

**WEST AUSTRALIAN
DRUG TRENDS 2002**



**Findings from the
Illicit Drug Reporting System
(IDRS)**

James Fetherston

Simon Lenton

National Drug Research Institute, Curtin University

NDARC Technical Report No. 149

ISBN 1 877027 340

©NDARC 2003

TABLE OF CONTENTS

LIST OF TABLES.....	iii
LIST OF FIGURES	iv
LIST OF FIGURES	iv
ACKNOWLEDGEMENTS	v
LIST OF ABBREVIATIONS	vi
EXECUTIVE SUMMARY	vii
Summary of drug trends in WA	viii
Heroin.....	viii
Methamphetamines	viii
Cocaine.....	ix
Cannabis.....	ix
Other drugs.....	ix
Overdoses	ix
Needle sharing.....	x
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 Study	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	11
4.1 Price.....	12
4.2 Availability.....	12
4.3 Purity.....	13
4.4 Use.....	14
4.4.1 Prevalence of heroin use.....	14
4.4.2 Current patterns of heroin use.....	15
4.5 Heroin use trends	17
4.6 Summary of heroin trends	17
5.0 METHAMPHETAMINE	18
5.1 Price.....	19
5.2 Availability.....	20
5.3 Purity.....	21
5.4 Use.....	23
5.4.1 Prevalence of amphetamine use.....	23
5.4.2 Current patterns of amphetamine use.....	23
5.5 Amphetamine use trends	25
5.6 Flashcard Analysis.....	25
5.7 Summary of amphetamine trends.....	28
6.0 COCAINE.....	29
6.1 Price.....	29
6.2 Availability.....	29
6.3 Purity.....	30
6.4 Use.....	31

6.4.1	Prevalence of cocaine use	31
6.4.2	Current patterns of cocaine use	31
6.5	Cocaine use trends	32
6.6	Summary of cocaine trends	32
7.0	CANNABIS	33
7.1	Price.....	33
7.2	Availability.....	33
7.3	Potency	34
7.4	Use.....	34
7.4.1	Prevalence of cannabis use	34
7.4.2	Current patterns of cannabis use	35
7.5	Cannabis use trends	36
7.6	Summary of cannabis trends	36
8.0	OTHER DRUGS.....	37
8.1	Ecstasy	37
8.1.2	Price	37
8.1.3	Purity.....	37
8.1.4	Use.....	38
8.2	Other opiates	40
8.2.1	Methadone	40
8.2.2	Morphine.....	40
8.2.3	Other opiates	41
8.2.4	Homebake	41
8.2.5	Buprenorphine.....	42
8.3	Benzodiazepines	42
8.4	Anti-depressants	43
8.5	Summary of other drug trends	44
9.0	DRUG-RELATED ISSUES	45
9.1	Treatment.....	45
9.2	Overdose	45
9.3	Crime.....	49
9.3.1	IDU and key informant reports	49
9.3.2	Expenditure on drugs.....	50
9.3.3	Law enforcement data.....	51
9.4	Needle Sharing Behaviour.....	52
10.0	SUMMARY AND CONCLUSION	55
10.1	Heroin.....	55
10.2	Methamphetamines.....	56
10.3	Cocaine	57
10.4	Cannabis	57
10.5	Other drugs.....	57
10.6	Overdoses.....	58
10.7	Needle sharing.....	58
11.0	REFERENCES	59

LIST OF TABLES

Table 1: Summary of drug trends in WA, 2002	viii
Table 2: Demographic characteristics of the IDU sample (n=100)	7
Table 3: Frequency of injecting among IDU sample (n = 100)	8
Table 4. Drug use history of IDU sample (n=100).....	10
Table 5: Summary of trends in the price, availability, purity and use of heroin.....	17
Table 6: Reports from speed, base and ice users regarding the form of these drugs.....	26
Table 7: Summary of trends in the price, availability, purity and use of amphetamines.....	28
Table 8: Summary of trends in the price, availability, purity and use of cocaine.....	32
Table 9: Summary of trends in the price, availability, potency and use of cannabis	36
Table 10: Number of charges laid in WA for drug by quarter, 2001 (Source: Crime Information Unit).....	51
Table 11: Number of charges by type laid in WA for drug related offences, by quarter, 2001 (Source: Crime Information Unit)	51
Table 12: Number of charges laid in WA for sell/supply offences by drug type (Source: ACC)	52
Table 13: Location of most recent injection as reported by IDU.....	54
Table 14: Location of usual injection as reported by IDU	54

LIST OF FIGURES

Figure 1: Purity of heroin seizures analysed by law enforcement agencies in WA, by quarter, July 1999 to June 2002 (Source: ABCI, ACC)	13
Figure 2: Number of heroin seizures analysed by law enforcement agencies in WA, by weight of seizure, 2001/2002 (Source: ABCI, ACC)	14
Figure 3: Number of heroin-related calls to ADIS & PDIS, by quarter, July 1998 to June 2002 (Source: Alcohol and Drug Information Service)	15
Figure 4: Purity of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI, ACC)	21
Figure 5: Number of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by weight of seizure, 2001/2002 (Source: ABCI, ACC).....	22
Figure 6: Number of amphetamine-related calls to ADIS, by quarter, July 1998 to June 2002 (Source: ADIS).....	23
Figure 7: Purity of cocaine seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI, ACC)	30
Figure 8: Number of cocaine-related calls to ADIS, by quarter, July 1999 to June 2002 (Source: ADIS).....	31
Figure 9: Number of cannabis-related calls to ADIS, by quarter, July 1998 to June 2002(Source: ADIS).....	35
Figure 10: Purity of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI, ACC).....	37
Figure 11: Number of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI)	38
Figure 12: Number of ecstasy-related calls to ADIS, by quarter, July 1998 to June 2002 (Source: ADIS).....	39
Figure 13: Number of calls to ADIS in relation to each of the four drug types studied, by quarter, July 1998 to June 2002 (Source: ADIS)	45
Figure 14: Narcotic overdose-related calls to ambulance, by month, July 1998 to June 2002 (Source:WAPCRU).....	46
Figure 15: Number of suspected heroin-related fatalities in WA, by quarter, July 1998 to June 2002. (Source: DAO)	47
Figure 16: Annual opioid overdose deaths in WA, among those aged 15-44 years, 1995-2001 (Source:ABS)	48
Figure 17: Rate of opioid overdose deaths per million population, among those aged 15-44 years, 1999 and 2001 (Source: ABS).....	49

ACKNOWLEDGEMENTS

This research was funded by the Commonwealth Department of Health and Ageing (CDHA), formerly the Commonwealth Department of Health and Ageing (CDHA), 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 authors would like to thank Courtney Breen, 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 West Australian Pre-hospital Care Research Unit; The Drug and Alcohol Office (DAO); the Alcohol and Drug Information Service (ADIS); the WA Police Service.

Special thanks to Kim Hargreaves for her extensive previous work on the Illicit Drug Reporting System, Kristy Arden for conducting the majority of the IDU interviews and to Phillipa Grieves for her assistance in the data entry process.

LIST OF ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
ATSI	Aboriginal or Torres Strait Islander
CDHA	Commonwealth Department of Health and Ageing
DAO	Drug and Alcohol Office
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
PDIS	Parent Drug Information Service
WA	Western Australia
WAPS	WA Police Service
WAPRCU	WA Pre-Hospital Car Research Unit

EXECUTIVE SUMMARY

In 2002 the Commonwealth Department of Health and Ageing (CDHA) commissioned the National Drug and Alcohol Research Centre (NDARC) to conduct the third national Illicit Drug Reporting System (IDRS). All states and territories, 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 third year of data collection on party 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 2002 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 fourth year of involvement in the IDRS for WA and the third 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, and other professions.
3. Analysis of a range of indicator data from survey, health and law enforcement sources.

Demographics and use patterns

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

The main trends to emerge from the 2002 IDRS are reported below by drug type. Some general trends also emerged. There was a sizable increase in the proportion of IDU who reported heroin as their first drug injected from 22% in 2001 to 30% in 2002. With regards to respondents' drug of choice, methamphetamine was seen to fall from its position of first drug of choice in 2001, when 42% nominated it to 32% in 2002. Conversely, heroin had regained its role as the most popularly nominated drug of choice by 48%, up from 34% in 2001.

Methamphetamine remained the drug most commonly injected in the month prior to interview, albeit with a decrease observed in the proportion of IDU who reported this from 72 IDU in 2001 to 56 in 2002. Nine individuals reported that they most commonly injected morphine in the month preceding the interview in 2002, up from one individual claiming this in 2001.

It is not possible to determine the extent to which shifts in the use of heroin and methamphetamine from the 2001 to 2002 samples are indicative of an emerging trend, and at least to some extent a reflection of the gradual return of heroin to Perth drug markets, or whether they are primarily a function of differences in the sample recruited in 2002 compared to 2001.

Summary of drug trends in WA

The WA component of the 2002 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, 2002

	Heroin	Methamphetamine	Cocaine	Cannabis
PRICE (\$)				
Packet/point	50-100	50		25 - 50 bag
1/4 gram	150			250 oz
1/2 gram	300	250 (powder)	350 (based on just 5 purchases)	Stable
gram	550	275 (base / paste)		
Change	Decreased	350 (crystal)	Cannot determine (limited purchases)	
		Stable		
AVAILABILITY	“Very Easy” to “Easy” Increased ease of obtaining	Very easy (powder and base) - stable Easy (crystal) – becoming more difficult	Difficult – to very difficult Unclear (limited data) if this has changed	Very easy Stable
PURITY	21%	30%	36.5%	High potency Stable
USE	Possibly increasing Some evidence of a return to heroin use	Remains widespread Some evidence of number of users decreasing	Uncommon and predominantly occasional / recreational use.	Widespread Mainly hydro used

Heroin

Evidence obtained in the course of interviews with heroin using IDUs, suggested that the availability of heroin in the Perth illicit drug market is again on the increase when compared to data collected in 2001. That said however, in terms of levels of availability, price and purity, these show no signs or reaching the levels reported “pre-drought” in 2000 at this stage. Heroin prices are down according to seizure data and self reports from IDUs who reported a drop in price of a gram of heroin from a median of \$750 per gram in 2001 to \$550 in 2002. Most (63%) of IDUs reported that the purity of heroin in Perth appears to have increased in the last six months,

Methamphetamines

There was a slight fall from 92% in 2001 to 85% in 2002 in the numbers of IDU interviewed who had used any form of methamphetamine in the six months prior to interview. On the whole the prices of amphetamine reported by IDU remained relatively unchanged from 2001, with the median price of a gram of powder being \$250. The median price reported for ‘crystal meth’ or ‘paste’ was \$250 per gram, while crystal was \$350 per gram. Some 79% of IDU able to comment

said that speed powder was 'very easy' to obtain and 65% said base / paste methamphetamine was also 'very easy' to get.

The average purity of illicit methamphetamine seizures analysed in WA has generally increased since the 1998/1999 financial year, and in 2001/2002 this trend has continued with an average purity of 30%. However, this appears to be largely due to the peak reached in the third quarter of 2001 and purity data from more recent quarters was seen to drop sharply. Most IDU rated the purity of crystal meth as high and stable over the previous 6 months.

Cocaine

As in previous years, number of IDU reporting the use of cocaine in WA in the last six months remained low. In 2002 only 17 respondents indicated use of the drug within that timeframe, representing a fall from the 32 in 2001 who claimed that they had used it. This suggests the apparent 'preliminary evidence of an increase in the use and injection of cocaine among IDU in Perth' during 2001 (Hargreaves & Lenton, 2002), has not continued in 2002. Even among those who had used, the frequency of use remains very low with none using more than seven days out of the last six months. It needs to be reiterated that IDU may not be the most appropriate sentinel group to survey in relation to trends in cocaine use.

Cannabis

Very little change in the profile of cannabis was observed between the 2001 and 2002 studies. The median price of an ounce remained at \$250, and the vast majority (85%) of IDU indicated that cannabis remained 'very easy' to obtain and was 'high' in potency. New in 2002 were questions relating to the original source of cannabis purchased. Most (67%) IDU said their cannabis came from a small time back-yard grower and 27% from a large scale cultivator / supplier such as a crime syndicate or bikie gangs. Some 66% said they were 'very sure' about this and 26% said that they were 'moderately sure'.

Other drugs

The most notable observation with regards to the use of other drugs in this year's IDRS, is the apparent increased popularity of pharmaceutical preparations amongst injecting drug users. This is particularly true of opioid based medications, most notably morphine, but also oxycodone and prescription drugs with codeine as the active ingredient. Also widespread is the illicit use of benzodiazepines and diverted buprenorphine. The data suggest that while the use of homebake remains relatively common amongst WA primary heroin users, it's use may be beginning to decline slightly as heroin slowly re-emerges on the market and other users appear to have moved to pharmaceutical preparations.

Overdoses

The number of ambulance overdose call outs and suspected heroin related deaths remained low during the 2001 and 2002 financial year. In the period from January to June 2002, there were only six suspected opioid overdoses in WA, down from 26 overdoses in the corresponding period the previous year.

Needle sharing

Almost a fifth of IDU (19%) reported that they had used a needle after someone else had already used it in that period, a slight decline from the 22% who reported this in 2002. Mostly when needles were shared they were done so with a sexual partner.

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 IDRS is funded by the Commonwealth Department of Health and Ageing (CDHA) and the National Drug Law Enforcement Research Fund (NDLERF). From 2000-2002, NDLERF has provided funding to complement the core funding from CDHA and enables the IDU survey component to be conducted in WA, TAS, the ACT, QLD and the NT. This ensures that comparable data is collected in every jurisdiction in Australia.

This report presents the findings of the fourth 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 *2002 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 2002 IDRS were to:

- examine trends in illicit drug use in Perth for 2002;
- identify any emerging illicit drug trends in Perth that warrant further investigation; and
- specifically determine the extent to which the shortage of heroin observed in the Perth region in the previous year may be continuing.
- To determine the extent to which substitute drugs such as homebake heroin have filled the role of heroin during this shortage.

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 2001 (Hargreaves & Lenton, 2002), 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 2001 data where possible.

2.1 Survey of Injecting Drug Users

A survey of 100 IDU was conducted in June 2002. The sample was recruited from throughout the Perth metropolitan area. 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 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 2001 by using the same recruitment strategies as adopted that year. That said, it should be noted that 2002 differed from previous years in that the services of a peer interviewer were used in the field and during the recruitment process, and the possibility can not be discounted that in recruiting from their own social networks, the demographic profile of the sample may have been affected. Conversely, it should also be considered that the use of such a

peer interviewer may positively affect subjects in the degree to which they were prepared to be frank with regards to more sensitive areas of the survey.

The interview administered consisted of a standardised structured questionnaire, which was a slightly modified version of the questionnaire used nationally in 2001. 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. New modifications included items pertaining to the use of buprenorphine and homebake heroin. 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 throughout August and September 2002. 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 previous IDRS surveys 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.

As all key informant interviews were conducted over the telephone, written information about the IDRS was sent by fax prior to participation in the survey. 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 13 male and 17 female respondents. Of these 30 individuals, 14 identified that they were involved in the drug treatment field, two were involved in outreach, four were NSP workers and two were specifically involved in youth work. Three others were employed within the law enforcement/criminal justice sector – one as a police officer, one as a Drug Court Assessment Officer, and one as a criminal justice worker. Also identified were two paramedics, Two peer / community education officers, and one clinical psychologist.

There were 41% of key informants who reported their level of contact with users was between five and seven days per week (37% in 2000 and 29% in 2001). The overall level of contact was again similar to that reported in the previous year (99.6 days, $sd=39.9$, range = 25.7 – 180, compared to 93.3 days, $sd=41.3$, range=26-180 days in 2001). Only one key informant (3.3%) had had contact with 20 IDU or less in the six months prior to interview and eleven 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. As in 2001, the drug most commonly identified was methamphetamine. The number of key informants able to report on primary methamphetamine

users has increased from ten in 2001, to 20 in 2002. This was followed by eight key informants who reported that the client group with which they were the most familiar were users of cannabis. There was only one key informant who commented on primary heroin users, down from seven in 2001, with one other reporting on users of other opiates. As in previous 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 youth (n=9), IDU (n=5), Aboriginals, prisoners and women were each mentioned by two key informants respectively and street present youth and sex workers were each specifically mentioned by isolated informants. Most key informants were 'moderately' (63%) to 'very certain' (37%) 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 2001 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)
- 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 the WA Drug and Alcohol Office (Formerly Next Step Specialist Drug and Alcohol Services)

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 11.0 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. All statistical analyses were calculated using SPSS V.11.

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 June 2002. The mean age of the sample surveyed was 29.7, (sd=7.8, range = 17-49 years) representing a slight increase on the 2001 mean age of 28.1 (sd=7.4, range =17-48 years). There was no significant difference in the proportion of males between 2001 (63%) and 2002 (58%) ($\chi^2 = 1.073$, df = 1, p = .300) There was no significant difference between the average age of male (30.1 years) and female (29.2 years) respondents (F = .338, df = 1,98, p = .563) Some 4% of those surveyed identified themselves as being of ATSI descent, not significantly different from the 6% who identified as ATSI in the 2001 survey ($\chi^2 = .709$, df = 1, p = .400).

A somewhat higher proportion of the sample was engaged in treatment at the time of interview in 2002, with 35 individuals stating they were receiving treatment, up from 24 in 2001. This number rose slightly to 38 individuals when asked if they had received any treatment in the last six months. Methadone remained the most common treatment with 22% of respondents having received methadone treatment in the last six months and 17% remaining in treatment at the time of interview. This was closely followed by the relatively new treatment buprenorphine with 15% reporting to have received this treatment in the last six months and 13% remaining on this treatment at the time of interview. Other treatments received in the past six months were relatively uncommon, with 9% having received counselling, 5% having undergone some form of detoxification, 2% having been prescribed naltrexone and 2% reporting having attended narcotics anonymous. At the time of interview, two individuals were still engaged in counselling, one in detoxification, and both those who reported receiving naltrexone were continuing to do so. A further two individuals stated that they had used naltrexone in the past six months. One of these received the drug from an unknown source and the other purchased it on the black market in the mistaken belief that it was heroin.

The average length of time spent in treatment was highly consistent with that reported in 2001, being 24 months (sd=33.3, range = 0.25 – 144 months). By gender males interviewed had spent an average of 20.4 months in treatment and females an average of 28.8 months. but this difference was not significant (F = 0.543, df = 1,33, p = .466)

A lower percentage of the sample (47%) were unemployed this year than the 61% reported in 2001. A total of 43% were in some form of formal employment, with 12% employed full time and a further 31% on a part time basis. An average of 10.7 years of schooling was reported (sd=1.3, range= 7 to 13 years) representing a slight fall from the average of 11.5 reported in 2001. As in the previous year, slightly over half (53%) of respondents reported that they had completed some form of post secondary education. This education consisted of 42% of respondents who had completed a trade or technical certificate, and a further 11% of respondents who reported completing a university or college qualification.

There was a distinct decline in the number of respondents who reported having ever been in prison with just 18% of respondents stating that they had a prison history vs. 34% in 2001. ($\chi^2 = 11.48$, df = 1, p = .001). As in previous years, it was observed that males were much more likely than females to have spent time in prison, with 16% of male respondents reporting that they had a prison history as opposed to 2% of females. ($\chi^2 = 7.121$, df = 1, p = .008).

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	2001	2002	Significance
Age (mean yrs)	28.1	30	N.S.
Gender (% male)	63	58	N.S.
Employment (%)			.022
Not employed	61	47	
Full time	10	12	
Part time / casual	18	31	
Student	5	4	
Home duties	3	3	
Sex industry worker	3	3	
School education (mean yrs completed)	11.5	10.7	.000
Tertiary education (%)			N.S.
None	49	47	
Trade/technical	35	42	
University/college	16	11	
Currently in drug treatment (%)	24	35	.010
Ever been in prison (%)	34	18	.001

3.2 Drug use history

The mean age of first injection was 18.6 years (sd=4.5, range=10-35 years) with little apparent difference between male and female respondents (18.4 and 18.9 years respectively. ($F = 0.279$, $df = 1$, 97 , $p = .599$) As in previous years the age of initiation to injecting varied greatly however, it remained the case that the great majority (91%) had commenced injecting by the age of 25. As was observed in both the 2000 and 2001 IDRS, respondents aged 25 or less at the time of interview were younger at first injection than those IDU who were over 25 years at time of interview (16.5 vs 19.9 years, ($F = 14.742$, $df = 1$, 97 , $p = .000$)). As previously noted, however, this data is subject to censoring because older respondents have had more years in which to have commenced injecting. Interestingly, the mean age at first injection for those aged over 25 years at the time of interview was slightly higher in 2002 than in 2001 (19.9 years compared to 19 years) ($t = -1.361$, $df = 60$, $p = .179$) The mean age of first injection for those aged 25 or less was 16.5 years, not significantly different from 16.2 years in 2001 ($t = -.701$, $df = 37$, $p = .488$)

Of the 100 IDU who indicated how often they had injected in the previous month, the majority (73%) had used less than daily, not significantly different from the 70% in 2001 ($\chi^2 = 0.429$, $df = 1$, $p = .513$). The frequency with which IDU injected in the month prior to interview is presented in Table 3. There was no significant difference between the proportion of daily injectors among

those aged 25 or less compared with those over 25 years at time of interview ($\chi^2 = 0.00$, $df = 1$, $p = 1.00$).

Table 3: Frequency of injecting among IDU sample (n = 100)

Frequency of injecting in month prior to interview	% of respondents
Weekly or less	24
More than weekly but less than daily	49
Once a day	9
Two to three times a day	10
More than three times a day	8
Total	100.0

Those who stated their drug of choice was heroin or other opiates (heroin, morphine, methadone, other opiates) were more likely to say that they injected daily over the past month than were those whose preferred drug was a stimulant (amphetamine, cocaine, ecstasy) ($\chi^2 = 7.324$, $df = 1$, $p = .007$)

Once again, the majority of IDU interviewed (59%) identified amphetamine as the first drug they injected, however this is a considerable decrease on the 72% reported in 2001. However, there was a sizable increase in the proportion of IDU who reported heroin as their first drug injected from 22% to 30% ($\chi^2 = 8.383$, $df = 1$, $p = .004$). However, this probably reflects differences in the sample selected between 2001 and 2002 whose origins may lie in the choice of social networks accessed by the peer interviewer, rather than differences in the market itself. As in 2001, heroin was more likely to be nominated as the first drug injected by IDU over 25 years old at time of interview ($n=20$) than those aged 25 ($n=10$) or less however, this difference was not significant ($\chi^2 = 0.288$, $df = 1$, $p = .591$). Other drugs that were nominated as being the first substance injected included morphine ($n=4$), ecstasy ($n=2$), benzodiazepines ($n=2$), and hallucinogens, other opiates and homebake heroin were each nominated by one individual respectively.

With regards to respondents' drug of choice, methamphetamine was seen to fall from its position of first drug of choice in 2001, when 42% nominated it to 32% in 2002 ($\chi^2 = 4.105$, $df = 1$, $p = .043$). Conversely, heroin had regained its role as the most popularly nominated drug of choice by 48%, up from 34% in 2001. Other substances nominated as drug of choice by respondents in 2002 included morphine (8%, with none reported in 2001), cannabis (5% vs 4% in 2001), cocaine (3% vs 5% in 2001) and ecstasy (2% down from 7% in 2001). While it remains too early to claim this change of roles between heroin and methamphetamine as being indicative of an emerging trend, it is nevertheless tempting to speculate that it is at least to some extent a reflection of the gradual return of heroin to Perth drug markets, although it may also be a function of the sample differences described above.

Methamphetamine remained the drug most commonly injected in the month prior to interview, albeit with a decrease observed in the proportion of IDU who reported this from 72 IDU in 2001 to 56 in 2002 ($\chi^2 = 12.698$, $df = 1$, $p = .000$). A small increase was observed in the number of respondents reporting having injected heroin as the most common drug in the month before interview with 30 IDU reporting this up from 23 in 2001. Nine individuals reported that they

most commonly injected morphine in the month preceding the interview in 2002 , a noticeable increase from the sole individual claiming this in 2001($\chi^2 = 64.646$, $df = 1$, $p = .000$). It is likely that this statistic demonstrating high rates of recent amphetamine use, combined with data presented earlier suggesting in this group heroin use was more likely to be first drug injected and drug of choice supports the hypothesis that the 2002 sample comprised a higher proportion of primary heroin users than the 2001 sample thereby reflecting a sampling issue rather than a recent market shift.

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 mths*	Days used any meth last 6 mths	Used in last 6 months
1. Heroin	82	80	60	36	9	13	0	10	1	35		64
2. Methadone	46	30	13					42	27	30		29
3. Morphine	74	70	49	1	0	1	0	49	20	17		52
4. Homebake	58	58	30					1	0	5		30
5. Other opiates	63	32	20	7	1	1	0	47	35	12		49
6. Speed powder	96	94	74	12	6	73	18	39	10	22	57	77
7. Amphet liquid	37	37	14					4	1	3		14
8. Base/point/wax	69	68	56	1	0	2	1	8	5	15		56
9. Ice/shabu/crystal	89	88	73	20	13	18	6	19	10	24		74
10. Cocaine	60	37	10	7	1	45	14	5	0	2		17
11. Hallucinogens	86	41	1	1	1	3	1	84	9	0.25		9
12. Ecstasy	85	57	23	2	1	21	13	83	39	7		43
13. Benzodiazepines	88	53	30	3	0	3	0	87	75	50		77
14. Alcohol	95	18	3					94	75	37		75
15. Cannabis	100									87		86
16. Anti-depressants	46	3	1					46	30	38		33
17. Inhalants	38									0.5		4
18. Tobacco	92									148		87
19. Buprenorphine	33	18	17	0	0	0	0	28	22	14		28

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

4.0 HEROIN

Evidence obtained in the course of interviews with heroin using IDUs, suggested that the availability of heroin in the Perth illicit drug market is again on the increase when compared to data collected in 2001. That said however, in terms of levels of availability, price and purity, these show no signs or reaching the levels reported 'pre-drought' in 2000 at this stage.

Level of knowledge in relation to the price, purity and availability of heroin among the IDU surveyed remained low in 2002 although some minor increases were observed. Compared with 2001 where half of those surveyed able to comment on these issues, 2002 saw slightly higher figures ranging from 51% able to comment on changes to the price of heroin up to 56% able to comment on issues relating to availability, however this was not significant ($\chi^2=0.073$, $df=1$, $p=0.787$). 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 with just two citing users of opioids as being their principle clients. (compared to 8 in 2001). Of these, only one reported specifically on heroin, the other stating that their clients were primarily using other forms of opioids. Both these members of the heroin/opioid key informant group identified themselves as drug treatment workers. That said, there were nevertheless 24 of the 30 key informants interviewed who were aware of at least some use of heroin by members of their client group, however that such small numbers of key informants reported specifically with regards to heroin / opioids necessitates that interpretation of the information provided by these key informants be undertaken with considerable caution.

Frequency of contact with IDU ranged from three to seven days per week, with an average of 129 contact days in the preceding six months ($sd=72.7$, $range=77-180$ days). Both key informants reported that they had seen between 21 and 50 clients during that time.

The key informant describing users of opioids reported that their clients came from throughout the Perth metropolitan area, whilst the key informant reporting specifically upon heroin indicated that all of their clients derived from areas South of the Swan River. The youngest clients seen by both of these workers were around 17 to 18 years, however, the clients reporting heroin as their principle drug were a little older with an age range of up to 50 whilst the users of other opiates were aged up to 35. In terms of estimated average age, the heroin using clients tended to be in their late 20s, while the users of other opioids had an average age of 23-24. Both key informants estimated their heroin / opioid using client base to be 70% male. The key informant reporting on users of various opiates was employed by an agency dealing exclusively with clients of Aboriginal or Torres Strait Islander origins.

The mean age of the IDU respondents surveyed who had used heroin most often in the month prior to interview ($n=30$) had fallen to 32.6 years ($sd=7.3$, $range=18-49$ years) from the at 36.2 years reported in 2001 ($sd=7.9$, $range = 21-48$ years) ($t = -2.717$, $df = 29$, $p = .011$). Small changes were observed in the gender ratios of those IDU reporting heroin as the most commonly injected drug with twice as many males as females (66.6% vs 33.3%) as opposed to the ration recorded in 2001 of 61% male to 39% female ($\chi^2 = 9.653$, $df = 1$, $p = .002$). The decreasing age of heroin users may possibly be reflective of the increased access to the drug by younger users less entrenched in the drug culture or may reflect issues surrounding the sampling method discussed earlier.

Some 64% of all 100 IDU interviewed reported use of heroin in the last six months which was not significantly different from 55% in 2001 ($\chi^2 = 2.586$, $df = 1$, $p = .108$). The median number of days of use for 2002 was 24 days as compared with 30 days in 2001.

4.1 Price

Of all IDU interviewed, 48 were able to report on the price of a gram of heroin (compared to 39 in 2001). Prices cited for a gram of heroin ranged from \$150 to \$1000 with the median price most commonly cited being \$600 (14 respondents), followed by \$650 reported by six respondents. Nine respondents cited median prices higher than \$650 and 19 cited median prices lower than \$600. As in previous years, the number of respondents able to comment on the price a cap of heroin in Perth was extremely small, with only five respondents able to answer.

Of those IDU who had actually purchased a gram of heroin in the six months prior to interview (n=19) the median price paid was \$550, representing a \$200 decrease from the median price paid by IDU in 2001. Of the 14 IDU who reported buying heroin by the gram in the last six months, prices ranged from \$400 to \$800, but with 50% paying between \$500 and \$600. This represents a noticeable drop in price from 2001 where most IDU (79%) paid between \$600 and \$900 for their last gram purchased.

In 2002, the most commonly purchased quantity of heroin was seen to be a 'quarter' (0.25gm) reported by 45 respondents with prices ranging between \$120 and \$200 with a median price of \$150. Similarly to the situation reported in 2001, the other most common quantity purchased was a 'half weight' (0.5gm) reported by 29 respondents with prices ranging from \$200 to \$400 and a median price of \$ 300. The practice of purchasing heroin by the packet also remained common with 28 respondents reporting the purchase of a \$50 packet and 21 having purchased a \$100 packet. Some (12) individuals reported having bought packets of both sizes

Of the 51 IDU able to comment on changes to the price of heroin, most (54%, n=28) considered that the price had decreased in the six months prior to interview with a further 25% indicating that the price had remained stable in that time. The one key informant who reported specifically on heroin reported that the price had remained stable at \$50 for a 'point'. That the price of heroin may have recently decreased is supported by data from the ABCI reporting that during the period January to March 2002, the price of a gram of heroin was between \$600-\$1000, but in the following quarter this price was seen to fall to \$500.

4.2 Availability

Heroin was considered 'very easy' to obtain by 57% (n=32) of those able to comment on present availability (n=56) representing a sizable increase on the 16% (n=8) of those able to comment on availability (n=51) in 2001 ($\chi^2 = 19.048$, $df = 1$, $p = .000$), but remaining much lower than the 77.5% (n=62) of IDU able to comment in 2000 ($\chi^2 = 118.752$, $df = 1$, $p = .000$). An additional 29% (n=16) indicated that heroin was currently 'easy' to get. In comparison to data collected in 2001 where over half (53%, n=27) of respondents indicated that heroin was 'difficult' (n=21) or 'very difficult' (n=6) to obtain, just six (11%) stated that heroin was currently 'difficult' to obtain, and only one (2%) respondent said that heroin was (very difficult) to obtain ($\chi^2 = 35.811$, $df = 1$, $p = .000$). Most of the IDU able to comment (63%, n=34) indicated that heroin had become more easy to obtain in the last six months, which would seem to reinforce support for the hypothesis that heroin may be returning to the illicit drug markets in WA. Mobile dealers returned to being the most popular means of scoring with 34% (n=21) of the heroin users who had purchased in the last six months (n=61) scoring from this source. Whilst this figure is similar to the 31% reporting mobile dealers as their usual source in 2001, the then most common source of a dealers' home fell somewhat from 35% to 23% (n=14) in 2002 but this was just failed

to reach significance ($\chi^2 = 3.59, df = 1, p = .058$). Purchase of heroin via a friend remained the third most popular source, with the 20% reporting it in 2002 not significantly different to 21% in 2001.

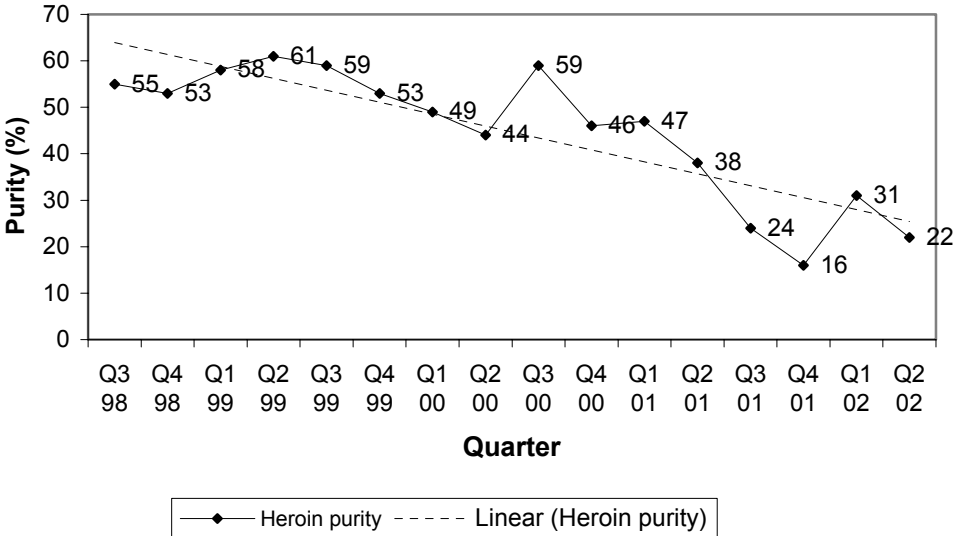
The one key informant who spoke specifically about heroin believed that the drug was currently 'easy' for users to obtain and that this level of availability was in the process of becoming easier still.

4.3 Purity

Slightly over half (57) IDU were able to comment on the current purity of heroin available in Perth. Of these, the most commonly held view by 47% (n=27) was that heroin purity was medium. A further 35% (n=20) believed the current purity to be low. The key informant who provided information on heroin expressed the belief that the available heroin in Perth was of a medium purity. There were 55 IDU who reported on changes to the purity of heroin in the last six months with the majority (60%, n=33) reporting that the purity of available heroin in Perth was increasing, a view point supported by the key informant who commented on heroin use.

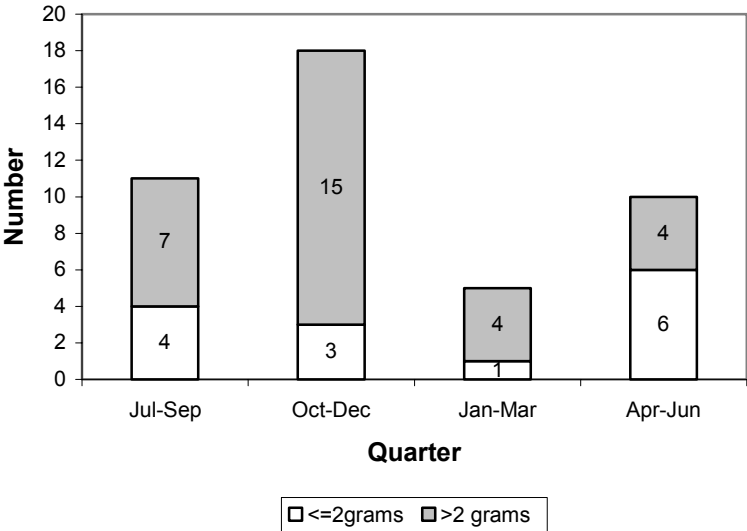
ABCI data would appear to conflict with IDU and KI reports with a very sizeable reduction observed in the average purity of seizures analysed between the 2002 and 2001 studies. Whereas heroin was considered 'low' in the 2001 study (average purity 49%, range 3% to 88%) the view that this purity was increasing in 2002 was at odds with an average purity of 21% (range 1% to 61%). Figure 1 represents the average purity of heroin seizures analysed by quarter for the past four financial years and indicates that there have largely been ongoing reductions 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 2002 (Source: ABCI, ACC)



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 205 in 2000/2001 to just 44 in 2001/2002. 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 2002. 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, 2001/2002 (Source: ABCI, ACC)

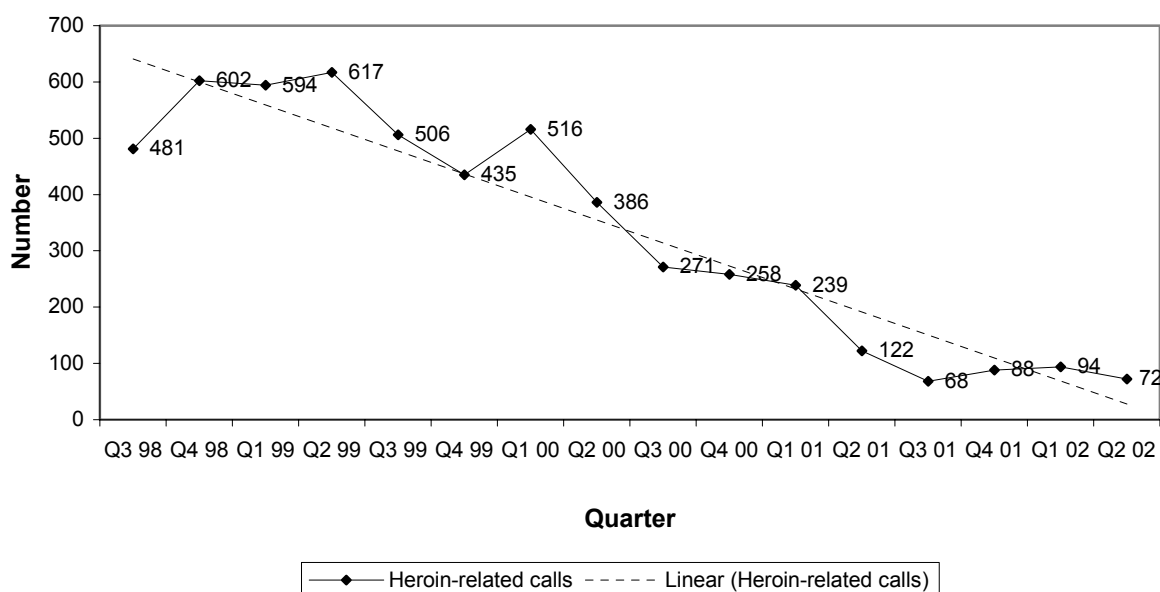


4.4 Use

4.4.1 Prevalence of heroin use

As WA data concerning needle and syringe provision and quarterly admissions to the methadone program were unable to be accessed for 2002 at the time of writing, data on prevalence of heroin use has been informed by data sourced from the ADIS & PDIS lines. This data demonstrates a slight increase in the number of opioid related calls received from the service during the last four quarters which while directly reflecting the level of concern by users and their partners or family members would seem to lend some support to information received from IDU and the key informant that heroin was experiencing increased availability.

Figure 3: Number of heroin-related calls to ADIS & PDIS, by quarter, July 1998 to June 2002 (Source: Alcohol and Drug Information Service)



4.4.2 Current patterns of heroin use

The one key informant who reported mainly having heroin using clients indicated that their level of use was at around two to three injections daily, using from \$50 to \$100 per day. Amongst those IDU who had injected heroin most often in the previous month (n=30), the most common response was ‘more than weekly but not daily’ (n=10, 33%) with ‘weekly or less’ and ‘2 to 3 times a day’ (both n=6, 20%) being the next most common. There were four IDU (13%) who reported injecting ‘once a day’ and a further four who said they injected ‘more than three times a day’. This indicates 47% (n=14) of these IDU who were injecting on at least a daily basis which appears extremely compatible with the 48% observed in 2001.

As in 2001, this figure is highly comparable to the number of IDU (n=48) who indicated that heroin was their drug of choice. Of these, most (60%, n=29) had injected heroin most often in the month prior to interview, 25% had injected methamphetamine most often, two had injected morphine most often, two had most commonly injected a mixture of benzodiazepines and heroin and solitary individuals reported that the drug they had most commonly injected was methadone, benzodiazepines or homebake heroin. 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 in that the most commonly reported frequency (40%, n=19) was more than weekly but not daily, followed by weekly or less (23%, n=11). There were 38% (n=18) who reported injecting on at least a daily basis. This can be further broken down into the 15% (n=7) who injected once a day, the 15% who injected two to three times a day and the 8% (n=4) who reported injecting more frequently than three times a day.

A small though not statistically significant reduction was again seen in the average number of days in which heroin had been used in the previous six months. Whereas heroin was used for a mean of 60.5 in 2001, in 2002 this was seen to drop slightly to 54.1 days (t=-0.854, df=63, p=0.396).

There were 63 IDU who provided information concerning the types of heroin they had used in the past six months. Heroin powder had been used by 92% (n=58) and the use of heroin rock by 84% (n=53). Of the IDU who had used powder, most (53%) reported this was the main form of heroin they had used in the preceding six months. The majority (60%) of IDUs who had used rock heroin nominated by identified it as their main form used in that time. That heroin rock was the predominant form available at this time was also supported by the key informant.

As noted in previous years, the key informant 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. Cannabis and benzodiazepine (especially licit) use tended to be on a daily basis. Use of amphetamine was somewhat less frequent, occurring around two to three times a week. The use of morphine and oxycodone was also mentioned by this key informant, but these drugs were apparently only in use by up to 10% of users seen, typically on a weekly basis. Two-thirds (67%) of the 30 IDU who had used heroin most often in the month prior to interview identified use of methamphetamines to some extent in the six months prior to the 2002 survey, which is extremely similar to the 65% reported in 2001. Of the IDU who nominated heroin as their drug of choice, 96% had used heroin in the six months prior to interview, a slight decline from the 100% in 2001. A high proportion of these IDU (75%) also reported the use of methamphetamine, this also representing a slight decline from the 2001 figure of 79%.

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

Of the 30 IDU who cited heroin as the drug most often injected in the last month, the use of methadone, morphine and/or homebake were all noted as was the case in 2001. There were 13 IDU currently on a methadone program, which can be considered similar to the 15 reported in 2001. 20 (67%) had used morphine down from 70% in 2001, 15 (50%) had used other opioids, up from 22% in 2001 and 14 (47%) had used homebake, a fall from the 78% reported in the previous year.

For IDU who identified heroin as their drug of choice

The 48 IDU who identified heroin as their drug of choice also indicated use of methadone, morphine and homebake and other opiates in the six months prior to interview. Fifteen of these IDU were currently on a methadone program, and five others had been on a methadone program in the six months prior to interview and a further two had used methadone to some extent over this period. Again, two-thirds (67%) had used morphine, but use of homebake had decreased from the 65% seen in 2001 to 42%. and 83% had used benzodiazepines in the six months prior to interview.

Treatment population

There were 35 IDU interviewed who were currently in treatment. The majority of these were on methadone (n=17), two were involved in drug counselling and two were on naltrexone. Most of this treatment sample identified heroin as their drug of choice (83%, n=29), just over half (51%) stated that it was the drug they had injected most often in the month prior to interview and 40% indicated that it was the drug they had most recently injected. The key informant reporting on heroin indicated that around 60% of users seen had been on methadone treatment in the six months prior to interview.

4.5 Heroin use trends

The majority (73%, n=22) of the 30 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. While seven IDU indicated that they felt that there were more people using heroin, there was only one who suggested that this number had dropped. It was commonly (n=14) suggested that the drug & more specifically the heroin using population had become more diverse, particularly with respect to its use by ‘unexpected types of people’, often from more affluent social strata. There were also nine IDU who stated that younger people appeared to be using heroin. A lesser number (40%, n=12) considered that there had been changes in the frequency and/or quantity of drugs used and there were relatively few who made comments specifically about heroin. There were five IDU who commented that the amount of heroin being used was increasing, several of them contextualising this as compensating for the lower purity of currently available heroin. There were three IDU who felt that the amount of heroin being used was less, and two who commented that patterns of using were moving towards more use on a recreational basis. With regards to the types of drugs being used, 83% (n=25) reported on changes that had occurred. There were 10 IDU who reported that heroin use was becoming more commonplace, however, 12 IDU mentioned a move towards amphetamines, frequently explained as a result of the heroin ‘drought’. A move away from heroin was specifically mentioned by eight interviewees. Increased use of ‘party drugs’ (Ecstasy and GHB) was noted by one IDU and two others noted that there appeared to be a move away from hallucinogens. A move away from methadone in favour of buprenorphine treatment was mentioned by one IDU, and one commented that the use of cannabis had become effectively universal. Although the age of users seen by the key informant this year was slightly higher than previously reported, there appeared to be otherwise little change in the demographics of this group. That so few key informants could be located to comment specifically about heroin in 2002 may possibly be a reflection of reduced numbers of heroin users now seeking treatment as a result of the lower rates of availability of the drug in recent years.

4.6 Summary of heroin trends

A summary of heroin-related trends is provided in Table 5.

Table 5: Summary of trends in the price, availability, purity and use of heroin

Price	<ul style="list-style-type: none"> • \$550 a gram, \$300 half weight, \$150 quarter gram • Decreased
Availability	<ul style="list-style-type: none"> • Easy to very easy to obtain • Availability increasing
Purity	<ul style="list-style-type: none"> • 21% seizures [49% in 2001] • IDU and KI report medium purity, increasing
Use	<ul style="list-style-type: none"> • Increase in the number of users • Use by a wider range of people

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. While the 2001 IDRS collected some data on crystal methamphetamine and methamphetamine base, this year represents the first time that a distinction has been made between the different forms of methamphetamine (speed powder, crystal methamphetamine and base methamphetamine) to collect more comprehensive data on the use, purity and availability of each of the forms.

This year, flashcards with colour photographs of the different forms of methamphetamines (Churchill and Topp, 2002) were also used to begin clarifying more precisely the characteristics of the different forms of methamphetamines that are marketed as 'speed', 'base', and 'crystal'. The results of this investigation are discussed below in the section 'flashcard analysis'. A copy of the flashcard, with discussion of the groupings, is located on the NDARC website at <http://ndarc.med.unsw.edu.au/ndarc.nsf/website/IDRS.bulletins>. There has also been a discussion of Australian methamphetamine markets by Topp and Churchill and Topp in the June 2002 issue of the *IDRS Bulletin*, also accessible from the NDARC website <http://ndarc.med.unsw.edu.au/ndarc.nsf/website/IDRS.bulletins>.

In 2002 a fall, albeit not a significant one was observed in the numbers of IDU interviewed who had used any form of methamphetamine in the six months prior to interview. It was revealed that 85% of the 100 IDUs interviewed had used some form of methamphetamine within that timeframe, down from 92% reported in 2001 ($\chi^2=3.453$, $df=1$, $p=0.63$), and in point of fact a return to the level of use seen in 2000. As seen in 2001 the majority (20 vs 19 in 2001) of key informants indicated that the users with which they had had the most contact in the last six months were users of amphetamine.

The most common profession of key informants able to comment on methamphetamines was drug treatment workers (n=8, 40%) followed by four (20%) needle and syringe exchange workers, two (10%) outreach workers, two education officers, two criminal justice workers, a paramedic and a youth worker. Half of these (50%) had been in contact with over 100 drug users in the past six months and a further nine had contact with between 51 and 100.

Key informants were familiar with IDU who were predominantly in their twenties however the age range was considerable, typically from late teens through to late forties. These IDU were reported as residing throughout the metropolitan area, although three also indicated that they also had contact with some IDU from rural areas. Most key informants (90%) stated that at least half and frequently more of the IDU they had contact with were male. The two exceptions to

this were a paramedic who indicated that 60-70% of cases he attended involved females and a drug treatment worker employed by an agency dealing exclusively with female clients.

In 2002, the most common form of methamphetamine use reported by key informants (77%) was of speed powder, narrowly overtaking the crystalline form that was predominant in 2001. Crystal methamphetamine was reported by 74% of IDU, down from 79% in 2001, and methamphetamine in its base / paste form was reported by 56%. However, it should be that changes in the way these data on these drugs were recorded makes comparison with 2001 figures difficult. Use of amphetamine liquid was relatively uncommon and reported by just 14% of those interviewed. Illicit use of prescription amphetamine, predominantly dexamphetamine, was also reported by 39 (46%) of the amphetamine-using IDU, representing a slight increase on the 41% reported in 2001. However, there were no individuals at all who indicated that illicit dexamphetamine to be the primary form of amphetamine used. There were also nine individuals who reported licit use of this medication.

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 speed powder, methamphetamine base / paste and crystalline forms of the drug. Most IDU were able to comment on at least one form of the drug.

Powder

There were 57 IDU able to comment who reported a range from \$140 to \$400 as the price of a gram of powder. The median reported price was \$250 with 40% (n=23) of IDU indicating that this was the price they had paid. Of those responding, 54% (n=31) indicated that they had paid between \$200 and \$250, and a further 30% (n=14) had paid between \$260 and \$300. The most commonly purchased size of deal in the previous six months was a 'point' (0.1gm) purchased by 53 IDU for a median price of \$50. Also common was a 'half-weight' (0.5gm), bought by 43 respondents for a median price of \$150, a gram purchased by 30 respondents for a median price of \$250 and an 'Eight-ball' (approx 3.5 gm or 1/8th of an ounce) bought by 20 IDU for a median price of \$775. On the whole these prices appear to have remained unchanged from 2001, with the exception of the 'eight-ball' quantity whose median price in 2001 was \$650. Of the 66 IDU able to comment on price change, 62% (n=41) believed the price had remained stable.

Base / Paste Methamphetamine

There were 35 IDU who were able to comment on the price of a gram of methamphetamine base / paste. Prices ranged from \$140 to \$400. The median price reported for 'crystal meth' or 'paste' was \$250 per gram. Comparison of these prices with those reported in 2001 is awkward as prior to 2002 no attempt was made to differentiate between paste / wax and crystal methamphetamine. A 'point' of base / paste was the most common size of deal purchased in the last six months, reported by 33 IDU for a median price of \$50. Also common was the purchase of 'half-weights' (0.5gm) and grams, bought by 25 and 26 individuals respectively. The median price of a 'half-weight' was \$150, and for a gram was \$275. The purchase of 'eight-balls' was a much less common practice, reported by 10 IDU for a median price of \$700. There were 46 IDU willing to comment on changes in price of base / paste methamphetamine, with 74% (n=34) stating that the price had remained stable.

Crystal Methamphetamine

There were 52 IDU able to provide information concerning the price of a gram of crystal methamphetamine. Prices ranged widely from \$50 up to \$600. However, the median price was \$400 paid by 42% (n=22) of respondents. A further 21% (n=11) reported paying \$350. With regards to the price of a 'point', there were 59 IDU able to provide information. Prices paid for a point of crystal methamphetamine ranged from \$10 to \$100, with a median price of \$50 which was paid by 78% (n=46) of respondents. A gram was the most common quantity purchased in the six months prior to interview with 50 respondents reporting having bought this quantity for a median price of \$350. Also common was the purchase of a 'half-weight' by 40 respondents with a median price of \$200 and a gram which was bought by 25 IDU for a median price of \$350. As with base / paste methamphetamine, drawing comparisons between these figures and those from 2001 is difficult as previously no attempt was made to differentiate crystal methamphetamine from the base / paste form. With regards to changes in the price of crystal methamphetamine there were 64 IDU able to comment. Of these, 53% (n=34) thought the price had remained stable over the last six months and a further 23% (n=15) believed that the price had increased.

There were 10 key informants were able to comment on prices of a gram of amphetamine. Whilst a considerable range of prices was cited ranging from \$100 to \$500, most estimates fell within the \$250-\$300 range and the median price was \$280. These reports appear to support prices cited by interviewed IDU. With regards to changes in these prices, six said the price had remained stable over the last six months, three thought it had increased, two felt they had decreased and one key informant reported that they tended to fluctuate. The drug prices provided from the ABCI are also not distinguished by form of methamphetamine purchased but report that the price of a street gram (0.7gm) was between \$150-300 but most commonly \$250, suggesting this may be for purchases of powder.

5.2 Availability

Of the 70 IDU able to comment on the availability of speed powder, 79% (n=55) stated that this was 'very easy', and a further 17% (n=12) that it was 'easy'. A proportion of 60% (n=42) indicated that this availability had remained stable. A similar pattern was seen with regards to base / paste methamphetamine with of 49 IDU able to comment, 65% (n=32) said that access was currently 'very easy' and a further 22% (n=11) stating that it was 'easy'. There were 47 respondents able to comment on whether this availability had changed in the past six months, with 64% (n=30) indicating that this availability had remained stable. A wider difference of opinion was observed concerning the availability of crystal methamphetamine with information being provided by 68 IDU. While 38% (n=26) reported that access was 'very easy' and a further 26% (n=18) stated that it was easy, there remained 31% (n=21) who described accessing the drug as 'very difficult'. There were 66 IDU able to comment on changes to this ease of access in the six months preceding the survey. The most common opinion voiced by 36% (n=24) was that access had become 'more difficult', but a further 30% (n=20) felt that this ease of access had remained stable. All of the key informants were of the opinion that current availability of crystal methamphetamine was either 'very easy' (n=15) or 'easy' (n=5). When asked about changes to this availability, 10 key informants said it had remained stable and a further four said it had become easier. There were two who reported that it had become more difficult and one who believed the availability to be fluctuating.

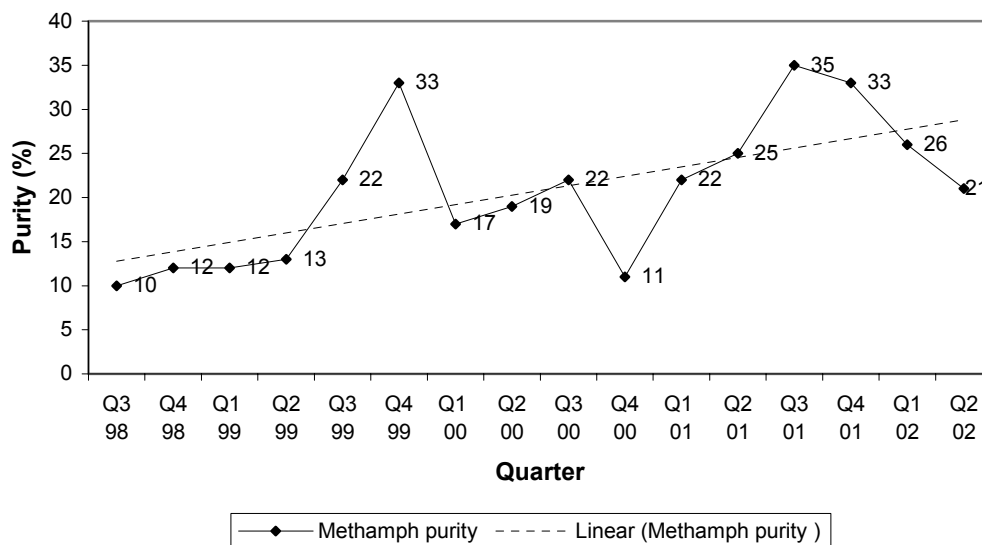
For all forms of methamphetamine the most common sources to score the drug was either from a dealers' home or from a mobile dealer. In the case of speed powder 28% (n=21) purchased from a dealer's home, closely followed by 27% (n=20) who usually obtained their drugs from a mobile dealer. These figures are extremely similar to 2001 when 27% dealt at dealers' homes and 28% used the services of a mobile dealer. The frequency of obtaining speed powder through friends was 23% (n=17, a slight fall on the 27% seen in 2001. In the case of base / paste methamphetamine, 37% (n=20) usually obtained their drugs from a dealer's home and 31% (n=17) purchased their drugs from a mobile dealer. Other sources were relatively uncommon. Of those IDU who used crystal methamphetamine, 40% typically obtained the drug from a dealers' home and a further 36% (n=25) went through a mobile dealer. Again, purchase from other sources was unusual.

As observed in the 2001 report, the use of crystal meth was widespread among the IDU sample but in 2002 had fallen to second place behind speed powder as the form of methamphetamine used by most IDU in the past six months. Of the 100 people surveyed in 2002, 82% had used speed powder to some extent in the six months prior to interview, and 74% had used crystal methamphetamine. However, with regards to the form most commonly used, speed powder and crystal methamphetamine had both been used as the main form of amphetamine by 34 IDU. As mentioned in Section 5.0, the use of paste and illicit use of prescription amphetamine was also common, used by 56% and 39% of the total sample respectively.

5.3 Purity

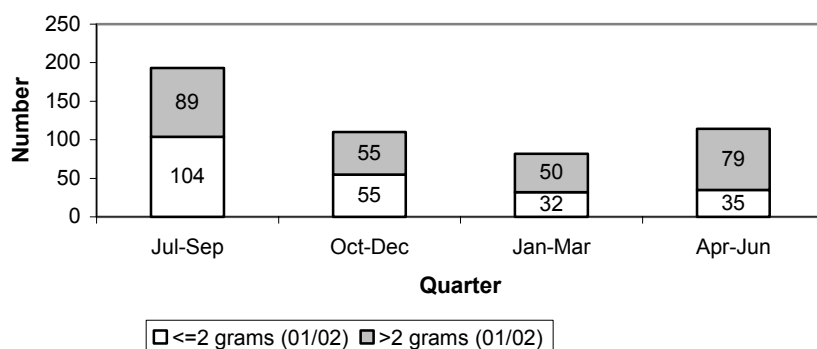
Illicit amphetamine seizures analysed included both amphetamine and methamphetamine. The proportion of seizures relating to methamphetamine decreased from 98% in 2000/2001 to 90% in 2001/2002. The average purity of illicit methamphetamine seizures analysed in WA has generally increased since the 1998/1999 financial year (see Figure 4), and in 2001/2002 this trend has continued with an average purity of 30%. However, this appears to be largely due to the peak reached in the third quarter of 2001 and purity data from more recent quarters was seen to drop sharply.

Figure 4: Purity of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI, ACC)



While in 2000/2001 there were 668 seizures of methamphetamine submitted for analysis, 2001/2002 saw this number reduce back to 499, similar to what it was in the 1999/2000 financial year. The number of seizures submitted for analysis, in each quarter, is presented in Figure 5.

Figure 5: Number of illicit methamphetamine seizures analysed by law enforcement agencies in WA, by weight of seizure, 2001/2002 (Source: ABCI, ACC)



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

As in 2001, IDU perceptions about the purity of the methamphetamine they had used in the six-month period prior to interview varied according to the form of methamphetamine in question. Of the 72 IDU who commented on the purity of methamphetamine powder, 46% (n=33) reported the purity to be low, with a further 29% (n=21) describing it as medium. There were 70 interviewees who commented on purity changes over the last six months. Of these, 37% (n=26) claimed the purity had decreased and 33% (n=23) said that it had remained stable. In the case of base / paste methamphetamine, 48 IDUs provided information, with 46% (n=22) indicating that purity was currently medium, and 28% (n=13) saying that it was high. Of the 45 IDUs who talked about changes to the price of base /paste, the prevailing opinion of 44% (n=20) was that it had remained unchanged over the last six months and a further 24% (n=11) felt that it had fluctuated. With regards to crystal methamphetamine, of the 68 IDUs who could answer, the overwhelming opinion held by 65% was that the current purity was high. There were 69 IDUs who commented on changes to this purity, with 35% (n=24) who reported that it had remained stable and 26% (n=18) who felt that it was increasing.

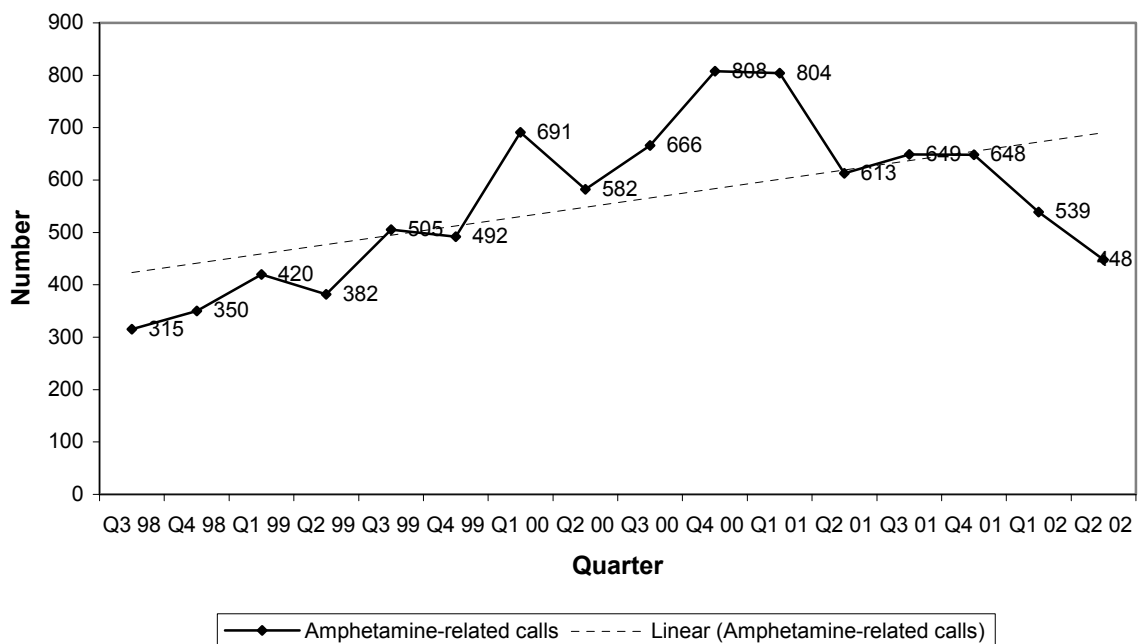
There were eleven key informants who provided information on the current purity of methamphetamine. The most commonly held view was that this purity was high (n=6), but there were also three key informants who stated that it was low and two who indicated that it was subject to fluctuations. Although five key informants stated that this purity had remained stable, seven indicated that it had actually increased and a much smaller number (n=2) said it had decreased.

5.4 Use

5.4.1 Prevalence of amphetamine use

One of the most notable indicators of methamphetamine use in WA is the number of calls made to the ADIS and PDIS lines in relation to this drug. Amphetamine has consistently been the drug most commonly inquired about of the four main drug types studied in the IDRS, although the number of calls relating to it have recently been falling.

Figure 6: Number of amphetamine-related calls to ADIS, by quarter, July 1998 to June 2002 (Source: ADIS)



5.4.2 Current patterns of amphetamine use

Amphetamine of any sort was used on at least one occasion in the period January to June 2002 by an overwhelming majority of 85%, rendering it the second most popular illicit drug among our sample, surpassed only by cannabis. Despite this high prevalence of use, this figure is nevertheless lower than the 92% of the IDU population using amphetamine in 2001 survey.

For those IDU who had used methamphetamine in the preceding six months, the average number of days of use was 67 days (sd=52.1, range=2-180 days), indicating a drop from the reported 2001 average of 77 days. However, this difference was not found to be significant ($t=-1.686$, $df=84$, $p=0.096$). Despite this however, the single most common reported frequency remained daily use by seven (8,2%), again, somewhat less than the 12% using amphetamines daily in 2001. For the 56 IDU who identified methamphetamine as the drug they had injected most often in the month prior to interview, most (59%) reported injecting more often than weekly, but not daily, followed by 27% who claimed to inject weekly or less. There were 14% ($n=8$) who had injected on at least a daily basis or more frequently. Half of these reported injecting once per day and of the remaining individuals, two reported the practise two to three times daily and two were injecting more than three times a day. There were 19 IDU, or just over one third of those who

had used some form of methamphetamine most often in the month prior to interview had used the drug on the day prior to interview.

As in previous years, the use of speed powder and crystal methamphetamine remained the most popular forms to be used by 96% (n=82) and 88% (n=75) respectively. The use of methamphetamine in its paste or wax form was less commonly reported with 68% (n=58) of IDU stating that they had used it, and only 15% (n=13) citing it as the form most used. Less commonly reported still was the use of liquid amphetamine by just 20% (n=17) and only 2% (n=2) indicating that it was the form of amphetamine most commonly used in the last six months. As seen in previous years, a considerable number (46%, n=39) had used illicit prescription amphetamines (primarily dexamphetamine), but there were none who indicated that this was their primary form of amphetamine. There were also nine individuals who had used licit prescription amphetamines (ie: these individuals held a valid medical prescription for these drugs), however, only two IDU indicated that licit prescription amphetamines were their prime type used in the six months prior to the survey.

Virtually all (94%) of IDU surveyed reported the use and injection of methamphetamine at least once in their drug using careers, with 84% reporting injecting some form of methamphetamine between January and June 2002. Various routes of administration were adopted by IDU who had used methamphetamine in the last six months. However, for all types of methamphetamine, injection was by far the most common means of administration, although given that all interviewees were injecting drug users, this is perhaps not surprising.

For methamphetamine in its powder form, of the 77 respondents who had recently used it, 96% (n=74) had injected, 23% (n=18) had snorted, 13% (n=10) had swallowed and 8% (n=6) had smoked it. In the case of base / paste, of the 56 IDU who had used it in the six months prior to the survey, all (100%) had injected it and smoked it, 8.9% (n=5) had swallowed it, and 2% (n=1) had snorted it. With regards to crystal methamphetamine, 100% (n=73) had injected it, 18% (n=13) reported having smoked it, 14% (n=10) had taken the drug orally and 8% (n=6) indicated that they had snorted it. Liquid amphetamine had been injected by all 14 IDU who had taken it and also had been swallowed by one individual.

Administration by injection was the most common method reported by 90% of key informants. However, there were three informants who also mentioned the practice of smoking crystal methamphetamine, one noting that this was a more established practice among Asian users. A level of use from infrequent recreational use up to daily was indicated. Speed powder was the form most often identified by key informants as being used by their IDU contacts (90%), however, crystal methamphetamine was also frequently mentioned (80%). Base or paste use appeared to be much less common and was reported by just 35% of key informants. A small number of key informants also mentioned the use of dexamphetamine tablets. Amphetamine liquid was not specifically enquired about and was not mentioned by any key informants.

Poly-drug use was common among the methamphetamine users with whom key informants were in contact. All key informants reported that large numbers of the primary amphetamine users were also users of cannabis. The use of ecstasy, benzodiazepines and alcohol were also commonly mentioned. Most of the key informants spoke of some heroin use amongst the amphetamine users they had contact with, but generally only by quite small proportions of users.

Key informant observations were supported by reports from IDU who had injected methamphetamine most often in the month prior to interview (n=56). These reports indicated that high proportions of 'primary' methamphetamine users had also used cannabis (100%, up from 94% in 2001), and/or ecstasy (55%, down from 63%) Also very common was the use of

benzodiazepines 73% up from 43%, and heroin (41%, up from 38%). The use of alcohol by this group remained relatively stable at 82% (85% in 2001).

5.5 Amphetamine use trends

Of the 54 primary methamphetamine injectors who responded to this section, the majority (74%, n=40) considered that there had been some change observed in relation to the demographics of methamphetamine users during January to June 2002. These changes tended to relate to an increase in the overall number of users (30%), and it was also commonly remarked that users were getting younger (28%). As in 2001 it was also commonly voiced opinion (33%) that there had been an increase in the diversity of people using the drug, including more 'mainstream' users, professional 'white collar' workers and that drug use was becoming more acceptable by the 'middle' and 'upper' classes. Some 29 (54%) of IDU reported on changes in frequency and quantity of drug use, with the most common viewpoint (37%) being that this had increased. A much smaller number (7%) believe that the frequency and quantity was actually falling, while 6% commented that they had noticed an increase in social and recreational use of amphetamines as opposed to dependent use. There were 36 (66%) IDU who commented on changes in the types of drugs being used with 46% indicating that use of amphetamines was increasing, commonly in the context of use of the drug due to continuing difficulties in obtaining heroin. However, there were 17% of respondents who stated that they were beginning to notice that heroin was again present. The shift towards morphine and other opiates was commented on by seven percent of respondents and nine percent commented on the declining popularity of ecstasy.

5.6 Flashcard Analysis

Photographs were grouped by Churchill and Topp (2002) into three categories which they hypothesised a priori to correspond to the three types of methamphetamines. Category A types were thought to represent speed, category B represented base, and category C represented ice. Those participants who reported using speed, base or ice were shown a flashcard containing photos from the three categories, and asked to identify the picture(s) that resembled what they had used. This data was analysed with a view to determining not only which forms of methamphetamine were currently most abundant, but also to ascertain if users' understandings of the differences between powder, base / paste and crystal corresponded to the classification system propounded by Churchill & Topp. There were a number of pictures in each category, and participants could nominate any number of photos from any category. In the sections that follow, the most commonly identified pictures are shown.

Table 6 shows the reports from users of each of the forms of methamphetamine. Only those persons who reported use in the past 6 months are included in the table. For each form of methamphetamine, those who reported any use within the past 6 months, and those who reported primarily using each form, are presented. Notably, numbers reporting primarily using base are small, so the results should be interpreted with caution.

Table 6: Reports from speed, base and ice users regarding the form of these drugs

	Speed		Base		Ice	
	Any ¹	Most common form used ²	Any ¹	Most common form used ²	Any ¹	Most common form used ²
	N = 77	N=34	N = 56	N=13	N = 74	N=34
% any A	99	100	-	-	-	-
% any B	0	-	98	100	-	-
% any C	1	-	2	-	100	100

1. Note that percentages are not additive as persons could nominate more than one picture.
2. Note that percentages do not add to 100 due to missing data.

Speed Powder

Of the participants who had used speed powder in the last six months, the majority (99%) identified pictures from the A class photographs. Almost half of the participants (48%) reported A1, and around one third identified samples from A2 (35%). The form shown in A4 was identified by 25% and the pinkish A3 by just 6%. There was only one IDU who selected a C class picture.

When asked about which form of methamphetamine they had used the most in the preceding six months, participants were again asked to identify which picture resembled that form they had used. Among participants who had used speed the most in the preceding six months (n=34), all identified only pictures selected from the A class photographs. A1 was the most commonly identified by 32%, followed by A2, identified by 24%.

A Class photographs

A1



A2



A3



A4



Base

Of the participants who had used base in the last six months, virtually all (98%) identified pictures from the B class photographs as resembling the base they had used. Just one IDU selected a photograph from the C class. Within that category, B3 was the photograph most identified (74%), followed by B4 (44%). Virtually all of the other B class pictures were selected by at least some respondents, but noticeably, no one identified the B2 picture.

Among participants who had used base the most in the last six months (N=39), all of them identified pictures from the B class, with B6 being the most identified photograph (38%), followed by B3 (23%). While these percentages are based on small numbers, it is interesting to consider the dominance of the B6 form which was nominated by only 7% of all IDU who had taken base / paste amphetamine in the last six months.

B Class Photographs (most identified)

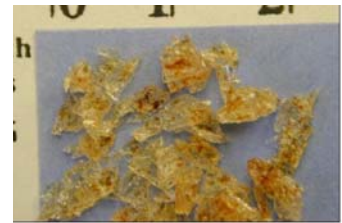
B3



B4



B6



Ice/crystal meth

Of the participants who had used ice in the last six months, all identified pictures from the C class photographs as resembling the ice they had used. Within that category, C2 was the photograph most identified (76%), followed by 30% identifying C1. No IDU identified pictures from the A or B classes.

Among participants who had used ice the most in the last six months (N=34), all identified pictures from the C class photographs, with C2 being the most identified photograph (59%). Again, these figures are based on small numbers, however findings are consistent with those of participants who had used ice in the last six months.

C Class Photographs (most identified)

C1



C2



Summary

The above analysis provides empirical support for the methamphetamine categories ascribed by Churchill and Topp (2002). As they hypothesised, the majority of speed users identifying pictures from the A class photographs, the majority of base / paste users identifying pictures from the B class photographs and all ice users identifying C class photographs.

5.7 Summary of amphetamine trends

A summary of the methamphetamine-related trends identified by IDU, key informants and indicator data is provided in Table 7.

Table 7: Summary of trends in the price, availability, purity and use of amphetamines

Price	<ul style="list-style-type: none">• Grams of powder \$250, base / paste \$250-\$275, gram of crystal \$350• Points \$50
Availability	<ul style="list-style-type: none">• Powder and paste very easy to obtain, crystal less so (both crystal and powder)• Availability of powder and base / paste stable, crystal meth now more difficult to obtain
Purity	<ul style="list-style-type: none">• 30% seizures [23% in 2001] but appears to be falling again• 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• Younger people using users

6.0 COCAINE

As in previous years, number of IDU reporting the use of cocaine in WA in the last six months remained low. In 2002 only 17 respondents indicated use of the drug within that timeframe, representing a fall from the 32 in 2001 who claimed that they had used it ($\chi^2 = 10.340$, $df = 1$, $p = .001$). Furthermore, of those 17, 76% ($n=13$) had used the drug for no more than seven days out of the last six months. With these low figures, it should of course be noted that some caution must be employed in drawing conclusions about the situation surrounding the role of cocaine in the WA illicit drug environment. 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

Only 14 IDU interviewed felt able to comment about the price of a gram of cocaine. Prices quoted ranged from \$230 to \$450, with a median price of \$362.50. Although the spread of prices is more confined, this would appear to be roughly consistent with figure reported in 2001 where the gram price of cocaine provided ranged from \$250 to \$600 per gram, although most placed the cost between \$300 and \$500. The median price paid for a gram at last purchase, as reported by the five IDU who had made such a purchase was \$350 (range=\$300-400). This price represents a \$50 increase from the median price reported in 2001 but given that there were only five purchases reported in both years caution must be exercised in determining whether this represents an actual increase in price. As in 2001, the price of a gram purchase is somewhat higher than the price provided by the WA Police Service data where a price of \$250 was consistently reported from mid the 2001 to mid 2002.

A limited number of purchases of other size deals of cocaine were also reported. One individual reported purchasing a bag of cocaine for \$100, and one other indicated that they had bought a 'half-weight' for an unknown price. Two respondents, believed to be dealers working in partnership together, reported the purchase of an 'eight ball' for \$850 and an ounce of cocaine for \$4500. Only six IDU were able to comment on changes in the price of cocaine in the six months prior to interview three indicating that the price of the drug had increased and two stating that it had remained stable.

Of the 17 IDU who had used cocaine in the six months prior to interview 15 were able to provide information about where they usually scored the cocaine they had used. The most common answer was that they had purchased cocaine from a street dealer (33%, $n=5$), followed by from a friend (27%, $n=4$). Other less common responses included gifts from friends, dealers' homes and one respondent who had purchased cocaine by home delivery.

6.2 Availability

Only 11 respondents discussed the current levels of availability of cocaine in Perth in 2002. Of these, four indicated that the drug was 'very difficult' to obtain and a further four stated that it was 'difficult'. Just two individuals stated that access to cocaine was 'very easy'. This is not significantly different to the situation described in 2001 when 53% ($n=8$) of the respondents able to comment indicated that access was either 'easy or 'very easy' ($\chi^2 = 2.923$, $df = 1$, $p = .087$). There was little consensus of opinion as to whether the availability of cocaine had changed, with of the nine respondents who commented, three stating that it was becoming easier, two that it

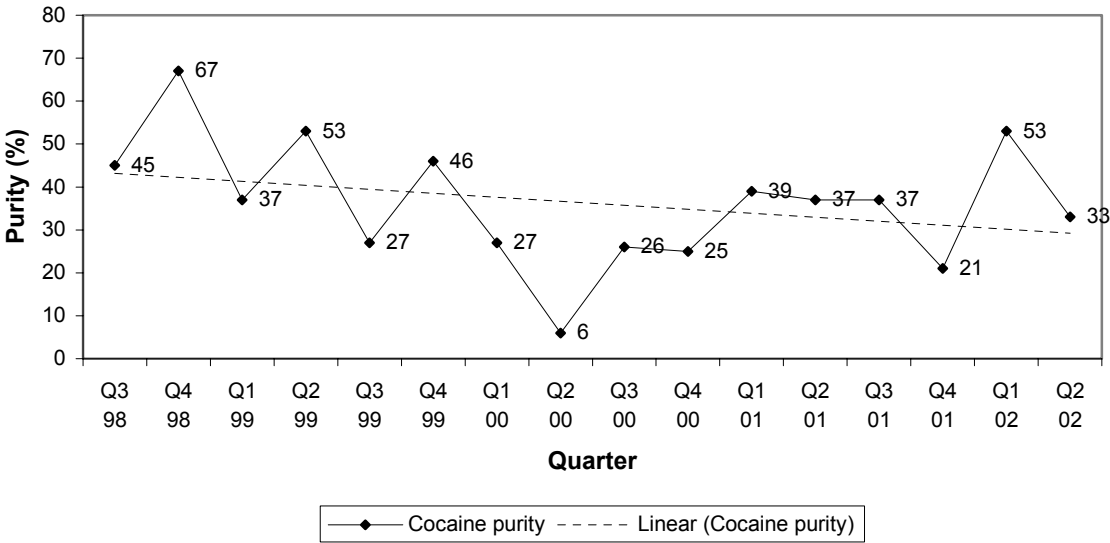
was now 'more difficult', two that it was 'stable' and a further two reporting that the availability was 'fluctuating'.

6.3 Purity

The IDU who were able to comment on the current purity of cocaine (n=8) exhibited a range of opinions as to the current purity of the drug with equal numbers (n=3) reporting that purity was 'high' or 'low', and two IDU indicating that it was currently of 'medium' purity. Similarly, there was no clear consensus as to how the purity of cocaine may have changed in the previous six months. Of those who answered, (n=7), three believed that the purity was fluctuating, two stated that it had remained stable, one that it was increasing, and one individual said the purity had been decreasing.

Average purity of the seizures analysed in the 2001/2002 financial year was 36.5% representing a slight increase on the 33% figure recorded in the previous year. As shown in figure 7, in the first quarter of 2002, analysis of samples showed cocaine to be of the highest purity since 1999. However, given the extremely small number of cocaine samples submitted for analysis (n=10) these figures need to be interpreted with some caution.

Figure 7: Purity of cocaine seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI, ACC)



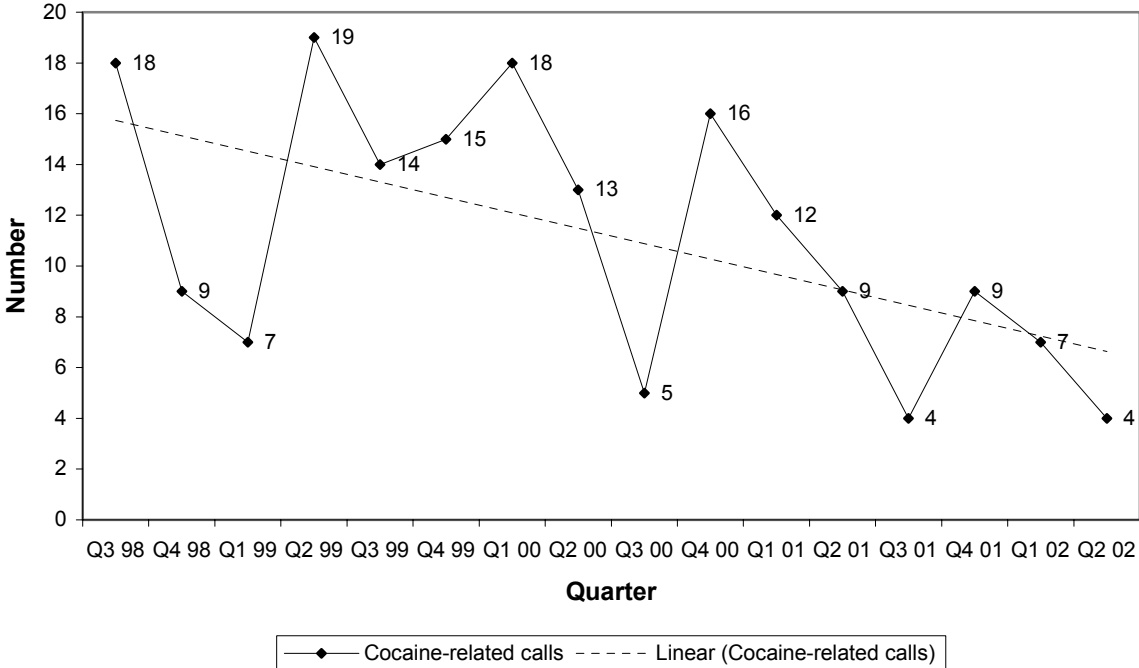
6.4 Use

6.4.1 Prevalence of cocaine use

Whilst data from the *Australian Needle and Syringe Program Survey* was not available for 2002, there were no reports of cocaine as the 'last drug injected' in the IDU survey conducted as part of this year's IDRS study in WA. There would appear to be reason to believe that cocaine use remains relatively scarce in this state.

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 8 the number of these cocaine-related calls made to the service has remained consistently low.

Figure 8: Number of cocaine-related calls to ADIS, by quarter, July 1999 to June 2002 (Source: ADIS)



6.4.2 Current patterns of cocaine use

The proportion of the IDU sample who reported the use of cocaine in the six months prior to interview in 2002 (17%) represented a drop from the 32% reported in 2001. ($\chi^2=0.63$, $df=1$, $p=0.802$). Of those respondents reporting on the type of cocaine they had used, all claimed to have used cocaine powder and all stated that cocaine powder was the cocaine form most commonly used. Two of these individuals also stated that they had used 'crack' cocaine at some point in the last six months, a fall from 10 individuals reporting the use of this form in 2001. As in 2001 there is little supporting evidence from seizure and purity data to support the presence of crack cocaine in WA and as has been previously suggested, it may be that IDU are reporting on the use of high quality crystal methamphetamine rather than the use of crack per se.

Actual use of cocaine remained infrequent, with no reports of use on a daily basis at all and of the 17 IDU who reported it's recent use, 71% (n=12) had used it for five or less days out of the last six months. The median number of days use was 3 days with the maximum number of days reported by one individual being 60. The mean number of days used in 2002 was 9.3, representing a slight but not significant fall from the mean of 13.4 in 2001 (t=-1.115, df=16, p=0.281).

Snorting was the most common means of administration in the six months prior to interview with 14 IDU (82%) indicating that they had used this method. This was an increase from the 69% who had used this method in the 2001 report. Injecting which had been the most popular route of administration in 2001 had fallen to second place with 10 individuals (51%) reporting this method, a fall from the 63% seen in 2001, however this difference was not significant ($\chi^2=0.00$, df=1, p=1.00) Three of the 10 (30%) IDU who had injected cocaine in the last six months reported that this was their sole means of administration, a considerable decline from the situation seen in 2001 when the majority (80%) of those injecting cocaine had used that method exclusively. Just one individual reported having smoked cocaine in the last six months and there were no reports of having consumed the drug orally.

Although no key informants reported on cocaine as the principle drug of the users that they had encountered, there were nine key informants who were aware of at least some cocaine use amongst the IDU they had had contact with. In all bar one of these cases (a paramedic who felt the level of use was 'unknown but more than recreational') the use of cocaine was reported as being recreational, infrequent, or even 'very rare'. There were no incidences in which more than 10% of IDUs seen by these key informants were estimated to have used cocaine and six (67%) reported that the figure was in fact 5% of IDU contacted or less. Only two key informants reported injecting use of cocaine, and in both cases this was not the primary mode of administration which was generally reported as being snorting.

6.5 Cocaine use trends

With only three individuals citing cocaine as their drug of choice, and none reporting it as the drug most often injected, it is difficult to interpret cocaine users' views on emerging trends. Although it does appear that there has been a decline in the use of cocaine in WA in 2002, this view must be carefully considered in the light of the low numbers of IDU able to comment directly about cocaine. As has been suggested in previous reports, it may be the case that injecting drug users may not be an ideal sentinel group for the purposes of reporting on cocaine usage.

6.6 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 8. Caution should be exercised in interpreting these figures due to the limited number of comments made.

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

Price	<ul style="list-style-type: none"> \$350 a gram (based on just 5 purchases)
Availability	<ul style="list-style-type: none"> Generally difficult to obtain
Purity	<ul style="list-style-type: none"> 36.5% purity [33% in 2000]
Use	<ul style="list-style-type: none"> Less than 1/5th of IDU surveyed had used at least once in last six months

7.0 CANNABIS

Of all the IDU interviewed, 86 reported that they had used cannabis during the course of the previous six months, and all (100%) had used the drug at some point in their lives. There were eight key informants reported on 'primary' cannabis users in 2002 compared to three in 2001. However, it is important to note that the use of other drugs was also common among these contacts, that is, they were injecting drug users who used a range of drugs including cannabis. All but one key informant indicated that they were aware of at least some cannabis use amongst their client group, with 63% stating that all the users that they had had recent contact with were cannabis smokers. There were only three key informants who said that only half or less of the users they had seen smoked cannabis. The IDU and KI data collected has been corroborated with indicator data where such data exists.

7.1 Price

There were 54 IDU able to provide prices for an ounce of cannabis over the previous six months. Prices given ranged from \$150 up to \$400 with a median price of \$250 which corresponds exactly to prices reported by IDU interviewed in 2001. Fewer IDU were able to provide information on the price of a gram of cannabis with only 27 answering. Prices paid ranged between \$10 and \$25, with \$25 being the median price.

As in 2001, bags of cannabis (cannabis packaged in plastic cash change bags) remained the most commonly sized quantity purchased, with 57 IDU stating that they had bought that amount. Although the median price for a bag was \$25, the price range varied greatly from \$10 to \$100. This is probably a reflection of bags containing varying quantities of cannabis as is also suggested by the fact that virtually all purchases of bags of cannabis (n=57) were either \$25 (n=26) or \$50 (n=26). The purchase of an ounce in the last six months was also reported by 32 IDU. Hashish appears to be extremely uncommon in Perth with no respondents reporting the purchase of a gram of hash, and only three claiming to have purchased a cap of hash oil, the most common price being \$50.

Most (83%) of the IDU able to comment (n=65) considered that the price of cannabis had remained stable in the six months prior to interview. There were five key informants who mentioned 'sticks', 'foils' or bags for \$25. The existence of \$50 bags was also mentioned by two key informants. A key informant employed as a police officer indicated that in his experience the price actually ranged from \$25 - \$30. Only one key informant discussed prices for an ounce of cannabis which ranged from \$250 - \$300. All six key informants able to express an opinion agreed that the price of cannabis had remained stable over the six months preceding the interview.

7.2 Availability

Of the 71 IDU able to comment on the availability of cannabis, the vast majority (85%, n=60) indicated that cannabis remained 'very easy' to obtain. This figure is very similar to the 79% of IDU who held this point of view in 2001. There were 70 IDU who provided information about changes to the availability of cannabis, the prevailing view held by 80% (n=56) being that the level of access to cannabis had remained unchanged. All eight key informants who spoke specifically about cannabis agreed that the drug was currently 'very easy' to obtain. Asked if this

availability had changed recently, seven of these thought it had remained stable and one believed that access had become easier.

Asked to identify the main place they had scored cannabis from in the last six months, 70 IDU provided this information. The most common source was from a dealer's home (43%, n=30) followed by obtaining it from friends (36%, n=25). There were a further 12 individuals (17%) who said that their usual source was as a gift from friends. Other responses were relatively uncommon.

There were 70 IDU who stated that they knew from where their cannabis had originated. The most commonly reported source by 67% (n=47) was that their cannabis had come from a small time 'backyard' user / grower. A considerably smaller number (27%, n=19) believed that their cannabis had come from a large scale cultivator / supplier such as a crime syndicate or bikie gangs. When asked how certain they were about the source of their cannabis, 66% (n=46) said that they were 'very sure' and a further 26% (n=18) said that they were 'moderately sure'.

7.3 Potency

The potency of cannabis was once again considered to be 'high' by the majority (53%, n=37) of the IDU able to comment. This is however a smaller number than those reporting it to be 'very high' in 2001 (78%, n= 63). A further 34% (n=24) in 2002 stated that the current potency of cannabis was 'medium'. Just over half (56%, n=38) of IDU responding said that the potency of cannabis had remained 'stable' over the previous six months. A further 21% (n=14) indicated that their recent experience involved cannabis of fluctuating potency. Only three key informants provided information about the current potency of cannabis with all of them agreeing that it was high. Opinion as to changes in this potency were more varied however, with three key informants stating that it had remained stable, two stating that it had increased and one who expressed the belief that it had decreased.

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.

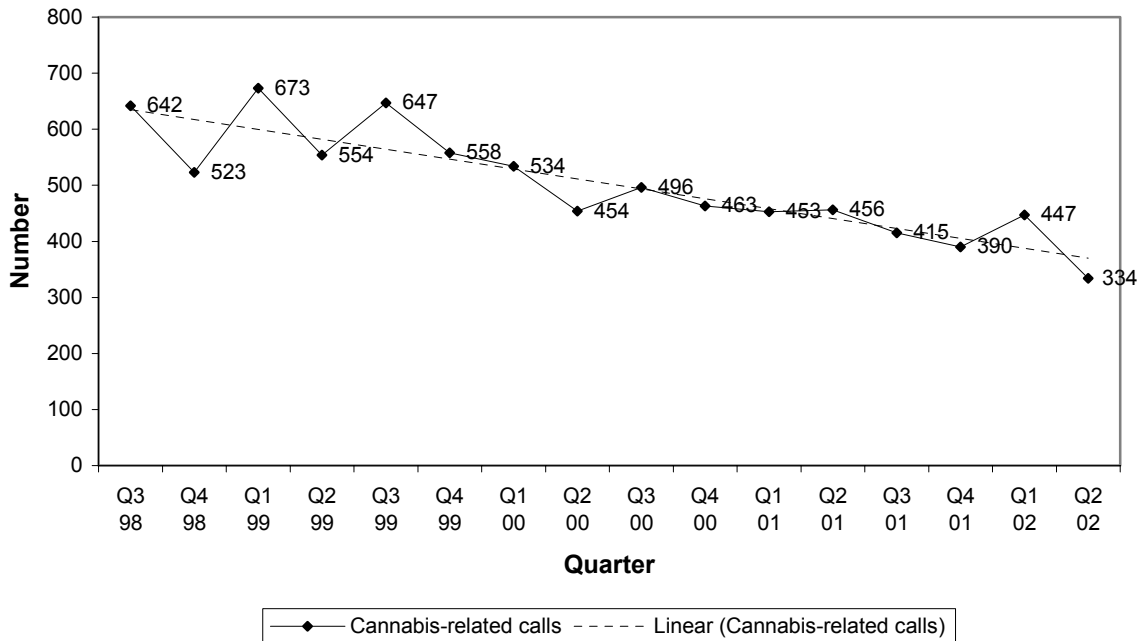
7.4 Use

7.4.1 Prevalence of cannabis use

According to the most recent *National Household Survey* (AIHW, 2001), WA respondents continued to exhibit higher rates of cannabis use than any other jurisdiction with the exception of the Northern Territory, with 17.5% of the population having used the drug in the past twelve months. Cannabis remained the most commonly used illicit drug.

Despite this, the decline in recent years in the number of calls made to the ADIS line in relation to cannabis, has continued, the 334 calls during the June quarter of 2002 representing the lowest call rate since September 1990.

Figure 9: Number of cannabis-related calls to ADIS, by quarter, July 1998 to June 2002(Source: ADIS)



7.4.2 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 with 86% reporting it's use in the last six months, a figure exceeded only slightly by the 87% reporting the use of tobacco. Interestingly, this high figure is in fact a decline from the previous year in which 91% of the sample reported having recently used the drug. Some fall was also observed in the median days of cannabis use with a median of 100 days reported in 2002 down from the 111 days in 2001. There appeared to be considerably less IDU using cannabis on a daily basis with just 27 individuals reporting this as opposed to the 44 daily users of cannabis interviewed in 2001.

Equal numbers of IDU who had used cannabis reported the use of hydroponic and naturally grown ('bush') cannabis, both with 95% (n=82) of individuals having used these forms. This indicates not only a small decline in the percentage using hydroponic cannabis in 2001 (97%), but also a slight increase in the number using naturally grown cannabis, up from 88% in 2001. However, hydroponic cannabis was a clear leader in terms of the type of cannabis most commonly used with 76% of respondents reporting this, a figure very close to the 78% reported in the 2001 survey. Slightly under one quarter (24.4%) had used hash in the past six months as opposed to the 36.3% described in 2001. There were a further 18 (21%) individuals who reported the use of hash oil, up from 17.6% in 2001. However, there were no individuals who reported that either hash or hash oil was the most common form of cannabis they had recently used.

As stated, nearly all of the key informants reporting on other primary drug users mentioned cannabis use among their IDU contacts and their comments were combined with those made by the eight key informants reporting on primary cannabis users. Of the 18 key informants who provided information on frequencies of use amongst users they had had contact with, 17 made reference to daily use. All indicated that the lower end of the range was at least a couple of times

weekly. All twelve key informants who provided information about the type of cannabis being used indicated that this was predominantly hydroponically grown.

7.5 Cannabis use trends

The key informants who reported on primary cannabis users (n=8) indicated that there had been no major observable change in the profile of the cannabis users with who they were in contact. One key informant did suggest that it was possible that more people were beginning to use cannabis, but went on to note that recent coverage of reforms to cannabis law in the media may have given some individuals the mistaken impression that cannabis was no longer subject to prohibition. Use of drugs other than cannabis was reported by all eight key informants. The use of methamphetamines, ecstasy, benzodiazepines, 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 Key Informants, 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.

7.6 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 9.

Table 9: Summary of trends in the price, availability, potency and use of cannabis

Price	<ul style="list-style-type: none"> • Gram price \$25 - 50 bags • Ounce price Median price \$250 • Stable
Availability	<ul style="list-style-type: none"> • Very easy to obtain • Stable • Hashish remains very uncommon
Potency	<ul style="list-style-type: none"> • High - very high (based on subjective evaluation) • Stable
Use	<ul style="list-style-type: none"> • Use widespread • Hydroponic cannabis used most often

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 'party drug' study component of the IDRS focuses on these aspects of ecstasy use but is currently only conducted in NSW, Qld and SA, however there are plans to expand it to include further jurisdictions in 2003. 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.

8.1.2 Price

Information provided by the WAPS, relating to the price of covert ecstasy purchases between July 2001 and June 2002 found that the price of a tablet of Ecstasy varied between \$35 and \$65, suggesting some minor price shifts from those observed in the previous year of from \$25 to \$70 per tablet. There were no figures provided for 2002 regarding the cost of bulk purchases of Ecstasy.

8.1.3 Purity

Based upon the 113 seizures of MDMA (Ecstasy) analysed by the ABCI (see Figure 10) over the 2001 / 2002 financial year, it would appear that the purity of ecstasy has recently experienced a sharp decline from which it is now recovering. The range in purity observed in the seizures analysed in the 2001/2002 financial year, appeared to be less widespread than previously observed, ranging from 11% to 50% as opposed to 5% to 63% the previous year.

Figure 10: Purity of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI, ACC)

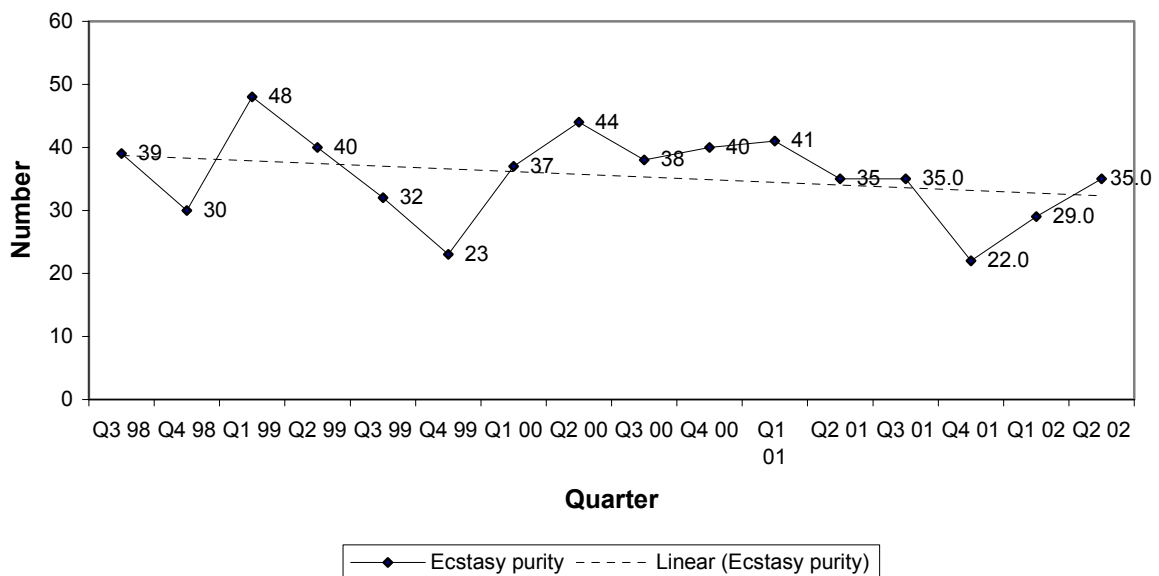
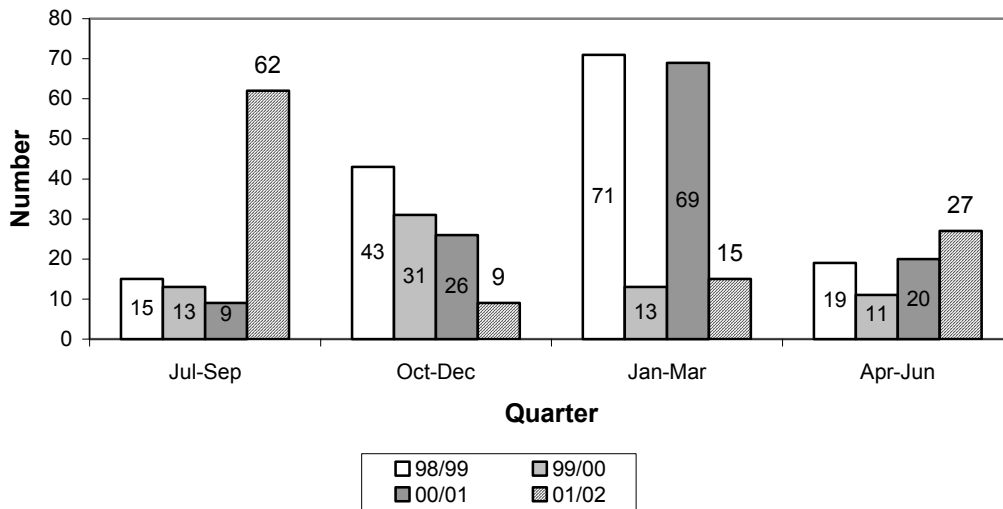


Figure 11: Number of phenethylamine (ecstasy) seizures analysed by law enforcement agencies in WA, by quarter, July 1998 to June 2002 (Source: ABCI)



8.1.4 Use

In the 2002 survey, once again, relatively few of the IDUs interviewed 43 said that they had used ecstasy in the last six months. This represents a slight decline from the 50 who had recently used the drug in 2001. In many respects this may be an unsurprising result as despite 85 IDUs stating a lifetime history of having used the drug, ecstasy was rarely the prime drug of choice amongst the IDU population, with only two individual respondents nominating it as such in 2002 (A fall from the seven who nominated it in 2001). Oral routes of administration remained the most prevalent, with 39 having swallowed ecstasy in the last six months. This is despite the interviewees' status as injecting drug users, a route used for the administration of ecstasy by only 23 IDUs in the six months preceding the survey. Only one person identified ecstasy as the substance they had most recently injected. As stated in previous Drug Trends reports (Hargreaves & Lenton, 2002), the information about ecstasy use presented here needs to be interpreted with caution as this information may not be representative of the broad population of ecstasy users, many of whom do not regularly inject (Lenton et al., 1997).

In 2002 there were two IDUs who nominated ecstasy as being the first drug they had ever injected with only one such report in 2001. There was no significant difference in the proportion of the 2002 IDU sample who indicated that they had ever used ecstasy (85%) or had done so within the six months prior to interview to the number who did so in 2001 (84%). ($\chi^2 = .083$, $df = 1$, $p = .773$). There was also no significant difference in recent use between 2002 (43%) and 2001 (50%) respectively, ($\chi^2 = 1.960$, $df = 1$, $p = .162$). There was no significant difference between the average number of days ecstasy was used in the last six months in 2002 (17.4) compared to the 10.7 days reported in 2001 ($t = 1.216$, $df = 41$, $p = .231$).

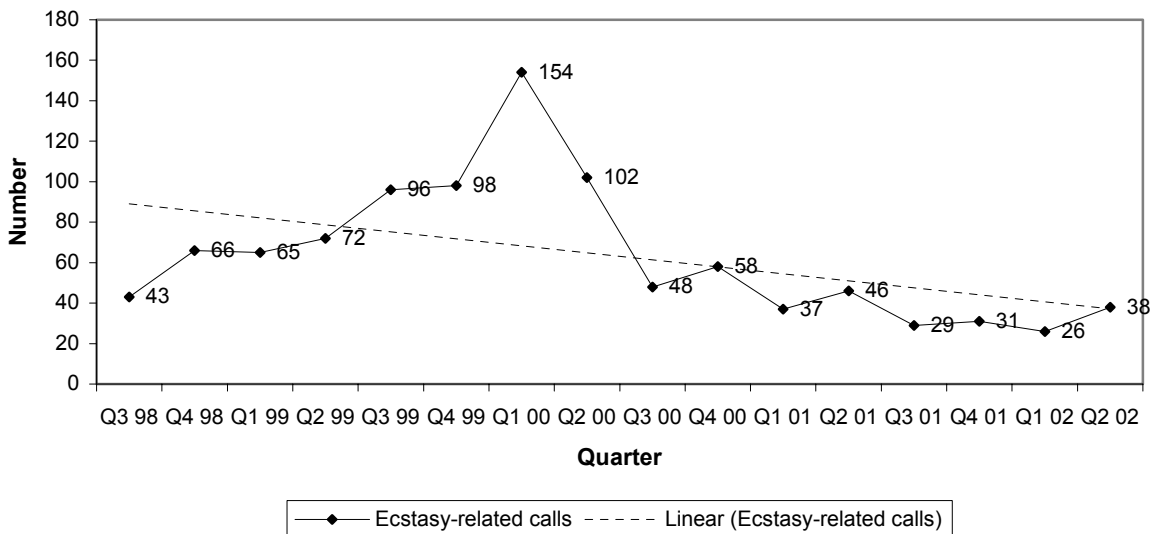
As stated, oral administration was again the most commonly utilised means of administration with 91% of those who had used ecstasy in the past six months having used the route ($n=39$ in 2001) not significantly different to the 86% in 2001 ($n=43$) ($\chi^2 = .788$, $df = 1$, $p = .375$). A very similar proportion as that described in previous years was found to have used ecstasy intravenously in 2002 (53%, $n=23$) compared to the 2001 (54%, $n=27$) and 2000 (53%, $n=24$).

figures. An increase in snorting was observed with 30% (n=13) up from 20% in 2001. Smoking of ecstasy remained uncommon, reported by just 2% (n=1), a figure that has remained stable from 2001 ($\chi^2 = 10.256$, $df = 1$, $p = .001$).

Virtually all key informants (97%, n=29) 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 100%, however, only five key informants cited rates of over 50% of their drug using contacts. Most key informants (83%, n=25) indicated that use was occasional or recreational in nature. Oral administration was the route of administration most often reported, although one key informant did note that a small number were injecting or 'shafting' the drug.

Only two key informants made specific comments were made in relation to trends in ecstasy use, and to some extent these comments appear contradictory. The first noted that amongst their cannabis using clients the use of ecstasy appeared to be rising, but nevertheless remained low. The second reported that ecstasy in Perth had obtained an increasingly worse reputation for quality, beginning around twelve months earlier. The number of ecstasy related calls received by the ADIS line remained low, and at this stage appears to show no signs of returning to the levels in late 1999 and early 2000.

Figure 12: Number of ecstasy-related calls to ADIS, by quarter, July 1998 to June 2002
(Source: ADIS)



8.2 Other opiates

8.2.1 Methadone

There were 46 IDU who had used methadone at some point, with 63% of these (n=29) indicating that they had done so in the six months prior to interview. These figures show virtually no change from 2001 (64%, n=29). The use of methadone occurred on a mean of 104.8 days (sd=77.5, range=1-180 days), not significantly different from the mean of 110 days reported in 2001. (sd=73.5, range=1-180 days; $t = -.354$, $df = 27$, $p = .726$) Daily use of methadone in the six months prior to interview was reported by 42% (n=28) of those who had used the drug in that period, an increase on the 31% (n=9) in 2001 but this difference was not significant ($\chi^2 = 1.461$, $df = 1$, $p = .227$),

Use of licit (n=24) and illicit (n=16) methadone as well as licit (n=4) and illicit (n=11) Physeptone[®] was nominated by IDU. As in 2001, roughly one fifth (22%) of all IDUs interviewed had been receiving methadone treatment during the course of the last six months. Accordingly, it is unsurprising to find that once again licit methadone was most commonly identified as the primary form of methadone used. There was no significant difference in the illicit use of methadone between 2002 and 2001 with nine describing illicit methadone (vs six in 2001) as their primary form of the drug, and three noting the illicit use of physeptone tablets (vs two in 2001) ($\chi^2 = 2.174$, $df = 1$, $p = .140$).

Almost all (93%) of the 29 IDU who had used methadone in the previous six months reported oral administration of the drug, a figure that has remained unchanged from 2001. There was no significant difference in the proportion who had injected methadone in 2002 (45%, n=13) compared to 2001 (52%, n=15) ($\chi^2 = 0.598$, $df = 1$, $p = .439$).

A considerable decrease in methadone use among IDU who nominated heroin as their drug of choice. Of the 47 IDU who nominated heroin as their drug of choice, 22 (47%) of these had used methadone in the six months prior to interview. This is significantly less than the 67.6% (n=23) reported in 2001 ($\chi^2 = 9.276$, $df = 1$, $p = .002$) and may possibly be associated with the more widespread use of buprenorphine.

8.2.2 Morphine

Almost three quarters (74%) of the IDU interviewed stated that they had ever used morphine as opposed to the 62% of respondents indicated that they had used morphine in 2001. ($\chi^2=0.171$, $df=1$, $p=0.679$) It was also noted that over half (52%) of IDU had used morphine in the six months preceding the interview, representing an increase on the 31% who had done so prior to the 2001 survey. ($\chi^2=0.75$, $df=1$, $p=0.784$).

Morphine represented the first drug ever injected for four IDU, the last drug injected prior to interview for 12 and the drug used most often in the month prior to interview for nine IDU. There were eight IDU who cited morphine as being their drug of choice. Virtually all (70 out of 74 individuals) who had ever used morphine indicated that they had injected the drug. Of those IDU who had used morphine in the last six months, the vast majority of use was illicit, with only eight individuals claiming to have most commonly used licit morphine. Of those who had used

morphine in the last six months, 49 had injected, 20 had swallowed and one reported having snorted the drug. The number of days of use in the last six months was an average of 33 days reported (range = 1 to 180, sd= 51.2) MS Contin[®] was overwhelmingly the most common form of morphine used with 41 individuals reporting it as the main brand used. Other brands noted by small numbers of IDU included Anamorph[®], Kapanol[®] and Ordine[®]. Among the 19 key informants who noted some degree of morphine use among their drug using contacts MS Contin[®] remained the most commonly mentioned brand, reported by 13 key informants, followed by Kapanol[®] which was reported by eight.

8.2.3 Other opiates

Other opiates represented the first drug injected for just one IDU and the drug of choice for one other. Similarly only one IDU mentioned them in the context of drug most injected. The lifetime and recent use of 'other opiates' (which included codeine, opium, etc) was, as in previous years less prevalent than the use of morphine with almost two thirds of respondents (63%) indicating that they had ever used such drugs, a considerable increase on the 37% seen in 2001 although this was not significant. ($\chi^2=0.88$, df=1, p=0.767) and 49%, up from 10% having used them recently. Higher frequencies of use were noted than in previous years with a mean of 26 days. (range = 1 to 180, sd=42.3) Swallowing (71%) remained was the main method by which recent users of other opiates had administered the drug, and 40% had injected. One IDU mentioned smoking other opiates during the six months and identified opium as their main 'other opiate' used. A wide variety of other opiates used were nominated with prescription codeine being mentioned by 17, and OTC codeine preparations by seven. There were twelve IDU who mentioned Oxycodone (including Proladone[®] and Endone[®]) as their main type of other opiates, and six individuals who nominated Dilaudid[®]. Other opiates used by small numbers of individual IDU included doloxene, opium, pethidine, Tramadol[®] and homebake heroin.

It remained uncommon for key informants to make reference to the use of other opioids, although three discussed Oxycodone and one mentioned Tramadol[®].

8.2.4 Homebake

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 slight though not statistically significant decrease was observed in 2002 with 30 IDU indicating use of homebake heroin in the last six months, down from 34 in 2001 ($\chi^2=0.136$, df=1, p=0.712). All of these 30 IDU reported having injected it bar one who claimed to have swallowed it. Conversely however, there was an increase in the lifetime use of homebake rising from 52% to 58%, however, this also was found not to be significant ($\chi^2=1.642$, df=1, p=0.200)

Whilst in 2001, two-thirds (65%, n=22) of the 34 IDU who identified heroin as their drug of choice in 2001 had also used homebake, in 2002 this proportion was seen to fall to 42% (n=20). Of the 64 IDU who had used heroin in the last six months, 45%(n=29) had also used homebake unlike 2001 where over half (56%, n=31) of those who had used heroin (n=55) had also used homebake. However, this difference was not found to be significant ($\chi^2=0.917$, df=1, p=0.338).

The average number of days on which homebake was used in the six months prior to interview had remained relatively stable from that reported in 2001, although a slight though not significant fall from 22.1 days to 19 (range=1 to 150, sd=29.5) days was noted ($t=-0.557$, $df=27$, $p=0.582$).

There were eight key informants who mentioned the use of homebake. Predominantly these key informants were involved in NSP or as outreach workers. It may be worth considering that this may also be a reflection of homebake not being routinely asked about in the key informant interview.

This data would seem to suggest that while the use of homebake remains relatively common amongst WA primary heroin users, its use may be beginning to decline slightly as heroin slowly re-emerges on the market and other users appear to have moved on towards pharmaceutical preparations.

8.2.5 Buprenorphine

Prior to 2002, buprenorphine (Subutex[®]) had not been specifically reported on thereby it is not feasible to draw meaningful comparisons with previous years. In the 2002 survey, 33% of IDU reported having ever used buprenorphine, and 28% having used within the last six months. There were only six key informants who made specific reference to buprenorphine use, although this may be a reflection of buprenorphine not having been specifically included in the 2002 key informant survey. Few other details were provided by these key informants although one, an outreach worker, did mention that injecting use of the drug had resulted in a number of abscesses amongst his client group.

With regards to recent use amongst the IDUs interviewed, oral consumption was most common, reported by 79% ($n=22$) of the sample. However injecting of buprenorphine was also common and reported by 61% ($n=17$). The average number of days was 49 (range=1 to 150, $sd=56.5$). Although there were reports of roughly equal numbers reporting the use of licit and illicit buprenorphine, with regards to the form most used, 15 IDU stated that this use was primarily licit, and 12 that their use had mainly been illicit. It was noted that considerable amounts of using buprenorphine outside of treatment appears to be occurring, as in addition to this licit use, of the 15 IDU who reported having received buprenorphine treatment in the last six months, 40% ($n=6$) had injected the drug. Also, there were 20% ($n=3$) who in addition to their valid prescription for the drug appeared to have obtained more buprenorphine from an illicit source. This use of buprenorphine outside of a prescribing environment may be useful to consider in to context of amending policy to include supervised dosing of patients receiving buprenorphine treatment.

8.3 Benzodiazepines

There were considerable increases noticed in the proportion of IDU who reported the use of benzodiazepines. Lifetime history of use increased from 64% in 2001 to 88% in 2002. ($\chi^2=0.190$, $df=1$, $p=0.663$) Similarly, use of these drugs in the six months prior to interview increased from 51% in 2001 to 77% in 2002. ($\chi^2=1.684$, $df=1$, $p=0.194$). However, neither of these differences were found to be significant.

There was also an increase in the number of IDU who reported daily use of benzodiazepines for the six months prior to study, from four to 12 although this was not significant ($\chi^2=0.568$, $df=1$, $p=0.451$). Overall frequency of use was seen to increase with use occurring on a mean of 65 days (range=1 to 180, $sd=64.5$). Once again, oral administration was the most common method of

use reported with virtually all (97%, n=75)) indicating that they had used this method at some point in the previous six months. Injecting of benzodiazepines had increased somewhat from 29% of IDU in the last six months who indicated this means of administration in 2001 to 39% (n=30) in 2002. This increase however was not found to be significant ($\chi^2=0.570$, df=1, p=0.450).

Although figure for licit and illicit use of benzodiazepines during the last six months were roughly comparable (59 and 52 individuals respectively), vastly more IDU (49 vs 27 individuals) indicated that licit sources had been the most common.

IDU were asked to specify the main form of benzodiazepines they had used in the six months before interview. Once again, diazepam was the benzodiazepine most commonly reported with 45% of the total sample (n=33) having used it. As in 2001, various forms of temazepam were reported as the second most common by 12 IDU, and nitrazepam and oxazepam were each reported by 10 IDU.

There were only three key informants who did not mention the use of benzodiazepines amongst their drug using contacts. In the vast majority of cases this use was via an oral means of administration, with only two referring to IDU as the main route of administration. Key informants were asked to specify whether this use was licit or illicit in nature and 17 indicated they were aware of both amongst their contacts. Only one key informant made reference to illicit use exclusively. As in 2001, a number of key informants indicated that it was often difficult to distinguish between licit and illicit benzodiazepine use. Diazepam and temazepam were most frequently mentioned, each by 17 key respondents. This was followed by 10 mentions of oxazepam, five of flunitrazepam and three of nitrazepam.

8.4 Anti-depressants

In 2002, a slight decline in the prevalence of lifetime antidepressant use was seen amongst the IDU surveyed with 46% (down from 52% in 2001) having ever used them. However, more IDU (33%, up from 28% in 2001) reported having consumed these drugs within the last six months. A significant increase in the average number of days of use was also observed with a mean of 116 days up from 83.5 in 2001 (t=2.535, df=32, p=0.016). An increase was also noticed in the proportion of IDU reporting daily use (45%, n=15, vs 32% in 2001).

As in the last two studies, the type of anti-depressants most commonly used were serotonin specific reuptake inhibitors (SSRIs). Most (74%, n=26) of the IDU able to nominate the brand of the anti-depressant they used reported anti-depressants within this type. The use of tricyclic antidepressants was reported by four IDU and three others using a reversible inhibitor of monoamine (RIMA). One individual reported the use of a newer class of antidepressant, a mirtazapine based tetracyclic preparation.

Use of anti-depressants among those who had used these drugs in the six months prior to interview was predominantly licit in nature with only two individuals reporting the illicit use of these drugs. All 'licit users' were able to specify the brand of anti-depressant they had used. All four IDU who reported use of tricyclic anti-depressants identified themselves as licit users of the drug. However, given as all these four cited heroin or morphine as their drug of choice this use of tricyclic antidepressants again highlights concerns raised in previous reports (Hargreaves, Lenton 2002) concerning their contributing role in opiate overdose as described in Darke & Ross, 1999. As all four of these respondents reported heroin use in the six months prior to interview, two on 15 days or less, one on 35 days and one on 55 days, it would seem likely that at least to some extent, this problem remains. It is however reassuring that although 83% (n=24) of

key informants indicated some use of a wide range of antidepressant medications amongst the illicit drug users that they had had contact with, only one, a paramedic with no opioid use amongst his clients, made specific reference to tricyclic antidepressants.

8.5 Summary of other drug trends

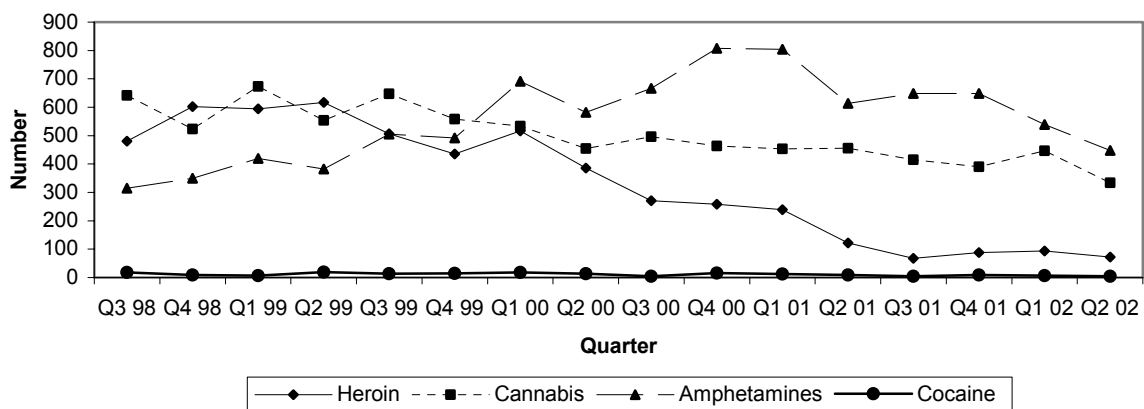
The most notable observation with regards to the use of other drugs in this year's IDRS, is the apparent increased popularity of pharmaceutical preparations amongst injecting drug users. This is particularly true of opioid based medications, most notably morphine, but also oxycodone and prescription drugs with codeine as the active ingredient. Also widespread is the illicit use of benzodiazepines and diverted buprenorphine. The practise of injecting these medications was also not uncommon. It is likely that these increased levels of use have occurred as a result of IDU seeking substitute drugs in response to the relative scarcity of heroin.

9.0 DRUG-RELATED ISSUES

9.1 Treatment

In an ongoing trend from the previous year, the number of calls received by the ADIS line continued to fall. In 2001 / 2002 financial year, the service received 4216 calls related to the four main illicit drug classes, down from the figure of 5691 calls received in 2000 / 2001. Calls relating to amphetamine continued to be the most common, with 2284 calls accounting for more than half (54%) of all those received by the service, a figure highly consistent with the 51% noted the previous year. As indicated in Figure 13 Calls relating to heroin continued to be uncommon with their frequency remaining fairly stable throughout the year and in total for just 8% of all calls. The rate of cannabis calls was also relatively stable, making up 38% of all calls, up from 33% in 2000/2001. Calls relating to cocaine as in all previous years were extremely rare, and accounted for less than one percent of all calls.

Figure 13: Number of calls to ADIS in relation to each of the four drug types studied, by quarter, July 1998 to June 2002 (Source: ADIS)



Available data for 2002 pertaining to the number of patients enrolled in pharmacotherapy programs was presented as a combined statistic of methadone and buprenorphine, making comparisons with earlier years difficult. As at June 2002 there were 3602 patients in WA enrolled in these programs. Of these, 1016 were registered with a public prescriber, 2429 with a private prescriber and 157 were registered patients within correctional facilities. Amongst those patients who were not incarcerated, 2912 were dosing through pharmacies and 533 received their medication at public clinics.

9.2 Overdose

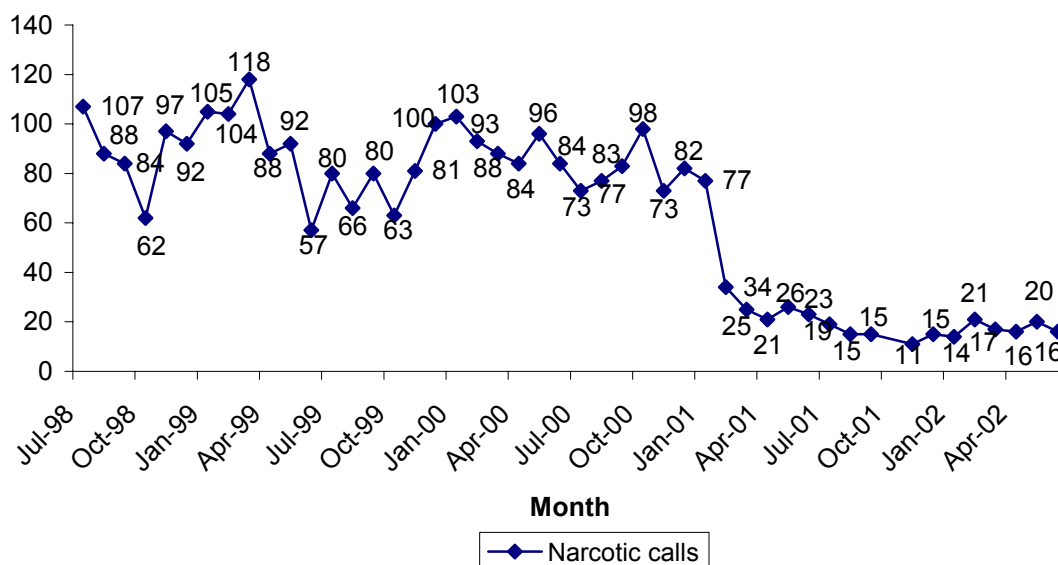
IDU who reported lifetime use of heroin (n=82) were asked if they had ever overdosed on the drug, with 44% (n=36) indicating that they had experienced at least one overdose. A median of three overdoses was reported (range=1-100 times) with the most recent overdose experience, on average, 53 months prior to interview (sd=70.3, range=1-324 months). The most recent heroin overdose experience recorded in the 2002 study was one month prior to interview unlike in 2001 where of those who had overdosed their most recent overdose was three months prior to interview.

Morphine-related overdose was much less common with just six (8%) of the 74 IDU who had ever used the drug indicating that they had overdosed on it. The median number of times for a morphine associated overdose was two, and no individuals had overdosed more than three times. The most recent morphine OD had occurred on average 33 months prior to the interview (range= 1-84).

Just slightly over one third (42%, n=15) 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 over two years (30 months) prior to participation in the study (mean=37.9 months, sd=36.4, range=2-120 months).

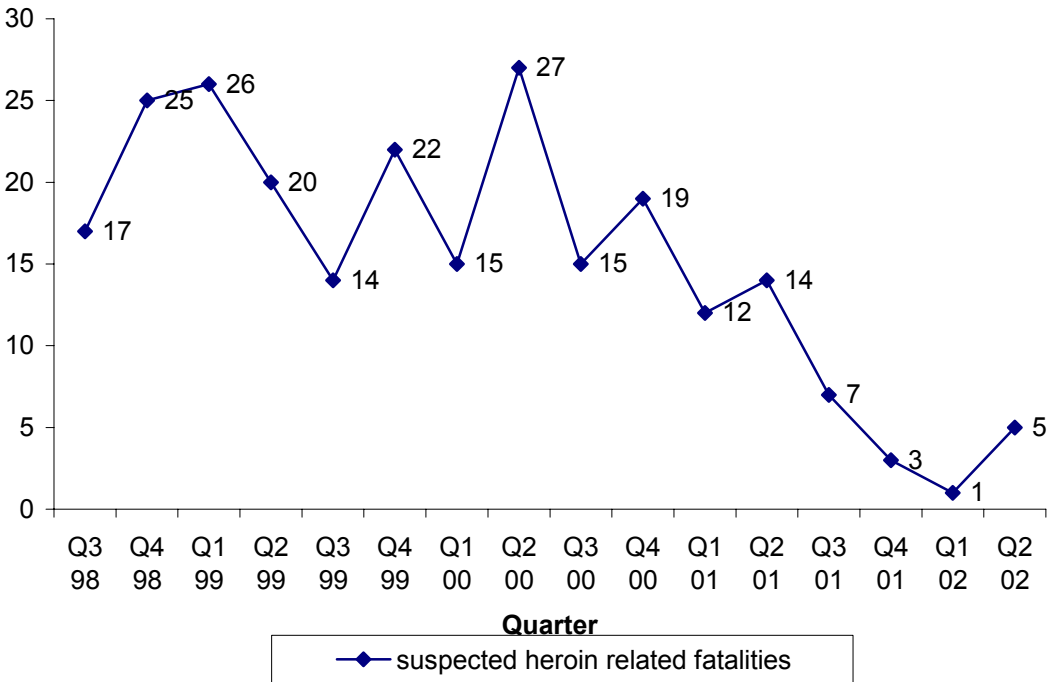
Presence at another person’s overdose remained common among the IDU sample with 60% having witnessed at least one overdose event, and although this figure is somewhat less than the 70% reported in 2001 it was not found to be significant. ($\chi^2=0.267$, $df=1$, $p=0.605$) A small difference was observed in the elapsed average time since their most recent experience of another’s overdose between the 2002 and 2001 studies (23. and 19.2 months respectively) and a small yet significant fall was observed in the proportion of the IDU sample who had witnessed another person overdose in the month prior to interview (2% compared to 7%, $\chi^2=6.149$, $df=1$, $p=0.013$). Figure 14 represents the number of calls made to the WA Ambulance Service in relation to attendance at a narcotic overdose-related event and clearly shows that the frequency of these types of calls remains at a very low level, far less than the rate that existed at the end of 2000.

Figure 14: Narcotic overdose-related calls to ambulance, by month, July 1998 to June 2002 (Source:WAPCRU)



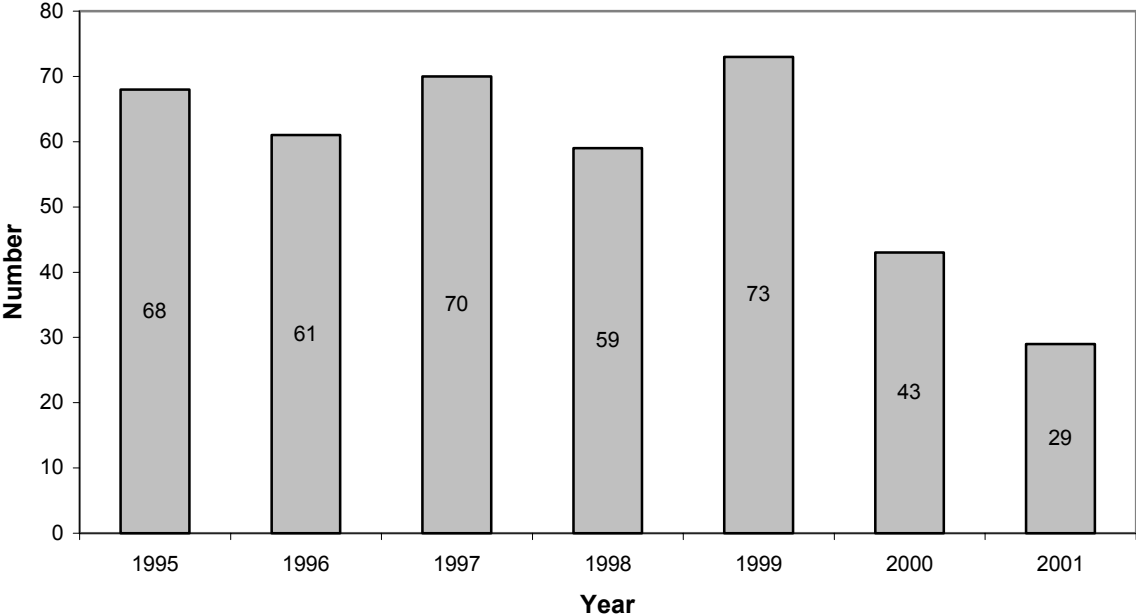
Given that ambulance call outs have remained relatively infrequent, it is perhaps not surprising to discover that the rates of suspected fatal opiate overdoses have also remained low. Indeed, in the period from January to June 2002, there were only six suspected opioid overdoses in WA, down from 26 overdoses in the corresponding period the previous year. This decline is shown in Figure 15. As coronial confirmation of these deaths is not yet available, it is worth considering the possibility that the actual number of deaths that will be confirmed as attributable to opiate overdose may in fact be less than these six.

Figure 15: Number of suspected heroin-related fatalities in WA, by quarter, July 1998 to June 2002. (Source: DAO)



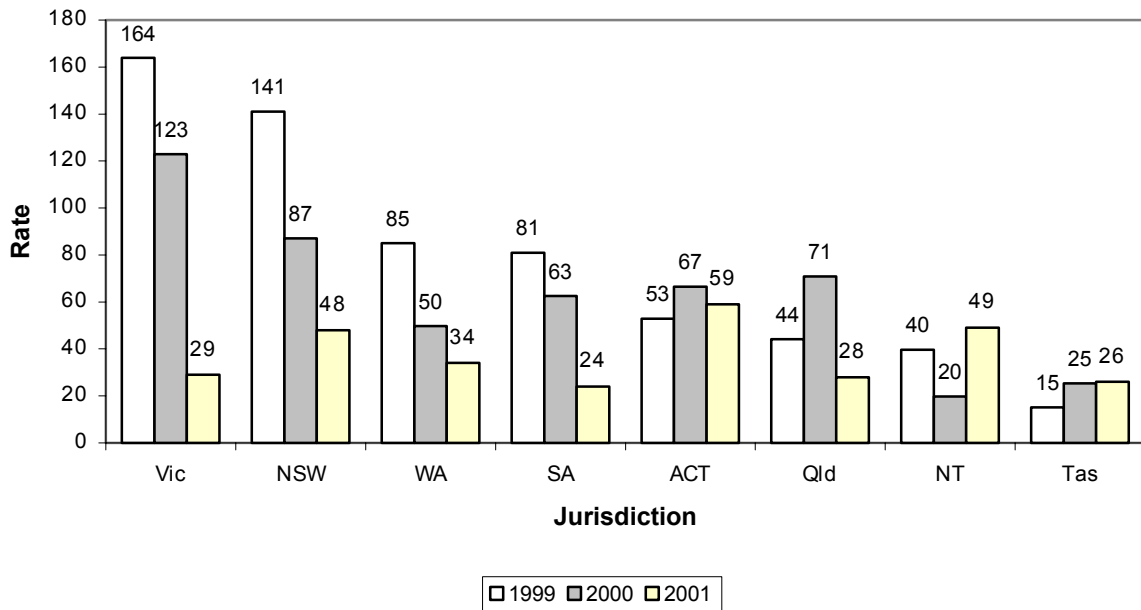
The reduction in the number of opioid-related fatalities among those aged 15-44 years noted in the 2001 report appears to have continued with this figure dropping from 43 down to 29 (Figure 16).

Figure 16: Annual opioid overdose deaths in WA, among those aged 15-44 years, 1995-2001 (Source:ABS)



The reduction observed in the rate per million population these opioid overdose deaths represented was also noted in the 2001 report, and this trend can also be seen to have continued. Despite this decline from 50 per million to 34 per million, WA recorded the second highest rate in 2001 rising from sixth position in 2000. The rates by jurisdiction for 1999 through 2001 are illustrated in Figure 17.

Figure 17: Rate of opioid overdose deaths per million population, among those aged 15-44 years, 1999 and 2001 (Source: ABS)



9.3 Crime

9.3.1 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 a sizeable although not statistically significant increase in the proportions of IDU reporting that they had committed an offence in the month prior to interview in 2002 from 2001 (80% and 61% respectively; $\chi^2=0.273$, $df=1$, $p=0.601$). Unlike in the 2001 study, there were significant differences in the level of offending with males having an average crime total of 2.88 and females of 1.94 ($t=-2.170$, $df=1$, $p=0.03$). Of the 42 females and 57 males to respond to this section, some differences were revealed to exist between gender and the types of criminal activity in which they had been involved. Whilst 36% ($n=10$) of females admitted to some form of property crime, only 28% ($n=11$) of males admitted to this. With respect to dealing, 61% ($n=26$) of females had been involved as opposed to 75% ($n=43$) of males. Fraud was more commonly committed by females with 24% ($n=10$) admitting to this, but only 19% ($n=11$) of males. Conversely, violent crime was almost exclusively the province of male IDUs with just 2% of females ($n=1$) versus 12% ($n=7$) of males.

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 with 86% ($n=69$) of all IDUs who admitted to some form of criminal activity having dealt drugs in the past month. Almost half (48.8%, $n=39$) of those who had offended indicated that dealing was their sole offence, which is quite similar to the proportion who reported this in the 2001 study (56.5%, $n=39$). Where other single offences were noted, five IDU reported property crime, four indicated that they had been involved in fraud, and one reported violent crime as their sole offence type committed in the previous month. Precisely a fifth of the overall IDU sample (20%) indicated

that they had committed crimes within two or more categories in the month prior to interview. Of the 20 IDU who had been involved in two types of offence, half of these were accounted for by the combination of property crime and dealing. There were ten IDU who reported that they had committed offences within three of these categories.

As noted in Section 3.1, 18% 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 (28% and 5% respectively, $\chi^2=8.598$, $df=1$, $p=0.003$). Among these IDU, the majority (61%, $n=11$) had also been arrested in the 12 months prior to interview and a further 27 respondents were also arrested in that period. No significant difference was observed in the rate of arrest reported for male and female respondents ($\chi^2=0.85$, $df=1$, n.s.). Whereas possession/use offences was the most common reason for arrest reported in 2002 ($n=15$), it was closely followed by property crime ($n=14$) which had been the most common in 2001. (33%, $n=11$). Other common arrests were for driving offences ($n=10$), and fraud ($n=6$). There were three IDUs arrested for dealing or trafficking. Only two people were arrested for crimes involving violence, down from five in 2001. Other less common offences were two counts of prostitution, one for drugs and driving, one for possession of weapons and one for non-payment of fines. Of those arrested for a single offence, the most common was property crime ($n=8$) followed by driving offences ($n=7$) and use or possession ($n=6$). There were eleven IDUs arrested for multiple offences.

IDU surveyed were asked to comment on changes to police activity in the six months prior to interview with such activity considered 'stable' by 51% to 'increasing' by 31% in that time. Even though more than half of those able to comment considered that police activity had increased, most IDU (71%) reported that this had not made it any harder for them to score recently. Slightly over a quarter of IDU surveyed (28%), however, did indicate that more of their friends had been 'busted'. Key informants reports also corroborated IDU reports about police activity being stable with a majority ($n=18$) indicating that there had been no changes they were aware of. A further three believed that police activity had increased, and three other key informants indicated that 'different' types of police activity was taking place, but the nature of these changes was not specified.

9.3.2 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. As in 2001, just under half of the sample ($n=49$) indicated that they had spent some money on the day prior to their interview with \$25 and \$50 the two most commonly reported amounts spent by 10 and nine IDU respectively. The median amount spent was \$50, half that as reported in 2001 the mean amount spent in 2002 was significantly lower at \$147 (range=\$10-\$1500, $sd=324.8$) than in 2001 when the mean was at \$208 ($sd=321.7$, range=\$10-\$2000) ($t=-2.817$, $df=46$, $p=0.007$). There were only five IDU who had spent more than \$200 the day before interview, a substantial decline on the 12 reported in 2001. (95% CI: 13.3%, 38.9% and 4.3%, 23.0% respectively).

9.3.3 Law enforcement data

According to figures from the Australian Crime Commission there were 9,529 drug-related charges laid by police in WA in 2001, an increase from 9,273 in 2000. This figure is difficult to reconcile with 2001 figures provided by the WA Crime Information Unit which indicates that 14,286 drug related charges were laid in 2001. These inconsistencies are presumed to result from differing methods of counting that may exist between these two organisations.

Table 10 represents the quarterly data for drug-related and all charges laid in 2001. (It is important to point out that this data is only available on an annual basis therefore the 2001 data represents the most recent data available).

Table 10: Number of charges laid in WA for drug by quarter, 2001 (Source: Crime Information Unit)

Quarter	Drug Charges	Drug charges
	2000 ¹	2001
Jan – Mar	-	3635
Apr – Jun	-	3877
Jul – Sep	3833	3572
Oct - Dec	3338	3202
Total	7171	14286

Data for the first two quarters of 2000 was not available

Table 11 represents the number of each type of charge laid for each quarter of 2001

Table 11: Number of charges by type laid in WA for drug related offences, by quarter, 2001 (Source: Crime Information Unit)

Charge type	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Nov	Year total
Possession / Use drug	1999	2232	2019	1801	8051
Sell / supply drug	268	272	295	210	1045
Cultivate Drug	299	180	157	175	811
Manufacture drug	9	9	3	6	27
Undetermined	7	9	0	0	16
Possession of implement	1053	1175	1098	1010	4336

According to the ACC figures in WA in 2001/2002, there was a total of 7,513 consumer (eg: possession / use) arrests and 2,016 provider (eg: sell / supply) arrests. As in 2000, cannabis was the drug type for which most charges were laid (see Table 12).

Table 12: Number of charges laid in WA for sell/supply offences by drug type (Source: ACC)

Drug type	Consumer Offence	Provider Offence	Year total
Cannabis	5846	1310	7156
Heroin & Other Opiates	111	54	165
Amphetamine – type Stimulants	1231	494	1725
Cocaine	8	17	25

Cannabis was overwhelmingly the drug associated with most charges in 2001 / 2002. Of all 9,529 drug charges reported by the ACC, 75% concerned cannabis. The 5,846 cannabis charges including 935 cannabis cautions accounted for 81% of all consumer offences and cannabis also accounted for 70% of provider arrests. Of the 165 heroin-related charges which accounted for less than two percent of all drug related charges, more than two thirds (67%) related to consumer offences and the remaining third (33%) to provider offences. Amphetamine-type stimulants were the drugs that after cannabis made up the largest proportion of arrests accounting for 18% of all drug charges in the 2001 / 2002 period. Consumer charges made up 71% arrests. As might be expected given the low frequency of use in WA as shown earlier cocaine was implicated in only 0.3% of drug related charges of which 68% were provider arrests. Drawing meaningful comparisons to previous years is awkward with respect to drug related crime due to the use of different and often irreconcilable sources of data.

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 fifth of IDU (19%) reported that they had used a needle after someone else had already used it in that period, a slight but not significant decline from the 22% who reported this in 2002 ($\chi^2=0.63$, $df=1$, $p=0.802$). Where IDU reported using a needle after someone else, it was primarily on one (n=9) or on three to five (n=8) occasions. However, three IDU had done so on two occasions in the month preceding interview, two had done so 6-10 times and one individual reported doing so on more than 10 occasions. In the majority of these cases (n=16, 84%) this use had occurred after only one other person had used the needle before them, however, two (11%) IDU reported that two people had used the needle prior to them and in one (5%) case the needle had been used by three to five other individuals before the IDU. In most instances these needles were used after they had been used by a sexual partner of the IDU, either a regular sex partner (n=9, 47%), or a casual sex partner (n=2, 11%). Use of needles after they had been used by close friends was also reported by five (26%) IDU and following their use by an acquaintance by three (16%). Of some concern is the report by one IDU that they had used needles that they had found in the street.

Not only was use after someone else quite common among IDU but equally common was the lending of needles to someone else after the respondent had already used, with nearly a fifth (19%) of IDU having done so in the previous month. There were five (26%) 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 ten (53%) had done so twice, three (16%) on 3-5 occasions, and one (5%) had done so on more than 10 occasions.

While the practise of sharing needles appeared to have declined slightly from the quarter reported in 2001, albeit not significantly ($\chi^2=0.476$, $df=1$, $p=0.490$), the use of other types of injecting equipment after someone else had already used it was actually more prevalent with 71% of IDU indicating that they had done so, up from 59% in 2001, however, this shift was not significant. ($\chi^2=0.018$, $df=1$, $p=0.892$). Spoons or other mixing containers were the most common items shared ($n=63$), followed by water (60%) and filters (53%) the most commonly reported items shared. These were also the most common responses provided in 2001 (50%, 46% and 44% respectively). The sharing of tourniquets was also quite common with 20 IDU having shared them (20 in 2000) There was also one IDU who reported sharing of hirudoid bruise cream after it had been used by another person. These figures may suggest that the situation suggested by Carruthers, (2001) that many injectors may unwittingly engage in behaviours where there is a risk of hepatitis C transmission continues.

Experience of at least one type of injection-related problem remained common among the population surveyed with 73% of the respondents reporting at least one. Of the IDU who experienced problems in the previous month, prominent scarring or bruising (54%) and difficulty injecting (51%) were the most common. Dirty hits (22%), abscesses or infections resulting from injection (9%) and thrombosis (5%), were also reported. Overdose experience in the month prior to interview was also reported by six IDU, all of whom identified the drug on which they had overdosed. Heroin was reported as the main drug on which three of them had overdosed, two IDU indicated they had overdosed on methamphetamine, and one reported an overdose from morphine. Four of these IDU reported polydrug use at the time of the overdose with three indicating that they had also taken benzodiazapines, and one mentioning alcohol. All instances of polydrug associated overdose occurred where the main drug implicated was opioids. Recent experience of one ($n=25$) or two ($n=27$) of these problems accounted for the majority (71%) of responses, although 15 IDU had experienced three problems, two had experienced four and three 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 25 IDU who indicated that their most recent injection had occurred in a public place representing an increase from the proportion who reported 'public' use in the 2001 study. This increase was not found to be statistically significant. ($n=14$; $\chi^2= 3.464$, $df=1$, $p=0.063$). Locations of the most recent injection reported in both years are presented in Table 13.

Table 13: Location of most recent injection as reported by IDU

Location	2001	2002
Private home	86	74
Car	7	12
Street, park or beach	3	4
Public toilet	4	8
'Shooting room'	0	1
Workplace	0	0
Other venue	0	0

IDU were also asked about where they had *usually* injected in the month prior to interview as well as about the location of their most recent injection. Usual locations are provided in Table 18 and indicate that 25% of the population surveyed had routinely used a public environment during the month prior to interview, a considerable though not significant increase on the 12 IDU who reported doing so in 2001 ($\chi^2=0.427$, $df=1$, $p=0.514$), More than three quarters ($n=19$) had experienced at least one injection-related problem in that month. Four IDU reported that they had experienced one problem, eight more had experienced two problems, five IDU reported three different problems in that time, one reported four and the remaining one IDU reported five.

Table 14: Location of usual injection as reported by IDU

Location	2001	2002
Private home	88	75
Car	8	11
Street, park or beach	0	7
Public toilet	4	6

10.0 SUMMARY AND CONCLUSION

The main trends to emerge from the 2001 IDRS are reported below by drug type. Some general trends also emerged. There was a sizable increase in the proportion of IDU who reported heroin as their first drug injected from 22% in 2001 to 30% in 2002.

With regards to respondents' drug of choice, methamphetamine was seen to fall from its position of first drug of choice in 2001, when 42% nominated it to 32% in 2002. Conversely, heroin had regained its role as the most popularly nominated drug of choice by 48%, up from 34% in 2001.

Methamphetamine remained the drug most commonly injected in the month prior to interview, albeit with a decrease observed in the proportion of IDU who reported this from 72 IDU in 2001 to 56 in 2002. Nine individuals reported that they most commonly injected morphine in the month preceding the interview in 2002, a noticeable increase from the sole individual claiming this in 2001.

However, some of these differences may reflect changes in the sample selected between the two years. It appears that the 2002 IDRS sample may contain a higher proportion of primary heroin users than in previous years which may be due to the social networks accessed by the peer interviewer, rather than differences in the market itself. It is not possible to determine the extent to which shifts in the use of heroin and methamphetamine from the 2001 to 2002 samples are indicative of an emerging trend, and at least to some extent a reflection of the gradual return of heroin to Perth drug markets, or whether they are primarily a function of the sample differences described above.

10.1 Heroin

Evidence obtained in the course of interviews with heroin using IDUs, suggested that the availability of heroin in the Perth illicit drug market is again on the increase when compared to data collected in 2001. That said however, in terms of levels of availability, price and purity, these show no signs of reaching the levels reported "pre-drought" in 2000 at this stage.

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 with just two citing users of opioids as being their principle clients. (compared to 8 in 2001).

Some 64% of all 100 IDU interviewed reported use of heroin in the last six months which was not significantly different from 55% in 2001 ($\chi^2 = 2.586$, $df = 1$, $p = .108$). The median number of days of use for 2002 was 24 days as compared with 30 days in 2001.

There appears to have been a notable drop in price of a gram of heroin from a median of \$750 per gram in 2001 to \$550 in 2002. Some 54% of IDUs able to comment said that the price of a gram of the drug had decreased in the previous six months. Data from the ABCI based on seizures also suggests a fall in the price from between \$600 and \$1000 in the first quarter of 2002 to \$500 in the second quarter.

Availability of heroin appears to have increased over the last 12 months with 57% of IDU reporting it 'very easy' to obtain, up from 16% in 2001. Most (63%) of IDUs reported that the purity of heroin in Perth appears to have increased in the last six months, but 47% said that

purity was currently 'medium' and 35% said 'low'. These reports appear at odds with ABCI data where average purity has decreased from 49% in 2001 to 21% in 2002. However, ABCI data are based on a small number of non-random samples.

A majority (64%) of IDUs who had used heroin in the previous six months reported that the heroin using population had become more diverse, particularly with respect to its use by 'unexpected types of people', often from more affluent social strata.

10.2 Methamphetamines

There was a slight fall from 92% in 2001 to 85% in 2002 in the numbers of IDU interviewed who had used any form of methamphetamine in the six months prior to interview. However, it is not clear whether this due to a decreased use of the drug or the sampling changes discussed above. There was no significant change (20 in 2002 vs 19 in 2001) in the proportion of key informants who said of key informants indicated that the users with which they had had the most contact in the last six months were users of amphetamine.

In 2002, the most common form of methamphetamine use reported by key informants (77%) was of speed powder, narrowly overtaking the crystalline form that was predominant in 2001. However, it should be noted that changes in the way these data on these drugs were recorded makes comparison with 2001 figures difficult.

On the whole the prices of amphetamine powder reported by IDU remained relatively unchanged from 2001, with the median price of a gram of powder being \$250. The median price reported for 'crystal meth' or 'paste' was \$250 per gram, while crystal was \$350 per gram.

Some 79% of IDU able to comment said that speed powder was 'very easy' to obtain and 65% said base / paste methamphetamine was also 'very easy' to get. Most (64%) said that availability had remained stable over the previous six months. Only 38% said that crystal methamphetamine was 'very easy' to get with 36% (n=24) was that access had become 'more difficult' and 30% saying it had remained stable. Although in 2001 the use of crystal meth was widespread among the IDU sample in 2002 it had fallen to second place behind speed powder as the form used by most IDU in the past six months.

The average purity of illicit methamphetamine seizures analysed in WA has generally increased since the 1998/1999 financial year, and in 2001/2002 this trend has continued with an average purity of 30%. However, this appears to be largely due to the peak reached in the third quarter of 2001 and purity data from more recent quarters was seen to drop sharply. As in 2001, IDU perceptions about the purity of the methamphetamine they had used in the six-month period prior to interview varied according to the form of methamphetamine in question. Powder was most frequently rated as low in purity and decreasing or stable over the prior 6 months. Base / paste methamphetamine was mostly rated as of medium purity and the prevailing notion was that it had remained unchanged over the prior six months. Most IDU rated the purity of crystal meth as high and stable over the previous 6 months.

Although the number of calls to the ADIS line for amphetamines had been steadily increasing since 1998 the numbers began to fall after the beginning of 2001 then stabilised for the rest of the year and began falling again at the beginning of 2002.

Trends in amphetamine use noted by IDU were that users were increasing in number, becoming younger and increasingly diverse.

10.3 Cocaine

As in previous years, number of IDU reporting the use of cocaine in WA in the last six months remained low. In 2002 only 17 respondents indicated use of the drug within that timeframe, representing a fall from the 32 in 2001 who claimed that they had used it. This suggests the apparent 'preliminary evidence of an increase in the use and injection of cocaine among IDU in Perth' during 2001 (Hargreaves & Lenton, 2002), has not continued in 2002. Even among those who had used, the frequency of use remains very low with none using more than seven days out of the last six months. It needs to be reiterated that IDU may not be the most appropriate sentinel group to survey in relation to trends in cocaine use.

10.4 Cannabis

Very little change in the profile of cannabis was observed between the 2001 and 2002 studies. The median price of an ounce remained at \$250, and the vast majority (85%) of IDU indicated that cannabis remained 'very easy' to obtain and was 'high' in potency. New in 2002 were questions relating to the original source of cannabis purchased. Most (67%) IDU said their cannabis came from a small time back-yard grower and 27% from a large scale cultivator / supplier such as a crime syndicate or bikie gangs. Some 66% said they were 'very sure' about this and 26% said that they were 'moderately sure'.

10.5 Other drugs

The most notable observation with regards to the use of other drugs in this year's IDRS, is the apparent increased popularity of pharmaceutical preparations amongst injecting drug users. This is particularly true of opioid based medications, most notably morphine, but also oxycodone and prescription drugs with codeine as the active ingredient. Also widespread is the illicit use of benzodiazepines and diverted buprenorphine. The practise of injecting these medications was also not uncommon. It is likely that these increased levels of use have occurred as a result of IDU seeking substitute drugs in response to the relative scarcity of heroin.

There was a dramatic decrease in methadone use among IDU who nominated heroin as their drug of choice from 67% in 2001 to 47% in 2002, which may reflect increased use of buprenorphine.

There was an increase in use of morphine in the last six months from 62% to 74% of all IDU. Most morphine used was illicit, with MS Contin[®] overwhelmingly the most common brand used. There was an increase in the use of other opiates from 10% having used in the last 6 months in 2001 to 49% in 2002. There was a slight decrease in the use of homebake heroin from 34 in to 30 in 2002 however, this was not found to be significant. Some 42% of IDU who identified heroin as their drug of choice had used homebake in the last 6 months, down from 65% in 2001. This data would seem to suggest that while the use of homebake remains relatively common amongst WA primary heroin users, it's use may be beginning to decline slightly as heroin slowly re-emerges on the market and other users appear to have moved on towards pharmaceutical preparations.

Prior to 2002, buprenorphine (Subutex[®]) had not been specifically reported on thereby it is not feasible to draw meaningful comparisons with previous years. In the 2002 survey, 33% of IDU reported having ever used buprenorphine, and 28% having used within the last six months.

There were considerable increases noticed in the proportion of IDU who reported the use of benzodiazepines. Lifetime history of use increased from 64% in 2001 to 88% in 2002.

10.6 Overdoses

The number of ambulance overdose call outs and suspected heroin related deaths remained low during the 2001 and 2002 financial year. In the period from January to June 2002, there were only six suspected opioid overdoses in WA, down from 26 overdoses in the corresponding period the previous year.

10.7 Needle sharing

Almost a fifth of IDU (19%) reported that they had used a needle after someone else had already used it in that period, a slight decline from the 22% who reported this in 2002. Mostly when needles were shared they were done so with a sexual partner.

11.0 REFERENCES

- Australian Crime Commission. (in press) *Australian Illicit Drug Report 2001-02*, Australian Crime Commission, Canberra
- Australian Institute of Health and Welfare (2002) *National Drug Strategy Household Survey (2001): Technical Report*. Canberra: AIHW, Department of Health and Aged Care.
- Carruthers, S. (2001) Unpublished data.
- Chesher, G.B. (1993) Pharmacology of the sympathomimetic psychostimulants. In: D. Burrows, B. Flaherty & M. MacAvoy (Eds.), *Illicit Psychostimulant Use in Australia* (pp. 9-30). Canberra; Australian Government Publishing Service.
- Darke, S. & Ross, J. (1999) *The use of anti-depressants among injecting drug users*. NDARC Technical Report No. 70. Sydney, National Drug and Alcohol Research Centre.
- Dwyer, R. & Rumbold, G. (2000) *Victorian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS)*. NDARC Technical Report No. 89. Sydney, National Drug and Alcohol Research Centre.
- Fitzsimmons, G. & Cooper-Stanbury, M. (2000) *1998 National Drug Strategy Household Survey - State and territory results*. Canberra: Australian Institute of Health and Welfare.
- Hando, J., O'Brien, S., Darke, S., Maher, L. & Hall, W. (1997) *The Illicit Drug Reporting System Trial: Final Report*. NDARC Monograph No. 31. Sydney, National Drug and Alcohol Research Centre.
- Hargreaves, K. & Lenton, S. (2002) *Western Australian Drug Trends 2001: Findings from the Illicit Drug Reporting System (IDRS)*. NDARC Technical Report No. 134. Sydney, National Drug and Alcohol Research Centre.
- Hargreaves, K. & Lenton, S. (2001) *Western Australian Drug Trends 2000: Findings from the Illicit Drug Reporting System (IDRS)*. NDARC Technical Report No. 110. Sydney, National Drug and Alcohol Research Centre.
- Hargreaves, K. & Lenton, S. (2000) *Western Australian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS)*. NDARC Technical Report No. 85. Sydney, National Drug and Alcohol Research Centre.
- Humeniuk, R. (2000) *South Australian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS)*. NDARC Technical Report No. 88. Sydney, National Drug and Alcohol Research Centre.
- Lenton, S., Boys, A. & Norcross, K. (1997) Raves, drugs and experience: drug use by a sample of people who attend raves in Western Australia. *Addiction*. 92 (10); 1327-1337.
- McKetin, R., Darke, S. et al. (2000) *Australian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS)*. NDARC Monograph No. 43. Sydney, National Drug and Alcohol Research Centre.

McKetin, R., Darke, S. & Kaye, S. (2000) *NSW Drug Trends 1999. Findings from the Illicit Drug Reporting System (IDRS)*. NDARC Technical Report No. 86. Sydney, National Drug and Alcohol Research Centre.

O'Reilly, B. (2002) *Northern Territory Drug Trends 2001*. Sydney, National Drug and Alcohol Research Centre.

Public Health Division, Health Department of WA (2001) *Drug use among 12 to 17 year old Western Australian school students in 1999*. Alcohol & Other Drugs Program Bulletin, No. 16. Perth, HDWA.

Reynolds, J., Lenton, S., Charlton, M. & Caporn, J. (1997) Ch 19 - Shopping, baking, and using: The manufacture, use, and problems associated with heroin made in the home from codeine-based pharmaceuticals. In Erickson, P., Riley, D., Cheung, Y. & O'Hare, P. (Eds) *Harm Reduction: A new direction for drug policies and programs*. Canada; University of Toronto Press.

Topp, L. et al. *Australian Drug Trends 2001: Findings of the Illicit Drug Reporting System*. NDARC Monograph. Sydney, National Drug and Alcohol Research Centre.

Topp L and Churchill A (2002). Australia's dynamic methamphetamine markets. *Illicit Drug Reporting System, Drug Trends Bulletin, June 2002*

Wardlaw, G. (1993) Supply reduction (law enforcement) strategies pertaining to illicit use of psychostimulants. In: D. Burrows, B. Flaherty & M. MacAvoy (Eds.), *Illicit Psychostimulant Use in Australia* (pp. 91-104). Canberra; Australian Government Publishing Service.