AUSTRALIAN DRUG TRENDS 2001

FINDINGS OF THE ILLICIT DRUG REPORTING SYSTEM (IDRS)

LIBBY TOPP, SHARLENE KAYE, RAIMONDO BRUNO, MARIE LONGO, PAUL WILLIAMS, BRIDIE O'REILLY, CRAIG FRY, GABRIELLE ROSE & SHANE DARKE

NDARC MONOGRAPH NUMBER 48

ISBN 1 877 027 15 4

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

In 2001, the IDRS was funded by the Commonwealth Department of Health and Ageing (CDHA) and the National Drug Law Enforcement Research Fund (NDLERF), and coordinated by the National Drug and Alcohol Research Centre (NDARC). The IDRS team would particularly like to thank Steve Vaughan of CDHA and Roger Nicholas and Dr Jeanette Packer of NDLERF for their assistance throughout the project.

The authors of *Australian Drug Trends 2001* are indebted to the many researchers and research institutions that contributed to the information presented in this report. In 2001, the IDRS team throughout Australia included:

- Associate Professor Shane Darke, Dr Libby Topp and Ms Sharlene Kaye, National Drug and Alcohol Research Centre, University of New South Wales;
- Dr Marie Longo, Dr Rachel Humeniuk, Mr Paul Christie and Dr Robert Ali, Drug and Alcohol Services Council, South Australia;
- Mr Craig Fry and Mr Peter Miller, Turning Point Alcohol and Drug Centre, Inc., Victoria;
- Ms Kim Hargreaves and Mr Simon Lenton, National Drug Research Institute, Curtin University of Technology, Western Australia;
- Mr Raimondo Bruno, School of Psychology, and Associate Professor Stuart McLean, School of Pharmacy, University of Tasmania;
- Dr Bridie O'Reilly, School of Health, Education and Community Services, Northern Territory University;
- Ms Gabrielle Rose and Professor Jake Najman, Queensland Alcohol and Drug Research and Education Centre, University of Queensland; and
- Mr Paul Williams and Ms Catherine Rushforth, Australian Institute of Criminology, Australian Capital Territory.

The following organisations generously provided national indicator data to the national IDRS:

- Australian Bureau of Criminal Intelligence;
- Australian Bureau of Statistics;
- Australian Customs Service;
- National Centre in HIV Epidemiology and Clinical Research;

- National Drug and Alcohol Research Centre.

The IDRS is grateful to Mr Will Blythe and Mr Mark Geddes of the Australian Bureau of Criminal Intelligence, Mr Adam Churchill of the Australian Customs Service and Dr Margaret MacDonald of the National Centre in HIV Epidemiology and Clinical Research, for their patient assistance with the indicator data provided by their organisations; to Dr Louisa Degenhardt of NDARC for facilitating access to the National Drug Strategy Household Survey data and the Australian Bureau of Statistics opioid overdose data; and to Ms Fiona Shand of NDARC, for facilitating access to the Clients of Treatment Service Agencies data.

The successful function of the IDRS depends on a great number of people who generously give their time and support to the project. Apart from those agencies that provide indicator data, we would also like to sincerely thank all the agencies that assisted with recruitment and interviewing of IDU. We are indebted to the 309 experts who were willing to be interviewed as key informants, who participate in interviews that last for an average of 45 minutes and receive no compensation for their time and effort; we gratefully acknowledge their expert input. Finally, we could not provide the reliable and valid data we have obtained without the assistance of the 951 IDU interviewed for the 2001 IDRS, and we thank them for their open discussion of illicit and stigmatised activities.

Finally, the IDRS would like to acknowledge the invaluable input over six years of its Senior Investigator, Associate Professor Shane Darke of NDARC. Shane will leave the IDRS in the safe hands of Dr Louisa Degenhardt of NDARC in 2002, and the IDRS team would like to thank him for generously sharing his extremely broad knowledge of injecting drug users, and for standing by a difficult project until it had matured enough to stand on its own two feet. We are proud of what this project has achieved, and we could not have done it without Shane's input.

LIST OF ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AFP	Australian Federal Police
AIHW	Australian Institute of Health and Welfare
ATSI	Aboriginal and/or Torres Strait Islander
CDHA	Commonwealth Department of Health and Ageing
FDS	Family Drug Support Telephone Service
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user/s
KI(S)	Key informant(s)
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDS	National Drug Strategy
NESB	Non-English speaking background
NSP	Needle and syringe program
NSW	New South Wales
NT	Northern Territory
QLD	Queensland
SA	South Australia
SNRI	Selective noradrenaline reuptake inhibitor (a type of anti-depressant)
SSRI	Selective serotonin reuptake inhibitor (a type of anti-depressant)
TAS	Tasmania
VIC	Victoria
WA	Western Australia

EXECUTIVE SUMMARY

The complete Illicit Drug Reporting System (IDRS) consists of three components: (1) interviews with injecting drug users (IDU); (2) interviews with key informants who, by the nature of their work, have regular contact with illicit drug users; and (3) an examination of extant data sources related to illicit drug use, such as National Household Survey data on drug use, opioid overdose data, purity of seizures of illicit drugs made by law enforcement agencies, and so on. The *Australian Drug Trends 2001* report presents a summary of the findings of the second year in which the complete IDRS has been conducted in every Australian jurisdiction. Detailed reports on drug trends within each jurisdiction can be obtained from the National Drug and Alcohol Research Centre (NDARC).

The IDRS monitors the price, purity, availability and patterns of use of the four main illicit drug classes: heroin, methamphetamine, cocaine and cannabis. Drug trends in this publication are cited by jurisdiction, although they primarily represent trends in the capital city of each jurisdiction, from which new drug trends typically emerge.

Key findings from the 2001 IDRS

1. There was a dramatic reduction in the availability of heroin observed in all jurisdictions in which heroin had for some years been freely available. It began in late 2000/early 2001, and was sustained throughout the first half of 2001, with the greatest magnitude experienced between January and March 2001. The change in availability was associated with increases in the price, marked decreases in the prevalence and frequency of use, and moderate declines in purity. Changes in the patterns of use of other drugs were associated with the shortage, particularly of the stimulants, methamphetamine and cocaine.

2. The methamphetamine markets continued to demonstrate their dynamic nature in 2001. Both prevalence and/or frequency of recent methamphetamine use increased in every jurisdiction between 2000 and 2001. This was particularly the case with the potent forms of methamphetamine that were detected by the 2000 IDRS to have increased in availability and use. There were apparent large increases in the price of a gram of methamphetamine powder in VIC, the ACT and QLD, but these may reflect a change in the form of methamphetamine purchased; powder remained cheapest in SA at $50 per gram. The cost of a 'point' (approximately 0.1 gram) of potent methamphetamine remained relatively stable in all jurisdictions and cheapest in SA at $30.

   The average purity of seizures of methamphetamine analysed across Australia remained stable between 1999/00 and 2000/01 at 22%, an increase from 1998/99 (16%). Both methamphetamine powder and the more potent forms were described as easy to obtain in all jurisdictions, and availability of both forms was considered to have remained stable or increased. In TAS

and SA, the prevalence of recent use of the potent forms of methamphetamine was higher than the prevalence of recent use of methamphetamine powder, and it is likely that methamphetamine powder is no longer the most available nor sought-after form of methamphetamine in these jurisdictions.

3. Cocaine use remained predominantly an issue in NSW, where marked increases between 2000 and 2001 in prevalence of recent use and dramatic increases in frequency of use were recorded. However, 2001 is the first year in which the IDRS has documented early indicators of a potential diffusion of cocaine from NSW to other jurisdictions, notably the ACT, QLD, VIC, SA and WA, including: a higher proportion of IDU able to comment on cocaine, increases in prevalence of recent use, higher proportions of IDU reporting the recent purchase of grams of cocaine and the purchase of cocaine 'caps'. Although the magnitude of the increases were small, together, they suggest that the availability and use of cocaine may be increasing outside Sydney, the traditional focus of Australia's illicit cocaine market. Purity of cocaine seizures remained relatively stable, and decreases in the price of a gram were recorded in VIC, SA and QLD. The price of both grams and caps remained stable in NSW.

4. As in previous years, the cannabis market proved the most stable of Australia's illicit drug markets. The price of an ounce of cannabis varied between $200 and $320; increases of $20 per ounce were recorded in NSW and QLD, whereas decreases of the same magnitude were reported in SA, VIC, the ACT, WA and TAS. As in all previous years of the IDRS, the potency of cannabis was considered high or medium to high, and stable, in all jurisdictions. Cannabis was considered very easy to obtain in all jurisdictions, and availability was perceived to have remained stable. Hydroponically grown cannabis 'heads' remained the most commonly used form of the drug, although high proportions of IDU also reported the recent use of outdoor crop cannabis (69%) and hashish (33%). Waterpipes ('bongs') remained the preferred means of cannabis administration.

Heroin

Price: Compared to 2000, the price of a gram of heroin increased in all jurisdictions except the NT and TAS, the two jurisdictions in which heroin has traditionally not been freely available (Table 1). In the other jurisdictions, the price of a gram of heroin increased by between $40 (SA) and $300 (WA). Prices for a 'cap' doubled in NSW and the NT. Although cap prices remained stable in the other jurisdictions, both IDU and KIS commented that the amount of heroin contained in a cap was smaller and more variable in 2001 than in previous years. Despite the increases in price, consistent with the results of the 2000 IDRS, heroin remained cheapest in NSW, and most expensive in the NT.

Purity: Due to industrial action, figures for VIC represent analysed seizures made by the AFP only, and no seizure data (either SAPOL or AFP) are available from SA for the second six months of the financial year. The average purity of analysed heroin seizures across Australia in 2000/01 was 44%. 2001 thus represents the second consecutive year in which the purity of heroin has decreased, falling from 53% in 1999/2000 and 65% in 1998/99. Compared to 2000, there were moderate declines in the purity of heroin seizures analysed in WA (4%), the ACT (14%), QLD (12%), NSW (11%), VIC (8%) and SA (3%). Consistent with previous years, NSW had the highest purity seizures. No seizures of heroin were analysed for purity in TAS in 2000/01.

Availability: There was a dramatic reduction in the availability of heroin in NSW, VIC, QLD, WA and the ACT, sustained throughout 2001. The shortage in supply was less pronounced in jurisdictions in which heroin has not been the dominant injectable drug (SA, TAS), and was not reported in the NT, where heroin is normally scarce. The reduction in the supply of heroin is consistent with the increases in price.

Use: There were reported reductions in the prevalence and/or frequency of heroin use among IDU in NSW, VIC, SA, WA, QLD and the ACT. As in previous years, heroin use remained uncommon in TAS and the NT. Increases in the use of other drugs associated with the heroin shortage were reported in most jurisdictions, specifically: cocaine (NSW), injection of benzodiazepines (VIC, QLD), methamphetamine (SA, WA, QLD, NSW, the ACT), other opiates (NSW, SA), and 'homebake' (WA).

Table 1: Estimated price, purity and availability of heroin by jurisdiction, 2000-2001

	Availability (2001)	Price ($) Gram		Price ($) Cap		Purity (%)	
		2001	2000	2001	2000	2001	2000
NSW	Easy (84%), although harder than in the past (37%)	320	220	50	25	51	62
SA	Difficult in first six months 2001; easier since then	350	310	50	50	45	48
VIC	Significant decrease between November 2000 and March 2001. Some supply restored since then but at much reduced levels	450	300	50	50	46	54
ACT	Easy (73%), although harder than in the past (84%)	485	300	50	50	40	54
WA	Difficult; dramatically reduced	750	450	50	50	49	53
QLD	Easy (74%) Stable (40%) to decreasing (29%)	450	350	50	50	39	51
TAS	Fluctuating	325	375	50	50	-	75 *
NT	Fluctuating	550	600	100	50	42	-

Note: no seizures of heroin were analysed in the NT in 1999/2000, or in TAS in 2000/01.

** The 75% purity in TAS in 2000 was estimated from a single seizure made by the AFP and is extremely unlikely to be representative of purity of the heroin available in that state.*

Methamphetamine

Price: Consistent with the results of the 2000 IDRS, methamphetamine powder remained cheapest in SA in 2001 (Table 2). Compared to 2000, there were apparent large increases in the cost of methamphetamine powder in VIC, the ACT and QLD, but these are likely to relate to increased quality of the drug and confusion as to which form of methamphetamine was discussed. There were no IDU estimates of the price of potent forms of methamphetamine (e.g., 'ice', 'crystal meth', 'base', 'paste') in 2000, but in that year, KIS in all jurisdictions except the ACT and the NT reported prices of $50 for a 'point' (0.1 gram) except in SA, where a point was reported to cost $30. The IDU estimates of the cost of a point in 2001 show the potent forms to be cheapest in SA ($30), a jurisdiction in which methamphetamine has traditionally dominated the market.

Purity: Due to industrial action, figures for VIC represent analysed seizures made by the AFP only, and no seizure data (either SAPOL or AFP) are available from SA for the second six months of the financial year. The average purity of seizures of methamphetamine analysed across Australia remained stable between 1999/00 and 2000/01 at 22%, an increase from 1998/99 (16%). Compared to 1999/00, there were slight decreases in purity in NSW (3%) and SA (2%), whereas slight increases occurred in VIC (8%), the NT (6%), the ACT (2%) and QLD (1%). In 2000/01, purity varied markedly across jurisdictions, but, consistent with the results of 1999/00, purity was lowest in TAS (6%) and the NT (11%), and highest in QLD (29%). Also consistent with 1999/00, the average purity of analysed seizures of methamphetamine (22%) was higher than that of amphetamine (14%), and the great majority (91%) of seizures were of methamphetamine.

Availability: Both methamphetamine powder and more potent forms of methamphetamine such as 'ice' and 'base' were regarded as easy to obtain in all jurisdictions. Availability of both forms was considered to have remained stable or increased in all jurisdictions. In TAS and SA, the more potent forms appear easier to obtain than methamphetamine powder, and were more widely used.

Use: Both prevalence and frequency of recent methamphetamine use among IDU increased between 2000 and 2001. Continuing the trend noted by the 2000 IDRS, increased use of potent forms of methamphetamine such as 'ice' and 'base' was reported in all jurisdictions.

Table 2: Estimated price, purity and availability of methamphetamine by jurisdiction, 2000-2001

	Availability (2001)	Price ($) gram of powder		Price ($) point of potent forms		Purity (%)	
		2001	2000	2001	2000	2001	2000
NSW	Easy Stable	100	90	50	50	12	15
SA	Easy Stable	50	50	30	30	15	17
VIC	Easy Stable to increasing	200	50	50	50	24	16
ACT	Easy Stable	250	180	50	-	12	10
WA	Very easy Stable to increasing	250	200	50	50	23	23
QLD	Very easy Stable to increasing	180	80	50	50	29	28
TAS	Very easy Stable	70	80	50	50	6	7
NT	Easy Stable	80	80	50	50	11	5

* Data not collected in 2000

Cocaine

Price: Only in NSW were there a sufficient number of recent purchases of cocaine in both 2000 and 2001 to allow price comparisons to be considered without caution. However, with this reservation noted, compared to 2000, in 2001, the price of a gram of cocaine declined in SA, QLD, VIC and the ACT, increased in WA, but remained stable in NSW at $200 per gram. Overall, gram prices in SA, VIC and QLD declined to levels commensurate with NSW, where cocaine has been the cheapest in previous years. Although in 2000, reliable numbers of purchases of 'caps' were reported only in NSW, in 2001, cap purchases were reported in jurisdictions other than NSW, albeit in small numbers. This may be an early indicator of the spread of cocaine to jurisdictions outside NSW; the increase in cocaine use among IDU in Sydney in 1998 coincided with the availability of caps of cocaine.

Purity: Due to industrial action, figures for VIC represent analysed seizures made by the AFP only, and no seizure data (either SAPOL or AFP) are available from SA for the second six months of the financial year. The average purity of seizures of cocaine across Australia in 2000/01 was 53%, little different to 1999/2000 (48%) or 1998/99 (50%). In 2001, no seizures of cocaine were analysed in the NT. Compared to 1999/00, the purity of analysed cocaine seizures increased in VIC (18%), the ACT (10%), QLD (8%) and NSW (2%).

Availability: As in 2000, cocaine was considered easy or very easy to obtain in NSW, but was not widely commented on nor available in other jurisdictions. However, indications of increased availability were noted in several jurisdictions, including VIC, the ACT, SA, QLD and WA.

Use: As in 1998, 1999 and 2000, cocaine use remained predominantly an issue in NSW in 2001, where the reduced availability of heroin corresponded with a marked increase in the prevalence and particularly in the frequency of cocaine injecting among IDU. Many heroin users appeared to make a transition to primary cocaine injection in response to the heroin shortage. The prevalence of recent cocaine use increased between 2000 and 2001 in VIC, SA, WA, the ACT and TAS, although frequency of use remained sporadic. Notwithstanding the low frequency of use in these jurisdictions, 2001 is the first year in which the IDRS has documented early indicators of a potential increase in the availability and use of cocaine in other jurisdictions.

Table 3: Estimated price, purity and availability of cocaine by jurisdiction, 2000-2001

	Availability (2001)	Price ($) Gram *		Price ($) Cap *		Purity (%)	
		2001	2000	2001	2000	2001	2000
NSW	Very easy Stable	200	200	50	50	49	47
SA	Limited although easier than in 2000	200	300	50	-	61	-
VIC	Limited although easier than in 2000	225	250	100	80	65	47
ACT	Limited although easier than in 2000	165	170	50	-	36	26
WA	Limited although easier than in 2000	300	250	-	-	33	34
QLD	Limited although easier than in 2000	200	250	80	-	59	51
TAS	Very difficult	450	300	-	-	45	-
NT	Difficult Fluctuating	-	-	-	-	-	-

** Only in NSW were there a sufficient number of recent purchases of cocaine in both 2000 and 2001 to allow price comparisons to be considered without caution.*

Note: no seizures of cocaine were analysed for purity in the NT in 2000/01, or in SA, TAS or the NT in 1999/2000. Only a single seizure of cocaine was analysed for purity in TAS in 2000/01.

Cannabis

Price: The price of an ounce of cannabis varied from $200 (SA) to $320 (NSW, QLD). Compared to 2000, the price of an ounce of cannabis declined by $20-$25 in SA, VIC, the ACT, WA and TAS. Increases of $20 per ounce were reported in NSW and QLD, whereas the price remained stable in the NT. As in 2000, gram prices varied between $20 and $25 in most jurisdictions; in SA, however, bags of 2 grams were sold for $25; in TAS, 1.5 grams cost $25; and in WA $25 buys somewhere between 1 and 2 grams of cannabis.

Potency: The THC content of cannabis is not routinely tested in Australia; thus, the estimates of the potency of cannabis in Table 4 represent ratings made by IDU and key informants. As in all previous years of the IDRS, the potency of cannabis was considered high or medium to high, and stable, in all jurisdictions.

Availability: Cannabis was considered very easy to obtain in all jurisdictions, and availability was perceived to have remained stable.

Use: In all jurisdictions, hydroponically grown cannabis heads remained the most commonly used form of cannabis, and waterpipes ('bongs') remained the preferred means of administration. Although hydroponic cannabis dominated, high proportions of IDU also reported the recent use of outdoor crop cannabis (69%) and hashish (33%).

Table 4: Estimated price, potency and availability of cannabis by jurisdiction, 2000-2001

	Availability (2001)	Price ($) Gram		Price ($) Ounce		Potency	
		2001	2000	2001	2000	2001	2000
NSW	Very easy	20	20	320	300	High	High
SA	Very easy	25*	25*	200	220	High	High
VIC	Very easy	20	20	250	280	High	Med-High
ACT	Very easy	20	25	280	300	High	Med-High
WA	Very easy	25*	25*	250	300	High	High
QLD	Very easy	25	25	320	300	High	High
TAS	Very easy	25#	25	280	300	High	High
NT	Very easy	25	25	300	300	Med-High	High

** approximately 2 grams*
 # approximately 1.5 grams

1.0 INTRODUCTION

The Illicit Drug Reporting System (IDRS) is an ongoing illicit drug monitoring system funded by the Commonwealth Department of Health and Ageing (CDHA) that has been conducted on an annual basis in NSW since 1996, and in all states and territories of Australia since 1999. The purpose of the IDRS is to provide a coordinated approach to monitoring the use of illicit drugs, in particular, heroin, amphetamine, cocaine and cannabis. It is intended to serve as a strategic early warning system, identifying emerging trends of local and national concern in various illicit drug markets. The study is designed to be sensitive to such trends, providing data in a timely fashion, rather than to describe the phenomena in detail, such that it will provide direction for more detailed data collection on specific issues.

The complete IDRS methodology consists of three components: (1) interviews with injecting drug users (IDU); (2) interviews with key informants (KIS) who, through the nature of their work, have regular contact with illicit drug users; and (3) an examination of extant data sources related to illicit drug use, such as National Household Survey data on drug use, opioid overdose data, purity of seizures of illicit drugs made by law enforcement agencies, and so on. These three data sources are triangulated against each other in order to minimise the biases and weaknesses inherent in each one, and to ensure that only valid emerging trends are documented.

The complete IDRS was trialled in NSW in 1996, and was expanded to include SA and VIC in 1997. In 1999, the complete IDRS was conducted in the same three jurisdictions, while a 'core' IDRS, consisting of key informant interviews and examination of extant indicator data sources, was conducted in all other jurisdictions. In 2000 and 2001, with additional funding provided by the National Drug Law Enforcement Research Fund (NDLERF), the complete IDRS was conducted in all jurisdictions. This is a significant advance on previous years, as 2000 and 2001 represent the first two years in which standardised, directly comparable data relating to illicit drug use and markets have been collected in all jurisdictions. The *Australian Drug Trends 2001* report presents a summary of these findings.

Detailed reports describing drug trends in each jurisdiction can be obtained from the National Drug and Alcohol Research Centre (NDARC) (TAS: Bruno & McLean, 2002; NSW: Darke, Kaye & Topp, 2002; VIC: Fry & Miller, 2002; WA: Hargreaves & Lenton, 2002; SA: Longo, Humeniuk, Christie & Ali, 2002; QLD: Rose & Najman, 2002; NT: O'Reilly, 2002; ACT: Williams & Rushforth, 2002). Also available are reports presenting the results of a two year trial of the feasibility of adding ecstasy and other party drugs to the list of drug classes monitored by the IDRS (Longo, Humeniuk, Christie, Topp & Ali, 2002; Topp, Breen, Kaye & Darke, 2002). Results pertaining to ecstasy are not presented in the present report.

1.1 Study aims

The primary aims of the 2001 national IDRS were:

1. to document the price, purity, availability and patterns of use of the four main illicit drug classes in this country, namely heroin, methamphetamine, cocaine and cannabis; and

2. to detect and document emerging drug trends of national significance that require further and more detailed investigation.

2.0 METHOD

The 2001 IDRS monitored trends in illicit drug markets using the methodology successfully trialled by Hando and colleagues in NSW, VIC and SA (Hando *et al.*, 1997b; 1998). In 2001, in all Australian jurisdictions except the NT (which was not funded to conduct the IDRS but in which data were still collected), drug trends were monitored through a triangulation of three data sources. In each jurisdiction, data collection consisted of:

1. a quantitative survey of IDU;

2. a qualitative survey of KIS who worked with illicit drug users; and

3. analyses of extant indicator data sources related to illicit drug use.

These data were used to provide an indication of emerging trends in drug use and illicit drug markets. Comparisons of data sources were used to determine convergent validity of illicit drug trends. The data sources were also used in a supplementary fashion, in which qualitative KIS' reports served to validate and contextualise the quantitative information obtained through the IDU survey and/or trends suggested by indicator data.

Comparable methodology was followed in each site for individual components of the IDRS. Any differences in methodology have been highlighted. Further information on methodology in each jurisdiction in 2001 can be found in the jurisdictional *Drug Trends 2001* reports, available from NDARC.

2.1 Survey of Injecting Drug Users (IDU)

Nine hundred and sixty one IDU were interviewed in all jurisdictions as they are considered a sentinel group for detecting illicit drug trends. Research has continually demonstrated that patterns of extensive polydrug use are the norm among Australian IDU (e.g., McKetin *et al.*, 2000). As such, they can be considered a 'sentinel' population of drug users who provide an excellent window into drug use patterns and trends.

The 951 IDU who participated in the 2001 IDRS were interviewed between June and August, 2001. The sample sizes in each jurisdiction were: NSW, *n*=163; VIC, *n*=151; NT, *n*=135; QLD, *n*=102; ACT, *n*=100; SA, *n*=100; TAS, *n*=100; and WA, *n*=100. Entry criteria for the IDU interview component were having injected at least monthly during the six months preceding the interview, and residence for at least 12 months in the particular capital city in which interviews were conducted. Subjects were recruited using multiple methods, including advertisements in street press,

newspapers, treatment agencies, needle and syringe programs (NSPs) and peer referral. Subjects were interviewed in locations convenient to them, such as NSPs, treatment agencies, public parks, coffee shops and hotels.

The interview schedule was administered to subjects by research staff in all jurisdictions. Interviews took approximately 30 to 5o minutes to complete. Subjects in all jurisdictions except the ACT and the NT were reimbursed up to $30 for their time and expenses incurred. In the ACT, the fee was provided instead to the agencies that assisted with subject recruitment; agency management subsequently redistributed some proportion of the fee to subjects, either in cash or in kind. In the NT, due to a lack of funding, subjects were reimbursed $15 for their time and expenses. Subjects were assured that all information they provided would remain confidential and anonymous. Informed consent to participate was obtained prior to the interview being conducted.

The structured interview schedule administered to subjects was similar to that administered in the 2000 IDRS (Topp *et al*., 2001), which was itself based on previous NDARC studies of heroin and amphetamine users (Darke *et al.*, 1992; 1994). In 2001, amendments were made to the questionnaire in an attempt to collect more detailed information on the various forms of methamphetamine currently available in Australia; on the use of opioids other than heroin, particularly morphine and methadone; and on the forms of drug classes used most often by IDU in the preceding six months. The interview schedule contained both open- and close-ended questions and consisted of seven main sections: demographics; drug use history; the price, purity and availability of illicit drugs; criminal activity; risk-taking behaviour; general health status; and general trends. Data analyses were conducted using SPSS for Windows, Version 10.0 (SPSS Inc., 1999).

2.2 Survey of Key Informants (KIS)

A total of 309 key informants (KIS) were interviewed, mostly by telephone, between May and September 2001. In the NT, due to a lack of funding, KIS were posted a modified version of the questionnaire and were asked to post it to the researcher following self-completion; and all KIS in TAS and a majority of KIS in QLD were interviewed in person. Criteria for entry to the KI component of the IDRS were at least weekly contact with illicit drug users in the six months preceding the interview, or contact with at least 10 illicit drug users during the same timeframe. Some law enforcement personnel were interviewed who did not have regular contact with illicit drug users, but they were able to supply information about drug importation, manufacture and/or dealing.

Participants in the KI component had either participated in the IDRS in previous years, or were referred by colleagues, supervisors or former KIS. They were screened for eligibility prior to the interview. The purpose and methodology of the IDRS were described to KIS prior to the interview, and they were given the opportunity to obtain more information about the study before deciding whether to participate.

The number of KIS recruited in each jurisdiction were: NSW, *n*=77; QLD, *n*=56; TAS, *n*=40; SA, *n*=38; VIC, *n*=34; WA, *n*=30; ACT, *n*=23; and NT, *n*=11. KIS included

GPs, pharmacists, drug dealers, staff of drug treatment agencies, NSPs, research organisations, user groups, law enforcement agencies, youth services, counselling services, ambulance services and general health agencies.

Unlike the IDRS in 1999 (McKetin et al., 2000) and 2000 (Topp *et al*., 2001), when heroin was the drug most frequently discussed by KIS in most jurisdictions, methamphetamine was the drug most frequently discussed in 2001, including 63% of KIS in WA, 50% of KIS in SA, 45% of KIS in QLD, and 39% of KIS in NSW. Heroin was the drug most frequently commented on by KIS in the ACT (61% of KIS) and in VIC (47%). In the NT the drug most frequently discussed was morphine (39%); and in TAS, equal proportions of KIS discussed methamphetamine (33%) and opioids (regular, flexible use of both morphine and methadone; 33%). Substantial minorities of KIS in all jurisdictions discussed cannabis (6%-22%), and small numbers of KIS in some jurisdictions discussed cocaine (n=16), morphine (n=10), ecstasy (n=4), inhalants (n=3) and benzodiazepines (n=1).

KI interviews took an average of 45 minutes to administer (range 30-60 minutes). The KI interview schedule was very similar to the KI interview administered in the 2000 IDRS (Topp *et al.*, 2001), which was itself based on previous NDARC research for the World Health Organization (Hando & Flaherty, 1993; Hando *et al.*, 1997a). The interview schedule was a semi-structured instrument that included sections on demographic characteristics of illicit drug users; drug use patterns; the price, purity and availability of drugs; criminal activity; and health issues.

The majority of questions in the interview schedule were open-ended, and the interviewers took notes during the interview that were later transcribed fully into a variety of data analysis formats that differed across jurisdictions. In an attempt to standardise data collection across jurisdictions and across time, while still retaining the primarily qualitative format, check boxes were added to the end of many questions to ensure that the necessary basic information was obtained. Once the interviews were fully transcribed, content analysis (Kellehear, 1993) was used to identify recurring themes within drug classes.

2.3 Other indicators

A number of secondary data sources were examined to supplement and validate data collected from the IDU and KI surveys. These included data from survey, health, research and law enforcement sources. The pilot study for the IDRS (Hando *et al*., 1997a) recommended that such data should:

- be available at least annually;
- include 50 or more cases;
- provide brief details relating to illicit drug use;
- be collected in the main study site (i.e., in the city or jurisdiction of the study); and

- include details on the four main illicit drugs under investigation.

Data sources which fulfilled at least four of these criteria and were available for most or all jurisdictions, included:

- drug purity data provided by the Australian Bureau of Criminal Intelligence (ABCI). This included the average purity of seizures of illicit drugs made by state and federal law enforcement agencies that were analysed in Australia during the 2000/01 financial year. Data relating to the purity of seizures made between January and June 2000 in SA by either state or federal law enforcement agencies was not available from ABCI, and local police seizure data from VIC was also unavailable;

- data from the 1998 National Drug Strategy (NDS) Household Survey (Australian Institute of Health and Welfare [AIHW], 1999; Darke et al., 2000);

- data provided by the Family Drug Support Telephone information and support service, a national 24-hour telephone support service run by the Damien Trimingham Foundation, that provides support, assistance and counselling to the family members of drug users;

- drug injection prevalence data and HIV/HCV seroprevalence data from the 2000 Australian needle and syringe program (NSP) Survey, provided by the National Centre for HIV Epidemiology and Clinical Research (NCHECR, 2001);

- opioid-related overdose fatalities from the Australian Bureau of Statistics (ABS);

- data on the number and weight of seizures of illicit drugs made at the border by the Australian Customs Service for the financial year 2000/01; and

- data from the 2001 Clients of Treatment Service Agencies (COTSA) one day census (Shand & Mattick, 2001).

2.4 Data analysis

Given that, prior to 2000, the complete IDRS was not conducted in all jurisdictions, data was not directly comparable across all of Australia. The year 2001 is the second time that such directly comparable data, drawn from standardised, quantitative IDU interviews conducted in all jurisdictions, has been available, and comparable results can therefore be presented not only across jurisdictions but also over time.

Therefore, in the present report, the IDU survey results are used as the primary basis on which to estimate drug trends. IDU surveys provided the most comparable information on drug price, availability and use patterns in all jurisdictions and over time. However, the purity of drug seizures data provided by ABCI is the most

accurate and objective indicator of drug purity, and is presented in this report. Gender differences among IDU are noted where significant.

3.0 RESULTS

3.1 An Overview of the IDU Survey

3.1.1 Demographic characteristics of the IDU sample

A total of 951 IDU were interviewed for the 2001 IDRS, a minimum of 100 in each jurisdiction. The mean age of the overall sample of 951 IDU was 29.9 years (SD 8.5; range 14-58), and 67% were male (Table 5). Female subjects were, on average, significantly younger than males (28.3 versus 30.7 years, t_{958}=-4.1, p<.01). The majority (95%) of the sample spoke English as their main language at home, and 14% identified as being of Indigenous Australian descent. Fifty six percent of the sample currently resided in their own house or flat (including renting), and 15% lived in their parents' or family home. Nine percent of the sample was homeless, and 8% described their current accommodation as a boarding house or hostel.

The mean number of school years completed by the overall sample was 10.3 (SD 1.8; range 0-14), and 45% had completed courses after school, with 36% possessing a trade or technical qualification, and 9% having completed a university degree or college course. Three quarters (73%) of the sample were unemployed, 10% were employed on a part-time or casual basis, 6% were employed full-time, 4% were students, 4% were engaged in home duties, and 3% were currently active in the sex industry.

Sixty four percent of the sample was not currently in any form of drug treatment, whereas 27% were in methadone maintenance treatment and 4% were undergoing drug counselling. In the preceding six months, 50% of the sample had been in some form of drug treatment; with 29% having been in methadone maintenance, 13% in counselling, 9% in detoxification, 2% in buprenorphine maintenance or detoxification, and 2% in naltrexone treatment.

Forty three percent of the sample had previously been imprisoned; males were significantly more likely to report previous imprisonment (52% of males versus 29% of females; χ^2_2=47.8; p<.001). The demographic characteristics of this sample are strikingly similar to those of the 910 IDU recruited in all jurisdictions for the 2000 IDRS (Table 5), as well as the 410 IDU recruited in NSW, SA and VIC for the 1999 IDRS (McKetin *et al.*, 2000).

Table 5: Demographic characteristics of IDU recruited in 2000 and 2001

Variable	2001 sample (N=951)	2000 sample (N=910)
Mean age in years (SD; range)	30.1 (8.4; 14-58)	28.8 (8.0; 14-64)
% male	67	68
% English speaking background	95	94
% ATSI	14	11
Mean years school education (SD; range)	10.3 (1.8; 0-14)	10.4 (1.7; 0-16)
% completed trade/technical qualification	37	31
% completed university/college	9	12
% unemployed	73	68
% students	4	5
% incarceration history	44	43
% currently in drug treatment	36	34

Consistent with the findings of the 2000 IDRS (Topp *et al.,* 2001), the sample recruited in NSW was less well educated, and more likely to have a history of imprisonment, than IDU recruited in other jurisdictions (Table 6). The NSW sample contained the highest proportions of subjects who identified as being of Indigenous Australian descent, followed by SA and the NT. As in 2000, the NT sample contained the oldest subjects and the highest proportion of males. Also consistent with 2000, the TAS and QLD samples were younger, on average, than IDU recruited in other jurisdictions, and the TAS sample contained a higher proportion of students than the other samples. The WA sample contained the lowest proportion of subjects who were currently unemployed. Higher proportions of the TAS, ACT and VIC samples were currently in treatment than in WA, the NT and NSW, although it should be noted that the IDRS deliberately recruits a majority of non-treatment subjects in order to access a 'sentinel' population of IDU who are current and active participants in illicit drug markets. Sample characteristics within jurisdictions were broadly consistent between 2000 and 2001; the greatest variability over time was in terms of proportions with post-school qualifications and current treatment status (Table 6).

Table 6: Demographic characteristics of IDU by jurisdiction, 2001
(Comparable data from 2000 presented in brackets)

Variable	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA N=100	WA N=100	NT N=135	QLD N=102
Mean age (years)	32.3 (29.6)	30.0 (29.2)	28.5 (28.3)	26.0 (26.3)	31.9 (30.5)	28.1 (28.3)	34.3 (31.5)	27.7 (26.4)
% male	72 (64)	68 (78)	57 (65)	75 (73)	61 (58)	63 (71)	77 (78)	61 (61)
% English speaking background	91 (79)	94 (96)	92 (93)	100 (100)	97 (96)	96 (99)	99 (99)	98 (100)
% ATSI	29 (25)	8 (8)	9 (6)	10 (10)	20 (8)	6 (5)	10 (11)	12 (8)
School education (yrs)	9.5 (9.3)	10.6 (10.7)	10.7 (10.9)	10.0 (10.2)	10.2 (10.6)	11.5 (10.5)	10.0 (10.3)	10.5 (10.6)
% trade/technical qualification	39 (26)	28 (47)	34 (43)	22 (28)	49 (27)	35 (21)	40 (25)	44 (28)
% university/college	5 (2)	4 (20)	11 (7)	1 (6)	4 (22)	16 (9)	15 (12)	11 (19)
% unemployed	80 (77)	75 (78)	79 (73)	68 (65)	77 (47)	61 (65)	71 (81)	65 (55)
% students	0 (2)	8 (4)	1 (2)	12 (16)	4 (4)	5 (6)	2 (0)	7 (5)
% prison history	55 (61)	34 (48)	46 (43)	32 (34)	50 (44)	34 (34)	51 (46)	38 (31)
% currently in drug treatment	29 (37)	49 (36)	44 (36)	52 (35)	34 (44)	24 (20)	24 (34)	36 (27)
Months in current treatment *	15	19	8	17	12	11	4	3
% drug treatment in last 6 mos *	58	60	41	65	56	61	35	49

* Data not collected in 2000

3.1.2 Drug use history and current drug use

3.1.2.1 First drug injected

Table 7 presents key drug use data by jurisdiction. The mean age of first injection of the overall sample was 18.8 years (SD 5.4; range 8-48). Previous IDRS results (McKetin *et al.*, 2000; Topp *et al.*, 2001) and other recent studies (Lynskey & Hall, 1998) have identified a decrease in the age of initial injecting among new recruits to injecting. To investigate this trend further, the overall sample of 951 IDU was divided into two groups: those aged ≤ 25 years at the time of interview (*n*=342), and those aged > 25 years (*n*=618). The younger group were, on average, 4.1 years younger at the time of initial injection than the older group (16.1 versus 20.2 years; t_{943}=-14.5; *p*<.001). Overall, there was a significant correlation between age at the time of interview and age of initial injecting (*r*=.41; *p*<.001), indicating that successive cohorts of IDU in Australia are initiating injecting at an earlier age. This correlation was significant in all jurisdictions, with the correlation coefficients ranging from *r*=.32 (NSW, ACT, WA) to *r*=.58 (TAS).

Of the overall sample, 52% reported that amphetamine was the first drug injected, whereas 39% had first injected heroin and 5% morphine. In NSW and VIC, a majority of subjects (64% and 54%, respectively) reported heroin to be the first drug they had injected, and in the ACT, close to half (48%) of the sample had first injected heroin. In all other jurisdictions, between 50% and 72% of the samples had first injected amphetamine (Table 7).

Across jurisdictions, different relationships were observed between subjects' age at the time of interview and the drug they were most likely to have first injected. In recent years, young people initiating injecting drug use in NSW and VIC have been more likely to do so with heroin than with amphetamine. In NSW, compared to subjects who were > 25, a significantly higher proportion of subjects aged ≤ 25 years had initiated injecting with heroin (81% versus 60% of those > 25; χ^2_1=4.5; *p*<.05), and a significantly higher proportion of older subjects had initiated injecting with amphetamine (36% versus 16% of those aged ≤ 25 years; χ^2_1=4.6; *p*<.05). A similar yet stronger relationship was observed in VIC, wherein a significantly higher proportion of subjects aged ≤ 25 years had initiated injecting with heroin (71% versus 41% of those > 25; χ^2_1=14.1; *p*<.001), and a significantly higher proportion of older subjects had initiated injecting with amphetamine (55% versus 21%; χ^2_1=17.9; *p*<.001).

Although younger IDU in NSW and VIC were significantly more likely to have commenced injecting with heroin, this pattern was not observed in the other jurisdictions, nor in the overall sample. Indeed, in WA, younger users were significantly *less* likely than older users to have commenced injecting with heroin (7% of those ≤ 25 years versus 33% of those > 25; χ^2_1=9.6; *p*<.01), and a similar relationship was observed in the NT (12% of those ≤ 25 years versus 42% of those > 25; χ^2_1=7.8; *p*<.01). In both WA and the NT, significantly higher proportions of younger subjects had commenced injecting with amphetamine (WA: 84% of those ≤ 25 years versus 61% of those > 25; χ^2_1=5.9; *p*<.05; NT: 76% of those ≤ 25 years

versus 44% of those > 25; χ^2_1=8.5; p<.01). In TAS, younger subjects were significantly more likely than older subjects to have commenced injecting with morphine (37% of those ≤ 25 years versus 13% of those > 25; χ^2_1=7.7; p<.001).

Table 7: Drug use patterns among IDU by jurisdiction, 2001

Variable	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA N=100	WA N=100	NT N=135	QLD N=102
Mean age first injection (yrs)	19.9	18.3	18.1	17.5	19.3	17.8	20.1	18.1
First drug injected (%)								
Heroin	64	48	54	5	33	22	36	29
Amphetamine	33	46	41	62	61	72	50	69
Morphine	1	2	1	25	2	2	11	2
Cocaine	2	2	1	0	0	1	1	0
Methadone	0	1	1	4	0	0	0	0
Drug of choice (%)								
Heroin	62	57	61	33	43	34	39	42
Methamphetamine	5	19	16	30	37	42	26	39
Morphine	0	0	1	12	3	0	22	0
Cocaine	29	1	2	1	6	5	2	0
Methadone	0	0	0	16	1	0	1	1
Last drug injected (%)								
Heroin	57	49	62	0	32	20	7	34
Methamphetamine	3	42	30	38	50	74	31	60
Morphine	0	1	1	23	11	2	57	1
Cocaine	36	0	1	1	2	2	0	0
Methadone	1	4	0	31	4	1	3	3
Injected most often last month (%)								
Heroin	58	48	61	1	38	24	5	36
Methamphetamine	4	41	32	35	43	74	27	57
Morphine	0	2	1	20	11	1	65	1
Cocaine	34	0	1	1	2	0	0	0
	0	5	0	39	2	0	2	3

Methadone								
Injection frequency last month (%)								
Not in last month	0	3	2	0	4	0	4	7
Weekly or less often	6	33	21	9	23	22	16	28
Between weekly and daily	23	28	33	62	38	48	22	23
Daily	12	8	15	17	14	15	12	9
Tw0-three times daily	26	15	23	8	18	12	41	16
More than three times a day	33	13	5	4	3	3	7	17

3.1.2.2 Drug of choice

Heroin was most frequently described as the drug of choice among the overall sample, nominated by 48%, followed by methamphetamine (25%), cocaine (7%), cannabis (6%), morphine (5%), and methadone (2%). As in 2000, there were differences in the drug of choice among IDU in different jurisdictions (Table 7). More than half of IDU in NSW, ACT and VIC nominated heroin as their drug of choice and less than one in five in these jurisdictions nominated methamphetamine. WA had the highest proportion of IDU who nominated methamphetamine as their drug of choice (42%), followed by QLD (39%) and SA (37%). TAS was the only jurisdiction in which a significant minority of the sample (16%) nominated methadone as their drug of choice. Morphine was the preferred drug of substantial minorities of IDU in the NT (22%) and in TAS (12%), but not elsewhere. Consistent with 2000, NSW remained the only jurisdiction where cocaine was the drug of choice of a significant proportion (29%) of IDU.

3.1.2.3 Last drug injected

Thirty eight percent of the overall IDU sample reported that methamphetamine was the last drug injected, followed by heroin (35%), morphine (12%), cocaine (7%) and methadone (5%). Substantial majorities of IDU in WA (74%) and QLD (60%), and half (50%) of IDU in SA, had last injected methamphetamine (Table 7). NSW recorded the lowest levels of recent methamphetamine injection (5%). Heroin was the drug last injected by half or more of subjects in NSW, VIC and the ACT, and by one third of subjects in QLD and SA. In the NT, the drug most likely to have last been injected was morphine, followed by methamphetamine. Consistent with 2000, NSW remained the only jurisdiction where a substantial proportion (39%) of IDU had last injected cocaine, and TAS remained the only jurisdiction where a substantial proportion (31%) of IDU had last injected methadone.

3.1.2.4 Drug injected most often

Similar patterns were found in terms of the drug injected most often in the preceding month as for last drug injected: heroin dominated in NSW, VIC and, to a lesser extent in the ACT, and had been injected most often by substantial minorities of IDU in SA, QLD and WA (Table 8). As in 2000, NSW was the only jurisdiction in which a significant proportion (34%) of IDU had injected cocaine most often in the last month, and a far higher proportion of the TAS sample (39%) than those in other jurisdictions had injected methadone most often in the preceding month. In the NT, morphine was most likely to have been injected most often in the preceding month, and morphine had also been injected most often by significant minorities of IDU in both TAS and SA. Between 27% and 74% of IDU in all jurisdictions except NSW (5%) had injected methamphetamine most often in the preceding month (Table 7).

3.1.2.5 Frequency of injection

Overall, 21% of the 2001 sample had injected less than weekly in the month preceding the interview, and 33% had injected between weekly and daily. Almost half the sample (46%) had injected at least once per day in the preceding month:

13% percent had injected once per day, and 21% two to three times per day. Twelve percent of the overall sample reported injecting more than three times per day. Consistent with 2000, frequency of injection was clearly highest in NSW (Table 7), where 71% of subjects had injected at least daily in the preceding month, and one-third had injected more than three times per day. This is likely to reflect, in part, the higher incidence of cocaine use in this jurisdiction. Apart from NSW, the NT, VIC and QLD also contained substantial proportions of subjects who reported injecting two or more times per day. The lowest injection frequency was reported in the ACT, TAS, SA and WA, in which at least two-thirds of subjects had injected less than daily in the preceding month.

3.1.2.6 Differences between 2000 and 2001

Compared to 2000, there was a substantial decrease in the proportion of the overall sample that nominated heroin as their preferred drug (2001: 48% versus 2000: 63%), and a concomitant increase in the proportions nominating methamphetamine (25%, up from 16% in 2000) and cocaine (7%, up from 3% in 2000). Decreases between 2000 and 2001 in the proportions of IDU samples nominating heroin as their drug of choice were recorded in all jurisdictions except TAS and the NT (Table 8), those in which heroin has traditionally been difficult to obtain and where the 2001 shortage in the supply of heroin has had less impact. It appears that in response to the shortage of supply of heroin throughout 2001 (see Section 3.2.3), some IDU have switched their drugs of choice to stimulant drugs, methamphetamine in most jurisdictions and cocaine in NSW.

This phenomenon is reflected in the behaviour of IDU: in 2001, methamphetamine was the drug last injected by 38% of the overall IDU sample, followed by heroin (35%), morphine (12%), cocaine (7%) and methadone (5%). A markedly different behavioural pattern was recorded in 2000, when heroin was the last drug injected by 58% of the overall IDU sample, followed by methamphetamine (23%), methadone (5%), other opiates (5%) and cocaine (2%). Similarly, in 2001, the drug injected most often in the preceding month among the overall sample was methamphetamine (37%), closely followed by heroin (36%), morphine (13%), cocaine (6%) and methadone (6%). This is quite different to 2000, when the drug injected most often in the preceding month by the overall sample was heroin (60%), followed by amphetamine (22%), other opiates (5%), methadone (5%) and cocaine (2%).

3.1.2.7 Naltrexone

In 2001, 3% of the overall IDU sample had used naltrexone in the preceding six months, with low rates reported in every jurisdiction: WA (7%), VIC (6%), SA (3%), NSW (3%), QLD (3%), the NT (1%), the ACT (1%), and TAS (0%). In most cases the source of supply of naltrexone was legitimate, i.e., a doctor's prescription. In 2000, WA recorded the highest rates of recent naltrexone use (18%), but there was little difference across time in the other jurisdictions.

Table 8: Drug use patterns among IDU by jurisdiction, 2000-2001

Variable	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Drug of choice (%)								
Heroin	81	76	78	36	56	57	44	62
2000	62	57	61	33	43	34	39	42
2001	5	8	5	20	30	23	21	24
Methamphetamine	5	19	16	30	37	42	26	39
2000	10	0	1	1	4	3	2	2
2001	29	1	2	1	6	5	2	0
Cocaine	0	0	0	23	3	2	18	2
2000	0	0	1	12	3	0	22	0
2001	1	1	1	11	1	0	1	0
Morphine	0	0	0	16	1	0	1	1
2000								
2001								
Methadone								
2000								
2001								
Last drug injected (%)								
Heroin	78	81	92	4	56	54	9	62
2000	57	49	62	0	32	20	7	34
2001	5	16	6	31	34	41	30	34
Methamphetamine	3	42	30	38	50	74	31	60
2000	8	1	0	1	0	0	0	0
2001	36	0	1	1	2	2	0	0
Cocaine	1	1	1	35	3	3	56	0
2000	0	1	1	23	11	2	57	1
2001	4	1	0	24	8	0	4	3
Morphine	1	4	0	31	4	1	3	3

2000								
2001								
Methadone								
2000								
2001								

Table 8: Drug use patterns among IDU by jurisdiction, 2000-2001 (continued)

Variable	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Injected most often last month (%)								
Heroin	79	79	93	2	59	54	14	65
2000	58	48	61	1	38	24	5	36
2001	5	12	6	29	34	44	28	31
Methamphetamine	4	41	32	35	43	74	27	57
2000	9	1	0	0	0	0	1	0
2001	34	0	1	1	2	0	0	0
Cocaine								
2000	1	2	0	39	3	1	53	0
2001	0	2	1	20	11	1	65	1
Morphine	4	0	0	29	5	0	3	2
2000	0	5	0	39	2	0	2	3
2001								
Methadone								
2000								
2001								

The IDU sample had used an average of 9.8 (SD 2.4; range 1-14) drugs in their lives, and 6.8 (SD 2.2; range 1-14) in the preceding six months. An average of 4.6 (SD 2.1; range 1-10) drugs had been injected by the sample over their lives, and 2.9 (SD 1.5; range 1-9) in the preceding six months. There was little difference in the extent of polydrug use across jurisdictions (Table 9).

Although the lifetime prevalence of use of most drugs remained stable between 2000 and 2001 (Tables 10 and 11), prevalence of recent (preceding six months) use of heroin, methamphetamine and cocaine were different in the two years. Compared to 2000, in 2001, there was a decrease in the prevalence of recent heroin use among the IDU samples from 79% to 67%, and concomitant increases in the prevalence of recent methamphetamine (64% to 76%) and cocaine (24% to 35%) use.

Table 9: Polydrug use history of IDU by Australian jurisdiction, 2001

Variable	NSW	ACT	VIC	TAS	SA	WA	NT	QLD

	N=163	N=100	N=151	N=100	N=100	N=100	N=135	N=102
Mean no. drugs ever used	9.5	9.7	10.2	10.6	10.0	9.9	8.9	9.9
Mean no. drugs used last 6 mos	6.6	7.2	7.2	7.1	6.5	6.7	6.3	7.0
Mean no. drugs ever injected	4.4	4.8	4.5	5.4	4.8	4.6	4.3	4.5
Mean no drugs injected last 6 mos	2.9	3.1	2.9	3.2	2.5	2.5	2.8	2.8

Table 10: Drug use history of the overall IDU sample (n=951), 2001

Drug Class	Ever used	Ever Injected	Injected last 6 mths	Ever smoked	Smoked last 6 mths	Ever snorted	Snorted last 6 mths	Ever Swallow	Swall. last 6 mths	Used last 6 mths	No. days used last 6 mths*
1. Heroin	89	88	66	46	9	21	3	17	5	67	60
2. Methadone	68	42	23					62	42	48	120
3. Other opiates	44	21	7	9	1	2	1	32	14	19	6
4. Morphine	67	63	40	3	<1	2	0	32	16	43	13
5. Amphetamines	93	91	75	20	8	60	15	50	18	76	30
6. Cocaine	67	53	29	14	4	38	11	11	4	35	7
7. Hallucinogens	76	23	4	5	2	2	<1	74	18	18	3
8. Ecstasy	59	32	18	3	1	9	4	53	30	35	3
9. Benzodiazepines	78	41	24	7	2	2	1	74	60	64	24
10. Alcohol	94	8	1					93	70	71	20
11. Cannabis	96									83	170
12. Anti-depressants	43									22	60
13. Inhalants	33									7	2
14. Tobacco	95									93	180

***** *median number of days used in last six months among those who had used the drug in this time*

Table 11: Drug use history of the overall IDU sample (n=910), 2000

Drug Class	Ever used	Ever Injected	Injected last 6 mths	Ever smoked	Smoked last 6 mths	Ever snorted	Snorted last 6 mths	Ever Swallow	Swall. last 6 mths	Used last 6 mths	No. days used last 6 mths*
1. Heroin	90	89	77	86	14	20	3	18	8	79	120
2. Methadone	66	40	22					58	37	44	90
3. Other opiates	58	44	28	12	3	2	1	43	25	37	12
4. Amphetamines	91	89	60	19	6	60	16	48	16	64	15
5. Cocaine	60	50	19	11	3	37	9	8	2	24	5
6. Hallucinogens	75	20	4	3	<1	1	<1	73	18	20	2
7. Ecstasy	55	27	11	2	1	7	3	53	21	23	3
8. Benzodiazepines	77	34	21	8	2	2	1	75	61	63	20
9. Alcohol	97	7	1					95	70	70	24
10. Cannabis	96									83	120
11. Anti-depressants	39									21	135
12. Inhalants	29									5	4
13. Tobacco	95									93	180

***** *median number of days used in last six months among those who had used the drug in this time*

Table 12: Forms of drugs used by IDU in the preceding six months by jurisdiction, 2001

Form of drug	NSW; N=163		ACT; N=100		VIC; N=151		TAS; N=100		SA; N=100		WA; N=100		NT; N=135		QLD; N=102	
	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most
Heroin (%)																
Powder	88	34	80	42	83	32	14	10	60	42	51	36	35	28	57	32
Rock	93	62	77	42	85	60	15	14	47	23	48	19	23	10	58	63
Methadone (%)																
Syrup, licit	34	34	44	44	37	35	60	55	32	24	21	20	15	13	29	26
Syrup, illicit	25	16	23	15	9	9	32	21	15	7	9	6	10	7	15	10
Physeptone, licit	0	0	3	0	3	0	2	1	3	0	5	0	8	6	4	1
Physeptone, illicit	1	<1	1	0	4	1	40	5	11	5	2	2	17	10	7	2
Morphine (%)																
Licit	3	3	5	3	8	7	2	1	14	9	7	4	42	30	5	5
Illicit	9	9	33	32	34	33	72	71	40	37	25	24	73	54	30	30
Amphetamines (%)																
Powder	43	28	63	22	74	54	45	16	47	10	87	27	63	51	67	21
Liquid	3	<1	16	1	7	<1	0	0	18	4	23	1	13	1	31	2
Crystalline	29	14	72	52	52	16	56	36	58	36	85	59	24	9	68	30
Base	23	8	36	4	32	10	52	30	59	31	56	3	18	7	38	5
Prescription, licit	2	0	7	2	3	<1	0	0	3	0	4	0	8	2	5	0
Prescription, illicit	4	<1	30	2	5	0	22	3	9	0	38	1	15	3	10	1

Table 12: Forms of drugs used by IDU in the preceding six months by jurisdiction, 2001 (continued)

Form of drug	NSW; N=163		ACT; N=100		VIC; N=151		TAS; N=100		SA; N=100		WA; N=100		NT; N=135		QLD; N=102	
	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most	Used	Used most
Cocaine (%)																
Powder	83	83	36	28	31	27	7	7	20	13	28	25	10	10	28	22
Crack	2	<1	18	8	7	3	2	1	5	3	10	5	4	2	12	8
Cannabis (%)																
Hydroponic	80	72	76	68	82	70	89	73	81	68	88	69	79	72	80	64
Naturally grown	48	12	74	16	70	14	70	18	72	15	80	21	60	8	75	21
Hashish	28	<1	29	0	31	2	26	1	36	2	33	0	30	2	46	1
Hash oil	7	0	19	0	11	0	6	0	28	1	16	0	21	<1	26	1
Benzodiazepines (%)																
Licit	39	29	50	43	67	57	42	40	39	36	36	35	39	33	41	31
Illicit	39	23	42	19	40	22	53	45	33	22	33	16	30	21	44	29
Anti-depressants (%)																
Licit	9	9	13	12	26	26	15	15	15	15	21	21	23	22	21	21
Illicit	<1	0	3	1	5	3	4	4	0	0	7	5	4	2	12	7
Other opiates (%)																
Licit	8	8	15	14	23	19	2	2	17	16	2	1	4	2	7	5
Illicit	6	6	11	7	12	10	18	18	11	10	5	5	3	2	15	13

3.1.2.8 Forms of drugs used in preceding six months

Table 12 depicts proportions of IDU samples in all jurisdictions that reported having used different forms of the main drug classes in the preceding six months in the columns headed 'used'. The columns headed 'used most' in Table 12 refer to the specific form of the drug class that IDU reported having used the most in the preceding six months. For example, whereas 88% of IDU in NSW reported using heroin powder in the preceding six months, only 34% said that this was the form of heroin that they had used the most in the preceding six months.

Generally, IDU in most jurisdictions were equally likely to report that they had used heroin 'rock' and heroin powder, although rates of use of both were relatively high in all jurisdictions except TAS and the NT. It remains unclear whether heroin rock is anything other than compressed powder. As in previous years, prevalence of recent heroin use was highest in NSW, VIC and the ACT. Although there has undoubtedly been a fundamental shift in the availability of heroin in Australia's illicit drug markets, the high prevalence of use in the preceding six months demonstrates that it has been possible to obtain the drug in that time.

Rates of recent use of almost every form of methamphetamine were highest in WA, with recent use of powder (87%) and crystalline (85%) methamphetamine particularly high. Rates of recent use of liquid methamphetamine were low in NSW, VIC and TAS, but were higher in QLD (31%) and WA (23%). The recent use of base methamphetamine, a damp oily powder with a brown or yellow tinge that is difficult to dissolve in preparation for injection, was most common in SA, WA and TAS; however, few IDU reported that this was the form of methamphetamine they had used most in the preceding six months.

Despite increases in methamphetamine use in 2001 compared to 2000, NSW continued to record the lowest rates of use relative to other Australian jurisdictions, probably because cocaine is the stimulant of choice and freely available to many IDU in Sydney. As in previous years, recent use of cocaine was most common in NSW, although, compared to 2000, increases in prevalence were recorded in most jurisdictions. Significant minorities of IDU in some jurisdictions reported the recent use of crack cocaine, although it remains unclear as to whether these IDU referred to real crack. Real crack cocaine is only bioavailable when smoked, and only half of those who reported that they had used crack in the preceding six months reported smoking as a route of administration. Further investigation is required before confident assertions regarding the availability of crack in Australia can be made.

As in all previous years of the IDRS, rates of cannabis smoking among IDU were high, and hydroponic cannabis continued to dominate the market. However, rates of recent use of outdoor crop cannabis were also high, ranging from 48% in NSW to 80% in WA, and significant minorities of IDU in all jurisdictions reported that outdoor crop cannabis was the form of cannabis they had used most in the preceding six months. Key informant reports suggest that outdoor crop cannabis is preferred by some smokers, particularly older smokers and those attempting to cut back on their use, because it is perceived as less potent than hydroponically grown cannabis. Hashish had been used in the preceding six months by substantial proportions of IDU in all jurisdictions, ranging from 26% in TAS to 46% in QLD, although very few

reported that hashish was the form of cannabis they had used most in that time. Rates of recent use of hash oil varied markedly, ranging from 6% in TAS and 7% in NSW to 28% in SA and 26% in QLD, although, again, very few IDU reported that hash oil was the form of cannabis they had used the most in the preceding six months.

3.1.2.9 Pharmaceuticals obtained lictly and illicitly

Table 12 draws a distinction between pharmaceuticals (such as methadone, morphine and anti-depressants) that were obtained *licitly* versus those that were obtained *illicitly. Licit* obtainment of pharmaceuticals was defined as pharmaceuticals obtained through the user's own prescription. Clearly, this definition does not take account of 'doctor shopping' practices, however, it does exclude any other method of obtainment of pharmaceuticals including those bought on the street, or drugs prescribed to a friend or partner. Methods such as these were defined as *illicit* obtainment. Thus, for the first time, the 2001 IDRS results provide some indication of the extent of black market trade in pharmaceutical products.

Rates of recent licit prescription amphetamine use were low across the country, ranging from 0% in TAS to 8% in the NT. However, there were marked differences in the rates of recent use of prescription amphetamine obtained illicitly, with low rates reported in NSW and VIC, but high rates reported in WA, the ACT and TAS. Despite the high rates of recent use in these jurisdictions, very few IDU reported that the main form of amphetamine they had used in the preceding six months was prescription amphetamine, obtained either licitly or illicitly.

In all jurisdictions, higher proportions of IDU had recently used methadone syrup obtained licitly than had used methadone syrup obtained illicitly. Rates of illicitly obtained methadone syrup use ranged from 9% (WA) to 32% (TAS), and reflected the rates of use of methadone obtained licitly, which were lowest in the NT and WA and highest in TAS. Almost all of those who had obtained methadone licitly in the preceding six months reported that this was the main form of methadone they had used in that time. Low rates of the recent use of physeptone tablets obtained licitly were recorded in all jurisdictions, but substantial minorities of IDU reported the recent use of illicitly obtained physeptone in TAS (40%), the NT (17%) and SA (11%).

Substantial rates of the recent use of morphine obtained licitly were recorded only in the NT (42%) and in SA (14%); in all other jurisdictions, less than 10% of IDU reported recent use of licit morphine. However, high rates of recent use of morphine obtained illicitly were recorded in every jurisdiction except NSW, ranging from 25% in WA to 72% in TAS and 73% in the NT. Virtually all IDU who reported recent use of illicit morphine also reported that this was the form of morphine they had used most in the preceding six months except in the NT.

The rates of recent use of other opiates obtained licitly, such as pethidine and codeine, ranged from 2% in TAS to 23% in VIC, and most of those able to obtain other opiates licitly reported that these were the main form of other opiates they had used. Rates of the recent use of other opiates obtained illicitly were highest in TAS (18%) and QLD (15%), and lowest in WA (5%) and the NT (3%). Again, most of

those who had used illicitly obtained other opiates reported that these were the main form of other opiates they had used.

Between one third and one half of IDU in all jurisdictions reported the use of benzodiazepines obtained illicitly in the preceding six months, ranging from 30% in the NT to 53% in TAS. There were discrepancies between the rates of recent illicit benzodiazepine use and the main source of benzodiazepines that had been used most in the preceding six months (i.e., licit versus illicit), suggesting that many of those who obtain benzodiazepines illicitly also obtain them licitly. Rates of recent use of benzodiazepines obtained licitly were uniformly high, but particularly in VIC (67%).

The rates of recent use of licitly obtained anti-depressants ranged from 9% in NSW to 26% in VIC, and almost all of those who had obtained licit anti-depressants reported that this was the main form of anti-depressants they had used in that time. Rates of recent use of illicitly obtained anti-depressants were highest in QLD (12%) and WA (7%), but were below 5% in all other jurisdictions, suggesting that these drugs have less abuse potential than do other pharmaceuticals.

3.1.2.10 Drugs used the day before the interview

There were marked differences between jurisdictions in the drugs that had been used by IDU on the day preceding the interview (Table 13). Small minorities of IDU (ranging from 3% in NSW to 16% in QLD) had not used any drugs on the day preceding the interview. Consistent with the results of 2000, rates of heroin use on the day preceding the interview were highest in NSW, VIC and the ACT, but rates in every jurisdiction had decreased compared to 2000. Rates of methamphetamine use were highest in WA and lowest in NSW and the ACT. Methadone use was much higher on the day preceding the interview in TAS than in all other jurisdictions, and TAS and VIC recorded higher rates of benzodiazepine use on the day before the interview than in all other jurisdictions, where rates of use were approximately equivalent (12%-16%). The use of morphine was common in the NT, and was also high relative to other jurisdictions in TAS and SA. Rates of other opiate use were uniformly low (0%-4%). Rates of cannabis use were higher in TAS, and lower in NSW, the NT and QLD, than in other jurisdictions. Only NSW recorded appreciable rates of cocaine use on the day preceding the interview.

3.1.2.11 Differences between 2000 and 2001

There were also differences between 2000 and 2001 in the proportions of the overall samples that reported use of various drugs on the day before the interview. Comparison of Tables 13 and 14 shows that the rates of use of no drugs, cannabis, benzodiazepines, methadone and alcohol, were all similar in 2000 and 2001. However, compared to the rates of use reported in 2000, the rate of use of heroin by the overall sample on the day preceding the 2001 interview was markedly lower (49% of the 2000 sample versus 27% of the 2001 sample), whereas the rates of use of methamphetamine (13% versus 23%) and cocaine (3% versus 10%) both increased (Tables 13 and 14). Morphine was not assessed separately in 2000, but

was included in the category 'other opiates', so data are not directly comparable between the two years for this class of drugs.

Table 13: Drugs used the day before the interview by jurisdiction, 2001

Drug (%)	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA N=100	WA N=100	NT N=135	QLD N=102
No drugs	9	3	11	15	7	7	12	6	16
Heroin	27	62	35	40	0	21	14	6	21
Methamphetamine	23	7	18	21	24	32	40	25	27
Cocaine	10	48	0	1	1	2	4	1	3
Cannabis	53	43	61	56	76	52	58	45	45
Benzodiazepines	18	12	15	33	33	16	14	13	10
Other opiates	2	1	2	3	0	4	0	2	0
Methadone	23	23	29	20	46	24	17	13	16
Alcohol	22	14	20	29	13	23	31	23	26
Morphine	13	0	0	3	17	15	3	62	0

Table 14: Drugs used the day before the interview, by jurisdiction, 2000

Drug (%)	Total sample N=910	NSW N=150	ACT N=100	VIC N=152	TAS N=100	SA N=107	WA N=100	NT N=100	QLD N=101
No drugs	7	2	8	7	10	5	8	6	13
Heroin	49	78	54	78	4	45	40	11	51
Methamphetamine	13	3	10	4	12	21	20	22	22
Cocaine	3	18	1	0	1	0	0	1	0
Cannabis	50	39	52	50	62	58	54	50	38
Benzodiazepines	18	17	15	25	23	19	26	5	9
Other opiates	5	0	0	5	22	5	7	62	1
Methadone	19	26	22	13	35	24	9	9	13
Alcohol	23	15	19	21	17	37	31	22	23

3.2 Heroin

Table 15 displays the price, purity and availability of heroin in 2001 by jurisdiction. At least half of IDU in all jurisdictions except TAS and the NT provided comment on some aspect of heroin (NSW 94%; VIC 91%; ACT 82%; QLD, 69%; SA 57%; WA 51%; NT 38%; TAS 20%). Comparable figures from 2000 are presented in Table 16.

Table 15: Price, purity and availability of heroin by jurisdiction, 2001

	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA * N=100	WA * N=100	NT N=135	QLD N=102
Price ($)									
per gram	-	320	485	450	325	350	750	550	500
per cap	-	50	50	50	50	50	50	100	50
Price changes									
(% who commented)									
Don't know	18	1	5	2	15	45	51	33	3
Decreased	5	9	2	5	5	1	2	0	7
Stable	24	23	17	23	60	29	7	45	27
Increased	43	54	65	55	10	21	36	14	46
Fluctuated	11	12	11	15	10	4	4	8	17
Average purity (%)	44	51	40	46	-	45	49	42	39
Availability									
(% who commented)									
Don't know	16	1	5	3	0	46	49	14	6
Very easy	28	46	23	36	5	24	8	8	31
Easy	32	37	50	41	35	15	16	16	43
Difficult	18	13	21	17	45	11	21	32	13
Very difficult	6	3	1	2	15	4	6	30	7
Availability changes									
(% who commented)									
Don't know	18	2	4	2	5	47	51	30	6
Easier	12	16	14	14	10	6	33	8	17
Stable	29	32	35	25	55	17	10	50	40
More difficult	30	37	37	33	30	20	3	4	29
Fluctuates	12	12	11	26	0	10	3	8	9

Place usually score									
Street dealer	21	38	15	31	10	4	2	25	19
Dealer's home	18	22	25	18	10	7	17	15	20
Mobile dealer	30	31	43	38	25	32	15	10	33
Friend	11	7	10	9	30	14	10	15	16

Note: no seizures of heroin were analysed for purity in TAS in 2000/01
** In SA and WA, reported proportions are of the total sample*

Table 16: Price, purity and availability of heroin by jurisdiction, 2000

	Total sample N=910	**NSW N=150**	**ACT N=100**	**VIC N=152**	**TAS N=100**	**SA N=107**	**WA N=100**	**NT N=100**	**QLD N=101**
Price ($)									
per gram	-	220	300	300	375	310	450	600	350
per cap	-	25	50	50	50	50	50	50	50
Price changes									
(% sample)									
Don't know	30	7	21	3	72	32	25	74	25
Decreased	20	41	45	18	4	8	14	0	18
Stable	40	47	20	61	16	46	58	10	52
Increased	5	2	7	10	4	0	1	8	4
Fluctuated	6	4	7	8	4	15	2	8	2
Average purity (%)	53	62	54	54	75	48	53	-	51
Availability									
(% sample)									
Don't know	26	7	12	3	68	30	20	67	18
Very easy	53	85	78	86	6	25	62	5	51
Easy	16	7	9	10	10	42	17	10	24
Difficult	4	1	1	1	15	3	0	9	6
Very difficult	2	0	0	1	1	0	1	9	2

Availability changes									
(% sample)		7	17	5	69	32	23	75	22
Don't know	29	12	11	5	4	10	16	3	21
Easier	10	73	52	75	21	41	55	11	49
Stable	50	7	12	11	6	1	1	8	9
More difficult	7	1	8	5	0	16	2	3	0
Fluctuates	4								
Place usually score									
Street dealer	21	27	37	45	4	8	8	6	21
Dealer's home	15	29	10	18	12	12	15	10	9
Mobile dealer	25	35	16	23	1	37	38	8	38
Friend	9	1	13	7	14	9	10	12	9

Note: no seizures of heroin were analysed for purity in the NT in 1999/2000

3.2.1 Price

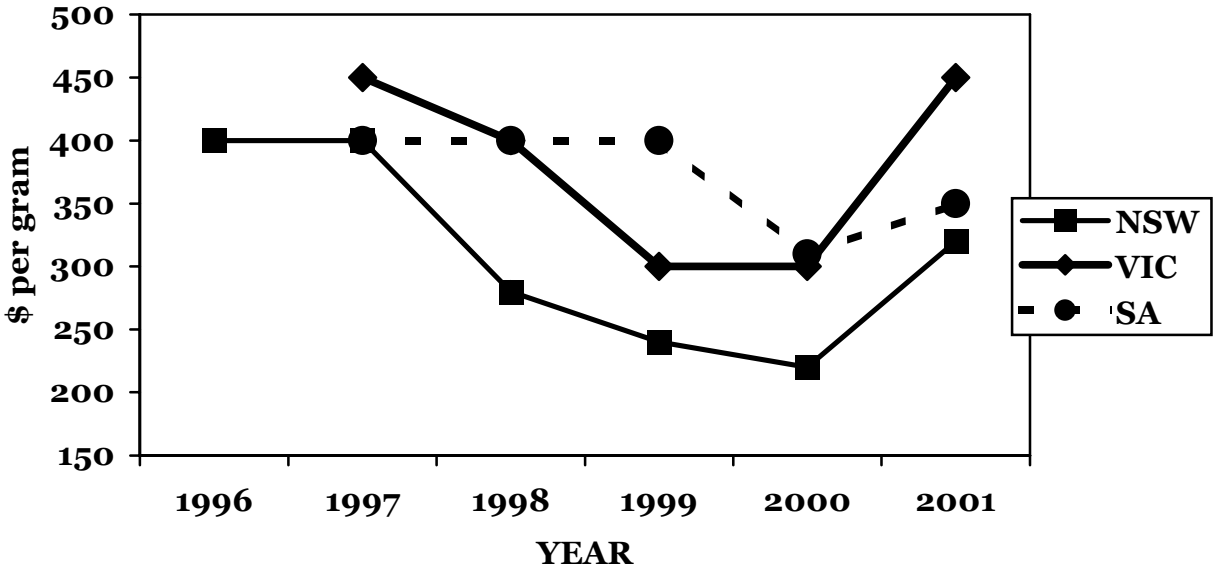
Prices in Tables 15 and 16 represent the median prices of purchases of heroin made by IDU in the six months preceding the interviews. Comparison of the two tables shows that the cost of heroin increased in 2001 across all Australian jurisdictions in which heroin has traditionally been freely available, i.e., excluding TAS and the NT. Gram prices reported in these jurisdictions are based on small numbers of purchases (n=2 in TAS; n=9 in the NT) and should be considered with caution.

In 2001, a gram of heroin remained cheapest in NSW ($320), although this represented a $100 increase compared to the average price reported by IDU in Sydney in 2000. In the other jurisdictions in which heroin has traditionally dominated illicit drug markets, more dramatic price increases were recorded; between 2000 and 2001, the cost of a gram of heroin increased by $150 in VIC and by $185 in the ACT. Across Australia, the magnitude of the increase in cost of a gram of heroin ranged from $40 in SA to $300 in WA.

The average cost of 'caps' of heroin (a small amount typically used for a single injection) doubled between 2000 and 2001 in NSW. The price of a cap also increased in the NT, although fewer purchases of caps were reported in the NT than in most other jurisdictions. In those jurisdictions where the cost of caps remained stable between 2000 and 2001 at $50, many IDU reported that smaller amounts of heroin were contained in a cap purchased in 2001 than was the case in 2000.

Figure 1 shows IDU estimates of the price of a gram of heroin in NSW, SA and VIC over the six years of operation of the IDRS. 2001 is the first year in which the IDRS has detected increases in the cost of heroin, following stable or decreased prices every year since 1996.

Figure 1: IDU estimates of heroin price by jurisdiction, 1996-2000



3.2.2 Purity

The average purity of analysed seizures of heroin made by law enforcement agencies in the 2000/01 financial year across jurisdictions is displayed in Table 15. No seizures of heroin were analysed for purity in TAS in 2000/01. The average purity of all heroin seizures analysed in Australia over the 2000/01 financial year was 44%. This represents the second consecutive year in which the average purity of heroin seizures has declined (Figure 2). However, it bears pointing out that a major limitation of purity data is that not all illicit drugs seized by Australia's law enforcement agencies are subjected to forensic analysis. In some instances, the seized drug will be analysed only in a contested court matter. The purity figures therefore relate to an unrepresentative sample of the illicit drugs available in Australia, and drawing meaningful conclusions from purity data remains difficult. Further, due to industrial action, figures for VIC represent analysed seizures made by the AFP only, and no seizure data (either SAPOL or AFP) are available from SA for the second six months of the financial year.

Figure 2: Average purity of heroin seizures analysed in Australia, 1996/97 - 2000/01

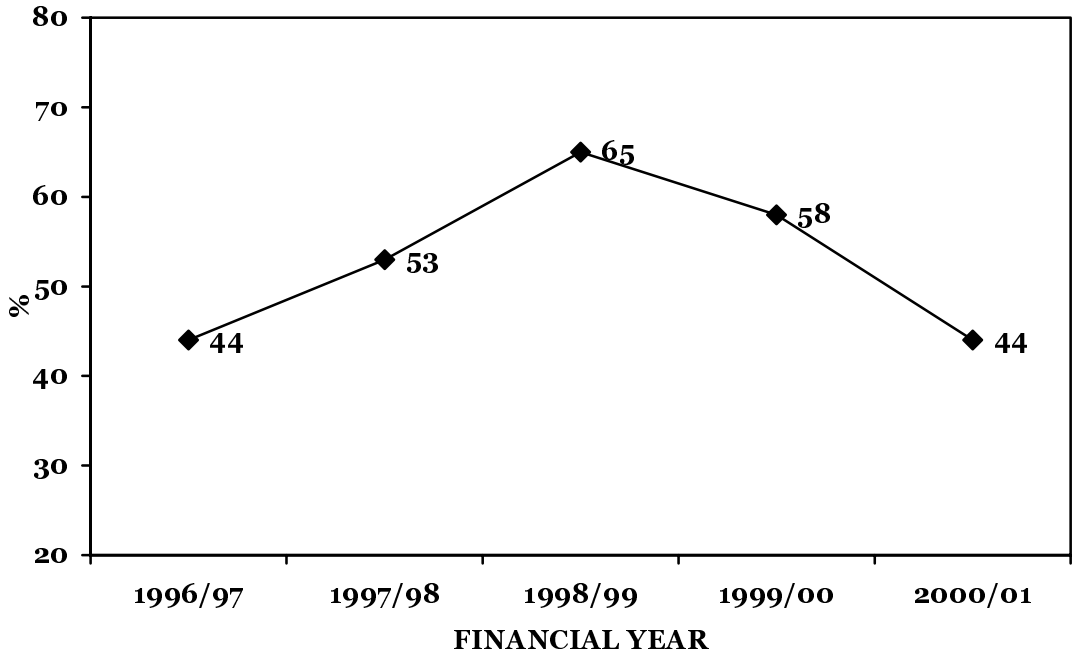
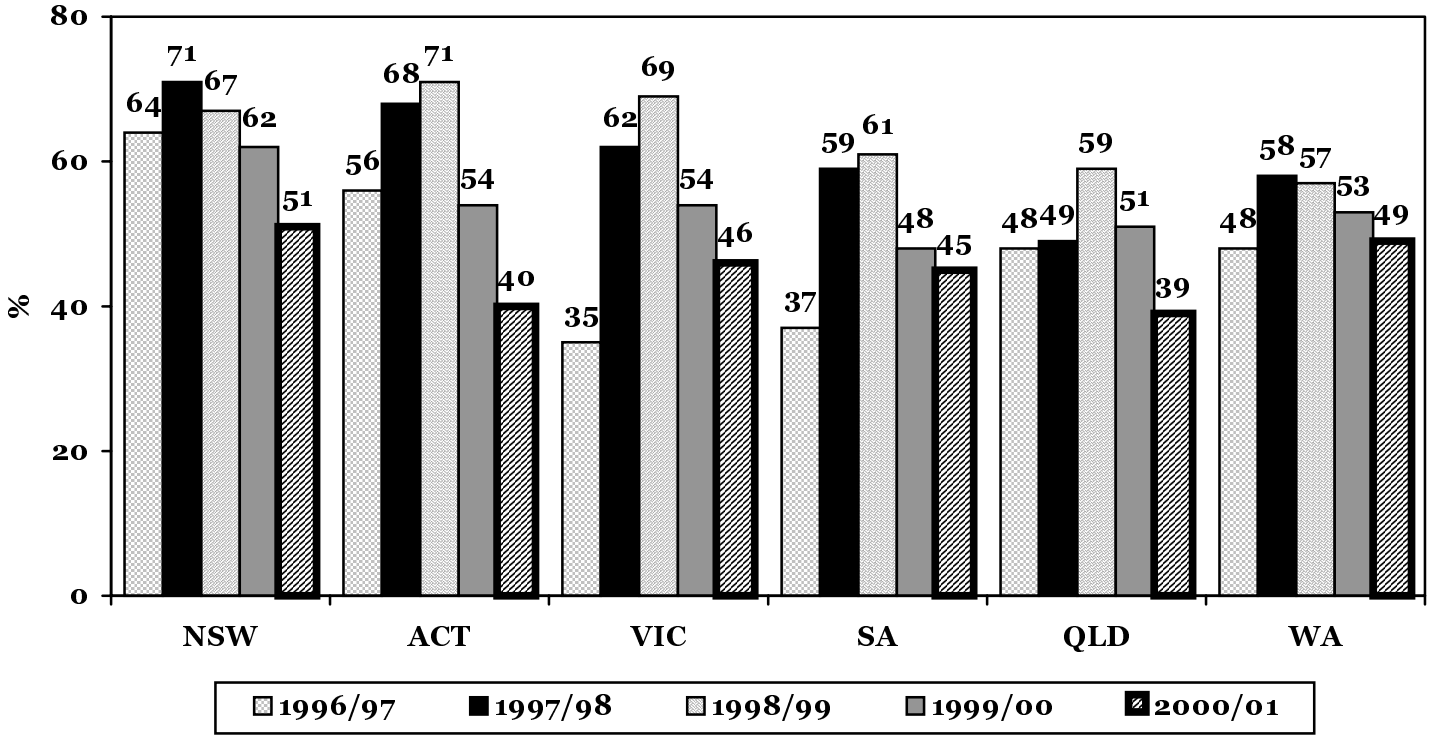


Figure 3 shows the average purity of analysed heroin seizures made by law enforcement agencies between 1996/97 and 2000/01, across jurisdictions. Despite the overall decreases in heroin purity, the average purity of analysed heroin seizures made in NSW remains higher in other jurisdictions, although the variability across jurisdictions is not wide, ranging in 2000/01 from an average of 39% in QLD to 51% in NSW. Even so, the pattern across the years for NSW seizures of heroin to generally be of higher purity is consistent with the intelligence collected by law enforcement agencies that Sydney remains the major Australian importation and distribution centre for heroin (ABCI, 2002).

Figure 3: Average purity of heroin seizures analysed in Australia by jurisdiction, 1996/97 - 2000/01



3.2.3 Availability

In 2001, a dramatic and sustained reduction in the availability of heroin was experienced in all Australian jurisdictions in which heroin had for some years been freely available. The shortage appears to have been first experienced significantly by participants in the heroin market around Christmas 2000, and to have been particularly marked between January and April 2001. Since that time, the availability of heroin has increased again, but has not returned to its pre-Christmas 2000 levels.

Comparison of Tables 15 and 16 indicate marked drops between 2000 and 2001 in the proportion of IDU that described heroin as 'very easy' to obtain in NSW (85% to 46%), the ACT (78% to 23%), VIC (86% to 36%) and QLD (51% to 31%). There were concomitant increases in the proportion of IDU that described heroin as 'difficult' or 'very difficult' to obtain in the same jurisdictions: NSW (1% to 16%), the ACT (1% to 22%), VIC (2% to 19%) and QLD (8% to 21%). Likewise, compared to 2000, in 2001 a far greater proportion of the overall sample reported that heroin had been more difficult to obtain in the preceding six months (7% versus 30%) or that availability had fluctuated (4% versus 12%). These response patterns were observed in the three major heroin markets (NSW, the ACT and VIC).

It should be noted, however, that the majority of IDU in those jurisdictions still considered that heroin had been 'very easy' or 'easy' to obtain in 2001, suggesting that the changes in the availability of heroin did not make it impossible to obtain

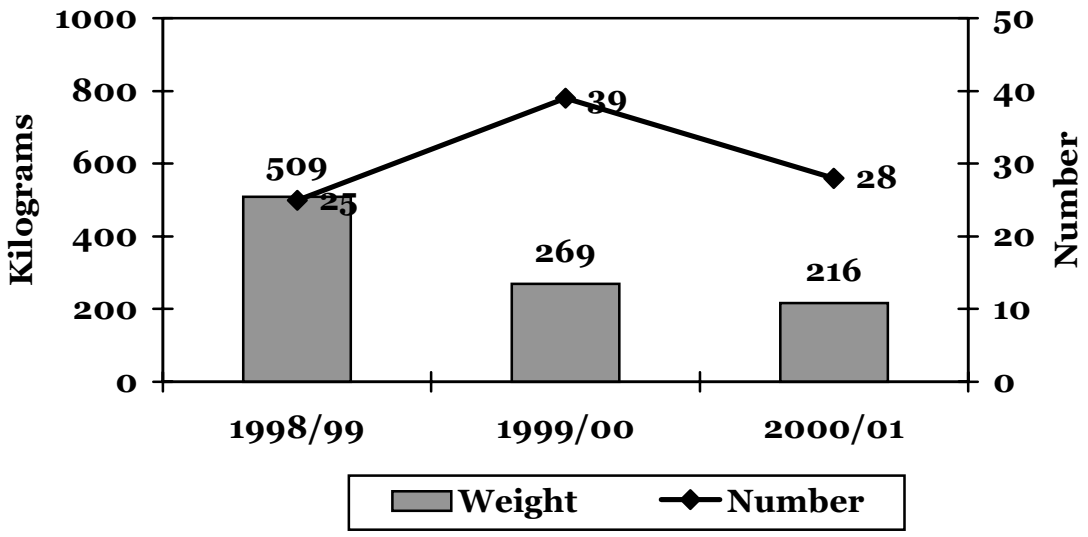
heroin, as the misnomer 'heroin drought' may seem to imply. Rather, the changes in availability were relative to the pre-Christmas 2000 period, when heroin was freely available.

Comparison of Tables 15 and 16 suggest little change between 2000 and 2001 in the usual purchase location for heroin of the overall sample. In particular, in both years, 21% of the sample reported that in the preceding six months, they had usually purchased heroin from a street dealer. This would appear to be in contrast to reports that the shortage of heroin has led to a reduction in the amount of activity in street-based drug markets. Indeed, in NSW, the proportion of the sample who usually purchased heroin from a street dealer increased from 27% in 2000 to 38% in 2001.

However, in other major heroin markets, declines were noted between 2000 and 2001 in the proportion of subjects who usually purchased heroin from a street dealer, and there were corresponding increases in the proportion who usually purchased in other locations. Such shifts in heroin purchase patterns from street-based transactions to transactions that are pre-arranged or even occur in private dwellings are likely to reflect a reliance on known, proven and stable contacts during times of scarcity of illicit drugs. That this pattern was not observed in NSW may reflect the fact that the shortage in the availability of heroin appears to have been less dramatic in that state than in Australia's other major heroin markets.

The number of heroin seizures at or near the Australian Customs border in 2000/01 was 28, a reduction from 39 detections in 1999/00, and the amount seized (215.6 kilograms) was also lower (Figure 4). Of the 28 detections at the border, 15 were in NSW, and these accounted for 98.5% of the weight of heroin detected. Even discounting the largest detection in 2000/01, that of 184.1 kilograms of heroin seized in NSW concealed in the structure of a sea cargo container (the third largest detection at Australia's border to date), the average weight per detection was higher in NSW than in any other state, at approximately 1.9 kilograms. Such figures strongly suggest that NSW remains the centre of heroin importation and distribution in Australia (ABCI, 2002).

Figure 4: Number and weight of detections of heroin made at the border by the Australian Customs Service, 1998/99 - 2000/01



The reduction in seizures during 2000/01 was most pronounced in the first half of 2001, and senior law enforcement officials consider that it is likely that onshore and offshore seizures and arrests in late 2000 reduced the flow of heroin from the Golden Triangle (from where the great majority of Australia's heroin has traditionally originated) to Australia (ABCI, 2002).

A number of significant seizures have involved joint investigations of both Australian and international officials (ABCI, 2002), such as the seizure in October 2000 by Fijian authorities of 357 kilograms of heroin in Suva after an investigation involving the Australian Federal Police, the Royal Fiji Police Force, the Royal Canadian Mounted Police, the New Zealand Police, the US Drug Enforcement Administration, the Department of Immigration and Multicultural and Indigenous Affairs and the National Crime Authority. The investigation demonstrated the range of offences in which heroin traffickers are involved, including people smuggling, and the counterfeiting of currency, travellers cheques and credit cards (ABCI, 2002).

Although the causes of the relative shortage of heroin sustained in Australia throughout 2001 are yet to be documented, it is likely that such multi-agency and international cooperation, which has led to seizures of large amounts of heroin and other drugs, has played an important role in reducing heroin availability. Australian law enforcement agencies believe that the small number of criminal groups capable of importing hundreds of kilogram shipments from the Golden Triangle to Australia have been disrupted by such interventions, and that, as a result, traffickers have turned their attention to other markets which pose fewer risks to distributors (ABCI, 2002).

3.2.4 Use

Tables 10 and 11 in Section 3.1.2 indicated that there was a decrease between 2000 and 2001 in the proportion of the overall IDU samples that reported use of heroin in the preceding six months, from 79% to 67%. The reduction was manifest in all jurisdictions except NSW (Table 17). The magnitude of these reductions varied from a decrease of 97% to 90% in VIC, to a decline from 80% to 55% in WA. Consistent with the 2000 results, in 2001, NSW, VIC and the ACT maintained high prevalence of recent heroin use among IDU samples, despite the significant reduction in the availability of heroin in these jurisdictions.

Prevalence of recent use of heroin is not a highly sensitive indicator of changes in availability, because even a single use occasion in the preceding six months will be counted. More dramatic manifestations of the reduced availability of heroin in the major heroin markets of NSW, VIC and the ACT can be seen in more sensitive indicators, such as the reduced frequency of heroin use among heroin users between 2000 and 2001. In every jurisdiction, the average number of days on which heroin had been used in the preceding six months declined substantially, with the most dramatic drops in frequency of use recorded in VIC and the ACT (Table 18). As with other market indicators, such as cost and prevalence of use, frequency of use data suggest that the NSW heroin market was less severely affected by the changes in heroin availability than the other two major heroin markets.

Table 17: Proportion of IDU samples across jurisdictions who reported use of heroin in preceding six months, 2000-2001

Jurisdiction	2000	2001
NSW	95	96
VIC	97	90
SA	75	65
QLD	82	63
WA	80	55
TAS	38	24
NT	56	36
ACT	92	83

Table 18: Median days of heroin use among IDU who had used heroin in the preceding six months across jurisdictions, 2000-2001.

Jurisdiction	2000	2001
NSW	180	158
VIC	176	65
SA	60	30
QLD	100	70
WA	90	30
TAS	5	3.5
NT	28	6
ACT	160	50

Another marked manifestation of the reduced availability of heroin can be seen in the reductions between 2000 and 2001 in every jurisdiction in the proportion of subjects who reported daily heroin use over the six months preceding the interview (Table 19), except in TAS, where no daily heroin use was reported in either 2000 or 2001. The drops were most dramatic in VIC (49% to 13%) and the ACT (46% to 15%), whereas NSW recorded only a moderate decline (49% to 41%).

Table 19: Proportion of IDU samples across all jurisdictions who reported daily heroin use, 2000-2001

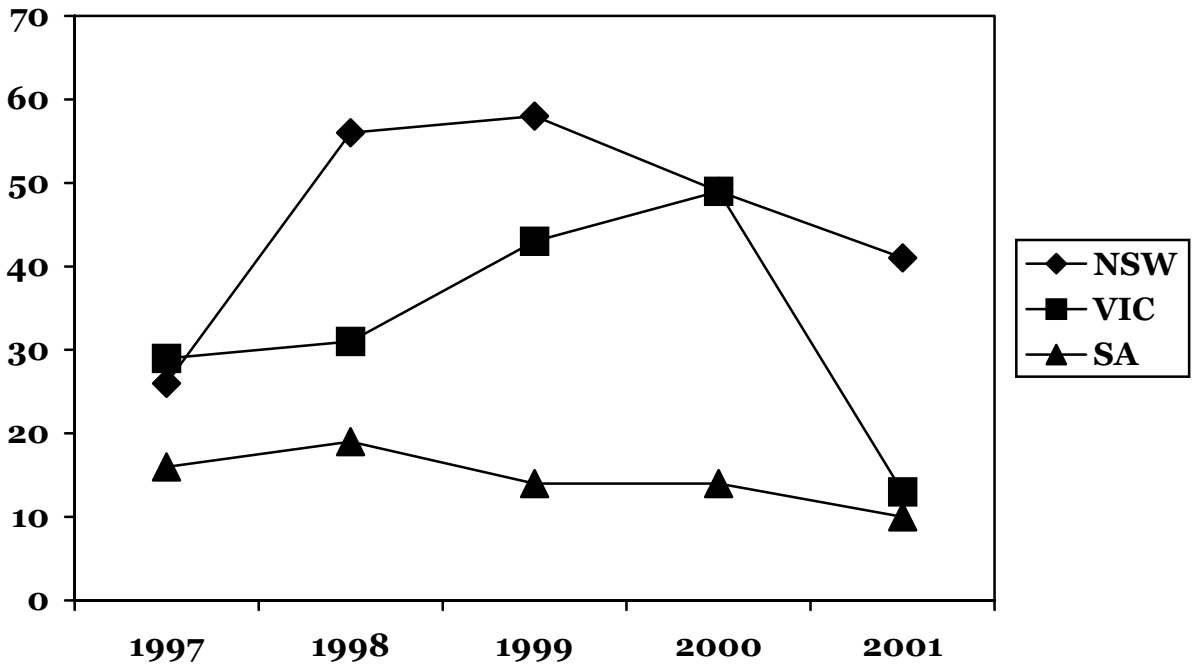
Jurisdiction	2000	2001
NSW	49%	41%
VIC	49%	13%
SA	14%	10%
QLD	27%	10%
WA	22%	2%
TAS	0%	0%
NT	10%	3%
ACT	46%	15%

Despite the uniform reductions, there remained wide variation across jurisdictions in the proportion of daily heroin users, ranging from 41% of the NSW sample to 0% of the TAS sample. Whereas in 2000 the proportion of daily heroin users was similar across the three major heroin markets (NSW, VIC and the ACT), in 2001, the reductions in VIC and the ACT were marked enough to bring VIC and the ACT into line with most others. The less dramatic decline in NSW is another indication that the reduction in the availability of heroin in that state has not been as great as in other major heroin markets.

Figure 5 indicates that 2001 was the second consecutive year in which there was a decrease in NSW in the proportion of subjects who reported daily heroin use, which followed a substantial increase between 1997 and 1998 and a stabilisation of rates

between 1998 and 1999. The marked decrease in VIC in 2001 followed two years in which the proportion of daily heroin users increased from 31% to 49%.

Figure 5: Proportion of IDU samples that reported daily heroin use by jurisdiction, 1997-2001



In sum, all behavioural indicators of heroin use are consistent with the reports of IDU and KIS that there was a marked and sustained reduction in the availability of heroin, which was manifest in decreased prevalence and frequency of use in all jurisdictions (Table 20). It appears that of the three markets in which heroin has traditionally predominated - NSW, VIC and the ACT - VIC was most strongly affected by the reduced availability of heroin, as indicated by increased price and decreased use.

Consistent with the reports of reduced heroin availability and the behavioural indicators of decreased heroin use was the 34% decrease between 1999/00 and 2000/01 in the number of heroin consumer and provider arrests Australia-wide, which fell from 11223 to 7396 (ABCI, 2002). All jurisdictions except the NT recorded a reduction in the number of persons arrested, with a 40% reduction in NSW (from 3782 arrests in 1999/00 to 2263 in 2000/01) representing the decrease of the greatest magnitude.

Also consistent with the reports of reduced heroin availability and the behavioural indicators of decreased heroin use was the decrease in the proportion of calls made to Family Drug Support, a national 24-hour telephone support service for the families of drugs users, that related to heroin (Figure 6).

It is likely that some former primary heroin users sought to cease their heroin use as a result of the reduction in availability of heroin, and that some of those did so by seeking to enter treatment. The Clients of Treatment Service Agencies (COTSA) Census, a one-day census of clients of treatment agencies (Shand & Mattick, 2001) shows that there was an increase between 1995 and 2001 in all jurisdictions except WA in the proportion of clients in treatment who reported opiates as the main drug problem (Figure 7).

Table 20: Heroin use patterns of IDU by jurisdiction, 2000-2001

	NSW	VIC	SA	QLD	WA	ACT	TAS	NT	ALL
*Drug of choice (%)**									
2000	81	78	56	62	57	78	36	44	63
2001	62	61	43	42	34	61	33	39	48
*Last injection (%)**									
2000	78	92	56	62	54	81	4	9	58
2001	57	62	34	34	20	49	0	7	35
*Used last 6 mths (%)**									
2000	96	97	75	85	80	92	43	56	78
2001	95	90	65	62	55	83	24	36	66
Days used (median)									
2000	180	176	60	100	90	160	5	28	120
2001	158	65	30	70	30	50	3.5	6	60
Daily users (%)									
2000	49	49	14	27	22	46	0	10	29
2001	41	13	10	10	2	15	0	3	13

* Heroin

Figure 6: Proportion of calls to Family Drug Support relating to heroin, 1999-2001

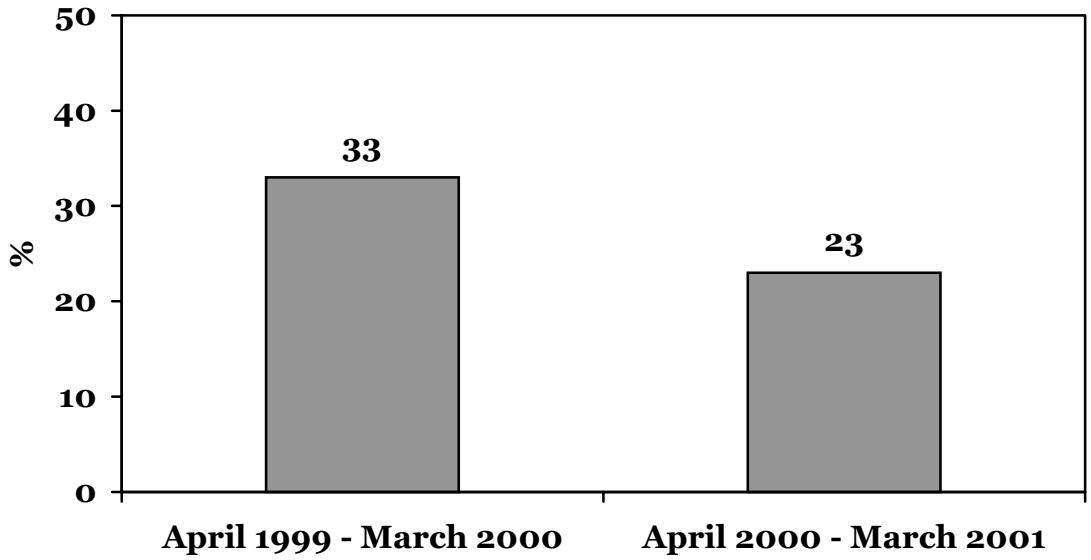
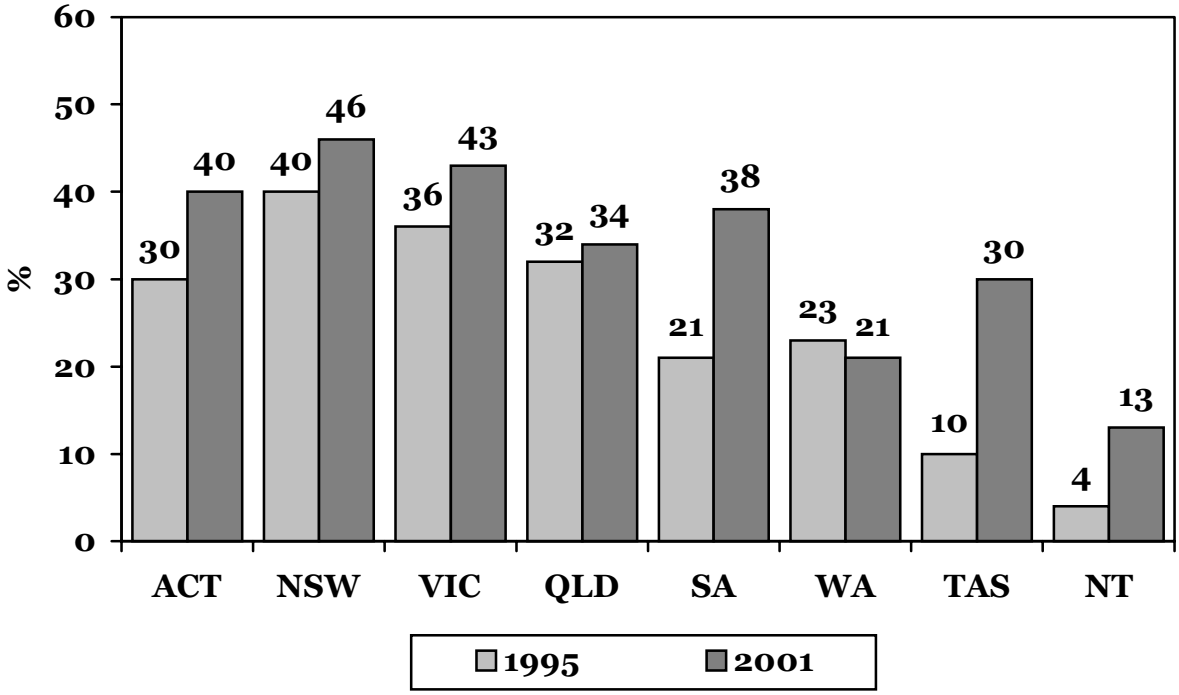


Figure 7: Proportion of clients of drug treatment services across jurisdictions reporting opiate use as the main drug problem, 1995 - 2001



3.2.5 Jurisdictional trends in heroin use

3.2.5.1 NSW

In NSW, the price of heroin increased in 2001 compared to 2000 ($320 v $220 per gram), the first increase in heroin prices recorded since the IDRS commenced in NSW in 1996. The increase was also detected in the price of caps ($50 v $25) and other purchase amounts. The purity of heroin seizures made in NSW by the AFP remained high (65%), whereas the purity of heroin seizures made by the NSW Police Service showed a moderate decline, from 58% in 1999/00 to 47% in 2000/01. There was a strong perception among IDU and KIS that there was a sustained reduction in the availability of heroin in Sydney during the first five months of 2001. The majority of IDU and KIS also reported that the availability of heroin had not returned to pre-Christmas 2000 levels. Although no longer a 'drought', heroin has remained substantially more difficult to obtain than in previous years. Consistent with the decline in the availability of heroin, behavioural indicators of heroin use among the NSW IDU sample all indicate a decrease in heroin use between 2000 and 2001. A worrisome effect of the reduced availability of heroin appears to have been for many heroin users to switch to cocaine injecting.

3.2.5.2 The ACT

In the ACT, most IDU and KIS indicated that the heroin shortage that began in late December was still continuing at the time of data collection (July 2001), resulting in an increase in the price of heroin, an increase in (recent) difficulties in obtaining heroin and a decrease in heroin purity. Purity was the lowest since it peaked at 73% in 1999. These trends were accompanied by a decrease in the number of heroin injectors, a decrease in the frequency of heroin injecting, a decrease in heroin overdoses and a decrease in injectors' contact with police. Concurrent with the development of the heroin shortage, increasing numbers of users substituted methamphetamine, and to a lesser extent, cocaine, for heroin. For many users, methamphetamine appears to have become a regular component of their injecting regime. For a second year in a row, KIS indicated that the number of Indigenous users had increased, but the study was unable to substantiate the community belief in up to 10% of members being addicted. The trend towards primary cannabis users progressing directly to heroin rather than via intervening steps, which was identified in the previous year's *ACT Drug Trends* report (Williams, Bryant & Hennessy, 2001), was not sustained, possibly due to the heroin shortage.

3.2.5.3 VIC

In VIC, the supply of heroin increased during the 1990s such that the drug became readily available at high purity levels in an emergent street-based drug-using scene. From November 2000 to March 2001, however, there was a substantial reduction in heroin supply in VIC. Following March 2001 some supply was re-established, but both purity and availability remained significantly lower than pre-2001 levels. It was within this context that the 2001 IDRS study was conducted between July and

August 2001. In comparison to the 2000 IDRS, there was a decrease in both availability and purity. The average price of heroin increased to $450 per gram, and although the price of a cap remained stable at $50, caps were reported to be smaller than previous IDRS studies and the purity was perceived as lower. Compared to 2000, there was a marked decrease in the frequency of heroin use among IDU, and in the quantity used. Intravenous injection remained the most common route of administration (91%). The principle form of heroin available was powder (60%), but 32% of IDU had used rock heroin in the preceding six months. In comparison to previous years, there was a decrease in street market activity and a corresponding increase in mobile dealing.

3.2.5.4 TAS

In TAS, the availability of heroin appears to have slowly increased over 1999 and 2000. However, its accessibility has remained relatively low, particularly in comparison to other jurisdictions, with a large proportion of local users finding heroin difficult to access despite it being a sought-after drug. Such a restricted availability of heroin locally has meant that the reduction in heroin availability sustained in mainland jurisdictions during 2001 has had a limited impact on the current accessibility of the drug locally. The majority of indicator data examined in TAS (Bruno & McLean, 2002) and patterns of use among those surveyed in the 2001 IDRS suggests that the availability of heroin in the state remained relatively low and stable, or slightly decreased, over the months prior to the survey. Both low-purity heroin powder and higher purity ‘rock’ form heroin appeared to be available in the state, and the price of these forms appeared to have remained stable over the preceding six months.

3.2.5.5 SA

In SA, IDU and KIS reported that although heroin was difficult to obtain in late 2000 and the first half of 2001, it appeared readily available as of mid-2001. Compared to 2000, the price of heroin increased, and the purity decreased. The use of heroin decreased compared with the previous IDRS survey. The availability and use of 'rock' heroin among IDU also decreased, although it remains unclear whether there are meaningful differences in the forms of heroin labelled 'rock' and 'powder' by IDU. Concomitant with the decrease in availability and purity of heroin, there was an increase in the use of other drugs among IDU in SA.

3.2.5.6 WA

In WA, there was a substantial reduction in the availability of heroin and a considerable increase in the price of the drug. A reduction in the proportion of IDU who had used heroin in the six months prior to interview and a reduction in the frequency of use among those who had used the drug were also noted. Compared to the results from 2000, fewer IDU identified heroin as their ‘drug of choice’ in 2001, although among those who did, the use of methadone and homebake (see Section 3.6.3.2) increased. It appears that as the availability of heroin began to decrease, some primary heroin users moved into methadone treatment while others

transferred to a range of different opioid-type drugs, particularly homebake. Although the average purity of analysed seizures of heroin has remained reasonably constant in recent years, there was a marked reduction in the number of such analyses made in 2000/01. IDU and KI perceptions were that heroin purity at the time of interview was low, and had decreased in the six months prior to interview. The reduced availability of heroin was associated with a substantial fall in the number of opioid overdoses observed in WA. Both the number of calls to the ambulance service for attendance at non-fatal narcotic overdoses and the number of suspected heroin-related fatalities have fallen. However, there was a reduction in both the number and rate per million population of fatal opioid-related fatalities observed among those aged 15-44 years in 2000. This reduction precedes the period of reduced heroin availability, and may represent a reduction in the use of heroin that pre-dates the effects of the shortage.

3.2.5.7 The NT

In the NT, heroin was the preferred opiate of IDU, but remained relatively rare, difficult to obtain, of low purity and expensive. Morphine was the most commonly used opiate and the drug most often last injected. The majority of IDU stated that the shortage of heroin reported in southern Australian markets had not affected the availability of heroin in Darwin, and, from 2000 to 2001, there was an increase in the proportion of IDU that described heroin price and availability as stable. The only notable shift from 2000 to 2001 was a higher proportion of IDU reporting that heroin purity was low. Heroin powder was the common form used in the preceding six months.

3.2.5.8 QLD

In QLD, the prevalence of recent use of heroin among IDU declined from 85% in 2000 to 62% in 2001. Males used heroin more frequently than females. The price of a gram of heroin increased from $350 in 2000 to $450 in 2001, while the price of a cap remained stable at $50. The average purity of heroin seizures analysed in QLD fell from 51% % in 2000 to 39% in 2001. The reduction in the supply of heroin may have commenced later in QLD than in other jurisdictions.

3.2.6 Summary of heroin trends

- Compared to 2000, the price of a gram of heroin increased in all jurisdictions except the NT and TAS, the two jurisdictions in which heroin has traditionally not been freely available. In the other jurisdictions, the price of a gram of heroin increased by between $40 (SA) and $300 (WA)

- Prices for a 'cap' doubled in NSW and the NT. Although cap prices remained stable in the other jurisdictions, both IDU and key informants commented that the amount of heroin contained in a cap was smaller and more variable in 2001 than in previous years

- Despite the increases in price, consistent with the results of the 2000 IDRS, heroin remained cheapest in NSW, and most expensive in the NT

- The average purity of analysed heroin seizures across Australia in 2000/01 was 44%. 2001 thus represents the second consecutive year in which the purity of heroin has decreased, falling from 53% in 1999/00 and 65% in 1998/99

- Compared to 2000, there were moderate declines in the purity of heroin seizures analysed in WA (4%), the ACT (14%), QLD (12%), NSW (11%), VIC (8%) and SA (3%). Consistent with previous years, NSW had the highest purity seizures

- There was a dramatic reduction in the availability of heroin in NSW, VIC, QLD, WA and the ACT, sustained throughout the first six months of 2001. The shortage in supply was less pronounced in jurisdictions in which heroin has not been the dominant injectable drug (SA, TAS), and was not reported in the NT, where heroin is normally scarce

- There were reported reductions in the prevalence and/or frequency of heroin use among IDU in NSW, VIC, SA, WA, QLD and the ACT. As in previous years, heroin use remained uncommon in TAS and the NT

- There were reductions in the proportion of IDU that nominated heroin as their drug of choice, the drug they had last injected, and the drug they had injected most often in the month preceding the interview

- Increases in the use of other drugs associated with the heroin shortage were reported in most jurisdictions, specifically: cocaine (NSW), injection of benzodiazepines (VIC, QLD), methamphetamine (SA, WA, QLD, NSW, the ACT), other opiates (NSW, SA), and 'homebake' (WA)

3.3 Methamphetamine

In the past, the IDRS used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. Throughout the 1980s, the form of illicit amphetamine most available in Australia was amphetamine sulfate (Chesher, 1993). Following the legislative controls introduced in the early 1990s on the distribution of the main precursor chemicals (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 sulfate) steadily increased, until methamphetamine clearly dominated the market (ABCI, 2001).

Chemically, amphetamine and methamphetamine are closely related. Both exert their effects indirectly by stimulating the release of peripheral and central monoamines (principally dopamine, noradrenaline, adrenaline and serotonin), and both have psychomotor, cardiovascular, anorexogenic and hyperthermic properties (Seiden *et al.*, 1993). Compared to amphetamine, methamphetamine has proportionally greater central stimulatory effects than peripheral circulatory actions (Chesher, 1993), and is a more potent form with stronger subjective effects.

In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs, known by terms such as ice, shabu, crystal meth, base and paste, which were identified by the 2000 IDRS as becoming increasingly available and more widely used in all jurisdictions, are also methamphetamine. Therefore, the term methamphetamine will now be used to refer to the drugs available in this class.

In response to the changes identified by the 2000 IDRS in Australia's illicit methamphetamine markets, the 2001 IDRS distinguished between the powder form of methamphetamine that has traditionally been available in Australia ('speed'), and the more potent forms (e.g., ice, shabu, crystal meth, base and paste). This is a change from the way methamphetamine was described in the 2000 IDRS report, when the overall class of amphetamines was assessed as a whole. With a routine surveillance system such as the IDRS, a balance must be drawn between collecting comparable data and responding to changes in dynamic illicit drug markets. The market distinguishes between 'speed' and more potent forms of methamphetamine, and it is therefore necessary that the IDRS also make some attempt to do so.

Table 21 displays the price, purity and availability of methamphetamine powder ('speed') in 2001 by jurisdiction. Close to two-thirds (60%) of the entire IDU sample provided comment on some aspect of the price, purity and availability of methamphetamine powder (WA 81%; NT 65%; VIC 59%; QLD 55%; ACT 40%; TAS 39%; NSW 31%; SA 27%). Table 22 displays the price and availability of the more potent forms of methamphetamine in 2001 by jurisdiction, commented on by 58% of the entire IDU sample (TAS 82%; WA 77%; QLD 73%; SA 69%; ACT 55%; VIC 49%; NT 32%; NSW 29%). An indication of the recent changes in Australia's illicit methamphetamine markets is provided by the fact that a higher proportion of IDU in SA, TAS, QLD and the ACT commented on the more potent forms of methamphetamine than commented on methamphetamine powder, and roughly equivalent proportions commented on the two forms in NSW and WA. Only in the NT and VIC did a higher proportion of IDU comment on powder methamphetamine,

the form traditionally available in Australia.

The purity of all seizures of methamphetamine, regardless of which form, is averaged by the Australian Bureau of Criminal Intelligence, the agency that provides purity figures. Thus, it is impossible to distinguish the average purity of methamphetamine powder from that of the more potent forms such as ice, base or shabu. Therefore, average methamphetamine purity figures for 2000/01 are displayed only in Table 21. Price, purity and availability figures from 2000 (when the entire class of 'amphetamines' was assessed as a whole) are presented in Table 23.

3.3.1 Price

3.3.1.1 Powder

Prices in Table 21 represent the median price of purchases of methamphetamine powder ('speed') made by IDU in the preceding six months. The price of a gram of methamphetamine powder ranged from $50 in SA to $250 in WA (Table 21). Comparison with Table 23 suggests that there were marked increases between 2000 and 2001 in the price of a gram of methamphetamine powder in the ACT, VIC, WA, and QLD, and that the price remained relatively stable in the other jurisdictions. However, the dynamic nature of Australia's methamphetamine markets, and the lack of consistency between reports of IDU and KIS alike as to exactly which form of methamphetamine is being used (Topp *et al*., in press), necessitate caution when drawing comparisons, both within jurisdictions over time, and between jurisdictions. Rather than, for example, the price of a gram of methamphetamine powder having risen by 300% in VIC between 2000 and 2001 (see Figure 8), it seems more likely that these changes reflect changes in the form of methamphetamine being sold, and a lack of clarity among users as to exactly what it is that they have purchased.

Intelligence collated by law enforcement agencies indicates that greater amounts of methamphetamine are being imported into Australia (ABCI, 2002), and that the majority of imported methamphetamine is in the form of a high purity crystal ('ice'). It is likely that that the majority of powder methamphetamine ('speed') available in Australia is locally manufactured. Increased importation of high purity methamphetamine may place pressure on domestic manufacturers to produce higher quality powder methamphetamine. If this were the case, the price of domestically produced methamphetamine powder may be expected to rise. However, this would not explain why the price appears to have risen dramatically in some jurisdictions but not others, nor is this hypothesis supported by the purity of analysed seizures of methamphetamine made by law enforcement agencies in 2000/01 (see Section 3.3.2), which remained relatively constant within jurisdictions between 1999/00 and 2000/01.

Table 21: Price, purity and availability of methamphetamine powder by jurisdiction, 2001

	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA * N=100	WA * N=100	NT N=135	QLD N=102
Price ($)									
per gram	-	100	250	200	70	50	250	80	180
Price changes									
(% who commented)									
Don't know	25	6	27	8	13	73	23	13	13
Decreased	7	4	5	16	13	2	4	3	9
Stable	53	76	56	60	56	22	50	65	60
Increased	9	4	7	8	8	2	19	11	11
Fluctuated	6	10	5	5	10	1	4	8	7
Average purity (%)	22	12	12	24	6	15	23	11	29
Availability									
(% who commented)									
Don't know	20	0	25	3	5	74	20	2	0
Very easy	43	52	33	43	51	13	63	43	59
Easy	30	26	38	49	33	11	11	45	32
Difficult	7	22	5	4	10	2	5	9	9
Very difficult	1	0	0	1	0	0	1	1	0
Availability changes									
(% who commented)									
Don't know	23	4	33	9	10	74	20	9	7
Easier	16	12	23	32	13	3	18	8	21
Stable	49	68	45	50	67	16	49	66	55
More difficult	8	14	0	5	5	7	9	10	11
Fluctuates	3	2	0	3	5	0	4	7	5

Place usually score									
Street dealer	12	22	8	15	28	2	4	19	6
Dealer's home	21	25	15	24	25	4	21	23	38
Mobile dealer	18	25	21	26	15	9	22	12	18
Friend	25	18	31	33	28	11	26	30	31

** In SA and WA, reported proportions are of the total sample*

Table 22: Price and availability of potent forms of methamphetamine by jurisdiction, 2001

	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA * N=100	WA * N=100	NT N=135	QLD N=102
Price ($)									
per 'point'	-	50	50	50	50	30	50	50	50
Price changes									
(% who commented)									
Don't know	22	8	40	23	7	33	28	19	12
Decreased	8	5	9	8	4	11	9	6	10
Stable	48	65	36	53	48	39	46	50	54
Increased	15	16	11	14	22	11	15	16	16
Fluctuated	7	5	4	3	20	6	2	9	8
Availability									
(% who commented)									
Don't know	13	0	16	10	1	31	23	6	1
Very easy	44	46	31	27	63	40	51	19	54
Easy	30	38	47	45	23	23	17	38	31
Difficult	11	11	6	12	10	6	7	31	12
Very difficult	3	5	0	7	2	0	2	6	1
Availability changes									
(% who commented)									
Don't know	18	8	36	10	5	32	24	9	5
Easier	19	14	24	35	20	10	26	9	7
Stable	49	60	31	37	60	45	42	44	72
More difficult	9	19	2	15	6	6	5	25	11
Fluctuates	6	0	7	4	10	7	3	13	5

Place usually score									
Street dealer	10	19	8	14	18	5	5	16	4
Dealer's home	25	24	18	25	29	22	18	31	36
Mobile dealer	23	41	18	30	18	22	22	9	26
Friend	26	8	33	22	28	21	29	28	32

Note: the purities of seizures of methamphetamine, regardless of which form, are averaged together by the ABCI, from whom purity figures are obtained. Thus, it is impossible to distinguish the average purity of methamphetamine powder from that of the more potent forms such as ice, base or shabu. Thus, average methamphetamine purity figures, displayed in Table 20, are not repeated here.

** In SA and WA, reported proportions are of the total sample*

Table 23: Price, purity and availability of methamphetamine by jurisdiction, 2000

	Total sample N=910	**NSW N=150**	**ACT N=100**	**VIC N=152**	**TAS N=100**	**SA N=107**	**WA N=100**	**NT N=100**	**QLD N=101**
Price ($)									
per gram	-	90	180	50	80	50	200	80	80
per 'point'	-	50	-	50	50	30	50	-	50
Price changes									
(% sample)									
Don't know	50	76	41	55	30	61	31	52	38
Decreased	6	2	10	2	7	0	7	1	22
Stable	31	17	30	38	43	26	39	31	32
Increased	8	3	10	5	14	5	14	10	3
Fluctuated	6	3	9	1	6	8	9	6	6
Average purity									
(%)	22	15	10	16	7	17	23	5	28

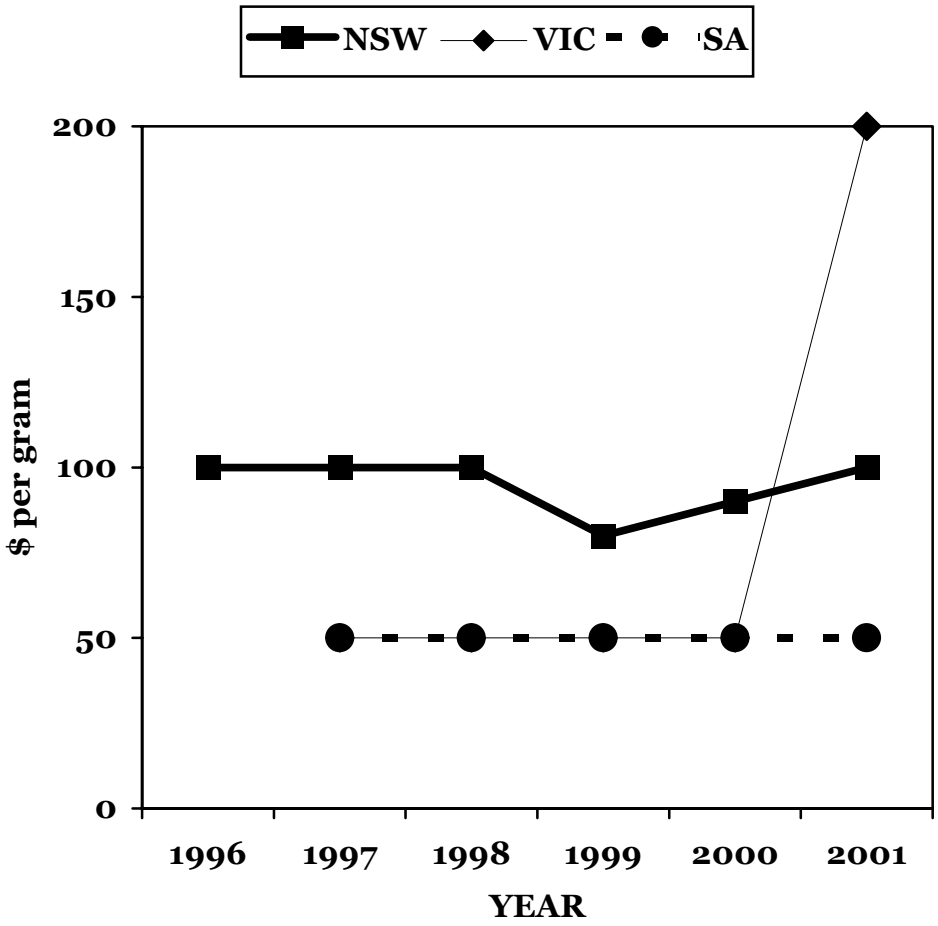
Availability									
(% sample)		75	37	51	25	59	22	38	33
Don't know	45	13	32	9	51	15	53	26	39
Very easy	27	10	23	20	18	22	24	26	23
Easy	20	3	7	20	6	4	1	8	5
Difficult	7	0	1	1	0	0	0	2	1
Very difficult	1								
Availability changes									
(% sample)		75	39	53	28	60	30	55	35
Don't know	49	5	15	6	33	5	19	9	13
Easier	12	17	39	32	35	25	42	22	45
Stable	31	3	2	9	2	0	3	5	8
More difficult	4	0	5	1	2	10	6	9	0
Fluctuates	4								
Place usually score									
	5	0	10	2	8	3	2	15	8
Street dealer	17	6	18	16	36	13	22	20	14
Dealer's home	11	7	8	9	11	8	21	8	18
Mobile dealer	17	7	20	16	20	15	23	15	20
Friend									

Further support for the notion that the apparent increases in price of methamphetamine powder in some jurisdictions is in fact a reflection of a change in the form of methamphetamine purchased comes from an examination over five years of price data (Figure 8). Unlike the price of heroin, the cost of methamphetamine had remained relatively stable between 1996 and 2000, with slight variability recorded only in NSW. In VIC and SA, the price of methamphetamine powder was consistently $50 per gram, and the dramatic price increase recorded in VIC in 2001 was not reflected in either NSW or SA, where prices remained relatively stable.

In sum, it appears that the dynamic nature of Australia's methamphetamine markets has restricted the ability of the IDRS to collect comparable, reliable and valid price data with respect to this class of drugs. Clearly, the emergence of potent forms of

methamphetamine in Australia is an area that should be examined in more detail in order that the dynamics of the market can be documented, and appropriate prevention, education and treatment strategies can be developed. Indeed, the IDRS was designed to point to trends that require further, specialist research rather than to document all phenomena in detail (Wardlaw, 1994).

Figure 8: IDU estimates of price of methamphetamine powder by jurisdiction, 1996-2001



3.3.1.2 Potent forms

Prices in Table 22 represent the median price of purchases of a 'point' (0.1 gram) of the more potent forms of methamphetamine (e.g., ice, shabu, crystal meth, base, paste) made by IDU in the preceding six months. Comparison of Tables 22 and 23 suggests that the price of potent forms of methamphetamine remained stable in all jurisdictions between 2000 and 2001. It should be noted that although purchases of points of methamphetamine were not reported in the ACT and the NT in 2000, IDU in all jurisdictions had purchased this quantity in 2001. The price for a point of the more potent forms remained cheapest in SA, at $30, as was the case in 2000.

3.3.2 Purity

The purity of methamphetamine fluctuates widely in Australia as a result of a number of factors, including the type and quality of chemicals used in the production process and the expertise of the 'cooks' involved, as well as whether the seizure was locally manufactured or imported. During 2000/01, forensic analysis of seizures of methamphetamine in Australia revealed purity levels ranging from less than 1% to 90%. It bears pointing out that a major limitation of purity data is that not all illicit drugs seized by Australia's law enforcement agencies are subjected to forensic analysis. In some instances, the seized drug will be analysed only in a contested court matter. The purity figures therefore relate to an unrepresentative sample of the illicit drugs available in Australia, and drawing meaningful conclusions from purity data remains difficult.

The average purity of methamphetamine seizures analysed in Australia remained stable between 1999/00 and 2000/01 at 22%, which represented an increase from 1998/99 (16%). Figure 9 indicates that, as in 1998/99 and 1999/00, purity was highest in 2000/01 in QLD (29%). Also consistent with previous years was the low purity in TAS (6%). Due to industrial action, the figure for VIC represents analysed seizures made by the AFP only, and no seizure data (either SAPOL or AFP) are available from SA for the second six months of the financial year.

In comparison to 1999/00, Figure 9 shows that purity remained fairly stable within jurisdictions, with only VIC recording a substantial increase in purity (from 16% in 1999/00 to 24% in 2000/01). However, this apparent increase in purity is most likely to be due to the fact that local police seizure data from 2000/01 was not available, and therefore the figure represents only the average purity of analysed seizures made by the Australian Federal Police (AFP). In general, local police seizures are far more likely to be made at the street level, and to be of smaller amounts, than are seizures made by the AFP. Thus, a lower average purity is to be expected of local police seizures.

Figure 9 includes the purity of seizures 0f both amphetamine and methamphetamine. However, the trend for the great majority of seizures to be methamphetamine rather than amphetamine continued throughout 2000/01 (Table 24). Also consistent with previous years, the average purity of methamphetamine seizures was significantly higher than that of amphetamine seizures (Table 24).

Figure 9: Purity of amphetamine/methamphetamine seizures by jurisdiction, 1998/99 - 2000/01

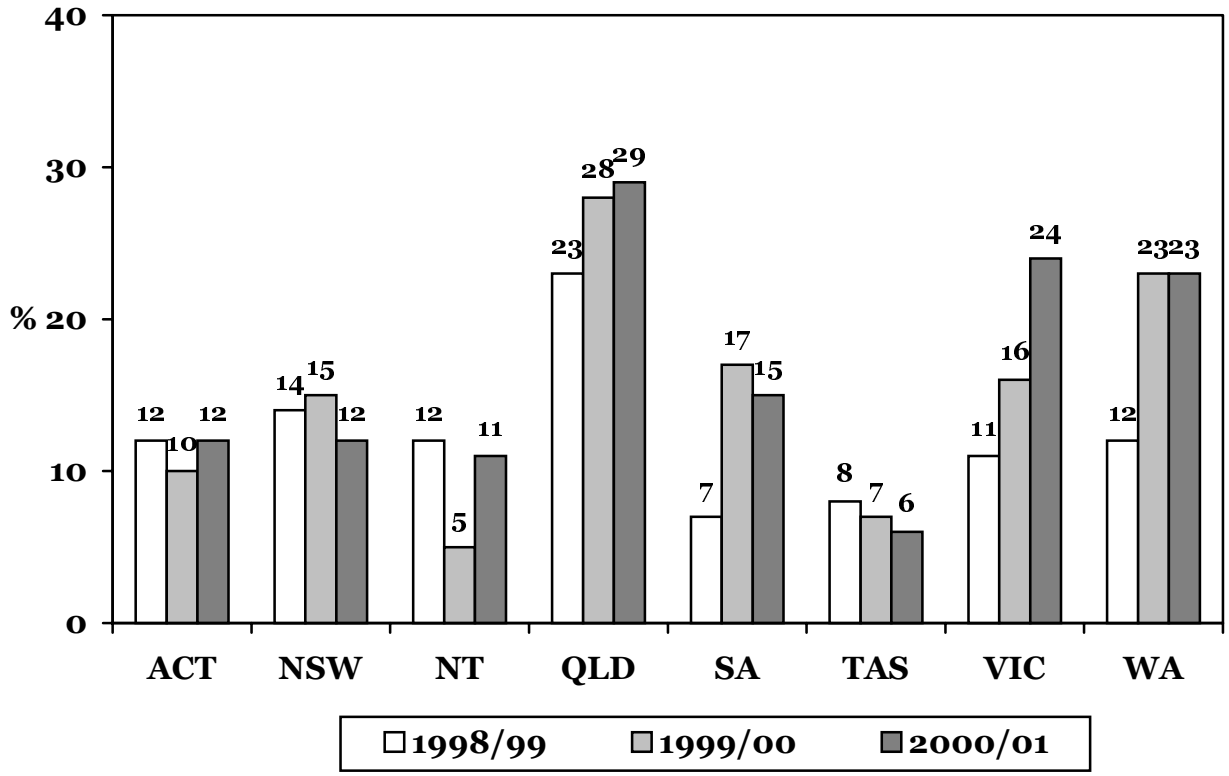


Table 24: Proportion and purity of amphetamine and methamphetamine seizures analysed in Australia, 1997/97 - 1999/2000

	1997/98	1998/99	1999/00	2000/01
Proportion of seizures analysed				
Amphetamine	17	11	5	9
Methamphetamine	83	89	95	91
Purity of seizures (%)				
Amphetamine	7	7	11	14
Methamphetamine	11	17	23	22

3.3.3 Availability

3.3.3.1 Powder

Among those IDU who commented, methamphetamine powder ('speed') was considered easy or very easy to obtain in all jurisdictions (Table 21). This represents a change in the availability of methamphetamine powder in VIC, where in 2000 approximately half of those who commented described methamphetamine as easy to obtain, and half described it as difficult. Across all jurisdictions, the majority of IDU who commented considered that the availability of methamphetamine powder had either remained stable or that the drug had become easier to obtain (Table 21).

As in 2000, IDU in all jurisdictions were more likely to report purchasing methamphetamine powder ('speed') from friends, dealer's homes or through a mobile dealer than on the street, although comparison of Tables 21 and 23 suggest that in 2001 a higher proportion of IDU in NSW, VIC and TAS had purchased methamphetamine powder on the street than was the case in 2000. These data suggest that a more significant street-based methamphetamine market may have developed in at least some Australian jurisdictions. Nonetheless, it seems that most IDU choose to purchase methamphetamine through pre-arranged transactions with known and trusted sources, a pattern of availability that is consistent with reports from law enforcement agencies (ABCI, 2002).

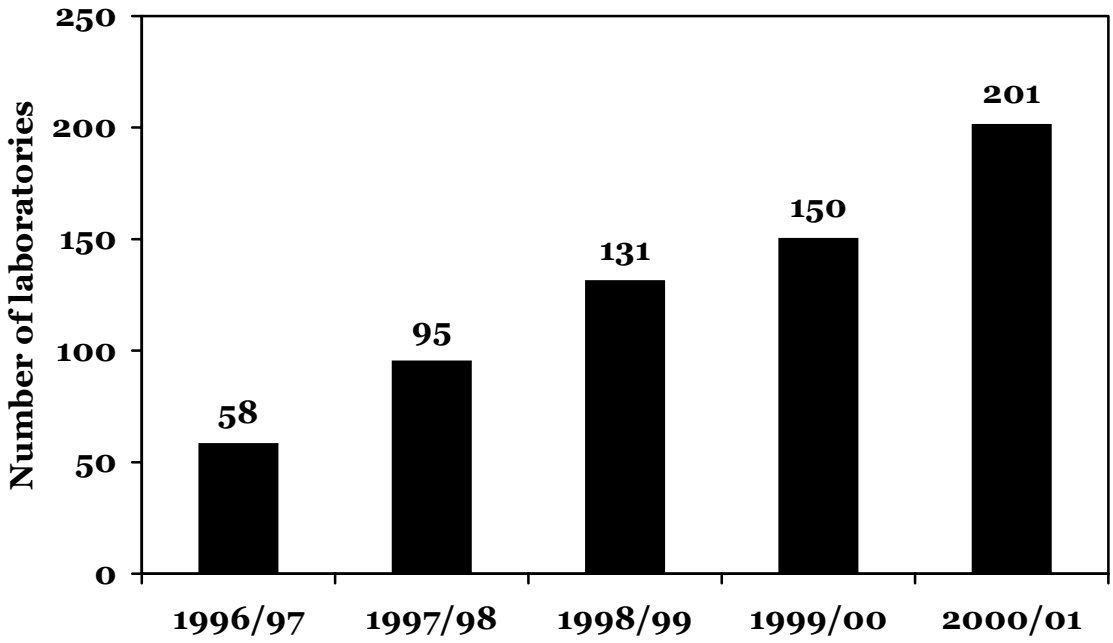
Intelligence collated from law enforcement agencies by the Australian Bureau of Criminal Intelligence (ABCI, 2002) indirectly suggests an increase in the availability of locally manufactured methamphetamine in Australia. The number of clandestine methamphetamine laboratories detected in Australia has steadily increased over recent years (Figure 10). In 2000/01, the highest number of laboratories was detected in QLD (77), followed by NSW (42). ABCI (2002) reported an increased incidence, particularly in VIC and NSW, of thefts from pharmaceutical companies of pseudoephedrine-based preparations (e.g., Sudafed™), from which pseudoephedrine is extracted and used as a precursor for the manufacture of methamphetamine. Further, there has been a shift from the sole use of Sudafed™ as a precursor to a wider sourcing of pseudoephedrine-based decongestants as a result of the increased restrictions on the sale of Sudafed™, as well as greater national awareness of its potential for use in the manufacture of methamphetamine (ABCI, 2002).

In some jurisdictions there has been a move among illicit manufacturers towards the use of improvised equipment in the manufacturing process to avoid leaving a 'trail' of the purchase of laboratory equipment from a legitimate supplier. Further, there has also been a trend towards a higher number of smaller scale and more portable laboratories that can be relocated quickly to avoid detection. Collectively, these laboratories are capable of producing significant amounts of methamphetamine and often contain highly flammable and explosive materials (ABCI, 2002).

There is concern among law enforcement officials that significantly enhanced domestic controls over ephedrine and pseudoephedrine (the main precursor chemicals used in the manufacture of methamphetamine) have increased the risk of illicit importation of such precursor chemicals (ABCI, 2002). Although many

detections of precursor chemicals made by the Australian Customs Service in 2000/01 involved small quantities of decongestant tablets, there were also several detections of large numbers of tablets and considerable quantities of powder. Such detections suggest that traffickers consider importation a viable means of sourcing the necessary precursors, given increased domestic controls (ABCI, 2002).

Figure 10: Clandestine methamphetamine laboratory detections in Australia, 1996/97-2000/01



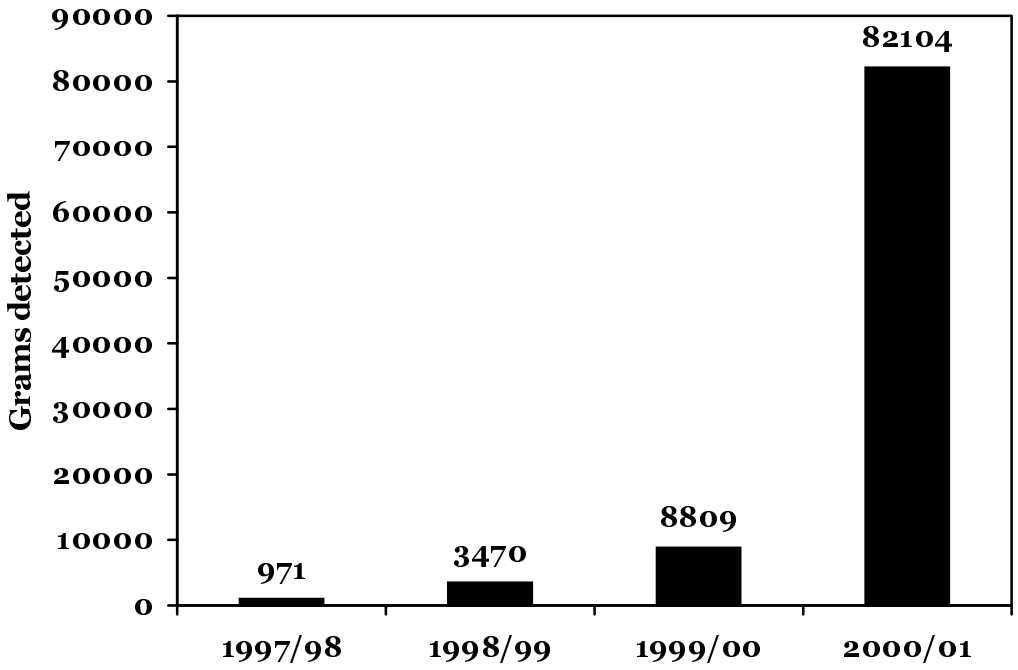
3.3.3.2 Potent forms

Among those IDU who commented, potent forms of methamphetamine such as base, paste, ice and shabu were considered easy or very easy to obtain in all jurisdictions (Table 22), although a substantial minority of IDU who commented in both the NT (31%) and QLD (16%) described these forms as difficult to obtain. Across all jurisdictions, the majority of IDU who commented considered that the availability of potent methamphetamine had either remained stable or that the drug had become easier to get (Table 23).

Data provided by the Australian Customs Service are consistent with the notion of increased availability of potent forms of methamphetamine. The total weight of methamphetamine detected at Australia's borders increased from 8.8 kilograms in 1999/00 to 83.4 kilograms in 2000/01, the highest total weight of methamphetamine detected by Customs to date. Crystalline methamphetamine ('ice') accounted for the majority (82.1 kilograms) of the methamphetamine detected, including the single largest seizure made at Australia's borders, that in November 2000 of 79.1 kilograms of ice from a shipping container which arrived in Sydney from China (ABCI, 2002). Figure 11 shows the increased detections (by weight) of crystalline

methamphetamine at Australia's borders since 1997/98. Since that time, the average weight of methamphetamine detections has risen from 74 grams to 5.56 kilograms. Ninety three percent of the methamphetamine (by weight) detected at Australia's borders in 2000/01 was imported by sea cargo, and the main countries of origin were China, the United States, the Phillipines and the United Kingdom (ABCI, 2002).

Figure 11: Total weight of crystalline methamphetamine detected by the Australian Customs Service, 1997/98 - 2000/2001



3.3.4 Use

Increases in methamphetamine use among IDU were recorded between 2000 and 2001, in terms of both prevalence of recent use and frequency of use among current methamphetamine users. Prevalence of recent use increased from 64% of the entire IDU sample in 2000 to 76% in 2001. Figure 12 indicates that all jurisdictions recorded increases in prevalence of recent use except for TAS and the NT, both of which recorded high baseline prevalence rates in 2000.

Frequency of use among current methamphetamine users in the entire IDU sample increased between 2000 and 2001 from an average of 15 days in the preceding six months to 30 days. In 2001, as in 2000, there was wide jurisdictional variation among current methamphetamine users in the frequency of recent methamphetamine use, and in five of the eight jurisdictions (WA, NT, ACT, VIC and QLD), methamphetamine was used significantly more frequently than in 2000 (Figure 13). In 2000, methamphetamine users in SA had used on a significantly higher number of days in the preceding six months than those in other jurisdictions, but in 2001, methamphetamine users in WA reported the most frequent use of the drug. NSW recorded the lowest frequency of recent methamphetamine use, which seems likely to be related to the ready availability of cocaine in that jurisdiction but not elsewhere.

Figure 12: Prevalence of recent methamphetamine use among IDU by jurisdiction, 2000-2001

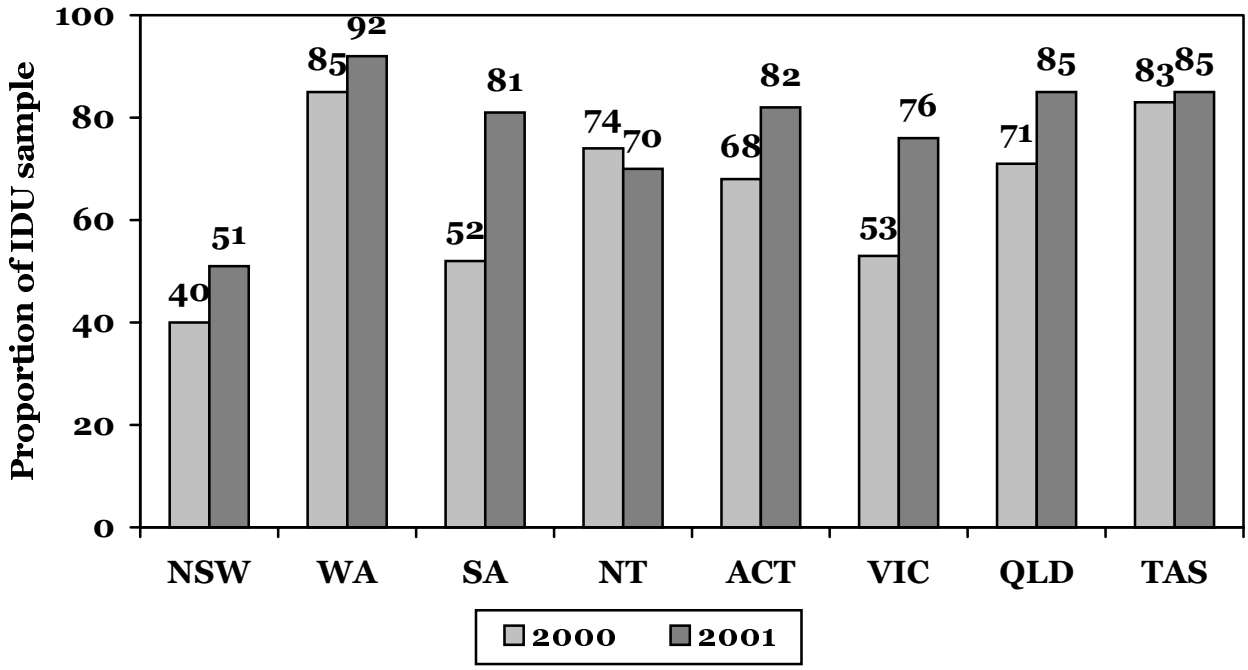
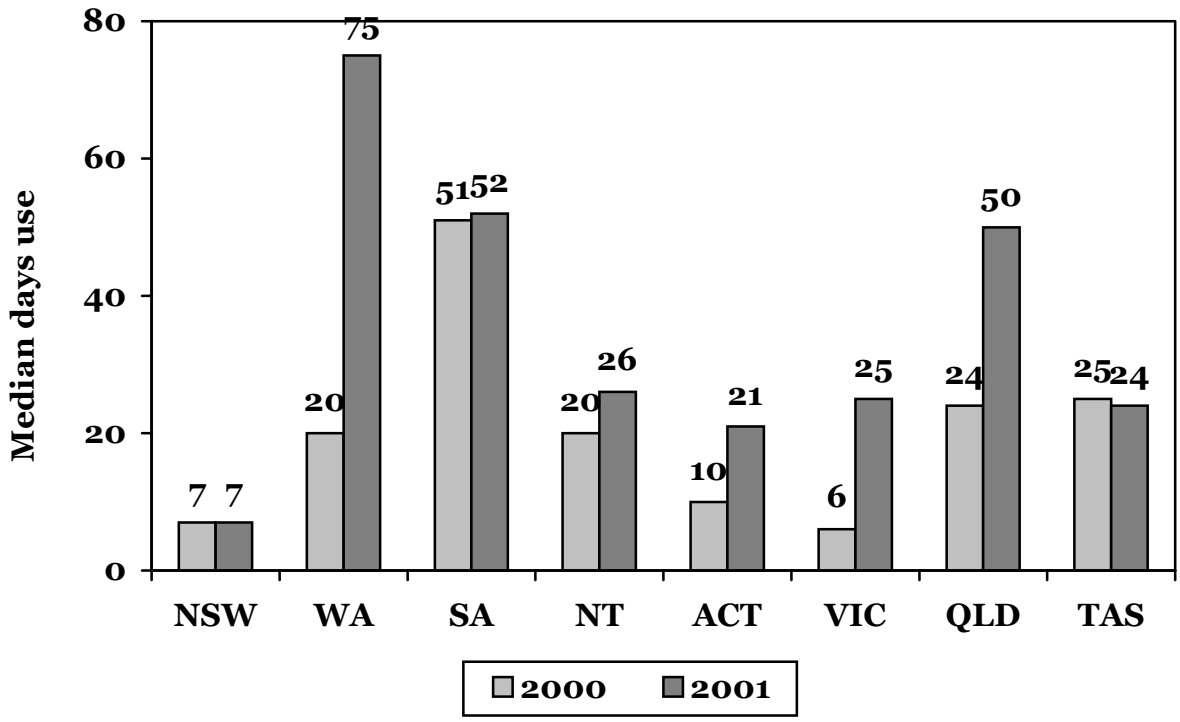


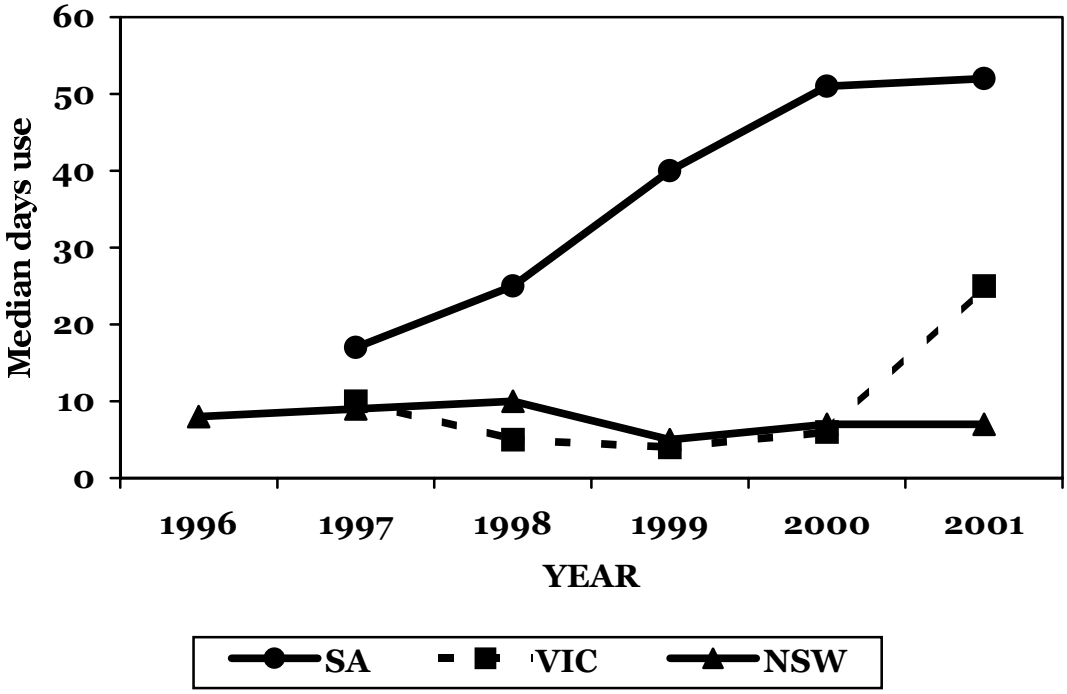
Figure 13: Median number of days of methamphetamine use in preceding six months among current methamphetamine users, by jurisdiction, 2000-2001



An examination of frequency of methamphetamine use data over time indicates that the relatively low frequency of use in NSW is consistent with observations in that state since 1996 (Figure 14). SA recorded marked increases in frequency of

methamphetamine use between 1998 (17 days) and 2000 (51 days), which appeared to stabilise between 2000 and 2001 (52 days). On the other hand, VIC had recorded low and stable frequencies of methamphetamine use until 2001, when frequency of use jumped from an average of once per month to once per week (Figure 14).

Figure 14: Median number of days of methamphetamine use in preceding six months among current methamphetamine users, by jurisdiction, 1996-2001



The jurisdictional differences in methamphetamine use are reflected in data sources other than the IDRS. For example, Figure 15 depicts data from the 2000 Australian needle and syringe program (NSP) Survey (the most recent data available; provided by NCHECR, 2001). These data refer to the prevalence of clients of NSPs across jurisdictions that reported that methamphetamine was the last drug they injected, and clearly reflect the findings of the 2000 IDRS (Topp *et al.*, 2001) that levels of methamphetamine use vary widely across jurisdictions, and were highest in 2000 in QLD and SA. The results of the 2001 NSP Survey should reflect the findings of the 2001 IDRS that prevalence of methamphetamine use increased between 2000 and 2001 in WA, VIC and the ACT. Past IDRS and NSP Survey results have strongly complimented each other (e.g., MacDonald, Robotin & Topp, 2001), and the two surveys thus serve to validate the findings of the other.

Figure 16 depicts the results of the Clients of Treatment Service Agencies (COTSA) Census (Shand & Mattick, 2001), conducted across Australia in 1995 and 2001. The data indicate that in those jurisdictions in which the IDRS has documented higher prevalence and frequency of methamphetamine use, such as WA, QLD and SA, a higher proportion of clients were in treatment in 2001 for methamphetamine. Further, there have also been more marked increases between 1995 and 2001 in these jurisdictions in the proportion of clients presenting for treatment reporting a primary methamphetamine problem.

Figure 15: Prevalence of methamphetamine injection by jurisdiction, 2000 (data from the Australian NSP Survey, NCHECR, 2001)

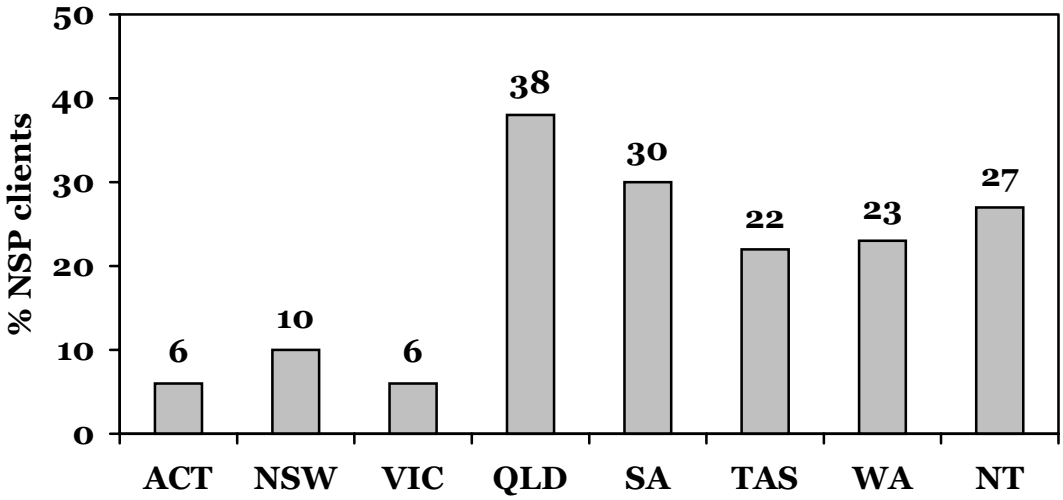
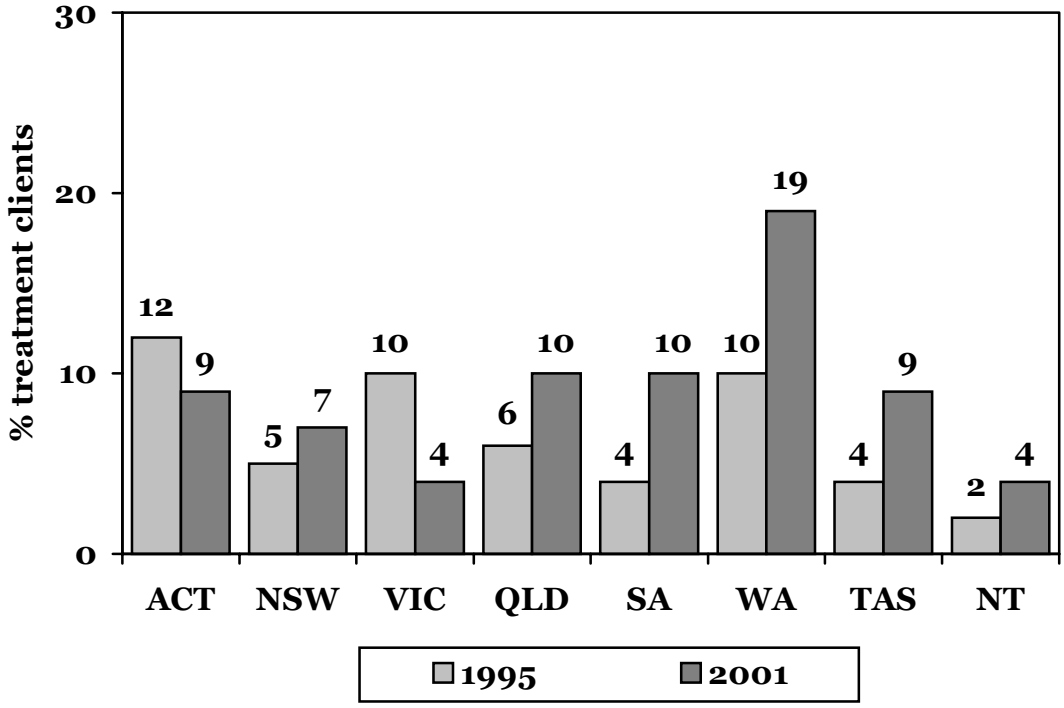


Figure 16: Proportion of clients of treatment services across jurisdictions reporting methamphetamine use as the main drug problem, 1995 - 2001



Further support for the notion that the use of methamphetamine increased in Australia between 2000 and 2001 is provided by the continuing increase in the number of arrests for amphetamine-type substance offences (ABCI, 2002), although it should be remembered that changes in patterns of arrest can reflect changes in

the activity of police as well as of criminals. Nonetheless, although a number of jurisdictions do not differentiate between arrests connected with amphetamine-type stimulants and phenethylamines (the class of drugs to which ecstasy [MDMA] belongs), the pattern of an increased number of offences is consistent with the idea that these drugs are becoming more available and more widely used. Consumer and provider arrests increased Australia-wide from 8083 in 1999/00 to 8851 in 2000/01, and, as in 1999/00, NSW accounted for the greatest number of both consumer (2155) and provider (686) arrests.

3.3.4.1 Potent forms of methamphetamine

The IDRS detected increases between 1999 and 2000 in the availability and use of more potent and higher purity forms of methamphetamine in all jurisdictions. These included the crystalline forms of methamphetamine known as 'crystal meth', 'ice' and/or 'shabu', and the waxy or oily form of methamphetamine that is often beige, tan or brownish in colour and is known as 'base' or 'paste', or as 'point' in SA. There was disagreement among both users and experts alike as to how the different forms of methamphetamine relate to each other and to the amphetamine sulfate traditionally available in Australia, an issue discussed in the *Australian Drug Trends 2000* report (Topp *et al.*, 2001).

Although the uncertainty and lack of clarity surrounding consideration of Australia's dynamic illicit methamphetamine markets remains to be resolved, it is nonetheless clear that the trend of increased availability and use of the more potent forms of methamphetamine continued in 2001. Between 2000 and 2001, every jurisdiction recorded dramatic increases in the proportion of current methamphetamine users who reported recent use of the crystalline forms of methamphetamine known variously as ice, shabu and crystal meth (Table 25). Drawing together the reports of IDU and KIS, we suggest that ice is a crystalline form of high purity methamphetamine that is imported from Asian countries. One NSW KI with extensive contact with both methamphetamine importers and domestic manufacturers suggested that the majority of methamphetamine imported into Australia is manufactured to patent in China and is then transited to other Asian countries such as the Phillipines and Indonesia before arriving in Australia. This report is consistent with intelligence collected by supply-side law enforcement agencies (ABCI, 2002). As depicted earlier, importations of ice have increased significantly in recent years (Figure 11). Ice was consistently described as large, transluscent to white crystals or crystally, coarse powder, and all IDU and KIS who commented described its purity as high (Topp *et al.*, in press).

Table 25: Proportion of current methamphetamine users who reported recent use of ice and/or shabu, 1999-2001, by jurisdiction

Jurisdiction	1999	2000	2001
NSW	7%	35%	58%
VIC	8%	18%	66%
SA	12%	21%	72%
QLD	Noted as trend	18%	79%
WA	Not mentioned	60%	92%
TAS	Noted as minor	7%	66%
NT	Not mentioned	8%	34%
ACT	Not mentioned	23%	87%

In response to the anecdotal reports obtained from IDU and KIS in 2000, in 2001, the IDRS assessed the recent use of the form of methamphetamine known variously as base, paste, wax and point. Drawing together IDU and KIS reports, we suggest that base/paste is a sticky, gluggy, waxy or oily form of damp powder, paste or crystal that is manufactured locally. It is oily because the pseudoephedrine to methamphetamine conversion produces the base form of methamphetamine, which is an oil. An oil is not a highly marketable commodity in Australian illicit drug markets, because it cannot be easily injected or snorted. Therefore, manufacturers attempt to purify methamphetamine base (oil) into methamphetamine hydrochloride (salt or crystal). To successfully complete this process requires considerable chemistry expertise, and few illicit manufacturers in Australia possess such expertise. The result is an oily powder that often has a yellow or brownish tinge due to the presence of iodine and other organic impurities. These organic impurities, which would not be present if the conversion and purification were performed accurately, also prevent the substance from forming into the large transluscent crystals typical of ice, so the appearance of these two forms of methamphetamine is quite different (Topp *et al.*, in press). Table 26 displays the proportion of current methamphetamine users in each jurisdiction that reported the use of base/paste in the six months preceding the interview in 2001.

Table 26: Proportion of current methamphetamine users who reported recent use of base/paste in 2001, by jurisdiction

Jurisdiction	'Base'
NSW	45%
VIC	41%
SA	73%
QLD	73%
WA	61%
TAS	61%
NT	25%
ACT	44%

Concurrent with the increased use of the more potent forms of methamphetamine, it appears that in some jurisdictions, notably SA and TAS, the prevalence of recent use of powder methamphetamine among current methamphetamine users surveyed decreased between 2000 and 2001 (Table 27). This suggests that the increased prevalence of methamphetamine use among IDU across Australia (depicted in Figure 12) can in part be accounted for by increased prevalence of potent forms of methamphetamine, rather than by increased prevalence of the 'speed' powder traditionally available in Australia. It is likely that methamphetamine powder is no longer the most available nor sought-after form of methamphetamine in these jurisdictions.

Concomitant with the reported increases across all jurisdictions in the availability and use of more potent and higher purity forms of methamphetamine such as ice, shabu, crystal meth, paste and base, KIS in five of the eight jurisdictions (NSW, NT, TAS, SA, and QLD) reported recent increases in the number of methamphetamine users suffering adverse psychological and physical side-effects related to their drug use. In particular, there were reports of increased numbers of methamphetamine users experiencing anxiety, depression, aggression/hostility and psychotic symptoms such as paranoia, delusions and hallucinations. Physical problems such as poor nutrition, weight loss, sleep problems, skin lesions and reduced immunity to opportunistic infections were also reported across a number of jurisdictions. Some KIS directly attributed these increases to the increased availability of more potent forms of methamphetamine, and highlighted the occupational health and safety implications for frontline workers of effects such as increased aggression and agitation among their clients. Some KIS also discussed the lack of methamphetamine-specific interventions to offer this client group, and the inability of Australia's treatment system, designed primarily for opiate and alcohol users, to deal with psychostimulant

problems.

Table 27: Proportion of current methamphetamine users that reported recent use of methamphetamine powder, 2000-2001, by jurisdiction

Jurisdiction	2000	2001
NSW	80	83
VIC	84	92
SA	95	58
QLD	82	77
WA	94	95
TAS	93	53
NT	95	90
ACT	85	76

In sum, all behavioural indications suggest that there were increases between 2000 and 2001 across the country in the availability and use of methamphetamine (Table 28), and particularly of the more potent forms of methamphetamine, such as ice/shabu and base/paste. However, although the 2001 IDRS made some progress toward an understanding Australia's dynamic methamphetamine markets, the changes between 2000 and 2001 in the way this class of drugs was assessed renders direct comparisons problematic, and further and more detailed research would be of great use in this area. The 2002 IDRS will assess the price, purity, availability and patterns of use of three different forms of methamphetamine: powder, base/paste and ice/shabu. This change should bring a little more clarity to this market, which at present is characterised by dynamism and uncertainty.

However, it remains clear that the emergence of potent forms of methamphetamine in Australia is an area that should be examined in more detail in order that the dynamics of the market can be documented, and appropriate prevention, education and treatment strategies can be developed. Indeed, the IDRS was designed to point to trends that require further, specialist research rather than to document all phenomena in detail (Wardlaw, 1994).

Table 28: Methamphetamine use patterns of IDU by jurisdiction, 2000-2001

	NSW	VIC	SA	QLD	WA	ACT	TAS	NT	ALL
*Drug of choice (%)**									
2000	5	5	30	24	23	8	20	21	16
2001	5	16	37	42	42	19	30	26	24
*Last injection (%)**									
2000	5	6	34	34	41	16	31	30	23
2001	3	30	50	66	74	42	37	31	37
*Used last 6 mths (%)**									
2000	40	53	52	71	85	68	83	74	64
2001	51	76	81	85	92	82	85	70	76
Days used (median)									
2000	7	6	51	24	20	10	25	20	15
2001	7	25	52	50	75	21	24	26	30
Daily users (%)									
2000	1	6	10	1	1	2	4	1	3
2001	1	25	9	5	11	10	5	4	6

* Methamphetamine

3.3.5 Jurisdictional trends in methamphetamine use

3.3.5.1 NSW

In NSW, the price of methamphetamine powder and potent methamphetamine remained stable; a gram of powder cost $100 and a 'point' of potent methamphetamine (0.1 gram) cost $50. The average purity of analysed methamphetamine seizures made by the AFP in NSW decreased from 36% in 2000 to 19% in 2001. Compared to 2000, there was an increase in the proportion of IDU using methamphetamine. In particular, the trend towards the use of highly potent forms of methamphetamine continued. These powerful forms of the drug included crystalline methamphetamine ('ice', 'shabu') and methamphetamine 'base'. Fifty eight percent of those who had used methamphetamine in the preceding six months reported the use of ice, compared to 35% in 2000 and 7% in 1999. Overall, 29% of the entire NSW IDU sample reported use of ice in the preceding six months, compared to 14% in 2000 and 3% in 1999. KIS noted a concomitant increase in both the incidence and severity of methamphetamine-related psychological problems, particularly symptoms of psychotic, affective and anxiety disorders.

3.3.5.2 The ACT

In the ACT, the former predominance of amphetamine powder, which in the previous *ACT Drug Trends* report was foreshadowed to be under threat of an emerging methamphetamine market, was broken in 2001. IDU interviewed in the 2001 IDRS in the ACT talked only about methamphetamine and, importantly, the ‘wet’ form, often referred to as ‘paste’ or ‘wax’, appears to have entered the ACT, in addition to crystalline methamphetamine or 'ice'. Between 2000 and 2001, the price of methamphetamine increased and purity decreased slightly to 12%. The increased availability of methamphetamine saw an apparent reduction in the diversion of prescription dexamphetamine, and heroin users began to substitute methamphetamine for heroin. The mean number of days of use of methamphetamine in the six months prior to interview almost tripled between the 2000 and 2001 surveys. The transition among younger users from cannabis to party drugs (e.g., ecstasy) to methamphetamine appears to have been assisted by the relatively easy availability of methamphetamine.

3.3.5.3 VIC

In VIC, there were marked increases compared to 2000 in the frequency of use of methamphetamine powder and in the prevalence of recent use of potent forms of methamphetamine. It was also reported that the use of methamphetamine has shifted from mainly recreational users to more frequent, polydrug users. There was a marked increase in the reported price of methamphetamine powder from $50 to $200 per gram; however, it seems likely that this is a reflection of changes in the form of methamphetamine purchased and/or a lack of clarity among users as to what they are buying and using. The price of a 'point' of the more potent forms of methamphetamine remained stable at $50 between 2000 and 2001.

Methamphetamine appears to have become the identified drug of choice for a group of people who were primary heroin users prior to the heroin shortage. There was an increase in the prevalence of recent methamphetamine injection among IDU from 50% in 2000 to 75% in 2001. Although the methamphetamine market appears to be predominantly a non-street market (26% mobile dealers, 24% dealer house, 33% friends), there has been an apparent increase in street sourcing from 4% in 2000 to 15% in 2001. All forms of methamphetamine were described as readily available, and the availability was considered to have remained stable or increased.

3.3.5.4 TAS

In TAS, it was clear that the increased availability of higher purity methamphetamine, identified as an emerging trend in the 2000 TAS IDRS, has further stabilised and expanded into 2001. The relatively high potency and ease of access to the drug appears to have made use of methamphetamine increasingly attractive among IDU, with almost all (85%) of those interviewed reporting use of the drug in the six months prior to interview, despite methamphetamine being the drug of choice for less than one third (30%) of subjects. The sustained ready availability of high potency methamphetamine was regarded as being responsible for anecdotal reports of recent increases in the number of people using methamphetamine, the number of younger users, and increased quantities of use by existing methamphetamine users. With increased use of these potent stimulants, there were reports of changes in the mental health of some users, including the emergence of acute psychosis. The impact of the increasing presentations of challenging behaviour tied to methamphetamine use is clearly being felt among service providers.

3.3.5.5 SA

In SA, methamphetamine was readily available, and the price of one gram of the powder form was identical to the 2000 IDRS. The stronger forms of methamphetamine (paste, wax, ice, crystal meth) have increased in use and availability since 1999 and are usually sold in ‘point’ form (0.1 gram). The median price of one point was also the same as the 2000 IDRS. The use of methamphetamine appeared to have increased among the general population in SA, in particular among younger people.

3.3.5.6 WA

In WA, as predicted by the 1999 IDRS and observed in the 2000 study, the use of methamphetamine continued to increase. Use of methamphetamine is now considered widespread with an increase in the number of users, particularly younger users, and a more diverse range of people using the drug. While crystalline methamphetamine ('ice' or 'crystal meth') clearly emerged as the main form of methamphetamine used by respondents in this study, other potent forms of the drug have also emerged onto the WA drug market, most notably base/paste. The average purity of analysed seizures remained constant between the 2000 and 2001 studies, although IDU perceptions about current purity were determined by the form of the drug they were referring to. Crystal meth and paste were generally regarded

as being of higher purity than powder and, as noted in 2000, tended to be associated with higher prices. Increases in both prevalence of use among IDU and frequency of use among current methamphetamine users were recorded in 2001; indeed, a higher proportion of IDU in WA reported recent use of methamphetamine than recent use of alcohol, tobacco, and cannabis.

3.3.5.7 The NT

In the NT, the majority of IDU reported recent use of methamphetamine, it was the preferred drug of a quarter of the sample, and was the most frequently reported first drug injected. NSP data also indicated a steady rise in from 1997 to 2000 in the proportion of people who last injected methamphetamine. The price of a gram of methamphetamine powder remained stable between 2000 and 2001, and in both years it was considered easy/very easy to obtain. Both IDU and KIS reported an increase in local manufacture of methamphetamine, more people involved in supplying the drug and the increased availability of more potent forms. The latter was confirmed by a four-fold increase between 2000 and 2001 in the proportion of IDU that reported the recent use of crystalline methamphetamine in the preceding six months. Most IDU considered the potent forms to be easy/very easy to obtain, and reported that the price had remained stable.

Almost half of IDU in the NT commented on changes in the type and number of methamphetamine users, and 40% of these stated there were more young people using this drug. Young people were also reported to be initiating methamphetamine use at a younger age. Other common themes were increased use of methamphetamine when morphine was harder to obtain, more professionals and people not traditionally associated with the drug scene injecting methamphetamine and morphine, and increased incidence of mood disorders and paranoia among methamphetamine users. Some KIS also reported methamphetamine users presenting with more social problems, more severe problems and in greater chaos. A small number of treatment service KIS indicated there were more presentations for methamphetamine-induced psychosis and this was attributed, at least in part, to the increased use of more potent forms of methamphetamine.

3.3.5.8 QLD

In QLD, the prevalence of recent methamphetamine use among IDU increased from 74% in 2000 to 85% in 2001. In 2001, a higher of proportion of females than males had injected methamphetamine in the six months preceding the interview. The average purity of methamphetamine seizures remained stable between 2000 (28%) and 2001 (29%), and although the price of a gram of methamphetamine powder appeared to increase from $80 in 2000 to $180 in 2001, it seems likely that this is in fact a reflection of a change in the type of methamphetamine purchased and a lack of clarity among users as to exactly what they were using. Increased use of methamphetamine in QLD appeared to be associated with increases in violent and property crime. Accident and Emergency Departments reported increased incidence of methamphetamine-related problems, including paranoia, anxiety, depression, psychotic breakdown and violent behaviour. Clandestine laboratory seizures indicate that the majority of methamphetamine manufacture in Australia occurs in

QLD.

3.3.6 Summary of methamphetamine trends

- Consistent with the results of the 2000 IDRS, a gram of methamphetamine powder remained cheapest in SA in 2001
- Compared to 2000, there were apparent large increases in the cost of a gram of methamphetamine powder in VIC, QLD and the ACT, but these are likely to relate to increased quality of the drug and confusion as to which form of methamphetamine was discussed
- There were no IDU estimates of the price of crystalline methamphetamine ('ice') in 2000, but in that year, key informants in all jurisdictions except the ACT and the NT reported prices of $50 for a 'point' (0.1 gram) except in SA, where a point was reported to cost $30
- Consistent with key informant reports in 2000, IDU estimates of the cost of a point in 2001 show it to be cheaper in SA ($30) than elsewhere ($50)
- The average purity of seizures of amphetamines analysed across Australia remained stable between 1999/00 and 2000/01 at 22%, an increase from 1998/99 (16%)
- Compared to 1999/00, there were slight increases in purity in VIC (8%), the NT (6%), the ACT (2%) and QLD (1%), whereas slight decreases in purity occurred in NSW (3%) and SA (2%)
- In 2000/01, purity varied markedly across jurisdictions, but, consistent with the results of 1999/00, purity was lowest in TAS (5%) and the NT (11%), and highest in QLD (29%)
- The average purity of analysed seizures of methamphetamine (22%) was higher than that of amphetamine (14%). The majority (91%) of seizures were of methamphetamine
- Both methamphetamine powder and more potent forms of methamphetamine such as 'ice' and 'base' were regarded as easy to obtain in all jurisdictions, and the availability of both forms was considered to have remained stable or increased
- Both prevalence and frequency of methamphetamine use increased between 2000 and 2001
- Continuing the trend noted by the 2000 IDRS, increased use of potent forms of methamphetamine such as 'ice' and 'base' was reported in all jurisdictions

3.4 Cocaine

Table 29 displays the price, purity and availability of cocaine in 2001 by jurisdiction. As in previous years, a significantly higher proportion of IDU in NSW (80%) than in other jurisdictions commented on aspects of the price, purity and availability of cocaine (ACT 30%; QLD 20%; VIC 18%; SA 11%; WA 10%; NT 7%; TAS 1%). Despite the relatively small numbers, these figures represent increases compared to 2000 in the proportion of IDU able to comment on cocaine in the ACT, QLD, VIC and SA, and may be an early indicator of the spread of cocaine to jurisdictions other than NSW. Table 30 displays comparable figures from the 2000 IDRS.

3.4.1 Price

Prices in Table 29 represent the median prices of purchases made by IDU in the preceding six months; no IDU had purchased a gram of cocaine in TAS in that time. A substantial number of IDU had purchased of a gram of cocaine in the preceding six months in NSW (22), VIC (15) and QLD (11). The figures for the other jurisdictions were estimated from small numbers of purchases and should be interpreted cautiously. Although few IDU in jurisdictions other than NSW commented on changes in the price of cocaine, the majority of IDU who commented reported that the price had remained stable.

Figure 17 indicates that the price of both grams and caps of cocaine have remained stable in NSW since 1998, whereas the price of a gram in SA (where fewer purchases are reported) has been more variable. The decrease since 2000 of $25 per gram in VIC may indicate that cocaine is impacting the market in that state. The reports in 2001 of purchases of 'caps' of cocaine in all jurisdictions except TAS and WA, albeit in small numbers, may be another early indicator of the diffusion of cocaine outside NSW. The marked increase in cocaine use in NSW in 1998 coincided with the sale of caps (a small amount typically used for a single injection) for $50 in that state.

Figure 17: IDU estimates of cocaine price by jurisdiction, 1996-2000

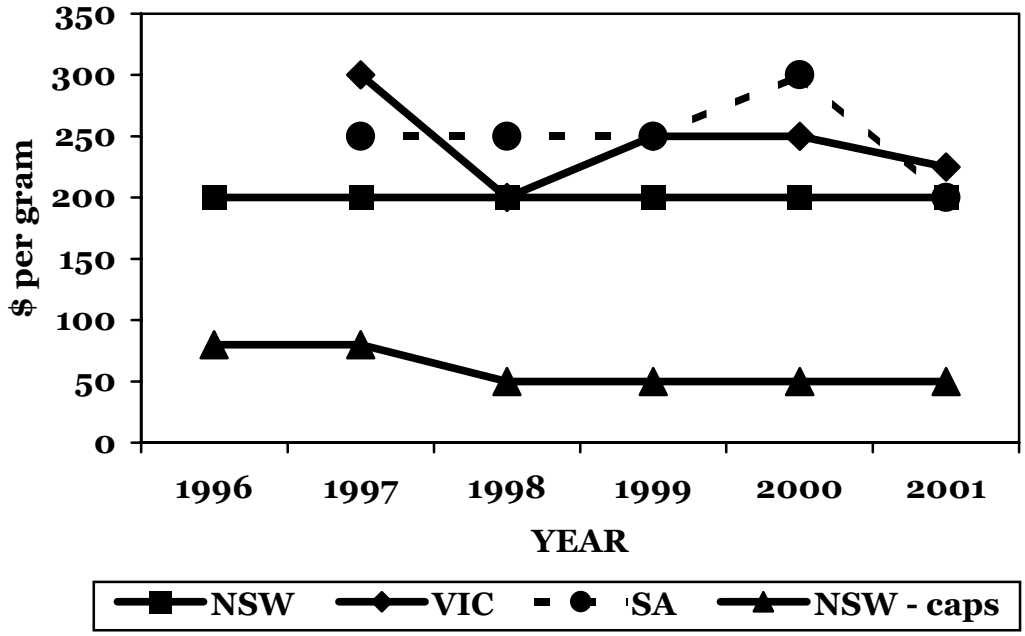

350
300
250
200
150
100
50
0
$ per gram
1996
1997
1998
1999
2000
2001
YEAR
NSW
VIC
SA
NSW - caps

Table 29: Price, purity and availability of cocaine by jurisdiction, 2001

	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS * N=100	SA * N=100	WA * N=100	NT N=135	QLD N=102
Price ($)									
per gram	-	200	165	225	-	200	300	300 [1]	200
Price changes									
(% who commented)									
		7	54	15	99	89	90	44	20
Don't know	52	7	14	4	0	1	2	0	10
Decreased	5	72	25	48	1	6	4	11	60
Stable	33	10	7	22	0	2	4	11	5
Increased	7	4	0	11	0	2	0	33	5
Fluctuated	4								
Average purity									
(%)	53	49	36	65	45	61	33	-	59
Availability									
(% who commented)									
		0	53	11	99	89	85	33	0
Don't know	47	69	7	19	0	3	2	11	20
Very easy	26	28	23	37	0	6	6	11	20
Easy	17	4	13	33	1	2	3	22	60
Difficult	9	0	3	0	0	0	4	22	0
Very difficult	2								
Availability changes									
(% who commented)									
		2	50	11	99	90	89	44	15
Don't know	50	24	20	7	0	1	1	0	10
Easier	11	64	17	56	1	7	9	33	40
Stable	32	6	10	7	0	1	1	0	30
More difficult	5	3	3	19	0	1	0	22	5
Fluctuates	3								

Place usually score									
Street dealer	15	36	11	15	0	1	2	22	5
Dealer's home	13	27	7	23	0	3	4	11	15
Mobile dealer	15	28	14	31	0	6	3	11	10
Friend	11	7	14	27	1	9	5	0	50

Note: no seizures of cocaine were made in the NT in 2000/01
** In SA, WA and TAS, reported proportions are of the total sample*
[1] Estimated from a single purchase

Table 30: Price, purity and availability of cocaine by jurisdiction, 2000

	Total sample N=910	NSW N=150	ACT N=100	VIC N=152	TAS N=100	SA N=107	WA N=100	NT N=100	QLD N=101
Price ($)									
per gram	-	200	170	250	300	300	250	250	250
Price changes									
(% sample)									
Don't know	61	45	90	92	99	95	92	95	92
Decreased	5	7	1	1	0	0	1	0	2
Stable	29	44	7	7	1	4	5	3	4
Increased	4	3	2	1	0	0	2	1	2
Fluctuated	1	1	0	0	0	1	0	1	0
Average purity									
(%)	48	47	26	47	-	-	34	-	51
Availability									
(% sample)									
Don't know	83	44	87	91	99	95	84	88	88
Very easy	6	33	0	1	0	0	0	1	0
Easy	5	17	4	3	1	2	4	3	2
Difficult	5	5	6	5	0	4	10	3	7
Very difficult	2	1	3	1	0	0	2	5	3
Availability changes									
(% sample)									
Don't know	56	45	88	91	99	95	86	89	89
Easier	6	4	3	0	0	1	7	1	1
Stable	28	39	8	7	1	1	4	4	8
More difficult	7	9	1	2	0	1	1	2	2
Fluctuates	4	3	0	0	0	2	2	4	0

Place usually score									
	11	23	1	0	0	0	1	2	1
Street dealer		12	1	2	0	2	4	0	3
	9	17	1	3	0	0	0	0	1
Dealer's home									
	9	1	7	3	1	4	3	9	9
Mobile dealer									
	11								
Friend									

Note: no seizures of cocaine were made in SA, TAS or the NT in 1999/00

3.4.2 Purity

The average purity of seizures of cocaine analysed across Australia in 2000/01 was 53% (Figure 18), little different to 1999/00 or 1998/99. However, it bears pointing out that a major limitation of purity data is that not all illicit drugs seized by Australia's law enforcement agencies are subjected to forensic analysis. In some instances, the seized drug will be analysed only in a contested court matter. The purity figures therefore relate to an unrepresentative sample of the illicit drugs available in Australia, and drawing meaningful conclusions from purity data remains difficult. Further, due to industrial action, figures for VIC represent analysed seizures made by the AFP only, and no seizure data (either SAPOL or AFP) are available from SA for the second six months of the financial year. In 2001, no seizures of cocaine were analysed in the NT.

Compared to 1999/00, the purity of analysed cocaine seizures appeared to increase in VIC (18%), the ACT (10%), QLD (8%) and NSW (2%) (Figure 19), but the apparent increase in purity in VIC is likely to be a reflection of the fact that local police seizure data was not available (see Section 3.3.2). The ABCI (2002) reported that the median purity of border and domestic seizures did not vary greatly within each jurisdiction in 2000/01, perhaps indicating less 'cutting' of cocaine once it enters Australia.

Figure 18: Average purity of cocaine seizures in Australia, 1996/97 - 2000/01

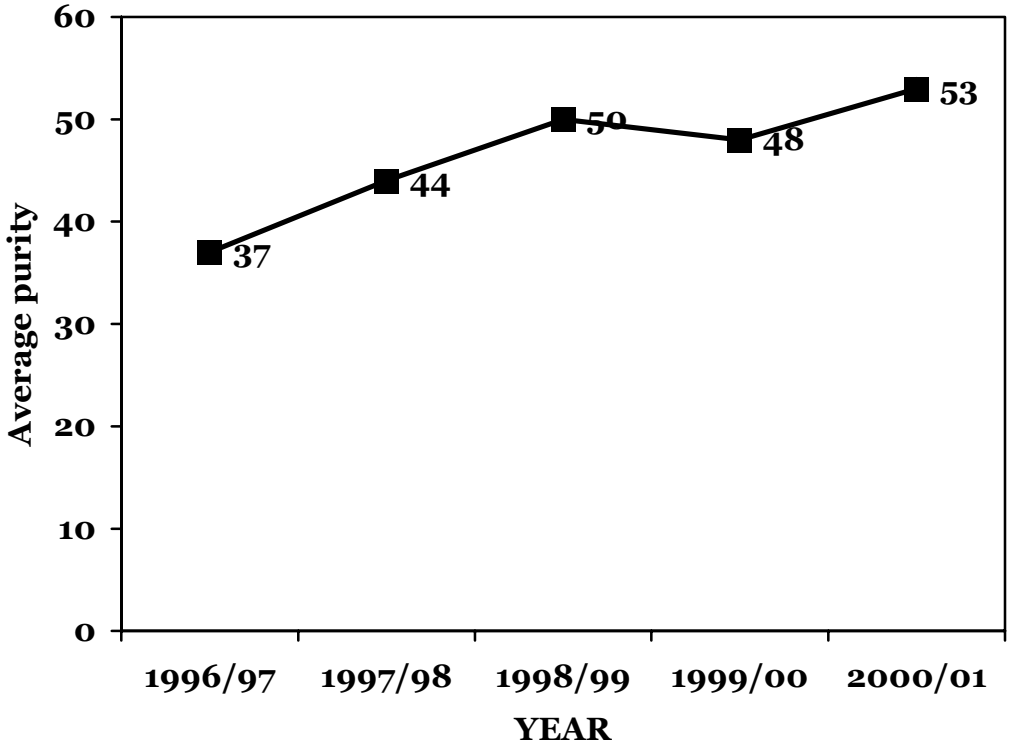
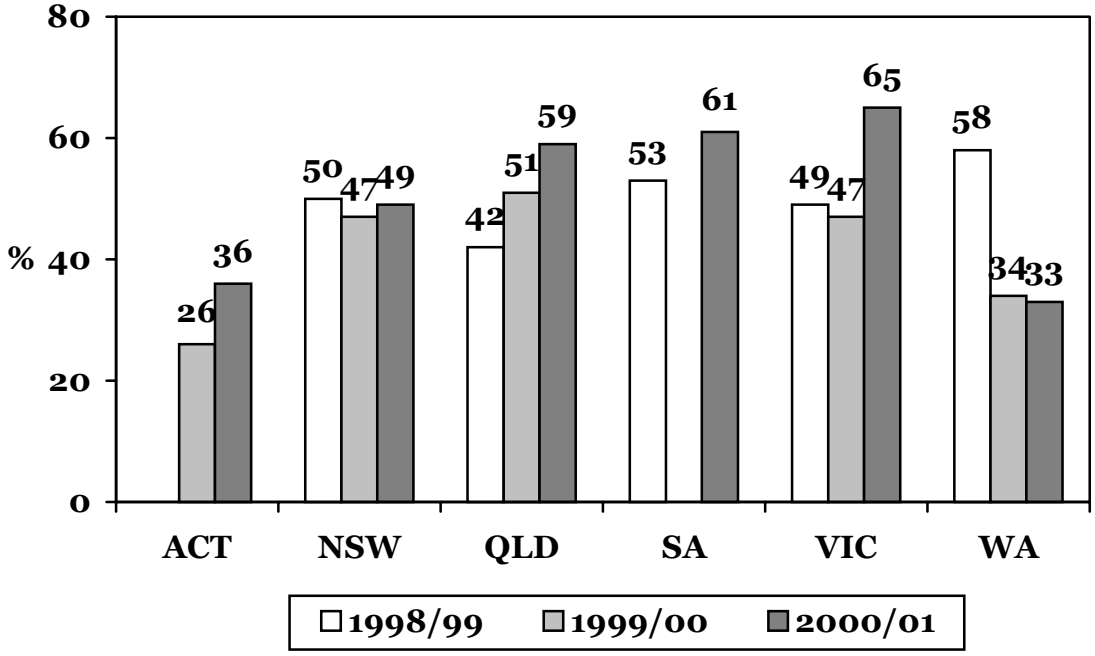

60
50
40
30
20
10
0
Average purity
37
44
50
48
53
1996/97
1997/98
1998/99
1999/00
2000/01
YEAR

Figure 19: Purity of cocaine seizures by jurisdiction, 1998/99 - 2000/01



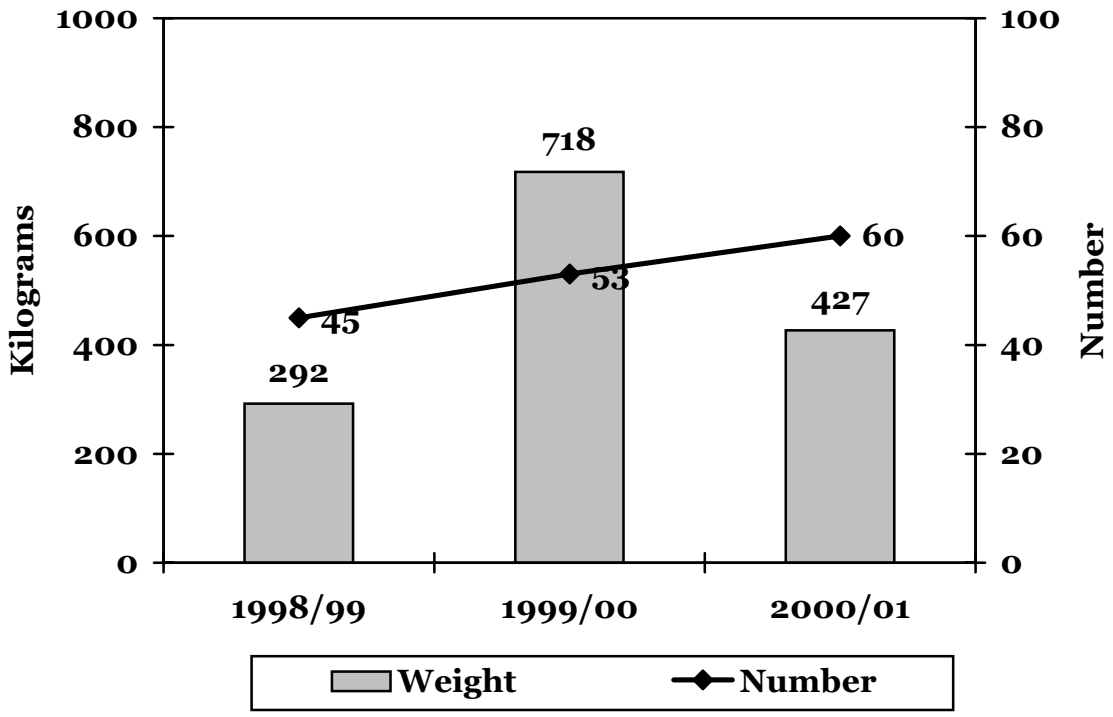
3.4.3 Availability

As in 2000, cocaine appeared to be freely available in 2001 only in NSW, where 80% of IDU commented on the drug, and 97% of those described it as easy or very easy to obtain (Table 29). The figures in Table 29 also suggest that NSW remains the only jurisdiction in which a significant street-based cocaine market exists. Of all jurisdictions, NSW recorded the highest number and weight of domestic seizures of cocaine in 2000/01 (ABCI, 2002), continuing a trend noted for the past five years and supporting the contention that cocaine is more available in that state than in all other jurisdictions.

In jurisdictions other than NSW, only a minority of IDU commented on cocaine, which in itself suggests that the drug is not widely available in those jurisdictions. There were, however, increases between 2000 and 2001 in the proportion of IDU able to comment on cocaine in the ACT, QLD, VIC and SA. Of those who did comment, except in the NT, TAS and QLD, a majority reported that the drug was easy or very easy to obtain, and that availability had remained stable or recently increased. Alth0ugh the proportions remain small, these data may constitute an early indicator of the spread of cocaine to jurisdictions outside of NSW. Consistent with these increases is the fact that in 2000/01, the largest seizures of cocaine were made in SA and QLD (ABCI, 2002). This may indicate that importations may be becoming more prevalent outside NSW, which has traditionally been regarded as the main importation and distribution point for cocaine in Australia.

During 2000/01, the Australian Customs Service made 60 detections of cocaine at the Australian border, weighing a total 427.4 kilograms, a decrease from 748.4 kilograms in 1999/00 (Figure 20). Of the 60 detections, 15 involved more than 100 grams; and 30 were made in NSW, 10 in VIC, nine in QLD, eight in WA and three in SA. The average weight of detections of cocaine at the Australian border has increased since 1993/94 from 507 grams to 7.1 kilograms. This change is likely to reflect both increased cocaine importation into Australia and the success of law enforcement agencies against high-level cocaine traffickers (ABCI, 2002). Although the number of embarkation points for cocaine entering Australia continues to increase, reflecting a world-wide trend in of diversification of cocaine trafficking routes, countries in South and Central America remain the major sources of large-scale importations (ABCI, 2002).

Figure 20: Number and weight of detections of cocaine made at the border by the Australian Customs Service, 1998/99 - 2000/01



The National Crime Authority has reported the possibility that some organised crime groups originating from countries regional to Australia (that in the past would have concentrated on heroin trafficking) have begun to import larger amounts of stimulants, including both methamphetamine and cocaine, in order to compensate for the voids left in illicit drugs markets as a result of the reduced availability of heroin (ABCI, 2002). Such a possibility is consistent with the notion that cocaine availability may have begun to increase across the country. It is also consistent with intelligence collected by the Joint Asian Crime Group in NSW suggesting cooperation between South American cocaine cartels and individuals from South-East Asian Crime Groups that had previously focussed on heroin trafficking (ABCI,

2002).

3.4.4 Use

3.4.4.1 Powder cocaine

The prevalence of recent cocaine use among IDU samples increased between 2000 and 2001 in all jurisdictions except the NT, and marked increases were recorded in NSW, the ACT, VIC and QLD (Figure 21). However, Figure 22 indicates that the frequency of recent cocaine use remained sporadic in jurisdictions other than NSW, where IDU reported an average frequency of use of every second day, and WA, in which the average frequency of recent cocaine use approximated fortnightly use.

Since 1997, IDU samples in SA have reported more variable rates of recent cocaine use than those in VIC, where the increase in prevalence between 2000 and 2001 represented the most marked change in cocaine use in that state since the IDRS was instituted (Figure 23). In NSW, the proportion of IDU that reported cocaine use in the preceding six months increased markedly in 1998, stabilised between 1999 and 2000, and increased again in 2001. Reports of both IDU and KIS in NSW clearly indicated that the increase in 2001 was associated with a change in drug use patterns in response to the reduced availability of heroin.

In NSW, frequency of recent cocaine use has followed a similar pattern to prevalence of use, increasing markedly in 1998, stabilising and then dramatically increasing in 2001 (Figure 24). In contrast, frequency of cocaine use has remained low and relatively stable since 1997 in both VIC and SA. Clearly, although 2001 represents the first year in which early indicators of a possible diffusion of cocaine into illicit drug markets outside of NSW have been recorded by the IDRS, the issue of cocaine use remains, at this stage, predominantly restricted to NSW.

As documented in 2000 (Topp *et al.*, 2001), cocaine use was associated with a higher frequency of injecting among IDU across jurisdictions. This is due to the short half-life of the drug; cocaine is rapidly excreted from the body and its subjective effects are relatively short (Platt, 1997). In the overall sample, IDU who had used cocaine in the preceding six months were significantly more likely to have injected at least once per day in the preceding month. Thus, of those who had injected at least daily in the preceding month, 59% had used cocaine in the preceding six months, compared to 38% of those who hadn't used cocaine (χ^2_1=35.5; p<.001).

The difference is even more marked when proportions of cocaine users and other IDU injecting more than three times per day are considered (23% of cocaine users had injected more than three times per day in the preceding month, versus 6% of other IDU; χ^2_1=61.9; p<.001). As noted in Section 3.1.2.5, the NSW IDU sample contained the highest proportion of subjects who had injected at least once per day in the month preceding the interview. This clearly reflects, at least in part, the higher prevalence and frequency of cocaine use in that jurisdiction.

Figure 21: Proportion of IDU samples that reported using cocaine in preceding six months, by jurisdiction, 2000-2001

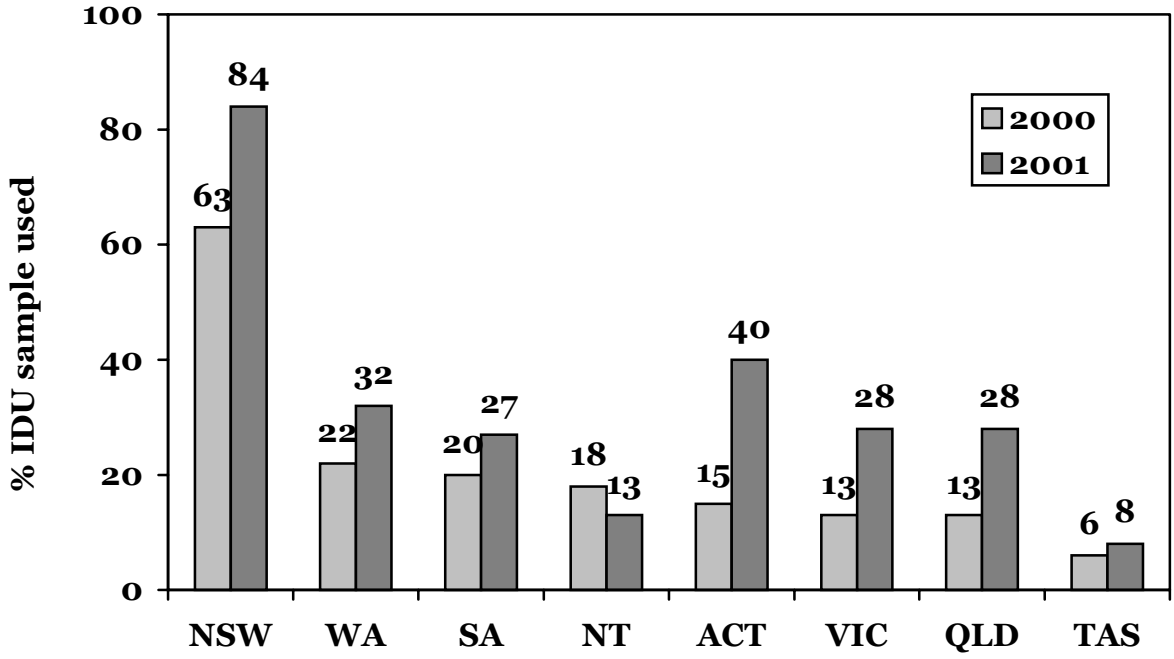


Figure 22: Average frequency of cocaine use among IDU that reported using cocaine in preceding six months, by jurisdiction, 2000-2001

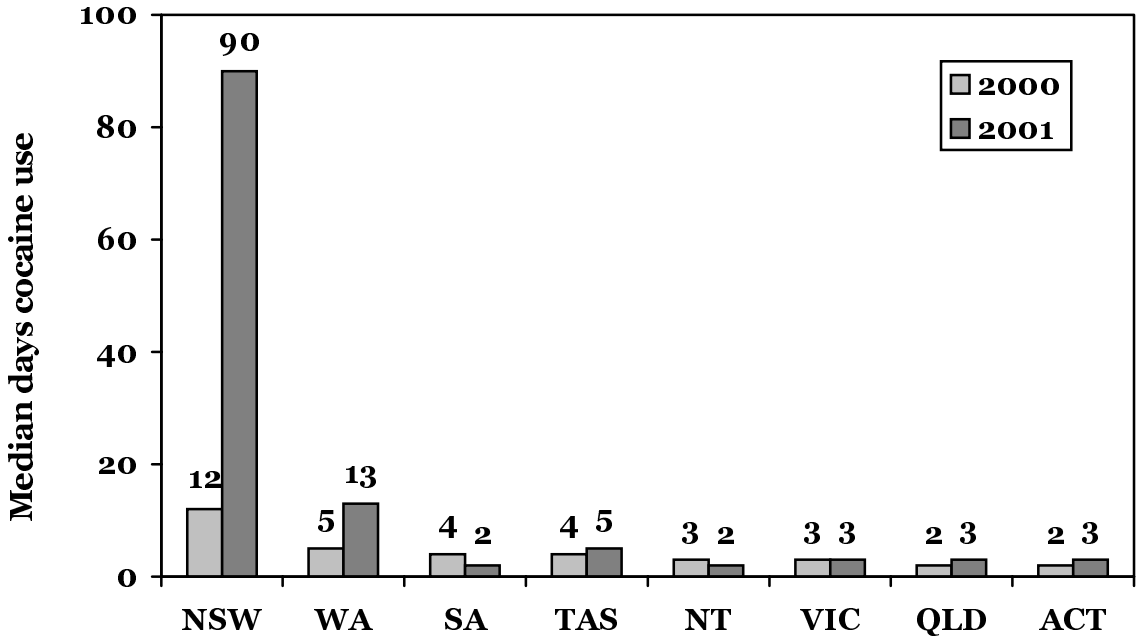


Figure 23: Proportions of IDU samples reporting cocaine use in preceding six months by jurisdiction, 1997-2001

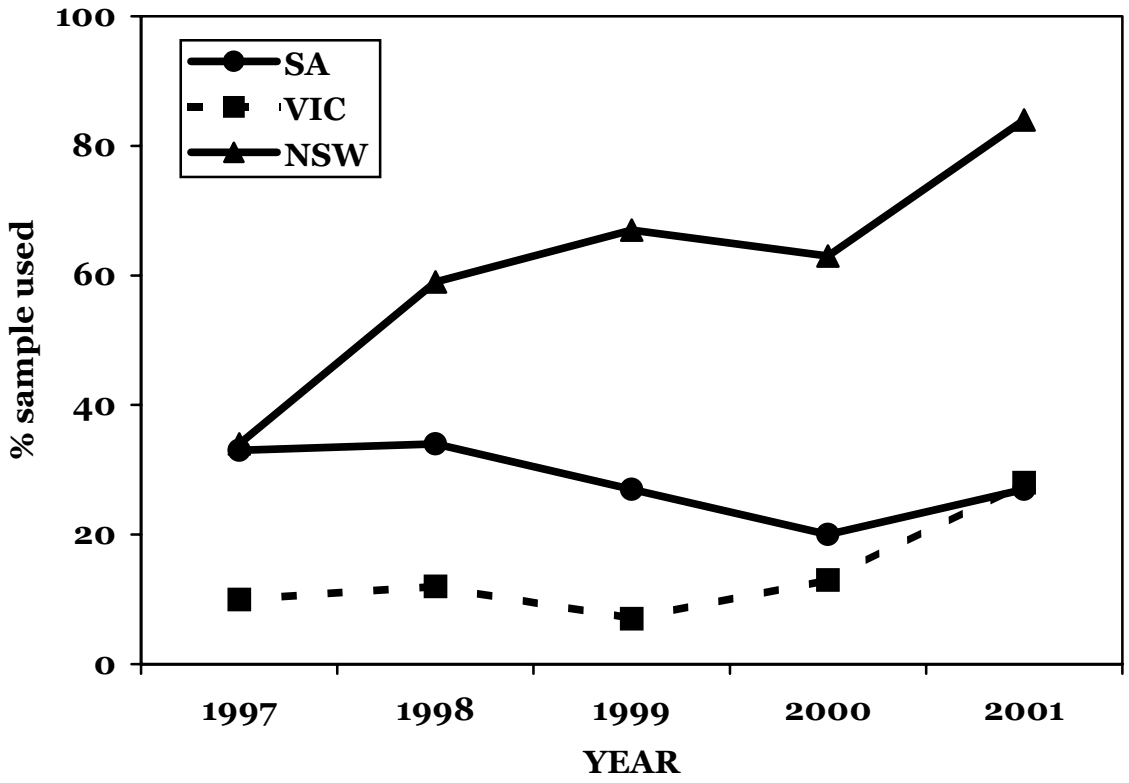
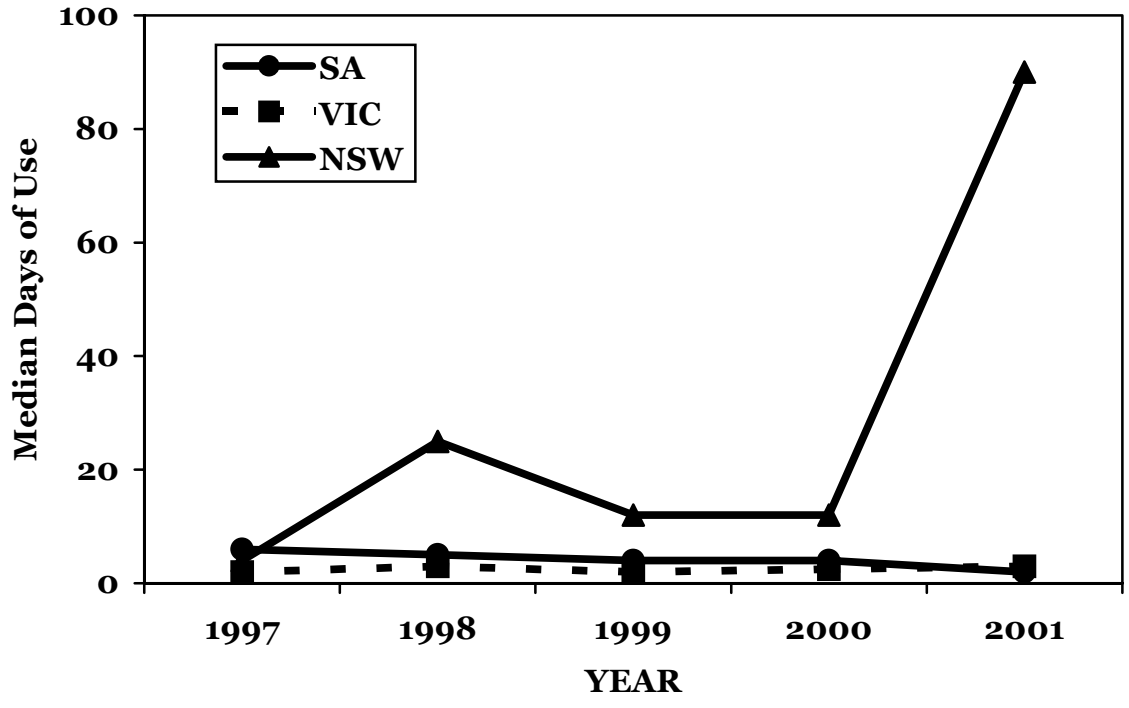


Figure 24: Median number of days of cocaine use among IDU in preceding six months by jurisdiction, 1997-2001



Consumer and provider arrests for cocaine increased by 50% across Australia from 433 in 1999/00 to 625 in 2000/01 (ABCI, 2002). Consistent with the predominance of cocaine use in NSW relative to other jurisdictions documented by the IDRS in 2001, total arrests in NSW continued to be signficantly higher than in all other jurisdictions during 2000/01: 318 consumer arrests and 188 provder arrests (ABCI, 2002).

Although seizures suggest that comparable quantities of cocaine and heroin are imported into Australia, cocaine offenders are not encountered by law enforcement agencies as regularly as heroin offenders (ABCI, 2002). As reported earlier, reports of both IDU and KIS indicate that the marked increases between 2000 and 2001 in prevalence and frequency of cocaine use in NSW are strongly associated with the shortage of heroin. Consistent with this contention, between 1999/00 and 2000/01 in NSW, there was a 40% decrease in heroin arrests and a corresponding 42% increase in cocaine arrests.

3.4.4.2 Crack cocaine

In 2001, significant minorities of IDU in some jurisdictions, notably QLD, the ACT and WA, reported the recent use of crack cocaine (see Table 12), however, it remains unclear as to whether these IDU referred to real crack (freebase) cocaine. Real crack cocaine is only bioavailable when smoked (Platt, 1997), and only half of those who reported that they had used crack in the preceding six months reported smoking as a route of administration. No seizures of crack cocaine were detected in 2000/01 (ABCI, 2002).

Given that the chemical process of deriving crack cocaine is relatively simple when there is a ready supply of quality cocaine hydrochloride (Platt, 1997), there is nothing preventing . Further investigation is required before confident assertions regarding the availability of crack on a commercial basis can be made.

In sum, behavioural indicators suggest an increase in the prevalence of recent use of cocaine in NSW, the ACT, VIC, QLD, WA and SA, although in 2001, frequency of cocaine use suggests that the problematic use of the drug remains predominantly confined to NSW (Table 31). Strong support for this contention is derived from a comparison across jurisdictions of rates of daily cocaine use; in NSW, almost a third of IDU reported daily cocaine use in the six months preceding the interview, whereas the rates for other jurisdictions ranged from 0%-1%.

Notwithstanding, the possible emergence of cocaine in Australian illicit drug markets where it has not appeared before is an area that should be examined in more detail in order that the dynamics of the market can be documented and the implications of potential cocaine diffusion can be clarified. Indeed, the IDRS was designed to point to trends that require further, specialist research rather than to document all phenomena in detail (Wardlaw, 1994).

Table 31: Cocaine use patterns of IDU by jurisdiction, 2000-2001

	NSW	VIC	SA	QLD	WA	ACT	TAS	NT	ALL
*Drug of choice (%)**									
2000	10	1	4	2	3	0	1	2	3
2001	29	2	6	0	5	1	1	2	7
*Last injection (%)**									
2000	11	0	0	0	0	1	1	0	2
2001	37	1	2	0	2	0	1	0	7
Used cocaine (%)									
2000	63	13	20	13	22	15	6	18	24
2001	84	28	27	28	32	40	8	13	35
Days used (median)									
2000	12	3	4	2	6	2	4	3	5
2001	90	3	2	3	13	4	5	2	7
Daily users (%)									
2000	5	0	0	0	0	1	0	0	1
2001	29	0	1	1	1	0	0	1	5

* Cocaine

3.4.5 Jurisdictional trends

3.4.5.1 NSW

In NSW, the price of cocaine remained stable between 2000 and 2001 ($200 per gram, $50 per cap). The purity of cocaine declined slightly from 51% in 2000 to 45% in 2001. Between 1998 and 2000, there was a stabilisation of high levels of cocaine use among IDU. In 2001, however, IDU, KIS and indicator data all suggested a marked increase in the use of cocaine. The proportion of IDU reporting recent cocaine use increased from 63% in 2000 to 84% in 2001, and the median number of days on which cocaine had been used in the preceding six months increased from 12 days to 90 days. Cocaine powder remained the predominant form of cocaine in NSW, with availability and use of 'crack' cocaine rarely reported.

3.4.5.2 The ACT

In the past in the ACT, as indicated in earlier *Drug Trends* reports, few seizures of cocaine have been made by law enforcement agencies, and the drug was considered difficult to obtain. Although a small 'ripple' in the overall scheme of the ACT drug market, several indications of a possible diffusion of cocaine into the ACT emerged in 2001. Thirty percent of IDU provided comment on some aspect of cocaine, a larger proportion than in previous years, and 6% had purchased a gram of cocaine in the preceding six months, and 4% had purchased a cap. Heroin users reported turning to injecting cocaine as a substitute for heroin. The proportion of IDU who reported cocaine injection increased by 20% between 2000 and 2001; and over the same timeframe, the proportion that had injected cocaine in the six months preceding the interview tripled. In 2001, IDU described availability as 'easy', and the average purity of seizures analysed in 2000/01 was 10% higher than the average purity of seizures analysed in 1999/00.

3.4.5.3 VIC

In VIC, there were also early indicators of a potential spread of cocaine. Eighteen percent of IDU provided comment on some aspect of the cocaine market. The prevalence of recent cocaine use among IDU increased from 13% in 2000 to 28% in 2001, and the prevalence of recent cocaine injection increased from 6% to 20%. Fifteen IDU had purchased a gram of cocaine in the preceding six months, and 5 had purchased a cap. Reported prices for a gram of cocaine ranged from $200 to $500, and the median price fell from $250 in 2000 to $225 in 2001. There were a number of relatively new reports of cap prices ($50, range $50-$200). Cocaine availability was reported to be easy to very easy (56%) and stable (56%). The average purity of cocaine seizures analysed in VIC increased from 47% in 2000 to 65% in 2001. Cocaine remains a desirable drug, but still too expensive for most injecting drug users.

3.4.5.4 TAS

Cocaine appears to remain virtually unobtainable in TAS, at least within the populations surveyed in the 2001 IDRS and those accessing drug and alcohol-related services. A very small number of IDU reported recent use of the drug, and indications were that the cocaine that is used in TAS is purchased in other jurisdictions and brought back to TAS for personal use.

3.4.5.5 SA

In SA, 5% of IDU had purchased a gram of cocaine in the preceding six months, and 2% had purchased a cap. Ten percent of IDU commented on some aspect of cocaine use. The majority of this group reported that cocaine was easy or very easy to obtain, and that availability had remained stable. The price of a gram of cocaine fell from $300 per gram in 2000 to $200 in 2001, although the relatively small number of purchases necessitates caution when drawing comparisons. The purity of analysed seizures of cocaine made in SA by SAPOL and AFP was 61%, higher

than that reported in all other jurisdictions with the exception of VIC. The largest seizure of cocaine detected in Australia in 2000/01 was made in SA. The use of cocaine appears to remain low in SA in comparison with other drugs, but KIS reports suggest that use is increasing.

3.4.5.6 WA

In WA, 10% of IDU provided comment on some aspect of cocaine, and 5% reported having purchased a gram of cocaine in the preceding six months. The IDU survey provided preliminary evidence of an increase in the use and injection of cocaine in Perth, although this trend was not detected in other WA data sources, such as calls to ADIS. A significant increase in both lifetime use and use in the six months prior to interview was observed. The level of use reported in WA remained infrequent, and cocaine was generally still considered difficult to obtain, although slightly less so than was reported in 2000.

3.4.5.7 The NT

In the NT, 7% of IDU commented on some aspect of the cocaine market, but only one IDU had purchased a gram of cocaine and one a cap of cocaine in the preceding six months. Clearly, the use of cocaine remains rare in the NT. Only a very small proportion of IDU (1%) had used cocaine in the preceding six months, and use was intermittent among those who had accessed the drug. The small number of IDU who commented indicated the price had fluctuated in the preceding six months, that it was difficult or very difficult to obtain, and that the availability had remained stable. As in 2000, no KIS nominated cocaine as the main illicit drug used by users with whom they had the most contact, and this verifies the IDU data in indicating the drug remains scarce and rarely used.

3.4.5.8 QLD

In QLD, there were early indicators of a possible spread of cocaine. Twenty percent of IDU commented on some aspect of the cocaine market, and 11 reported the purchase of a gram of cocaine in the preceding six months. The median price of a gram of cocaine fell from $250 in 2000 to $200 in 2001, and IDU suggested that it has become more readily available. The average purity of seizures of cocaine made in QLD increased from 51% in 2000 to 59% in 2001. More than a quarter (28%) of IDU in QLD had used cocaine in the preceding six months, on a median of three days, and 22% had injected it.

3.4.6 Summary of cocaine trends

- Only in NSW were there a sufficient number of recent purchases of cocaine in both 2000 and 2001 to allow price comparisons to be considered without caution. However, with this reservation noted, compared to 2000, in 2001, the price of a gram of cocaine declined in SA, QLD, VIC and the ACT, increased in WA, but remained stable in NSW at $200 per gram

- The average purity of seizures of cocaine across Australia in 2000/01 was 53%, little different to 1999/00 (48%) or 1998/99 (50%)

- Compared to 1999/00, the purity of analysed cocaine seizures increased in VIC (18%), the ACT (10%), QLD (8%) and NSW (2%)

- As in 2000, cocaine was considered easy or very easy to obtain in NSW, but was not widely commented on nor available in other jurisdictions. However, indications of increased availability were noted in several jurisdictions, including VIC, the ACT, SA, QLD and WA

- There were marked increases in the prevalence of cocaine use in NSW, and dramatic increases in frequency of cocaine use, strongly associated with reduced availability of heroin

- The prevalence of recent cocaine use increased between 2000 and 2001 in VIC, SA, WA, the ACT and TAS, although frequency of use remained sporadic. Notwithstanding the low frequency of use in these jurisdictions, 2001 is the first year in which the IDRS has documented early indicators of a potential increase in the availability and use of cocaine in jurisdictions other than NSW

- Cocaine use was associated with more frequent injection among IDU

- Although crack cocaine use was reported by a minority of IDU in some jurisdictions, notably the ACT, QLD and WA, it remains uncertain whether crack is commercially available in Australia

3.5 Cannabis

Eighty three percent of the overall IDU sample felt confident enough of their knowledge to comment on the price, potency and availability of cannabis (Table 32). The proportions across jurisdictions ranged from 71% in NSW to 93% in TAS. Comparable figures from 2000 are presented in Table 33.

3.5.1 Price

Prices in Table 32 represent the median price of purchases made by IDU in the preceding six months. There was relatively little variation in the price of cannabis across jurisdictions in 2001, with ounces costing between $200 and $320, and grams costing $20 to $25, except in SA, where previous anecdotal information (Humeniuk, 2000) suggests that $25 buys two grams; and in TAS and WA, where $25 buys 1.5 grams. Comparison of Tables 32 and 33 also indicates that there was relatively little change in cannabis prices between 2000 and 2001, with declines of between $20 and $25 per ounce recorded in SA, VIC, the ACT, WA and TAS, and increases of $20 per ounce recorded in NSW and QLD. As in 2000, ounces were cheapest in SA in 2001. This pattern is consistent with the results of the IDRS in previous years: cannabis has always been cheapest in SA (Figure 25), while the price of an ounce in VIC has steadily declined since 1997. In all jurisdictions, the great majority of IDU who commented perceived that the price of cannabis had either remained stable or decreased.

3.5.2 Potency

Descriptions of the potency of cannabis in Tables 32 and 33 represent ratings made by IDU and KIS. As in previous years, in 2001 the potency of cannabis was perceived in all jurisdictions to be high or medium to high, and to have remained stable over the preceding six months.

Reports of hydroponic cannabis containing a higher average THC content continued, despite the lack of evidence to support an increase in the THC content of cannabis consumed in Australia. The THC content of Australian cannabis has not been systematically tested, thus it is not possible to confirm whether the THC content has changed in recent years. Hall and Swift (1999) argue that the perception of increased cannabis potency is more likely to be due to changes in patterns of cannabis use. Specifically, there has been an increase in the use of the more potent cannabis heads in preference to cannabis leaf. Over some years, there has also been a trend toward earlier initiation into cannabis use, which is associated with higher levels of cannabis use and cannabis-related problems (Degenhardt, Lynskey & Hall, 2000). Finally, over a similar timeframe, there has been an increase in the use of 'bongs' or water-pipes, which are a more efficient means of smoking the drug, in that they cool the smoke and therefore allow the smoker to hold the smoke in their lungs for a longer time, such that absorption is maximised.

Table 32: Price, potency and availability of cannabis by jurisdiction, 2001

	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA * N=100	WA * N=100	NT N=135	QLD N=102
Price ($)									
per ounce	-	320	280	250	280	200	250	300	320
per gram	-	20	20	20	25[1]	25[2]	25[1]	25	25
Price changes									
(% who commented)									
Don't know	9	3	7	3	2	23	23	3	9
Decreased	8	6	10	16	10	10	7	1	5
Stable	73	84	77	67	76	60	63	80	74
Increased	6	5	4	7	4	3	4	11	11
Fluctuated	4	2	3	7	8	4	3	5	1
Potency	High Stable	High Stable	High Stable	High Stable	High Stable	High Stable	High Stable	Med-High Stable	High Stable
Availability									
(% who commented)									
Don't know	6	0	1	0	1	20	20	2	1
Very easy	70	73	80	72	90	58	63	71	55
Easy	21	25	18	25	9	15	11	25	40
Difficult	2	1	1	3	0	5	5	2	2
Very difficult	1	1	0	0	0	2	1	0	1
Availability changes									
(% who commented)									
Don't know	7	1	4	2	2	21	19	5	2
Easier	6	7	5	10	4	1	4	4	8
Stable	80	89	89	80	90	68	66	82	74
More difficult	4	3	0	6	1	8	6	3	7
Fluctuates	3	1	3	1	2	2	5	7	8

Place usually score									
Street dealer	11	35	0	7	10	2	1	21	2
Dealer's home	25	23	35	22	31	8	14	37	27
Friend	36	23	45	36	36	47	41	22	42
Grow your own	4	1	10	3	8	8	2	2	2

** In SA and WA, reported proportions are of the total sample*

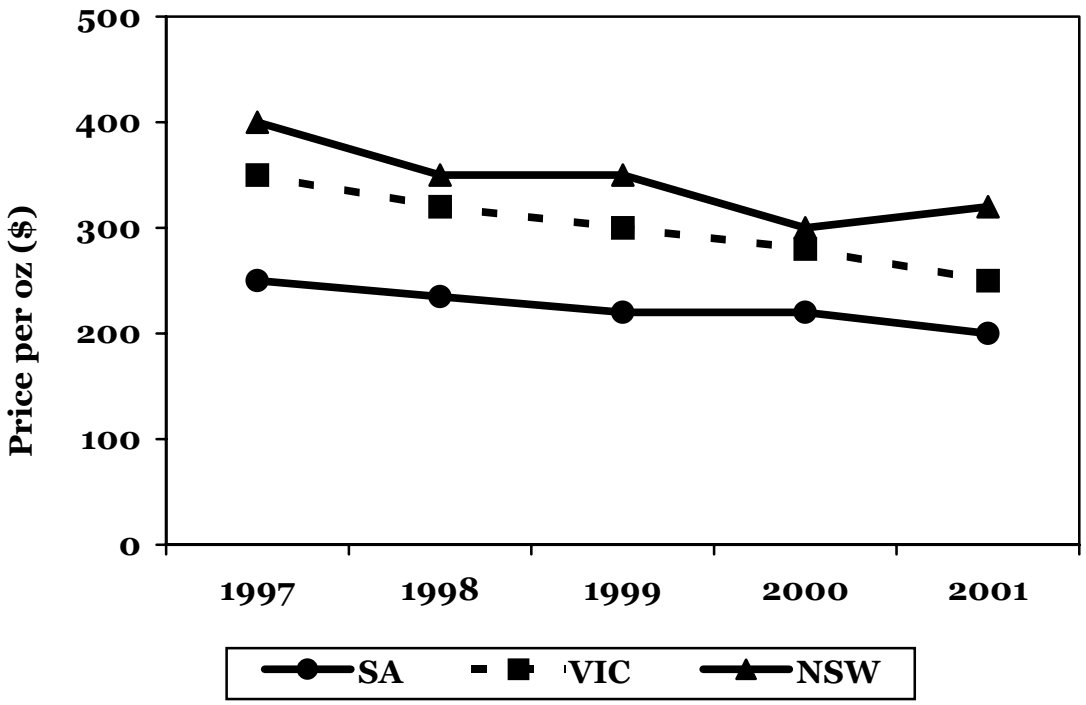
[1] Approximately 1.5 grams [2] Approximately 2 grams

Table 33: Price, potency and availability of cannabis by jurisdiction, 2000

	Total sample N=910	NSW N=150	ACT N=100	VIC N=152	TAS N=100	SA N=107	WA N=100	NT N=100	QLD N=101
Price ($)									
per ounce	-	300	300	280	300	220	300	300	300
per gram	-	20	25	20	25	25	25	25	25
Price changes									
(% sample)									
Don't know	27	40	31	28	25	23	10	33	24
Decreased	9	7	2	18	10	4	13	1	10
Stable	53	49	53	47	58	68	71	45	56
Increased	5	2	3	1	4	7	5	15	10
Fluctuated	5	2	11	6	3	15	1	6	0
Potency	High	High	Med-High	Med-High	Med-High	High	High	High	High
Availability									
(% sample)									
Don't know	24	39	23	28	19	24	5	25	19
Very easy	51	54	54	39	64	47	68	51	35
Easy	20	5	20	23	14	27	23	19	29
Difficult	5	1	3	9	3	2	4	5	14
Very difficult	1	0	0	1	0	0	0	0	4
Availability changes									
(% sample)									
Don't know	27	40	27	28	23	23	4	37	21
Easier	7	5	2	3	12	8	10	9	6
Stable	57	53	56	58	60	60	69	42	60
More difficult	6	1	5	9	5	0	13	4	13
Fluctuates	4	1	10	3	0	8	4	8	1

Place usually score									
Street dealer	12	21	11	6	10	8	10	18	9
Dealer's home	25	19	25	25	36	27	25	30	20
Friend	25	7	31	31	26	27	29	13	43
Grow your own	4	1	5	5	3	8	3	4	1

Figure 25: Price of an ounce of cannabis by jurisdiction, 1997-2001



3.5.3 Availability

As in 1999 and 2000, cannabis was described as very easy to obtain throughout the whole of Australia, and the majority of those IDU who commented perceived the availability of cannabis to be stable over the six months preceding the interview (Table 32). Most IDU purchased cannabis from a friend or at a dealer's home (Table 32). In NSW and the NT, substantial minorities of IDU had also purchased cannabis from a street dealer, indicating the presence of open-air cannabis markets in the capital cities of these jurisdictions. In the ACT, WA, SA and QLD, there were decreases between 2000 and 2001 in the proportions of IDU who reported having purchasing cannabis from a street dealer. Relatively few IDU in any jurisdiction reported growing their own cannabis (Table 32).

Very few IDU consider cannabis their primary drug of choice, and this in itself may account for the low proportions that reported growing their own cannabis. It seems likely that among a population of primary cannabis smokers, a higher proportion would grow their own cannabis than among the IDU interviewed for the IDRS, for whom cannabis is simply one of a range of drugs they use in conjunction with their primary drug(s) of choice. It is also highly likely that among a population of primary cannabis smokers, ounces, half-ounces and quarter-ounces would be the more usual purchase unit than the grams that are most often purchased among IDU. Different cannabis prices may also be reported among such a sample.

3.5.4 Use

Table 12 suggests that the great majority of cannabis smoked in Australia, at least among IDU, is hydroponically grown 'head' (the flowering tops of *cannabis sativa*); cannabis leaf is available but it is not sought after. However, high rates of the use of outdoor crop cannabis were also reported in all jurisdictions, with between 48% (NSW) and 80% (WA) of IDU in all jurisdictions reporting the use of outdoor cannabis in the six months preceding the interview (see Table 12).

Consistent with previous years, the prevalence of recent hash use among IDU was higher in SA than in VIC and NSW (Figure 26). The prevalence of the recent use of hash oil among IDU remained low in NSW and VIC (Figure 27), following marked decreases in its use in all jurisdictions between 1998 and 1999, but rates of use jumped dramatically in SA between 2000 and 2001 to close to one-third of the IDU sample. All these trends were confirmed by KIS reports throughout most jurisdictions. KIS in all jurisdictions also reported that 'bongs' or water-pipes remained the most common means of administration of cannabis.

Figure 26: Prevalence of recent use of hash among IDU by jurisdiction, 1997-2001

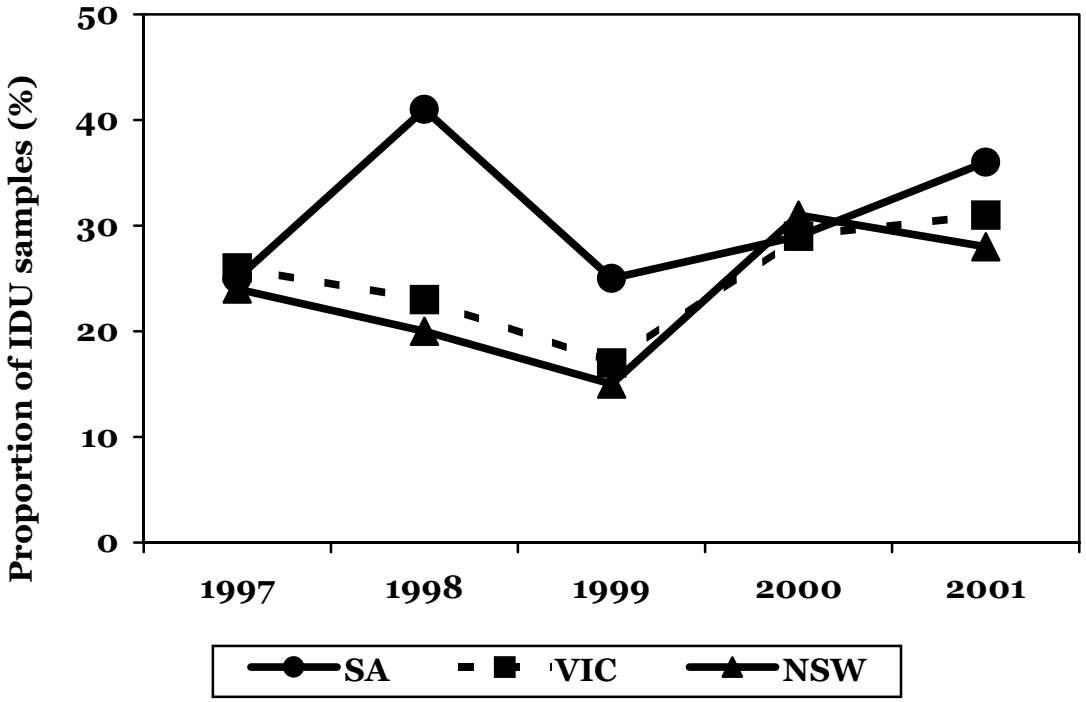
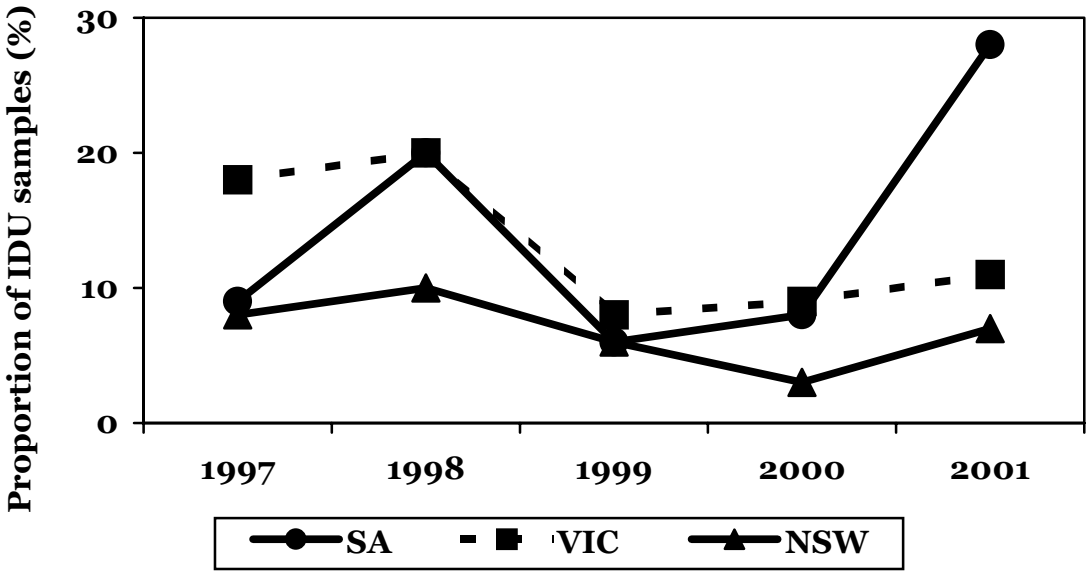
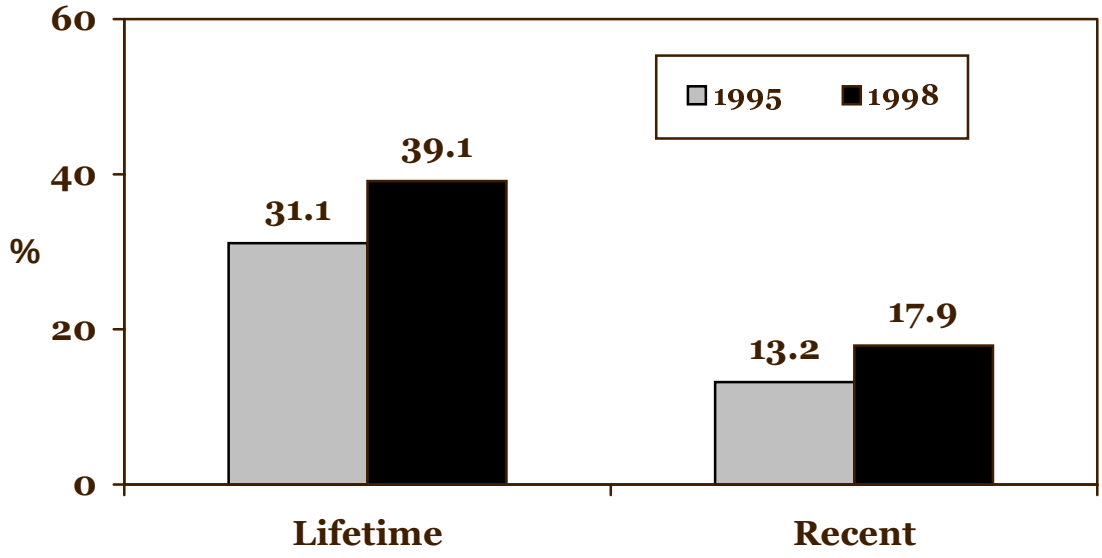


Figure 27: Prevalence of recent hash oil use among IDU by jurisdiction, 1997-2001



Analyses of data from the Australian School Students' Alcohol and Drugs Survey (Lynskey *et al*., 2000) suggest that there has been a general increase in the prevalence of cannabis use among Australian youth since the early 1990s. This finding is consistent with the increase between 1995 and 1998 in both lifetime and recent (preceding 12 months) cannabis use among the Australian general population (Figure 28), recorded by the triennial National Drug Strategy (NDS) Household Surveys of Drug Use (AIHW, 1999). The increased prevalence of use has been most apparent among young people. In the 1985 NDS Household survey, 32% of respondents aged 14-19 years had tried cannabis and by 1995 this proportion has increased to 41% (Makkai & McAllister, 1997). Consistent with this trend, the 1998 survey found that 45% of 14-19 year olds reported lifetime cannabis use (Table 34).

Figure 28: Prevalence of lifetime and recent cannabis use in Australia, 1995-1998



As noted above, recent analyses of the National Drug Strategy Household Survey data indicate that the age of initiation into cannabis use has consistently decreased for each successive birth cohort (Degenhardt *et al.*, 2000). For example, among the cohort born between 1970 and 1974, the average age of initiation into cannabis use was 18 years. In contrast, the cohort born between 1975 and 1979 recorded an average age of initiation of 16 years.

The NDS Household Surveys indicate that the prevalence of having ever used cannabis is strongly related to gender as well as age (Table 34). Men are more likely to have used cannabis than women; 44% of males versus 35% of females reported lifetime use in the 1998 survey (Darke *et al*, 2000).

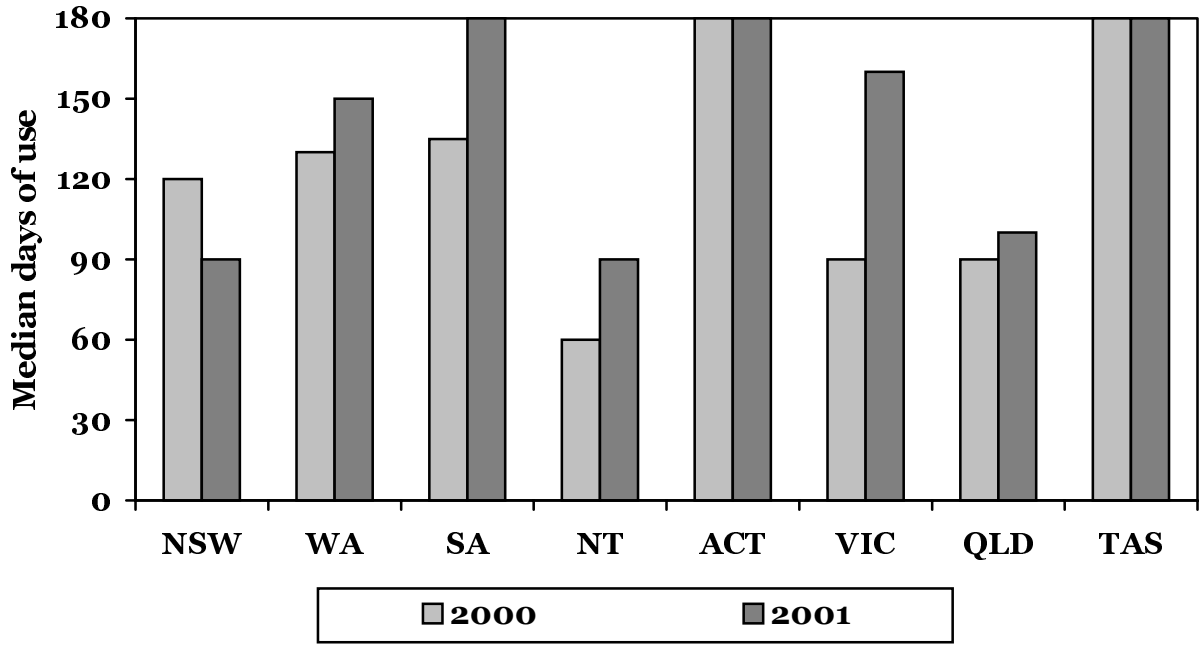
Table 34: Prevalence of lifetime and 12-month cannabis use by age and gender, 1998 NDS Household Survey general population data

	Lifetime Use (%)	12 Month Use (%)
Persons	**39.1**	**17.9**
14-19 years	45.2	35.1
20-29 years	63.9	36.9
30-39 years	56.7	20.3
40-49 years	41.7	11.5
50+ years	10.1	3.3
Males	**43.8**	**21.4**
14-19 years	45.3	35.6
20-29 years	68.3	44.8
30-39 years	59.9	24.1
40-49 years	53.7	16.7
50+ years	11.7	3.0
Females	**34.6**	**14.5**

14-19 years	45.1	34.6
20-29 years	59.3	28.9
30-39 years	53.6	16.4
40-49 years	30.0	6.1
50+ years	8.7	3.6

Frequency of recent use of cannabis among IDU varied across jurisdictions and, in some cases, within jurisdictions over time (Figure 29). Frequency of cannabis use among a population such as IDU, extremely few of whom nominate cannabis as their drug of choice, is likely to be related to the availability and cost of their drug(s) of choice as much as the availability and cost of cannabis itself. Extrapolating from the patterns of use of cannabis among IDU to the entire population of cannabis smokers is problematic and should not be considered a valid basis for policy decisions.

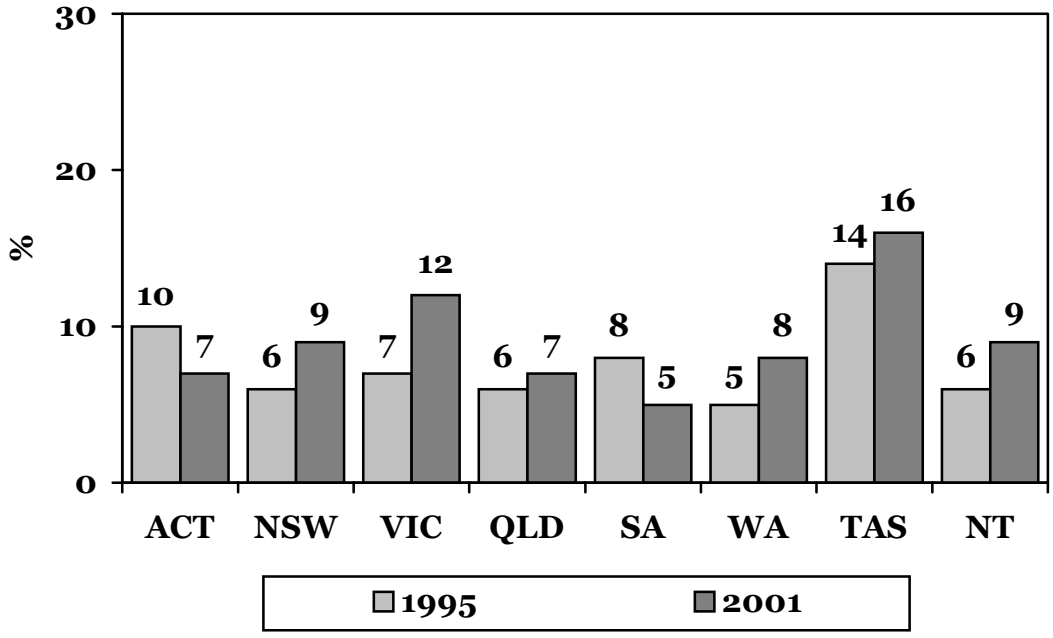
Figure 29: Frequency of recent cannabis use among IDU who reported use of the drug in the six months preceding interview, 2000-01



Jurisdictional differences in the proportion of clients of treatment services who nominated cannabis as their primary drug problem were noted in the COTSA surveys in both 1995 and 2001 (Shand & Mattick, 2001). TAS recorded the highest proportion of cannabis smokers among clients in treatment, whereas VIC recorded

the greatest increase over time in proportion of clients of treatment services reporting cannabis as the primary drug problem (Figure 30).

Figure 30: Proportion of clients of drug treatment services across jurisdictions reporting cannabis use as the main drug problem, 1995 - 2001



3.5.5 Jurisdictional trends in cannabis use

3.5.5.1 NSW

In NSW, in 2001 the median price of the most recent purchase of an ounce of cannabis was $320, a slight increase from $300 reported in 2000. This represents the first increase in the ounce price of cannabis since the IDRS was instituted. Prices of half ounces, quarter ounces and grams were identical to those reported in 2000. Cannabis remained easy to obtain in 2001. The perceived potency of cannabis continued to be rated as high, and hydroponically grown cannabis was perceived as continuing to dominate the market.

3.5.5.2 The ACT

In the ACT, cannabis was used daily by most injecting drug users as an adjunct to their other illicit drug use. Cannabis was very easy to obtain, potency was described as high, and the drug was relatively inexpensive. The trend for cannabis dealers to also deal in heroin identified in the previous *ACT Drug Trends* report was not sustained, possibly due to the heroin shortage. Nonetheless, KIS indicated that the age of initiation into cannabis use continued to fall, and that cannabis users were progressing to ecstasy and methamphetamine use more rapidly than in the past.

3.5.5.3 VIC

In VIC, cannabis use remained relatively stable, with a small increase in prevalence of use and a slight reduction in ounce prices. KIS attributed the increase in use to the reduced availability of heroin. Cannabis availability and perceived potency have not changed in VIC between 1997 and 2001. Cannabis is the most widely used illicit drug in VIC, as in all Australian jurisdictions, and its use is almost ubiquitous among IDU.

3.5.5.4 TAS

In TAS, most aspects of the cannabis market and patterns of use were relatively stable, despite the continued expansion of the Illicit Drug Diversion Initiative within the state. This indicates that any perceived lessening of the potential personal cost associated with possession of small amounts of cannabis has not had any negative impact in terms of expansion of the local cannabis market (an argument often levelled at similar programs in other jurisdictions). Among the IDU surveyed, cannabis use remained almost universal, with 94% reporting use of the drug in the preceding six months, and the majority of these having used daily. Although most of those interviewed indicated that the price of cannabis had remained stable in the six months preceding the interview, the median purchase price of an ounce of cannabis fell from $300 in 2000 to $280 in 2001. Most IDU reported a preference for hydroponic cannabis head, and, consistent with this, intelligence reports from TAS police indicate an increasing trend toward hydroponic cultivation of the drug.

3.5.5.5 SA

In SA, cannabis was readily available, and the price was identical to that reported in the 2000 IDRS. Both IDU and KIS described the potency as high, and users report that the majority of cannabis available in SA is ‘hydroponically grown’. The prevalence of cannabis use among this population appeared relatively stable.

3.5.5.6 WA

In WA, little change was recorded in cannabis use between 2000 and 2001, with the drug remaining the most frequently used illicit drug among the IDU surveyed, and price, availability and patterns of use remaining stable. An increase in the proportion of IDU describing potency as ‘very high’ was noted. A continuation of the reduction in the number of cannabis-related calls to the ADIS line and a reduction in the number of cannabis-related possession/use charges laid in WA in 2000 were noted. The reduction in such charges was consistent with the number of cautions issued under the state-wide cannabis cautioning scheme introduced in WA in March 2000, where those who receive a caution for possession are not charged and consequently do not appear in the data.

3.5.5.7 The NT

In the NT, cannabis remained the most prevalent drug, with a high proportion of IDU using it, often on a daily or almost daily basis. Cannabis was very easy to obtain,

and both availability and price remained stable. Potency was considered to be medium to high and stable. Hydroponic cannabis remained the form most commonly used.

3.5.5.8 QLD

Cannabis use was stable in QLD between 2000 and 2001. In 2001, the price of cannabis was $25 for a gram and $320 an ounce, representing an increase between 2000 and 2001 in ounce prices of $20. The potency of cannabis was perceived as high in both years, and availability of both hydroponically and outdoor crop cannabis was described as high and stable.

3.5.6 Summary of cannabis trends

- There was relatively little variation in the price of an ounce of cannabis in 2001, which ranged from $200 in SA to $320 in NSW. The price of a gram of cannabis was also cheapest in SA. Over all years of the IDRS, SA has consistently recorded lower market prices for cannabis than the other jurisdictions
- The price of cannabis decreased by $20-$25 per ounce between 2000 and 2001 in SA, VIC, the ACT, WA and TAS, and increased by $20 in NSW and QLD
- As in all years of the IDRS, the potency of cannabis was estimated by IDU and KIS in all jurisdictions as high or medium to high, and the potency was perceived to have remained stable
- Cannabis remained widely available in all jurisdictions and the availability was perceived to have remained stable
- Hydroponically grown cannabis continues to dominate the market and 'bongs' remain the preferred means of administration
- High proportions of IDU also reported the recent use of outdoor crop cannabis (69%) and hashish (33%)
- There has been an increase throughout the 1990s in the prevalence of cannabis use, particularly among young people
- Extrapolating from the reports of IDU to the entire population of cannabis users is problematic and is unlikely provide a sound basis for policy decisions

3.6 Other drugs

3.6.1 Ecstasy

In 2000 and 2001, the monitoring of trends in the use of ecstasy and other party drugs formed a separate, specialised component of the IDRS based on previous NDARC research into ecstasy use (Topp *et al.*, 1998; 1999). These trends are reported elsewhere (Longo *et al.*, 2002; Topp *et al.,* 2002).

3.6.2 Methadone

3.6.2.1 Differences across jurisdictions

Consistent with 2000, there were startling jurisdictional differences in 2001 in the proportions of IDU who reported having injected methadone in the preceding six months, ranging from 6% in VIC to 76% in TAS (Figure 31). The high rate of methadone injection in TAS, partly related to the difficulty in obtaining heroin in that jurisdiction, is cause for concern, given that the injection of methadone syrup is associated with vascular damage and increased risk of overdose (Darke, Ross & Hall, 1996). Other data are consistent with the notion that there is significantly more methadone activity in TAS than in other jurisdictions: significantly higher proportions of IDU in TAS than elsewhere had used and injected methadone in the preceding six months (Figure 32); and more nominated methadone as their favourite drug, as the drug they had last injected, and as the drug they had injected most often in the preceding month (Table 7).

Figure 31: Proportion of IDU samples that reported injecting methadone in preceding six months, by jurisdiction, 2000-2001

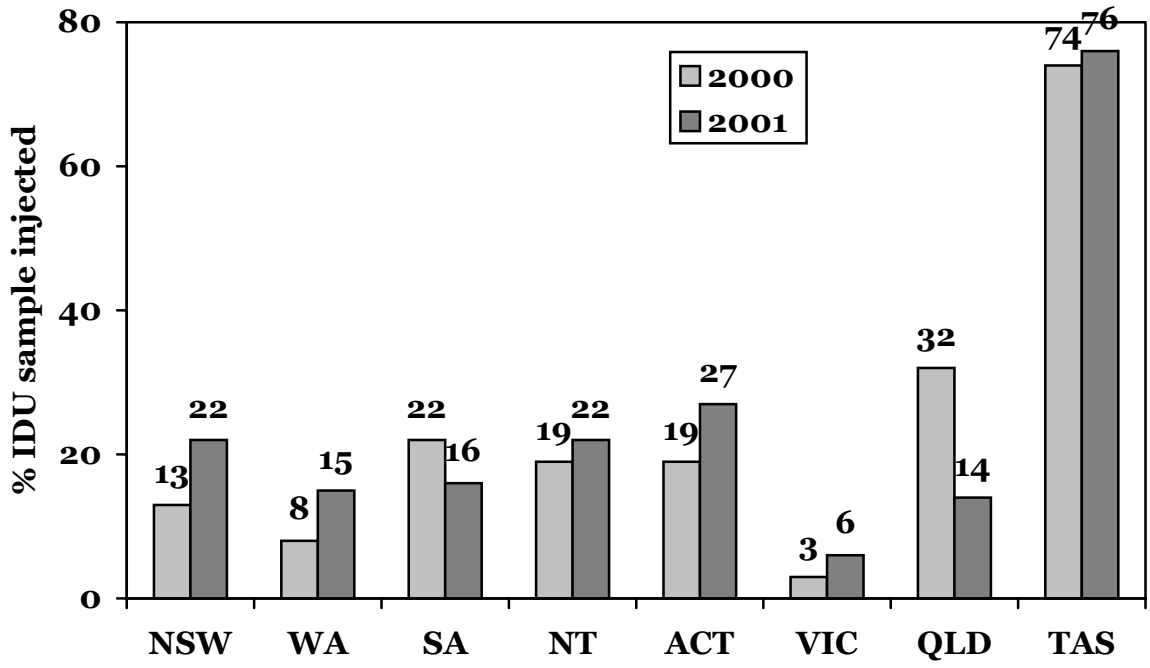
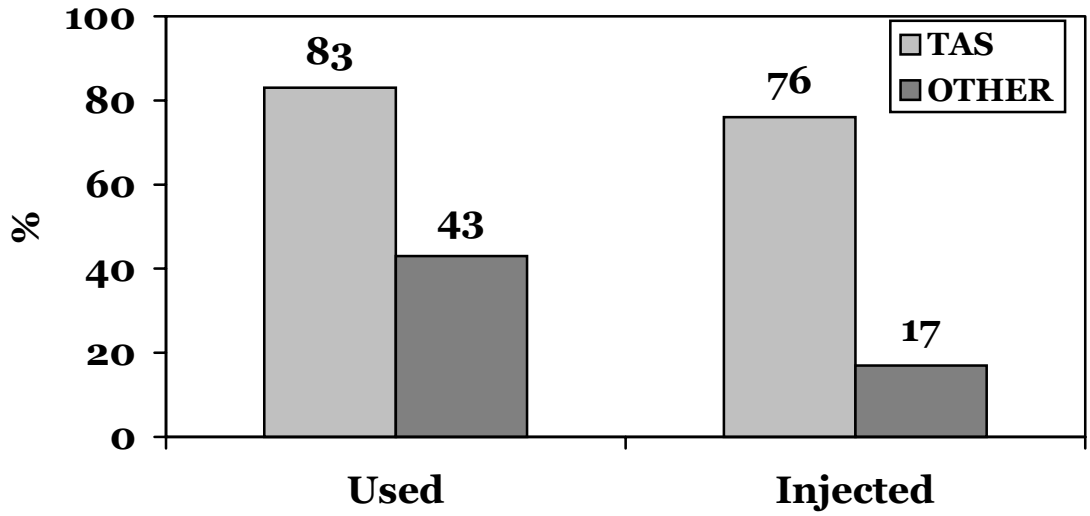


Figure 32: Methadone use and injection in TAS and other jurisdictions in the six months preceding the interview, 2001



However, although a significantly higher proportion of TAS IDU than IDU in other jurisdictions reported recent use of methadone, the figures are likely to *overestimate* the availability of methadone via *illicit* sources in that jurisdiction. The majority (71%) of IDU who reported recent use of methadone had been enrolled in a methadone maintenance program, and those who had accessed the drug through illicit sources (i.e., not through their own legitimate prescription) reported an average frequency of use of only six days in the preceding six months. Consistent with this, IDU reported usually obtaining the drug by trading it among friends (54%) or by opportunistic selling of takeaway doses (27%).

In the other jurisdiction in which heroin has traditionally not been freely available, the NT, the prevalence of recent methadone use among IDU increased between 2000 and 2001 from 23% to 36%. The average frequency of methadone use increased from 45 days in the preceding six months to 62 days, while the prevalence of recent injection remained relatively stable (Figure 31). The NT does not have a methadone maintenance program but, in February 2000, Territory Health Services (now the Department of Health and Community Services) introduced a 3-month methadone withdrawal program (Opiate Withdrawal and Management Program, OWMP). The increase in 2001 in the proportion of IDU that reported use of methadone in the preceding six months may be partially due to more IDU accessing this treatment in the NT during the survey period. Of the 35% of IDU who had sought treatment in the previous 6 months, most (42%) had been on the methadone program. Further, in the six months preceding the interview, IDU in the NT more often accessed methadone syrup through licit rather than illicit avenues (15% versus 10%).

Nonetheless, at least some methadone syrup appeared to be diverted in the NT, with 7% of IDU reporting that illicit methadone syrup was the form of methadone used most often in the preceding six months. Physeptone® tablets were more likely to be obtained in the preceding six months from illicit sources than from licit sources (17% versus 8%), and a higher proportion of those who had used Physeptone® tablets in the preceding six months reported that they more often used tablets obtained illicitly than those who more often used tablets obtained licitly. This

suggests diversion of this form of methadone onto the black market along with methadone syrup.

3.6.2.2 Differences over time

Figure 31 depicts clear increases between 2000 and 2001 in the prevalence of recent injection of methadone in NSW, WA and the ACT, and decreases in SA and QLD. The increase in methadone injection in NSW is the first recorded by the IDRS since 1998 (Figure 33), when the necessary injecting equipment was removed from NSW NSPs. Some IDU and KIS in NSW suggested that the increase in methadone injection was related to the reduced availability of heroin. VIC also recorded a slight increase between 2000 and 2001 in the prevalence of recent methadone injection, although the prevalence of this practice in VIC has consistently been lower and more stable than in other jurisdictions (Figure 33). In SA, the decrease between 2000 and 2001 in recent methadone injecting represents the first decrease recorded by the IDRS.

Despite the high rates of methadone injection in TAS, the Annual NSP Surveys (NCHECR, 2001) have shown that, overall, methadone injection decreased markedly between 1995 and 2000 among clients of NSPs throughout Australia, from 19% to 3% (Figure 34). This was largely as a result of the decrease in rates of injection in NSW, depicted among IDRS IDU samples by jurisdiction in Figure 35, and mirrored among clients of NSW NSPs in Figure 36. Given the high concordance between the IDRS and the Annual NSP Surveys in the past (e.g., MacDonald & Topp, 2000), and the increase recorded by the IDRS in methadone injecting in NSW in 2001, it seems likely that an increase in the prevalence of methadone injection will be recorded by the 2001 NSP Survey when the results become available.

Figure 33: Methadone injection among IDRS IDU samples in preceding six months by jurisdiction, 1997-2000

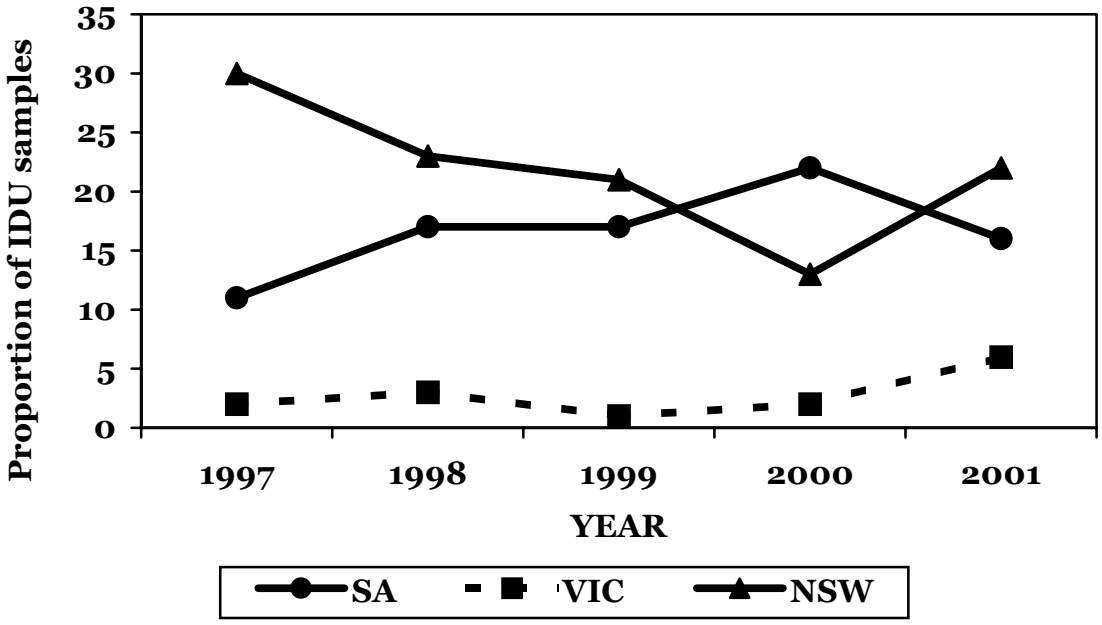


Figure 34: Prevalence of methadone injection in Australia among clients of NSPs, 1995-2000

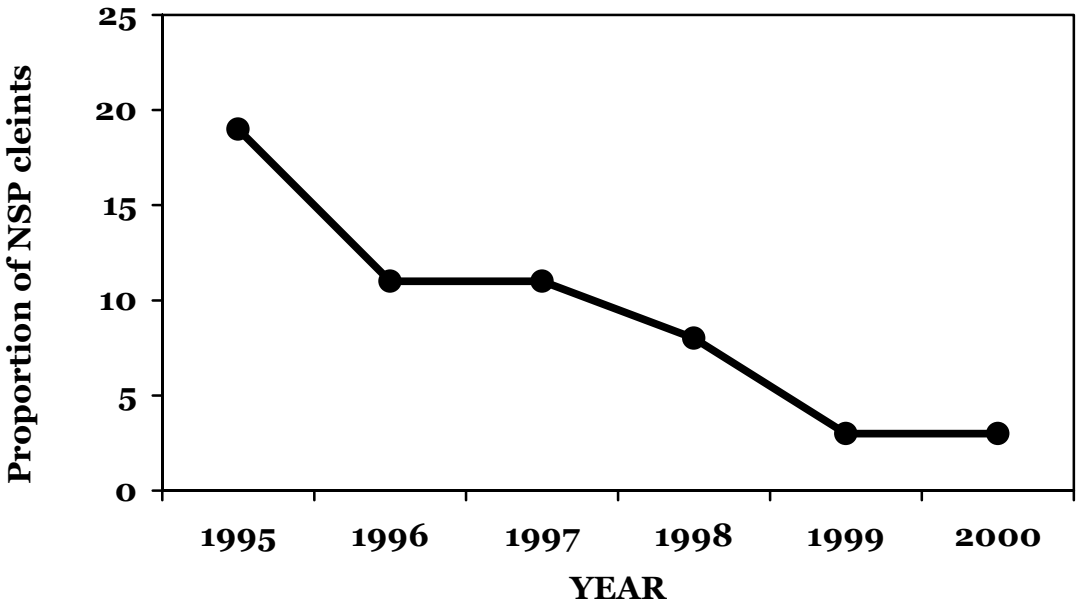
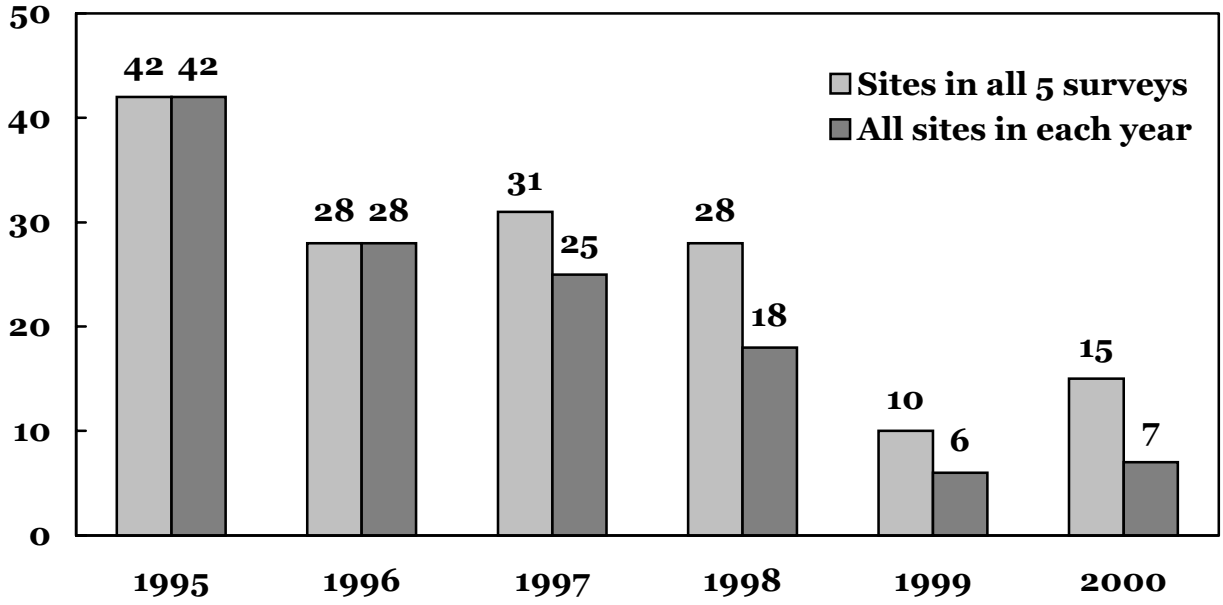


Figure 35: Methadone injection among clients of NSPs in NSW, 1995-2000



Note: Figure 35 depicts the decrease over time in methadone injection in NSW in two ways: among clients of NSPs who took part in all of the Annual NSP Surveys; and among clients of all sites that participated in the Survey each year.

3.6.3 Other opioids

3.6.3.1 Morphine

Consistent with the results of the 2000 IDRS, in 2001, the use of morphine was primarily an issue in the NT and, to a somewhat lesser extent, in TAS (Table 12). In these jurisdictions, heroin has traditionally not been freely available and other opioids have dominated the markets.

In the NT in 2001, heroin was the preferred opioid of IDU, but morphine was the most commonly used opioid and the drug most often last injected (Table 12). Relative to other jurisdictions, there was a significantly higher prevalence (Figure 36) and frequency (Figure 37) of recent morphine use among IDU in the NT. The reports of KIS and IDU in the NT suggested that there had been a recent increase in the number of indigenous people using morphine; that there had been an overall increase in the use of morphine, especially among young people; and that quantity and frequency of morphine use had increased. It was perceived that most morphine users did not access treatment; and that polydrug use was prevalent and increasing.

Figure 36: Prevalence of recent morphine use among IDU in the NT and other jurisdictions, 2001

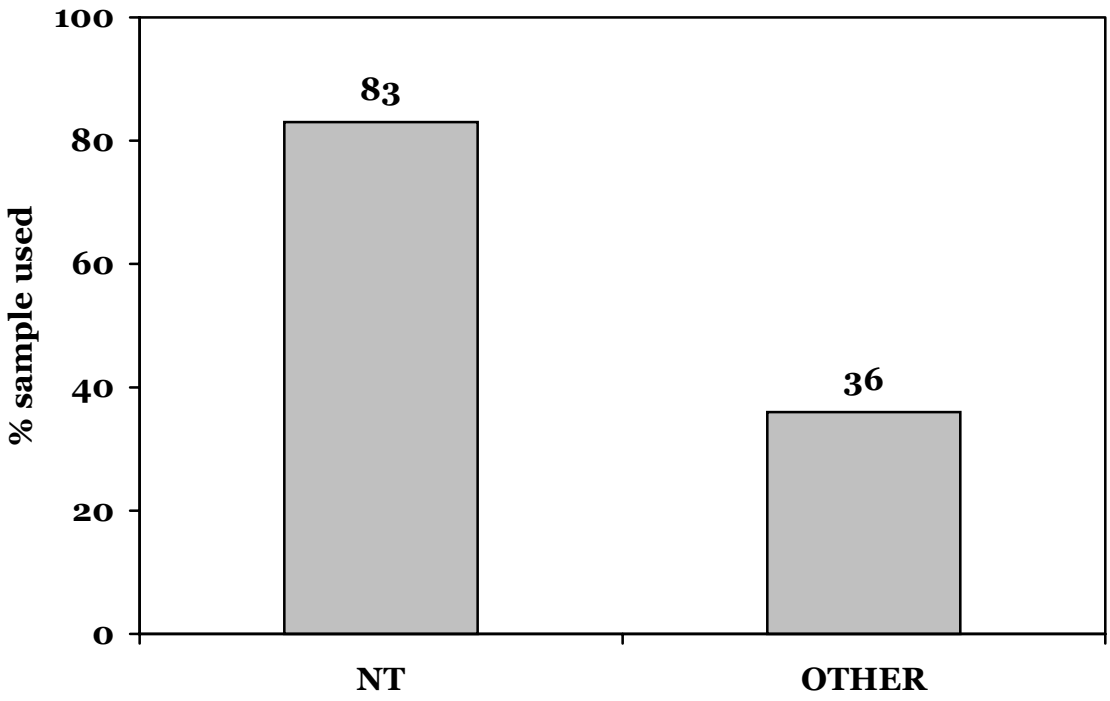
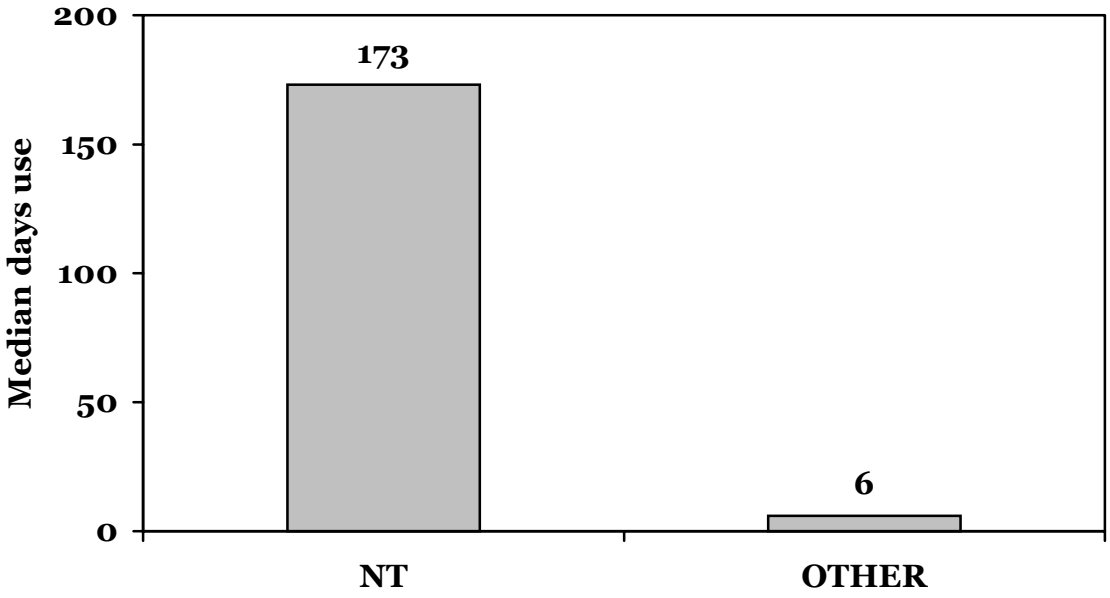
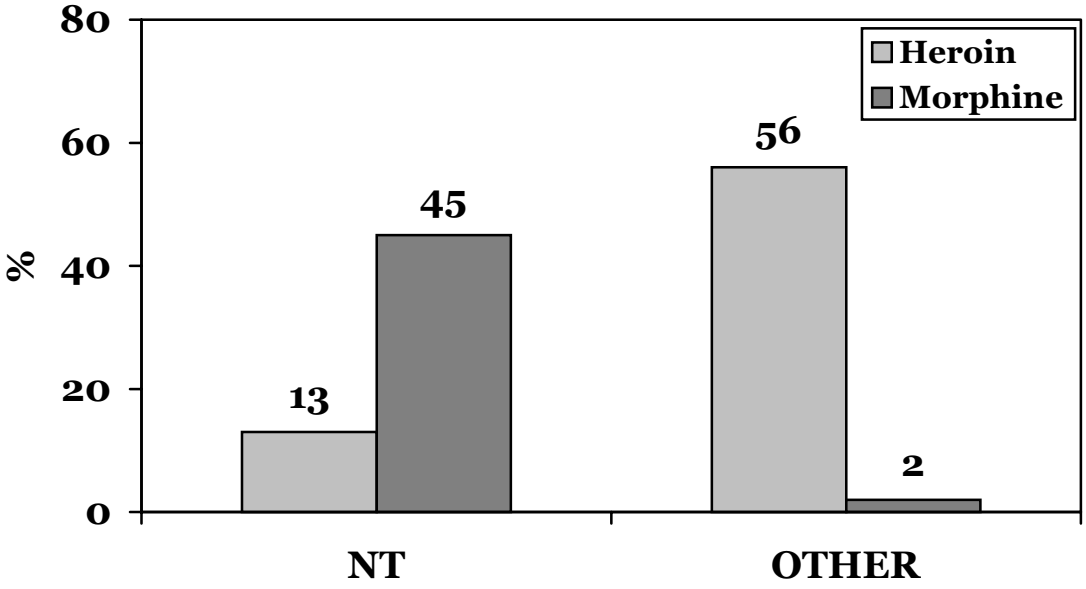

100
80
60
40
20
0
% sample used
83
36
NT
OTHER

Figure 37: Frequency of recent morphine use among IDU in the NT and other jurisdictions, 2001



A higher prevalence of morphine injection among IDU in the NT compared to those in other jurisdictions has also been documented by the Annual NSP Surveys (NCHECR, 2001). Figure 38 depicts the prevalence of morphine and heroin as the last drug injected by clients of NSPs in the NT and other jurisdictions in 2000, the most recent NSP Survey results available, and clearly shows that morphine is the most commonly injected opioid in that jurisdiction, but is much less commonly injected in other jurisdictions.

Figure 38: Prevalence of heroin and morphine injection in the NT and other jurisdictions, 2000



MS Contin® 100mg tablets were most common form of morphine available in the NT in 2001, but there was also an increase in the availability of other forms. A 100mg MS Contin® tablet usually cost $50 and the price was reported to have been stable. MS Contin® 60 mg sold for $30 while the 30 mg form sold for $15. Diversion of legal morphine prescriptions was common, and the illicit morphine market was perceived to have become busier and more aggressive. Most of those who commented described morphine as easy to obtain.

In TAS, patterns of use and availability of other opioids such as morphine generally remained stable between 2000 and 2001. However, there were anecdotal reports of an increasing number of people using opioids, and a continuation of the trend towards an increase in the proportion of the clients of the state's Needle Availability Program reporting opioids as the drug they most often injected. This figure has steadily increased from 32% in 1996/97 to 57% in 2000/01. There were some indications of a slight decrease in price of the most commonly purchased amount of morphine (60mg tablets of MS Contin: modal prices $50 in 2000, $40-50 in 2001), which, in conjunction with IDU reports, may suggest a potential increase in availability of morphine. In terms of pathways to accessing these pharmaceutical opioids in TAS, importantly, IDU do not appear to be doctor-shopping as a means of accessing these products; only 5% of those who had used morphine in the six months prior to interview accessed the drug from a medical practitioner.

There was clear evidence in TAS of a reduction in use or attempted use of preparations of alkaloid poppies. There was a decrease between 2000 and 2001 in the proportion of IDU that reported recent use of poppies from 34% to 13%. The number of poppy crop thefts recorded in TAS also decreased substantially between 2000 and 2001, from 63000 heads to 8000.

The higher rates and frequency of use of opioids other than heroin and methadone among IDU in the NT and TAS relative to those in other jurisdictions are consistent with the results of the 2000 IDRS. However, in 2001, morphine use emerged for the first time as an issue in SA. There was an increase in SA in the prevalence of recent morphine use among IDU, from 8% in 2000 to 43% in 2001. Three quarters (79%) of those who used morphine in the previous six months had injected it, and this group mainly obtained their morphine through illicit means. In SA, nearly a quarter of those who had used morphine in the previous six months had used on a daily basis in that time.

3.6.3.2 Homebake

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

(Reynolds *et al.,* 1997).

Use of homebake appears in the past to have been predominantly restricted to opioid users in WA. The reasons for this appear to be three-fold: demand for heroin during times of limited supply of powder heroin; geographical isolation; and historical and social factors, notably the community knowledge about homebake manufacture which was carried by immigrants from New Zealand in the late 1980's (Reynolds *et al.,* 1997). A reduction in the reported use of homebake was noted in the mid 1990s as the availability of heroin increased in WA (Reynolds *et al.,* 1997). Questions about homebake have routinely been added to the IDRS data collections in, and in 2001 there were indications of an increase in its use as a result of the reduced availability of heroin.

In WA in 2001, five KIS noted that homebake had re-emerged onto the WA drug market for a time, and was used primarily when heroin was unavailable. This perception was supported by the significant increases between 2000 and 2001 in the lifetime use, lifetime injection, recent use and recent injection of homebake among IDU in WA. The increase in prevalence of recent homebake use was more marked among IDU who nominated heroin as their drug of choice. Almost two-thirds of these IDU indicated that they had used homebake in the six months prior to interview, compared to just 9% in the 2000 study. In addition, more than half of the IDU who reported any heroin use in the last six months had also used homebake, compared to just 6% in 2000.

Together, these data suggest a re-emergence of homebake use in WA, particularly among IDU who identified heroin as their drug of choice. The data are consistent with KIS perceptions that such use was the result of the decreased availability of heroin observed in the WA since late 2000/early 2001. The trend was not detected in other WA data sources such as calls to ADIS. Even though questions about homebake are not routinely asked in the IDRS in other jurisdictions, any homebake use would have been detected in relation to reports of the use of 'other opiates'. Consequently, interstate comparisons were possible and determined that the use of homebake remained restricted to WA during 2001.

3.6.4. Benzodiazepines

There were marked differences between jurisdictions in the proportions of IDU who reported having used benzodiazepines in the preceding six months, ranging in 2001 from 56% in NSW to 85% in TAS (Table 35). Rates of recent injection also varied widely, from 9% of IDU in SA to 40% in VIC. Marked increases between 2000 and 2001 in the prevalence of recent benzodiazepine use and injection were recorded in the NT, and in prevalence of recent injection in QLD. A marked decrease in prevalence of recent use was recorded in WA and, to a lesser extent, in the ACT.

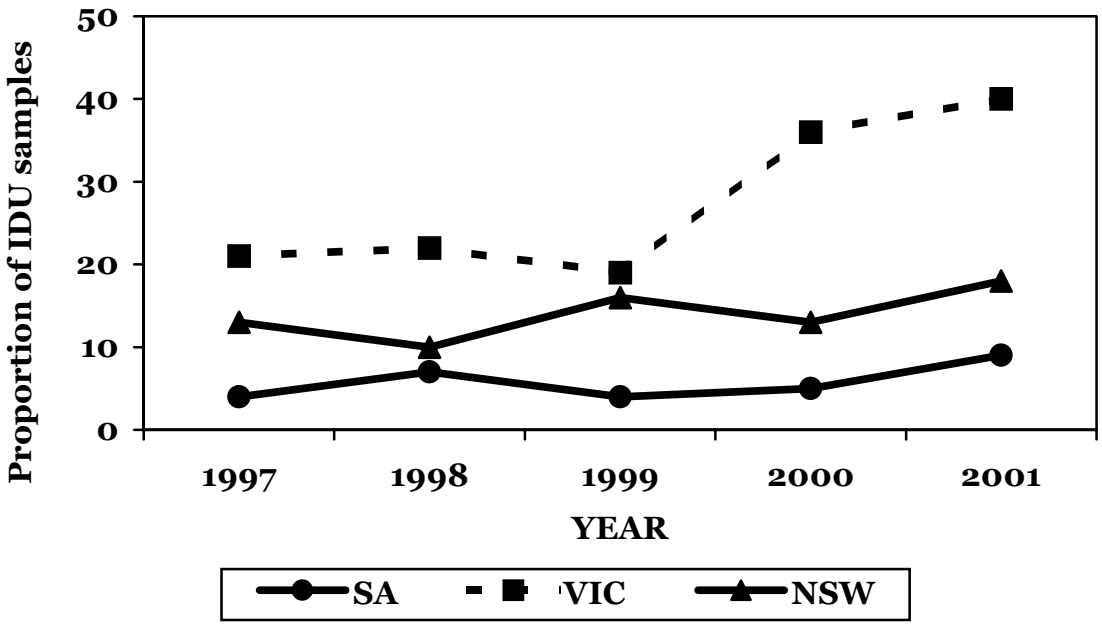
Table 35: Proportion of IDU samples reporting benzodiazepine use and injection in preceding six months by jurisdiction, 2000-2001

	2000		2001		
	Used (%)	Injected (%)	Most common brand	Used (%)	Injected (%)
NSW	61	13	Diazepam	56	18
SA	65	5	Diazepam	57	9
VIC	74	36	Temazepam	78	40
QLD	60	16	-	64	27
WA	72	21	Diazepam	51	14
TAS	78	36	Diazepam	85	37
NT	29	12	Temazepam	53	27
ACT	77	15	Diazepam	66	14

Consistent with specific studies of benzodiazepine preferences (Darke, Ross & Hall, 1995), fast-acting benzodiazepines such as diazepam (e.g., Valium®) were the preferred types of benzodiazepines among the IDU samples in all jurisdictions. The preference for these types was also consistently noted by KIS. The use of temazepam capsules (e.g., Normison®), which contain a gel-like substance that is insoluble in blood or water but easily injected relative to other benzodiazepine preparations, was associated with benzodiazepine injecting. Temazepam was the most commonly used benzodiazepine in VIC, the jurisdiction that recorded the highest rate of recent benzodiazepine injecting (Table 35).

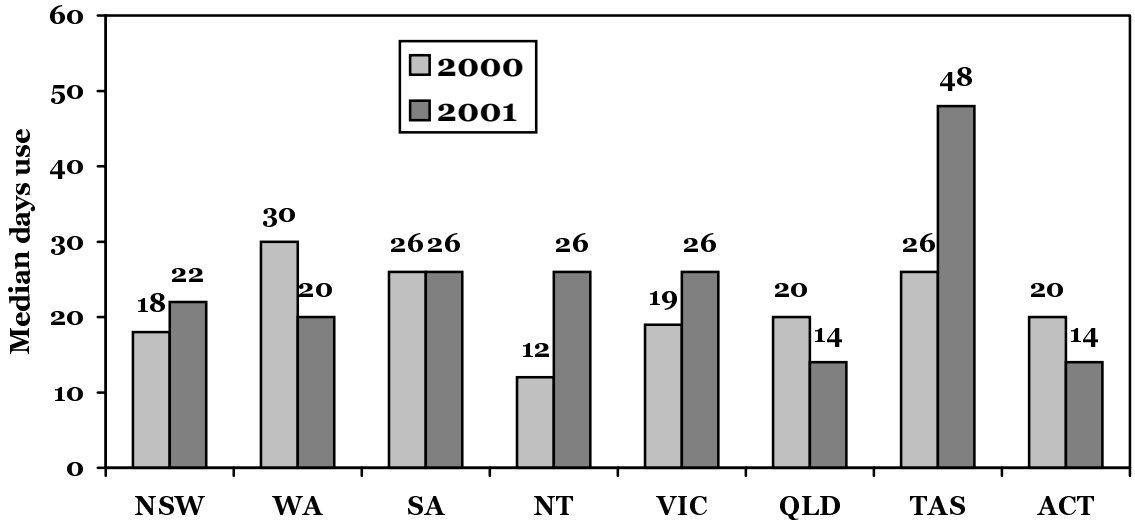
The high rates of recent benzodiazepine injection in VIC in 2000 and 2001 were a result of the stabilisation of the marked increase between 1999 and 2000 in the proportion of the IDU sample that reported having engaged in the practice in the preceding six months, from 19% to 36%. In contrast, over the years of the IDRS, the injection of benzodiazepines has remained lower and relatively stable in NSW and SA (Figure 39), although there were slight increases in benzodiazepine injection between 2000 and 2001 in both states. The relatively high rates of benzodiazepine injection in some Australian jurisdictions, notably VIC and TAS, are cause for concern because, like the injection of methadone syrup, intravenous benzodiazepine use is associated with increased drug-related harm, including vascular damage, blood clots and increased risk of overdose (Darke, Ross & Hall, 1995; Ross, Darke & Hall, 1997).

Figure 39: Benzodiazepine injection in preceding six months by jurisdiction, 1997-2000



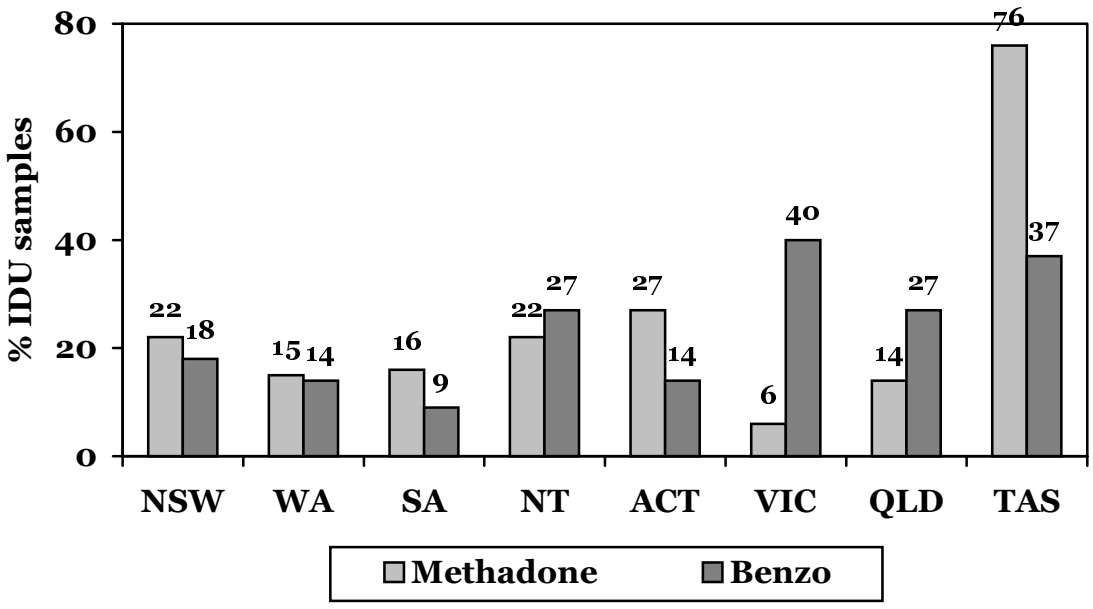
Along with differences in route of administration of benzodiazepines, in 2001 there were also marked jurisdictional differences in average frequency of recent benzodiazepine use (Figure 40), ranging from approximately once per fortnight in QLD to two days per week in TAS. There were also marked differences in frequency of use within jurisdictions over time; increases in frequency of use between 2000 and 2001 were recorded in the NT and TAS, while decreases were recorded in WA, the ACT and QLD (Figure 40).

Figure 40: Median days benzodiazepine use in preceding six months, by jurisdiction, 2000-2001



Both methadone and benzodiazepines are intended for oral administration. It could reasonably be hypothesised that if an IDU is willing to inject one non-injectable substance, they might also be willing to inject another. However, comparison of figures within jurisdictions in the proportions of IDU samples that reported recent injection of methadone and benzodiazepines reveals marked differences in the rates of injection of the two drugs (Figure 41). This difference is most striking in VIC, which, consistent with 2000, recorded the lowest rate of methadone injection in 2001, along with the highest rate of benzodiazepine injection. Conversely, in SA, relatively high rates of methadone injection were recorded simultaneously with the lowest rate of benzodiazepine injection. Only in NSW, WA and the NT were the recorded rates of the two practices equivalent, but these proportions did not represent the same group of subjects.

Figure 41: Proportions of IDU samples that reported recent benzodiazepine or recent methadone injection by jurisdiction, 2001



3.6.5 Anti-depressants

There was less jurisdictional variation in the use of anti-depressants among IDU than in the use of methadone and benzodiazepines. Rates of recent anti-depressant use ranged from 15% in SA to 28% in QLD (Table 36). Decreases in prevalence between 2000 and 2001 were recorded in QLD, NSW and the ACT. In those jurisdictions where comparable data has been collected over time, rates of recent anti-depressant use have remained relatively stable, with VIC consistently reporting higher rates of recent anti-depressant use than NSW and SA (Figure 42).

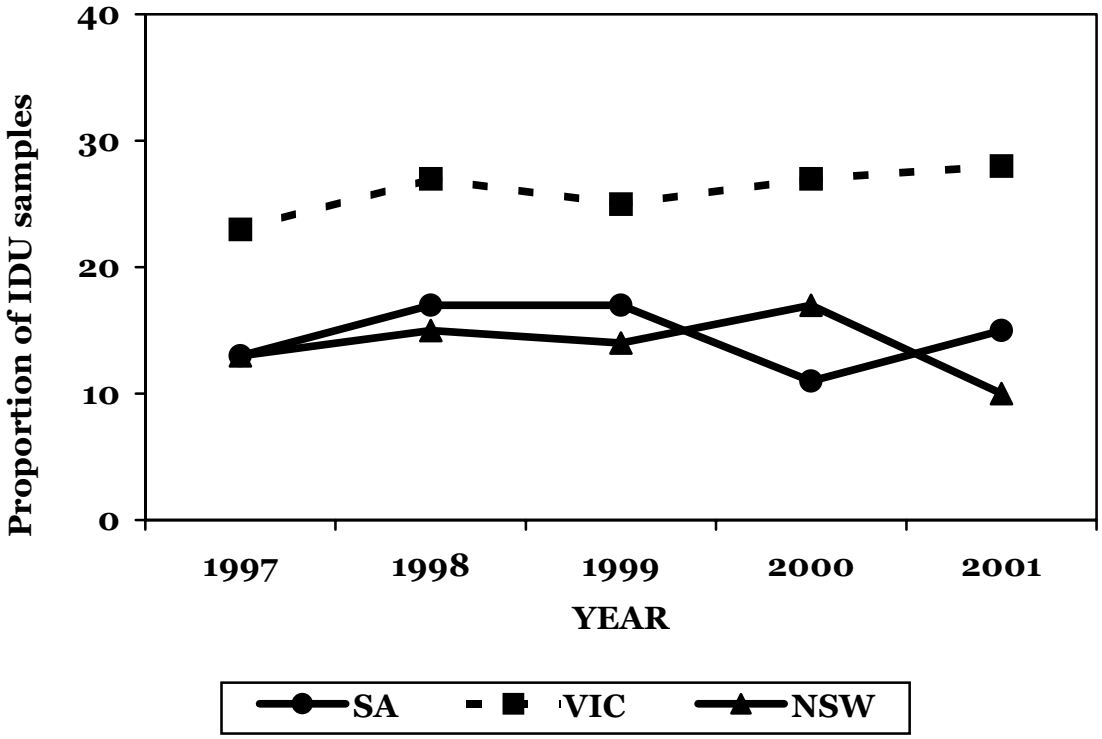
As with methadone and benzodiazepines, the use of anti-depressants among IDU is of concern because it has been associated with heroin overdose (Darke & Ross, 2000; Darke, Ross, Zador & Sunjic, 2000), along with higher levels of polydrug use and psychiatric distress, and poorer general health. The elevated risk of overdose

was specifically associated with the older tricyclic anti-depressants (e.g., Tryptanol®) rather than the more recent serotonin-specific (e.g., Prozac®) and noradrenaline-specific (e.g., Effexor®) reuptake inhibitors.

Table 36: Proportion of IDU samples reporting anti-depressant in preceding six months by jurisdiction, 2000

Jurisdiction	2000	2001
NSW	17	10
VIC	27	28
SA	11	15
QLD	51	28
WA	32	28
TAS	22	25
NT	24	27
ACT	26	16

Figure 42: Anti-depressant use in preceding six months by jurisdiction, 1997-2001


40
30
20
10
0
Proportion of IDU samples
1997
1998
1999
2000
2001
YEAR
SA
VIC
NSW

In summary, there was wide variation both between jurisdictions, and within jurisdictions over time, in the use and injection of other drugs such as methadone, other opioid preparations and benzodiazepines (Table 37).

Table 37: Patterns of other drug use among IDU by jurisdiction, 2000-2001

	NSW	VIC	SA	QLD	WA	ACT	TAS	NT	ALL
Methadone									
Injected (%)									
2000	13	3	22	32	8	19	74	19	22
2001	22	6	16	14	15	27	76	22	23
Other opiates									
Used (%)									
2000	23	38	23	51	51	30	83	76	37
2001	21	49	52	38	37	49	75	83	50
Injected (%)									
2000	12	24	11	33	36	17	77	73	26
2001	12	37	34	32	32	74	74	78	42
BZDs									
Used (%)									
2000	61	74	65	80	72	67	81	29	63
2001	56	78	57	64	51	66	85	53	64
Injected (%)									
2000	13	36	5	16	21	15	37	12	21
2001	18	40	9	27	14	14	37	27	24

3.6.6 Summary of other drug trends

- There were striking jurisdictional differences in the rates of recent injection of methadone, ranging in 2001 from 6% in VIC to 76% in TAS
- TAS recorded significantly higher rates of methadone use and injecting than other jurisdictions, but these figures should not be taken to overestimate the availability of methadone via illicit sources in that state
- The NT recorded significantly higher rates of morphine activity than other jurisdictions
- SA recorded increases in prevalence of recent morphine use that may have been associated with the reduced availability of heroin
- Homebake re-emerged in WAS opioid markets in response to the reduced availability of heroin
- Recent use of benzodiazepines was high (56% -85%) in all jurisdictions, and the NT recorded marked increases between 2000 and 2001 in recent use. As in 2000, diazepam was the most commonly used benzodiazepine
- Rates of recent benzodiazepine injection varied from 9% in SA to 40% in VIC. VIC recorded a striking increase in recent benzodiazepine injection between 1999 and 2000 which appeared to stabilise in 2001. The use of temazepam capsules was strongly associated with benzodiazepine injection
- There were marked differences within jurisdictions in the rates of injection of non-injectable substances, such as methadone versus benzodiazepines
- Rates of recent anti-depressant use were less variable across jurisdictions, than methadone and benzodiazepines, ranging from 15% in SA to 28% in QLD, WA and VIC. Rates of recent anti-depressant use have remained relatively stable since 1997 SA and VIC, whereas a decrease was recorded between 2000 and 2001 in NSW. A marked decrease in recent benzodiazepine use between 2000 and 2001 was recorded in QLD

3.7 Drug-related issues

3.7.1 Fatal opioid overdose

According to the 2000 Australian Bureau of Statistics (ABS) data on opioid overdose deaths (Degenhardt, 2001), the number of opioid-related deaths among 15-44 year olds in Australia decreased from 958 in 1999 to 725 in 2000. This followed an increase between 1998 (737) and 1999 (Table 38). Adjusted for population, this represents a 25% decrease compared to the overdose rate, from 112.5 per million persons in 1999 to 84.8 per million persons in 2000 (Figure 43). Note that these figures are for 2000, *prior to* the reduced availability of heroin.

As in 1998 and 1999, deaths in VIC (263) and NSW (249) contributed close to three quarters (71%) of all opioid-related deaths. In 2000, VIC had the highest overdose rate in Australia (Figure 44), with a rate of 122.9 per million persons. VIC also had the highest number of opioid overdoses in the country (263). Nevertheless, the rate decreased by 25% in 2000 compared to the 1999 rate. There was a 38% decrease in the NSW overdose rate between 1999 and 2000 (Degenhardt, 2001). Overdose rates decreased in all jurisdictions except QLD.

Table 38: Number of opioid overdose deaths among those aged 15-44 years by jurisdiction, 1988 - 1999

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1988	201	99	15	12	18	0	0	2	**347**
1989	154	98	19	8	18	1	2	2	**302**
1990	193	78	8	18	14	5	0	0	**316**
1991	142	63	9	12	12	3	0	2	**243**
1992	178	77	18	28	21	0	1	4	**327**
1993	177	84	22	40	23	4	2	5	**357**
1994	201	91	34	32	38	4	5	1	**406**
1995	251	136	42	34	68	6	0	13	**550**
1996	244	142	27	30	61	5	2	15	**526**
1997	292	168	26	36	70	1	1	6	**600**
1998	358	210	38	457	59	7	10	10	**737**
1999	401	347	70	52	73	3	4	8	**958**
2000	249	263	113	40	43	5	2	10	**725**

Earlier research has shown that the typical fatal heroin overdose case is an opiate-dependent male in his early 30s, not in drug treatment, who has consumed other drugs in conjunction with heroin, primarily alcohol and/or benzodiazepines Darke, Ross, Zador & Sunjic, 2000). The 2000 ABS figures accord well with these observations (Degenhardt, 2001): deaths in the 15 to 44 year age group made up 90% of all opioid overdose deaths in Australia; males formed 79% of the group (Table 39); and the average age at death was 30.4 years.

Figure 43: Rates per million population of opioid overdose among those aged 15-44 years in Australia, 1988-2000

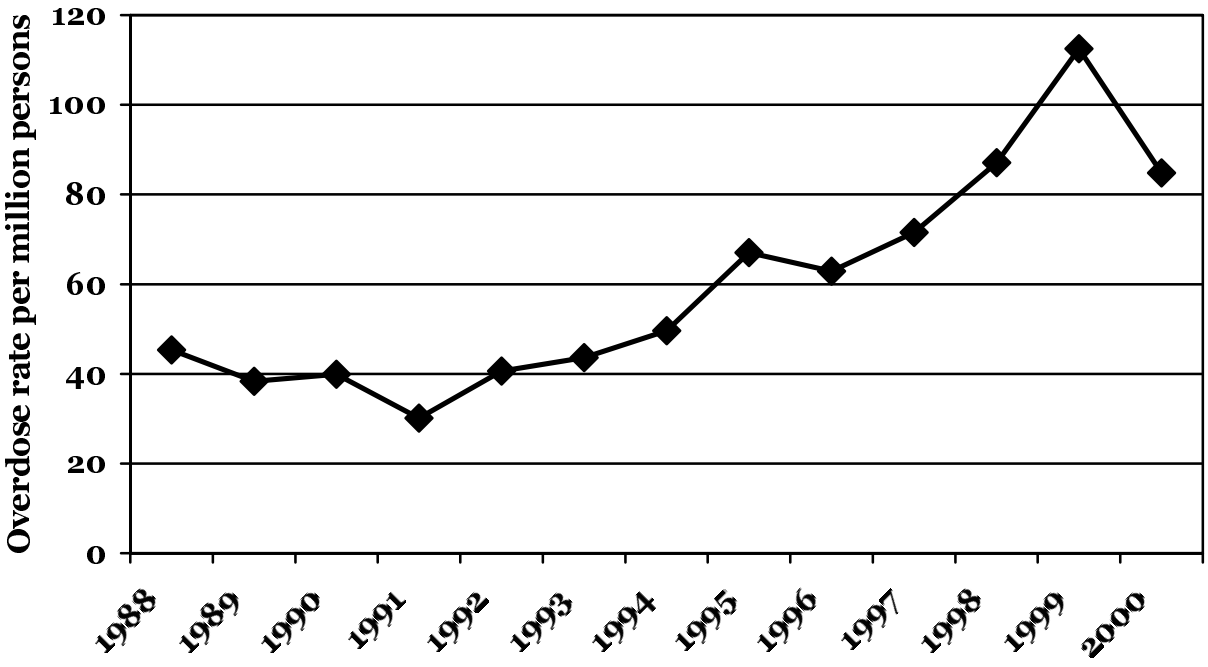


Figure 44: Rates per million population of opioid overdose among those aged 15-44 years across jurisdictions, 2000

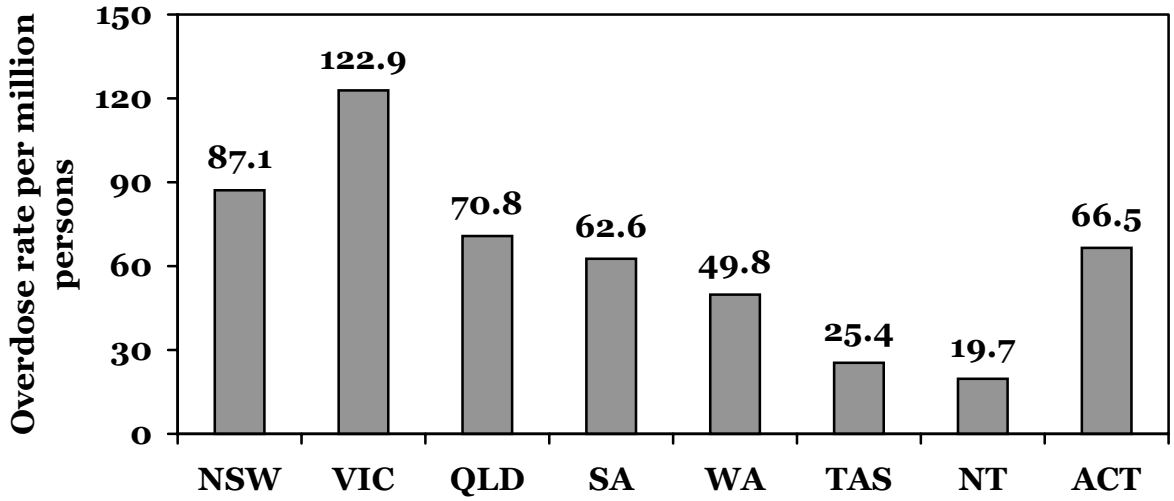


Table 39: Number of deaths attributed to opioids among those aged 15-44 years by gender and jurisdiction, 2001

	AUST	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
No. of deaths									
Males	572	198	8	205	4	33	31	1	92
Females	153	51	2	58	1	7	12	1	21
% of deaths									
Males	79	80	80	78	80	83	72	50	81
Females	21	20	20	22	20	17	28	50	19

The 2000 ABS opioid overdose figures do not reflect the effects of the reduced availability of heroin, which was widely reported to take hold around Christmas 2000. Degenhardt (2001) asserted that it is unlikely that there was a single factor responsible for the reduction on opioid deaths, and that a range of potential factors may have contributed. Potential contributors discussed by Degenhardt included: increases in access to treatment, and to a wider range of treatment, for opioid dependence; user education initiatives; and innovative strategies designed to reduce overdose risk, such as a change in police practices so that attendance at an overdose is no longer routine.

3.7.2 Injection-related issues

Substantial minorities of IDU in every jurisdiction continue to share injecting equipment (Table 40). Of the overall IDU sample, 13% reported having borrowed used needles and/or syringes from another IDU in the preceding month, with the highest rates of borrowing recorded in WA, followed by the ACT and VIC (Table40). Seventeen percent of the overall sample reported having lent another IDU their own used needles and/or syringes, with the highest rates of lending of lending of used equipment recorded in VIC, WA and QLD (Table 40). These same three jurisdictions also recorded the highest rates of lending in 2000.

In those jurisdictions where comparable data has been collected over time, marked variations both across jurisdiction and within jurisdictions over time have been documented (Figures 45 and 46). It is difficult to discern particular patterns among these data, and it seems likely that the issue of used injecting equipment is one that is difficult to assess in a valid and reliable manner through self-report due to social desirability biases.

Table 40: Injection-related issues in last month among IDU by jurisdiction, 2001

	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA N=100	WA N=100	NT N=135	QLD N=102
Needle sharing (%)									
Borrowed	13	11	15	15	10	10	23	11	12
Lent	17	17	17	25	6	14	25	10	24
Other injecting equipment sharing (%)									
Shared no equipment	55	48	62	55	87	59	41	37	60
Spoon/mixing container	35	48	30	38	5	35	50	30	34
Filter	19	25	14	12	3	25	44	12	19
Tourniquet	13	10	10	12	10	15	20	17	15
Water	21	28	14	17	7	31	46	7	21
Injection problems (%)									
Infection/abscess	10	12	14	7	9	6	9	13	12
'Dirty hit'	23	18	19	17	31	17	17	40	21
Scarring/bruising	46	55	43	47	42	41	47	40	53
Difficulty injecting	43	46	34	49	48	33	48	41	38
Thrombosis	14	19	3	10	21	21	18	9	12
Location of last injection (%)									
Home	69	47	67	60	74	82	86	84	70
Street/park	13	41	11	9	6	3	3	8	9
Car	8	3	7	15	8	9	7	4	8
Public toilet	7	2	11	12	12	6	4	2	5
Shooting room	<1	1	0	2	0	0	0	0	0

Figure 45: Self-reported **borrowing** of used needles and/or syringes in preceding month by jurisdiction, 1997-2001

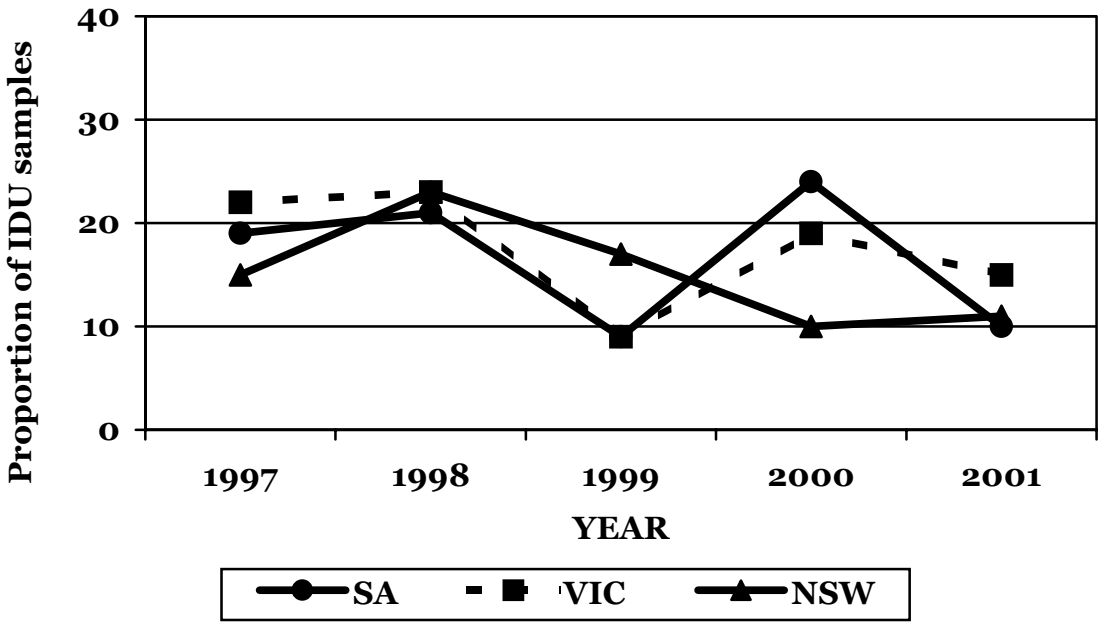
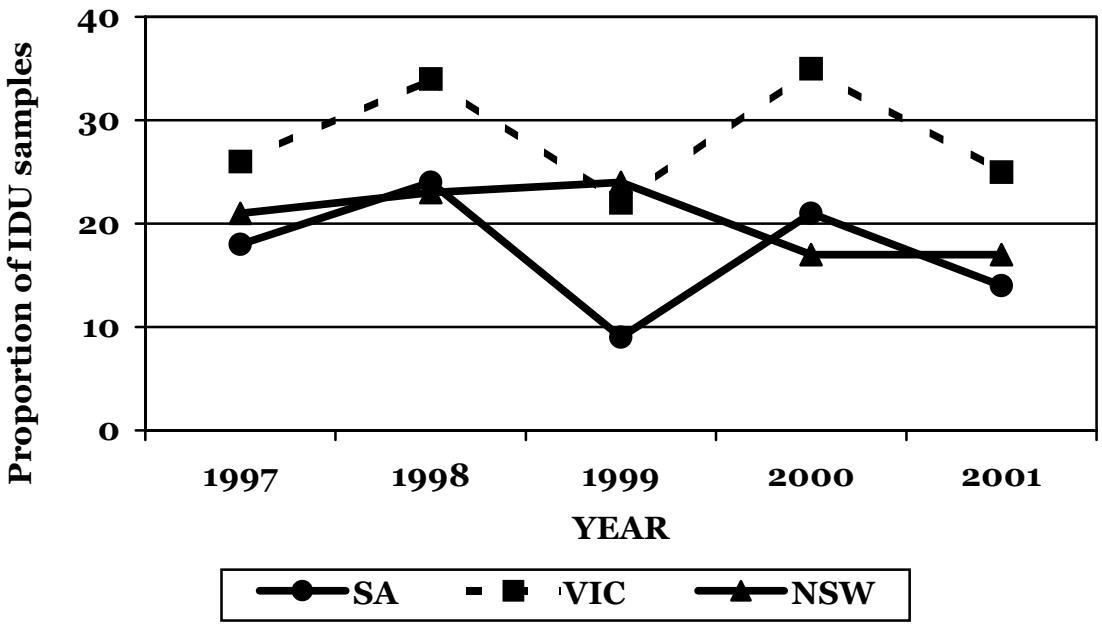


Figure 46: Self-reported **lending** of used needles and/or syringes in preceding month by jurisdiction, 1997-2001



The Annual NSP Survey has documented over recent years a general decrease in the sharing of needles and syringes, which has doubtless contributed to Australia's consistently low prevalence of HIV among IDU, which has never exceeded 2% among clients of NSPs (Figure 32; NCHECR, 2001). However, the high rates of sharing of other injecting equipment, such as spoons, filters, water and tourniquets (Table 40), must explain, at least in part, Australia's consistently high prevalence of

Hepatitis C (HCV) among IDU, which has never fallen below 49% (Figure 47; NCHECR, 2001). Items relating to the sharing of injecting equipment other than needles and syringes were added to the IDRS IDU survey in 1999, so that there is only three years of comparable data in three jurisdictions on the basis of which inferences about trends can be drawn (Figure 48). No pattern is discernible at this stage, with the data displaying much variability both within and between jurisdictions.

Figure 47: HIV and HCV seroprevalence among IDU recruited for the Australian NSP Survey, 1995-2000

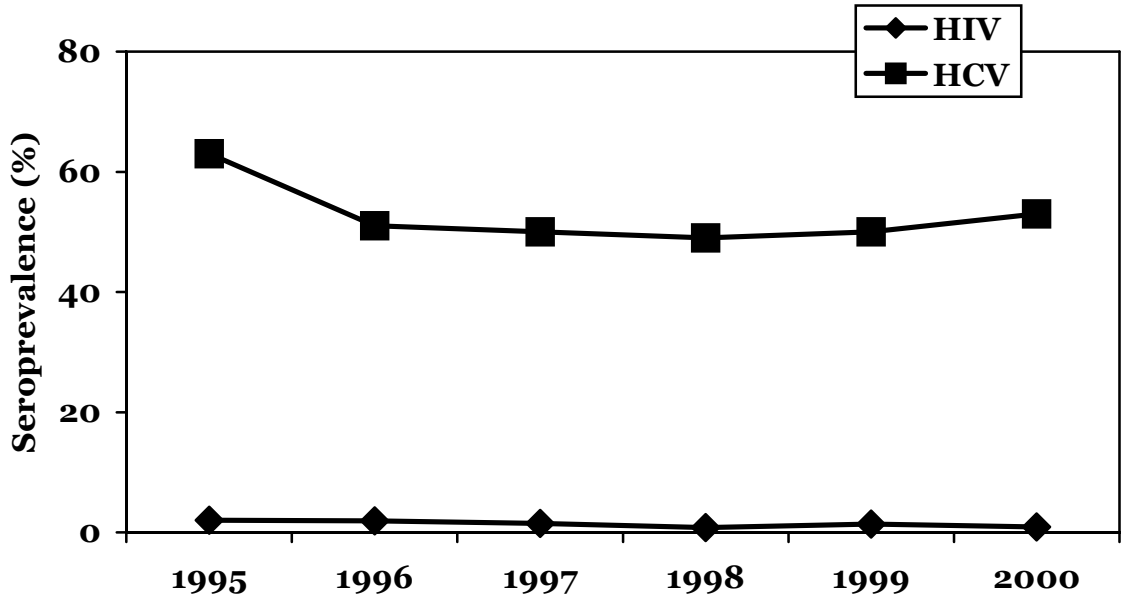
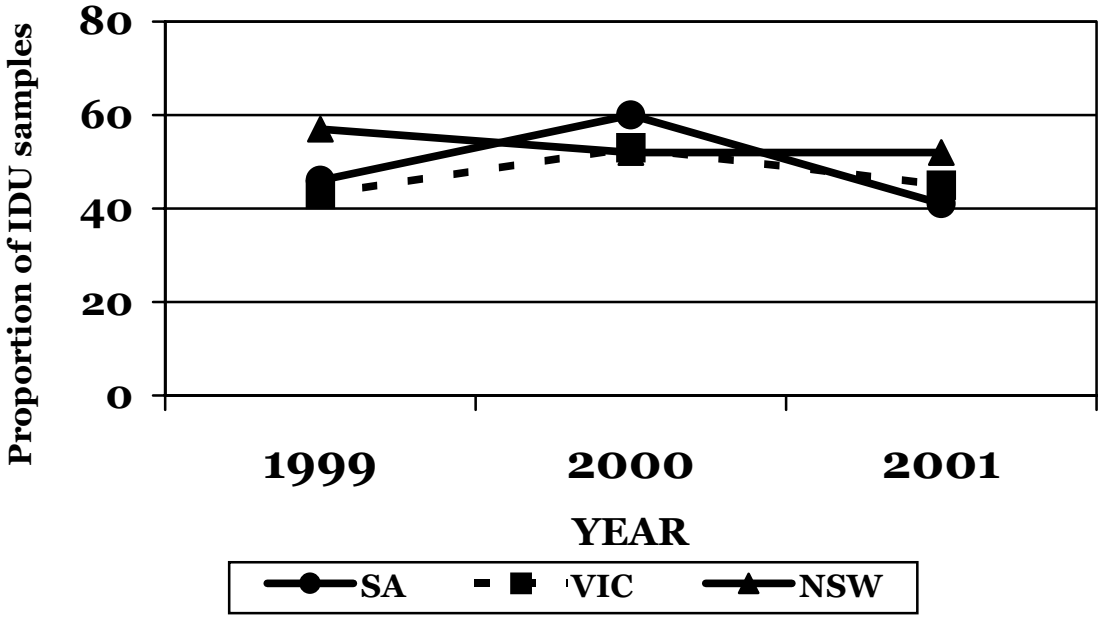


Figure 48: Self-reported borrowing of used injecting equipment other than needles/syringes in preceding month by jurisdiction, 1999-2001



The majority of IDU had experienced injection-related health problems in the month preceding the interview (Table 40). Close to half of the overall sample reported significant scarring/bruising, and close to half reported difficulty injecting (indicating poor vascular health). Despite the fact that TAS recorded the lowest frequency of injecting in the month preceding the interview (see Section3.1.2), that jurisdiction also recorded relatively high rates of both scarring/bruising and thrombosis, and the second highest rate of difficulty injecting. The relatively high rates of these problems among TAS IDU may well be related to the high proportion of the TAS sample that reported having recently injected methadone and/or benzodiazepines. As in 2000, IDU in the NT reported the highest rates of 'dirty hits' (injections which make the user feel sick afterwards), which could reasonably be related to the adulterants used to dilute illicit drugs.

Table 40 suggests that the NSW sample engaged in the highest rates of street-based injecting, and in all jurisdictions except NSW, close to two thirds of IDU had last injected in a private home (their own or someone else's). Significant rates of public injecting, including injecting in locations such as on the street, a park, a public toilet or a car, also occurred in all jurisdictions. Rates of public injecting during the last injecting occasion ranged from 14% in WA and the NT to 46% in NSW. Very few IDU in any jurisdiction reported that they had last injected in a 'shooting room' (i.e., a commercial premises rented for a short time specifically for the purpose of injecting).

3.7.3 Criminal activity

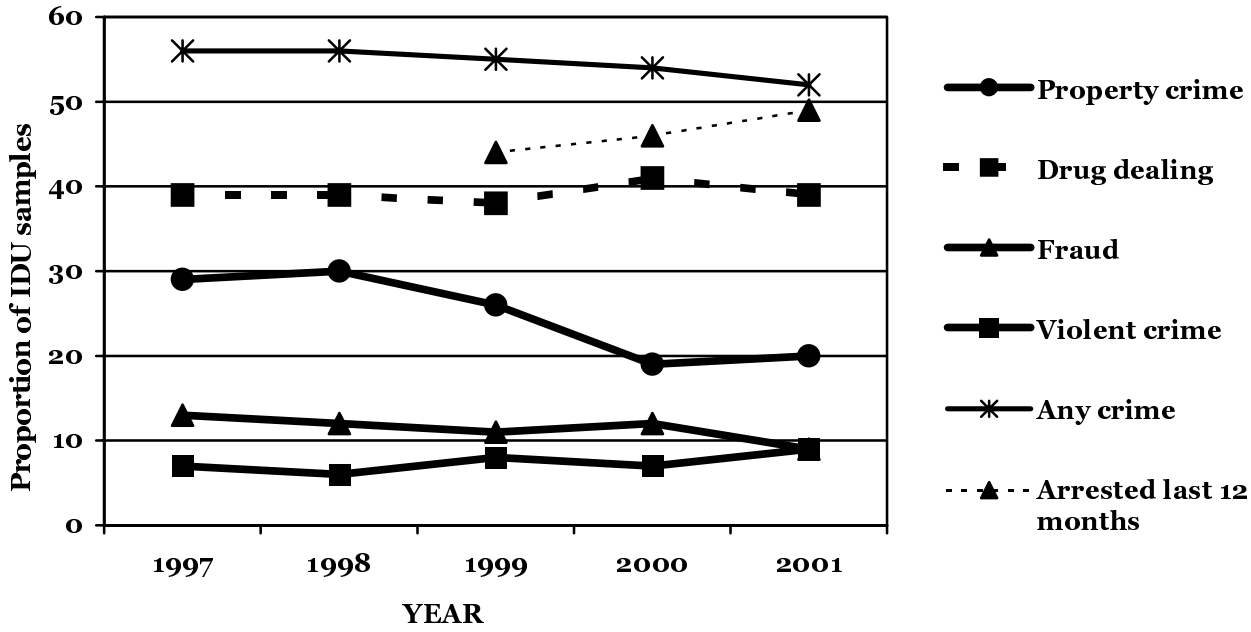
Table 41 shows self-reported criminal activity among IDU in the m0nth preceding the interview by jurisdiction. As in previous years, more than half (52%) of the overall sample had engaged in at least one criminal activity in the preceding month, most often drug dealing (39%) and property crime (20%). Recent crime rates were lowest in the NT (33%) and SA (40%), but were comparable elsewhere. As in 1999 and 2000, close to half (44%) of the overall IDU had been arrested in the preceding 12 months, most often for property crime and drug dealing. Figure 35 indicates that rates of self-reported recent criminal activity have remained relatively stable among IDU recruited for the IDRS since 1997. Rates of property crime have recorded the largest decline (from 29% in 1997 to 20% in 2001).

Table 41: Self-reported criminal activity among IDU in the month preceding the interview, by jurisdiction, 2001

	Total sample N=951	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA N=100	WA N=100	NT N=135	QLD N=102
Property crime (%)									
No property crime	80	73	77	70	77	87	83	88	85
Less than weekly	8	9	12	10	10	7	8	4	6
Weekly	4	6	1	7	6	3	4	4	4
More than weekly	4	9	1	4	6	1	4	4	1
Daily	3	3	5	9	1	2	1	0	4
Drug dealing (%)									
No drug dealing	61	61	63	62	59	70	38	76	54
Less than weekly	12	10	10	11	19	6	18	8	16
Weekly	7	5	6	6	10	7	14	4	6
More than weekly	11	12	6	9	8	11	18	7	16
Daily	9	12	14	11	4	6	12	5	9
Fraud (%)									
No fraud	91	91	95	84	96	96	83	95	93
Less than weekly	4	4	3	9	3	1	6	4	4
Weekly	2	1	2	3	1	2	7	1	2
More than weekly	2	3	0	4	0	0	4	1	1
Daily	<1	1	0	0	0	1	0	0	0
Violent crime (%)									
No violent crime	91	91	85	84	96	91	95	97	93
Less than weekly	6	7	10	12	4	8	4	2	3
Weekly	1	0	2	3	0	1	1	0	2
More than weekly	1	1	3	0	0	0	0	1	2
Daily	<1	1	0	1	0	0	0	0	0
Any crime last month (%)	52	58	48	60	56	40	69	33	52

Arrested last 12 months (%)	44	45	59	60	42	35	33	32	42
Arrested for (%):									
Property crime	17	18	26	39	30	5	11	11	7
Use/possession	7	10	8	9	2	2	4	2	20
Dealing	4	6	4	11	5	3	2	2	0
Violent crime	6	9	4	8	19	10	5	4	4
Fraud	2	0	2	4	0	4	4	0	3

Figure 49: Self-reported criminal activity among IDU in month preceding interview, 1997-2000



The high level of criminal involvement among IDU corresponds to their high expenditure on illicit drugs. It was most common for those IDU who had spent some money on illicit drugs the day before to have spent between $50 and $199. Thirty two percent of the overall IDU sample had spent $100 or more on illicit drugs on the day preceding the interview, and 18% had spent more than $200 (Table 41). Between a third and a half of IDU in all jurisdictions except NSW had spent nothing on illicit drugs on the day preceding the interview. That state documented significantly higher expenditure, which relates to the higher prevalence and frequency of cocaine use (Darke, Kaye & Topp, 2002).

Table 42: Expenditure on illicit drugs on the day preceding the interview, by jurisdiction, 2001

Expenditure ($)	Total sample N=910	NSW N=163	ACT N=100	VIC N=151	TAS N=100	SA N=100	WA N=100	NT N=135	QLD N=102
Nothing	39	16	50	39	36	44	51	44	46
Less than $20	3	1	7	5	4	1	3	2	6
$20 - $49	12	7	9	13	24	17	4	11	13
$50 - $99	14	18	10	12	21	11	12	15	11
$100 - $199	14	24	9	13	7	16	12	11	13
$200 - $399	12	23	6	15	6	9	13	9	8
$400 0r more	6	12	9	4	2	2	5	8	4
Median expenditure ($)	25	120	0	20	25	25	0	25	10

3.7.4 Summary of drug-related issues

- The rate of fatal opioid overdose in Australia from 112.5 per million persons in 1999 to 84.8 million persons in 2000. In 2000, VIC (263) and NSW (249) contributed 71% of the 725 deaths, and VIC had the highest overdose rate in Australia (122.9 per million persons)
- Substantial minorities of IDU in all jurisdictions reported sharing needles and/or syringes, and almost half had shared other injecting equipment in the preceding month
- The prevalence of HIV among clients of NSP programs remained low in 2000 (under 2%) whereas the prevalence of HCV remained high (52%)
- Significant rates of injection-related health problems and public injecting were reported in all jurisdictions. IDU in NSW reported engaging in significantly more public injecting than those in other jurisdiction
- Self-reported criminal activity was high in all jurisdictions, and comparable to the rates recorded in earlier years
- Expenditure on illicit drugs was significantly higher in NSW than in other jurisdictions, which relates, at least in part, to the higher prevalence and frequency of cocaine use in that state

4.0 SUMMARY AND IMPLICATIONS

The *Australian Drug Trends 2001* report presents the findings of the second year in which the complete IDRS was conducted in all jurisdictions. This is a significant advance on the results of previous years of the operation of the IDRS. 2001 represents the first year in which standardised, directly comparable data relating to illicit drug use and markets have not only been collected in every jurisdiction, but that these results can now also be compared over time.

The most striking features of the findings of the 2001 IDRS were the marked and sustained reduction in the availability of heroin, and the divergent responses to that shortage of illicit drug markets in different jurisdictions.

4.1 Heroin

There was a dramatic reduction in the availability of heroin observed in all jurisdictions in which heroin had for some years been freely available. It began in late 2000/early 2001, and was sustained throughout the first half of 2001, with the greatest magnitude experienced between January and March 2001. The change in availability was associated with increases in the price, marked decreases in the prevalence and frequency of use, and moderate declines in purity. Changes in the patterns of use of other drugs were associated with the shortage, particularly of the stimulants, methamphetamine and cocaine.

Such a dramatic and sustained reduction in the availability of heroin is almost unprecedented in the history of modern Western drug markets, and has proved of great interest to policymakers both nationally and internationally. The true value of the routine monitoring of illicit drug markets could not have been better illustrated than by the heroin shortage. The IDRS has collected directly comparable data in NSW for six years, in VIC and SA for five, and in the other jurisdictions for two, allowing the remarkable results of 2001 to be placed in a rich and detailed background context that demonstrates the magnitude of the dramatic changes between 2000 and 2001 in our illicit drug markets.

The heroin shortage has also provided an excellent opportunity for the IDRS to operate in the way intended by Wardlaw (1994) when he first conceived of the manner in which a strategic early warning system should be conducted. Wardlaw argued that the IDRS should point to areas of national concern that required further and more detailed specialist research, and the system has clearly done this with respect to the heroin shortage. A study of the causes, effects and implications of the heroin shortage in NSW, VIC and the ACT was commissioned to NDARC by the National Drug Law Enforcement Research Fund as a result of the findings of the IDRS and Australia's other monitoring systems. In 2002 and 2003, this project will truly demonstrate the value of routine monitoring combined with further, specialist research. Although in Wardlaw's original report, he suggested that the IDRS should be linked to a formal mechanism for commissioning the more in-depth research suggested by its findings, such a linkage is yet to implemented. Indeed, this is unlikely to be so while ever the IDRS itself struggles to achieve ongoing funding, as continues to occur despite the proven ability of the monitoring system to meet its commitments in detecting emergent drug trends.

4.2 Methamphetamine

The methamphetamine markets continued to demonstrate their dynamic nature in 2001. Both prevalence and/or frequency of recent methamphetamine use increased in every jurisdiction between 2000 and 2001. This was particularly the case with the potent forms of methamphetamine that were detected by the 2000 IDRS to have increased in availability and use. There were apparent large increases in the price of a gram of methamphetamine powder in VIC, the ACT and QLD, but these may reflect a change in the form of methamphetamine purchased; powder remained cheapest in SA at $50 per gram. The cost of a 'point' (approximately 0.1 gram) of potent methamphetamine remained relatively stable in all jurisdictions and cheapest in SA at $30.

The average purity of seizures of methamphetamine analysed across Australia remained stable between 1999/00 and 2000/01 at 22%, an increase from 1998/99 (16%). Both methamphetamine powder and the more potent forms were described as easy to obtain in all jurisdictions, and availability of both forms was considered to have remained stable or increased. In TAS and SA, the prevalence of recent use of the potent forms of methamphetamine was higher than the prevalence of recent use of methamphetamine powder, and it is likely that methamphetamine powder is no longer the most available nor sought-after form of methamphetamine in these jurisdictions.

There is a lack of clarity as to the dynamic nature of Australia's methampehtamine markets, but one thing is certain: the availability and use of more potent forms of methamphetamine, highlighted as a concern in the 2000 IDRS (Topp *et al.,* 2001), continued to increase throughout 2001. If this continues to be the case, serious public health implications can be expected. Numerous adverse effects of methamphetamine were documented throughout the 1990s. Physical health problems such as poor appetite, fatigue, tremors, trouble sleeping, cardiac arrythmias, headaches, joint pains and weight loss are frequently reported by samples of illicit amphetamine users, as are psychological problems such as depression, anxiety, irritability, paranoia, mood swings, difficulty concentrating, aggression and hallucinations (e.g., Hall & Hando, 1994; Hall, Hando, Darke & Ross, 1996; Klee & Morris, 1994; Williamson *et al*., 1997). Although historically the subject of much debate, the existence and destructive nature of a methamphetamine dependence syndrome, comparable to that long acknowledged to exist for alcohol and heroin, was recently documented (Topp & Darke, 1997; Topp, Lovibond & Mattick, 1998; Topp & Mattick, 1997a,b).

Methamphetamine-related financial, relationship and occupational problems have also been reported by substantial proportions of samples of regular users (e.g., Morgan & Beck, 1997; Hando, Topp & Hall, 1997). The popularisation and widespread use of methamphetamine in place of cannabis in Hawaii has led to devastating effects for individuals, families and local communities (Joe-Laidler & Morgan, 1997). More recently, heavy methamphetamine use has been associated with neuropsychological deficits that could not be accounted for by premorbid intelligence, concurrent polydrug use or acute intoxication (McKetin & Mattick, 1997, 1998). This deficit is related specifically to the inability among heavy users to focus attention in relevant stimuli, leading to an increased load on limited attentional

resources (McKetin & Solowij, 1999). It is expected that the incidence of problems previously documented to be associated with methamphetamine use will increase as the use of more potent and higher purity forms of the drug continues to increase.

In response to the growing recognition of the dependence potential of methamphetamine and the adverse physical, psychological, cognitive and social effects of chronic methamphetamine use, an earlier NDARC study examined treatment seeking among methamphetamine users in Sydney (Hando *et al.*, 1997). Chief among the findings of this study were the high proportion of users wishing to modify their methamphetamine use, and the lack of attraction of methamphetamine users to traditional treatment services, which were perceived as inadequate and oriented towards opiate users. Subjects interested in receiving formal treatment recommended that it focus on methamphetamine specific issues and be relevant to them (Hando *et al.*, 1997). These are legitimate suggestions, given that intervention services in this country have traditionally focussed on opiate and alcohol detoxification (Lintzeris, Holgate & Dunlop, 1996). Treatment services in this country are not yet equipped to deal with large numbers of methamphetamine users presenting with methamphetamine-specific problems; yet this is what may be expected if the availability and use of potent forms of methamphetamine in various illicit drug markets continues to spread. It is reasonable to expect that this will be the case, particularly given the context of fundamental changes to Australia's heroin markets and the indications of a world-wide increase in methamphetamine use (UNODCCP, 2000). A clear implication of the findings of both the 2000 and 2001 IDRS is that future research should examine which treatment modalities will attract and retain methamphetamine users in treatment, in order that appropriate services can be offered to this group if, as expected, the numbers seeking treatment increase.

The planning of appropriate policy responses to the potential for methamphetamine-related harms will be hindered by the current lack of clarity with respect to many aspects of the use of these drugs, including terminology, the way in which the various forms are perceived to relate to each other, their appearance, their origin, purchase quantities, their price or the routes by which they are administered. Many questions remain that cannot be answered through the routine IDRS data collection. That the data are not conclusive is not a criticism of the IDRS, which was designed to point to trends that require further, specialist research rather than to document all phenomena in detail (Wardlaw, 1994). Clearly, the emergence of potent forms of methamphetamine Australia's illicit drug markets is an area that should be examined in more detail in order that appropriate prevention, education and treatment strategies can be developed.

4.3 Cocaine

Cocaine use remained predominantly an issue in NSW, where marked increases between 2000 and 2001 in prevalence of recent use and dramatic increases in frequency of use were recorded. However, 2001 is the first year in which the IDRS has documented early indicators of a potential diffusion of cocaine from NSW to other jurisdictions, notably the ACT, QLD, VIC, SA and WA, including: a higher proportion of IDU able to comment on cocaine, increases in prevalence of recent use, higher proportions of IDU reporting the recent purchase of grams of cocaine and the purchase of cocaine 'caps'. Although the magnitude of the increases were

small, together, they suggest that the availability and use of cocaine may be increasing outside Sydney, the traditional focus of Australia's illicit cocaine market. Purity of cocaine seizures remained relatively stable, and decreases in the price of a gram were recorded in VIC, SA and QLD. The price of both grams and caps remained stable in NSW.

The ability of the IDRS to act as a strategic early warning system was proven beyond question when it detected the emergence of widespread cocaine injecting among primary heroin injectors in Sydney in 1998. In 2000, the IDRS flagged the issue of increases in the availability and use of potent forms of methamphetamine across the country, a prediction proven correct by the continued trend documented in the results of the 2001 IDRS. Although it would be misleading to suggest that cocaine has altered the illicit drug markets of jurisdictions other than NSW as it has done in that state, 2001 is the first year where uniform early indicators of a possible increase in the availability and use of cocaine in the ACT, WA, QLD, SA and VIC were documented. Particularly pertinent in relation to these changes is their contiguity with the reduced availability of heroin in the same jurisdictions. It may prove to be the case in the future that 2001 will be the year that the drug and alcohol field and policymakers look back at as the first sign that cocaine would begin to impact on other illicit drug markets in the same way that it has in NSW.

The IDRS is unable to provide answers to all the questions that might be posed about this contention, but once again, it should be remembered that the system was not designed to do so. It was designed to detect emergent trends of national importance and to point to areas requiring further and more detailed research. Clearly, the potential increase in the availability and use of cocaine in five jurisdictions is such an area, particularly given the context of fundamental and sustained changes to heroin markets throughout 2001 in Australia.

4.4 Cannabis

As in previous years, the cannabis market proved the most stable of Australia's illicit drug markets. The price of an ounce of cannabis varied between $200 and $320; increases of $20 per ounce were recorded in NSW and QLD, whereas decreases of the same magnitude were reported in SA, VIC, the ACT, WA and TAS. As in all previous years of the IDRS, the potency of cannabis was considered high or medium to high, and stable, in all jurisdictions. Cannabis was considered very easy to obtain in all jurisdictions, and availability was perceived to have remained stable. Hydroponically grown cannabis 'heads' remained the most commonly used form of the drug, although high proportions of IDU also reported the recent use of outdoor crop cannabis (69%) and hashish (33%). Waterpipes ('bongs') remained the preferred means of cannabis administration.

It is, however, problematic to assume that changes detected in patterns of cannabis use among IDU may generalise to the entire population of cannabis smokers. Indeed, cannabis is the only illicit drug where it could be argued that a population of relatively 'pure' cannabis smokers exist - in other words, people whose preferred drug is cannabis and who choose not to use other illicit drugs. The IDRS may prove in the future to be less sensitive to changes in cannabis markets as it has proven to be with respect to other illicit drugs, and useful cannabis data sources may be developed elsewhere, such as additional questions in the National Drug Strategy

Household Survey or in the school surveys conducted regularly in a number of jurisdictions.

4.5 Other drugs

There were marked differences across jurisdictions in the use of pharmaceuticals including methadone, morphine, benzodiazepines and anti-depressants. Particularly striking were the differences, both within and between jurisdictions, as well as over time, in the rates of injection of non-injectable substances such as methadone and benzodiazepines. Previous research has indicated that the injection of these drugs is associated with increased drug-related harm, including increased risk of overdose, vascular damage and blood clots (e.g., Darke & Ross, 2000; Darke, Ross & Hall, 1995; 1996). Reasons for the apparent subcultural differences in the injection of non-injectable substances will make an interesting area for future research. Such research could inform the development of appropriate and credible harm reduction strategies outlining the risks of the injection of non-injectables.

4.6 Methodological considerations

There is no doubt that the 2000 and 2001 IDRS has provided the most directly comparable data yet relating to illicit drug use and markets, collected in every Australian jurisdiction. The IDU survey is the most important component of the IDRS, providing the most accurate data available on drug prices and availability, data that cannot be collected in any other way. The inclusion of the IDU survey in all Australian jurisdictions in 2000 and 2001, and the examinatios of changes over time enabled because of that comparability, represented a significant advance on the results of previous years of operation of the IDRS, as well as providing the first opportunities to collect such data in jurisdictions such as TAS and the NT. IDU remain the most appropriate sentinel population among whom to monitor emergent trends in drug use, and such standardised, directly comparable data will also be collected in every jurisdiction in 2002, allowing for the first time a reasonable series of data points to truly begin to examine meaningful trends in drug markets over the mid-term.

Given the differences between jurisdictions in the availability and patterns of use of various drugs, and their divergent responses to the reduced availability of heroin sustained throughout 2001, it is worth reiterating that detailed jurisdictional findings of the IDRS and discussion of their implications are available in the jurisdictional *Drug Trends 2001* reports, available from NDARC. It is also worth reiterating the fact that without an IDU survey conducted in all jurisdictions in 2000 and 2001, a far less precise picture of the similarities and differences between drug markets across jurisdictions would be available than has been presented in *Australian Drug Trends 2001*.

5.0 REFERENCES

Australian Bureau of Criminal Intelligence (2000) *Australian Illicit Drug Report 1998-99.* Canberra: Commonwealth of Australia.

Australian Bureau of Criminal Intelligence (2001) *Australian Illicit Drug Report 1999-2000.* Canberra: Commonwealth of Australia.

Australian Bureau of Criminal Intelligence (in press) *Australian Illicit Drug Report 2000-2001.* Canberra: Commonwealth of Australia.

Australian Institute of Health and Welfare (1999) *1998 National Drug Strategy Household Survey: First Results.* Canberra: Australian Institute of Health and Welfare.

Bruno, R. & McLean, S. (2002) *Tasmanian Drug Trends 2001: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 135. Sydney: National Drug and Alcohol Research Centre.

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.

Commonwealth Department of Health and Family Services (1996) *1995 National Drug Strategy Household Survey: Survey Results*. Canberra: Australian Government Publishing Service.

Darke, S., Cohen, J., Ross, J., Hando, J. & Hall, W. (1994) Transitions between routes of administration of regular amphetamine users. *Addiction, 89,* 1077-1083.

Darke, S., Hall, W. & Topp, L. (2000) *The Illicit Drug Reporting System (IDRS): 1996-2000.* NDARC Technical Report Number 101. Sydney: National Drug and Alcohol Research Centre.

Darke, S., Hall, W., Wodak, A., Heather, N. & Ward, J. (1992) Development and validation of a multi-dimensional instrument for assessing outcomes of treatment among opiate users: The Opiate Treatment Index. *British Journal of Addiction, 87,* 733-742.

Darke, S., Kaye, S. & Topp, L. (2002) *NSW Drug Trends 2001: Findings from the Illicit Drug Reporting System.* NDARC Technical Report Number 125. Sydney: National Drug and Alcohol Research Centre.

Darke, S. & Ross, J. (2000) The use of antidepressants among injecting drug users in Sydney, Australia. *Addiction, 95,*407-417.

Darke, S., Ross, J. & Hall, W. (1995) Benzodiazepine use among injecting heroin users. *Medical Journal of Australia, 162,* 645-647.

Darke, S., Ross, J. & Hall, W. (1996) The injection of methadone syrup in Sydney,

Australia. *Drug and Alcohol Dependence, 43,* 191-198.

Darke, S., Ross, J. & Hall, W. (1996b) Overdose among heroin users in Sydney, Australia I: Prevalence and correlates of non-fatal overdose. *Addiction, 93,* 701-711.

Darke, S., Ross, J., Hando, J., Hall, W. & Degenhardt, L. (2000) *Illicit Drug Use in Australia: Epidemiology, Use Patterns and Associated Harm.* National Drug Strategy Monograph Number 43. Canberra: Commonwealth Department of Health and Aged Care.

Darke, S., Ross, J., Zador, D. & Sunjic, S. (2000) Heroin-related deaths in New South Wales, Australia, 1992-1996. *Drug and Alcohol Dependence, 60,* 141-150.

Darke, S., Topp, L. & Kaye, S. (2001) *NSW Drug Trends 2000: Findings of the Illicit Drug Reporting System.* NDARC Technical Report No. 117. Sydney: National Drug and Alcohol Research Centre.

Degenhardt, L. (2001) Opioid Overdose Deaths in Australia: 2000 Edition. Sydney: National Drug and Alcohol Research Centre.

Degenhardt, L., Lynskey, M. & Hall, W. (2000) Cohort trends in the age of initiation of drug use in Australia. *Australian and New Zealand Journal of Public Health, 24,* 421-426.

Fry, C. & Miller, P. (2002) *Victorian Drug Trends 2001: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 129. Sydney: National Drug and Alcohol Research Centre.

Hall, W. & Hando, J. (1994) Route of administration and adverse effects of amphetamine use among young adults in Sydney, Australia. *Drug and Alcohol Review, 13,* 277-284.

Hall, W., Hando, J. Darke, S. & Ross, J. (1996) Psychological morbidity and route of administration among amphetamine users in Sydney, Australia. *Addiction, 91,* 81-87.

Hall, W. & Swift, W. (1999) The THC content of cannabis in Australia: Evidence and implications*. Australian and New Zealand Journal of Public Health, 24*, 503-508.

Hando, J., Darke, S., Degenhardt, L., Cormack, S. & Rumbold, G. (1998) *Drug Trends 1997. A Comparison of Drug Use and Trends in Three Australian States: Results from a National Trial of the Illicit Drug Reporting System (IDRS).* NDARC Monograph Number 36. Sydney: National Drug and Alcohol Research Centre.

Hando, J., Flaherty, B. & Rutter, S. (1997a) An Australian profile on the use of cocaine. *Addiction, 92,* 173-182.

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

Hando, J., Topp, L. & Hall, W. (1997) Amphetamine-related harms and treatment preferences of regular amphetamine users in Sydney, Australia. *Drug and Alcohol Dependence, 46,* 105-113.

Hargreaves, K. & Lenton, S. (2002) *West Australian Drug Trends 2001: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 134. Sydney: National Drug and Alcohol Research Centre.

Higgins, K., Cooper-Stanbury, M. & Williams, P. (2000) *Statistics on Drug Use in Australia, 1998.* Canberra: Australian Institute of Health and Welfare.

Humeniuk, R. (2000) *South Australian Drug Trends 1999: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 88. Sydney: National Drug and Alcohol Research Centre.

Joe-Laidler, K.A. & Morgan, P. (1997) Kinship and community: The 'ice' crisis in Hawaii. In: H. Klee (ed.), *Amphetamine misuse: International perspectives on current trends* (pp.163-179). The Netherlands: Harwood Academic Publishers.

Kaye, S., Darke, S. & Topp, L. (2001) *An Examination of Cocaine Dependence Among Injecting and Non-Injecting Cocaine Users in Sydney.* NDARC Technical Report Number 116. Sydney: National Drug and Alcohol Research Centre.

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

Klee, H. & Morris, J. (1994) Factors that lead young amphetamine misusers to seek help: Implications for drug prevention and harm reduction. *Drugs: Education, Prevention and Policy, 1,* 289-297.

Lintzeris, N., Holgate, F. & Dunlop, A. (1996) Addressing dependent amphetamine use: A place for prescription. *Drug and Alcohol Review, 15,* 189-195.

Longo, M., Humeniuk, R., Christie, P. & Ali, R. (2002) *South Australian Drug Trends 2002: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 130. Sydney: National Drug and Alcohol Research Centre.

Longo, M., Humeniuk, R., Topp, L., Christie, P. & Ali, R. (2002) *South Australian Party Drug Trends 2001: Findings of the Illicit Drug Reporting System Party Drugs Module.* NDARC Technical Report Number 131. Sydney: National Drug and Alcohol Research Centre.

Lynskey, M.T. & Hall, W. (1998) Cohort trends in the age of initiation to heroin use. *Drug and Alcohol Review, 17,* 289-297.

Lynskey, M.T., White, V., Hill, D., Letcher, T. & Hall, W. (2000) Prevalence of illicit drug use among youth: Results from the Australian School Students' Alcohol and Drugs Survey. *Australian and New Zealand Journal of Public Health, 23,* 519-524.

MacDonald, M., Robotin, M. & Topp, L. (2001) Drug use trends among injecting drug users (IDU): Findings from the Australian Needle and Syringe Program (NSP) Survey, 1995-2000. *Drug Trends Bulletin, October 2001.*
Makkai, T. & McAllister, I. (1998) *Patterns of Drug Use in Australia, 1985-95.* Canberra: Australian Government Publishing Service.

Makkai, T. & McAllister, I. (1997) *Marijuana in Australia: Patterns and Attitudes.* National Drug Strategy Monograph Series Number 31. Canberra: Australian Government Publishing Service.

McGregor, C., Darke, S., Christie, P. & Ali, R (1998) Experience of non-fatal overdose among heroin users in Adelaide: Circumstances and risk perception. *Addiction*, 93, 701-711.

McKetin, R., Darke, S., Humeniuk, R., Dwyer, R., Bruno, R., Fleming, J., Kinner, S., Hargreaves, K. & Rysavy, P. *Australian Drug Trends 1999: Findings from the Illicit Drug Reporting System.* NDARC Monograph Number 43. Sydney: National Drug and Alcohol Research centre.

McKetin, R., Darke, S. & Kaye, S. (2000) *NSW Drug Trends 1999: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 86. Sydney: National Drug and Alcohol Research Centre.

McKetin, R. & Mattick, R.P. (1997) Attention and memory in illicit amphetamine users. *Drug and Alcohol Dependence, 48,* 235-242.

McKetin, R. & Mattick, R.P. (1998) Attention and memory in illicit amphetamine users: Comparison with non-drug-using controls. *Drug and Alcohol Dependence, 50,* 181-184.

McKetin, R. & Solowij, N. (1999) Event-related indices of auditory selective attention in dependent amphetamine users. *Biological Psychiatry, 45,* 1488-1497.

Morgan, P. & Beck, J. (1997) The legacy and the paradox: Hidden contexts of methamphetamine use in the United States. In: H. Klee (ed.), *Amphetamine misuse: International Perspectives on Current Trends* (pp.135-162). The Netherlands: Harwood Academic Publishers.

National Centre in HIV Epidemiology and Clinical Research (2001) *HIV/AIDS, Viral Hepatitis and Sexually Transmissible Infections in Australia Annual Surveillance Report 2001.* National Centre in HIV Epidemiology and Clinical Research (Eds.). Sydney: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.

O'Reilly, B. (2002) *Northern Territory Drug Trends 2001: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 137. Sydney: National Drug and Alcohol Research Centre.

Platt, J. (1997) *Cocaine Addiction: Theory, Research and Treatment.* Cambridge, Massachusetts: Harvard University Press.

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

Rose, G. & Najman, J. (2002) *Queensland Drug Trends 2001: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 132. Sydney: National Drug and Alcohol Research Centre.

Ross, J., Darke, S. & Hall, W. (1997) Transitions between routes of benzodiazepine administration among heroin users in Sydney, Australia. *Addiction, 92,* 697-795.

Seiden, L.S., Sobol, K.E. & Ricaurte, G.A. (1993) Amphetamine: Effects on catecholamine systems and behaviour. *Ann Rev Pharmacology and Toxicology, 33,* 639-674.

SPSS, Inc. (1999) *SPSS® Base 9.0 User's Guide.* Chicago, Illinois: SPSS Inc.

Topp, L., Breen, C., Kaye, S. & Darke, S. (2002) *NSW Party Drug Trends 2001: Findings of the Illicit Drug Reporting System Party Drugs Module.* NDARC Technical Report No. 136. Sydney: National Drug and Alcohol Research Centre.

Topp, L. & Darke, S. (1997) The applicability of the dependence syndrome to amphetamine. *Drug and Alcohol Dependence, 48,* 113-118.

Topp, L. & Darke, S. (2001) *NSW Party Drug Trends 2000: Findings of the illicit Drug Reporting System Party Drugs Module.* NDARC Technical Report Number 113. Sydney: National Drug and Alcohol Research Centre.

Topp, L., Degenhardt, L., Kaye, S. & Darke, S. (in press) The emergence of potent forms of methamphetamine in Sydney, Australia. *Drug and Alcohol Review.*

Topp, L., Hando, J., Degenhardt, L., Dillon, P., Roche, A. & Solowij, N. (1998) *Ecstasy Use in Australia.* NDARC Monograph No. 39. Sydney: National Drug and Alcohol Research Centre.

Topp, L., Hando, J., Dillon, P., Roche, A. & Solowij, N. (1999) Ecstasy use in Australia: Patterns of use and associated harms. *Drug and Alcohol Dependence, 55,* 105-115.

Topp, L., Lovibond, P.F. & Mattick, R.P. (1998) Cue reactivity in dependent amphetamine users: Can monistic conditioning theories improve our understanding of reactivity? *Drug and Alcohol Review, 17,* 277-288.

Topp. L. & Mattick, R.P. (1997a) Validation of the amphetamine dependence syndrome and the SAmDQ. *Addiction, 92*, 151-162.

Topp. L. & Mattick, R.P. (1997b) Choosing a cut-off on the Severity of Dependence Scale (SDS) for amphetamine users. *Addiction, 92*, 839-845.

United Nations Office for Drug Control and Crime Prevention (2000) *World Drug Report 2000.*Great Britain: Oxford University Press.

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.

Wardlaw, G. (1994) *Final Report: Illicit Drug Reporting System.* Consultant's report to the Commonwealth Department of Human Services and Health. Canberra: Wardlaw Consulting Pty Ltd.

Williams, P. & Rushforth, C. (2002) *ACT Drug Trends 2001: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 128. Sydney: National Drug and Alcohol Research Centre.

Williamson, S., Gossop, M., Powis, B., Griffiths, P., Fountain, J. & Strang, J. (1997) Adverse effects of stimulant drugs in a community sample of drug users. *Drug and Alcohol Dependence, 44,* 87-94.