis purchased (but stable)	X	X	X
Readily available	X	X	
Potency high (stable to increasing)	X		
Use widespread	X	X	X
Hydroponic cannabis form most commonly used	X	X	