Josephine Weekley, Sophie Pointer, Robert Ali

SA DRUG TRENDS 2003 Findings from the Illicit Drug Reporting System (IDRS)

NDARC Technical Report No. 176





Findings from the Illicit Drug Reporting System (IDRS)

Josephine Weekley, Sophie Pointer and Robert Ali

Drug and Alcohol Services Council of South Australia

NDARC Technical Report No. 176

ISBN 1 877027 64 2 ©NDARC 2004

TABLE OF CONTENTS

| ACKNOWLEDGEMENTS | VII |
|---|------|
| ABBREVIATIONS | VIII |
| EXECUTIVE SUMMARY | іх |
| 1. INTRODUCTION | 1 |
| 2. METHOD | 2 |
| 2.1 Survey of injecting drug users (IDU) | 2 |
| 2.2 Survey of key informants (KIS) | 2 |
| 2.3 Other indicators | 3 |
| 2.4 Methamphetamine | 4 |
| | _ |
| 3. RESULTS | S |
| 3.2 Drug use history and summer drug use | 5 |
| 5.2 Drug use history and current drug use | 0 |
| 4. HEROIN | 11 |
| 4.1 Price | 11 |
| 4.2 Availability | 12 |
| 4.3 Purity | 14 |
| 4.4 Use | 16 |
| 4.5 Heroin related harms | 19 |
| 4.6 Trends in heroin use | 24 |
| 4.7 Summary of heroin trends | 25 |
| 5. Methamphetamine | 27 |
| 5.1 Price | 27 |
| 5.2 Availability | 29 |
| 5.3 Purity | 32 |
| 5.4 Use | 34 |
| 5.5 Methamphetamine related harms | |
| 5.6 Flashcard Analysis | 41 |
| 5.7 Trends in methamphetamine use | |
| 5.8 Summary of methamphetamine trends | 45 |
| 6. COCAINE | 47 |
| 6.1 Price | 47 |
| 6.2 Availability | 47 |
| 6.3 Purity | 48 |
| 6.4 Use | |
| 6.5 Cocaine related harms | |
| 6.6 Trends in cocaine use | 51 |
| 6.7 Summary of cocaine trends | 51 |
| 7. CANNABIS | 52 |
| 7.1 Price | 52 |
| 7.2 Availability | 54 |
| 7.3 Potency | 56 |
| 7.4 Use | 57 |
| 7.5 Cannabis related harms | |
| 7.6 I rends in cannabis use | 60 |
| /./ Summary of cannabis trends | 60 |

| 8. Opioids |
|---|
| 8.1 Overview of opioid use among IDU62 |
| 8.2 Morphine |
| 8.3 Methadone |
| 8.3 Illicit Buprenorphine |
| 8.4 Other opioids70 |
| 8.5 Summary of opioids71 |
| 9. Other drugs72 |
| 9.1 Ecstasy and hallucinogens72 |
| 9.2 Benzodiazepines72 |
| 9.3 Anti-depressants73 |
| 9.4 Summary of other drugs74 |
| 10 Associated harms75 |
| 10.1 Blood borne viruses75 |
| 10.2 Sharing of injecting equipment among IDU75 |
| 10.3 Location of injecting77 |
| 10.4 Injecting related health problems77 |
| 10.5 Expenditure on illicit drugs79 |
| 10.6 Mental health problems79 |
| 10.7 Criminal and police activity81 |
| 10.8 Summary of associated harms83 |
| 11 DISCUSSION |
| 11.1 Heroin85 |
| 11.2 Methamphetamine85 |
| 11.3 Cocaine |
| 11.4 Cannabis |
| 11.5 Other opioids |
| 11.6 Other drugs |
| 11.7 Associated harms |
| 12 Implications |
| REFERENCES |

LIST OF TABLES

| TABLE OF CONTENTSi |
|--|
| Table 3.1: Demographic characteristics of IDU sample 5 |
| Table 3.2: Injection history, drug preferences and polydrug use of IDU 7 |
| Table 3.3: Drug use history and routes of administration of the IDU sample (% of totalsample; n=120) |
| Table 3.3 (continued): Drug use history and routes of administration of the IDU sample(% of total sample; n=120)10 |
| Table 4.1: Price of most recent heroin purchases by IDU, 2002* & 200311 |
| Table 4.2: Change in price of heroin over last 6 months, 2002 & 200312 |
| Table 4.3: Availability of heroin currently, 2002 & 2003 |
| Table 4.4: Change in availability of heroin over the last 6 months, 2002 & 200313 |
| Table 4.5: Current purity/strength of heroin, 2002 & 2003 |
| Table 4.6: Change in purity/strength of heroin in last 6 months, 2002 & 2003 |
| Table 4.7: Frequency of injecting among heroin users, 2003 |
| Table 4.8: Experience of heroin overdose among those IDU reporting <i>ever</i> used heroin,2000 - 2003 |
| Table 4.9: Primary drug of concern nominated by clients of the Drug and AlcoholServices Council, as a percentage of total number of clients, 2000/01 - 2002/03 |
| Table 4.10: Trends in the price, availability, purity and use of heroin |
| Table 5.1: Price of most recent methamphetamine purchases by IDU, 2002* & 2003 28 |
| Table 5.2: Change in price of methamphetamine over last 6 months, 2002 & 2003 |
| Table 5.3: Availability of methamphetamine currently, 2002 & 200330 |
| Table 5.4: Change in availability of methamphetamine over the last 6 months, 2002 &200330 |
| Table 5.5: Usual source of methamphetamine in last 6 months, 200331 |
| Table 5.6: Purity/strength of methamphetamine currently, 2002 & 2003 |
| Table 5.7: Change in purity/strength of methamphetamine in last 6 months, 2002 & 2003 |
| Table 5.8: Frequency of injecting among methamphetamine users, 2003 |
| Table 5.9: Reports from methamphetamine users regarding the forms of this drug usedrecently, 200342 |
| Table 5.10: Trends in the price, availability, purity and use of methamphetamine |
| Table 7.1: Price of most recent cannabis purchases by IDU, 2003 |
| Table 7.2: Change in price of cannabis over the last 6 months, 2002 & 2003 |
| Table 7.3: Availability of cannabis currently, 2002 & 200355 |
| Table 7.4: Change in availability of cannabis over the last 6 months, 2002 & 2003 |
| Table 7.5: Current potency/strength of cannabis, 2002 & 200356 |
| Table 7.6: Change in potency/strength of cannabis in last 6 months, 2002 & 2003 |
| Table 7.7: Trends in the price, availability, purity and use of cannabis61 |

| Table 8.1: Price of most recent morphine purchases by IDU, 2003 63 |
|---|
| Table 8.2: Change in price of morphine over the last 6 months, 2003 63 |
| Table 8.3: Availability of morphine currently, 2003 |
| Table 8.4: Change in availability of morphine over the last 6 months, 2003 |
| Table 8.5: Frequency of injecting among morphine users, 2003 |
| Table 8.6: Availability of illicit methadone currently, 2003 |
| Table 8.7: Change in availability of illicit methadone over the last 6 months, 2003 67 |
| Table 8.8: Summary of trends in the use of other opiods |
| Table 9.1: Summary of trends in the use of other drugs |
| Table 10.1: Sharing of injecting equipment (other than needles) among IDU in the monthpreceding interview, 2002 & 200376 |
| Table 10.2: Usual location when injecting in the month preceding interview, 2002 & 2003 77 |
| Table 10.3: Injecting related health problems experienced in the month precedinginterview, 2002 & 200378 |
| Table 10.4: IDU attendance of a health professional, for a mental health problem, in thelast 6 months, 2002 & 200380 |
| Table 10.5: Mental health problem for which IDU sought help when attending a healthprofessional in the last 6 months, 2002 & 2003 |
| Table 10.6: Criminal and police activity as reported by IDU, 2002 & 200381 |
| Table 10.7: Summary of trends in associated harms 84 |

LIST OF FIGURES

| Figure 3.1: Recent Drug Use: percentage of the IDU to have used each substance type in the last 6 months |
|--|
| Figure 4.1: Median price of a gram of heroin, last purchase, 1997 - 200312 |
| Figure 4.2: Availability of heroin in the last 6 months, 1997 - 200314 |
| Figure 4.3: Number of heroin seizures analysed and median heroin purity in SA 2001/2002 – 2002/2003 |
| Figure 4.4: Heroin – Recent* use & Median number of days used#, 1997 - 200317 |
| Figure 4.5: Heroin - % of IDU that used daily* & used yesterday, 1997 - 200317 |
| Figure 4.6: Number of heroin and other opiate related offences reported by SAPOL in South Australia, 1999/2001 – 2002/2003 |
| Figure 4.7: Experience of heroin overdose ever and in the last 12 months, as a proportion of the whole IDU sample, 2000 – 2003 |
| Figure 4.8: Number of accidental opioid deaths, among those aged 15-54 years, in SA compared to national figures, 1988-2002 |
| Figure 4.9: Number of calls to ADIS regarding opioid substances, Jul 2002 – June 2003 22 |
| Figure 4.10: Percentage of clients nominating opioids as the primary drug of concern, 2000/01 – 2002/03*# |
| Figure 4.11: number of admissions to DASC inpatient treatment services, with heroin or other opioids as the primary drug of concern, Jul 2001 – Jun 2003*# |
| Figure 5.1: Median price of methamphetamine, last purchase, 1997 - 2003 |
| Figure 5.2: Availability of methamphetamine in the last 6 months, 1997- 200331 |
| Figure 5.3: Number of methamphetamine seizures analysed and median methamphetamine purity in SA 2001/2002 – 2002/2003 |
| Figure 5.4: Methamphetamine – % of IDU that used in the last 6 months, 2001 - 2003 34 |
| Figure 5.5: Methamphetamine – median number of days used in the last 6 months*, 2002 & 2003 |
| Figure 5.6: Methamphetamine** – Recent* use & Median number of days used#, 1997 – 2003 |
| Figure 5.7: Methamphetamine - % of IDU that used daily in the last 6 months, 1997 - 2003 |
| Figure 5.8: Number of amphetamine related offences reported by SAPOL in South Australia, 1999/2001 – 2002/2003 |
| Figure 5.9: Number of accidental drug-induced deaths mentioning methamphetamine among those aged 15-54 years in Australia, 1997-2002 |
| Figure 5.10: Number of calls to ADIS regarding amphetamines, Jul 2002 – June 2003 40 |
| Figure 5.11: Number of admissions to DASC inpatient treatment services, with amphetamines as the primary drug of concern, Jul 2001 – Jun 2003*# |
| Figure 6.1: Number of cocaine seizures analysed and median cocaine purity in SA 2001/2002 – 2002/2003 |
| Figure 6.2: Cocaine – Recent* use & Median number of days used#, 1997 - 2003 |
| Figure 6.3: Number of cocaine related offences reported by SAPOL in South Australia, 1999/2001 – 2002/2003 |

| Figure 6.4: Number of accidental drug-induced deaths mentioning cocaine among those aged 15-54 years in Australia, 1997-2002 |
|--|
| Figure 7.1: Median price of a 'bag' or an ounce of cannabis, 1997 - 2003 |
| Figure 7.2: Availability of cannabis in the last six months, 1997 - 2003 |
| Figure 7.3: Cannabis – Recent* use & Median number of days used#, 1997 - 2003 58 |
| Figure 7.4: Cannabis - % of IDU that used daily & used yesterday, 1997 – 2003* 58 |
| Figure 7.5: Number of cannabis related offences reported by SAPOL in South Australia, 1999/2001 – 2002/2003 |
| Figure 7.6: Number of calls to ADIS regarding cannabis, Jul 2002 – June 2003 60 |
| Figure 8.1: Morphine – Recent* use & Median days used#, 2001 - 2003 |
| Figure 8.2: Illicit Methadone – Recent* use & Median number of days used#, 2001 - 2003 |
| Figure 8.3: Injecting of methadone by IDU in the last 6 months, 1997 - 2003 |
| Figure 9.1: Benzodiazepines - Recent* use and injection, & Median number of days used#, 1997 - 200373 |
| Figure 10.1: Sharing of needles and injecting equipment by IDU in the month preceding interview, 1997 – 200376 |
| Figure 10.2: Experience of difficulty injecting and thrombosis among IDU in the month preceding interview, 1997 – 2003 |
| Figure 10.3: IDU reported involvement in crime, by offence type, in the month prior to interview, 1997 - 2003 |

ACKNOWLEDGEMENTS

This research was funded by the Australian Government Department of Health and Ageing and the National Drug Law Enforcement Research Fund through the National Drug and Alcohol Research Centre. The authors would like to thank Ms Courtney Breen, Dr Louisa Degenhardt, Dr Richard Mattick and Ms Amanda Roxburgh of NDARC for their support and assistance throughout this study.

The authors also wish to acknowledge and thank:

- The six research interviewers who conducted the interviews with injecting drug users: Nitsan Atkinson, Aylza Donald, Andrea Gordon, Justin Hay, Ann Maree Moore and Lynlea Simmonds.
- The thirty-three key informants who willingly provided their time, efforts and experience to contribute to the IDRS.
- Staff at the Clean Needle Program Sites around Adelaide who assisted in the recruitment of the injecting drug users, and who gave generously of their time and resources in facilitating this process.
- The ongoing support of the IDRS South Australian advisory committee including Simone Cormack (DASC), Damon Brogan (South Australian Voice for Intravenous Education/AIDS Council), Associate Professor Robert Ali (DASC), Robert Braithwaite (DHS), Dr. Paul Pigou (Forensic Science Services), Hugh Grantham (SA Ambulance Service), Dr Russell Waddell (SA Health Commission), Detective Superintendent Dennis Edmonds (SAPOL) and Professor Jason White (University of Adelaide/DASC).
- The organisations that generously provided us with indicator data or advice where indicator data was not available at the time of publication, including the Drug and Alcohol Services Council, the Australian Crime Commission (formerly the Australian Bureau of Criminal Intelligence), the Australian Institute of Criminology, the South Australian Police, the Australian Bureau of Statistics, the South Australian Ambulance Service, the Royal Adelaide Hospital, and the National Drug and Alcohol Research Centre.

Finally, the authors wish to thank the 120 injecting drug users who participated in the IDU survey.

ABBREVIATIONS

| ABCI | Australian Bureau of Criminal Intelligence |
|-------|---|
| ABS | Australian Bureau of Statistics |
| ACC | Australian Crime Commission |
| ADIS | Alcohol and Drug Information Service |
| AFL | Australian Forensic Laboratories |
| AFP | Australian Federal Police |
| AIC | Australian Institute of Criminology |
| ATSI | Aboriginal and Torres Strait Islander |
| CNP | Clean Needle Program |
| DASC | Drug and Alcohol Services Council |
| IDRS | Illicit Drug Reporting System |
| IDU | Injecting Drug Users |
| KIS | Key Informants |
| MDMA | 3, 4-methylenedioxymethamphetamine ('ecstasy') |
| NDARC | National Drug and Alcohol Research Centre |
| NSP | Needle and Syringe Program |
| OTHER | Refers to collation of secondary indicators of drug use |
| RAH | Royal Adelaide Hospital |
| SA | South Australia |
| SAPOL | South Australian Police |

EXECUTIVE SUMMARY

Demographic characteristics of injecting drug users (IDU)

One hundred and twenty IDU participated in the 2003 IDRS. The median age of the sample was 34 (range 16 to 54 years) and 53% of participants were male. Over two-thirds (68%) of the sample was unemployed and a third (33%) had a history of previous imprisonment. The median number of years spent at school was 10 (range 3 to 12 years). Over half the sample (53%) reported having no tertiary qualifications. Compared to 2002, in 2003 there were more females in the sample, fewer who identified as Aboriginal or Torres Strait Islander or with a history of imprisonment, and slightly more who were in some form of treatment for drug use at the time of interview.

Patterns of drug use among IDU

The drug most commonly first injected by the sample was amphetamine (61%), followed by heroin (30%). Compared to 2002, in 2003 there was a shift from methamphetamine to heroin as the most preferred drug among the IDU sample. However, methamphetamine remained the drug most injected by the IDU in 2003.

Frequency of injecting in the last month was at least greater than weekly for 87% of the sample, with nearly half injecting at least once a day (47%). Reported frequency of injecting in the last month increased overall from 2002 to 2003, in particular there was an increased proportion of IDU injecting *at least* once a day, from 33% to 47%, in 2003.

Polydrug use was common among the IDU in 2003 and has remained consistently so across the years, with no real differences being reported from 2002 to 2003. There was substantial crossover between heroin users and methamphetamine users in the 2003 IDU sample. Thirty-eight IDU (32%) had used both heroin and some form of methamphetamine, and 58 IDU (48%) had used both opioids and some form of methamphetamine, in the last six months.

Heroin

The median price *most recently paid* for a gram of heroin was \$425, a decrease from 2002 when the median last purchase price was \$450/gram. Of those IDU who were confident to report on the current price of heroin (n=68), over two-thirds (71%) reported the price as stable. Overall, there was a trend toward a decrease in the median price for a gram of heroin from 2002 to 2003, but not as great as to reach the pre-shortage price reported in 2000.

The majority of the IDU reported it was either easy or very easy to obtain heroin and that availability was stable or had become easier in the last six months, these results are slightly lower than those reported in 2002. KIS comments on price and availability of heroin were consistent with IDU.

In 2003, the purity of heroin was largely reported as low to medium and that this had remained stable or was increasing over the last six months. There appears to be a trend toward an increase in purity of heroin reported by IDU in 2003, some support for this belief was obtained from recent key indicator data provided by SAPOL.

An increase in the proportion of IDU that had recently used heroin was noted, with a significant rise in the median number of days used to pre-shortage levels. This increase in

median days used was primarily due to an increase in the proportion of IDU reporting daily use in 2003.

An increase was apparent in the proportion of clients presenting to DASC treatment services nominating any type of opioid substance (including heroin) as their primary drug of concern, representing a higher proportion than those nominating amphetamines as their primary drug of concern.

Methamphetamine

There has been a clear increase in the price of a point of either base or crystal, and grams of powder, methamphetamine since 2002. Both a point of crystal and a gram of powdered methamphetamine have doubled in price in this time. The majority of IDU able to comment reported that price was stable. KIS largely agreed with IDU regarding price and stability.

Powdered methamphetamine was reported as easier to obtain than the other two forms, although all three were still reported as easy or very easy to obtain and that availability was stable in the previous six months. With respect to the location where IDU obtain methamphetamine there has been a decrease in reports of IDU obtaining powder and base methamphetamine from dealers homes and a concomitant rise in the use of mobile dealers.

Overall the purity of all three forms was reported to be stable to decreasing by IDU. KIS recorded little agreement in the trends of methamphetamine purity in the preceding six months, but did agree with IDU reports that methamphetamine was very easy to obtain.

There has been a decrease in the proportion of IDU reporting recent use of base and crystal methamphetamine in the 2003 sample. However, there was a small rise in the median number of days IDU reported using powder and base methamphetamine since 2002 and an overall rise in the proportion of IDU that had used some form of methamphetamine daily in the previous six months.

SAPOL data revealed a decrease in the number of methamphetamine related offences particularly in regard to possession/use offences. This corresponds to law enforcement KIS reports of an increasing focus on supply level crime and, according to at least one other law enforcement KIS, the introduction of police diversion programs.

Presentations to DASC treatment services with methamphetamine as the primary drug of concern continued to increase, while inpatient admissions for methamphetamine declined during the same period. The inpatient figures for methamphetamine, however, are still twice as large as those reported for heroin across the same time frame.

Cocaine

The small number of KIS and IDU either using cocaine or able to provide information on price, purity and availability on cocaine in itself indicates the lack of a sizeable and visible cocaine market in Adelaide.

Not enough data was available to make any definitive comments with respect to trends associated with the key indicators.

Cannabis

The median price paid for a 'bag' of cannabis (bush or hydro) was \$25 and this price has remained unchanged since 1997. The majority of IDU reported that the price of cannabis had remained stable in the past six months but compared to 2002 there was a slight rise in the proportion of participants reporting that the price was fluctuating.

Ease of availability, though still considered 'easy' or 'very easy' by over 80% of IDU, had decreased since 2002 with fewer reporting that cannabis is very easy to obtain. KIS reports suggest that there had been no dramatic changes in availability of cannabis, apart from some minor fluctuations at the beginning of the year.

The majority of IDU reported that the current strength of cannabis was high, but there has been a noticeable shift in reported purity from high to medium compared to 2002. The majority of IDU in the 2003 sample however, reported that strength had remained stable in the past six months.

A slight decrease in the number of possession/use offences related to cannabis was noted in SAPOL indicator data but again, no dramatic changes were noted.

The number of calls to ADIS concerning cannabis remained stable.

Other opioids

Morphine

The reported *last purchase* price for morphine was a median of 30/100 mg (n=27). One hundred milligrams (in tablet form) was the most commonly purchased amount and Kapanol® was the most commonly purchased brand of morphine, in the six months prior to interview. The price was reported to be stable to increasing by IDU.

The majority of IDU reported morphine as generally easy or very easy to obtain, and that availability was stable (54%). Most IDU stated that they *usually* obtained morphine from a friend (48%), from a dealer's home (32%), or from a mobile dealer (13%).

Forty-three percent of IDU reported they had used morphine in the last six months a median 50 days. Although the proportion of the sample reporting recent use of morphine remains stable compared to 2002, there has been a dramatic increase in the median number of use days from 2002 to 2003 (12 v 50). All but one of the IDU that had used morphine reported having done so by injecting. More than half those IDU reporting morphine use in the last 6 months had nominated heroin as their drug of choice.

The majority of recent morphine users reported that the main form of use during the last six months was *illicit* and that the main brand of morphine they had used in that time was Kapanol® (by 65%), followed by MS Contin® (by 12%).

Methadone

The reported *last purchase* price of methadone was a median 1/ml of syrup (n=5). More IDU were able to provide information on the *last purchase price* of physeptone tablets, reporting a median price of 10/10mg tablet (n=15). The majority of IDU reported methadone as generally easy or very easy to obtain, with two thirds of reporting that availability was stable.

Twenty-two (18%) IDU reported having used methadone syrup illicitly a median of 5 days and 27 (23%) IDU reported having used physeptone tablets illicitly a median of 4 days in the last six months. No IDU reported daily use of illicit methadone syrup or physeptone tablets on a daily basis.

There was a small increase in the proportion of IDU reporting use of syrup illicitly since 2001, and substantial increase in the proportion of IDU reporting illicit use of physeptone tablets compared to both 2001 and 2002 (from 11% and 6%, respectively, to 23% in 2003).

In 2003 roughly equal proportions of the IDU reported mainly using methadone licitly (53%) and illicitly (47%) in the last six months. In 2003, ten IDU stated that they were currently on a methadone maintenance treatment program and had been for the preceding six months. Of these, nine also reported use of either illicit methadone syrup (n=5) or physeptone tablets (n=4) during the six months prior to interview.

Buprenorphine

Twelve (10%) of participating IDU reported having used buprenorphine illicitly a median of 4 days in the last six months. No IDU reported use of illicit buprenorphine on a daily basis. There has been an increase in the illicit use of buprenorphine among IDU since last year, both in terms of the proportion of the IDU that reported recent use (from 5% to 10%) and in the proportion reporting having injected illicit buprenorphine recently (from 3% to 9%).

The majority of those IDU reporting use of any buprenorphine did so licitly.

In 2003, of the five IDU that stated they were currently on a buprenorphine maintenance treatment program, and had been for the preceding six months, none reported concurrent use of illicit buprenorphine in that time.

Other drugs

There were no reported changes in the patterns of use of ecstasy and hallucinogens among the IDU, though methamphetamine users were more likely to also report use of these drugs compared to heroin users.

Parameters of benzodiazepine use in the 2003 sample also remained largely unchanged with over 50% of IDU reporting recent use. A small increase in the median number of days used and the proportion reporting daily use was reported compared to 2002.

Anti-depressant use was also stable.

Associated harms

A decrease in the number of unspecified Hep B and C cases Nationally and locally since 2001 was observed in the general population, along with a decline in the proportion of HCV positive cases among IDU (NSP).

Sharing of needles and equipment has remained at similar levels compared to 2002. Over a quarter of all IDU still report unsafe practices through the sharing of injecting equipment. Injecting related health issues were still present with sizable proportions experiencing scarring, bruising and difficulty with injecting. For the first time the IDRS distinguished large proportions of methadone and morphine injectors reported injecting problems.

An analysis of expenditure on drugs demonstrated that heroin users had spent twice as much on drugs in the day prior to interview than methamphetamine users.

There were no substantial changes from previous years regarding mental health issues other than an increase in IDU attendance of a health professional for anxiety and panic and a concomitant increase in comments from health related KIS on the increase in anxiety and panic problems.

The most commonly reported crimes committed by IDU were drug dealing and property crime. IDU reported stable police activity in the six months leading up to the survey and the majority of IDU believed that police activity had not made it more difficult to obtain drugs. KIS reports continued to highlight the increase in violent crimes associated with methamphetamine use.

Implications

The results of the 2003 SA IDRS survey have highlighted a number of similarities and differences in the IDU population compared to previous years. The effects of the heroin shortage are still being felt in some areas and it appears as if the landscape may have evolved in substantial ways. Whether these changes emerge as permanent markers of the injecting drug user population within South Australia remain to be seen.

The following areas were highlighted as issues requiring further investigation; explorations of the dynamic nature of current injecting drug use, examination of treatment options for methamphetamine users and training for health professionals, investigations of barriers among IDU to use of safe injecting practices, and the impact of legislative change on cannabis use and availability in South Australia.

1. INTRODUCTION

The Illicit Drug Reporting System (IDRS) was trialed in 1997 under the auspices of the National Drug and Alcohol Research Centre (NDARC) to examine drug trends in three Australian jurisdictions. This work was commissioned and supported by the Commonwealth Department of Health and Ageing. The trial consisted of conducting the complete IDRS in New South Wales, Victoria and South Australia (see Hando *et al.*, 1998 for a national comparison, and Cormack *et al.*, 1998 for the South Australian findings). The 'core' IDRS incorporated a triangulated approach to data collection on drug trends, and consisted of a survey of injecting drug users, a semi-structured survey of key informants who had regular contact with drug users, and secondary data sources or indicators relevant to drug use.

The IDRS process was repeated in 1998 in the same three jurisdictions, and in 1999 they were joined by Western Australia, Northern Territory, Australian Capital Territory, Queensland and Tasmania. For a review of the history and progression of the IDRS Nationally up to 2000 see Darke, Hall and Topp (2000). The year 2003 is the seventh year that the IDRS has been conducted in South Australia, and the fifth year that it has included all states and territories (see Breen *et al.*, 2003 for a national comparison of 2003 findings, and Longo *et al.*, 2002 for the South Australian perspective).

The IDRS provides a coordinated and ongoing monitoring system predominantly focusing on heroin, methamphetamine, cocaine and cannabis, and acts as a strategic early warning system for emerging illicit drug problems. The IDRS is a sensitive and timely indicator of drug trends both nationally and by jurisdiction, and is representative, simple to execute and cost-effective. As well as drug trends, the findings highlight areas where further research is required, or where changes need to be made in terms of education, health promotion, treatment services and policy.

The 2003 South Australian Drug Trends Report summarises information collected by the South Australian component of the national IDRS using three methods: a survey of injecting drug users, key informant interviews with professionals working in the drug and alcohol or related fields, and existing and up-to-date data indicators relating to drugs and drug use. The three sources complement each other, each having their own strengths and weaknesses. The results are summarised by drug type in tables designed to provide the reader with a 'snapshot' overview of drug trends in South Australia.

Study Aims

The aim of the South Australian component of the 2003 IDRS was to provide information on drug trends in South Australia, particularly focusing on the 12 months between mid-2002 and mid-2003.

2. Method

A triangulated approach was utilised for this study, with information on drug trends coming from three primary sources. This approach is based on a procedure outlined by Hando & Darke (1998). The three sources were as follows:

A survey of injecting drug users (IDU);

A semi-structured survey of key informants (KI) who work in the drug and alcohol area, or some related field, and who have regular contact with drug users; An examination of existing and current indicators (OTHER) relating to drugs, drug use and

An examination of existing and current indicators (OTHER) relating to drugs, drug use and drug-related issues.

2.1 Survey of injecting drug users (IDU)

A sample of 120 injecting drug users (IDU) was interviewed in June and July 2003. Criteria for entry into the study were: having injected drugs at least once a month in the previous six months, being over 16 years of age, and living in the Adelaide metropolitan area.

Participants were recruited through Clean Needle Program sites across Adelaide. Clients of the service were invited to participate by the CNP peer educator and/or the IDRS interviewer directly or given a study flyer providing information and details on how to arrange participation. Awareness of the study then spread via 'word of mouth' and further recruitment occurred by 'snowballing'.

Since 2001, to be consistent with the IDRS data collection procedures in other jurisdictions, trained research interviewers have conducted the interviews with the IDU. In 2003, six research interviewers with a sound working knowledge of issues related to illicit and injecting drug use were trained on administration of the survey instrument. The purpose and content of the survey was fully explained and informed consent was obtained from participants prior to the interviews being conducted. Interviews were conducted at a time convenient to the participant and generally in a room provided by the agency associated with the CNP or an agreed location nearby. The average time to complete an interview was approximately 50 minutes (range: 20 to 100 minutes) and subjects were compensated \$30 for their time.

The structured interview (survey instrument) was based on previous research conducted at NDARC (see Darke *et al.*, 1992, 1994). Sections on demographics, drug use, price, purity and availability of drugs (heroin, methamphetamine, cocaine, cannabis, morphine and methadone), crime, risk-taking, health and general trends were included. In general, participants were asked to consider changes on the above parameters over the previous six to 12 months (mid-2002 to mid-2003). The results were analysed statistically using SPSS for Windows, Version 11.0.

2.2 Survey of key informants (KIS)

Entry criteria for the KIS were: at least weekly contact with illicit drug users in the previous six months, or contact with 10 or more illicit drug users in the previous six months, or specialist

knowledge of drug markets in SA. All key informants were paid or volunteer workers in drug treatment agencies, other health and community services, drug user groups, SA police, Clean Needle Programs or research organisations. Key informants were recruited based on their participation in previous IDRS surveys, and on recommendations made by existing key informants and colleagues. Potential key informants were contacted via telephone and assessed for suitability according to the criteria. A mutually convenient time was then made for either an interview in person or over the telephone.

In 2003, 33 KIS were interviewed (18 males and 15 females) from the end of August to late October 2003. KIS comprised a range of persons from various professions: fifteen health workers (youth workers, community drug and alcohol workers, psychologists, medical officers, nurses, and drug & alcohol counsellors), nine user representatives (peer educators, outreach and clean needle program workers) and nine law enforcement officers and police intelligence analysts.

Key informants were asked to identify the main illicit drug used by the drug users they had the most contact with in the previous six months, or (if they had limited or no contact with users) the main illicit drug they were most knowledgeable about. Methamphetamine was overwhelmingly the most identified drug type amongst KIS in relation to users they had most contact with. It should therefore be noted that an unspecified number were asked to focus on cannabis, cocaine or heroin and other opiates when their knowledge encompassed these drug types as well as methamphetamine, in an effort to gather more information with regard to these drug types. Twenty-seven KIS completed the interview in relation to one main drug type only: 13 on methamphetamine, 7 on heroin and other opiates, 6 on cannabis and one with regard to cocaine. There were 6 KIS who completed the interview in relation to more than one main drug type: 4 on methamphetamine and heroin and other opiates, and 2 on methamphetamine and cannabis. Therefore, a total of 19 KIS provided information on the use or supply and manufacture of methamphetamine, 11 on the use or supply of heroin and other opiates, 8 on the use or supply and cultivation of cannabis and only one on the use of cocaine. Most KIS also provided some useful information on at least one other drug or drug using group additional to the main focus of their interview.

The key informant interview took approximately 60 minutes to administer. The instrument used was based on previous research conducted at NDARC for the World Health Organisation (Hando & Flaherty, 1993) and included sections on demographics, drug use patterns, drug price, purity and availability, criminal behaviour, police activity and health issues. In general, KIS were asked for information on the above parameters relevant to the previous six to 12 months, in particular any changes to those parameters over that period. The responses to the semi-structured interview were transcribed and analysed for content and trends.

2.3 Other indicators

To complement and validate data collected from the injecting drug user and key informant surveys, a range of secondary data sources were utilised including population surveys and other health and law enforcement data. The pilot study for the IDRS (Hando *et al.*, 1997) recommended that secondary indicator data should:

Be available at least annually; Include 50 or more cases; Provide brief details of illicit drug use; Be located in the main study site (Adelaide or South Australia for the present study); Include details of the four main illicit drugs under investigation.

Data sources that fulfilled the above criteria and were included in the report were:

- Telephone advisory data provided by the Alcohol and Drug Information Service (ADIS) of South Australia;
- Australian Needle and Syringe Program (NSP) Survey data;
- Admissions data from the Drug and Alcohol Services Council (DASC);
- Purity of drug seizures made by South Australian Police (SAPOL) and the Australian Federal Police (AFP), provided by the Australian Forensic Laboratory (AFL) and the Australian Crime Commission (ACC), formerly the Australian Bureau of Criminal Intelligence (ABCI);
- National Notifiable Diseases Surveillance System (NNDSS) data, from the Australian Government department of Health and Ageing;
- Statewide rates of drug-related arrests provided by SAPOL;
- Statewide rates of opioid-related fatalities provided by the Australian Bureau of Statistics (ABS).

2.4 Methamphetamine

Prior to 2001, IDRS reports used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine . 'Amphetamine' is used to denote the sulphate of amphetamine which, throughout the 1980's, was the form of illicit amphetamine most available in Australia (Chesher, 1993). Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. 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, have been identified as becoming more widely available and used in all jurisdictions (Topp & Darke, 2002), are also methamphetamine. Therefore the term methamphetamine was used from 2001 to refer to the drugs available that were previously termed 'amphetamines'. The terms are used interchangeably within this report unless specifically noted within the text. For a further discussion of this issue see White, Breen & Degenhardt (2003).

3. RESULTS

3.1 Overview of the IDU sample

The demographic characteristics of the 120 IDU interviewed in 2003 are summarised in Table 3.1, with the 2002 sample characteristics provided for comparison.

| Characteristic | 2002 n=100 | 2003 n=120 |
|--|---------------------------|---------------------------|
| Age (median in years) | 32 | 34 |
| Gender (% male) | 66 | 53 |
| Identify as ATSI (%) | 18 | 11 |
| Employment (%) Not employed Full time Part time/casual Student Home duties | 74 9 5 5 6 | 68 3 15 3 13 |
| School Education (median in years) | 10 | 10 |
| Tertiary Education (%) None Trade/technical University | 51 38 11 | 53 32 16 |
| Currently in treatment (%) | 24 | 33 |
| Prison history (%) | 55 | 33 |
| Area of Adelaide (%) Central/Eastern Western Southern Northern No fixed address/missing | 14 41 29 13 3 | 18 30 30 21 2 |

Source: IDRS IDU interviews

The median age of the sample was 34 (range 16 to 54 years) and 53% of participants were male. Over two-thirds (68%) of the sample was unemployed and a third (33%) had a history of previous imprisonment. The median number of years spent at school was 10 (range 3 to 12 years). Over half the sample (53%) reported having no tertiary qualifications, 32% had completed a trade or technical course and 16% had completed a university course. Two thirds (67%) of the sample were not currently in any treatment for drug use, but of the remaining third that were, the majority were in a maintenance pharmacotherapy treatment. Specifically, 23% were on a methadone program and 7% were on a buprenorphine program.

Compared to 2002, in 2003 there were more females in the sample, fewer who identified as Aboriginal or Torres Strait Islander or with a history of imprisonment, and slightly more who were in some form of treatment for drug use at the time of interview.

KIS reports of demographics of drug user populations they have contact with replicate those of the sample: majority male (~60-70% with some suggestion of an increase in female representation), unemployed with approximately 10 years of school education, and significant proportions with a history of imprisonment or currently in treatment for drug use (most likely a maintenance pharmacotherapy). Of note were the reported differences between methamphetamine users and heroin users in terms of average age (~25 years compared to ~30 years, respectively), current treatment status (heroin users were more likely to be in some form of treatment for their drug use) and ethnic background (methamphetamine users encompass a more culturally diverse group). On examination, the demographics of heroin users and methamphetamine users in the IDU sample were found to be different with regard to median age (38 years v 32 years) and proportion currently in treatment for drug use (50% v 25%), respectively.

3.2 Drug use history and current drug use

The injecting history, drug preferences and patterns of polydrug use are summarised in Table 3.2, and drug use history and recent drug use are summarised in Table 3.3 and Figure 3.1.

The median age of first injection by the IDU sample was 18 years (range 13 to 46). The drug most commonly first injected by the sample was amphetamine (61%), followed by heroin (30%). A comparison of 2003 with 2002 shows little difference except that in 2003 a small number reported first injecting morphine (n=5), where previously none had.

Compared to 2002, in 2003 there was a shift from methamphetamine to heroin as the most preferred drug among the IDU sample. Specifically, there was an increase in the proportion reporting heroin as their drug of choice (from 30% to 48%) and a concomitant decrease in the proportion reporting methamphetamine as their preferred drug (from 52% to 33%). The pattern of preference in 2003 more closely resembles that seen in 2001.

Similarly, since 2002 there has been an increase in the proportion of IDU that reported injecting heroin most often in the last month (22% to 33%) and a concurrent decrease in the proportion reporting methamphetamine as the drug most injected (57% to 43%). In addition, there was an increased proportion reporting heroin as last drug injected (25% to 35%) and a decreased proportion reporting methamphetamine as the last drug injected (60% to 44%) from 2002 to 2003. However, despite heroin being the preferred drug of the IDU in 2003 and an increased use of heroin being reported, methamphetamine remained the drug most injected by the IDU in 2003.

Frequency of injecting in the last month was at least greater than weekly for 87% of the sample, with nearly half injecting at least once a day (47%). Reported frequency of injecting in the last month increased overall from 2002 to 2003, in particular there was an increased proportion of IDU injecting *at least* once a day, from 33% to 47%, in 2003.

| Variable | 2002 n=100 | 2003 n=120 | | |
|--|---------------|---------------|--|--|
| Age first injection (median in years) | 17 | 18 | | |
| First drug injected (%) | | | | |
| Heroin Amphetamine | 30 64 | 30 61 | | |
| Cocaine | 1.0 | - | | |
| Other | 5.0 | 4 5 | | |
| Drug of choice (%) | | | | |
| Heroin | 30 | 48 | | |
| Methamphetamine | 52 | 33 | | |
| Connabis | 3 | 5 | | |
| Morphine | 6 | 8 | | |
| Other | 2 | 4 | | |
| Unspecified | 2 | - | | |
| Drug injected most often in last month (%) | | | | |
| Heroin | 22 | 33 | | |
| Methamphetamine | 57 | 43 | | |
| Cocaine | - | - | | |
| Morphine | 17 | 14 | | |
| Methadone | | 6 | | |
| No drug in last month | Z | 2 | | |
| | _ | 2 | | |
| Most recent drug injected (%) | | | | |
| Heroin | 25 | 35 | | |
| Methamphetamine | 60 | 44 | | |
| Morphine | 14 | 14 | | |
| Other | - 1 | 4 | | |
| Encyclonary of inicating in last month (0/) | 1 | 2 | | |
| requency of injecting in fast month (70) | | | | |
| Weekly or less | 27 | 13 | | |
| More than weekly but less than daily | 40 | 41 | | |
| 2 - 3 times a day | 15 | 23 | | |
| >3 times a day | 11 | 8 | | |
| Polydrug use (median) | | | | |
| Number of drug classes ever used | 11 (4-16) | 12 (4-16) | | |
| Number of drug classes used in last 6 months | 6 (2-14) | 7 (2-14) | | |
| Number of drug classes ever injected | - | 5 (1-12) | | |
| Number of drug classes injected in last 6 months | - | 2 (1-9) | | |

Table 3.2: Injection history, drug preferences and polydrug use of IDU

Source: IDRS IDU interviews

Polydrug use was common among the IDU in 2003 and has remained consistently so across the years, with no real differences being reported from 2002 to 2003 (see Table 3.2). In 2003, IDU reported use of a median 12 (range: 4 - 16) drug classes across their lifetime and a median of 7 (range: 2 - 14) during the 6 months prior to interview. The drug classes most commonly used by the IDU across their lifetime were: alcohol or any methamphetamine, tobacco, cannabis, any opioid, heroin, and hallucinogens (see Table 3.3). The drug classes most commonly used by the IDU in the last 6 months were: tobacco, cannabis, any opioid, any methamphetamine, alcohol, heroin, and benzodiazepines (Figure 3.1).





* pharm stim = pharmaceutical stimulants (eg. dexamphetamine) Source: IDRS IDU interviews

There was substantial crossover between heroin users and methamphetamine users in the 2003 IDU sample. Thirty-eight IDU (32%) had used both heroin and some form of methamphetamine, and 58 IDU (48%) had used both opioids and some form of methamphetamine, in the last six months.

Of the fifty-eight IDU that nominated heroin as their drug of choice, 53 (91%) had used heroin in the previous six months, 27 (47%) had used morphine and 38 (66%) had used any methadone (licit or illicit). In addition, 31 (53%) had used some form of methamphetamine. Similarly, there was overlap of drug classes used by those IDU who nominated methamphetamine as their preferred drug. Of the 39 IDU reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last 6 months, 10 (26%) had used morphine and 7 (18%) had used heroin during that period. Of the 9 IDU that nominated morphine as their preferred drug, all had used it in the previous six months, one (11%) had used heroin and 7 (78%) had used some form of methamphetamine during that period.

A comparison with the 2002 survey revealed a number of interesting differences. A dramatic increase in the use of heroin (median days used) was apparent as well as an increase in the proportion of IDU using daily (n = 20). While there was a similar smaller rise in the median number of days IDU reported using methamphetamine, a decrease in the proportion reporting recent use was seen. In what is appearing to be a South Australian specific trend, there was an equal proportion of IDU reporting recent use of each type of methamphetamine, but the frequency of use of base methamphetamine (median days used) was double that of powder or crystal methamphetamine.

| 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* |
|-------------------------|--------------|------------------|-------------------------|----------------|-----------------------|-----------------|---------------------------|-----------------|--------------------------|------------------------|----------------------------------|
| Heroin | 88 | 87 | 54 | 39 | 3 | 18 | 1 | 18 | 3 | 55 | 72 |
| Methadone - licit | 59 | 23 | 8 | | | | | 58 | 26 | 26 | 180 |
| Methadone - illicit | 38 | 18 | 8 | | | | | 31 | 13 | 18 | 5 |
| Physeptone# - licit | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 9 | 3 | 3 | 180 |
| Physeptone# - illicit | 40 | 25 | 16 | 1 | 1 | 0 | 0 | 32 | 13 | 23 | 4 |
| Any methadone | 73 | 44 | 25 | - | - | - | - | - | - | 48 | 80 |
| Buprenorphine - licit | 25 | 7 | 3 | | · | · | · | 24 | 15 | 15 | 30 |
| Buprenorphine - illicit | 16 | 9 | 7 | | | | | | 6 | 10 | 2 |
| Any buprenorphine | 32 | 13 | 9 | - | - | - | - | - | - | 23 | 12 |
| Morphine | 72 | 70 | 42 | 3 | 0 | 1 | 0 | 38 | 20 | 43 | 50 |
| Homebake | 27 | 26 | 4 | 3 | 0 | 0 | 0 | 3 | 0 | 4 | 4 |
| Other opioids | 43 | 24 | 5 | 8 | 0 | 0 | 0 | 33 | 12 | 15 | 20 |
| Any opioid | 92 | 91 | 73 | | | | | | | 75 | |

Table 3.3: Drug use history and routes of administration of the IDU sample (% of total sample; n=120)

Source: IDRS IDU interviews, * Median number of days used by those IDU who had used the drug class in the last 6 months; # Physeptone is a tablet form of methadone ** Any opioid: includes all opioid substances (heroin, methadone/physeptone, buprenorphine, morphine homebake and other opiates)

| 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* |
|---|--------------|------------------|-------------------------|----------------|-----------------------|-----------------|---------------------------|-----------------|--------------------------|------------------------|----------------------------------|
| Methamphetamine: Powder form | 95 | 90 | 49 | 18 | 1 | 66 | 5 | 59 | 10 | 53 | 8 |
| Methamphetamine: Base/paste form | 71 | 68 | 49 | 2 | 0 | 4 | 0 | 23 | 12 | 51 | 24 |
| Methamphetamine: Crystal/ice form | 71 | 66 | 46 | 10 | 3 | 7 | 1 | 14 | 5 | 48 | 14 |
| Methamphetamine liquid | 28 | 27 | 12 | | | | | 6 | 1 | 12 | 10 |
| Pharmaceutical stimulants | 37 | 14 | 3 | 1 | 0 | 1 | 0 | 33 | 8 | 11 | 3 |
| <i>Methamphetamine:</i> <i>any form</i> [#] | 98 | 96 | 72 | - | - | - | - | - | - | 73 | 48 |
| Cocaine | 66 | 48 | 8 | 8 | 1 | 41 | 5 | 8 | 0 | 13 | 2 |
| Hallucinogens | 88 | 23 | 3 | 5 | 3 | 2 | 0 | 86 | 14 | 18 | 1 |
| Ecstasy | 63 | 37 | 12 | 3 | 0 | 12 | 3 | 55 | 18 | 24 | 2 |
| Benzodiazepines | 79 | 31 | 8 | 7 | 1 | 1 | 0 | 79 | 53 | 53 | 30 |
| Alcohol | 98 | 9 | 0 | | | | | 98 | 65 | 65 | 10 |
| Cannabis | 96 | | | | | | | | 80 | 180 | |
| Tobacco | 97 | | | | | | | | 94 | 180 | |
| Anti-depressants | 56 | | | | | | | 22 | 180 | | |
| Inhalants | 38 | | | | | | | | | 6 | 3 |

Table 3.3 (continued): Drug use history and routes of administration of the IDU sample (% of total sample; n=120)

[#]Methamphetamine: any form includes powder, base/paste, crystal/ice, liquid and pharmaceutical stimulants

4. HEROIN

It should be noted that the price, purity and availability sections of the IDU survey are not restricted to users of the particular drug, but to those *who feel confident of their knowledge* of these parameters of the market. In addition, participants may answer any or all price, purity and availability sections, thereby the sample sizes (n) per section may fluctuate for any given drug. The sample sizes are therefore reported in each table (n=x). Care should be taken in interpreting category percentages that may be associated with small sample sizes.

The pool of IDU able to provide answers on one or more aspects of the heroin market (price, purity and/or availability) was substantially larger in 2003 (57% of IDU) compared to 2002 (39% of IDU).

4.1 Price

The *current* price of heroin was estimated by the IDU to be a median \$400/gram (range \$200-700, n=33) or \$50/cap (range \$50-100, n=44. These estimations were not substantially different to the median prices paid by IDU for the different amounts of heroin, at last purchase, as listed in Table 4.1. The median price *most recently paid* for a gram of heroin was \$425, a decrease from 2002 when the median last purchase price was \$450/gram. The median price *most recently paid* for a half-weight was reported as \$200; also a decrease from the 2002 median price of \$250. The median *last purchase* price of a 'cap' of heroin was unchanged from 2002 at \$50.

| Amount bought | Median price paid, \$ (range) | Number of IDU purchasers |
|--------------------------|----------------------------------|--------------------------|
| 'cap' | 50 (50 - 100) | 40 |
| | 50 (50 - 100) 425 (350- 550) | 10 |
| gram | 450 (250 - 500) | 11 |
| 'half-weight' (1/2 gram) | 200 (150 - 300) | 23 |
| | 250 (180 - 350) | 17 |
| ¹ /4 oram | 100 (100 - 180) | 16 |
| , Sturin | 100 (80 - 175) | 17 |
| 1/8 gram | 50 (40 - 100) | 9 |
| 1/0 grain | # | # |

Table 4.1: Price of most recent heroin purchases by IDU, 2002* & 2003

* 2002 data in italics; # n<5: not reported

Note: all purchases were within six months of interview

Source: IDRS IDU interviews

Of those IDU who were confident to report on the current price of heroin (n=68), over two-thirds (71%) reported the price as stable (see Table 4.2). A larger proportion of the sample in 2003 reported the price of heroin in the last 6 months was stable compared to 2002 (71% v 59%), and fewer reported the price as increasing (15% v 33%).

| Reported price status | % of IDU able to answer | | | |
|-----------------------|-------------------------|----------------|--|--|
| | 2002 (n=39) | 2003 (n=68) | | |
| don't know | 0 | 6 | | |
| increasing | 33 | 15 | | |
| stable | 59 | 71 | | |
| decreasing | 5 | 3 | | |
| fluctuating | 3 | 6 | | |

Table 4.2: Change in price of heroin over last 6 months, 2002 & 2003

Source: IDRS IDU interviews

Overall, there was a trend toward a decrease in the median price for a gram of heroin from 2002 to 2003, but not as great as to reach the pre-shortage price reported in 2000 (see Figure 4.1).





Source: IDRS IDU interviews

Both health KIS and law enforcement KIS report similar prices for a cap of heroin to the IDU. The majority of KIS believe that the price of heroin is currently stable although two of the law enforcement KIS reported a decrease in price over the last six months.

4.2 Availability

Tables 4.3 and 4.4 summarise the current availability of heroin and the changes in heroin availability over the last six months, according to IDU report. The majority of the IDU answering the section regarding availability of heroin in 2003 reported it was either easy or very easy to obtain heroin and that this availability was stable or had become easier in the last six months. Compared to the 2002 sample, in 2003 the proportion reporting

availability as easy or very easy was larger (88% v 80%) and a greater proportion reported that availability had been stable over the last six months (66% v 46%).

Similar to the IDU reports, the majority of KIS believed that heroin was easy or very easy to obtain and that this trend had remained stable in the past six months. A small number of KIS did mention however, that there are also some IDU who find it difficult to get heroin which accords with the small proportion of IDU (12%) who reported difficulties in obtaining heroin in the 2003 sample.

| How easy is it to get heroin | % of IDU able to answer | | |
|------------------------------|-------------------------|--------|--|
| at the moment? | 2002 | 2003 | |
| | (n=39) | (n=67) | |
| very easy | 31 | 34 | |
| easy | 49 | 54 | |
| difficult | 15 | 12 | |
| very difficult | 5 | 0 | |

Table 4.3: Availability of heroin currently, 2002 & 2003

Source: IDRS IDU interviews

| Table 4.4: | Change in | availability | of heroin | over the | last 6 m | nonths, 2 | 2002 & | 2003 |
|------------|-----------|--------------|-----------|----------|----------|-----------|--------|------|
| | | 1 | | | | , | | |

| Has [availability] changed | % of IDU able to answer | | |
|----------------------------|-------------------------|--------|--|
| in the last 6 months? | 2002 | 2003 | |
| | (n=39) | (n=67) | |
| don't know | 3 | 3 | |
| more difficult | 18 | 8 | |
| stable | 46 | 66 | |
| easier | 31 | 19 | |
| fluctuates | 3 | 5 | |

Source: IDRS IDU interviews

These parameters indicate that availability of heroin has increased and stabilised in the year since the 2002 survey. Furthermore, long-term trend data for the availability of heroin, as reported by IDU in all previous surveys, is presented in Figure 4.2 and shows a gradual increase in the proportions indicating that heroin was very easy or easy to obtain in the six months prior to interview, since 2001. However, ease of obtainability has not yet returned to the levels seen prior to that time, which coincides with the heroin shortage.





The majority of IDU that had used heroin in the six months prior to interview (n=61) reported they usually obtained heroin from a mobile dealer (41%), a dealer's home (25%), or a delivery to their own home (21%). The remaining 13% reported sourcing heroin from a street dealer (5%) or a friend (8%). The median time usually taken to score heroin was 23 minutes (range: 1 to 120, n=60). A comparison with the 2002 survey reveals an increase in IDU obtaining heroin from mobile dealers; only 31% of IDU reported using a mobile dealer in 2002. Two KIS from the law enforcement area reported a rise in street dealing but the general consensus was that there had been little change in the supply of heroin to IDU since 2002.

4.3 Purity

Tables 4.5 and 4.6 summarise the current purity of heroin and the changes in heroin purity over the last six months, according to IDU. In 2003, the purity of heroin was largely reported as low to medium and that this had remained stable or was increasing over the last six months. Compared to 2002, when the purity of heroin was also generally reported as low to medium, there seems to be a trend toward an increase in purity of heroin in 2003 given the increase in the proportions stating medium or high purity and the increase in the proportion stating purity had increased over the last six months, in the 2003 survey. These changes must be viewed with caution however, due to the increase in the number of IDU able to answer this section from 2002 to 2003.

| How pure would you say | % of IDU able to answer | | |
|--------------------------|-------------------------|--------|--|
| heroin is at the moment? | 2002 2003 | | |
| | (n=39) | (n=64) | |
| high | 5 | 19 | |
| medium | 23 | 33 | |
| low | 51 | 44 | |
| fluctuates | 21 | 5 | |

| Table 4.5: Current purity/stre | gth of heroin, | 2002 & | 2003 |
|--------------------------------|----------------|--------|------|
|--------------------------------|----------------|--------|------|

Source: IDRS IDU interviews

| Has the purity of heroin | % of IDU able to answer | | |
|--------------------------|-------------------------|--------|--|
| changed in the last 6 | 2002 | 2003 | |
| months? | (n=39) | (n=64) | |
| increasing | 13 | 36 | |
| stable | 15 | 42 | |
| decreasing | 51 | 11 | |
| fluctuating | 21 | 11 | |

Source: IDRS IDU interviews

The Australian Crime Commission (ACC), formerly the Australian Bureau of Criminal Intelligence (ABCI), provided quarterly data on heroin seized in SA during the last financial year 2002/2003. These data were obtained from analyses by the Australian Forensic Laboratory of seizures by State police (SAPOL) and the Australian Federal Police (AFP). Figure 4.3 shows the number of samples analysed and the median purity over time for both SAPOL and AFP seizures. The total number of heroin seizures analysed for July02 to June03 was 247 and the median purity was 18.9%.

Very few seizures by the AFP were made or analysed during this time period, making it difficult to make direct comparisons to SAPOL seizure purity. SAPOL seizures fluctuated in terms of numbers throughout the time period and there seems to have been an increase in purity in the final quarter of 2002/2003 compared to the previous two quarters. Despite quarterly variation, however, purity levels appear to have remained largely stable across the entire time frame depicted in Figure 4.3.

Figure 4.3: Number of heroin seizures analysed and median heroin purity in SA 2001/2002 – 2002/2003



Source: The Australian Crime Commission

There was no concordance among KIS regarding the current purity of heroin that would suggest some degree of fluctuation at the moment. Regardless of the KIS reports of current purity, the majority did believe that in the previous six months purity was stable to increasing.

4.4 Use

4.4.1 Heroin use among IDU

Thirty percent of IDU reported heroin as the first drug ever injected, 48% nominated heroin as their drug of choice, 33% reported heroin as the drug most often injected in the last month, and 35% reported heroin was the last drug they injected.

4.4.2 Current patterns of heroin use

Sixty-six (55%) of the participating IDU interviewed in 2003 had used heroin on a median of 72 days in the last six months (range 1 - 180), all but one of whom had injected heroin in that time. Compared to 2002, there was an increase in the proportion of the IDU that had used heroin in the last six months (48% to 55%) and an increase in the median number of days heroin was used during that time (24 days to 72 days)(see Figure 4.4). An analysis of the mean number of days used between the two samples revealed a significant difference with the mean number of days used in 2003 (mean = 46.4 days, SD = 69.2) greater than the mean number of days used in 2002 (mean = 23.9 days, SD = 48.4), $t_{(218)} = 2.74$, p < 0.01.



Figure 4.4: Heroin – Recent* use & Median number of days used[#], 1997 - 2003

* in the previous six months; # by those reporting use in the previous six months **Source: IDRS IDU interviews**

Contributing to the increase in median number of days used was an increase in the proportion of IDU that had used heroin on a daily basis, from 5% in 2002 to 17% in 2003, as depicted in Figure 4.5. Figure 4.5 also shows that the proportion of IDU reporting daily use of heroin in 2003 has reached (and surpassed) the pre-shortage levels (of 2000).

Figure 4.5: Heroin - % of IDU that used daily* & used yesterday, 1997 - 2003



^{*} in the previous six months Source: IDRS IDU interviews

As shown in Table 4.7, just over 50% of the heroin using IDU had injected once a day or more in the month prior to interview. This is greater than the 30% of heroin users who reported daily use of heroin over the six-month period prior to interview (see Figure 4.5). Less than 5% of the sample had used heroin by any method other than injecting in the last six months (see Table 3.3).

| Frequency of injecting | % of heroin users injecting in the last month (n=66) |
|-----------------------------------|---|
| Weekly or less | 12 |
| More than weekly, less than daily | 36 |
| Once a day | 18 |
| 2 to 3 times a day | 27 |
| More than 3 times a day | 6 |
| | |

Table 4.7: Frequency of injecting among heroin users, 2003

Source: IDRS IDU interviews

Of the fifty-eight IDU that nominated heroin as their drug of choice, 53 (91%) had used heroin in the previous six months, 27 (47%) had used morphine and 38 (66%) had used any methadone (licit or illicit). In addition, 31 (53%) had used some form of methamphetamine.

Nineteen IDU nominated heroin as their drug of choice but reported that the drug they had injected most in the last month was something other than heroin. Of these IDU, twelve had mostly injected some other opioid substance (morphine, methadone or buprenorphine) in that period, ten of whom gave reasons of drug price, purity or availability for not injecting mostly heroin. The remaining seven IDU had injected methamphetamine most, the reasons for which were again given as due to the price or availability of the drug, by the majority (n=4). Only 14% (n=9) of the IDU that reported use of heroin in the last six months had not used another opiate or opioid drug as well, during that period. These data indicate that IDU continue to supplement or replace their use of heroin with other opioid and non-opioid drugs.

Of the 66 IDU that had used heroin in the six months prior to interview, 61 (92%) reported use of a powder form of heroin, 51 (77%) reported using heroin rock and 7 (11%) reported using 'homebake', a crude opioid substance derived from pharmaceutical preparations containing codeine (Reynolds *et al.*, 1997). A slightly higher proportion of heroin users reported heroin rock, compared to heroin powder, as the form they had *used most* in the last six months (53% v 46%). Compared to 2002, while the proportion of IDU reporting use of rock heroin remained largely unchanged there was a ten percent rise in the proportion of IDU reporting use of powder heroin.

KIS comments on the current patterns of use among heroin users included a perceived increase in the frequency of use of heroin that was largely attributed to the increase in availability and decrease in price. All KIS agreed that injecting was still the most common practice and two KIS identified smoking as an alternative route for Vietnamese IDU. When asked about any changes in the form of heroin currently available, a number of KIS reported an increase in the availability of heroin rock, which is consistent with IDU reports. Rock was reported by several KIS to generally be just compressed powder to accommodate the market's preference for rock, which is perceived to be of a higher quality. Finally, Kapanol® (pharmaceutical morphine) was the most mentioned other drug discussed by KIS in relation to current patterns of drug use by heroin IDU.

4.5 Heroin related harms

4.5.1 Law enforcement

The number of possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs) offences reported by SAPOL since 1999/2000 is presented in Figure 4.6. The total number of possession and provision offences for 2002/2003 period was 3,131, which is a slight decrease on 2001/2002 total numbers (3,673). As can be seen in Figure 4.6, there has been a steady decrease in the number of both possession and provision heroin and other opiate offences since 1999/2000. There appears to have been some levelling out of the number of offences between 2001/2002 and 2002/2003. Heroin and other opiate possession and provision offences made up only 2% of the total number of drug-related offences in 2002/2003.

Figure 4.6: Number of heroin and other opiate related offences reported by SAPOL in South Australia, 1999/2001 – 2002/2003



4.5.2 Health

Heroin overdose

Of the 106 IDU that reported having used heroin in their lifetime, 42 (40%) also reported experience of heroin overdose between one and 27 times. Ninety-five percent (n=40) had overdosed six times or less, and the majority (52%) had overdosed once (n=16, 38%) or twice (n=6, 14%). The number of overdoses experienced across lifetime was similar to that reported in the IDRS for the past 3 years (see Table 4.8).

| Heroin overdose variable | 2000 | 2001 | 2002 | 2003 | |
|-----------------------------|--------|--------|--------|--------|--|
| | (n=47) | (n=40) | (n=33) | (n=42) | |
| % overdosed once | 32 | 40 | 42 | 38 | |
| % overdosed twice | 26 | 20 | 21 | 14 | |
| % overdosed 3 times or more | 42 | 40 | 36 | 48 | |
| Source: IDRS IDU interviews | | | | | |

Table 4.8: Experience of heroin overdose among those IDU reporting ever usedheroin, 2000 – 2003

The long-term trend in experience of overdose across lifetime and experience of overdose in the last twelve months is depicted in Figure 4.7. As seen in the graph, prevalence of both parameters of heroin overdose have stabilised in the last year following a decrease in previous years.

The median amount of time between interview and last overdose was 48 months (range 1 to 360, n=42), which was identical to that reported in 2002.

Figure 4.7: Experience of heroin overdose ever and in the last 12 months, as a proportion of the whole IDU sample, 2000 – 2003



Twenty-seven IDU (64% of those who had experienced heroin overdose) reported having ever had the opioid antagonist naloxone (Narcan®) administered for heroin overdose. Two IDU had received Narcan® in the last twelve months. The median amount of time between interview and last Narcan administration was 36 months (range 1 to 360). This was lower than the 52% of IDU who had received Narcan® for heroin overdose a median 48 months prior to interview, in 2002.

Seventy-two participants (60% of IDU) reported having ever been present when someone else had overdosed, a median 5 times (range 1 to 100), and a median 36 months prior to interview (range 1 day to 20 years). Sixteen IDU (22%) reported witnessing someone else's overdose within 12 months of interview. In comparison, 68% of IDU
reported being present at another user's overdose a median 4 times, and a median 18 months prior to interview, in 2002.

The 2002 NSP survey revealed a similar lifetime experience of overdose (with any drug) with 42% of NSP survey participants reporting an overdose experience.

Opioid overdose

Australian Bureau of Statistics (ABS) data (Figure 4.8) show a plateau in opioid overdose deaths in both SA and Nationally from 2002 to 2003 (Degenhardt & Barker, 2003a). In SA, there were 21 deaths due to opioid overdose, a small increase from 18 in 2002. Opioid overdose deaths in SA accounted for just under 6% of the national total. SA has consistently accounted for approximately 5 to 7% of the national total except for the years 1992-1994 (inclusive).

Figure 4.8: Number of accidental opioid deaths, among those aged 15-54 years, in SA compared to national figures, 1988-2002



Source: Australian Bureau of Statistics mortality database

Only one health KIS commented on heroin overdose trends within the past six months, reporting a decrease in heroin overdoses.

Treatment

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding any opioid substances accounted for 6.3% of the total coded telephone contacts in the 2002/2003 financial year (n=13,825), the same proportion as for 2001/2002 (6.6% of a total 12,538). In 2003, the majority of opioid related contacts were regarding some form of opioid pharmacotherapy (such as methadone, naltrexone and buprenorphine) (2.7% of total, n=376). There were 336 calls regarding heroin (2.4% of total) and 132 regarding other opioids (0.95% of total). These breakdowns per category of opioid also mirror the 2001/2002 period. Figure 4.9 depicts the number of opioid related calls per quarter for the last financial year.



Figure 4.9: Number of calls to ADIS regarding opioid substances, Jul 2002 – June 2003

Presentations to treatment services of the SA Drug and Alcohol Services Council (DASC) are presented in Table 4.9 and show that the proportion of clients nominating heroin as their primary drug of concern increased in 2002/2003, compared to 2001/2002 (from10.3% to 19.9%), above the figure for 2000/2001 (16.7%). In 2002/2003 heroin became the second most commonly nominated primary drug of concern by clients of DASC, after alcohol, and overtook amphetamines, which had held this place in the previous year. There was a change in data collection procedures in July 2002 (from the Client Data System (CDS) to the Client Management Engine-DASC Information System (CME-DIS)), which may impact on the data trends. It is difficult to ascertain at his stage what impact the changes may have had, therefore readers are advised to treat any interpretation cautiously.

| Drug type | 2000/2001 | 2001/2002 | 2002/2003*# |
|-------------------|-----------|-----------|-------------|
| Alcohol | 40.2 | 41.6 | 41.2 |
| Amphetamines | 10.7 | 14.5 | 18.0 |
| Heroin | 16.7 | 10.3 | 19.9 |
| Opioid analgesics | 7.0 | 8.5 | 7.6 |
| Cannabis | 8.4 | 10.7 | 9.5 |
| Benzodiazepines | 2.0 | 1.9 | 1.9 |
| Cocaine | 0.2 | 0.3 | 0.3 |
| Tobacco | 0.1 | 0.2 | 0.3 |
| Other | 8.5 | 2.3 | 1.4 |
| Unknown | 6.2 | 9.7 | 0.0 |

Table 4.9: Primary drug of concern nominated by clients of the Drug and Alcohol Services Council, as a percentage of total number of clients, 2000/01 - 2002/03

* During this period a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS).

this data is preliminary only

Source: Drug and Alcohol Services Council

When considering presentations to DASC regarding 'any opioid' the pattern was similar. In 2002/2003 there was an increase in the proportion of clients nominating any type of opioid substance (including heroin) as their primary drug of concern, compared to 2001/2002 (from 19% to 28%), surpassing the proportion nominating opioids as their primary drug of concern in 2000/2001 (24%)(Figure 4.10). It can be seen that this increase was due primarily to the increase in heroin nominations, and not to an increase in opioid analgesics (such as morphine, codeine and pethidine).

Figure 4.10: Percentage of clients nominating opioids as the primary drug of concern, $2000/01 - 2002/03^{*\#}$



* During 2002/2003 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS). # this data is preliminary only

Source: Drug and Alcohol Services Council

Figure 4.11 presents the number of admissions to DASC inpatient treatment services for heroin or other opioids during the period July 2001 to June 2003. The number of admissions where heroin was the primary drug of concern has remained stable over the past two years. In 2002/2003 there was a total of 90 inpatient admissions to DASC for heroin, compared to 85 in the previous year. The number of admissions for other opioids was also unchanged in this time, with 67 in 2001/2002 and 66 in 2002/2003. There was half the number of inpatient admissions for heroin compared to amphetamines (182) during the 2002/2003 year. Again there may have been some impact on the trends due to the implementation of CME-DIS.

Figure 4.11: number of admissions to DASC inpatient treatment services, with heroin or other opioids as the primary drug of concern, Jul 2001 – Jun $2003^{*\#}$



* During 2002/2003 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS). # this data is preliminary only

Source: Drug and Alcohol Services Council

Methadone & Buprenorphine treatment

Data regarding number of people on a maintenance pharmacotherapy program (methadone or buprenorphine) in the year 2002/2003 were unavailable at the time of writing and will therefore not be included in this report.

4.6 Trends in heroin use

IDU comments about trends in heroin use were somewhat conflicting. A number of IDU reported a general decrease in the use of heroin primarily due to the price and availability, however an equal number reported a rise in heroin use, citing an increase in availability. Some IDU also reported an increase in frequency of use to compensate for the low purity of heroin that was available.

KIS reports tended to confirm the IDU reports of a fluctuating heroin market. A number of law enforcement KIS reported that there was still less heroin available since the drought and what was available was often of lower quality. One law enforcement KIS reported that this was due to dealers obtaining lower purity heroin than was previously available.

On balance it appears as if the heroin market is still fluctuating and recovering from the shortage.

4.7 Summary of heroin trends

Table 4.10 contains a summary of trends in the price, purity and availability and use of heroin in the previous 12 months. Overall there has been a trend toward a decrease in the price of heroin from 2002 to 2003, but prices have not yet returned to the pre-shortage levels of 2000 (e.g., \$320 per gram). Heroin was still considered easy or very easy to obtain and availability appeared to be stable in the preceding six months. A slight rise in the proportion of IDU obtaining heroin from mobile dealers was noted. According to the majority of IDU, heroin purity remained at low to medium levels in 2003. However, an increasing proportion of IDU reported that strength was increasing.

The analysis of purity of recent SAPOL seizures of heroin revealed little change over the long term making it difficult to comment with any certainty about the trends identified by IDU and KIS. However, there may have been an increase in purity during the second quarter of 2003 compared to the previous two quarters.

An increase in the proportion of IDU that had recently used heroin was noted, with a rise in the median number of days used to pre-shortage levels. This increase in median days used was primarily due to an increase in the proportion of IDU reporting daily use in 2003.

While the proportion of IDU reporting use of rock heroin remained largely unchanged there was a ten percent rise in the proportion of IDU reporting use of powder heroin availability of this form had increased according to KIS.

SAPOL data revealed little change in the number of possession or provision heroin related offences since 2002 and IDU and KIS provided little or no comment on street level offending. Similarly, there were no changes to reports of experience of recent heroin overdose among IDU and this was reflected in the ABS data on opioid overdose deaths.

With respect to information seeking, ADIS calls regarding heroin and other opiates mirror the 2001/2002 period and there was general agreement among KIS that little had changed during 2003. An analysis of the number of inpatient admissions to total DASC treatment facilities for heroin or other opiates also revealed little change since 2002. However, an increase was apparent in the proportion of clients presenting to DASC treatment services nominating any type of opioid substance (including heroin) as their primary drug of concern, representing a higher proportion than those nominating amphetamines as their primary drug of concern. Taken together this suggests that there

has been an increase in services provided (other than inpatient) for heroin and other opioid related problems.

| Price | |
|------------------|--|
| Gram Cap | \$425 (\$350-\$550); Mostly stable \$50; Stable |
| Availability | Very easy to easy; stable |
| Purity | 18.9% (SAPOL); stable Low to medium (IDU); stable to increasing |
| Use | % used recently & frequency of use has increased markedly since 2002 |
| Other indicators | No change in offences (SAPOL) No change in opioid overdose deaths (ABS) Increase in treatment seeking (DASC) |

Table 4.10: Trends in the price, availability, purity and use of heroin

5. METHAMPHETAMINE

For further information regarding the methamphetamine market in Australia, see also Topp and Churchill (2002).

In 2002, the IDRS collected data on three different forms of methamphetamine in order to collect more comprehensive data on the use, purity and availability of each of the forms. Flashcards with colour photographs were introduced to clarify more precisely the characteristics of the different forms of methamphetamines that are marketed under a variety of names, but can be categorised into three main forms: 'speed/powder', 'base/paste', and 'crystal/ice' (see Breen *et al.*, 2003). For ease of understanding (and comparability with the 2002 IDRS report), these three main forms will be referred to as powder, base and crystal, respectively, in the following sections. Also, due to this categorisation, price, purity and availability data prior to 2002 is not directly comparable to data collected in the years following the 2002 IDRS report and care should be taken when interpreting the changes in these parameters, as reported in the following sections.

5.1 Price

Overall there have been increases in the price of all three forms of methamphetamine from 2002 to 2003. A 'point' was the most frequently purchased quantity of any form of methamphetamine and there was a clear difference in price between the three different forms of methamphetamine for this quantity. The most notable rise is seen with the increase in the price of a point of crystal, which has doubled since 2002 (Table 5.1). Powder methamphetamine was consistently cheaper than base or crystal methamphetamine for most quantities purchased. No clear difference in price, except for a 'point', was seen between base and crystal methamphetamine. It is noticeable that there was some wide ranges in reported prices of the various amounts and types of methamphetamine. This could be attributable to several factors such as variability in quality and quantity for a given 'amount', or (as indicated by both IDU and KIS) the relationship between user and supplier. A more frequent user may obtain methamphetamine more cheaply when they have an established relationship with a dealer. A detailed discussion of price information for each of the three forms of methamphetamine follows.

Methamphetamine – powder form

The *current* price of powder methamphetamine was estimated to be a median 83/gram (25-450, n=36) or 30/2 point' (range 20-100, n=34) by IDU. These estimations were not substantially different to the median price *paid* by IDU for the different amounts of powder, *at last purchase*, as listed in Table 5.1. The median price paid for a gram of powder was 100, an increase from 2002 when the median last purchase price was 50.

Methamphetamine - base form

The *current* price of base methamphetamine was estimated to be a median \$200/gram (\$50-450, n=31) or \$30/'point' (\$15-75, n=44) by IDU. These estimations were the same as the median price *paid* by IDU for the different amounts of base, *at last purchase*, as listed in Table 5.1. The median price of \$200 paid for a gram of base in 2003 was the same as that reported for 2002, however, the median price of \$30 paid for a 'point' of base had increased from \$25.

Methamphetamine – crystal form

The *current* price of crystal methamphetamine was estimated to be a median \$200/gram (\$50-400, n=29) or \$50/'point' (\$20-55, n=36) by IDU. These estimations were the same as the median price *paid* by IDU for the different amounts of base, *at last purchase*, as listed in Table 5.1. The median price of \$200 paid for a gram of crystal in 2003 was the same as that reported for 2002, however, the median price of \$50 paid for a 'point' of crystal had doubled since 2002.

| Amount | Me | dian price pai (range) | d, \$ | d, \$ Number of IDU purchasers | | |
|-------------------------------------|----------------------------|---------------------------|--------------------|--------------------------------|---------|----|
| bought | bought powder base crystal | | powder | base | crystal | |
| 'noint' | 25 (20 - 100) | 30 (20 - 75) | 50 (20 - 50) | 25 | 30 | 30 |
| point | # | 25 (15 - 50) | 25 (15 - 50) | # | 33 | 23 |
| | 100 (25 - 450) | 200 (50 - 300) | 200 (50 - 400) | 19 | 16 | 21 |
| gram | 50 (45 – 100) | 200 (70 – 125) | 190 (70 – 200) | 12 | 20 | 14 |
| 'half-weight' | 100 (25 - 200) | 100 (40 - 150) | 100 (100 - 150) | 12 | 22 | 19 |
| (¹ / ₂ gram) | # | 100 (50 – 125) | 100 (50 – 100) | # | 23 | 17 |
| | 50 (50 - 250) | 87.50 (50 - 200) | 70 (50 - 120) | 5 | 8 | 9 |
| ¹∕₄ gram | - | - | # | - | - | # |
| 'eightball' | 465 (100 - 500) | 500 (500 - 550) | 540 (100 - 740) | 10 | 8 | 8 |
| (3.5grams) | # | 450 (350 – 500) | 425 (350 – 625) | # | 10 | 8 |

| Table 5.1: Price of most recent methamphetamine purchases by IDU, 2002* & |
|---|
| 2003 |

* 2002 data in italics, # n<5: not reported

Note: all purchases were within six months of interview Source: IDRS IDU interviews

Source: IDRS IDU interviews

Table 5.2 summarises the IDU report of change in the price of the three main forms of methamphetamine over the last six months, for 2002 and 2003. In both years, the price of each type of methamphetamine was reported as stable by the majority of IDU answering this section. There was no difference in the reported stability of the price of powder across the two years. For base and crystal, there was a small increase in the proportion of IDU reporting the price as stable in 2003, a decrease in the proportions reporting the price as decreasing, and an increase in the proportions that didn't know if the price had changed in that time (possibly indicating newcomers to the market for these forms).

| Reported price | Pow | vder | Base | | Crystal | |
|----------------|--------|--------|-------------|---------------|---------|--------|
| status | | | % of IDU at | ole to answer | r | |
| | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| | (n=26) | (n=50) | (n=51) | (n=58) | (n=43) | (n=50) |
| don't know | 12 | 16 | 6 | 14 | 12 | 22 |
| increasing | 4 | 8 | 14 | 9 | 7 | 4 |
| stable | 65 | 60 | 57 | 69 | 58 | 64 |
| decreasing | 15 | 12 | 14 | 3 | 19 | 6 |
| fluctuating | 4 | 4 | 10 | 5 | 5 | 4 |

Table 5.2: Change in price of methamphetamine over last 6 months, 2002 & 2003

Source: IDRS IDU interviews

Longer term changes in the 'last purchase' price of a 'point' or gram the different forms of methamphetamine are depicted graphically in Figure 5.1.

Figure 5.1: Median price of methamphetamine, last purchase, 1997 - 2003



Source: IDRS IDU interviews

Health and service provision KIS did not differentiate the forms of methamphetamine and provided only general information about price. The majority of health and service provision KIS reported an average price of \$50 per point with a low of \$15 and that in the previous six months the price was stable. Two law enforcement KIS provided information on the price of powder and base methamphetamine, both reported a range of \$35 to \$50 per point for powder and base, and \$200 per gram for base, which corresponds to IDU reports.

5.2 Availability

Tables 5.3 and 5.4 summarise the current availability of the three main forms of methamphetamine, and the changes in availability over the last six months, according to IDU report. In 2003, availability of all three types of methamphetamine was reported as

similar and as easy or very easy to obtain by the majority of IDU able to answer these sections (85% or more). The majority (65% or more) also reported that availability of all forms had been stable over the last 6 months. Compared to 2002, the reported availability was largely unchanged in 2003.

| How easy is it to get | Pow | vder | Base | | Crystal | |
|--------------------------|--------|-----------------------|-------------|-------------|---------|--------|
| [powder/base/crystal] at | | % | o of IDU at | ole to answ | er | |
| the moment? | 2002 | 2002 2003 2002 2003 2 | | | | 2003 |
| | (n=26) | (n=43) | (n=51) | (n=55) | (n=43) | (n=46) |
| very easy | 40 | 58 | 73 | 33 | 58 | 33 |
| easy | 36 | 33 | 18 | 53 | 28 | 52 |
| difficult | 16 | 7 | 10 | 9 | 14 | 11 |
| very difficult | 8 | 2 | 0 | 5 | 0 | 4 |

Table 5.3: Availability of methamphetamine currently, 2002 & 2003

Source: IDRS IDU interviews

Table 5.4: Change in availability of methamphetamine over the last 6 months,2002 & 2003

| Has [availability] changed | Pow | vder | Base | | Crystal | |
|----------------------------|--------|-------------------------|--------|--------|---------|--------|
| in the last 6 months? | | % of IDU able to answer | | | | |
| | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| | (n=26) | (n=43) | (n=51) | (n=55) | (n=43) | (n=46) |
| don't know | 0 | 2 | 4 | 4 | 2 | 4 |
| more difficult | 15 | 9 | 6 | 9 | 9 | 9 |
| stable | 81 | 74 | 65 | 71 | 54 | 65 |
| easier | 4 | 9 | 22 | 13 | 21 | 20 |
| fluctuates | 0 | 5 | 4 | 4 | 14 | 2 |

Source: IDRS IDU interviews

Figure 5.2 shows the trend in availability of methamphetamine, as reported by IDU, since 1997. As can be seen, methamphetamine has generally been considered easy or very easy to obtain across all these years. The most noticeable fluctuation has been in the reported obtainability of powder methamphetamine, which decreased in 2002 and recovered to previous levels in 2003.



Figure 5.2: Availability of methamphetamine in the last 6 months, 1997-2003

As can be seen in Table 5.5, there was very little difference in how methamphetamine users sourced the different forms of the drug in 2003. The majority stated they usually obtained each form of the drug from a friend or a mobile dealer (in roughly equal proportions), or from a dealer's home. The median time *usually* taken to score was the same for each form of methamphetamine, at 30 minutes. The range of time *usually* taken to score varied from 1 minute (for all forms) to 2 hours for powder, 1 day for base and 1 week for crystal.

| Source | % of IDU able to answer | | | | | |
|------------------|-------------------------|----------------|-------------------|--|--|--|
| Source | Powder (n=45) | Base (n=51) | Crystal (n=49) | | | |
| street dealer | 9 | 8 | 4 | | | |
| dealer's home | 16 | 16 | 22 | | | |
| friend | 29 | 33 | 27 | | | |
| mobile dealer | 29 | 31 | 22 | | | |
| home delivery | 9 | 2 | 8 | | | |
| gift from friend | 7 | 6 | 14 | | | |
| other | 2 | 4 | 2 | | | |

 Table 5.5: Usual source of methamphetamine in last 6 months, 2003

Source: IDRS IDU interviews

A number of changes were seen regarding the source of the three forms of methamphetamine in comparison with the 2002 sample. Obtaining powder and base forms from a dealers' home has decreased markedly and a rise in mobile deals is evident. In contrast, the source of crystal methamphetamine reported by IDU has not changed much since 2002 apart from a small decrease in the number of IDU reporting scoring crystal methamphetamine from friends.

Similar to IDU reports the overwhelming majority of health and law enforcement KIS reported that methamphetamine was easy or very easy to obtain. Law enforcement KIS commented on the growing number of clandestine laboratories detected and correlated the ease of obtaining methamphetamines to this increase.

5.3 Purity

As shown in Table 5.6, there were some differences reported regarding the purity of the three different forms of methamphetamine in 2003, with the trend being an increase in purity from powder to base to crystal, as would be expected. For powder, purity was reported as either medium, low or fluctuating by almost equal proportions of the sample. Base was reported as medium purity by the largest proportion, or either high or low purity by equal and sizeable proportions. Crystal was reported largely as high to medium purity.

Since 2002, there has been a decrease in the proportion of IDU reporting purity of powder as high (from 25% to 7%) and a concomitant increase in the proportion reporting the purity of powder fluctuates (from 8% to 27%). For the powder and base forms, there has also been a decrease in the proportions reporting purity as high, but with a concomitant increase in the proportions reporting purity as medium or low (see Table 5.6). Despite the overall decrease in perceived purity of all forms of methamphetamine since 2002, the purity of base and crystal forms was still reported as high or medium by the majority of those IDU able to answer (by 69% for base and by 73% for crystal).

| How pure would you say | Pow | vder | Base | | Crystal | |
|-----------------------------|--------|--------|-----------|-------------|---------|--------|
| [powder/base/crystal] is at | | % | of IDU ab | ole to answ | er | |
| the moment? | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| | (n=24) | (n=42) | (n=50) | (n=52) | (n=42) | (n=42) |
| high | 25 | 7 | 48 | 25 | 74 | 40 |
| medium | 42 | 33 | 22 | 44 | 14 | 33 |
| low | 25 | 33 | 12 | 21 | 2 | 12 |
| fluctuates | 8 | 27 | 18 | 10 | 10 | 14 |

| Table 5.6. Purity | /strength | of metham | nhetamine | currently. | 2002 & 2003 |
|-------------------|-----------|------------|------------|------------|--------------------|
| Table 5.0. Fully | sucingui | or methani | prictamine | currently, | 2002×2003 |

Source: IDRS IDU interviews

Since 2002 (when 54% of IDU reported purity of powder as stable in the last six months) the perceived purity of powder has become less stable, with equal proportions reporting purity as decreasing or fluctuating (31% and 33%, respectively). In contrast to powder, the perceived purity of base has become more stable since 2002, with a doubling of the proportion of the sample reporting purity as stable (from 26% in 2002 to 52% in 2003), and a decrease in the proportion of the sample reporting purity as fluctuating (from 30% in 2002 to 15% in 2003), over the last six months. The perceived purity of crystal has remained unchanged since 2002, with 50% or more of the IDU able to answer reporting purity as stable over the last six months.

| Has the purity of | Powder Base | | | | Cry | Crystal | |
|-----------------------|-------------|--------|-----------|-------------|--------|---------|--|
| [powder/base/crystal] | | % | of IDU ab | ole to answ | er | | |
| changed in the last 6 | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 | |
| months? | (n=24) | (n=42) | (n=50) | (n=52) | (n=42) | (n=42) | |
| don't know | 0 | 0 | 0 | 0 | 5 | 2 | |
| increasing | 21 | 10 | 20 | 8 | 19 | 14 | |
| stable | 54 | 26 | 26 | 52 | 50 | 52 | |
| decreasing | 21 | 31 | 24 | 25 | 14 | 17 | |
| fluctuating | 4 | 33 | 30 | 15 | 12 | 14 | |

Table 5.7: Change in purity/strength of methamphetamine in last 6 months, 2002& 2003

Source: IDRS IDU interviews

The majority of KIS believed that the purity of methamphetamine was high at the moment although there was no consensus concerning whether this had been the case in the previous six months. Only one KIS commented on a specific form of methamphetamine, paste, and reported that purity of paste was high at the current time.

Figure 5.3 shows the number of methamphetamine seizures analysed and the median purity of those analyses over time for both SAPOL and AFP seizures. The total number of methamphetamine seizures analysed for July02 to June03 was 921 and the median purity was 21.5%. This constitutes an increase in terms of both of these parameters compared to the previous year (551 and 15%, respectively). Although there is no SAPOL data available for the 2000/2001 period, this year's data confirms a continuing trend of increasing methamphetamine seizure numbers and purity from 1999/2000 onward. Interpretation of AFP data was not possible, as only one seizure by the AFP was analysed in 2002/2003.

Figure 5.3: Number of methamphetamine seizures analysed and median methamphetamine purity in SA 2001/2002 – 2002/2003



Source: Australian Crime Commission

5.4 Use

5.4.1 Methamphetamine use among IDU

Sixty-one percent of IDU reported amphetamine as the first drug ever injected, 33% nominated methamphetamine as their drug of choice, 43% reported methamphetamine as the drug most often injected in the last month, and 44% reported methamphetamine was the last drug they injected (see Table 3.2).

5.4.2 Current patterns of methamphetamine use

Approximately half the participating IDU had used each of the three main forms of methamphetamine in the six months prior to interview (see Table 3.3). Specifically, in the last six months, sixty-three IDU (53%) had used powder methamphetamine a median of 8 days (range 1 - 150), sixty-one IDU (51%) had used base methamphetamine a median of 24 days (range 1 - 180), and fifty-eight IDU (48%) had used crystal methamphetamine a median of 14 days (range 1 - 180). In addition, fourteen IDU (12%) had used liquid methamphetamine a median of 10 days (range 1 - 84) and thirteen (11%) had used pharmaceutical stimulants (such as dexamphetamine) a median of 3 days (range 1 - 72), in the last six months. The proportions of the IDU sample using methamphetamine base and crystal forms has decreased since last year (see Figure 5.4), from 65% to 51% and from 56% to 48%, respectively. The median number of days used for either powder, base or crystal forms of methamphetamine in 2003 is very similar to that reported in 2002 (see Figure 5.5), with the largest change being an increase in the median number of days used base (from 20 to 24 days).

Figure 5.4: Methamphetamine – % of IDU that used in the last 6 months, 2001 - 2003



Note: 2001 was the first year to collect data on % IDU to have used each of the separate powder, base, crystal and liquid forms, and pharmaceutical stimulants. **Source: IDRS IDU interviews**



Figure 5.5: Methamphetamine – median number of days used in the last 6 months*, 2002 & 2003

* used by those IDU that reported use of each form in the last 6 months Note: 2002 was the first year to collect data on number of days used for the separate powder, base, crystal and liquid forms, and 2003 was the first year to collect data on number of days used pharmaceutical stimulants. Source: IDRS IDU interviews

In the six months prior to interview, eighty-eight of the IDU sample (73%) had used some form of methamphetamine (powder, base, crystal, liquid or pharmaceutical stimulants) for a median of 48 days (range 1 - 180). The long-term trend in these parameters of use are depicted in Figure 5.6. Readers are again advised to interpret the data with caution since the introduction of the differentiation of three forms of methamphetamine.



Figure 5.6: Methamphetamine** – Recent* use & Median number of days used[#], 1997 – 2003

* in the previous 6 months; # by those reporting use in the previous six months ** from 1997 to 2001 refers to reported use of any amphetamine/methamphetamine; from 2002 refers to collapsed reported use of powder, base, crystal and liquid forms, and pharmaceutical stimulants (2003 only).

Source: IDRS IDU interviews

Of the eighty-eight IDU who had used some form of methamphetamine in the six months prior to interview, twelve (14%) reported using on a daily basis during that period. Seven methamphetamine users had used base daily and six had used crystal daily, but none had used powder, liquid or pharmaceutical stimulants on a daily basis during the last six months. The long-term trend for percent of IDU using some form of methamphetamine daily is depicted in Figure 5.7, and shows a small but steady increase in this parameter over past years.

Figure 5.7: Methamphetamine - % of IDU that used daily in the last 6 months, 1997 - 2003



Source: IDRS IDU interviews

As would be expected of a primarily injecting drug user sample, over 90% of the IDU using each form of methamphetamine did so by injecting. From 1% to 12% of methamphetamine users had used each form of the drug by swallowing in the last six months, with fewer using either by smoking or snorting (see Table 3.3). The exception to this was pharmaceutical stimulants, which were mainly used orally.

Of the 39 IDU reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last 6 months, 10 (26%) had used morphine and 7 (18%) had used heroin during that period. Sixty-six percent (n=58) of IDU reporting use of some form of methamphetamine in the last six months also reported use of opiate or opioid substances during that period.

A slightly higher proportion of methamphetamine users reported base, compared to crystal, as the form they had *used most often* in the last six months (41% v 37%). Powder methamphetamine was nominated by 17% of IDU, and pharmaceutical stimulants by 3% of IDU, as the form they had *used most* in that period. These data were similar to that reported in 2002, where 47% of IDU reported base as the form they had *used most often* in the preceding six months, 33% crystal, 16.5% powder and 3.5% liquid methamphetamine.

As shown in Table 5.8, over 40% of methamphetamine users injected either the powder, base or crystal form of methamphetamine once a day or more in the last one month. No differences were seen in the frequency of injecting for the three different forms of methamphetamine. The frequency of injecting in the last *one* month, however, was considerably higher than the data for injecting during the last *six* months (identical to the daily *use* data detailed above), suggesting either injecting of more than one substance on a single day, or escalation of use prior to interview.

| | % of methamphetamine users injecting in the last month | | | | | | |
|-----------------------------------|--|---------|--------|--|--|--|--|
| Frequency of injecting | Powder | Crystal | | | | | |
| | (n=63) | (n=61) | (n=58) | | | | |
| Weekly or less | 11 | 7 | 10 | | | | |
| More than weekly, less than daily | 41 | 51 | 43 | | | | |
| Once a day | 11 | 12 | 9 | | | | |
| 2 to 3 times a day | 25 | 18 | 24 | | | | |
| More than 3 times a day | 11 | 13 | 14 | | | | |

Table 5.8: Frequency of injecting among methamphetamine users, 2003

Source: IDRS IDU interviews

A large number of KIS reported an increase in the frequency of methamphetamine use in the previous six months. One KIS claimed there was a decrease among IDU injecting and a concomitant increase in oral use (swallowing). One health KIS reported an increase in 'doctoring' (other individuals injecting the user) among young girls and inexperienced methamphetamine users. Two KIS reported seeing more 'binge' use of methamphetamine among IDU, with a 'binge' involving a cycle of increasing use over a period of seven to ten days, followed by use of depressants (eg. alcohol and benzodiazepines) to enable sleep before the cycle is reinitiated.

5.5 Methamphetamine related harms

5.5.1 Law enforcement

Figure 5.8. presents the number of amphetamine related offences (possession and provision) for 1999 to 2003. As can be seen there has been a decrease in the total number of offences since 1999/2000. This change is primarily caused by a decrease in possession/use offences. Amphetamine possession and provision offences made up 15% of the total number of drug-related offences in 2002/2003, and this is unchanged from the 2001/2002 time period.

Figure 5.8: Number of amphetamine related offences reported by SAPOL in South Australia, 1999/2001 – 2002/2003



Source: SAPOL

5.5.2 Health

Degenhardt and Barker (2003b) recently investigated Australian Bureau of Statistics data in relation to the number of accidental drug-induced deaths in which methamphetamine and cocaine were mentioned. This includes deaths where methamphetamine was determined to be either the primary factor (underlying cause) responsible for the person's death as well as where methamphetamine was noted in "toxic quantities" but another drug was thought to be the primary factor (mentions). The methamphetamine data for the years 1997 to 2002 are presented in Figure 5.9.



Figure 5.9: Number of accidental drug-induced deaths mentioning methamphetamine among those aged 15-54 years in Australia, 1997-2002

Source: Australian Bureau of Statistics morbidity database

There was a steady increase in the number of deaths in which methamphetamine was noted from 1997 to 2000, followed by a decrease in 2001 and a slight increase in 2002. Only one death where methamphetamine was thought to be the underlying cause of death was recorded in 2002.

Across the years 1997 to 2002, SA accounted for 6.4% of the total number of deaths (n=362) where methamphetamine was mentioned.

Treatment

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding amphetamines accounted for 11.6% of the total coded telephone contacts in the 2002/2003 financial year, the same proportion as in 2001/2002 (11.7%). Similarly, amphetamine was the third most frequently enquired about drug class, after alcohol and cannabis, for both years. There was a slight decline in the number of calls per quarter, regarding amphetamines, across 2002/2003 year, from 428 in Jul-Sep 2002 to 377 in Apr-Jun 2003 (Figure 5.10).



Figure 5.10: Number of calls to ADIS regarding amphetamines, Jul 2002 – June 2003

Presentations to DASC treatment services are presented in Table 4.9 (page 23) and show that the proportion of clients nominating amphetamine as their primary drug of concern has continued to increase in 2002/2003, compared to the previous two years (from10.7% to 14.5% to 18%). In 2002/2003 amphetamines became the third most commonly nominated primary drug of concern by clients of DASC, after alcohol and heroin, which was nominated as the primary drug of concern by a similar proportion of clients (19.9%).

Figure 5.11 presents the number of admissions to DASC inpatient treatment services for amphetamines during the period July 2001 to June 2003. The number of inpatient admissions where amphetamines were the primary drug of concern has decreased from 253 in 2001/2002 to 182 in 2002/2003. However, amphetamines remained the most commonly nominated primary drug of concern among inpatient admissions: there was double the number of inpatient admissions for amphetamines compared to heroin (90) during the 2002/2003 year.





* During 2002/2003 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS). # this data is preliminary only

Source: Drug and Alcohol Services Council

5.6 Flashcard Analysis

Photographs were grouped into three categories, which were hypothesised *a priori* to correspond to the three types of methamphetamine (see Churchill and Topp, 2002). Class A types were thought to represent powder methamphetamine or speed, Class B represented base, and Class C represented crystal forms. Those participants who reported using speed, base or crystal were shown a flashcard containing multiple photos from all the three classes, and asked to identify *one* picture that *most* resembled what they had *most* used recently. This identification process was done for each form of methamphetamine the participant reported having used in the last six months. This process represents a change in the methodology employed in the 2002 survey, where participants could nominate any number of photos from any class.

Table 5.9 summarises the class of photograph identified by those IDU that reported *any* use of each form and by the sub-groups of IDU that nominated each form as the type they had used *most commonly* in the last six months. As can be seen in this table, the overwhelming majority of IDU identified the class of photo corresponding to the form they reported using, as characterised by Churchill and Topp (2002). In the sections that follow, a more detailed breakdown is provided and the most commonly identified pictures are shown for each form of methamphetamine.

| | Powder | | Base | | Crystal | |
|---------|----------------|---|----------------|--|----------------|--|
| | Any* (n=63) | Most commonly used form (n=15) | Any* (n=61) | Most commonly used form* (n=36) | Any* (n=58) | Most commonly used form* (n=32) |
| % any A | 97 | 100 | 0 | 0 | 0 | 0 |
| % any B | 0 | 0 | 90 | 86 | 5 | 6 |
| % any C | 0 | 0 | 3 | 6 | 90 | 91 |

Table 5.9: Reports from methamphetamine users regarding the forms of this drugused recently, 2003

* note the percentages do not total 100 due to missing data

Source: IDRS IDU interviews

5.6.1 Methamphetamine - Powder

Of the IDU who had used methamphetamine powder in the six months prior to interview, all that provided information nominated pictures from the A class photographs on the flashcard as the form most closely resembling what they had used most often during that period. The most commonly nominated pictures were A1 and A2 (by 48% and 27% of IDU, respectively). The remainder nominated A3 (13%) or A4 (10%).

Of those IDU that reported using the powder form of methamphetamine more than any other form of methamphetamine in the last six months, 40% nominated A1, and 27% nominated each A2 & A3, as the picture most closely resembling what they had used most often during that period.

A class photograph most identified.



5.6.2 Methamphetamine - Base

Of the IDU who had used methamphetamine base in the six months prior to interview, the majority that provided information nominated pictures from the B class photographs on the flashcard as the form most closely resembling what they had used most often during that period. The most commonly nominated pictures were B3 and B4 (by 21% of IDU each), followed by B5 (15%) & B6 (12%). The remainder nominated either B1, B2, B7, B9 or B10 (in roughly equal proportions), or a C class photograph (by 2 IDU only).

Of those IDU that reported using the base form of methamphetamine more than any other form of methamphetamine in the last six months, 28% nominated B4, and 17% nominated each B3 or B5, as the picture most closely resembling what they had used

most often during that period. Again, 2 IDU (6%) nominated a C class photograph, and the remainder (24%) nominated another of the B class photographs.

B class photographs most identified.



B3



B4

5.6.3 Methamphetamine - Crystal

Of the IDU who had used methamphetamine crystal in the six months prior to interview, the majority that provided information nominated pictures from the C class photographs on the flashcard as the form most closely resembling what they had used most often during that period. The most commonly nominated picture, by a sizeable margin, was C2 (by 53% of IDU). The remainder nominated C4 (19%), C5 (12%), C1 (5%) or a B class photograph (by 3 IDU only).

Of those IDU that reported using the crystal form of methamphetamine more than any other form of methamphetamine in the last six months, 50% nominated C2, and 22% nominated C4, as the picture most closely resembling what they had used most often during that period. The remainder nominated C1 or C5 in equal proportions (9%) or a B class photograph (2 IDU only).

C class photograph most identified.



5.6.4 Summary

Compared to 2002, there was a much clearer distinction of the powder, base and crystal forms of methamphetamine into the A, B and C class photographs of the flashcard, which more strongly supports the hypothesized categorisation of Churchill and Topp (2002). This is likely to be due in the most part by changes to the methodology in 2003 that were undertaken in an attempt to clarify more precisely the different forms of methamphetamine that are available. In particular, in 2003, if the participating IDU indicated they had used methamphetamine in the last six months the research interviewers described in words the three main forms of methamphetamine (powder, base and crystal) and IDU were then asked to provide information on their use with regard to these different forms. They were then asked to nominate *only one* picture that most resembled each form they had used, where in 2002 multiple picture nominations were allowed.

Therefore, the increased clarity seen in 2003 may in fact be somewhat misleading given some of the anecdotal evidence supplied by IDU in 2003 and in past years. In particular, many IDU mentioned that the photographs provided on the flashcard were an inadequate representation of what was available. Restricting them to nominate only one picture (though helping to identify the 'most used' form) may have eliminated the variety and crossover of the forms that exist "in the real world". As has been reported in previous IDRS reports (eg. Longo *et al.*, 2003), the generic term 'speed' may be used to describe everything from powder to the stronger forms, and in 2003 it has been apparent that IDU will often refer to both the base and crystal forms as simply "meth" or "crystal meth" interchangeably. It is proposed that in the 2004 survey a more comprehensive and up-to-date array of photographs of the different forms of methamphetamine be used on the flashcard.

5.7 Trends in methamphetamine use

IDU were less divisive with regard to their comments on methamphetamine use in South Australia. All but two IDU that commented on the use of methamphetamine believed that methamphetamine users were getting younger and were using more frequently than in the past. These reports are strengthened by comments from law enforcement KIS who correlate a large increase in the availability of methamphetamine to an increase in the number of clandestine labs detected. Additionally, one KIS reported an increase in younger 'cooks' who were also user/dealers.

A small number of IDU commented on an increased use of crystal methamphetamine but there was no general consensus about the patterns of use of the three different forms of methamphetamine. There were a number of comments regarding individuals switching from heroin to methamphetamine for reasons of price and availability. One IDU commented that the switch was occurring because the purity of methamphetamine was greater than heroin and that the drug effects were longer lasting, thus ensuring "more value for money".

5.8 Summary of methamphetamine trends

Table 5.10 contains a summary of trends in the price, purity, availability and use of methamphetamine in the previous 12 months. There has been a clear increase in the price of a point of either base or crystal, and grams of powder, methamphetamine since 2002. Both a point of crystal and a gram of powdered methamphetamine have doubled in price in this time. However, given the recent distinction between the three forms of methamphetamine, and the units of measure available, considerable caution needs to be exercised in the interpretation of reasons for the apparent increase in price. The majority of IDU able to comment on the price of methamphetamine reported that the market was stable, with neither increases nor decreases seen across the three forms. KIS largely agreed with IDU regarding price and stability although the majority of KIS did not differentiate between the three forms of methamphetamine.

Powdered methamphetamine was reported as easier to obtain than the other two forms, although all three were still reported as easy or very easy to obtain. As with heroin, the majority of IDU reported that availability was stable in the preceding 12 months. With respect to the location where IDU obtain methamphetamine there has been a decrease in reports of IDU obtaining powder and base methamphetamine from dealers homes and a concomitant rise in the use of mobile dealers.

Differences were noted in the purity of the three forms of methamphetamines by IDU. As would be expected, powder methamphetamine was reported to be the lowest in purity. Overall the purity of all three forms was reported to be stable to decreasing by IDU. In contrast, SAPOL seizure data revealed an increase in the median purity of methamphetamine since last year. KIS recorded little agreement in the trends of methamphetamine purity in the preceding six months, but did agree with IDU reports that methamphetamine was very easy to obtain.

There has been a decrease in the proportion of IDU reporting recent use of base and crystal methamphetamine in the 2003 sample. However, there was a small rise in the median number of days IDU reported using powder and base methamphetamine since 2002 and an overall rise in the proportion of IDU that had used some form of methamphetamine daily in the previous six months. The proportion of IDU reporting daily use of some form of methamphetamine has doubled since 1998. This suggests that while there are slightly fewer IDU using methamphetamines in 2003, those who are using are doing so with greater regularity. This conclusion is strengthened by the KIS reports of an increase in the frequency of methamphetamine use in the previous six months.

SAPOL data revealed a decrease in the number of methamphetamine related offences particularly in regard to possession/use offences. This corresponds to law enforcement KIS reports of an increasing focus on supply level crime and, according to at least one other law enforcement KIS, the introduction of police diversion programs.

No significant changes in the number of accidental deaths involving methamphetamine were noted between the 2002 and 2003 samples at a National level.

Calls to ADIS regarding methamphetamine remained stable. Similar to the dichotomy noted for heroin treatment, presentations to DASC treatment services with methamphetamine as the primary drug of concern continued to increase, while inpatient admissions for methamphetamine declined during the same period. These inpatient figures for methamphetamine are still twice as large as those reported for heroin across the same time frame.

| Price | |
|------------------|--|
| Powder (point) | Median price \$25 (\$20-\$100); Stable |
| Base (point) | Median price \$30 (\$20-\$75); Stable |
| Crystal (point) | Median price \$50 (\$20-\$50); Stable |
| Availability | Very easy to easy for all forms Stable for all forms Rise in proportion scoring from mobile dealers |
| Purity | 21.5% (SAPOL); increasing Medium to low for powder; decreasing or fluctuating Medium to high for base and crystal; stable to decreasing |
| Use | Decrease in % IDU reporting recent use of any methamphetamine Increase in % IDU using daily Increase in median days used any methamphetamine & in median days used powder and base |
| Other indicators | Methamphetamine possession/use offences decreased Accidental deaths involving methamphetamine stable according to National figures Increased presentations to DASC treatment services Decreased DASC inpatient admissions, but remains most common 'primary drug of concern' |

6. COCAINE

Historically, relatively small numbers of IDU IDRS participants have been able to provide information with regard to the cocaine market in Adelaide. In 2003, compared to previous years, even fewer (only 6 IDU) were able to supply information regarding the price, purity or availability of cocaine, which was reflective of the low numbers of IDU that had used cocaine in the last six months (a total of only 15). In addition, only five KIS were able to provide any information on cocaine, four of whom gave information peripheral to their main interview and one who undertook the interview with cocaine as the main drug, on request. Despite efforts, no KIS who could nominate cocaine as the main area of expertise, were identified in Adelaide. Consequently, the data for price, purity and availability of cocaine in 2003 is of limited value and the following information should be viewed with caution.

6.1 Price

The *current* price of cocaine was estimated by the IDU to be a median of \$325 per gram (range 200 - 500, n = 6). Only two IDU were able to provide information on the price of their *last cocaine purchase*. One reported the price of \$250 for a gram, the other reported \$100 for quarter of a gram. Six IDU reported that the price of cocaine had remained stable over the last six months.

These parameters of the price of cocaine are the same as those reported in the 2002 IDRS, when the sample size was also small.

6.2 Availability

Of the six IDU able to provide information, five reported cocaine was difficult or very difficult to obtain and one reported it was very easy to obtain, in the last six months. The majority (n=4) stated availability had been stable during that period, one IDU reported it had become easier to obtain, and the remaining IDU was unable to comment.

Compared to 2002, there may be a trend toward increased difficulty in obtaining cocaine. In that year, just over half of the IDU that were able to provide information reported it was easy or very easy to obtain (n=9), with the remainder stating it was difficult or very difficult (n=7). However, given the small sample sizes for this section in both years, no clear inference can be made. It may be that the small (and decreasing) number of IDU able to provide information is an indication of the decreasing availability of cocaine to the IDU population in particular, and to the Adelaide market in general, but this does not exclude the possibility that a thriving cocaine market exists beyond the scope of this survey.

Very few KIS were able to comment on cocaine use in Adelaide. Two law enforcement KIS reported higher levels of cocaine importation into Adelaide, but that this was not visible at street leve. Reasons suggested for the low profile of cocaine in South Australia include the high financial costs associated with purchasing cocaine and the exclusiveness

of the market, suggested to be white-collar users with little or no connection to other criminal activities.

6.3 Purity

Of the six IDU able to provide information on the purity of cocaine, two perceived the purity as high and four perceived it as low. Five IDU reported that the purity of cocaine had remained stable during the past six months and one reported the purity as increasing during that time.

Figure 6.1 shows the number of cocaine seizures analysed and the median purity of those analyses over time for both SAPOL and AFP seizures. There were very few seizures for South Australia and none recorded by the AFP for the time period in question. The total number of cocaine seizures analysed for July02 to June03 was 24 and the median purity was 20.6%. The small number of seizures and the lack of comparable data from previous years makes meaningful analysis impossible.

Figure 6.1: Number of cocaine seizures analysed and median cocaine purity in SA 2001/2002 – 2002/2003



Source: SAPOL

6.4 Use

6.4.1 Cocaine use among IDU

Only 3% (n=4) of the participating IDU nominated cocaine as their drug of choice and none reported cocaine as the first drug ever injected, as the drug most often injected in the last month, or as the last drug they injected. However, 66% of IDU reported they

had used cocaine in their lifetime, and 48% reported they had injected cocaine in their lifetime.

6.4.2 Current patterns of cocaine use

Only fifteen (13%) of the IDU sample reported using cocaine a median of two days (range 1 - 12) in the last six months, nine of whom had injected cocaine in that time. Compared to 2002, there was a decrease in the proportion of the IDU sample that had used cocaine in the last six months (from 26%), though the median number of days cocaine was used was stable (3 v 2) across the years. Indeed, though the proportion of the sample that had used cocaine was considerably lower than in any previous IDRS survey and continues a decreasing trend across the years, the long-term trend for median number of days used by those IDU using cocaine has been relatively stable (see Figure 6.2).



Figure 6.2: Cocaine – Recent* use & Median number of days used[#], 1997 - 2003

* in the previous 6 months; # by those reporting use in the previous six months Source: IDRS IDU interviews

Of the 15 IDU that reported use of cocaine in the last six months, all but one reported cocaine powder was the form they had used most during that time. One IDU reported primarily using crack cocaine. A small amount of detail on the cocaine market in South Australia was provided by one health KIS who noted use tended to be more situational/recreational and confined to nightclub users. Law enforcement KIS provided little detail other than to suggest that the cocaine market in South Australia was very exclusive and not wide spread, partly due to the costs involved.

6.5 Cocaine related harms

6.5.1 Law enforcement

Figure 6.3 presents the number of cocaine related offences (possession and provision) for 1999 to 2003. As can be seen there has been a decrease in the total number of offences since the spike recorded in 2000/2001. Cocaine possession and provision offences made up only 0.16% of the total number of drug-related offences in 2002/2003 compared to 0.33% in the previous year.

Figure 6.3: Number of cocaine related offences reported by SAPOL in South Australia, 1999/2001 – 2002/2003



Source: SAPOL

6.5.2 Health

Degenhardt and Barker (2003b) recently investigated Australian Bureau of Statistics data in relation to the number of accidental drug-induced deaths in which methamphetamine and cocaine were mentioned. The data for cocaine for the years 1997 to 2002 are presented in Figure 6.4.

Figure 6.4: Number of accidental drug-induced deaths mentioning cocaine among those aged 15-54 years in Australia, 1997-2002



Source: Australian Bureau of Statistics morbidity database

The data reveal a downward trend in the total number of deaths where cocaine was mentioned between 2001 and 2002. This downturn is similar to that seen before the plateau in 2000/2001. There was only one death where cocaine was reported as the underlying cause in 2002.

Treatment

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cocaine accounted for only 0.25% (n=35) of the total coded telephone contacts in the 2002/2003 financial year, approximately the same proportion as in 2001/2002 (0.4%, n=50).

6.6 Trends in cocaine use

None of the IDU participants commented on trends in cocaine use in South Australia.

6.7 Summary of cocaine trends

The small number of KIS and IDU either using cocaine or able to provide information on price, purity and availability on cocaine in itself indicates the lack of a sizeable and visible cocaine market in Adelaide, particularly amongst the IDU sampled by the IDRS. In addition to the extremely small number of IDU able to comment on cocaine, there were a number of inconsistencies within the different parameters examined. It is therefore inappropriate to attempt to draw too many conclusions or to generalise the results, either to the IDU sample for 2003 or to the general IDU community in South Australia. A summary of cocaine trends will not be presented and readers are again advised to view the results with caution.

7. CANNABIS

Readers should note that in March 2003 the law in South Australia changed introducing a prohibition on the growing (for personal use) of *any* hydroponically grown cannabis plants and restricting the number of 'outdoor' grown plants. It is unlikely to have greatly influenced the 2003 survey results but may impact in future years.

To ensure more detailed information was collected on the different forms of cannabis in 2003, the cannabis section was separated into two categories: 'hydro' (hydroponically grown) and 'bush' (grown outdoors).

The following section refers to a 'bag' as a standard measure (particular to the South Australian cannabis market). A detailed investigation of the weight/content of a bag of cannabis was undertaken in 2002 (Longo *et al.*, 2003). Briefly, in the 2002 survey 33 IDU gave a single value of the average weight of cannabis bags sold in South Australia, with a median of 2 grams and a mean of 2.5 grams. A further 19 gave both a lower and upper weight range for cannabis bags. The median lower range was 2 grams (mean 2.1) and the median upper range was 3 grams (mean 2.9). It can be understood therefore, that the amount of cannabis in a 'bag' may fluctuate, but that a 'bag' in SA generally conveys a weight of cannabis between 2 and 3 grams.

7.1 Price

| Amount bought | Median price paid, \$ (range) | | Number of IDU purchasers | | |
|-----------------------------------|----------------------------------|---------------|--------------------------|------|--|
| | hydro | bush | hydro | bush | |
| Gram | 10 | # | - | | |
| | (10 - 25) | 11 | 5 | # | |
| 2 grams | 22.5 | 20 | 10 | _ | |
| 2 grains | (20 - 25) | (20 - 25) | 12 | 7 | |
| 3 grams | 25 | 44 | | # | |
| | (25 - 30) | # | | | |
| 'bag' | 25 | 25 | | | |
| | (20 - 30) | (10 - 50) | 64 | 46 | |
| ¹ / ₄ ounce | 50 | | 10 | # | |
| | (50 - 110) | # | 18 | | |
| ¹ / ₂ ounce | 100 | 100 | 27 | 12 | |
| | (70 - 200) | (70 - 100) | 27 | | |
| 000000 | 200 | 180 | | 19 | |
| ounce | (150 - 250) | (50 - 250) | 33 | | |

| Table 7.1: Price of most recent cannable purchases by IDU |
|---|
|---|

n<5: not reported

Source: IDRS IDU interviews

The median price *most recently paid* for an ounce of hydro was \$200, and the median price *most recently paid* for an ounce of bush was \$180. As shown in Table 7.1, there was very little difference in the reported prices of hydro compared to bush. The most common amount of cannabis purchased in the last six months was a 'bag' and the median reported price *paid* was \$25, for either hydro or bush. The next most commonly reported purchase was of an ounce and there was a small difference in the median price *paid* for hydro (\$200, n=33) compared to bush (\$180, n=19). This difference in price between hydro and bush was not seen in the price *paid* for a half ounce of cannabis. Only two IDU reported buying a gram of 'hash' (cannabis resin) and three reported buying 'hash' oil, in the last six months, therefore no reliable data on the price of cannabis resin or oil is available. Compared to 2002, the prices reported for a quarter ounce, half ounce, ounce and 'bag' of cannabis are the same as reported for 2003.

The price of cannabis was reported as stable over the last six months by over 50% of IDU in 2003 (see Table 7.2). There was a small decrease in the proportion reporting that cannabis price was stable in the last six months (with a concomitant increase in the proportion stating the price was fluctuating) from 2002 to 2003.

IDU provided more information on last purchase of hydro than of bush, indicating that IDU had purchased more hydro than bush in the last six months.

| Reported price status | % of IDU at | ole to answer |
|-----------------------|----------------|----------------|
| | 2002 (n=77) | 2003 (n=93) |
| don't know | 10 | 7 |
| increasing | 9 | 14 |
| stable | 70 | 59 |
| decreasing | 5 | 5 |
| fluctuating | 5 | 15 |

Table 7.2: Change in price of cannabis over the last 6 months, 2002 & 2003

Source: **IDRS IDU** interviews

The long term trend in the price of a 'bag' or an ounce of cannabis is depicted graphically in Figure 7.1. It can be seen that the price of these amounts of cannabis has remained very stable over the years, particularly since 2000.

Figure 7.1: Median price of a 'bag' or an ounce of cannabis, 1997 - 2003



Source: IDRS IDU interviews

Similar to IDU, KIS report little change overall in the price of cannabis at street level however, a number of law enforcement KIS reported an increase in price for larger amounts.

7.2 Availability

Tables 7.3 and 7.4 summarise the current availability of cannabis and the changes in cannabis availability over the last six months, according to IDU report. In 2003 the majority of IDU (82%, n=75) reported cannabis as generally easy or very easy to obtain, with almost half of those able to answer reporting this availability as stable. Compared to 2002, however, there was a decrease in the proportion reporting availability as stable (from 80% to 49%), and an increase in the proportion reporting availability had become more difficult (from 8% to 27%), in the last six months.

| How easy is it to get | % of IDU able to answer | | |
|-------------------------|-------------------------|--------|--|
| cannabis at the moment? | 2002 | 2003 | |
| | (n=76) | (n=91) | |
| very easy | 70 | 35 | |
| easy | 18 | 47 | |
| difficult | 12 | 16 | |
| very difficult | 0 | 1 | |

Table 7.3: Availability of cannabis currently, 2002 & 2003

Source: **IDRS IDU** interviews

Table 7.4: Change in availability of cannabis over the last 6 months, 2002 & 2003

| Has [availability] changed | % of IDU able to answer | | |
|----------------------------|-------------------------|--------|--|
| in the last 6 months? | 2002 | 2003 | |
| | (n=76) | (n=91) | |
| don't know | 1 | 0 | |
| more difficult | 8 | 27 | |
| stable | 80 | 49 | |
| easier | 4 | 13 | |
| fluctuates | 7 | 10 | |

Source: IDRS IDU interviews

Figure 7.2 shows the long-term trend of a small but steady decrease in the proportion of IDU reporting availability of cannabis as easy or very easy, since 2000. Despite this, cannabis remains relatively easy to obtain in Adelaide with over 80% of IDU reporting no difficulty in obtaining the drug. KIS reports suggest that there has been no dramatic changes in availability of cannabis, one reported that there may have been a small decrease in availability due to the change in South Australian law and several others reported an initial decrease in availability in the first quarter of 2003, which had resolved.

Figure 7.2: Availability of cannabis in the last six months, 1997 - 2003





Of the ninety IDU that had used cannabis in the last six months and were able to answer this section, the largest proportions reported they *usually* obtained cannabis from a friend (49%), or at a dealer's home (21%). A further 16% reported obtaining cannabis either as a gift from a friend (8%) or from a mobile dealer (8%). Only four IDU reported their usual method of scoring was from a street dealer. These data of "from whom did you *usually* score cannabis" were the same as that for "from whom did you *usually* taken to score cannabis was 30 minutes (range: 1 minute to 1 day, n=79), and the median time taken to score the *last* time was 20 minutes (range: 1 minute to 4 days, n=77).

Perceived source of cannabis used by IDU

IDU that had used cannabis in the past six months (and were confident to answer questions on availability of cannabis) were asked if they knew the original source of the cannabis they had used the last time they had used it. Of 82 IDU, 39% didn't know the source of the cannabis they had last used, 51% reported the source as a small-time, 'backyard' user/grower, 7% reported the source as a large scale cultivator/supplier, and 2% reported having used what they had grown themselves. Of those reporting the source of the cannabis they had last used (n=50), 88% reported they were very sure of this source. Similarly, in 2002 51% of IDU reported the original source of the cannabis they had last used xas from a small-time, 'backyard' user/grower, although slightly larger proportions reported the source as either a large scale cultivator/supplier (19%) or what they had grown themselves (7%).

Law enforcement KIS described little change in the pattern of supply in the previous 12 months. The predominate supply network still consists of smaller 'backyard' growers who belong (perhaps unknowingly) to larger syndicates. This is supported by the majority of IDU reporting obtaining cannabis primarily from small-time dealers, in both 2002 and 2003.

7.3 Potency

Tables 7.5 and 7.6 summarise the current potency of cannabis and the changes in cannabis potency over the last six months, according to IDU report. In 2003, the strength of cannabis was reported as high or medium (by over 84% of IDU able to answer) and largely stable, in the last 6 months. There has been a noticeable shift in the potency reported, from high to medium, compared to 2002. KIS reports indicate that the purity of cannabis is quite high and has been stable for the previous six to 12 months.

| How strong would you say | % of IDU able to answer | | |
|----------------------------|-------------------------|--------|--|
| cannabis is at the moment? | 2002 | 2003 | |
| | (n=75) | (n=90) | |
| high | 73 | 52 | |
| medium | 17 | 32 | |
| low | 3 | 6 | |
| fluctuates | 7 | 10 | |

Table 7.5: Current potency/strength of cannabis, 2002 & 2003

Source: IDRS IDU interviews
| Has the strength of | % of IDU able to answer | | |
|------------------------------|-------------------------|--------|--|
| cannabis changed in the last | 2002 | 2003 | |
| 6 months? | (n=75) | (n=90) | |
| don't know | 4 | 2 | |
| increasing | 8 | 9 | |
| stable | 71 | 66 | |
| decreasing | 7 | 10 | |
| fluctuating | 11 | 13 | |

Table 7.6: Change in potency/strength of cannabis in last 6 months, 2002 & 2003

Source: IDRS IDU interviews

7.4 Use

7.4.1 Cannabis use among IDU

It is worth noting that because participants were recruited on the basis of their injecting drug use (rather than use of illicit drugs in general) the following data regarding patterns of cannabis use may not be typical of cannabis users in general, but specific to an IDU population. The IDRS reports on cannabis use among an IDU sample only.

7.4.2 Current patterns of cannabis use

Eighty percent of the IDU sample reported having used cannabis a median of 180 days (range 2 - 180), which possibly reflects daily use of the drug, during the last six months. Cannabis, though generally not the drug of choice among the IDU sample (see Table 3.2), was used commonly and the prevalence of use in the last six months among this group was second only to smoking. This pattern of use remains largely unchanged from that reported in 2002. Indeed, the proportions of the IDU who had recently used cannabis has remained stable across all the years the IDRS has been conducted, and the median number of days cannabis was used by the IDU in the previous six months has been stable since 2001 (see Figure 7.3).



Figure 7.3: Cannabis – Recent* use & Median number of days used[#], 1997 - 2003

* in the previous 6 months; # by those reporting use in the previous six months Source: IDRS IDU interviews

Fourty-four percent of IDU (n=53) stated they had used on a daily basis in the last six months, and 48% (n=57) reported they had used the drug on the day preceding the interview. These proportions are slightly lower than those reported in 2002, when 50% of cannabis users reported daily use and 56% reported use of cannabis on the day preceding the interview. However, the trend for these parameters of cannabis use have been generally stable over the long term (see Figure 7.4).

Figure 7.4: Cannabis - % of IDU that used daily & used yesterday, 1997 - 2003*



* data for % used yesterday' was not collected in 1997 to 1999, inclusive. Source: IDRS IDU interviews All of the 96 IDU that had used cannabis recently reported use of hydroponic cannabis, and 91% reported use of bush cannabis, within that period. In addition, 47% reported use of 'hash' (cannabis resin) and 29% reported use of 'hash' oil. An overwhelming majority of the cannabis using IDU reported hydro was the form they had *used most* in the last six months (84%). Fourteen percent reported bush was the form they had *most used* and 2 IDU reported 'hash' or 'hash' oil was the form *most used* in the last six months. The same patterns of use of all forms of cannabis were reported in the 2002.

KIS report very little change in the patterns of use over the previous six to 12 months.

7.5 Cannabis related harms

7.5.1 Law enforcement

Figure 7.5 presents the number of cannabis related offences (possession and provision, excluding expiation notices) for 1999 to 2003. As can be seen there has been a decrease in the total number of offences since 2001/2002. Possession/use offences continued to decline across the time period depicted, while the provision offences decline is a more recent phenomena. Cannabis possession and provision offences made up 81% of the total number of drug-related offences in 2002/2003, which was the same as in 2001/2002.





Source: SAPOL

7.5.2 Health

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cannabis accounted for 12% of the total coded telephone contacts in the 2002/2003 financial year, which was slightly lower than the 14% recorded in 2001/2002. Enquiries regarding cannabis were the second most common drug-related enquiry type, following

enquiries regarding alcohol (25.5% of total). There was no difference in the number of calls made per quarter across the 2002/2003 year (Figure 7.6).



Figure 7.6: Number of calls to ADIS regarding cannabis, Jul 2002 – June 2003

7.6 Trends in cannabis use

Not many IDU (n = 10) commented on the trends in cannabis use within South Australia. Those who did comment suggested that there had been a decrease in cannabis use primarily due to difficulties in sourcing. KIS reported a very stable market at the user level but were expecting some changes at the growers level due to the change in laws in South Australia recently.

7.7 Summary of cannabis trends

Table 7.7 contains a summary of trends in the price, purity, availability and use of cannabis in the previous 12 months. The median price paid for a 'bag' of cannabis (bush or hydro) was \$25 and this price has remained unchanged since 1997. The majority of IDU reported that the price of cannabis had remained stable in the past six months but compared to 2002 there was a slight rise in the proportion of participants reporting that the price was fluctuating.

Almost two-thirds (61%) of the sample were able to comment on the perceived source of their cannabis with half reporting small-time 'backyard' growers as the most typical source. Ease of availability, though still considered 'easy' or 'very easy' by over 80% of IDU, had decreased since 2002 with fewer reporting that cannabis is very easy to obtain. KIS reports suggest that there had been no dramatic changes in availability of cannabis, apart from some minor fluctuations at the beginning of the year.

The majority of IDU reported that the current strength of cannabis was high, but there has been a noticeable shift in reported purity from high to medium compared to 2002.

The majority of IDU in the 2003 sample however, reported that strength had remained stable in the past six months.

A slight decrease in the number of possession/use offences related to cannabis was noted in SAPOL indicator data but again, no dramatic changes were noted.

The number of calls to ADIS concerning cannabis remained stable.

| Price <i>Hydro</i> Ounce Bag/deal | \$200 (\$150 - 250); Stable \$25 (\$20 - \$30); Stable |
|--|--|
| <i>Bush</i> Ounce Bag/deal | \$180 (\$50 - 250); Stable \$25 (\$10 - \$50); Stable |
| Availability Potency | Very easy or easy (IDU); Stable to decreasing High (IDU): Stable to slight decrease |
| Use | Stable and widespread, hydro most used |
| Other indicators | Slight decrease in number of offences (SAPOL) Calls to ADIS stable |

| | — • • • | | | • | | a 1. |
|---------------|----------------|---------|-----------------|--------|---------|-------------|
| Table 7.7 : | I rends in th | e price | , availability, | purity | and use | of cannabis |

8. OPIOIDS

It should be noted that in the following sections, the terms *licit* and *illicit* refer to the source of supply of the drug, not the way in which it is used. That is, obtainment or use of a drug is considered *licit* when the supply is from a person's own prescription only and *illicit* if the supply is from any other source.

8.1 Overview of opioid use among IDU

Table 3.3 provides data on the history of use and route of administration of opioid substances for the 2003 IDU sample. Opioid substances include heroin, morphine, 'homebake' (a crude opioid substance derived from codeine) and other opiates, as well as methadone/physeptone and buprenorphine.

After heroin (see Section 4.4), some form of licit or illicit methadone was the opioid most used by the IDU sample, followed by morphine. Specifically, 48% of IDU (n=58) reported use of methadone or physeptone a median of 80 days (range 1 to 180) in the last six months, in 2002 the proportion of IDU reporting methadone use was 36% with a median of 105 days use in the last six months. The proportion using methadone has increased but the frequency of use has decreased.

In 2003, 43% of IDU (n=51) reported using morphine a median of 50 days (range 1 to 180) in the last six months. The proportion reporting morphine use was similar in 2002 (46%) but there has been a dramatic increase in the median number of days used since that time (from 12 in 2002). This suggests that there has been a rise in the frequency of use but no concomitant rise in the proportion of IDU using.

When all the opioid substance categories (heroin, morphine, homebake and other opiates, plus any methadone or buprenorphine) were collapsed, it was evident that 75% (n=90) of IDU had used some type of opioid substance (including licit and illicit use) in the six months prior to interview. When licit use (of methadone or buprenorphine) was excluded, only one less person had used any of these substances in that time. Excluding heroin, 68% (n=81) of IDU had used some other opioid substance.

Sixty-four percent (n=58) of opioid substance users also reported use of some form of methamphetamine in the last six months.

KIS reports of other opioid use were primarily within the context of heroin IDU and reflected a perception that an increasing number of heroin users were continuing to use other opioids due the low purity and availability of heroin. Health KIS overwhelmingly regarded heroin and other opiate users as a single group; that is, almost exclusively, heroin users would also be using other opioids to supplement their heroin use. KIS also noted a rise in the frequency of use of other opioids, particularly Kapanol® and MSContin®.

8.2 Morphine

In 2003, for the first time, IDRS survey participants were asked to provide information on the price and availability of illicit morphine.

8.2.1 Price

Of the 40 IDU able to answer about the price of morphine, the *current* price for morphine was an estimated median of \$30/100mg (range \$10-\$62.50). This was the same as the median *price of last purchase* of 100mg of either MS Contin® or Kapanol® reported by IDU, as summarised in Table 8.1. One hundred milligrams (in tablet form) was the most commonly purchased amount and Kapanol® was the most commonly purchased brand of morphine, in the six months prior to interview. The majority of those IDU able to answer also reported the price of morphine as stable to increasing during that time (see Table 8.2).

| Amount bought | Median price paid, \$ (range) | Number of IDU purchasers |
|--------------------|----------------------------------|-----------------------------|
| MS Contin® – 60mg | 15 (10-45) | 5 |
| MS Contin® – 100mg | 30 (15-58) | 14 |
| Kapanol® – 50mg | 15 (10-25) | 9 |
| Kapanol® – 100mg | 30 (10-78) | 27 |

 Table 8.1: Price of most recent morphine purchases by IDU, 2003

Source: IDRS IDU interviews

| Table 8.2: Change | in price | of morphine | over the la | ast 6 months, | 2003 |
|-------------------|----------|-------------|-------------|---------------|------|
|-------------------|----------|-------------|-------------|---------------|------|

| Reported price status | % of IDU able to answer (n=46) |
|-----------------------|-----------------------------------|
| don't know | 11 |
| increasing | 20 |
| stable | 57 |
| decreasing | 4 |
| fluctuating | 9 |

Source: **IDRS IDU** interviews

8.2.2 Availability

Tables 8.3 and 8.4 summarise the current availability of morphine and the changes in morphine availability over the last six months, according to IDU report. In 2003 the majority of IDU able to answer (74%, n=31) reported morphine as generally easy or very easy to obtain, with over half of those able to answer reporting this availability as stable (57%, n=24).

| How easy is it to get morphine at the moment? | % of IDU able to answer (n=42) |
|--|-----------------------------------|
| very easy | 24 |
| easy | 50 |
| difficult | 24 |
| very difficult | 2 |

Table 8.3: Availability of morphine currently, 2003

Source: **IDRS IDU** interviews

| Table 8.4: Change | in availability | of morphine | over the last | t 6 months, 2003 |
|-------------------|-----------------|-------------|---------------|------------------|
| a | 1 | | | , |

| Has [availability] changed in the last 6 months? | % of IDU able to answer (n=42) |
|--|-----------------------------------|
| don't know | 0 |
| more difficult | 19 |
| stable | 57 |
| easier | 21 |
| fluctuates | 2 |
| | |

Source: IDRS IDU interviews

Most of the IDU that reported use of morphine in the last 6 months and were able to answer (n=31) stated that they *usually* obtained morphine from a friend (48%), from a dealer's home (32%), or from a mobile dealer (13%). The *usual* length of time taken to score was a median 18 minutes, which was almost identical to the median of 15 minutes taken to score *last* time (range for both, 1 minute to 2 hours).

8.2.3 Morphine use among IDU

Four percent of IDU reported morphine as the first drug ever injected, 8% nominated morphine as their drug of choice, 14% reported morphine as the drug most often injected in the last month, and 14% reported heroin was the last drug they injected (see Table 3.2).

Forty-three percent of IDU (n=51) reported they had used morphine in the last six months a median 50 days (range 1 to 180). Although the proportion of the sample reporting recent use of morphine remains stable compared to 2002, there has been a dramatic increase in the median number of use days from 2002 to 2003 (12 v 50) (see Figure 8.1).

Figure 8.1: Morphine – Recent* use & Median days used[#], 2001 - 2003





All but one of the IDU that had used morphine (98%) reported having done so by injecting, a median of 22 days (range 1 to 180) during the last six months. Forty-seven percent of morphine users (n=24) also reported oral use of the drug in that time and twenty percent (n=10) reported daily use of morphine, 18% (n=9) by injecting. Data for these parameters was similar to 2002 when 96% of morphine using IDU reported use by injecting and 22% reported daily use, during the six months prior to interview.

More than half those IDU reporting morphine use in the last 6 months (27 of 51=53%) had nominated heroin as their drug of choice.

As shown in Table 8.5, 59% of recent morphine users had injected once a day or more in the last month. This is slightly higher than the 51% of heroin users injecting heroin once a day or more in the last month. Only 18% of morphine users reported injecting morphine on a daily basis in the last *six* months, so again there is evidence of either injecting of more than one drug type on a single day or an escalation of injecting/use prior to recruitment into the IDRS survey.

| Frequency of injecting | % of morphine users injecting in the last month (n=51) |
|-----------------------------------|---|
| Weekly or less | 8 |
| More than weekly, less than daily | 33 |
| Once a day | 20 |
| 2 to 3 times a day | 29 |
| More than 3 times a day | 10 |

Table 8.5: Frequency of injecting among morphine users, 2003

Source: IDRS IDU interviews

Twenty-seven percent of recent morphine users (n=14) reported use of morphine licitly and 78% (n=40) reported using illicitly. These proportions were similar to those reported by morphine using IDU in 2002 (28% and 85%, respectively). The majority (75%, n=38) also reported that the main form of use during the last six months was *illicit* and that the main brand of morphine they had used in that time was Kapanol® (by 65%, n=33), followed by MS Contin® (by 12%, n=6). Again these parameters were generally unchanged from 2002, when 78% of morphine users reported mainly using illicitly, using mainly Kapanol® (57%) or MS Contin® (22%).

Morphine overdose

Only three IDU reported having ever overdosed on morphine, one person twice and two people three times. Of these, two had overdosed within the last 12 months.

8.3 Methadone

Please note: the category of methadone includes methadone syrup and methadone in a tablet form, known as physeptone.

8.3.1 Illicit methadone price

In 2003, for the first time, IDRS survey participants were asked to provide information regarding the price and availability of illicit methadone.

The *current* price of methadone was estimated to be a median 1/ml of syrup (range 0.50-2.50, n=15) by IDU. The median prices *paid* by IDU at *last purchase* was the same, as reported by five IDU. More IDU were able to provide information on the price of physeptone tablets, reporting a median price *paid* at *last purchase* of 10/10mg tablet (range 3-10, n=15).

8.3.2 Illicit methadone availability

Tables 8.6 and 8.7 summarise the current availability of illicit methadone and the changes in methadone availability over the last six months, according to IDU report. In 2003 the majority of IDU able to answer (62%, n=13) reported methadone as generally easy or very easy to obtain, with two thirds of those able to answer reporting this availability as stable (67%, n=16). It should be noted that sample sizes per category for this section were small and therefore should be interpreted with caution.

| How easy is it to get methadone at the moment? | % of IDU able to answer (n=21) |
|--|-----------------------------------|
| very easy | 10 |
| easy | 52 |
| difficult | 33 |
| very difficult | 5 |

Table 8.6: Availability of illicit methadone currently, 2003

Source: **IDRS IDU** interviews

| (n=21) |
|--------|
| 14 |
| 10 |
| 67 |
| 5 |
| 5 |
| |

Table 8.7: Change in availability of illicit methadone over the last 6 months, 2003

Source: IDRS IDU interviews

Only 11 IDU that had used methadone illicitly in the last 6 months were able to provide information on where they obtained the drug. Nine (82%) reported they both *usually* and *last* time obtained the drug from a friend. Both the *usual* and *last* time taken to score methadone was a median 30 minutes (range 1 minute to 1 week).

8.3.3 Illicit methadone use among IDU

2003 was the first year that IDRS survey participants were asked to provide separate information on the use of licit and illicit methadone syrup and physeptone tablets as per the categories in Table 3.3.

Twenty-two (18%) of participating IDU reported having used methadone syrup illicitly a median of 5 days (range 1 - 120) in the last six months. Of those, nine (41%) reported use of methadone syrup by injecting a median of 12 days (range 1 - 120) and 16 (73%) reported use by swallowing, during that period. No IDU reported use of illicit methadone syrup on a daily basis.

Twenty-seven (23%) of the participating IDU reported having used physeptone tablets illicitly a median of 4 days (range 1 - 150) in the last six months. Of those, 19 (70%) reported use of physeptone tablets by injecting a median of 3 days (range 1- 150) and 16 (59%) reported use by swallowing, during that period. No IDU reported daily use of illicit physeptone tablets on a daily basis.

Figure 8.2 depicts graphically the recent illicit use of methadone since 2001 and shows a small increase in the proportion of IDU reporting use of syrup illicitly since 2001, and substantial increase in the proportion of IDU reporting illicit use of physeptone tablets compared to both 2001 and 2002 (from 11% and 6%, respectively, to 23% in 2003).

Figure 8.2: Illicit Methadone – Recent* use & Median number of days used[#], 2001 - 2003



Source: IDRS IDU interviews

Figure 8.3 shows that there has also been a gradual trend toward increased injecting of illicit methadone from 1997 to 2003.



Figure 8.3: Injecting of methadone by IDU in the last 6 months, 1997 - 2003

Of the 58 IDU that reported use of any methadone (syrup or tablets, licit or illicit), 48% (n=28) reported licit methadone syrup as the form they had *most used*, and 5% (n=3)

reported licit physeptone tablets as the form they had *most used*, in the six months prior to interview. A further 26% (n=15) reported illicit physeptone tablets as the form they had *used most*, and the remaining 21% (n=12) reported illicit methadone syrup as the form they had *used most*. Therefore, in 2003 roughly equal proportions of the IDU reported mainly using methadone licitly (53%) and illicitly (47%) in the last six months. The proportion of methadone users that had been using mainly illicitly was somewhat lower in 2002, at 36%.

In 2003, ten IDU stated that they were currently on a methadone maintenance treatment program and had been for the preceding six months. Of these, nine also reported use of either illicit methadone syrup (n=5) or physeptone tablets (n=4) during the six months prior to interview.

8.3 Illicit Buprenorphine

8.3.1 Illicit buprenorphine use among IDU

2003 was the first year that IDRS survey participants were asked to provide separate information on the use of licit and illicit buprenorphine as per the categories in Table 3.3.

Twelve (10%) of participating IDU reported having used buprenorphine illicitly a median of 4 days (range 1 - 72) in the last six months. Of those, eight (67%) reported use of buprenorphine by injecting a median of 3 days (range 1 - 72) and 7 (58%) reported use by swallowing, during that period. No IDU reported use of illicit buprenorphine on a daily basis.

Figure 8.4 shows that there has been an increase in the illicit use of buprenorphine among IDU since last year, both in terms of the proportion of the IDU that reported recent use (from 5% to 10%) and in the proportion reporting having injected illicit buprenorphine recently (from 3% to 9%). This increase should be interpreted with caution, however, given the small sample it is based on.

Figure 8.4: Illicit Buprenorphine – Recent* use and injecting & Median number of days used[#], 2002 & 2003



* in the previous 6 months; # by those reporting use in the previous six months Source: IDRS IDU interviews

Of the 27 IDU reporting use of any buprenorphine (licit or illicit), 18 (67%) reported mainly using licit buprenorphine, with the remainder (33%) using mostly illicitly, in the six months prior to interview. That is, the majority of those IDU reporting use of any buprenorphine did so licitly.

In 2003, of the five IDU that stated they were currently on a buprenorphine maintenance treatment program, and had been for the preceding six months, none reported concurrent use of illicit buprenorphine in that time.

8.4 Other opioids

The category 'other opioids' includes any other opiates (such as opium) or opioid analgesic substances such as codeine, pethidine and the like.

Eighteen (15%) of the participating IDU reported use of other opioids a median of 20 days (range 1 - 180), with 5 IDU reporting daily use, in the last six months. The majority of other opioid users (78%, n=14) had used these substances by swallowing, with only 6 IDU (33%) reporting use by injecting. Eleven (61%) reported licit use and 9 (50%) reported illicit use during the six months prior to interview. Furthermore, the majority of other opioid users (61%, n=11) reported mainly *licit* use in that time. The main forms used were some form of codeine, primarily Panadeine Forte®, (by 50%, n=9) or oxycodone (by 28%, n=5).

By comparison, in 2002, 28% of IDU reported use of other opioids a median of 6 days (range 1-48), with none reporting daily use. So, though a smaller proportion of IDU had used other opiates in 2003 compared to 2002, they reported more frequent use. In addition, in 2003 there was a reversal in the main type of other opioids being used, with

the majority reporting mainly *licit* use compared to 2002 when most (86%) reported mainly *illicit* use. The main forms being used was similar for both years.

8.5 Summary of opioids

A summary of trends in the use of other opioids is found in Table 8.8. The trend of increased use of morphine among IDU since 2001 continued in the 2003 sample and for the first time information on the price and availability of other opioids was collected.

| Morphine | The most commonly purchased amount was 100mg tablet |
|---------------|--|
| | Median price was \$30/100mg(\$15 - 58) |
| | Kapanol® was the most commonly used brand |
| | Easy to very easy to obtain (IDU); stable |
| | Majority used by injecting: unchanged from 2002 |
| | Increased frequency of use since 2002 |
| | |
| Methadone | The median price for methadone was \$1/ml (\$0.50 - \$2.50) or |
| | \$10/10mg tablet (\$3 - \$10) |
| | An increasing number of IDU had recently used methadone |
| | There were roughly equal proportions of IDU using licitly and |
| | illicitly in the previous 6 months |
| | |
| | |
| D 11 | |
| Buprenorphine | 10% of the sample had used buprenorphine illicitly in the last 6 |
| | months; an increase compared to 2002 |
| | Eight out of 12 had injected buprenorphine during the last 6 |
| | months, again an increase since 2002 |
| | The majority of had used licitly |
| | |
| Other opioids | |
| Other opioids | 15% of IDU reported use of other opioids in the previous 6 |
| | months including opium, codeine and pethidine |
| | A smaller proportion of IDU reported using other opioids |
| | compared to the 2002 sample but reported more frequent use |
| | |

Table 8.8: Summary of trends in the use of other opiods

9. OTHER DRUGS

9.1 Ecstasy and hallucinogens

Use of ecstasy (MDMA) and hallucinogens (including LSD or 'trips', and naturally occurring compounds such as 'magic mushrooms') among the IDU sample in the last six months is summarised in Table 3.3.

Although sizeable proportions of the IDU had used both ecstasy (24%) and some type of hallucinogen (18%) in the last six months, neither had been consumed frequently in that time with the median days of use being two (range 1 to 20) and one (range 1 to 10), respectively. Both ecstasy and hallucinogens had been used mainly orally, although 12% of IDU (n=14) also reported having used ecstasy by injecting during the last six months. The parameters of use for these two drug classes were very similar to those reported in 2002.

On analysis, users of *any* methamphetamine in the IDU sample were found to be more likely to also report consumption of ecstasy (32% v 20%) and hallucinogens (24% v 9%) than heroin users. This finding was also supported by KIS information suggesting that ecstasy or 'pill' use among methamphetamine users was generally more likely than among heroin or opiate users and tended to be opportunistic.

Ecstasy and other 'party drug' use has been examined among a separate sample of primarily non-injecting drug users in past years as the 'Party Drugs' module of the IDRS (e.g, Longo *et al.*, 2001).

9.2 Benzodiazepines

Sixty-four (53%) IDU reported use of benzodiazepines a median of 30 days (range 1-180) in the last six months, 34% (n=22) of whom reported using benzodiazepines on a daily basis. All reported use by swallowing, and 8% (n=10) reported use by injecting a median of 4.5 days (range 1-90), in that time.

As shown in Figure 9.1, there has been an increase in the median number of days benzodiazepines have been used (from 20 to 30 days), by those reporting recent use, compared to 2002. An increase was also seen in the proportion reporting daily use, from 19% in 2002 to 34% in 2003. However, long term trends indicate that both the 'median days used' parameter and prevalence of injecting among the sample seem to be stabilising, following a small change in 2002.



Figure 9.1: Benzodiazepines - Recent* use and injection, & Median number of days used[#], 1997 - 2003

* in the previous 6 months; # by those reporting use in the previous six months Source: IDRS IDU interviews

Of the 64 IDU that reported use of benzodiazepines, 66% (n=42%) reported use of licit benzodiazepines and 55% (n=35) reported use of illicit benzodiazepines, in the six months prior to interview. The majority of benzodiazepine users (61%, n=39) also reported that they had *mostly* used licitly in that time. It should be remembered however, that a so called *licit* supply may be achieved by the practice of "doctor shopping".

As was the case in 2002, the main type of benzodiazepines used by the sample in 2003 was diazepam (by 70%, n=45).

KIS report that benzodiazepines are used in two different ways primarily by heroin IDU, first in conjunction with heroin as a means to prolong the effects and second as a form of self-medication during heroin withdrawal.

9.3 Anti-depressants

Twenty-six (22%) IDU reported use of anti-depressants a median of 180 days (range 3-180), 62% (n=16) of those on a daily basis, in the last six months. These parameters of use were unchanged from 2002.

Anti-depressant use among the IDU sample was primarily licit, with 85% (n=22) of recent users reporting mostly licit use and only four IDU reporting any illicit use of anti-depressants, within the past six months. The main type of antidepressant used (by 12 IDU) was a selective serotonin re-uptake inhibitor (SSRI's). Other types used included selective noradrenaline re-uptake inhibitors (SNRI's) (n=3), tricyclics (n=3) and monoamine oxidase inhibitors (n=2). Again, these statistics show no change from those reported in 2002 with regard to type of anti-depressant used. KIS reports indicate that use of licit antidepressants is common among IDU in Adelaide.

9.4 Summary of other drugs

A summary of trends in the use of other drugs is found in Table 14. Very few comments from KIS were made and there have been very few changes in the patterns of use of these drugs since 2002.

| Ecstasy and | 24% recently used ecstasy, 18% hallucinogens |
|------------------|---|
| hallucinogens | No change in patterns of use since 2002 |
| | Methamphetamine users more likely to also report |
| | consumption of ecstasy and hallucinogens compared to heroin |
| | users |
| Benzodiazepines | 53% recently used |
| - | Main type of benzodiazepine use was licit diazepam |
| | Increase in median number of days used to 2001 levels |
| | Increase in proportion reporting daily use to 2001 levels |
| Anti-depressants | 22% recently used |
| * | Main type of anti-depressant use was licit SSRIs |
| | No change in pattern of use since 2002 |
| | |
| | |

Table 9.1: Summary of trends in the use of other drugs

10 ASSOCIATED HARMS

10.1 Blood borne viruses

The risks of acquiring hepatitis B and C are greatly increased in IDU populations. Blood borne viruses can be transmitted by the sharing of needles, syringes and other equipment. State and Territory health departments report viral hepatitis notifications to the National Notifiable Diseases Surveillance System (NNDSS). NNDSS differentiate between incident infections (i.e., newly acquired) and unspecified infections (i.e., those where the timing of disease acquisition is unknown. Readers should note that the data reported cannot be directly attributed to IDU specific cases.

In 2003, the number of unspecified hepatitis B notifications in South Australia reported to NNDSS was 212 compared to 267 in 2002 and 310 in 2001, a continuation of the gradual decrease in unspecified notifications. The pattern is similar to the National unspecified notification data where an decrease has occurred over the previous three years. A similar pattern was observed for unspecified hepatitis C notifications locally and Nationally. The number of unspecified hepatitis C notifications in South Australia in 2003 was 560 (2002 = 641, 2001 = 884).

An analysis of the number of incidents of hepatitis B in South Australia revealed a decline with 9 incidents recorded in 2003, a gradual decrease from 30 in 2000. The National number of incidents of hepatitis B shows a decrease from 2001. The indicator data for incidents of hepatitis C shows greater fluctuation over the past 4 years. In 2003, the number of South Australian incidents was 66 an increase from 44 in 2002, which was in turn a decrease from the previous two years. The National data shows a decrease in incidents of hepatitis C in the last three years from 672 in 2001 to 428 in 2003.

The Annual Needle and Syringe Program (NSP) survey conducted in South Australia in 2002 results revealed a prevalence rate for HCV of 43% among injecting drug users participating in the survey. Previous years HCV prevalence rates were similar with 52% in 2001 and 47% in 2000 (NCHECR, 2003). Some differences were noted between males and females in the 2002 sample where the HCV prevalence rate was higher for males (47%) than females (37%).

10.2 Sharing of injecting equipment among IDU

The majority of IDU reported that they had not used a needle after someone else (92%, n=111) or before someone else (86%, n=103) in the month prior to interview. These parameters of injecting related risk have remained stable for the past three years and indicate a small but persistent proportion of IDU that are at high risk of blood borne virus (BBV) infection and re-infection through needle sharing.

Of those that had used a needle *after* someone else, all had done so after one other person only, the majority after their regular sex partner (n=7) and two after a close friend. Of those that had used a needle *before* someone else, 11 had done so once or

twice, 5 had done so three to six times and one reported having done so more than ten times, in the past month.

Sharing of other injecting equipment was reported by a higher percentage of IDU with 28% of users stating they had shared one or more pieces of injecting equipment, other than needles, in the past six months. As listed in Table 10.1, the proportions reporting sharing of the different categories of injecting equipment remained relatively stable from 2002 to 2003. The highest proportions (21% v 18%) reported sharing of spoons or containers used to mix drugs prior to injecting.

| Table 10.1: Sharing of injecting equipment (other than needles) among I | DU in |
|---|-------|
| the month preceding interview, 2002 & 2003 | |

| Injecting equipment | 2002 | 2003 |
|-------------------------|----------|----------|
| | (n=100) | (n=120) |
| | % of IDU | % of IDU |
| Spoons/mixing container | 21 | 18 |
| Filters | 13 | 7 |
| Tourniquet | 12 | 11 |
| Water | 11 | 14 |

Source: IDRS IDU interviews

Figure 10.1 shows that despite a significant decrease in the proportion reporting sharing of other injecting equipment from 2001 to 2002, the proportion stabilised in 2003 and remains over a quarter of IDU, again posing a high risk of BBV transmission among this group of IDU.

Figure 10.1: Sharing of needles and injecting equipment by IDU in the month preceding interview, 1997 – 2003.



Source: IDRS IDU interviews

* borrowed means to have used a needle *after* someone else had already used it ** lent means to have used a needle *before* someone else used it Of the KIS confident to comment on injecting practices among IDU, two out of three reported that there had been a decrease in sharing of needles in the past six months.

10.3 Location of injecting

In 2003, the majority of IDU reported their *usual* location when injecting drugs in the last month was a private home (85% of IDU, n=102). The *usual* location of injecting was unchanged compared to 2002 (see Table 10.2) and the same proportions per location were reported for location when *last* injected.

Table 10.2: Usual location when injecting in the month preceding interview, 2002& 2003

| Location when injecting | 2002 (n=100) % of IDU | 2003 (n=120) % of IDU |
|----------------------------|-----------------------------|-----------------------------|
| Private home | 87 | 85 |
| Street/car park/beach | 1 | 2 |
| Car | 8 | 10 |
| Public toilet | 3 | 1 |
| Not injected in last month | 1 | 1 |
| Missing data | - | 2 |
| | | |

Source: IDRS IDU interviews

One health KIS reported that police had been confiscating needles and using needles as justification for searching IDU homes. The same KIS reported a decrease in returns of used needles to the CNP and that some clients were picking up fewer needles to reduce the risk of detection and confiscation.

10.4 Injecting related health problems

In 2003, 68% of the IDU sample reported experiencing at least one type of injecting related health problem in the month prior to interview. By far the most commonly experienced problems were prominent scarring or bruising around the injection site (51%, n=61), followed by difficulty injecting (44%, n=53). Compared to 2002, there were decreases in the proportion reporting difficulty injecting (from 73% to 44%) and in the proportion reporting experience of thrombosis (from 22% to 3%). Experience of other injecting related health problems remained stable across this time period (see Table 10.3).

| | 2002 (n=100) % of IDU | 2003 (n=120) % of IDU |
|-----------------------------|-----------------------------|-----------------------------|
| Overdose | 1 | 3 |
| Dirty hit | 9 | 14 |
| Abscesses/infections | 4 | 4 |
| Prominent scarring/bruising | 58 | 51 |
| Difficulty injecting | 73 | 44 |
| Thrombosis | 22 | 3 |

Table 10.3: Injecting related health problems experienced in the month precedinginterview, 2002 & 2003

Source: IDRS IDU interviews

Figure 10.2 depicts the long-term trends for experience of difficulty injecting and thrombosis since 1997. Experience of thrombosis has declined from a peak in 2001, which may be attributable to an increased use of non-injectable substances such as morphine, methadone and benzodiazepines during the heroin shortage. Experience of difficulty injecting has returned to previous levels following a spike in 2002.

Figure 10.2: Experience of difficulty injecting and thrombosis among IDU in the month preceding interview, 1997 – 2003



Source: IDRS IDU interviews

There was no significant difference in the experience of problems between methamphetamine versus non-methamphetamine injectors or injectors of benzodiazepine versus non-benzodiazepine injectors.

An analysis of the number of IDU experiencing problems due to injecting *in the last one month* revealed the following;

Benzodiazepine injectors: 2 of 5 experienced problems Methadone injectors: 12 of 19 experienced problems Buprenorphine injectors: 4 of 7 experienced problems Morphine injectors: 28 of 40 experienced problems The most commonly reported problems experienced by methadone injectors in the last month were difficulty finding veins (53%, n=10), scarring/bruising (37%, n=7), thrombosis/blood clot (11%, n=2) or swelling of arm (11%, n=2). The most commonly reported problems experienced by morphine injectors in the last month were scarring/bruising (53%, n=21), difficulty finding veins (43%, n=17), swelling of arm (23%, n=9) or dirty hit (23%, n=9).

The numbers of IDU experiencing problems related to injecting of benzodiazepines or buprenorphine in the last month was small.

The majority of KIS commenting on injecting related health problems referred to continuing issues with vein care. No significant increases or decreases were noted however one KIS reported that clients were still reluctant to seek medical treatment for injecting related health problems.

10.5 Expenditure on illicit drugs

Overall, the median amount spent on drugs yesterday reported by the IDU sample was \$25 (range \$0 - \$650; n=118). On analysis, it was found that on average, heroin users in the sample had spent \$25 more than methamphetamine users on the day prior to interview.

Those who had used heroin in the last 6 months spent a median of 50 (range 0 - 400; n=66) on drugs yesterday. For those who had injected heroin most often in the last month, the median amount spent on drugs yesterday was 50 (range 0 - 400, n=40).

Those who had used any methamphetamine in the last 6 months spent a median of \$25 (range \$0 - \$650; n=84) on drugs yesterday. For those who had injected methamphetamine most often in the last month, the median amount spent on drugs yesterday was even less, at \$20 (range \$0 - \$650, n=51). This supports information from both IDU and KIS that users get a better deal with an increased number of purchases of methamphetamine.

10.6 Mental health problems

In 2003, 38 IDU (32%) reported having attended a health professional for a mental health problem (other than drug dependence) in the six months preceding interview. Table 10.4 shows that the proportions of the sample that had attended the different professionals in both 2002 and 2003 were very similar. The most noticeable changes were an increase in the percentage that had attended a social worker (0 to 6%), a hospital emergency department (2% to 6%), and a psychiatric ward (0 to 2%). However, the sample sizes for each category are too small to provide any conclusive evidence of change.

| Type of health professional | 2002 (n=100) % of IDU | 2003 (n=120) % of IDU |
|-------------------------------|-----------------------------|-----------------------------|
| General Practitioner | 14 | 17 |
| Psychiatrist | 14 | 13 |
| Psychologist | 8 | 8 |
| Counsellor | 9 | 10 |
| Social worker | 0 | 6 |
| Mental health nurse | 4 | 4 |
| Community health nurse | 2 | 2 |
| Hospital emergency department | 2 | 6 |
| Psychiatric ward | 0 | 2 |
| Anv | 30 | 32 |

Table 10.4: IDU attendance of a health professional, for a mental health problem,in the last 6 months, 2002 & 2003

Note: percentages in each column do not total 100% as IDU could report attendance of more than one mental health professional

Source: IDRS IDU interviews

The most notable changes in mental health problems for which IDU sought help when attending a health professional in the last six months were an increase in depression, anxiety and panic (see Table 10.5).

| Table 10.5: Mental health problem for which IDU sought help when attending a |
|--|
| health professional in the last 6 months, 2002 & 2003 |

| Mental health problem | 2002 (n=100) % of IDU | 2003 (n=120) % of IDU |
|------------------------|-----------------------------|-----------------------------|
| Depression | 17 | 21 |
| Mania | 0 | 2 |
| Manic depression | 0 | 3 |
| Anxiety | 8 | 15 |
| Phobias | 2 | 4 |
| Panic | 1 | 8 |
| Paranoia | 5 | 4 |
| Drug-induced psychosis | 3 | 1 |

Note: percentages in each column do not total 100% as IDU could report more than one mental health problem

Source: IDRS IDU interviews

KIS provided a number of comments on mental health problems associated with both methamphetamine and heroin use. Of the 13 KIS from health or service provision areas who commented on the mental health of methamphetamine IDU, seven reported that mental health problems were on the rise, four reported stabilising of problems while two were unsure. Depression, both bi-polar and uni-polar, was one of the most frequently mentioned mental health problems reported by health KIS, this was closely followed by anxiety related problems and psychosis. KIS continued to report large numbers of methamphetamine IDU experiencing mental health problems and a small increase in methamphetamine-induced psychosis. One KIS reported that up to 30% of methamphetamine IDU were experiencing visual hallucinations at interview.

A slightly different profile was noted among heroin IDU. As with methamphetamine users, the predominant mental health problem was depression. However, KIS noted less anxiety and psychosis problems. While there was a perception among KIS that there was a small rise in the incidence of mental health problems associated with methamphetamine use the same was not true of heroin users where KIS report no real change in the preceding six to 12 months.

Law enforcement KIS commented less often than has been the case in previous IDRS surveys on mental health issues among IDU. There were fewer overall comments on aggression and violent behaviour associated with methamphetamine users but those who did comment believed the problems were continuing to increase.

10.7 Criminal and police activity

In 2003, a smaller proportion of the IDU reported involvement in any type of crime during the last month and fewer had been arrested in the twelve months prior to interview, compared to 2002 (see Table 10.6). The most commonly reported types of crime were the same as for 2002 however, with IDU primarily reporting involvement in drug dealing (28%) followed by property crime (11%). There was no substantial difference in the proportion of males and females reporting involvement in criminal activity in the last month (33% v 45%), or in the proportion of males and females that had been arrested in the last 12 months (22% v 20%).

| | 2002 | 2003 |
|--|----------|----------|
| | (n=100) | (n=120) |
| | % of IDU | % of IDU |
| Criminal activity in last month | | |
| Property crime | 18 | 11 |
| Drug dealing | 36 | 28 |
| Fraud | 8 | 7 |
| Violent crime | 9 | 3 |
| Any crime | 44 | 38 |
| Arrested in last 12 months | 39 | 21 |
| Perception of police activity in last 6 months | | |
| More activity | 51 | 32 |
| Stable | 36 | 38 |
| Less activity | 2 | 4 |
| Don't know | 11 | 27 |
| More difficult to obtain drugs recently | | |
| Yes | 17 | 21 |
| No | 83 | 78 |

Source: IDRS IDU interviews

Of the 21% of IDU (n=25) that had been arrested in the preceding twelve months, the most common grounds for arrest were property crime (44%, n=11), a driving offence (16%, n=4) or a violent crime (12%, n=3). There were also four arrests involving a weapons offence. Only two IDU (8%) were arrested for use/possession of a prohibited substance and none were arrested for drug dealing.

For those able to comment, IDU perceptions of changes in police activity in the last six months were roughly equally divided between stable and increasing activity. In comparison to 2002 there was a decrease in perceptions of increasing activity. As in 2002, the majority of IDU in 2003 (78%) believed that police activity had not made it more difficult to obtain drugs recently.

Figure 10.3 shows the long terms trends regarding involvement in any criminal activity, and per each type of criminal activity measured, among IDRS IDU samples since 1997. It can be seen that there was a steady decline in *any* criminal activity from 1998 to 2001, from which time the prevalence of criminal involvement has been fairly stable. The two most prominent types of criminal activity, across all years, were drug dealing followed by property crime and both have followed the same pattern of decline and stabilisation of prevalence, during this time. Prevalence of all types of criminal activity among the IDRS IDU samples has been generally stable over the past three years of reporting.

Figure 10.3: IDU reported involvement in crime, by offence type, in the month prior to interview, 1997 - 2003



KIS were asked to comment on the criminal activity of users as well as their perceptions of changes in police activity in the previous six to 12 months. Very few changes were reported in the pattern of criminal activity associated with heroin users with the typical crime still larceny/break & enter. A different picture emerged with respect to methamphetamine users, with the majority of KIS reporting increases in violent crimes. Several health KIS reported increases in domestic violence and assaults against women while others spoke of an increase in opportunistic larceny. An increase in prostitution was also noted by two health KIS.

Two different opinions emerged regarding the drug diversion programs operating in South Australia. One health KIS reported an increase in IDU referred via police diversion however another KIS claimed that very few diversions were occurring and to their knowledge there had been no police diversions in the past 12 months to the agency concerned. A similar divergent view of the use of police diversion programs were seen in the law enforcement KIS reports. One KIS reported that more IDU were being diverted away from the criminal justice system whereas another reported that the police diversion program had made little impact.

10.8 Summary of associated harms

A summary of trends in associated harms is found in Table 10.7. There appeared to be a decrease in the number of unspecified Hep B and C cases Nationally and locally since 2001. The NSP data also revealed a decline in the proportion of HCV positive cases, however this has not been part of a consistent downward trend as the proportion of cases in 2001 was higher.

An analysis of injecting related issues revealed that sharing of needles and equipment has remained at similar levels compared to 2002. Over a quarter of all IDU still report unsafe practices through the sharing of injecting equipment. Injecting related health issues were still present with sizable proportions experiencing scarring, bruising and difficulty with injecting. Large proportions of methadone and morphine injectors reported injecting problems. The location of injecting has not changed since 2002, with the majority reporting injecting at private homes.

An analysis of expenditure on drugs demonstrated that heroin users had spent twice as much on drugs in the day prior to interview than methamphetamine users. There were no other trends to report on.

Mental health issues were discussed by IDU and KIS. There were no substantial changes from previous years other than an increase in attendance of a health professional for anxiety and panic and a concomitant increase in comments from health related KIS on the increase in anxiety and panic problems among IDU.

The most commonly reported crimes committed by IDU were similar to those reported in the 2002 survey with IDU primarily reporting involvement in drug dealing and property crime. Perceptions of police activity reported by IDU revealed some changes since 2002 with fewer IDU reporting more police activity in the six months leading up to the survey. However the majority of IDU believed that police activity had not made it more difficult to obtain drugs. KIS reports continued to highlight the increase in violent crimes associated with methamphetamine use.

| Blood borne viruses | Hep C decreasing (NNDSS), decreasing prevalence among IDU (NSP) |
|-----------------------------|--|
| | Hep B decreasing (NNDSS) |
| Injecting related issues | Similar levels of injecting related harm to 2002 More problems associated with morphine and methadone |
| Expenditure | Heroin users expenditure greater than methamphetamine users |
| Mental health issues | Increase in reported anxiety and panic (methamphetamine users) Stable reports of depression among heroin users |
| Criminal & police issues | Drug dealing and property crime still commonly reported Decrease in perceptions of police activity among IDU No change in perception of impact of policing on obtaining drugs |

Table 10.7: Summary of trends in associated harms

11 DISCUSSION

The 2003 survey captured a greater amount of detail about the use of a number of substances which had previously been flagged as potential areas of concern. The results provided more information about methadone, morphine and buprenorphine and presented a picture of use which will assist policy makers and health professionals to better service clients using these substances.

The overall results of the 2003 survey revealed some similarities and differences from previous years, the most notable change was the trend towards pre-shortage levels of heroin use. Methamphetamine use was again highlighted as an increasing area of concern. In contrast, issues such as patterns of harm and criminal activity associated with injecting drug use remained stable.

11.1 Heroin

Since the heroin shortage policy makers, health professionals and others have been keen to examine trends and issues among heroin users in order to see whether the initial impact of the shortage is still being felt within the IDU population. The 2001 and 2002 surveys revealed a number of changes, and the 2003 survey presented an opportunity to see whether these changes in the heroin market had become entrenched.

In 2003, an apparent return to pre-shortage patterns of use, price and availability was observed. According to IDU reports, the price of heroin had decreased for the first time from \$450 per gram (in 2002) to \$425 per gram (in 2003), towards the pre-shortage price of \$320 per gram (in 2000). The majority of IDU in 2003 reported that availability had remained *easy to very easy* in the past six months and was stable. Despite the drop in price and easy of availability, purity still remains low to medium. A result that concords with purity analyses of SAPOL seizures.

Frequency of recent use has increased dramatically since 2002 with a median number of use days of 72, which represents a return to pre-shortage levels. This increase was primarily due to a concomitant increase in the proportion of IDU reporting daily use of heroin. An increase was seen in the proportion of clients presenting to DASC treatment services with heroin as the primary drug of concern however, actual admissions to inpatients services remained stable.

There were no changes to the number of heroin and other opiate related offences by SAPOL in 2003 and no changes in experience of recent heroin overdose either reported by IDU or reflected on the National level.

It is still too early to say whether there will be a complete return to the patterns of heroin use prior to the heroin shortage but the key indicators suggest that this may occur in the next few years.

11.2 Methamphetamine

The greatest impact of the heroin shortage was the concomitant rise in methamphetamine use and the growth in availability of different, more potent forms of the drug. The patterns observed in the 2003 survey again reflected the effects of methamphetamine use on the IDU population particularly in terms of health related harms.

There was a rise in the price of a point all three forms (powder, base, crystal) of methamphetamine in the 2003 survey. The most dramatic finding was a doubling of the price of a point of crystal methamphetamine from \$25 to \$50. The market was reported to be stable across all three forms and ease of availability remained at *easy or very easy* levels. Law enforcement KIS reports of the increase of detection of clandestine labs supports the conclusion that methamphetamine is readily available in South Australia.

The purity of all three forms of methamphetamine was reported to be stable to decreasing by IDU with the purist form reported to be crystal methamphetamine. In contrast, SAPOL seizure data revealed an increase in total methamphetamine purity since 2002.

The proportion of IDU reporting use of any methamphetamine had decreased since 2002 however, the median number of days used had increased. The increase in the median number of days used was possibly due to an increase in the proportion of IDU reporting daily methamphetamine use.

Despite a decrease in the proportion of primarily methamphetamine related admissions to DASC inpatient services, they still outnumbered heroin users by two to one in 2003. KIS continued to report on the aggressive and often violent behaviour of methamphetamine users and an increasing decline in the mental health of individuals presenting for treatment. While law enforcement KIS commented less on the aggressive behaviour of methamphetamine users a few did report that this was still an issue of concern for operational level police.

11.3 Cocaine

As in previous years, the number of IDU reporting cocaine use was extremely low (15) and decreasing and only six were able to comment on price, purity and availability. Additionally, very few KIS commented on the cocaine market in Adelaide. Very few seizures of cocaine have occurred in Adelaide and lack of comparison data make interpretation of trends in seized purity difficult. Law enforcement KIS suggested that the cocaine market in South Australia was very exclusive and not wide spread, a conclusion supported by the IDU reports and the available indicator data.

11.4 Cannabis

A greater level of detail was collected regarding cannabis use in the 2003 survey with the differentiation between two different forms of cannabis (bush, hydro). Overall, there was very little change in the cannabis market according to IDU with the price of cannabis at 2002 levels and stable.

Although the majority of IDU reported cannabis as easy or very easy to obtain there were some differences in the overall pattern of results. A greater proportion reported that it had become more difficult and fewer reported that availability was stable compared to 2002. A gentle decline in the availability of cannabis has been evident since 1997 and it appears as if this trend is gathering momentum in 2003.

A change was also evident in the purity of cannabis with a definite shift in potency from high to medium in comparison with 2002.

There were no substantial changes in IDU reports of cannabis use. The proportion of IDU reporting use and the median number of days used use had continued to remain at peak levels since 2001.

On the surface it appears as if the cannabis market in South Australia is largely unchanged. However the subtle change in perception of ease of availability is supported by the recent change to South Australian legislation which has, in effect, reversed the decriminalisation associated with growing cannabis and could impact on cannabis availability more profoundly in the future. In addition, law enforcement KIS have predicted shifts in the pattern of supply which may occur as a result of the change in laws.

11.5 Other opioids

The 2002 survey identified a shift in the patterns of use of heroin users with respect to other opioids which has been continued in 2003. For example, a small increase in the frequency of use of morphine by heroin users identified in 2002 had grown substantially. In 2003 the median number of days IDU reported using morphine had quadrupled from 12 to 50 days.

For the first time in 2003 IDU were asked detailed questions about the price and availability of morphine and methadone. IDU report the median price of morphine as \$30 per 100mg tablet, which is often seen as better value for money by users than a cap of heroin, as well as easier to obtain. Kapanol® was consistently reported as the brand most commonly used by participants.

The use of illicit methadone had increased in 2003, in particular the proportion of IDU reporting use of physeptone (tablets) rising from 6% to 23% between 2002 and 2003. The upward trend of injecting of methadone continued in 2003 and roughly equal proportions of IDU were reporting primarily licit and illicit use. Similarly, there was a increase in the proportions of IDU reporting recent use and injecting of buprenorphine from 2002 to 2003.

The shift in the pattern of other opioid use by heroin users was also noted by health KIS who reported that heroin users would regularly use other opioids to supplement their heroin use. This now appears to be a well established pattern and perhaps represents one of the lasting outcomes of the heroin shortage.

11.6 Other drugs

There were no reported changes in the patterns of use of ecstasy and hallucinogens among the IDU, though methamphetamine users were more likely to also report use of these drugs compared to heroin users.

Parameters of benzodiazepine use in the 2003 sample also remained largely unchanged with over 50% of IDU reporting recent use. A small increase in the median number of days used and the proportion reporting daily use was reported compared to 2002. Anti-depressant use was also stable.

11.7 Associated harms

The 2003 survey demonstrated an increase in the frequency of IDU reporting injecting drugs compared to previous years. When coupled with the high rate of sharing of injecting equipment, among one quarter of the sample, the implications for blood borne virus transmission are significant. The increase in injecting frequency and the high rate of sharing among IDU may impact on what has been a positive downward trend in HCV and HBV prevalence over recent years.

In 2003 a number of additional questions were added in order to obtain more detail on the harms associated with injecting non-injectable substances. A higher proportion of IDU reported injecting non-injectable substances after the heroin shortage (Longo *et al.*, 2001) and this trend appears to be continuing. The results of the 2003 survey identified large proportions of methadone and morphine users reporting injecting related health problems.

Mental health issues have again been highlighted as an area of concern in the 2003 survey. As in previous years, both IDU and KIS reported on mental health issues; IDU reported an increase in attending health professionals for anxiety and panic and KIS reported a concomitant rise in anxiety, panic and aggression particularly amongst clients to treatment services. Law enforcement KIS also reported continuing high levels of aggression and violence associated with methamphetamine users.

12 IMPLICATIONS

The results of the 2003 SA IDRS survey have highlighted a number of similarities and differences in the IDU population compared to previous years. The effects of the heroin shortage are still being felt in some areas and it appears as if the landscape may have evolved in substantial ways. Whether these changes emerge as permanent markers of the injecting drug user population within South Australia remain to be seen.

The following issues were identified in the 2003 survey, which will require ongoing attention from policy makers, researchers and health professionals;

- The distinction between heroin users and other drug users is no longer clear cut and investigations need to be undertaken to explore the dynamic nature of the current injecting drug user population. For example, heroin users in the 2003 sample were likely to be using other drugs (e.g., opioids and methamphetamine) more often than they would have in the past. Designing treatment programs in the future will need to take into account a more entrenched poly-drug using profile in order to address the health needs of this increasingly complex group.
- High levels of methamphetamine use are continuing and treatment options for this group are lacking both in regard to harms associated with use and dependence, including potential mental health consequences such as methamphetamine-induced psychosis. The impact on health and law enforcement staff is another area that requires investigation. Additional training has already been introduced in some South Australian agencies and the efficacy of these courses needs to be evaluated before being rolled out more widely.

- The increase in injecting frequency and the high rate of sharing among IDU may impact on what has been a positive downward trend in HCV and HBV prevalence over recent years. Identifying potential barriers to change among current injecting drug users is an important goal. Exploring reasons behind persistent equipment sharing, which at the moment appear to be independent of the injecting drug of choice, must become a priority.
- The impact of legislative change on cannabis use and availability in South Australia has emerged as a topic requiring close scrutiny in the coming years. A longitudinal study that looks at the impact of past and present changes to legislation and the impact on cannabis users would be timely.

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 (2002) *Australian Illicit Drug Report 2000-2001*. Canberra: Commonwealth of Australia.

Australian Crime Commission (2003) *Australian Illicit Drug Report 2001-2002*. Canberra: Australian Crime Commission.

Australian Crime Commission (in press) *Australian Illicit Drug Report 2002-2003*. Canberra: Australian Crime Commission.

Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Duquemin, A., Fetherston, J., Fischer, J., Jenkinson, R., Kinner, S., Longo, M., Rushforth, C. (2003). *Australian Drug Trends 2002: Findings of the Illicit Drug Reporting System (IDRS)*. 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.

Churchill, A. & Topp, L. (2002) at: http://ndarc.med.unsw.edu.au/ndarc.nsf/website/IDRS.bulletins

Cormack, S., Faulkner, C., Foster Jones, P., & Greaves, H. (1998) South Australian Drug Trends 1997. Findings from the Illicit Drug Reporting System (IDRS). NDARC technical report No. 57. Sydney: National Drug and Alcohol Research Centre.

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*. National Drug and Alcohol Research Centre Technical Report No. 101, Sydney: National Drug and Alcohol Research Centre.

Darke, S., Hall, W., Ross, M.W., & Wodak, A. (1992) Benzodiazepine use and HIV risk taking behaviour among injecting drug users. *Drug and Alcohol Dependence* 31:31-36.

Degenhardt, L. & Barker, B. (2003a). 2002 *Australian Bureau of Statistics data on accidental opioid induced deaths*. Sydney: National Drug and Alcohol Research Centre.

Degenhardt, L. & Barker, B. (2003b). *Cocaine and amphetamine mentions in accidental drug-induced deaths in Australia 1997-2002*. Sydney: National Drug and Alcohol Research Centre.

Hando J & Darke S (1998) *NSW Drug Trends 1997*. *Findings from the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre monograph, No. 56. Sydney: National Drug and Alcohol Research Centre.

Hando J & Flaherty B (1993) *Procedure manual for the key informant study*. World Health Organisation Initiative on cocaine. Geneva, World Health Organisation Programme on Substance Abuse.

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 Reporting Drug System (IDRS). National Drug and Alcohol Research Centre monograph, No. 36. Sydney: National Drug and Alcohol Research Centre.

Hando J, O'Brien S, Darke S, Maher L & Hall W (1997). *The Illicit Drug Reporting System Trial: Final Report.* NDARC monograph No. 31. Sydney: National Drug and Alcohol Research Centre.

Longo, M., Humeniuk, R., Christie, P. & Ali, R. (2002). *South Australian Drug Trends 2001: Findings of the Illicit Drug Reporting System.* NDARC Technical Report Number 130. Sydney: National Drug and Alcohol Research Centre.

Longo, M.C., Christie, P., Ali, R., & Humeniuk., R. (2003). South Australian Drug Trends 2002: Findings of the Illicit Drug Reporting System. NDARC Technical Report. Sydney: National Drug and Alcohol Research Centre. In preparation.

Longo, M.C., Humeniuk, R., Christie, P. & Ali, R. (2001) *SA Party Drug Trends 2000. Findings from the Illicit Drug Reporting System (IDRS) Party Drugs Module.* NDARC Technical Report Number 131. Sydney: National Drug and Alcohol Research Centre.

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

National Centre in HIV Epidemiology and Clinical Research (2003). *Australian NSP Survey National Data Report 1995-2002*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW.

Reynolds, J., Lenton, S., Charlton, M. and Caphorn, J. (1997). Shopping, baking and using: the manufacture, use and problems associated with heroin made in the home from codeine based pharmaceuticals. *In* Erikson, P.A., Riley, D.A., Cheung, Y.T. and O'Hare, P.A. *Harm Reduction: A new direction for drug policies and programs*. University of Toronto Press, Toronto. pp. 324-339.

South Australia Police Annual Report 2000-2001, 2001-2002 and 2002-2003. Topp, L., Hando, J. & Darke, S. (2003). *Procedure Manual for the 2003 Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

Topp, L. & Churchill, A. (2002). Australia's dynamic methamphetamine market. *Drug Trends Bulletin, June 2002.*

White, B., Breen, C. & Degenhardt, L. (2003). *NSW Party Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)* Party Drugs Module. Sydney: National Drug and Alcohol Research Centre.