Stuart Kinner & Jane Fischer

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

NDARC Technical Report No. 177





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## Stuart Kinner & Jane Fischer

Queensland Alcohol and Drug Research and Education Centre (QADREC)

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## **ABBREVIATIONS**

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
AIHW	Australian Institute of Health and Welfare
ATSI	Aborigine or Torres Strait Islander
ATODS	Alcohol, Tobacco and Other Drugs Services, Queensland Health
BBV	blood-borne virus
CMC	Crime and Misconduct Commission
IDRS	Illicit Drug Reporting System
IDU	Injecting Drug User
KI	Key informant
MDMA	3,4-methylenedioxymethylamphetamine ('Ecstasy')
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and Syringe Program
QADREC	Queensland Alcohol and Drug Research and Education Centre
QNSP	Queensland Needle Availability and Support Program
QPS	Queensland Police Service
QuIVAA	Queensland Intravenous AIDS Association

## **EXECUTIVE SUMMARY**

The Illicit Drug Reporting System (IDRS) is funded jointly by the Australian Government Department of Health and Ageing and the National Drug Law Enforcement Research Fund (NDLERF), and is designed to monitor patterns and trends in illicit drug use and associated harms, with a view to highlighting issues that require further attention from relevant health or law enforcement agencies. Each year and in each state and territory of Australia, interviews are conducted with a sample of regular injecting drug users (IDU) and a sample of key informants (KI) working in the drug and alcohol field. Together with indicator data from other agencies, the IDRS aims to identify emerging trends in illicit drug use and associated harms, and to act as an early warning system for intervention. The IDRS focuses primarily on patterns and trends relating to heroin, methamphetamine, cocaine and cannabis, however data relating to other drugs and to drug-related issues are also collected.

## Demographic characteristics of injecting drug users (IDU)

The 2003 IDRS surveyed 135 injecting drug users (IDU) in south-east Queensland. Continuing a trend from previous years, IDU in 2003 were on average slightly older (mean = 32.8 years) than in 2002 (mean = 29.9 years). The sample was almost two thirds male and almost half reported a prison history. More males than females reported a prison history.

Seventy percent of the IDU sample was unemployed and just over a quarter had completed high school. Over two thirds reported living in their own house or flat, however seven percent were homeless and eleven percent were living in a boarding house or hostel. The proportion of IDU identifying as Aboriginal or Torres Strait Islander (ATSI) has increased in each year of the IDRS. In 2003 14% of the sample identified as ATSI.

## Patterns of drug use among IDU

IDU in 2003 reported first injecting a drug at an average age of 18.4 years, although males reported injecting earlier (mean = 17.9 years) than females (mean = 19.2 years). Younger IDU also reported first injecting at a younger age, suggesting that initiation to injecting may be occurring at a younger age.

Out of a total of 17 possible drug classes, IDU on average reported having used 10.5 drug classes in their lifetime, and having injected 5.1 drug classes in their lifetime. These figures are comparable to those for 2002. In 2003 30% of IDU nominated heroin as the drug they had injected most in the last month, and 57% nominated methamphetamine. Over a third of IDU in 2003 reported injecting at least once a day in the last month.

## Heroin

Despite evidence of an increase in heroin use among IDU interviewed in 2002, use appears to have declined again in 2003. This prolonged decrease in heroin use among IDU participants in the IDRS has been paralleled by a sustained increase in price, a sustained reduction in purity and, to a lesser extent, a sustained decrease in the perceived availability of heroin in Queensland.

Among those who have continued to use heroin in 2003, there appears to have been little change in patterns of use. IDU who nominate heroin as their drug of choice are still

characterised by above-average levels of polydrug use, with recent use of other CNS depressants including alcohol, benzodiazepines and morphine not uncommon. Despite this, there was some evidence of a continued reduction in the incidence of both fatal and non-fatal overdose among heroin users in 2003.

The number of opioid treatment registrations in Queensland has continued to rise, with 3,929 client registrations throughout the State in 2003. An increasing minority of IDU are opting to receive buprenorphine rather than methadone. The vast majority of opioid pharmacotherapy clients in Queensland receive their dose from a public prescriber and only a small minority receive their dose within a correctional setting.

## Methamphetamine

Methamphetamine seems to have established itself as a relatively cheap, readily available and potent injectable drug in Queensland. Crystal methamphetamine ('ice') in particular seems to have gained a reputation among many IDU as a potent, highly desirable drug, despite the negative physical, social and psychological effects that many associate with its use.

In 2003 methamphetamine was the most frequently injected drug among IDU sampled for the IDRS, despite the fact that a larger proportion nominated heroin as their drug of choice. Ninety percent of IDU reported having injected some form of methamphetamine in the last six months, with over half reporting recent injection of ice. Fewer than one in ten reported smoking ice recently although anecdotal reports suggest that smoking of ice may be more common among non-injecting drug users, among younger users and in the party drug subculture.

Whereas IDU who nominated heroin as their drug of choice were characterised by above-average levels of polydrug use, those who nominated methamphetamine as their drug of choice in 2003 were characterised by below-average levels of polydrug use.

## Cocaine

Although two thirds of IDU sampled for the IDRS in 2003 reported having used cocaine at some point in their life, fewer than a quarter reported using recently and only one in ten reported recent injection. Cocaine use among IDU in Queensland remains sporadic and, for the most part, opportunistic. Nevertheless, there were anecdotal reports in 2003 of an increase in the use of cocaine in a party drug context, perhaps with methamphetamine, and typically among more affluent users.

Consistent with this, while IDU report that the price of cocaine is still high, the availability low and the purity variable, law enforcement data show an increase in the number of cocaine seizures in Queensland, in the last financial year.

## Cannabis

The cannabis market in Queensland, as in other jurisdictions, continues to be distinguished by its consistency. Despite significant fluctuations in the prevalence of use of a range of other illicit drugs, the IDRS has recorded very little change in the price, potency, availability or use of cannabis among IDU, over the past four years.

Cannabis use continues to be endemic among IDU in Queensland with roughly four out of every five reporting recent use. Over the last few years there appears to have been a

consistent increase in the frequency of use, with the average user in 2003 smoking cannabis on four or five days out of every week and more than a third smoking daily.

The majority of IDU report recent use of both hydroponic and 'bush' cannabis, however roughly three quarters report mostly using 'hydro' – a form they report to be both more potent, and more expensive. Most report obtaining their cannabis from either a friend or a dealer's home, while roughly equal proportions identify the original source of their cannabis as a large-scale cultivator, or a small-time backyard grower.

## Illicit use of methadone

While rates of use of both licit and illicit (i.e., not prescribed) methadone have decreased in 2003, rates of injection have increased. Over one quarter (26%) of IDU in 2003 reported recent injection of methadone, compared with 19% in 2002. Fewer than one in five IDU (18%) in 2003 reported recent use of illicit methadone syrup, and only 4% reported recent use of illicit physeptone, indicating that a proportion of IDU are injecting methadone that has been prescribed to them.

## Illicit use of buprenorphine

Where use of methadone has decreased in 2003, use of buprenorphine has increased. More IDU in 2003 are being prescribed buprenorphine, with 16% reporting use of licit buprenorphine in the last six months. Only 7% of IDU in 2003 reported recent use of illicit buprenorphine. Ten percent reported recent injection of buprenorphine, representing a 100% increase in buprenorphine injection from 2002.

## Morphine

The 2002 IDRS identified an increase in the use and injection of morphine, particularly MS Contin<sup>®</sup>, among IDU. This trend has continued in 2003 with forty percent of IDU reporting recent injection of morphine. Among those who reported injecting morphine in the last month, almost half reported experiencing problems associated with their use.

In the context of continued poor quality heroin, unreliable supply and (relatively) inflated heroin prices, many IDU seem to consider morphine a more reliable and desirable option. A 50mg 'grey nurse' costs \$50 on the illicit market, compared with \$200 or more for a comparable quantity of heroin.

## Benzodiazepines

The 2003 IDRS identified a reduction in the use and, in particular, injection of benzodiazepines among IDU in Queensland. The reported incidence of recent benzodiazepine injection dropped markedly from 2002 (25%) to 2003 (11%). Whereas the benzodiazepine most commonly used by IDU in 2002 was Temazepam<sup>®</sup>, in 2003 the overwhelming majority reported using Valium<sup>®</sup>.

## Associated harms

Blood-borne viruses (BBV), injection-related problems, mental health problems and involvement in the criminal justice system continue to feature prominently among the hazards faced by IDU in Queensland. While Hepatitis C rates seem to be dropping in the general Australian population, they appear to be climbing among IDU: In 2002, almost half of the IDU surveyed in the Queensland arm of the national NSP survey tested positive for Hepatitis C.

Despite an almost linear increase in the number of syringes being distributed to NSPs in Queensland since 1996/97, sharing of needles and other injecting equipment among IDU remains far from uncommon. In 2003 more than one in ten IDU reported using a needle after someone else in the last month, and more than one in five reported that someone had used a needle after them in the last month.

While the majority of IDU in 2003 reported injecting in a private home, more than one in ten reported last injecting in a community location, and more than one in ten reported last injecting in a car. Those injecting heroin were particularly likely to inject in either a car or a public toilet.

Over half of the IDU surveyed in 2003 reported at least one injection-related problem in the last month, with the most common problems being scarring or bruising, and difficulty injecting. These figures are not significantly different from those recorded in 2002, 2001 or 2000. Injection-related problems were particularly common among those reporting recent injection of benzodiazepines, buprenorphine or methadone, although almost half of those reporting recent morphine injection also reported at least one problem related to injection, in the last month. Injection of diverted pharmaceutical preparations continues to be a significant health risk among IDU in Queensland.

In 2003 over a third of IDU reported seeing a mental health professional in the last six months, with the most common problem (other than drug dependence) being depression. There has been little change from 2002 to 2003 in the prevalence of self-reported mental health problems among IDU in Queensland.

As in previous years, over half of the IDU surveyed in 2003 reported engaging in some form of criminal activity in the past month – typically drug dealing or property crime, however in 2003 one in ten reported engaging in some form of violent crime in the last month. Since 2000, self-reported rates of violent crime and of arrest for violent crime among IDU have increased linearly, with more than one in five IDU in 2003 reporting arrest for a violent crime in the last year.

## Implications

The IDRS identified a number of new drug trends in 2003, and confirmed that other trends, observed in 2002, have continued into the current year. Among the key issues arising from this year's report are:

- the apparent interaction between the heroin and methamphetamine markets in Queensland
- an increase in the frequency of cannabis use among IDU
- a continued increase in the use and injection of morphine among IDU
- suggestions of an increase in the use of cocaine among non-injecting drug users
- continued high rates of Hepatitis C, injection-related problems, mental health problems and involvement with the criminal justice system, among IDU
- evidence of a continued increase in the availability and use of crystal methamphetamine, and an associated increase in methamphetamine-related harms

These trends raise some important questions for research and for policy makers, and highlight areas in which appropriate and targeted intervention must begin or be continued.

## **1. INTRODUCTION**

The Illicit Drug Reporting System (IDRS) is an on-going research project that serves as a strategic early-warning system for emerging trends and patterns in illicit drug use and associated harms. Since 1999 the IDRS has been conducted annually in every state and territory of Australia, and is now jointly funded by the Australian Government Department of Health and Ageing and the National Drug Law Enforcement Research Fund (NDLERF). The IDRS focuses primarily on four main illicits: heroin, amphetamines, cocaine and cannabis, but also monitors trends in other drugs and in drug-related harms.

An important feature of the IDRS is that it aims to disseminate its findings in a timely fashion, highlighting current issues that require further attention rather than providing a more protracted, in-depth analysis of available data. Each year the key findings are presented at a national conference in November, and the final report is published by the National Drug and Alcohol Research Centre (NDARC) early the following year. In addition, NDARC produces an annual national report and quarterly Drug Trends Bulletins highlighting issues of particular interest.

Data for the IDRS come from three complementary sources: a survey of injecting drug users (IDU) who are considered a 'sentinel' group in the community, structured interviews with key informants (KI) working in the drug and alcohol field, and existing data sets. By triangulating information from these three sources the IDRS is able to assess with some confidence the reliability and validity of its findings.

#### Study Aims

As in previous years, the aims of the 2003 Queensland IDRS were to:

- document the price, purity and availability of heroin, amphetamines, cocaine, cannabis and other drugs in Queensland
- identify, assess and report on emerging trends in illicit drug use and associated harms

## 2. METHOD

The IDRS maximises the reliability of its reported findings by triangulating information from three complementary sources: a KI survey, an IDU survey and contemporary indicator data. Comparability across years and jurisdictions is ensured by continued and nationwide use of the same survey instruments; minor improvements are made to the surveys each year to keep pace with developments in illicit drug markets and trends.

## 2.1 Survey of injecting drug users (IDU)

IDU are defined as individuals who have injected an illicit drug at least monthly for the six months prior to interview, and who have lived in the region where the interview takes place for at least 12 months. Given the ubiquity of polydrug use among IDU (see Topp et al. 2002), they are considered a 'sentinel' group in the community, well placed to provide first-hand and current information about a range of illicit drugs. The IDU sample is not considered representative of all illicit drug users, or even of all injecting drug users.

The IDU survey is a structured interview administered by research staff in a convenient community location (e.g., NSP, drug treatment agency). Subjects are assured that the information they provide will remain anonymous and confidential, and informed consent is obtained prior to the interview. The survey typically takes around 50 minutes to complete and subjects are reimbursed \$20 for their time and expenses incurred in participation. Whereas the key informant (KI) survey gathers largely qualitative data, the information obtained from the IDU survey is mostly quantitative in nature. The survey includes sections on:

- demographics
- drug use history
- price, purity and availability of illicit drugs
- criminal activity
- risk-taking behaviour
- general health status
- general trends

## 2.2 Survey of key informants (KIs)

Key informants are individuals who work with illicit drug users on a regular basis, and are thus well positioned to provide information on trends and patterns in illicit drug use and associated harms. Criteria for participation in the IDRS as a KI are:

- at least weekly contact with illicit drug users in the six months preceding the interview; or
- contact with at least 10 illicit drug users within the same time frame

These criteria are relaxed somewhat for law enforcement KI, who may not have direct contact with illicit drug users but may nevertheless be able to provide valuable information about drug dealing, manufacture and importation, or about drug-related crime.

Key informant interviews may be conducted either over the telephone or in person. Interviews begin with the researcher explaining the nature and purpose of the IDRS, and screening the potential KI for eligibility. Key informants are asked to nominate one illicit drug to be the focus of discussion. Most interviews take between 30 and 45 minutes to complete, and include a range of open-ended questions followed by check boxes to help focus the interview.

The KI survey instrument includes sections on:

- demographic characteristics of illicit drug users
- drug use patterns
- price, purity and availability of drugs
- criminal activity
- health issues

KI come from a range of backgrounds and professions including (but not limited to) paramedics, GPs, NSP workers, counsellors, staff of drug treatment agencies, researchers, psychiatrists, law enforcement or intelligence officers, and youth service personnel. Many KI have participated in the IDRS in previous years, however a snowballing recruitment technique is used each year to identify additional potential participants.

Data from the KI survey is qualitative in nature and is used primarily to complement and give context to the quantitative data obtained through the IDU survey and indicator data.

## 2.3 Other indicators

Data for the IDRS are also obtained from a range of external health, research and law enforcement sources. These indicator data cover a wide range of issues relevant to illicit drug use and serve to further validate and contextualise the findings of the IDU and KI surveys. For inclusion in the IDRS, indicator data should meet the following criteria:

- available at least annually
- include 50 or more cases
- provide details relating to illicit drug use
- be collected in the main study site
- include details on the four main illicit drugs under investigation

Not all indicator data meet all of these criteria, however they do serve as a guide to ensure that indicator data are both relevant and contemporary. In 2003 the following data were obtained for the IDRS:

- ABS accidental deaths due to opioids
- ADIS telephone counselling statistics
- ACC purity of analysed drug seizures and drug consumer/provider arrests
- AIHW national pharmacotherapy statistics
- Drug ARM telephone counselling statistics
- NCHECR BBV prevalence among IDU
- NNDSS BBV notifications by year
- QPS clandestine methamphetamine laboratory seizures
- Queensland Health ATODS pharmacotherapy statistics
- QuIVAA drug prices reported by NSP clients

## 3. RESULTS

## 3.1 Overview of the IDU sample

In 2003 135 IDU were interviewed in south-east Queensland: 42% in the Brisbane area, 26% in the Logan/Inala area and 27% on the Gold Coast. Four percent of IDU reported being of no fixed address. As in previous years, the sample was just under two thirds (62%) male, however IDU interviewed in 2003 were on average slightly older (mean age = 32.8 years) than in previous years (see Table 1). There has in fact been a linear increase in the average age of IDU surveyed each year since 2000, possibly reflecting an ageing demographic of injecting drug users accessing NSPs.

Fourteen percent of IDU identified as Aboriginal or Torres Strait Islanders (ATSI), and 39% reported currently participating in some form of drug treatment, typically methadone maintenance (23%). Seventy percent of the sample was unemployed at the time of survey and just over a quarter (28%) had completed high school. Nevertheless, almost half (47%) reported some form of post-school qualification and 68% reported residing in a home they either owned or rented.

As Table 2 illustrates, some notable gender differences were evident in the 2003 sample: Male IDU were more likely than female IDU to report a prison history (55% vs 33%), whereas female IDU were more likely than male IDU to report receiving drug treatment (44% vs 35%), particularly methadone maintenance (35% vs 16%). By contrast, male IDU were more likely than female IDU to report engaging in buprenorphine treatment (11% vs 4%). Female IDU were more likely to report having a tertiary qualification (17% vs 8%) but also more often identified as homeless (12% vs 5%).

	2000	2001	2002	2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Gender (%)	· · · · ·	· · · · ·		
Male	61	60	63	62
Female	39	40	37	38
Mean age (years)	26.44	27.74	29.86	32.77
ATSI (%)	8	12	13	14
Employment status (%)				
Not employed	55	66	76	70
Full-time	12	9	11	13
Part-time	21	9	7	9
Student	5	7	2	4
Home duties	1	6	5	4
Sex industry	7	4		
Accommodation (%)				
Own house/flat		52	63	68
Parents/family		14	8	11
Boarding house		9	11	11
NFPA/homeless	14	9	9	7
Other		16	9	2
Schooling completed (%)				
< grade 10	15	21	33	28
< grade 12	46	43	49	44
grade 12	39	36	18	28
Post-school educ. (%)				
None	53	43	45	53
Trade/technical	28	46	43	35
Uni/college	19	11	12	12
Current treatment (%)				
None	73	63	50	61
Methadone	23	22	34	23
Buprenorphine			2	8
Drug counselling	1	7	3	5
Other	3	8	11	3
Prison history (%)	31	38	50	47

 Table 1: Demographic characteristics of IDU samples 2000 - 2003

	Males	Females	Full sample	
	(n = 83)	(n = 52)	(N = 135)	
Gender (%)				
Male			62	
Female			38	
Mean age (years)	32.70	32.88	32.77	
Employment status (%)				
Not employed	71	67	70	
Full-time	12	15	13	
Part-time	11	6	9	
Student	5	4	4	
Home duties	1	8	4	
Accommodation status (%)				
Own house/flat	64	75	68	
Parents/family	15	6	11	
Boarding house	13	8	11	
Shelter/refuge	4	0	2	
NFPA/homeless	5	12	7	
Region in SEO (%)				
Brisbane	45	39	42	
Logan/Inala	28	23	26	
Gold Coast	22	37	27	
NFPA	6	2	4	
Schooling completed (%)				
< grade 10	27	31	28	
< grade 12	42	46	44	
grade 12	31	23	28	
ATSI (%)	15	13	14	
Post-school education (%)				
None	58	46	53	
Trade/technical	34	37	35	
Uni/college	8	17	12	
Current treatment (%)				
None	65	56	61	
Methadone	16	35	23	
Buprenorphine	11	4	8	
Drug counselling	5	4	5	
Other	3	2	3	
Prison history (%)	55	33	47	

#### Table 2: Demographic characteristics of 2003 IDU sample by gender

#### 3.2 Overview of the key informant sample

In 2003 43 key informants (KI) participated in the Queensland IDRS (see Table 3). Consistent with 2002 and perhaps indicative of community concern, 47% of KI in 2003 spoke primarily about methamphetamine use. A further 26% spoke primarily about heroin and 15% spoke primarily about cannabis. Again consistent with 2002, no KI in 2003 spoke primarily about cocaine, although a number of KI made some comments about cocaine use. For the first time in 2003, a small number of KI chose to spoke about use of inhalants (9%) or morphine (3%).

The majority of KI in 2003 worked in the health sector, however almost one in five (19%) worked in the law enforcement sector and were able to provide valuable

information about patterns of manufacture and distribution, criminal activity associated with drug use and the law enforcement response to this activity.

Although most KI reported working with IDU in some capacity, a number also reported working with special populations including prisoners (16%), youth (23%), indigenous people (9%), sex workers (7%) or homeless people (5%). Comments by KI regarding these groups are included throughout the report.

	KI 2003
	(N = 43)
Gender (%)	
Male	49
Female	51
Drug (%)	
Heroin	26
Methamphetamine	47
Cannabis	15
Cocaine	0
Inhalants	9
Morphine	3
Work type (%)	
General health (e.g., GP, nurse)	13
Drug treatment worker	26
NSP worker	18
Outreach/youth worker	11
Mental health (e.g., psychologist, psychiatrist)	8
Research/education	5
Police officer	13
Intelligence officer	3
Forensic chemist	3
Special populations (%)	
Homeless	5
Prisoners	16
Indigenous	9
Sex workers	7
Youth	23
NESB	5
IDU	40
Gay & lesbian	2
Mentally ill	2

#### Table 3: Selected characteristics of 2003 KI sample

## 3.3 Drug use history and current drug use

Compared to previous years, a larger proportion of IDU in 2003 reported heroin as the drug they first injected (44%), while fewer identified amphetamines as the drug they first injected (52%). Nevertheless, fewer IDU in 2003 identified heroin as their drug of choice (47%) and more identified methamphetamine as their drug of choice (36%). Similarly, compared to 2002, IDU in 2003 were less likely to identify heroin as the drug most often injected in the last month (30% vs 52%) or the drug last injected (32% vs 45%), while the proportions nominating methamphetamine increased (see Table 4).

Interestingly, while the demographic characteristics of the 2003 sample differ from those of the 2002 sample, these patterns of use are remarkably similar to those observed in 2001, during the heroin shortage (Rose & Najman, 2002). Based on these data it appears that IDU in south-east Queensland are increasingly demonstrating a preference for methamphetamine over heroin, despite the fact that more IDU in 2003 were initiated into injecting with heroin. The extent to which these changing preferences can be explained by changes in market dynamics (i.e., price, purity and availability) will be considered in more detail later in this report, however when asked to explain the discrepancy between their drug of choice and the drug they had most often injected in the last month, the most common reasons nominated by IDU in 2003 (of the 31% who responded) were availability (9%), price (8%) and health effects (3%). Perhaps surprisingly, only 2% of IDU cited purity as the reason for the discrepancy.

There were also some notable trends evident within the 2003 IDU sample. Consistent with previous years, males on average reported initiating into injecting at a much younger age (17.9 years) than did females (19.2 years). Also consistent with previous years both in Queensland (Kinner & Fischer, 2003; McAllister, 2001; Rose & Najman, 2002) and Australia wide (Breen et al., 2003), there was a significant positive correlation between age and age at first injection ( $\mathbf{r} = .28$ ,  $\mathbf{p} < .01$ ), indicating that more recent recruits into injecting may also be initiating into injecting at a younger age. This relationship was significant for males ( $\mathbf{r} = .31$ ,  $\mathbf{p} < .01$ ) but not for females ( $\mathbf{r} = .23$ ,  $\mathbf{ns}$ ). Males and females reported similar drug preferences and patterns of use, however male IDU more often reported cocaine, morphine and buprenorphine as the drug last injected or most injected in the last month (see Table 5).

	2000	2001	2002	2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Mean age first injected (years)	19.0	18.6	19.4	18.4
Drug first injected (%)	17.0	10.0	17.1	10.1
Heroin	27	28	35	44
Amphetamines	68	70	61	52
Methadone	0	0	0	1
Cocaine	1	1	2	1
Morphine	0	0	1	2
Other	1	3	1	2
Drug of choice (%)	-	-	-	_
Heroin	62	44	63	47
Methamphetamine	24	36	25	36
Methadone	0	1	1	1
Other opiates	2	0	0	1
Cocaine	2	0	1	5
Cannabis		13	8	6
Morphine	0	0	1	1
Ecstasy		3	1	1
Other	0	3	0	3
Drug most injected last month (%)				
Heroin	65	37	52	30
Methamphetamine	31	55	39	57
Methadone	2	3	4	6
Cocaine				2
Cocaine & heroin				1
Morphine		1	5	4
Buprenorphine			0	1
Other	2	4	0	0
Last drug injected (%)				
Heroin	62	35	45	32
Methamphetamine	34	60	41	55
Methadone	3	3	6	4
Cocaine	0	0	0	1
Morphine		0	6	8
Buprenorphine			0	2
Other	0	0	3	0
How often injected last month (%)				
Weekly or less	26	38	21	40
> weekly but < daily	30	24	31	26
Once a day	13	9	18	16
2-3 times a day	21	14	25	12
> 3 times a day	11	15	4	7
Mean number of drug classes	9.5	10.2	10.2	10.5
ever used <sup>a</sup>				
Mean number of drug classes used last 6 months <sup>a</sup>	6.1	6.9	6.7	6.4
Mean number of drug classes	3.9	4.5	5.2	5.1
Mean number of drug classes injected last 6 months <sup>a</sup>	2.2	2.7	2.8	2.8

# Table 4: Injection history, drug preferences and polydrug use of IDU samples 2000 - 2003

<sup>a</sup> In previous years IDU have been asked about use of a smaller number of drug classes (17 classes in 2003, 16 in 2002 and 2001, 15 in 2000), therefore figures from previous years are not directly comparable with those from 2003.

	Males	Females	Full sample
	(n = 83)	(n = 52)	(N = 135)
Mean age first injected (years)	17.88	19.17	18.38
Drug first injected (%)			
Heroin	43	44	44
Methadone	0	2	1
Amphetamines	53	50	52
Cocaine	1	0	1
Hallucinogens	1	0	1
Benzodiazepines	0	2	1
Morphine	1	2	2
Drug of choice (%)			
Heroin	47	48	47
Methadone	1	0	1
Other opiates	1	0	1
Methamphetamine	35	39	36
Cocaine	6	4	5
Ecstasy	1	0	1
Benzodiazepines	0	4	2
Alcohol	1	0	1
Cannabis	6	6	6
Morphine	1	0	1
Drug most injected last month (%)			
Heroin	29	33	30
Methadone	5	8	6
Methamphetamine	58	56	57
Cocaine	2	0	2
Cocaine & heroin	0	2	1
Morphine	5	2	4
Buprenorphine	1	0	1
Last drug injected (%)			
Heroin	31	33	32
Methadone	4	4	4
Methamphetamine	52	60	55
Cocaine	1	0	1
Morphine	10	4	8
Buprenorphine	3	0	2
How often injected last month (%)			
Weekly or less	38	42	40
> weekly but < daily	27	25	26
Once a day	17	14	16
2-3 times a day	11	14	12
> 3 times a day	7	6	7
Mean number of drug classes	10.18	11.00	10.50
ever used <sup>a</sup>			
Mean number of drug classes used last 6	6.42	6.48	6.44
months <sup>a</sup>			
Mean number of drug classes	5.05	5.23	5.12
ever injected <sup>a</sup>			
Mean number of drug classes injected last 6 months <sup>a</sup>	2.78	2.71	2.76

# Table 5: Injection history, drug preferences and polydrug use of 2003 IDU sample by gender

<sup>a</sup> IDU in 2003 were asked about use of 17 different classes of drug.

The drug use history of the 2003 IDU sample is summarised in Table 6. The drugs most often used 'recently' (i.e., in the last six months) by this group were tobacco (86%), cannabis (76%) and alcohol (71%), followed by heroin (64%) and methamphetamine ice crystals (60%), powder (58%) and base/paste (50%). Ninety percent of IDU in 2003 reported recent use of some form of methamphetamine.

Not surprisingly, the drugs most often injected 'recently' by IDU in 2003 were heroin (62%), ice (59%), speed powder (56%) and base (50%). Ninety percent of IDU in 2003 reported recent injection of some form of methamphetamine. Of some concern, 40% also reported having injected morphine in the last six months.

The drug most frequently injected by IDU in 2003 was heroin, with a median frequency of 50 days in the last six months (i.e., about 2 days per week) among those who had used. IDU reported injection of methamphetamine on a median of 16 days in the last six months for ice, 12 days for powder, 11 days for liquid, 10 days for base and 1 day for pharmaceutical stimulants (e.g., dexamphetamine, Ritalin<sup>®</sup>). Other drugs injected relatively frequently among IDU in 2003 included a range of licit and illicit opiates including methadone, physeptone, buprenorphine, morphine and 'other opiates' (see Table 6).

Nevertheless, among those who reported recent use, the drugs most frequently used by any route of administration in 2003 were tobacco and antidepressants, both of which were used on a median of 180 days in the last six months (i.e., daily). Other frequently used drugs included licit methadone (median 165 days), cannabis (median 125 days) and inhalants (median 70 days). Heroin and methamphetamine were used on a median of 49 days and 28 days in the last six months, respectively.

While there have been some fluctuations in the prevalence of use of various drugs from year to year, overall there has been considerable consistency in IDU reports since 2000. Heroin, amphetamines and cannabis remain the three illicits most commonly used by this group, with alcohol and tobacco used by similar proportions. A substantial minority each year report having used morphine or methadone, and around half report using benzodiazepines. Smaller numbers report recent use of 'party drugs' such as cocaine, ecstasy and hallucinogens (see Figure 1).

Drug	Ever used	Ever Injected	Injected	Ever smoked	Smoked last 6 mo	Ever sported	Snorted	Ever swallowed	Swallowed last 6 mo	Used in last 6 mo	Median days	Median days used
	useu	mjeeteu	1400 0 1110.	Sinoneu	hast o mo.	shorted	hist o mo.	5 wanto wed	inst o mo.	1100 O 11101	injected last 6 mo.	last 6 mo.
Tobacco	93									86		180
Cannabis	93									76		125
Alcohol	98	6	2					86	71	71	5	24
Heroin	87	86	62	33	4	22	2	16	2	64	50	49
Ice	83	81	59	10	7	3	2	17	7	60	16	12
Speed powder	89	87	56	7	1	37	3	34	6	58	12	10
											(mean 27)	(mean 27)
Base	73	72	50	4	2	4	1	12	4	50	10	6
Benzodiazepines	71	35	11	4	1	1	0	64	47	48	15	16
Morphine	75	69	40	2	1	0	0	33	13	42	8.5	6
Ecstasy	62	31	13	2	1	7	4	48	24	31	3	3
Antidepressants	44	1	0					37	28	28		180
Methadone (licit)	44	30	19					39	24	27	24	165
Methadone (illicit)	39	30	14					19	9	18	10	6
Cocaine	65	54	10	10	1	32	8	10	2	16	4.5	2.5
Amphet. liquid	39	36	15					8	4	16	11	5
(Meth)amphetamine any – incl. licit			90							90		28
Methadone any			26							37		90
Buprenorphine (licit)	20	6	5	0	0	0	0	16	15	16	10	30
Hallucinogens	73	21	4	3	1	2	0	60	13	14	1	3
Other opiates	27	15	4	3	0	0	0	16	8	10	10	10
Buprenorphine (illicit)	13	10	7	0	0	0	0	6	5	7	3	5.5
Inhalants	22									6		70
Pharm. stimulants	25	11	4	0	0	1	0	16	2	4	1	1.5
Physeptone (illicit)	22	19	3	0	0	0	0	7	0	4	11.5	3
Homebake	27	27	1	2	0	0	0	2	0	2	1	0.5
Physeptone (licit)	13	10	1	0	0	0	0	7	0	1	6	6

## Table 6: Drug use history of 2003 IDU sample



Figure 1. Recent drug use (in the last six months) among IDU, 2000 - 2003

## 4. HEROIN

Data presented in Section 3.3 suggested a decline in the use of heroin among IDU in Queensland, perhaps driven to some extent by availability, price and other market factors. In the following section these factors will be discussed in more detail, and their association with patterns of use considered.

## 4.1 Price

In 2001 the price of heroin as reported by IDU rose, probably in response to the documented heroin shortage at that time (Rose & Najman, 2002). In 2002 the reported price dropped somewhat (Kinner & Fischer, 2003), however there seems to have been no further reduction in price in 2003. According to IDU in 2003 the median price of a gram was \$400, of a half gram \$240 and a quarter gram \$120 (see Table 7). These prices are consistent with those reported by key informants.

As in previous years, the median price of a cap of heroin was \$50, however while the price of a cap has remained stable at \$50, the quantity or purity (or both) of a cap may have varied in response to market forces. In other words, it may be that when purchasing a cap of heroin IDU are effectively purchasing '\$50 worth'.

Larger quantities of heroin may therefore be more sensitive indicators of price changes. Prices for a cap, quarter gram, half gram and gram of heroin in Queensland from 2000 to 2003 are presented below in Figure 2. Increases in the median price of heroin are evident in larger quantities between 2000 and 2001; there is also mixed evidence of a small increase in the price of heroin from 2002 to 2003, with the median price of a half gram rising from \$230 in 2002 to \$240 in 2003.

Quantity	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Cap (\$)	50	50	50	50
Bought last 6 months (%)	44	44	30	22
<sup>1</sup> / <sub>8</sub> gram (\$)	50	50	70	65
Bought last 6 months (%)	20	14	13	3
<sup>1</sup> / <sub>4</sub> gram (\$)	100	132.50	120	120
Bought last 6 months (%)	56	47	52	31
<sup>1</sup> / <sub>2</sub> weight (\$)	200	250	230	240
Bought last 6 months (%)	53	40	30	18
Gram (\$)	350	487.50	400	400
Bought last 6 months (%)	34	35	26	16
Price change last 6 months (%)				
Don't know	25	3	7	12
Increasing	4	46	31	7
Stable	52	27	42	69
Decreasing	18	7	12	5
Fluctuating	2	17	7	8
% of IDU reporting	100	69	78	57

#### Table 7: Median price of heroin and reported price changes 2000 - 2003



Figure 2: Median price of heroin estimated from IDU purchases, 2000 - 2003

#### 4.2 Availability

Just as the price of heroin in Queensland seems to have remained relatively stable from 2002 to 2003, the perceived availability among IDU seems to have changed little in the last year. In 2003 roughly equal numbers of IDU considered heroin easy (43%) or very easy (42%) to get – very similar to the proportions recorded in 2002 (see Table 8). Compared to 2002, however, more IDU in 2003 considered the availability of heroin stable, while fewer reported that heroin had become easier to get in the last six months (see Table 8 and Figure 3). Finally, two key informants reported that in the second half of 2003, the availability of heroin increased slightly. Overall, the availability of heroin seems to have stabilised in 2003 at a level similar to that recorded in 2002, but lower than in 2000, before the heroin shortage.

	IDRS 2000 $(N = 101)$	IDRS 2001 (N = 102)	IDRS 2002 (N = 104)	IDRS 2003 (N = 135)	
Current availability (%)					
Very easy	59	31	43	42	
Easy	27	43	42	43	
Difficult	6	13	15	12	
Very difficult	3	7	0	1	
Don't know	5	6	0	3	
Availability change last 6 months (%)					
More difficult	10	29	17	18	
Stable	56	40	53	63	
Easier	25	17	25	8	
Fluctuates	0	9	3	4	
Don't know	5	6	3	7	

Table 8: Availability of heroin and changes in availability, 2000 - 2003



Figure 3: IDU reports of ease of availability of heroin in the past six months, 2000 – 2003

IDU in 2003 were asked where they *usually* scored heroin and how long it *usually* took to score, and where they scored *last time*, and how long it took to score *last time*. Because responses to the latter questions did not differ substantively from responses to the former, only *usual* source and time to score are presented here. In 2003, as in previous years, the most common source for heroin was a mobile dealer (46%), with only 8% of IDU in 2003 purchasing heroin on the street. There was some evidence of the heroin market moving 'off the street' in 2003: in previous years considerably more IDU have reported purchasing from a street dealer, and considerably fewer reporting purchasing from a mobile dealer. There was also some indirect evidence of increased availability of heroin in 2003, with the median time to score dropping from 30 minutes in 2002 to only 20 minutes in 2003 (see Table 9).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Usual source last 6 months (%)				
Don't use	21	13	3	4
Street dealer	22	19	17	8
Dealer's home	9	20	15	17
Friend	9	16	19	16
Mobile dealer	39	33	37	46
Home delivery			9	8
Gift from friend			1	1
Usual time to score (minutes)				
Median			30	20
Range			1 - 390	2 - 180

Table 9: Usual source of heroin and time to score 2000 - 2003

## 4.3 Purity

Over half of IDU in 2003 (53%) reported that the current purity of heroin was low, compared to 24% in 2002 and 28% in 2001, however the proportion reporting that they 'didn't know' the current purity was substantially lower in 2003. Excluding 'don't know' responses the proportions reporting the purity of heroin as low from 2000 to 2003 were 19%, 46%, 33% and 56% respectively. Based on IDU perceptions, therefore, it appears that the purity of heroin in Queensland has continued to decline into 2003. Consistent with this, over a third of IDU in 2003 reported that the purity of heroin had decreased in the last six months, and only one in ten reported that the purity had increased (see Table 10).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Current purity (%)				
High	14	9	12	17
Medium	44	19	24	22
Low	13	28	24	53
Fluctuates	0	5	14	3
Don't know	30	39	27	5
Purity change last 6 months (%)				
Increasing	16	5	16	10
Stable	34	9	19	31
Decreasing	19	36	26	36
Fluctuating	7	14	13	13
Don't know	25	36	26	9

Table 10: Purity of heroin and changes in purity according to IDU 2000 - 2003

Figure 4 show the number and median purity of analysed heroin seizures in Queensland, from July 1999 to June 2003. The drop in both number and purity of seizures is evident in late 2000 and 2001, during the heroin shortage (Rose & Najman, 2002). There also appears to have been a small increase in the average purity of seizures since around the middle of 2002, with the median purity rising from 15.7% in 2001/02 to 22.5% during 2002/03. During 2002/03 there was little difference in the median purity of small ( $\leq 2$  grams) seizures (23.3%) and large (> 2 gram) seizures (22.1%). Not surprisingly, however, there was a large difference in the median purity of seizures by QPS (23.9%) and AFP (69.0%), with the latter more indicative of the purity of large shipments of the drug.



Source: (ABCI, 2001, 2002; ACC, 2003, in press)

Figure 4. Median purity of heroin seizures analysed in Queensland, 1999/00 – 2002/03

#### 4.4 Use

#### Heroin use among IDU

On the basis of the above, it appears that in 2003 the price and availability of heroin in Queensland have stabilised, while the purity continues to be low. Perhaps not surprisingly then, use of heroin among IDU in Queensland seems to have declined in 2003. As Figure 5 shows, the use of heroin decreased considerably during the heroin shortage of 2001, but increased again in 2002. In 2003 this pattern reversed again, with the prevalence of use in 2003 more closely resembling 2001 than 2002.



Figure 5. Prevalence of heroin use among IDU, 2000 - 2003

#### 4.5 Current patterns of heroin use

Forty-seven percent of the IDU sample nominated heroin as their drug of choice. Among this group (mean age 34.97 years) 55% reported a history of incarceration and 52% reported currently receiving some form of treatment. The most common treatment among this group was pharmacotherapy involving either methadone (64%) or buprenorphine (27%). The level of polydrug use among IDU who nominated heroin as their drug of choice was high, compared to the sample as a whole: Among heroin IDU the mean number of drugs used ever and in the last six months, and injected ever and in the last six months, was higher than in the full sample (see Tables 11 and 12).

	Heroin drug of choice
	(n = 64)
Mean age first injected (years)	18.02
Drug first injected (%)	
Heroin	70
Amphetamines	25
Hallucinogens	2
Benzodiazepines	2
Morphine	2
Drug most injected last month (%)	
Heroin	58
Methadone	8
Methamphetamine	27
Morphine	8
Last drug injected (%)	
Heroin	57
Methadone	6
Methamphetamine	25
Morphine	10
Buprenorphine	2
How often injected last month (%)	
Weekly or less	35
> weekly but $<$ daily	24
Once a day	22
2-3 times a day	14
> 3 times a day	5
Mean number of drug classes	11.69
ever used <sup>a</sup>	
Mean number of drug classes used	7.23
last 6 months <sup>a</sup>	
Mean number of drug classes	6.17
ever injected <sup>a</sup>	
Mean number of drug classes injected	3.44
last 6 months <sup>a</sup>	

## Table 11: Injection history, drug preferences and polydrug use of 2003 IDU who nominated heroin as their drug of choice (n = 64)

<sup>a</sup> IDU in 2003 were asked about use of 17 different classes of drug.

Among IDU who nominated heroin as their drug of choice the other drugs most commonly used in the last six months were tobacco (86%), cannabis (77%) and alcohol (61%), although over half of this group also reported having used benzodiazepines, morphine and methamphetamines in the same time period. Other than heroin, the drugs

most commonly injected by this group in the last six months were morphine (53%) and methamphetamine – particularly base (55%) and ice (53%) (see Table 12).

A number of key informants commented on the increasingly blurry distinction between IDU who used heroin and methamphetamine. One claimed that as a consequence of the heroin shortage in 2001, the perceived distinction between an injecting methamphetamine user and a heroin using 'junkie' had disappeared, while another argued that regular use of both heroin and methamphetamine was normative: "speed to go, heroin to slow". Consistent with this, another KI reported that it is not uncommon for IDU to alternate between using heroin in prison, and methamphetamine in the community. More broadly, a number of KI asserted that polydrug use had become the norm, with many IDU alternating between heroin, methamphetamine, morphine and other drugs.

Drug	Ever used	Used last 6	Ever injected	Injected last	Median days	
	(%)	months (%)	(%)	6 months (%)	used / 180	
Tobacco	95	86			180	
Cannabis	92	77			180	
Alcohol	100	61	5	2	8	
Amphet. liquid	31	6	31	6	7.5	
Physeptone (illicit)	31	6	28	5	2	
Benzodiazepines	84	56	44	14	22	
Base	77	55	77	55	6	
Morphine	86	55	84	53	10	
Ice	78	53	77	53	18.5	
Inhalants	20	5			5	
Pharm. stimulants	25	5	14	5	2	
Speed powder	88	47	83	45	10	
Methadone (licit)	69	41	47	31	155	
Ecstasy	66	33	34	13	2	
Antidepressants	47	33	0	0	180	
Methadone (illicit)	53	30	44	23	6	
Buprenorphine (licit)	38	30	11	9	30	
Homebake	38	3	38	2	0.5	
Other opiates	38	16	20	5	8	
Buprenorphine (illicit)	20	14	17	11	7	
Cocaine	73	14	66	11	2	
Hallucinogens	75	11	30	3	1	
Physeptone (licit)	20	0	14	0		

Table 12. Polydrug use among IDU in 2003 who nominated heroin as their drug of choice (n = 64)

It is instructive to compare the patterns of polydrug use of two groups of IDU who nominated heroin as their drug of choice: (a) those for whom heroin was also the drug most often injected in the month prior to interview, and (b) those for whom heroin was not the drug most often injected in the month prior to interview. In the present sample 64 IDU nominated heroin as their drug of choice. Of these, 37 (58%) fell into the former category and 27 (42%) fell into the latter category. Patterns of polydrug use for these two groups are displayed below in Table 13.

As the table shows, those in the latter group reported higher rates of use and injection of a number of other drugs. Compared to those for whom heroin was the drug most often injected in the last month, these IDU more often reported injection of a range of alternative opiates including morphine (51% vs 56%), licit methadone (24% vs 41%), illicit physeptone (3% vs 7%) and homebake (0% vs 4%). These IDU also more often reported injection of a range of other drugs including methamphetamine liquid (0% vs 15%), powder (41% vs 52%), base (49% vs 63%) and ice (51% vs 56%); ecstasy (3% vs 26%), hallucinogens (0% vs 7%) and even alcohol (0% vs 4%).

A subset of IDU who reported heroin as their drug of choice therefore seem to have used a number of other drugs – both opiates and non-opiates – as alternatives to heroin. This pattern of drug substitution is also reflected in the frequency with which these IDU used alternative drugs. Compared to those who reported using heroin most in the last month, those who appeared to be engaging in substitution reported more often using a range of other opiates over the last six months, including illicit physeptone (median of 0.5 vs 91.5 days), morphine (10 vs 24 days), licit methadone (125 vs 155 days), licit buprenorphine (24.5 vs 60 days) and illicit buprenorphine (5.5 vs 10 days). The same IDU also reported more frequently using a range of non-opiate drugs including methamphetamine liquid (0 vs 7.5 days) and ice (10 vs 24 days), ecstasy (2 vs 3.5 days), benzodiazepines (22 vs 30 days) and particularly inhalants (0 vs 70 days). This latter finding was unexpected and cannot be explained by large age differences in the two groups: Those who had used heroin most in the last month were on average 35.2 years old; those who had more often used other drugs (including inhalants) were on average 34.7 years old.

Overall then, there was some evidence of greater polydrug use among those IDU who nominated heroin as their drug of choice, but who nevertheless reported more often injecting some other drug. This was evident when comparing the mean number of drugs ever used (11.43 vs 12.04), ever injected (5.86 vs 6.59), used in the last 6 months (7.19 vs 7.30) and injected in the last 6 months (3.24 vs 3.70).

Drug	Ever u	sed (%)	Used last 6	months (%)	Ever inje	ected (%)	Injected last (	6 months (%)	Median day	s used / 180
Used heroin most in last month?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Tobacco	95	96	81	93					180	180
Cannabis	89	96	73	82					180	165
Alcohol	100	100	70	48	5	4	0	4	11.5	6
Amphet. liquid	27	37	0	15	27	37	0	15	0	7.5
Physeptone (illicit)	22	44	5	7	19	41	3	7	0.5	91.5
Benzodiazepines	84	85	54	59	41	48	16	11	22	30
Base	78	74	49	63	78	74	49	63	8	6
Morphine	81	93	54	56	78	93	51	56	6	24
Ice	73	85	51	56	73	82	51	56	10	24
Inhalants	22	19	3	7					0	70
Pharm. stimulants	27	22	5	4	16	11	5	4	6	1
Speed powder	84	93	43	52	76	93	41	52	10	11
Methadone (licit)	70	67	43	37	38	59	24	41	125	155
Ecstasy	60	74	30	37	30	41	3	26	2	3.5
Antidepressants	46	48	32	33	0	0	0	0	180	180
Methadone (illicit)	54	52	35	22	41	48	24	22	6	4
Buprenorphine (licit)	43	30	32	26	8	15	8	11	24.5	60
Homebake	46	26	3	4	46	26	0	4	0	1
Other opiates	30	48	11	22	19	22	5	4	14.5	8
Buprenorphine (illicit)	16	26	16	11	16	19	16	4	5.5	10
Cocaine	65	85	14	15	60	74	14	7	3	1
Hallucinogens	70	82	14	7	24	37	0	7	1	2
Physeptone (licit)	24	15	0	0	14	15	0	0		

Table 13. Polydrug use among IDU in 2003 who nominated heroin as their drug of choice (n = 64): Comparing those who did (n = 37) and did not (n = 27) use heroin most in the last month

#### 4.6 Heroin related harms

#### Health

#### Overdose

Figure 6 displays the number of accidental deaths in Queensland attributed to opioids, among those aged 15-54 years, from 1988 to 2002. Consistent with the view that the heroin market in Queensland has not returned to 'pre-shortage' levels, the number of accidental deaths attributed to opioids in Queensland continued to drop in 2002. During 2002 40 accidental deaths in Queensland were attributed to opioids. Although this figure is markedly lower than those recorded in 2001 (58), 2000 (124), 1999 (79) and 1998 (64), it remains considerably higher than those recorded in the early 1990's. In 1990, for example, only eight accidental deaths in Queensland were attributed to opioids.



Source: (Degenhardt & Barker, 2003)

## Figure 6. Number and rate per million, accidental deaths in Queensland due to opioids among those aged 15-54 years, 1988-2002

A similar pattern seems to describe the rate of non-fatal overdose among IDU. Data collected by the Queensland Ambulance Service (QAS) until December 2001 show a marked reduction in non-fatal overdose during the heroin shortage (see Kinner & Fischer, 2003), paralleling the trend for fatal overdose, however more recent data from QAS are not available. More recent IDU reports suggest that the rate of non-fatal overdose among IDU may have continued to drop through 2003: Between 2000 and 2003 the median 'time since last overdose' reported by IDU increased from a median of 12 months to 36 months, indirectly suggesting a decrease in the incidence of non-fatal overdose among this group. Similar increases are evident in the median 'months since last Narcan administration' and 'months since present when someone else overdosed' (see Table 14). It therefore appears that, consistent with the sustained reduction in heroin
use among IDU in Queensland, the rate of both fatal and non-fatal heroin overdose may have continued to decline into 2003.

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Times overdosed on heroin ever				
Median	4	3	3	3
Range	1 - 25	1 - 10	1 - 50	1 – 15
% of IDU	43	45	44	39
Months since last heroin				
overdose				
Median	12	19	24	36
Range	1 – 192	1 - 144	3 – 184	1 - 250
Months since Narcan				
administered				
Median	2	14.5	24	30
Range	0 - 102	0 - 144	0 - 120	0 - 240
Times present when someone				
else overdosed				
Median	4	4	4	5
Range	1 - 50	1 - 100	1 - 50	1 - 200
% of IDU	70	78	70	67
Months since present when				
someone else overdosed				
Median	8	12	18	24
Range	1 - 360	1 - 144	1 - 144	0.25 - 300

#### Table 14. Experience of heroin overdose among IDU 2000 - 2003

<u>Note</u>: Data are based on the proportion of IDU who reported the event (e.g., experience of overdose) occurring at least once. Questions regarding presence at someone else's overdose do not distinguish between heroin and other drugs.

#### Treatment

Just under 40% of IDU in 2003 reported currently receiving some form of treatment – typically either methadone (23%) or buprenorphine (8%) pharmacotherapy. From 2002 to 2003 the proportion reporting current methadone maintenance dropped substantially, from 34% to 23%, while the proportion receiving buprenorphine treatment increased four-fold from 2% to 8%. Similarly, despite a reduction in the proportion of IDU reporting a history of treatment (from 61% in 2002 to 46% in 2003) the proportion reporting having previously received methadone maintenance treatment declined from 37% in 2002 to only 23% in 2003, while the proportion reporting previous buprenorphine treatment doubled from 5% to 10%. Overall, it appears that among those receiving treatment for opiate dependence in 2003, fewer are receiving methadone maintenance and more are receiving buprenorphine (see Table 15).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Current treatment (%)				
No treatment	73	63	50	61
Methadone	23	22	34	23
Buprenorphine			2	8
Detox	0	1	1	1
NA	1	0	0	1
Drug counselling	1	7	3	5
Naltrexone	0	0	0	1
Subutex			1	1
Therapeutic Comm.	0	7	4	0
Other	2	0	6	0
Median months in current				
treatment	11	4.5	6	12
Previous treatment (%)				
No treatment		50	39	54
Methadone		26	37	23
Buprenorphine		0	5	10
Detox		10	11	5
ТС		8	5	0
NA		5	3	3
Drug counselling		19	12	13
Naltrexone		1	1	2
Other		2	9	5

Table 15. Past and current treatments received by IDU 2000 - 2003

Opioid pharmacotherapy figures provided by Queensland Health support this interpretation. During 2001/02 there were 3,896 clients receiving pharmacotherapy in Queensland: 3,320 (85%) receiving methadone and 576 (15%) receiving buprenorphine (Kinner & Fischer, 2003). More recent figures from 15th October 2003 reveal a total of 3,949 clients receiving pharmacotherapy for opioid dependence in Queensland, including 3,040 (77%) receiving methadone and 908 (23%) receiving buprenorphine (ATODS, 2004b, personal communication). A number of key informants commented that among heroin dependent IDU, there was growing disenchantment with regard to methadone maintenance. One KI claimed that methadone doesn't "give them the hit they need", while another suggested that the increase in buprenorphine clients might be attributable to it being a relatively new treatment.

The total number of opioid treatment program (methadone and buprenorphine) registrations<sup>1</sup> in Queensland from 1989 to 2003 is shown below in Figure 7. There has been a linear increase in the number of registrations on the program over this time, with a total of 3,929 clients registered in 2003. The vast majority of these registrations (n=3,278) are with one of the 13 public sector opioid treatment programs; the remainder (n=651) are with one of 56 private medical practitioners currently treating clients in Queensland. While the number of public program registrations has increased markedly over time (from 472 in 1989 to 3,278 in 2003), the number of private prescriber registrations has increased only slightly (from 487 in 1989 to 651 in 2003).

<sup>&</sup>lt;sup>1</sup> These data do not distinguish between methadone and buprenorphine pharmacotherapy.



Source: Alcohol, Tobacco and Other Drug Services, Queensland Health (ATODS, 2003)

## Figure 7. Opioid treatment program registrations in Queensland by prescriber type, $1989 - 2003^2$

In contrast to most jurisdictions in Australia, most opioid pharmacotherapy clients in Queensland (80.1%) are registered with a public prescriber. The only other jurisdiction in Australia in which the majority of clients are currently registered with a public prescriber is the ACT (73.4%). Queensland is also distinguished by the relatively small number of clients in correctional facilities receiving pharmacotherapy for opioid dependence, with only 1.6% of Queensland clients in 2002 registered with a correctional facility. Across Australia only Tasmania (1.0%) and the ACT (1.7%) report comparable figures; in New South Wales over 10% of clients are registered with a correctional facility (see Table 16).

	QLD	Australia
Public prescriber (%)	80.1	24.7
Private prescriber (%)	18.3	67.7
Public/private prescriber (%)		0.9
Correctional facilities (%)	1.6	6.5

Table 16. Proportion of pharmacotherapy clients in Queensland and Australia by prescriber, 2002

Source: (AIHW, 2003)

While Queensland is distinguished by the relatively large proportion of clients registered with a public prescriber, consistent with Australia as a whole, most clients in Queensland (64%) collect their dose from a pharmacy. Queensland is somewhat unusual, however, in that just over 1% of clients receive their dose from a correctional centre, compared with 6.6% Australia-wide (see Table 17).

<sup>&</sup>lt;sup>2</sup> Client registrations as at 30 June each year, except for 2003 where registrations as at 31 May are shown.

	QLD	Australia
Public clinics (%)	4.9	15.2
Pharmacies (%)	64.1	62.5
Private clinics (%)	7.9	9.4
Correctional facilities (%)	1.1	6.6
Other (%)	22.1	6.3

Table 17. Proportion of pharmacotherapy clients in Queensland and Australia by dosing site, 2002

Source: (AIHW, 2003)

## 4.7 Trends in heroin use

Data presented above in Sections 4.1 - 4.4 suggest a significant decline in the use of heroin among IDU from 2000 to 2003. While the use of heroin has declined, however, there appears to have been little change in the way heroin is used by IDU (see Table 18 Not surprisingly, almost all IDU in 2003 who had used heroin recently also reported having injected heroin recently. Fewer than once in ten (6%) reported smoking heroin ('chasing the dragon') recently and only 3% reported snorting or swallowing heroin in the last six months. According to one key informant, smoking of heroin is more common in the Asian community.

Table 18. Routes of administration of heroin among those who had used last in the last 6 months, 2000 - 2003

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(n = 80)	(n = 62)	(n = 81)	(n = 64)
Injected last 6 months (%)	99	100	98	97
Smoked last 6 months (%)	18	13	15	6
Snorted last 6 months (%)	5	2	2	3
Swallowed last 6 months (%)	11	10	2	3

Similarly, there has been little change since 2000 in the forms of heroin that IDU report using (see Table 19). In 2003 59% of IDU reported mostly using rock heroin, with 41% mostly using the powder form. This is consistent with key informant reports however two KI claimed that so-called rock heroin is simply cut and recompressed powder. Again consistent with KI reports that IDU only use homebake if they are 'hanging out and desperate', only seven percent of IDU in 2003 reported having used homebake heroin recently, and none reported that this was the form they had used most.

Table 19. Forms	of heroin used	and used most by	y IDU 2000 - 2003
-----------------	----------------	------------------	-------------------

	IDRS	5 2000	IDRS	5 2001	IDRS	2002	IDRS	5 2003
	(N =	= 101)	(N =	: 102)	(N =	104)	(N =	: 135)
	Used	Most	Used	Most	Used	Most	Used	Most
Powder (%)	66		58	56	72	35	54	41
Rock (%)	76		56	60	79	65	55	59
Homebake (%)							7	0

Note: for form most used valid percentages are shown. In 2001 IDU were not asked about 'form most used' in a forced-choice format, so total percentage may exceed 100.

## 4.8 Summary of heroin trends

- Price stable but higher than prior to the heroin shortage. Larger quantities of heroin may fluctuate in price more than smaller quantities price of a 'cap' stable at \$50.
- Purity low and decreasing according to IDU; low and stable to increasing according to seizure data.
- Availability stable but harder to obtain than prior to heroin shortage. Nevertheless, most IDU consider heroin easy or very easy to obtain. Some evidence of reduced street dealing; IDU typically score from a mobile dealer.
- Use of heroin among IDU decreased since 2002, possibly in response to sustained reduction in purity and availability.
- Little change in patterns of use: Continued high levels of polydrug use, most users purchasing and injecting rock heroin. Possible reduction in heroin overdose and in smoking heroin ('chasing the dragon').
- Pharmacotherapy is still the treatment of choice among heroin-dependent IDU. Increase in proportion receiving buprenorphine; decrease in proportion receiving methadone.

## **5. METHAMPHETAMINE**

While heroin use in Queensland seems to have declined in 2003, data from the IDU survey suggest that the opposite is true of methamphetamine. In the following section the price, purity, availability and use of methamphetamine in Queensland will be discussed. As in 2002, three forms of methamphetamine will be considered: methamphetamine powder ('speed'), methamphetamine 'base' (a waxy paste) and crystal methamphetamine ('ice'). Finally, in Section 5.7, the nature of the relationship between the heroin and methamphetamine markets in Queensland will be considered.

## 5.1 Price

Despite 84% of the 2003 IDU sample reporting having used some form of methamphetamine in the last six months, fewer than one quarter reported purchasing any given quantity of methamphetamine (see Table 20). Nevertheless, the most commonly purchased quantities in 2003 were a half gram and a gram. As in 2002, there was some evidence that crystal methamphetamine ('ice') was more expensive than other forms of the drug, with the median price of a <sup>1</sup>/<sub>4</sub> gram, half weight (0.5 grams) and eight ball (3.5 grams) of ice higher than that for comparable quantities of powder or base. However the median price of a gram of ice (\$200) was the same as the median price of a gram of powder or base, and reported prices for a point and ounce of ice were less than for other forms. It may therefore be premature to conclude that crystal methamphetamine is more expensive than other forms of the drug.

Quantity	Powder	Base	Ice
Point (\$)	50	50	35
Bought last 6 months (%)	27	15	20
<sup>1</sup> / <sub>8</sub> gram (\$)	30	30	
Bought last 6 months (%)	2	1	0
<sup>1</sup> /4 gram (\$)	50	50	80
Bought last 6 months (%)	5	2	4
<sup>1</sup> /2 weight (\$)	100	100	120
Bought last 6 months (%)	16	20	22
Gram (\$)	200	200	200
Bought last 6 months (%)	21	13	19
Eight ball (\$)	500	500	550
Bought last 6 months (%)	9	5	7
Ounce (\$)	3500	3200	3200
Bought last 6 months (%)	2	1	1
Price change last 6 months (%)			
Don't know	7	5	13
Increasing	8	5	8
Stable	74	81	67
Decreasing	8	6	9
Fluctuating	3	3	3
% of IDU reporting	65	47	47

Table 20: Median	price of metha	mphetamine and	reported p	rice changes in 20	003
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There was little evidence of a significant change in the price of methamphetamine from 2002 to 2003, with the majority of users in 2003 reporting that the price of each form was stable. Nevertheless, there was less agreement among IDU with regard to the price of ice: From 2002 to 2003 the median reported price of half a gram of ice increased from \$105 to \$120, while the price of a gram dropped from \$235 to \$200 (see Figure 8).



Note: comparable data for 2000 and 2001 are not available. For a comparison with 2000 and 2001 amphetamine and methamphetamine data, see Kinner & Fischer (2003).

Figure 8: Median price of a gram of methamphetamine estimated from IDU purchases, 2002 – 2003

#### 5.2 Availability

In 2003 the perceived availability of methamphetamine powder, base and ice were very similar. Roughly 80% of IDU who responded considered each form either easy or very easy to obtain, and the majority of those responding considered the availability stable (see Table 21).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Current availability of powder (%)				
Very easy	39	59	77	51
Easy	23	32	19	30
Difficult	5	9	2	14
Very difficult	1	0	0	1
Don't know	33	0	2	5
% responding	100	55	50	65
Availability powder last 6 months (%)				
More difficult	8	11	6	14
Stable	45	55	69	57
Easier	13	21	15	19
Fluctuates	0	5	6	3
Don't know	35	7	4	7
% responding	100	55	50	65
Current availability of base (%)				
Very easy			56	48
Easy			28	35
Difficult			5	14
Very difficult			0	0
Don't know			10	3
% responding			38	53
Availability base last 6 months (%)				
More difficult			8	13
Stable			59	68
Easier			18	10
Fluctuates			8	3
Don't know			8	6
% responding			38	53
Current availability of ice (%)				
Very easy		54	32	54
Easy		31	35	24
Difficult		12	15	15
Very difficult		1	12	2
Don't know		1	6	6
% responding		73	33	50
Availability ice last 6 months (%)				
More difficult		11	24	9
Stable		72	38	61
Easier		7	21	21
Fluctuates		5	3	0
Don't know		5	15	9
% responding		73	33	50

Table 21: Availability of methamphetamine forms and changes in availability 2000- 2003

Comparing perceived availability over time, however, an interesting pattern emerges. While the availability of base seems to have remained relatively stable since 2002, the availability of powder has decreased while the availability of ice has increased – a reversal of the pattern from 2001 to 2002 (see Figure 9).



Note: valid percentages are presented. IDU in 2000 were simply asked about the availability of 'speed', so data for this year are not directly comparable.

Figure 9. Changes in availability of methamphetamine 2000 - 2003

In 2003 the most common sources of methamphetamine for IDU were a friend, a dealer's home and a mobile dealer. One in ten IDU reported that they usually sourced powder or base from a street dealer; 18% of IDU reported usually sourcing ice from a street dealer (see Table 22).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Usual source powder last 6 mths (%)				
Don't use	32	7	2	10
Street dealer	9	6	15	10
Dealer's home	15	38	35	21
Friend	22	31	12	28
Mobile dealer	20	18	21	19
Home delivery			15	5
Gift from friend			0	7
Other	2	0	0	0
% of IDU reporting	90	54	50	65
Usual time to score powder (mins)				
Median			22.5	20
Range			0 - 180	2 - 360
Usual source base 6 months (%)				
Don't use			3	5
Street dealer			8	10
Dealer's home			31	15
Friend			21	29
Mobile dealer			23	36
Home delivery			13	5
Gift from friend			3	0
Other			0	2
% of IDU reporting			38	46
Usual time to score base (mins)				
Median			20	25
Range			0 - 120	1 - 360
Usual source ice last 6 months (%)				
Don't use		1	3	0
Street dealer		4	12	18
Dealer's home		36	38	17
Friend		32	29	29
Mobile dealer		26	12	24
Home delivery			3	9
Gift from friend			3	3
Other			0	0
% of IDU reporting		71	33	49
Usual time to score ice (mins)				
Median			30	25
Range			0-360	1 - 2880

Table 22: Usual source of methamphetamine and time to score 2000 - 2003

Note: IDU in 2002 and 2003 were also asked where they scored *last time*, and how long it took to score *last time*. These responses did not differ substantively from those presented above.

Between 2001 and 2003 there seems to have been a move away from purchasing methamphetamine from a dealer's home, to purchasing from a street dealer. In 2001 36% of IDU reported usually scoring ice from a dealer's home, with only 4% scoring from a street dealer. By contrast, in 2003 18% of IDU reported usually scoring ice from a street dealer, with only 17% scoring from a dealer's home. IDU in 2002 and 2003 responded in a similar fashion with regard to methamphetamine base (see Table 22 above). There is therefore some evidence that the market for more pure forms of methamphetamine, especially methamphetamine crystals or 'ice', is moving more onto the street – the opposite of the pattern observed with regard to heroin (see Section 4.2). With respect to methamphetamine powder the pattern is less clear, however between 2001 and 2003 the proportion of IDU reporting usually scoring powder from a street dealer dealer dealer, while

between 2002 and 2003 the proportion reporting usually scoring from a dealer's home increased (see Figure 10).



Note: Valid percentages are shown. 2000 data have been excluded due to high proportion of IDU indicating 'don't know'.

Figure 10. Proportion of IDU reporting buying methamphetamine from (a) a street dealer, or (b) a dealer's home, 2001 - 2003

## 5.3 Purity

As in previous years, IDU in 2003 considered ice to be of higher purity than either base or powder: Sixty-six percent of IDU in 2003 reported the purity of ice as high, compared to 35% and 34% for base and powder respectively (see Table 23). Paralleling changes in the perceived availability of ice from 2002 to 2003 (see Figure 9 above), more IDU in 2003 considered the purity of ice to be high. Over the same time period fewer IDU considered the purity of base high, while the proportion reporting that the purity of powder was high also increased (see Figure 11).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Current purity powder (%)				
High	37	30	19	34
Medium	13	28	27	25
Low	11	23	25	19
Fluctuates	0	9	29	10
Don't know	40	9	0	11
% of IDU reporting	100	52	50	65
Purity powder last 6 months (%)				
Increasing	19	4	8	13
Stable	23	29	35	36
Decreasing	6	26	21	25
Fluctuating	12	29	27	16
Don't know	41	15	10	10
% of IDU reporting	100	54	50	65
Current purity base (%)				
High			44	35
Medium			26	43
Low			13	14
Fluctuates			15	5
Don't know			3	3
% of IDU reporting			38	47
Purity base last 6 months (%)				
Increasing			13	8
Stable			46	52
Decreasing			48	22
Fluctuating			23	11
Don't know			0	6
% of IDU reporting			38	47
Current purity ice (%)				
High		51	59	66
Medium		30	21	19
Low		5	9	6
Fluctuates		12	3	3
Don't know		1	9	6
% of IDU reporting		73	33	50
Purity ice last 6 months (%)				
Increasing		4	15	19
Stable		57	53	55
Decreasing		10	6	9
Fluctuating		20	12	3
Don't know		10	15	13
% of IDU reporting		73	33	50

# Table 23: Purity of methamphetamine and changes in purity according to IDU2000 - 2003



Figure 11. Proportion of IDU reporting methamphetamine purity as high 2000 – 2003

Figure 12 show the number and median purity of analysed methamphetamine seizures in Queensland, from July 1999 to June 2003. Consistent with key informant reports that methamphetamine production in Queensland is a 'cottage industry', with most production occurring locally, there were no methamphetamine seizures by AFP during the 2002/03 financial year. In fact, between July 1999 to June 2003 the AFP made only 15 methamphetamine seizures in Queensland, compared to 4,775 seizures by QPS.

Although the median purity of methamphetamine seizures seems to have varied considerably over the last few years (from 13.9% in the third quarter of 2001, to 30.2% in the last quarter of 2000), overall there appears to have been a gradual decline in the purity of methamphetamine seizures in Queensland since around 2000: During the 1999/00 financial year the median purity of QPS seizures was 26.8%, compared with a median purity of only 19.4% in 2002/03. While this apparent decline in methamphetamine purity may seem at odds with IDU reports of stable or increasing purity, IDU reports may be more indicative of the purity of ice which, according to some KI, is typically imported into Australia in large shipments. Perhaps significantly, the last two AFP seizures of methamphetamine in Queensland were of high purity: 81.0% in the last quarter of 2001 and 78.6% in the first quarter of 2002.



Source: (ABCI, 2001, 2002; ACC, 2003, in press)

Figure 12. Median purity of methamphetamine seizures analysed in Queensland, 1999/00 – 2002/03

As noted in last year's report (Kinner & Fischer, 2003) methamphetamine seems to have all but replaced the less potent amphetamine as the stimulant of choice for IDU in Queensland. Figure 13 shows the number and median purity of analysed amphetamine seizures in Queensland from 1999/00 to 2002/03. During 2002/03 the AFP made no seizures of amphetamine in Queensland and QPS made only 44 seizures, with a median purity of only 0.9%.



Source: (ABCI, 2001, 2002; ACC, 2003, in press)

Figure 13. Median purity of amphetamine seizures analysed in Queensland, 1999/00 - 2002/03

## 5.4 Use

#### 5.4.1 Methamphetamine use among IDU

Trends in the use of methamphetamine among IDU since 2000 are shown in Figure 14. Use of methamphetamine among IDU in Queensland increased from 2000 to 2001, declined from 2001 to 2002, and increased again between 2002 and 2003. It may be worth noting that this trend is the reverse of that observed for heroin use over the same time period (see Figure 14), perhaps suggesting that the two markets are to some degree interdependent.



Figure 14. Patterns of methamphetamine use among IDU, 2000 - 2003

#### 5.4.2 Current patterns of methamphetamine use

Since 2000 there appears to have been relatively little change in the routes of administration of methamphetamine chosen by IDU in Queensland (see Table 24). Perhaps not surprisingly, all IDU in 2003 who reported having used methamphetamine recently also reported having injected the drug recently. Roughly one fifth of IDU reported having swallowed methamphetamine at least once in the last six months and fewer than one in ten reported either snorting or smoking recently. There was no substantial variation in route of administration by methamphetamine form, despite reports by some key informants of an increase in the smoking of crystal methamphetamine ('ice'): One law enforcement KI reported an increase in the number of pipes found at clandestine laboratories while another two reported that a local identity known for selling 'bongs' had started selling 'ice pipes' instead. Another KI asserted that smoking was becoming more common among ice dealers. It may be that the smoking of ice is more prevalent among users who do not regularly inject, such as younger methamphetamine users, or party drug users (as one KI claimed), who are not as well represented by the ageing IDU sample accessed in the IDRS.

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Powder	· ·			· · ·
Used last 6 months (%)			55	58
Injected last 6 months (%)			54	56
Smoked last 6 months (%)			4	1
Snorted last 6 months (%)			8	3
Swallowed last 6 months (%)			11	6
Base				
Used last 6 months (%)			42	50
Injected last 6 months (%)			42	50
Smoked last 6 months (%)			2	2
Snorted last 6 months (%)			3	1
Swallowed last 6 months (%)			6	4
Ice				
Used last 6 months (%)			39	60
Injected last 6 months (%)			38	56
Smoked last 6 months (%)			2	1
Snorted last 6 months (%)			2	3
Swallowed last 6 months (%)			7	6
Any form				
Used last 6 months (%)	71	87	82	90
Injected last 6 months (%)	69	83	80	90
Smoked last 6 months (%)	4	8	7	9
Snorted last 6 months (%)	9	13	9	5
Swallowed last 6 months (%)	20	26	19	18

## Table 24. Routes of administration of methamphetamine in the last 6 months,2000 - 2003

Note: IDU in 2000 and 2001 were simply asked about 'speed', so data for each form are not available for these years. For 2001, 2002 and 2003 'any form' includes powder, base ice, liquid methamphetamine and pharmaceutical stimulants; in 2000 IDU were not asked about base.

In 2003, as in previous years, the majority of IDU reported having used methamphetamine powder (65%), base (52%) and ice (64%) in the last six months, with approximately one quarter reporting having used methamphetamine liquid. Very small proportions reported having used prescription amphetamines, either licitly or illicitly. Again similar to previous years, very few IDU nominated amphetamine liquid as the form they had used most in the last six months, and none nominated prescription amphetamines as the form most used. In 2003 the proportion of IDU reporting using the powder form of methamphetamine 'most' was stable at around one third, however the proportion nominating base decreased from 37% to 22%, while the proportion nominating ice increased from 27% to 40% (see Table 25).

An increase in the availability and use of ice in south-east Queensland was reported by at least six key informants, once of whom asserted that ice had "flooded the market" in the last six months. In explaining this increase another KI noted that ice was becoming increasingly 'trendy' in some circles, while others attributed the increase to the quality of ice: One KI who used ice described the feeling as "clean" and another as "clear and smooth"; both claimed that 'once you start using ice, you never go back (to other forms of methamphetamine)'. Yet another KI noted that while ice is a little more expensive than other forms of methamphetamine, it is "twice as good … the most addictive drug

I've ever had ... like crack to cocaine". Nevertheless, one KI claimed that while ice was becoming more prevalent, most of the methamphetamine on the market was still in powder form. Consistent with this, two law enforcement KI stated that most methamphetamine seized by police is either brown powder or base, but that evidence from clandestine laboratory seizures suggests more attempts by cooks to produce crystal.

	IDRS	IDRS 2000 $(N = 101)$		IDRS 2001 (N = 102)		IDRS 2002 (N = 104)		2003
	(N =							135)
	Used	Most	Used	Most	Used	Most	Used	Most
Liquid (%)	42		29	2	27	6	24	4
Powder (%)	58		69	23	56	31	65	35
Base (%)			66	40	49	37	52	22
Ice (%)	13		66	26	48	27	64	40
Prescription (licit %)	0		2	0	1	0	2	0
Prescription (illicit %)	9		9	1	5	0	3	0

Table 25. Forms of amphetamine used recently and used most recently by IDU, 2000 - 2003

Note: for form most used valid percentages are shown. In 2001 IDU were not asked about 'form most used' in a forced-choice format, so percentages may exceed 100.

Whereas IDU who nominated heroin as their drug of choice were characterised by higher levels of polydrug use than the entire sample (see Section 4.5), those who nominated methamphetamine as their drug of choice reported below-average levels of polydrug use (see Table 26). For example, across the entire sample the mean number of drugs tried in the last six months was 6.4, compared to 7.2 for those who nominated heroin as their drug of choice and only 5.6 for those nominating methamphetamine. Similarly, for the full sample the mean number of drugs injected recently was 2.8 compared to 3.4 for those who nominated heroin as their drug of choice and 2.0 for those nominating methamphetamine. Furthermore, whereas almost half of those who nominated heroin as their drug of choice reported most often injecting some other drug, 92% of those nominating methamphetamine as their drug of choice also reported that this was the drug they had injected most often in the last month. It my be that as a result of the greater availability of methamphetamine among IDU, there was reduced need to engage in injection of alternative, 'substitute' drugs.

	Methamphetamine drug of choice
	(n = 49)
Mean age first injected (years)	18.00
Drug first injected (%)	
Heroin	18
Amphetamines	80
Methadone	2
Drug most injected last month (%)	
Heroin	4
Methamphetamine	92
Cocaine + heroin	2
Buprenorphine	2
Last drug injected (%)	
Heroin	8
Methamphetamine	86
Morphine	4
Buprenorphine	2
How often injected last month (%)	
Weekly or less	45
> weekly but < daily	25
Once a day	12
2-3 times a day	12
> 3 times a day	6
Mean number of drug classes	9.33
ever used <sup>a</sup>	
Mean number of drug classes used	5.63
last 6 months <sup>a</sup>	
Mean number of drug classes	3.82
ever injected <sup>a</sup>	
Mean number of drug classes injected	2.04
last 6 months <sup>a</sup>	

Table 26: Injection history, drug preferences and polydrug use of 2003 IDU who nominated methamphetamine as their drug of choice (n = 49)

<sup>a</sup> IDU in 2003 were asked about use of 17 different classes of drug.

Patterns of polydrug use among IDU who nominated methamphetamine as their drug of choice in 2003 are shown below in Table 27. Other than methamphetamine, the drugs most commonly used by these IDU were tobacco (88% used recently), alcohol (82% used recently) and cannabis (74% used recently). In contrast to the pattern seen among those who nominated heroin as their drug of choice (see Section 4.4 on page 18), these drugs are arguably complements to methamphetamine use, rather than substitutes for methamphetamine.

Around one third of IDU who nominated methamphetamine as their drug of choice also reported recent use of heroin, however these IDU reported use on a median of only three days in six months. Similarly, just under a third of these IDU (29%) reported recent morphine use, on a median of only 1.5 days in six months. Nearly all of those who reported recent use of heroin or morphine also reported recent injection.

Around a third of IDU who nominated methamphetamine as their drug of choice reported recent use of benzodiazepines (35%), on a median of 10 days in six months, and

of ecstasy (33%), on a median of three days in six months. Sixteen percent of these IDU reported recent injection of ecstasy.

Drug	Ever used	Used last 6	Ever injected	Injected last	Median days
	(%)	months (%)	(%)	6 months (%)	used / 180
Tobacco	92	88			180
Alcohol	98	82	6	0	24
Cannabis	96	74			90
Ice	90	74	90	71	8.5
Speed powder	88	69	88	67	4.5
Pharm. stimulants	25	6	8	4	1
Base	71	47	69	47	4
Other opiates	14	4	8	2	28
Heroin	76	35	74	31	3
Benzodiazepines	59	35	27	6	10
Ecstasy	61	33	25	16	3
Morphine	61	29	49	27	1.5
Amphet. liquid	43	20	39	20	4
Antidepressants	43	20	2	0	180
Physeptone (licit)	6	2	4	2	6
Buprenorphine (illicit)	6	2	4	2	3
Buprenorphine (licit)	4	2	2	2	180
Methadone (illicit)	18	2	12	2	0
Hallucinogens	74	18	12	4	5
Cocaine	51	14	31	4	2
Methadone (licit)	20	10	10	4	180
Inhalants	27	10			140
Physeptone (illicit)	10	0	8	0	
Homebake	14	0	14	0	

Table 27. Polydrug use among IDU in 2003 who nominated methamphetamine as their drug of choice (n = 49)

## 5.5 Methamphetamine related harms

#### 5.5.1 Law enforcement

Figure 15 shows the number of clandestine laboratories seized in Queensland by Queensland Police Service (QPS) from 1998 to 2003. The number of seizures increased substantially in 2001, during the heroin shortage, and again in 2002. In 2003 QPS made 166 clandestine laboratory seizures, although one key informant noted that in contrast to other Australia jurisdictions, the majority of seizures in Queensland are of small 'box labs' rather than large-scale production facilities. Methamphetamine production in Queensland seems to be characterised by a relatively large number of producers, each making relatively small quantities of the drug: During the 2001/02 financial year, for example, 57.5% of the clandestine laboratory seizures in Australia were made in Queensland (ACC, 2003).



Source: Queensland Police Service

## Figure 15. Number of clandestine laboratory seizures by Queensland Police Service, 1998 – 2003

Nevertheless, according to one key informant there are at least two relatively distinct types of methamphetamine producer in Queensland:

- 1) Profit-drive and organised groups who may import precursor chemicals from overseas, and who tend to produce large quantities of high quality methamphetamine, using the pseudoephedrine method.
- 2) Box lab producers who produce methamphetamine of variable quality 'in the back yard', selling to support their own use.

Consistent with data from QPS and the ACC, two key informants reported that the majority of methamphetamine-related seizures and arrests in Queensland relate to those in the latter group.

#### 5.5.2 Health

In contrast to heroin, there are relatively few indicator data available by which to gauge the health-related impacts of methamphetamine use. As three key informants noted, despite evidence that more IDU in Queensland are injecting methamphetamine than heroin, there are currently more treatment options available for heroin users than methamphetamine users. Compounding this problem, four key informants observed that methamphetamine users are less likely to seek help in relation to their use, with many choosing instead to self-medicate with benzodiazepines, heroin or other CNS depressants.

Nevertheless, key informant reports are strongly indicative of significant health and social harms associated with regular methamphetamine use. Approximately half of the key informants interviewed in 2003 reported an increase in the incidence of mental health problems associated with methamphetamine use. Some of these problems included drug-induced psychosis, anxiety and depression, obsessive-compulsive behaviour, panic attacks, paranoia and confusion. Four key informants associated these problems with ice in particular, while another three reported that some users who try ice find it too potent

and "back off, and don't seek it out any more". One KI described how some users who inject ice at home before going out sometimes become disoriented and distracted, and engage in obsessive-compulsive behaviours, to the extent that they spend the entire night at home instead. According to this key informant, this effect is know among regular users as "doing 360's".

In addition to the mental health problems associated with regular methamphetamine use, a number of KI reported an association between methamphetamine use and behavioural problems, again associated in particular with ice. Two KI reported an increase in risk-taking behaviour associated with methamphetamine use, while another reported a link between methamphetamine use and unsafe sex, particularly in the gay community. The same KI also expressed concern about the incidence of needle sharing during a methamphetamine 'binge': "The syringe is loaded and handed to them, so they just do it".

Also of concern, a large number of KI reported an association between regular methamphetamine use and aggressive behaviour. One law enforcement KI spoke of aggression towards police officers, while a number of KI from the health sector expressed concern over the incidence of unreported intrafamilial violence related to methamphetamine use, often within a relationship context but also directed at parents by teenage children.

Finally, a number of KI commented on the association between regular methamphetamine use and general health problems. Two KI made particular reference to skin problems among regular methamphetamine users, with one describing users engaging in obsessive-compulsive behaviours, and picking at their skin. Another KI observed that with an increasing shortage of bulk-billing GPs, more users seem to be presenting to hospital emergency departments with non-acute general health issues, or with mental health issues.

## 5.6 Flashcard Analysis

Since 2002 the IDRS has distinguished among three forms of methamphetamine -powder, base and ice – and asked IDU to identify which of a set of pictures on a 'flashcard' they identify as each form of the drug. Analysis of flashcard data in 2002 revealed considerable disagreement among IDU with regard to the appearance of each form of methamphetamine (Kinner & Fischer, 2003). Comparable data from 2003 suggest greater agreement among IDU, with the majority of those who responded agreeing on the appearance of each form of methamphetamine.

Table 28 shows which pictures IDU selected for each form of methamphetamine in 2003: Category A pictures represent methamphetamine powder, Category B pictures represent base, and Category C pictures represent ice (Churchill & Topp, 2002). As the table shows, approximately two thirds of IDU who responded and who had used each form in the last six months identified Category A pictures as powder, Category B pictures as base and Category C pictures as ice.

	% used last 6 months	Any A (%)	Any B (%)	Any C (%)
Powder	58	67	8	5
Base	50	4	61	7
Ice	60	0	1	67

Table 28. Photographs identified by IDU in 2003 as representative of methamphetamine powder (A), base (B) and ice (C) respectively

Note: valid percentages are shown; percentages nevertheless sum to less than 100 as not all IDU who had used in last 6 months selected a picture

#### 5.6.1 Speed

There was strong agreement among IDU with regard to the appearance of methamphetamine powder, with 94% of those who selected a picture selecting a Category A picture. Fifty two percent of those who responded identified picture A1 (below) as representative of methamphetamine powder, with a further 18% identifying picture A2. Fifteen percent of respondents selected one of the other 'A' pictures, 10% identified any Category B picture and only 6% identified any Category C picture.



#### 5.6.2 Base

There was less agreement among IDU with regard to the appearance of base, however 84% of those who selected a picture did identify a Category B picture. Roughly equal numbers selected pictures B3 (18%), B4 (14%) and B5 (14%), and at least one IDU (2%) selected each of the other seven Category B pictures. Given that B5 is simply a cropped version of picture B4, this brown, damp paste was in fact the image most frequently identified as base (28%). Nevertheless, 10% of those who identified a picture for base identified one of the Category C pictures, and a further 6% identified a Category A picture.



#### 5.6.3 Ice/crystal meth

As with powder, there was strong agreement among IDU with regard to the appearance of methamphetamine ice. Sixty-seven percent of those who responded identified picture

C2 as ice, with a further 18% selecting picture C1. Thirteen percent of those who responded identified another Category C picture, while one IDU (2%) identified a category B picture (B6 – a dark crystal which is in fact crystalline methamphetamine<sup>3</sup>. No IDU identified a Category A picture as ice.



## 5.6.4 Summary

Overall, there was reasonably good agreement among IDU in 2003 with regard to the appearance of methamphetamine powder, base and ice. Agreement was greatest with regard to ice, with 98% of IDU who selected a picture identifying a Category C (crystal) picture.

## 5.7 Trends in methamphetamine use

It has been noted that in the context of a sustained heroin shortage, a considerable number of IDU in Australia seem to have moved from injection of heroin to injection of psychostimulants (Topp, Day, & Degenhardt, 2003). In Queensland, the IDRS provides persuasive evidence of this trend, with a clear pattern of interaction between use of heroin and methamphetamine from 2000 and 2003. In 2003 three key informants argued that the increase in methamphetamine use among IDU was a direct result of sustained, poor quality heroin. Figure 16 illustrates the interacting nature of the heroin and methamphetamine markets in Queensland.

As the Figure shows, every increase in the use of one substance has been paralleled by a decrease in use of the other, and vice-versa. Figure 16 illustrates that this is the case with respect to four key indicators of use: (a) use in the last six months (i.e., recent use), (b) drug of choice, (c) drug most often injected in the last month, and (d) drug last injected; however the same pattern of interaction is also evident in every other indicator of use measured by the IDRS: median days of use in the last six months, proportion of IDU reporting daily use, and proportion of IDU reporting use the day before interview (see Sections 4.4 and 5.4). As Topp, Day and Degenhardt (2003) have pointed out, the possibility that decreased supply of one drug may lead to increased use of others has significant implications both for policy surrounding supply reduction strategies, and for the provision of appropriate intervention and treatment services for injecting drug users.

<sup>&</sup>lt;sup>3</sup> according to a reliable key informant. The brown colouration in methamphetamine is due to very small amounts of impurity, and is not indicative of lower drug quality or purity.



Figure 16. Proportion of IDU reporting heroin and methamphetamine (a) in last six months, (b) as drug of choice, (c) as drug most injected last month, and (d) as last drug injected

## 5.8 Summary of methamphetamine trends

- Price stable, with crystal methamphetamine ('ice') possibly more expensive than either powder or base.
- Perceived purity of powder medium to high and stable or fluctuating. Perceived purity of base medium to high and stable. Perceived purity of ice high and stable to increasing. Purity of seizures stable to decreasing, although seizure data may not be indicative of purity of ice.
- Availability easy to very easy and stable, although since 2002 availability of ice increased, and availability of powder decreased. Since 2002 ice and base more often purchased on the street, powder more often purchased in a dealer's home.
- Use of methamphetamine, especially ice, increased among IDU in 2003, possibly in response to diminishing heroin market.
- Little change in patterns of use among IDU, despite anecdotal evidence of an increase in smoking of ice.
- Continued high level of clandestine 'box lab' seizures.
- Reports of mental health and behavioural problems, including psychosis and violence, associated with regular methamphetamine use.
- Strong evidence that the heroin and methamphetamine markets in Queensland are heavily interdependent.

## 6. COCAINE

IDRS data from previous years indicate that cocaine is a relatively uncommon drug among IDU in Queensland. In this regard, little appears to have changed in 2003. In the following sections the price, purity, availability and use of cocaine in 2003 are considered, however given the small number of IDU reporting, these findings must be interpreted with caution.

## 6.1 Price

In 2003 only six IDU reported on the price of cocaine. One IDU reported purchasing a half gram of cocaine for \$100, and six reported purchasing a gram of cocaine for a median price of \$300 (range \$200 - \$450). This gram price is higher than that reported in 2002 (\$220), however as in previous years, very few IDU (8%) reported that the price of cocaine had increased in the last six months (see Table 29).

Quantity	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
<sup>1</sup> / <sub>2</sub> weight (\$)				100
Bought last 6 months (%)				1
Gram (\$)	250	200	220	300
Bought last 6 months (%)	5	11	7	6
Price change last 6 months (%)				
Don't know	56	20	29	39
Increasing	11	5	0	8
Stable	22	60	43	31
Decreasing	11	10	14	15
Fluctuating	0	5	14	8
% of IDU reporting	18	20	7	10

### Table 29: Median price of cocaine and reported price changes 2000 - 2003

## 6.2 Availability

Consistent with previous years, IDU In 2003 most frequently reported the availability of cocaine as 'difficult'; over half of those who responded reported that cocaine was currently either difficult or very difficult to obtain. No IDU in 2003 reported that cocaine had become easier to obtain in the last six months. Overall, IDU reports suggested that cocaine remained difficult to obtain in 2003, and that this had not changed in the last six months (see Table 30).

In contrast, some key informants in 2003 reported an increase in the availability and use of cocaine in south-east Queensland. One KI reported an increase in the use of cocaine (by snorting) on the Gold Coast, among professionals and business people. Another reported that while cocaine was primarily a "Gold Coast drug" there had been a slight increase in the injecting of cocaine in Brisbane. Two more KI also reported an increase in the use of cocaine in Brisbane, in some cases mixed with methamphetamine. One of these reported a growing perception that "speed is the poor man's cocaine", while the other described cocaine as a "club drug". One law enforcement KI reported an increase in the number of cocaine seizures being analysed by the government forensic laboratory, describing the typical consistency of cocaine as a "soapy powder".

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Current availability (%)				
Very easy	0	20	29	8
Easy	11	20	29	15
Difficult	39	60	29	46
Very difficult	17	0	0	8
Don't know	33	0	14	23
% of IDU responding	18	20	7	10
Availability change last 6 months (%)				
More difficult	11	30	14	15
Stable	44	40	29	31
Easier	6	10	14	0
Fluctuates	0	5	14	15
Don't know	39	15	29	39
% of IDU responding	18	20	7	10

Table 30: Availability of cocaine and changes in availability 2000 - 2003

IDU were asked where they typically scored cocaine, and how long it typically took them to score (see Table 31). Since 2000 the most common reported sources have been (a) a friend and (b) a dealer's home. No IDU in 2003 reported typically obtaining cocaine from a street dealer and almost half (46%) of those who responded nominated a friend as their source. Although only a small number of IDU responded, the proportion identifying a mobile dealer as their source increased linearly from 7% in 2000 to 23% in 2003, perhaps suggesting an increase in this method of distribution. Among those who responded in 2003, the typical time to score cocaine was reportedly 30 minutes – longer than in 2002 (16 minutes) but nevertheless quite comparable with the reported time to score heroin and methamphetamine in 2003 (see Tables 9 and 22).

	IDRS 2000 $(N = 101)$	IDRS 2001 $(N = 102)$	IDRS 2002 $(N = 104)$	IDRS 2003 $(N = 135)$
	(1N - 101)	(1N - 102)	(1N - 104)	(1N - 133)
Usual source last 6 months (%)				
Don't use	1	20	0	8
Street dealer	7	5	0	0
Dealer's home	21	15	50	15
Friend	64	50	17	46
Mobile dealer	7	10	17	23
Home delivery			0	0
Gift from friend			17	8
% of IDU responding	14	20	7	10
Usual time to score (minutes)				
Median			16	30
Range			0 - 60	1 - 1440

Table 31: Usual source of cocaine and time to score 2000 - 2003

<sup>1</sup> in 2000 all non-responses were classed as 'don't use cocaine'; to improve comparability with more recent data these responses (86% of the sample) have been omitted. Note that 2000 responses are nevertheless not directly comparable with those from later years.

IDU were also asked where they scored cocaine from 'last time' and how long it took them to score 'last time'. Responses to these questions did not differ substantively from those above, and are therefore not reported here.

## 6.3 Purity

In 2003 only 10% of IDU reported on the purity of cocaine. As in previous years there was little agreement among respondents with almost a third reporting the current purity as high, but almost one quarter reporting the purity as low. With regard to changes in purity, the modal response among IDU was that the purity of cocaine had not changed in the last six months. Nevertheless, almost one quarter (23%) reported that the purity had decreased over this time (see Table 32).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Current purity (%)				
High	17	25	29	31
Medium	17	50	29	15
Low	11	10	0	23
Fluctuates	0	0	14	8
Don't know	56	15	29	23
% of IDU responding	18	20	7	10
Purity change last 6 months $(\%)$				
Increasing	11	20	14	8
Stable	39	40	14	39
Decreasing	0	5	14	23
Fluctuating	0	5	29	0
Don't know	50	30	29	31
% of IDU responding	18	20	7	10

Figure 17 displays the number and purity of analysed cocaine seizures in Queensland from 1999/00 to 2002/03. Over this four-year period QPS and AFP made a total of 181 cocaine seizures (cf. 4,790 for methamphetamine, see Section 5.3), including 46 seizures during 2002/03. In 2002/03 the median purity of these seizures was 41.1%, with all seizures in this time made by QPS. While the figure shows the purity of cocaine decreasing during the last financial year, it is also evident that both the number and purity of analysed cocaine seizures in Queensland varies dramatically over time. It would thus be premature to draw any firm conclusions regarding either the availability of the purity of cocaine in Queensland, based on these data. Consistent with key informant reports regarding increased availability of cocaine (see Section 6.2), however, there has been a considerable increase in the total number of cocaine seizures in the last year, from 15 in 2001/02 to 46 in 2002/03.



Source: (ABCI, 2001, 2002; ACC, 2003, in press)

Figure 17. Median purity of amphetamine seizures analysed in Queensland, 1999/00-2002/03

#### 6.4 Use

#### 6.4.1 Cocaine use among IDU

Recent cocaine use among IDU in Queensland seems to be relatively atypical. Although 65% of IDU in 2003 reported having ever used cocaine, only 16% reported having used in the last six months, on a median of only 2.5 days. One in ten IDU in 2003 reported having injected cocaine in the last six months, on a median of 4.5 days. Only six IDU reported using cocaine more than once a month over the past six months, however two of these reported injecting cocaine on a daily basis over this time. Among IDU, injection was the most common route of administration of cocaine in 2003 (see Figure 18).



Figure 18. Prevalence of lifetime and recent cocaine use among IDU, 2000 - 2003

#### 6.4.2 Current patterns of cocaine use

Although only a small proportion of the IDU sample reported recent cocaine injection (10%), these IDU were distinguished by the frequency with which they injected. Across the entire sample 7% of IDU reported injecting more than three times a day, and 12% reported injecting 2-3 times a day, whereas among those who reported recent cocaine injection 29% reported injecting more than three times a day and 21% reported injecting 2-3 times a day. Overall, around one third (34%) of the full sample reported injecting daily or more often, compared to almost two thirds (64%) of recent cocaine injectors.

Among IDU in 2003 the most common route of administration of cocaine was by injection. Over half of the sample (54%) reported having injected cocaine at some point and one in ten reported recent injection (see Table 33). Not surprisingly, the next most common route of administration was snorting, while few IDU reported either swallowing or snorting cocaine. These data are generally consistent with those from previous years and suggest that with respect to routes of administration of cocaine among IDU, little has changed since 2000.

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Ever (%)				
Injected	36	43	49	54
Smoked	10	13	5	10
Snorted	31	41	26	32
Swallowed	11	17	5	10
Last 6 months (%) <sup>a</sup>				
Injected	8	22	14	10
Smoked	4	5	2	1
Snorted	8	12	5	8
Swallowed	2	7	2	2

Table 33: Routes of administration of cocaine by IDU, 2000 - 2003

In 2003 nearly all IDU who reported recent cocaine use reported using powder (95%) rather than crack (5%). In fact the proportion of IDU reporting recent crack use has dropped considerable since 2001, when 32% of the sample identified crack as the main form of cocaine they used (see Table 34). Given the small numbers reporting on cocaine use each year only tentative conclusions about cocaine forms can be made, however on the basis of these data it appears that use of crack cocaine among IDU is minimal and, perhaps, in decline.

	•			
	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Used in last 6 months (%)				
Powder	15	27	12	15
Crack	3	10	2	2
Form most used last 6 months (%) <sup>a</sup>				
Powder		68	86	95
Crack		32	14	5

	Table 34: Forms of coca	ne used by	IDU in last	six months	, 2000 - 2	2003
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<sup>a</sup> valid percentages are shown

### 6.5 Cocaine related harms

#### 6.5.1 Law enforcement

It was noted above that among recent cocaine injectors, there was some evidence of an increase in the frequency of injection. Among those IDU interviewed in 2003, recent cocaine use was also associated with an increased likelihood of dealing drugs<sup>4</sup> (79% of recent cocaine injectors vs 33% of other IDU) and engaging in sex work<sup>5</sup> (29% of recent cocaine injectors vs 7% of other IDU).

#### 6.5.2 Health

IDU in 2003 who reported recent cocaine injection also reported injecting significantly more frequently than those who had not injected cocaine recently<sup>6</sup>. These users were also significantly more likely to report that others had used a needle after them in the last month<sup>7</sup>: 29% of recent cocaine injectors reported sharing their needle, compared with 20% of those who had not injected cocaine recently. Again, however, with such a small proportion of the IDU sample reporting recent cocaine use, it is difficult to interpret these differences meaningfully. With a small but possibly growing number of cocaine users and injectors in Queensland, it may be timely to further investigate the prevalence and patterns of cocaine use in this jurisdiction, as they develop over time.

 $^{7}\chi^{2}(4) = 18.59, p = .001$ 

 $<sup>^{4}</sup>$ <u>t</u> (132) = -4.08, <u>p</u> < .001

 $<sup>^{5}\</sup>chi^{2}(1) = 7.48, p = .006$ 

 $<sup>^{6}</sup>$ <u>t</u> (132) = -3.78, <u>p</u> < .001

## 6.6 Summary of cocaine trends

- Cocaine use among IDU in Queensland remains minimal, despite some evidence of a small increase in use and injection. Anecdotal reports of more frequent cocaine use among non-injectors.
- Price appears to be stable to increasing. Median price for a gram of \$300.
- Perceived purity stable but little agreement among IDU. Purity of seizures fluctuates, however number of seizures increasing.
- Availability stable and difficult, despite some anecdotal evidence of increased availability and use in party drug scene. Users typically obtain cocaine from a friend.
- Little change in patterns of use among IDU with injection as modal route of administration. Cocaine injection associated with increased incidence of some criminal activities, and with increased frequency of injection and needle sharing.

## 7. CANNABIS

## 7.1 Price

The cannabis market in Queensland continues to be distinguished by its stability over time. In 2003 65% of IDU who responded reported that the price of cannabis had been stable over the last six months. A further 20% reported that the price was increasing while only 10% reported that the price was decreasing (see Table 35).

As in 2002, IDU reported that hydroponic cannabis was more expensive than 'bush' cannabis: For example, the median reported price for a <sup>1</sup>/<sub>4</sub> ounce of 'hydro' was \$90, while the median price for a comparable quantity of bush was only \$72.50. The median reported price for an ounce of hydro was \$310, compared with \$240 for bush. On average, reported prices for quantities of bush cannabis were about one third less than those for hydroponically grown cannabis. Nevertheless, IDU more often reported buying quantities of hydro than bush.

Quantity	Hydro	Hash	Bush
Cap (hash oil) (\$)		50	
Bought last 6 months (%)		4	
Gram (\$)	25	22.50	15
Bought last 6 months (%)	23	3	9
2 grams (\$)	25		25
Bought last 6 months (%)	9		5
3 grams (\$)	50		25
Bought last 6 months (%)	9		4
Bag (\$)	50		50
Bought last 6 months (%)	10		4
<sup>1</sup> / <sub>4</sub> ounce (\$)	90		72.50
Bought last 6 months (%)	34		12
<sup>1</sup> / <sub>2</sub> ounce (\$)	160		140
Bought last 6 months (%)	12		4
Ounce (\$)	310		240
Bought last 6 months (%)	25		24
Price change last 6 months (%)			
Don't know		3	
Increasing		20	
Stable		65	
Decreasing		10	
Fluctuating		2	
% of IDU reporting		69	

### Table 35: Median price of cannabis and reported price changes 2003

While one in five IDU who responded in 2003 reported that the price of cannabis had increased over the preceding six months, there was some evidence of a decrease in the price of cannabis since 2000. IDU in previous years were not asked to distinguish between hydro and bush prices, however from 2000 to 2003 there appears to have been a reduction in the price of two gram (\$50 - \$25), quarter ounce (\$100 - \$90/\$72.50), half ounce (\$177.50 - \$160/\$140) and possibly ounce (\$300 - \$310/\$240) quantities of cannabis (see Table 36).

Quantity	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
				Hydro Bush
1 gram (\$)	25	22.50	25	25 15
Bought last 6 months (%)	29	25	9	23 9
2 grams (\$)	50	30	25	25 25
Bought last 6 months (%)	26	20	5	9 5
Bag (\$)	50	50	50	50 50
Bought last 6 months (%)	51	30	18	10 4
bought last o monuis (70)	51	50	10	10 4
<sup>1</sup> / <sub>4</sub> ounce (\$)	100	90	90	90 72.50
Bought last 6 months (%)	52	51	39	34 12
14 00000 (\$)	177 50	170	160	160 140
Powelst last $(p)$	24	26	100	100 140
Bought last o months (76)	34	30	10	12 4
		Hydro Bush		
Ounce (\$)	300	320 237.50	300	310 240
Bought last 6 months (%)	29	34 12	36	25 24
Price change last 6 months (%)				
Dop't know	24	0	4	3
Increasing	10	11	т 11	20
Stable	56	74	74	20 65
Decreasing	10	5	8	10
Eluctuation	0	J 1	0	2
1 of IDI reporting	100	1	4 77	2 60
70 of IDU reporting	100	80	/ /	09

Table 36: Median price of cannabis and reported price changes 2000 - 2003

## 7.2 Availability

Consistent with previous years, the vast majority of IDU in 2003 (88%) reported that cannabis was either easy or very easy to obtain. Almost two thirds (60%) reported that the availability of cannabis had been stable over the last six months and more than one in five (22%) reported that cannabis had become easier to obtain over this time (see Table 37).

Table 37: Availability of cannabis an	d changes in availability 2	2000 - 2003
---------------------------------------	-----------------------------	-------------

	IDRS 2000 $(N = 101)$	IDRS 2001 $(N = 102)$	IDRS 2002 $(N = 104)$	IDRS 2003 $(N = 125)$
	(1N - 101)	(1N - 102)	(1N - 104)	(IN - 155)
Current availability (%)				
Very easy	35	55	60	45
Easy	29	40	31	43
Difficult	14	2	8	9
Very difficult	4	1	1	2
Don't know	19	1	0	1
% of IDU reporting	100	81	77	69
Availability change last 6 months (%)				
More difficult	13	7	9	12
Stable	60	74	78	60
Easier	6	8	9	22
Fluctuates	1	8	5	4
Don't know	21	2	0	2
% of IDU reporting	100	81	77	69

Again consistent with previous years, IDU in 2003 most frequently reported obtaining cannabis from a dealer's home (26%) or from a friend (38%). Since 2000, however, there has been an increase in the proportion of IDU reporting usually obtaining cannabis from a mobile dealer or by 'home delivery' (see Table 38).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Usual source last 6 months (%)				
Don't use	18	4	0	1
Street dealer	9	2	10	12
Dealer's home	20	27	35	26
Friend	43	42	35	38
Grow your own	1	2	0	2
Mobile dealer	0	0	8	12
Home delivery	0	0	9	5
Gift from friend	2	5	3	1
Other	7	18	0	3
Usual time to score (minutes)				
Median			20	20
Range			0 - 120	1 - 4320

Table 38: Usual source of cannabis and time to score 2000 - 2003

Since 2002 IDU have also been asked to nominate the 'original source' of the cannabis they last used, and to indicate how sure they are of the source. In 2003 40% of respondents nominated a large scale cultivator or supplier – slightly fewer than in 2002 (47%). Conversely, the proportion of respondents nominating a small time back yard user/grower as their source increased from 2002 (19%) to 2003 (33%). The vast majority of IDU who responded in 2003 were either moderately sure (16%) or very sure (78%) of the source they nominated (see Table 39).

Table 39: Usual	production	source of	cannabis	2000 - 2	2003
-----------------	------------	-----------	----------	----------	------

	IDRS 2002	IDRS 2003
	(N = 104)	(N = 135)
Production source (%)		
Don't know	32	25
Grew my own	0	2
Small time back yard user/grower	19	33
Large scale cultivator / supplier	47	40
Other	2	0
% of IDU reporting	76	69
Confidence in source (%)		
Very sure	62	78
Moderately sure	31	16
Moderately unsure	6	4
Very unsure	2	2
% of IDU reporting	50	50

## 7.3 Potency

Consistent with previous years, most IDU in 2003 reported the current potency of cannabis to be either high (54%) or medium (33%). Three quarters of those who responded in 2003 reported that the potency of cannabis had been stable over the past six months, with a further 11% reporting that the potency had increased over this time (see Table 40).

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003
	(N = 101)	(N = 102)	(N = 104)	(N = 135)
Current potency (%)				
High	57	60	64	54
Medium	19	27	26	33
Low	2	0	6	7
Fluctuates	22	7	4	5
Don't know	0	6	0	1
% of IDU reporting	100	81	77	69
Potency change last 6 mths (%)				
Increasing	11	12	16	11
Stable	54	71	64	75
Decreasing	3	2	6	9
Fluctuating	7	6	10	3
Don't know	26	8	4	2
% of IDU reporting	100	81	77	69

Table 40: Potency of cannabis and changes in potency according to IDU 2000 - 2003

## 7.4 Use

## 7.4.1 Cannabis use among IDU

It was noted in 2002 (Kinner & Fischer, 2003) that although the proportion of IDU in Queensland using cannabis was not increasing, the frequency of use among those who did use had increased. This trend seems to have continued in 2003 with the median days used in the last six months, among those who had used, increasing from 90 in 2000, to 100 in 2001, 120 in 2002, and most recently, 125 days in 2003. In 2003 35% of IDU reported smoking cannabis on a daily basis over the past six months. This trend towards increasing frequency of use was also reported by thee key informants and is also reflected in the proportion of IDU reporting (a) daily use of cannabis and (b) use of cannabis the day before interview (see Figure 19).

While the frequency of use of cannabis therefore seems to have increased, the proportion of IDU using cannabis dropped slightly from 82% in 2002 to 76% in 2003. The proportion of IDU nominating cannabis as their drug of choice also dropped over this period, from 8% in 2002 to 6% in 2003.



Figure 19. Patterns of cannabis use among IDU, 2000 - 2003

#### 7.4.2 Current patterns of cannabis use

In 2003 the most commonly used form of cannabis among IDU was hydroponic, with 75% of those who had used cannabis recently nominating hydro as the form most used. This is consistent with the reports of two key informants, who stated that many users will purchase only hydroponic head. A further 24% nominated bush cannabis as the form most used, while one IDU reported mostly using hash. Nevertheless, over two thirds of IDU reported having used bush cannabis at least once in the last six months, with substantial minorities also reporting recent use of hash (17%) and hash oil (13%) (see Table 41).

	IDRS 2000 (N = 101) <sup>b</sup>	IDRS 2001 (N = 102) c	IDRS 2002 (N = 104)	IDRS 2003 (N = 135)
Used in last 6 months (%)				
Hydro	83 (head)	78	77	75
Bush	48 (leaf)	74	68	68
Hash	38	42	24	17
Hash oil	13	24	16	13
Form most used last 6 months (%) a				
Hydro		78	85	75
Bush		27	15	24
Hash		1	0	1
Hash oil		1	0	0

Table 41: Forms of cannabis used by IDU in last six months, 2000 - 2003

<sup>a</sup> valid percentages are shown;

<sup>b</sup> instead of hydro and bush, IDU in 2000 were asked about cannabis head and leaf. These types are not comparable;

<sup>c</sup> percentages do not add to 100 as question was not asked in a forced-choice format in 2001
## 7.5 Cannabis related harms

#### 7.5.1 Law enforcement

While there was little evidence in the 2003 IDRS of an association between cannabis use and criminal activity, particularly violent crime, one key informant commented on the potential for violence associated with the organised production of cannabis, describing an arrangement whereby a cannabis 'broker' would fund a large number of individuals to each grow a small crop of hydroponically grown cannabis, in their home. The key informant alleged that at least three such organised 'cartels' were in operation in southeast Queensland, and that the groups involved had a reputation for using violence. It was not possible to verify this report with other data available to the IDRS.

#### 7.5.2 Diversion

The Queensland Illicit Drug Diversion Initiative (QIDDI) is funded under the COAG Illicit Drug Diversion Initiative and has two components:

- (a) the Police Diversion Program, under which eligible<sup>8</sup> individuals who are arrested for or questioned about a minor cannabis offence (i.e., possession of not more than 50 grams of cannabis, or possession of cannabis smoking implements), may opt to attend a Drug Diversion Assessment Program (DDAP) rather than being charged; and
- (b) the Illicit Drugs Court Diversion Program, under which eligible<sup>9</sup> individuals who have been charged with possession of a small amount of an illicit drug for personal use may be sentenced to attend a compulsory Drug Assessment and Education Session (DAES); if the individual attends and completes the DAES, no conviction is recorded.

The Police Diversion Program commenced on 24 June 2001 and as at 31 December 2003 a total of 16,309<sup>10</sup> referrals had been made. As Figure 20 shows, there has been a gradual increase over the course of the program in the frequency of referral, with 495 referrals in December 2001, 590 referrals in December 2002 and 633 referrals in December 2003. Despite this, two key informants claimed that some Queensland police officers are quite pessimistic about the QIDDI program.

For the purposes of comparison, Figure 20 also shows the number of referrals made from the Illicit Drugs court Diversion Program since the pilot program started on 28 March 2003. Up to 31 December 2003 there has been an average of just over 70 referrals each month, with a total of 652 referrals being made during this time.

<sup>&</sup>lt;sup>8</sup> Eligible individuals must also have (a) not committed another indictable offence in circumstances related to the minor drugs offence, (b) not previously been convicted of an offence involving violence against another person, (c) admitted to having committed the offence during an electronically recorded interview, and(d) not been offered diversion on a previous occasion (ATODS, 2004a).

<sup>&</sup>lt;sup>9</sup> Eligible individuals must also have (a) not previously been convicted of (or are currently facing) charges of a sexual nature or a drug offence dealt with on indictment, (b) not previously been convicted of an indictable offence involving violence against another person (other than certain offences specified in the *Drug Diversion Amendment Act 2002*), and (c) been offered a diversion on no more than one previous occasion (including Police Diversion) (ATODS, 2004a).

<sup>&</sup>lt;sup>10</sup> This figure includes 43 clients whose referrals were subsequently cancelled.



Source: ATODS, Queensland Health

# Figure 20. Number of QIDDI referrals by police and courts, by month, June 2001 – Dec 2003

#### 7.5.3 Health

Four key informants in 2003 commented at length on health and treatment issues associated with cannabis use. One noted that cannabis users are often reticent to accessed treatment services for help with their use, due to a perception that "it's just pot" and that they would not be taken seriously. Despite this perception, three KI in 2003 expressed concern over the incidence of psychotic symptoms among regular cannabis users. One KI claimed that some users of hydroponic cannabis were in fact starting to seek out less potent forms of the drug (particularly bush), in response to the perceived negative effects associated with the more potent hydroponic form.

#### 7.6 Summary of cannabis trends

- Cannabis market in Queensland continues to be distinguished by its stability over time. Used by the vast majority of IDU.
- Price stable and higher for hydroponic cannabis than for 'bush' cannabis.
- Perceived potency medium to high and stable. Anecdotal reports of some users finding potency of hydroponic cannabis too high.
- Availability easy to very easy and stable or easier to obtain. Cannabis typically sourced from a friend or a dealer's home. Usual production source usually a large scale cultivator or a small time 'back yard' grower.
- Three quarters of IDU mainly use hydroponic cannabis, although the majority also use bush occasionally.
- Consistent increase in the number of police diversion for cannabis possession since June 2001.

## 8. OPIOIDS

### 8.1 Methadone

In 2003 almost one in five IDU (18%) reported recent use of illicit methadone (i.e., methadone obtained other than by a prescription in the user's name). Furthermore, almost one in three IDU (30%) reported having injected illicit methadone at some point, and half of these (14%) reported having done so in the last six months. Surprisingly, an even larger proportion of IDU (19%) reported recent injection of licit methadone (i.e., methadone obtained by a prescription in the user's name).

By contrast, while more than one in five IDU (22%) reported ever using illicit physeptone, only 4% reported using illicit physeptone recently. The majority of these (3%) reported having injected illicit physeptone at least once recently. Only 1% of IDU reported recent use of licit physeptone, however 1% also reported injection of licit physeptone recently (see Table 42).

Table 42. Licit and illicit use of methadone and	l physeptone among	IDU in 2003
--	--------------------	-------------

	Methadone		Physe	eptone
	Licit	Illicit	Licit	Illicit
Ever used (%)	44	39	13	22
Used last 6 months (%)	27	18	1	4
Ever swallowed (%)	39	19	7	7
Swallowed last 6 months (%)	24	9	0	0
Ever injected (%)	30	30	10	19
Injected last 6 months (%)	19	14	1	3
Median days injected last 6 months	24	10	6	11.5
Median days used last 6 months	165	6	6	3

From 2001 to 2003 there was evidence of an increase in the injection of methadone, with 14% of IDU in 2001, 19% of IDU in 2002 and 26% of IDU in 2003 reporting recent injection of either methadone syrup or physeptone tablets (either licitly or illicitly obtained). Nevertheless, the overall proportion of IDU reporting licit or illicit use of methadone or physeptone was lower in 2003 than in previous years, such that among those who did report use, a larger proportion also reported injecting (see Figure 21).



Figure 21. Proportion of IDU reporting use and injection of methadone and physeptone, 2000 – 2003

#### 8.2 Buprenorphine

In 2003 one in five IDU reported having used licit buprenorphine (i.e., buprenorphine obtained via a prescription in the user's name) at some point in their life, and 16% reported using licit buprenorphine in the last six months. Approximately one third of these (5%) reported having injected licit buprenorphine recently. By contrast, only 7% of IDU reported recent use of illicit buprenorphine, but all of these IDU reported recent injection.

Perhaps reflecting the more consistent availability of licit buprenorphine, among those who reported recent injection of buprenorphine, licit buprenorphine was reportedly injected more often (median 10 days) than was illicit buprenorphine (median 3 days) (see Table 43). Of the 14 IDU who had injected buprenorphine recently, 10 (71%) were male.

	Buprenorphine		
	Licit	Illicit	
Ever used (%)	20	13	
Used last 6 months (%)	16	7	
Ever swallowed (%)	16	6	
Swallowed last 6 months (%)	15	5	
Ever injected (%)	6	10	
Injected last 6 months (%)	5	7	
Median days injected last 6 months	10	3	
Median days used last 6 months	30	5.5	

Table 43. Licit and illicit use of buprenorphine among IDU in 2003

From 2002 to 2003 there was little change in the proportion of IDU reported recent use of licit buprenorphine, however over the same time period the proportion reporting recent use of illicit buprenorphine increased slightly from 7% to 10%, while the proportion reporting recent injection of buprenorphine doubled (from 5% to 10%) (see Figure 22).



Figure 22. Proportion of IDU who reported (a) licit or illicit use of buprenorphine and (b) injection of buprenorphine, 2002 - 2003

#### 8.3 Morphine

In 2002 the IDRS identified an increase in the injection of morphine among IDU in Queensland (Kinner & Fischer, 2003). This trend seems to have continued into 2003 with 40% of IDU in 2003 reporting recent injection of morphine, compared with 32% in 2002 and 31% in 2001. This increase in the injection of morphine among IDU is also reflected in a range of other indicators: From 2001 to 2003 there were increases in the proportion of IDU identifying morphine as the drug first injected (from 0% to 2%), the drug most injected in the last month (from 1% to 4%), the last drug injected (from 0% to 7%) and drug of choice (from 0% to 1%) (see Figure 23). In the context of a sustained reduction in the availability of heroin in Queensland (Topp et al., 2003), morphine may be an increasingly attractive alternative opiate for IDU whose drug of choice is heroin. This view was endorsed by six key informants, three of whom reported that injection of MS Contin® in particular had increased in the last 12 months. One KI noted that MS Contin<sup>®</sup> was of more predictable quality than heroin, and was also easier to obtain on the illicit market. Another two observed that whereas half a gram of heroin might cost \$200 or more, a comparable quantity of morphine (in the form of a 50mg MS Contin<sup>®</sup> or 'grey nurse') currently costs only \$50. In light of these reports, it is not difficult to appreciate why some IDU may choose to inject morphine rather than heroin.



Note: The proportion of IDU reporting injection of morphine in the last six months has been divided by ten, to improve comparability.

#### Figure 23. Patterns of use and injection of morphine among IDU, 2001 - 2003

Table 44 details patterns of use of morphine among IDU from 2001 to 2003. In 2003 almost all IDU (95%) who reported using morphine recently also reported recent injection. By contrast, consistent with previous years, only a minority (31% in 2003) of those who reported recent morphine use reported having swallowed the drug. Evidently, morphine continues to be an attractive alternative opiate for injection among IDU in Queensland, with the overwhelming majority of IDU (92% in 2003) choosing to inject MS Contin<sup>®</sup>.

With increasing use of morphine as an opiate for injection, one might expect to see an increase in the incidence of overdose involving morphine. Although the numbers are small, IDRS data from 2002 and 2003 support this prediction, with the proportion of IDU reporting having overdosed on morphine ever, or in the last 12 months, doubling in this time (see Table 45). An increase in morphine overdose among IDU in Queensland is also suggested by a substantial decrease in the median number of months since 'last morphine overdose' – from 52 months in 2002 to only 12 months in 2003.

	IDRS 2001	IDRS 2002	<b>IDRS 2003</b>
	( <u>N</u> = 102)	( <u>N</u> = 104)	( <u>N</u> = 135)
Drug first injected (%)	0	1	2
Drug of choice (%)	0	1	1
Drug most often injected last month (%)	1	5	4
Drug last injected (%)	0	6	7
Patterns of use (%)			
Ever used	61	71	75
Ever injected	54	68	69
Injected last 6 months	31	32	40
Ever smoked	3	1	2
Smoked last 6 months	0	0	1
Ever snorted	1	0	0
Snorted last 6 months	1	0	0
Ever swallowed	22	30	33
Swallowed last 6 months	13	19	13
Used last 6 months	35	39	42
Median days used last 6 months	5	11	7
Median days injected last 6 months			8.5
Form of morphine used last 6 months (%)			
Licit	6	11	12
Illicit	28	32	36
Form of morphine most used last 6 months (%) <sup>1</sup>			
Licit	15	18	20
Illicit	82	82	80
Main brand of morphine used last 6 months (%) <sup>1</sup>			
OxyContin <sup>®</sup>		3	0
MS Contin ®		53	92
Endone <sup>®</sup>		3	0
Kapanol <sup>®</sup>		8	3
Morphine Sulphate ®		5	3
'David Ball'		3	0
missing/other		26	3

## Table 44. Patterns of use of morphine among IDU, 2001 - 2003

Table 45. Self-reported morphine ov	verdose among IDU 2002 - 2003
-------------------------------------	-------------------------------

	IDRS 2002 ( <u>N</u> = 104)	IDRS 2003 ( <u>N</u> = 135)
Ever overdosed on morphine (%)	2	4
Overdosed on morphine last 12 months (%)	1	2
Median months since last morphine OD	52	12

## 9. OTHER DRUGS

### 9.1 Ecstasy and other party drugs

The prevalence of ecstasy (MDMA) use among IDU from 2000 to 2003 is illustrated below in Figure 24. Although ecstasy use is not traditionally associated with injecting drug users, almost a third of IDU in 2003 (31%) reported recent use of ecstasy and 13% reported recent injection of ecstasy, on a median of three days in six months (i.e., once every two months). IDU who had injected ecstasy recently were significantly younger (mean age = 28.22 years) than those who had not (mean age = 33.47 years)<sup>11</sup>, and were also less likely to have a prison history (28%) than those who had not injected ecstasy recently, recent ecstasy injectors were significantly more likely to report last injecting methamphetamine (78% vs 51%) and significantly less likely to report last injecting heroin (17% vs 34%) or morphine (0% vs 9%)<sup>12</sup>.

In light of the apparent association between use of ecstasy and use of other drugs among IDU, it may be instructive to compare trends in the use of ecstasy over this four-year period with those for heroin (Figure 5), methamphetamine (Figure 14) and, to a lesser extent, cocaine (Figure 18). While heroin use decreased in 2001, increased in 2002 and decreased again in 2003, the inverse was true of methamphetamine, cocaine and, as Figure 24 shows, ecstasy. On the basis of this evidence it appears that, as Topp, Degenhardt and Day (2003) have suggested, a sustained reduction in the availability of heroin has resulted in an increase in the use of a range of alternative stimulants, including ecstasy.

Increased ecstasy use in Queensland was also reported by a number of key informants in 2003. One law enforcement KI reported that at least three pill presses had been seized in Queensland in the last six months, while another claimed that ecstasy was sometimes imported into Australia in powder form, then pressed into tablets locally. Another KI asserted that while most ecstasy was imported into Australia, there was definitely some local production occurring. Finally, two KI reported that a substantial proportion of pills sold as ecstasy contain no MDMA, but instead a combination of methamphetamine, caffeine and ketamine, designed to simulate the effects of MDMA.

Given that the focus of the IDRS is on injecting drug use, key informants in 2003 made little reference to other party drugs. Nevertheless, three key informants stated that there was still a 'niche market' for Fantasy/GHB use, while another reported an increase in the availability of both Fantasy and ketamine in 2003. Another KI reported an increase in the availability of 1-4B, a chemical precursor to GHB which is at present both readily available and legal to possess in Queensland. Finally, one KI reported a prolonged decrease in the availability of LSD, and a corresponding increase in the availability and use of tryptamines (synthetic hallucinogens), particularly a form with the street name 'foxy'.

<sup>&</sup>lt;sup>11</sup> <u>t</u> (133) = 2.25, <u>p</u> < .05

 $<sup>^{12}\</sup>chi^2(5) = 12.50, p < .05$ 



Figure 24. Prevalence of recent use and injection of ecstasy (MDMA) among IDU, 2000 - 2003

#### 9.2 Benzodiazepines

Patterns of use of benzodiazepines among IDU from 2000 to 2003 are shown in Table 46. In 2003 48% of IDU reported having used benzodiazepines in the last six months, compared with 56% in 2002 and 64% in 2001. This reduction in benzodiazepine use is consistent with the reports of one key informant, who attributed the reduction to increased controls on the supply of 10 mg Temazepam<sup>®</sup> gel capsules. Presumably reflecting the on-going impact of this restriction, very few IDU in 2003 (5%) reported typically using Temazepam<sup>®</sup>, while the proportion reporting typically using Valium<sup>®</sup> increased substantially from 39% in 2002 to 81% in 2003. In response to this restriction, IDU appear to have moved to Valium<sup>®</sup> as the benzodiazepine of choice.

Among those who reported recent use of benzodiazepines in 2003, use was typically sporadic: IDU reported using on a median of 16 days in six months, and injecting benzodiazepines on a median of 15 days in six months. Nevertheless, nine IDU (7%) reported daily benzodiazepine use, and one IDU (a 31 year old female who also reported daily morphine injection) reported daily benzodiazepine injection, over the past six months.

The most common route of administration of benzodiazepines among IDU in 2003 was oral: 47% of IDU reported swallowing benzodiazepines in the last six months. Only 11% of IDU reported recent injection, and 4% of IDU reported smoking benzodiazepines recently. The proportion of IDU reporting recent injection of benzodiazepines dropped substantially from 25% in 2002 and 27% in 2001, again possibly as a consequence of the restriction of Temazepam<sup>®</sup> gel capsules.

Despite a reduction in the proportion of IDU reporting recent benzodiazepine injection, there was no evidence of a reduction in injection-related problems among those who did inject. Compared to IDU who had not injected benzodiazepines recently, those who had done so more often reported abscesses and infections (15% vs 27%), prominent scarring

and bruising (35% vs 60%), and difficulty injecting (32% vs 60%). Benzodiazepine-related injection problems are considered further in Section 10.4 on page 76.

	<b>IDRS 2000</b>	<b>IDRS 2001</b>	<b>IDRS 2002</b>	<b>IDRS 2003</b>
	( <u>N</u> = 101)	( <u>N</u> = 102)	<u>(N</u> = 104)	( <u>N</u> = 135)
Drug first injected (%)	1	0	0	1
Drug of choice (%)	0	0	0	2
Drug most often injected last month (%)	0	0	0	0
Drug last injected (%)	0	0	1	0
Patterns of use (%)				
Ever used	75	77	76	71
Ever injected	25	44	52	35
Injected last 6 months	12	27	25	11
Ever smoked	4	8	2	4
Smoked last 6 months	1	2	2	1
Ever snorted	1	2	2	1
Snorted last 6 months	1	1	0	0
Ever swallowed	73	72	71	64
Swallowed last 6 months	56	59	52	47
Used last 6 months	60	64	56	48
Median days used last 6 months	20	14	22	16
Median days injected last 6 months				15
Used at all in last 6 months (%)				
Benzodiazepines – licit	60 <sup>3</sup>	41	41	33
Benzodiazepines – illicit		41	36	26
Form most used last 6 months (%)				
Benzodiazepines – licit		56	61	68
Benzodiazepines – illicit		43	39	32
% of IDU responding		60	59	42
Main brand of benzodiazepine used last 6				
months (%) <sup>1, 2</sup>				
Rohypnol ®	13	9	0	0
Temazepam	26	21	29	5
Valium ®	43	50	39	81
% of IDU responding	60	57	57	30

Table 46. Forms of benzodiazepine used by IDU in the last 6 months, 2000 - 2003

<sup>1</sup> only brands nominated by  $\geq 10\%$  of respondents in any year are shown

<sup>2</sup> where IDU in 2001 nominated > 1 'main brand', the first brand nominated is counted

<sup>3</sup> IDU in 2000 were not asked to specify whether the use was licit or illicit

#### 9.3 Anti-depressants

Patterns of antidepressant use among IDU from 2000 to 2003 are shown below in Table 47. Overall, there appears to have been little change in the use of antidepressants among IDU during this time. In 2003 28% of IDU reported recent use of antidepressants although none reported recent injection. The majority of those who reported recent antidepressant use reported obtaining them licitly and consistent with this, use was on a median of 180 days in six months, presumably indicating use as per the prescriber's instructions. This high rate of licit antidepressant use among IDU is indicative of significant rates of depression among this group (see also Section 10.6 below). IDU in 2003 reported using a range of antidepressant medications including Aropaz <sup>®</sup>, Zoloft <sup>®</sup>, Cipromyl <sup>®</sup> and Effexor <sup>®</sup>.

	<b>IDRS 2000</b>	<b>IDRS 2001</b>	IDRS 2002	IDRS 2003
	( <u>N</u> = 101)	<u>(N</u> = 102)	<u>(N</u> = 104)	( <u>N</u> = 135)
Drug first injected (%)	0	0	0	0
Drug of choice (%)	0	0	0	0
Drug most often injected last month (%)	0	0	0	0
Drug last injected (%)	0	0	0	0
Patterns of use (%)				
Ever used	44	54	55	44
Ever injected			4	1
Injected last 6 months			2	0
Ever swallowed			55	37
Swallowed last 6 months			28	28
Used last 6 months	24	28	28	28
Median days used last 6 months	68	41	40	180
Used at all in last 6 months (%)				
Antidepressants – licit	24 <sup>1</sup>	21	22	24
Antidepressants – illicit		11	6	5
Form most used last 6 months (%)				
Antidepressants – licit		72	79	87
Antidepressants – illicit		24	21	13
% of IDU reporting		28	28	28
Main brand of antidepressants used last 6				
months $(\%)^2$				
Aropax ®	14	15	0	42
Lovan <sup>®</sup>	14	0	0	0
Zoloft <sup>®</sup>	23	23	14	12
Cipromyl <sup>®</sup>	18	12	7	12
Effexor ®	14	4	17	12
% of IDU responding	22	25	28	19

Table 47.	Forms	of antider	oressant	used by	IDU :	in the	last 6	months,	2000 -	- 2003
				1				,		

<sup>1</sup> IDU in 2000 were not asked to specify whether the use was licit or illicit

<sup>2</sup> only brands nominated by  $\geq 10\%$  of respondents in any year are shown

### **10 ASSOCIATED HARMS**

#### **10.1 Blood borne viruses**

People with a history of injecting drug use are at significantly greater risk of acquiring hepatitis B (HBV), hepatitis C (HCV) and HIV than the general population (NCHECR, 2003), because blood borne viruses (BBV) can be transmitted via the sharing of needles, syringes and equipment. In Australia, the state and territory health departments report viral hepatitis notifications to the National Notifiable Diseases Surveillance System (NNDSS) and HIV notifications to the National Centre for HIV Epidemiology and Clinical Research (NCHECR) for monitoring purposes. Both the NNDSS and the NCHECR differentiate between incident infections (i.e. newly acquired infections) and unspecified infections (i.e. those where the timing of disease acquisition is unknown).

Trends in the total number of notifications (i.e. unspecified and incident) for hepatitis A (HAV), HBV and HCV in Queensland from 1991 to 2003 are shown in Figure 25. HBV reporting has remained relatively stable over this time, with around 800 to 1000 new cases reported each year. By contrast, HAV notifications dropped sharply in 1999 and have continued to decline slowly since, from 133 in 2000 to only 46 in 2003. Similarly, HCV notifications have declined since 2000 (3,395 notifications), with 2,272 notifications in Queensland during 2003.



Source: Communicable Diseases Network - Australia - National Notifiable Diseases Surveillance System

Figure 25. Total number of HAV, HBV and HCV infection notifications (incident and unspecified) in QLD, 1991 - 2003<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> *Notes on interpretation:* The notifications compiled by the NNDSS may be influenced by a number of factors that should be considered when interpreting the data. Since no personal identifiers are collected in records, duplication in reporting may occur if patients move from one jurisdiction to another and were notified in both In addition, notified cases are likely to only represent a proportion of the total number of cases that occur. This proportion may vary between diseases, between jurisdictions, and over time.

Trends in the number of incident notifications for HIV in Queensland from 1993 to 2002 are shown in Figure 26. These data show that HIV reporting has remained relatively stable (approx. 25 cases per year) in Queensland over time, however there was an increase in reporting in 2002 (38 cases). Transmission of HIV in Australia continues to be mainly though sexual contact between men, accounting for 92% of incident HIV cases in 2002. A relatively small proportion of incident HIV (3.2%) was attributed to history of IDU for the same period in Australia (NCHECR, 2003).



Source: National Centre for HIV Epidemiology and Clinical Research (2003 HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia: Annual Surveillance Report, page 38 - Table 1.2.3)<sup>14</sup>

# Figure 26. Number of notifications of incident HIV infection in Queensland, 1993 - 2002

Trends in the prevalence of HCV and HIV infection among clients attending NSP clinics in Queensland from 1995 to 2001 are shown in Figure 27. Between 29% and 48% of clients attending NSPs in Queensland from 1995 to 2002 tested positive to HCV, consistent with state health authority data indicating that injecting drug use is the main risk factor for HCV. Despite a decrease in HCV notifications across Queensland since 2000, there is evidence of an increase in the prevalence of HCV among NSP clients between 1998 (29%) and 2002 (48%). One IDRS key informant in 2003 observed that while IDU are in general well educated about HCV risks, many do not behave accordingly. Another KI asserted that with such a high proportion of IDU HCV positive, some IDU are getting "a bit lax" about needle sharing.

By contrast, rates of HIV infection among IDU appear to be low and stable over time: The Australian NSP Survey found that between 1995 and 2002 only 0.8-1.9% of clients attending NSPs in Queensland tested positive to HIV (Buddle, Zhou, & MacDonald, 2003).

<sup>&</sup>lt;sup>14</sup> <u>http://www.med.unsw.edu.au/nchecr/Downloads/03ansurvrpt.pdf</u>



Source: Buddle, Zhou and MacDonald (2003)

Figure 27. Prevalence of HCV and HIV infection amongst NSP clients in Queensland, 1995 - 2002

#### 10.2 Sharing of injecting equipment among IDU

Self-reported rates of needle risk-taking behaviour among IDU from 2000 to 2003 are shown in Table 48. In 2003 13% of IDU reported using a needle after someone else at least once in the last month and 21% reported that someone else had used a needle after them. Among those who did report sharing a needle, almost all (91%) reported sharing with only one other person, most typically a close friend. Forty percent of IDU in 2003 reporter sharing some other injecting equipment in the last month, typically spoons or other mixing containers (31%), or water (20%). There appears to have been little change in the rates and patterns of needle risk-taking behaviour among IDU sampled for the IDRS, between 2000 and 2003.

	<b>IDRS 2000</b>	<b>IDRS 2001</b>	IDRS 2002	<b>IDRS 2003</b>
	( <u>N</u> = 101)	( <u>N</u> = 102)	( <u>N</u> = 104)	( <u>N</u> = 135)
Used needle after someone else last month (%)				
None	81	88	82	87
One time	8	6	7	7
Two times	4	0	4	3
3-5 times	3	4	6	3
6-10 times	1	1	2	0
> 10 times	3	1	0	0
Number of people used needle before you (%)				
None	82	85	77	89
One person	16	13	16	10
Two people	3	2	2	0
3 – 5 people		0	1	1
Who used needle before you (%)				
Regular sex partner	6	12	12	2
Casual sex partner	4	0	0	1
Close friends	8	0	7	3
Acquaintance	2	0	2	2
Other	1	3	0	1
Times someone used needle after you (%)				
None	77	76	66	79
One time	6	9	13	13
Two times	6	6	11	4
3-5 times	8	4	7	3
6-10 times	2	1	3	1
> 10 times	1	5	1	0
Other equipment used after someone else (%)				
None	50	60	59	60
Spoons/mixing containers	42	34	32	31
Filters	35	19	17	17
Tourniquets	14	15	11	13
Water	43	21	18	20
Other equipment	5	2	2	1

Table 48. Needle risk-taking behaviour reported by IDU in the last month, 2000 – 2003

Figure 28 shows the number of syringes dispensed to NSPs in Queensland during each financial year from 1996/97 to 2002/03. The Figure shows a peak in the dispensing of syringes to NSPs during the 1999/00 financial year, followed by a substantial drop in dispensing during 2000/01 and 2001/02, and an increase again in 2002/03. It is important to note, however, that these figures reflect the number of syringes dispensed *by* Queensland Health *to* NSPs, rather than *by* NSPs *to* clients. While broadly indicative of levels of use, the figures therefore do not accurately reflect either the demand for, or the usage of, syringes by IDU in Queensland.



Source: QNSP, Queensland Health

Figure 28. Number of syringes dispensed to NSPs in Queensland, 1996/97 to 2002/03

#### **10.3 Location of injections**

As in previous years, the majority of IDU in 2003 (72%) reported last injecting in a private home. Nevertheless, significant numbers reported last injecting in a car (13%), a public toilet (8%) or in an open community location such as a street, car park or beach (6%). There appears to have been relatively little change from 2000 to 2003 in the proportion of IDU reporting last injecting in a community location (see Table 49), underscoring the continued importance of providing and promoting safe syringe disposal units in key community locations.

	IDRS 2000 $(N = 101)$	IDRS 2001 $(N = 102)$	IDRS 2002 $(N = 104)$	IDRS 2003 $(N = 135)$
Location of last injection (%)		(11 102)		(11 133)
Private home	52	69	67	72
Street / car park / beach	11	9	8	6
Car	17	8	11	13
Public toilet	16	5	10	8
Prison			1	0
Supervised injecting room			1	0
"Shooting" room				2
Squat			1	0
Car park			1	0
Other	5	8	0	0

Table 49. Location for last injection according to IDU, 2000 - 2003

In Table 50 the location of last injection for IDU in 2003 is presented separately for those who reported last injecting heroin (n=41) and those who reported last injecting methamphetamine (n=73). Whereas the vast majority of those injecting methamphetamine (82%) did so in a private home, almost half of those who injected

heroin (44%) did not. Twenty-seven percent of those who last injected heroin did so in a car, with a further 12% injecting in a public toilet.

	Heroin (n=41)	Methamphetamine (n=73)	IDRS 2003 (N = 135)
Location of last injection (%)			
Private home	56	82	72
Street / car park / beach	5	6	6
Car	27	6	13
Public toilet	12	4	8
Prison	0	0	0
Supervised injecting room	0	0	0
"Shooting" room	0	3	2
Squat	0	0	0
Car park	0	0	0
Other	0	0	0

Table 50. Location for last injection according to IDU in 2003, by drug

#### 10.4 Injection-related health problems

In 2003 53% of IDU reported experiencing at least one injection-related problem in the last month. Thirty seven percent reported experiencing at least two problems, 19% reported three problems, 10% reported experiencing four problems and 2% of IDU reported experiencing all five problems listed, within the last month. The most common problems experienced by IDU in 2003 were scarring and bruising (37%) and difficulty injecting (35%). Smaller proportions reported experiencing a dirty hit (19%) or abscesses and infections (16%); 7% reported thrombosis and 7% reported having an overdose, in the last month (see Table 51).

There appears to have been a slight decline in the average number of injection-related problems reported by IDU between 2000 and 2003, although this decrease is not statistically significant (p > .05). Compared to 2002, fewer IDU in 2003 reported experiencing scarring and bruising (from 51% to 37%), difficulty injecting (from 43% to 35%) and thrombosis (from 11% to 7%), however the incidence of dirty hits, abscesses and infections and overdose either remained stable or increased slightly (see Table 51).

	1000 2000	1000 2001	1006 2002	1000 2002
	(DK5 2000)	(N - 102)	10K5 2002	1DK5 2005
	$(\underline{\mathbf{N}} = 101)$	(N = 102)	( <u>N</u> = 104)	( <u>N</u> = 155)
Injection problems in last month (%)				
Overdose	8	7	6	7
Abscess/infections	14	10	14	16
Dirty hit	28	18	18	19
Scarring/bruising	56	45	51	37
Difficulty injecting	36	32	43	35
Thrombosis	8	10	11	7
Total injection-related problems last				
month				
Mean (SD)	1.50 (1.23)	1.43 (1.35)	1.46 (1.39)	1.22 (1.41)
Range	0 - 5	0 - 5	0 - 5	0 - 5

#### Table 51. Injection-related problems reported by IDU 2000 - 2003

A subset of IDU in 2003 reported injection of various pharmaceutical preparations in the last month: 5% reported injecting benzodiazepines, 6% reported injecting buprenorphine, 15% reporting injecting methadone and 27% reporting injecting morphine. These IDU were asked to indicate whether they had experienced any of a range of problems "due to" injection of the drug, in this time. Responses to this question are presented below in Table 52.

Although only 5% of IDU reported benzodiazepine injection in the last month, 71% of this group reported experiencing some problems associated with injection. Over half (57%) reported experiencing difficulty finding a vein and almost half (43%) reported scarring or bruising at the injection site. Other problems associated with benzodiazepine injection included dirty hits (29%), swelling of the arm (29%), leg (29%), hand (14%) or foot (14%), abscesses and infections (14%), dependence on benzodiazepines (14%) and contact with the ambulance (14%).

Six percent of IDU reported injection of buprenorphine in the last month, with 62% attributing one or more problems to injection. Fifty percent of those who responded reported experiencing some degree of dependence on buprenorphine in the last month, with one in four (25%) experiencing difficulty finding a vein. Other problems that IDU attributed to the injection of buprenorphine included dirty hits (13%), scarring or bruising (13%), thrombosis or blood clots (13%), and swelling of the arm (13%) or leg (13%).

Fifteen percent of IDU reported injecting methadone in the last month and of these, 60% attributed one or more problems to injection. The most common problems were difficulty finding veins (47%), dependence (26%), scarring or bruising (26%) and swelling of the arm (26%) or hand (21%). Other problems that IDU attributed to injection of methadone included abscesses or infections (11%), dirty hits (11%), swelling of the leg (5%) or foot (5%) and contact with the ambulance (5%).

Finally, more than one in four IDU (27%) reported injecting morphine in the last month, however fewer than half of these (44%) attributed any problems to injection. This perception among IDU that morphine is a *relatively* safe drug to inject may be one factor that has contributed to its increasing popularity as an opiate for injection. Among those who did attribute some problems to morphine injection, the most frequently endorsed problems were difficulty finding veins (28%) and morphine dependence (19%). A small number of IDU attributed abscesses or infections (14%), scarring or bruising (14%), swelling of the arm (8%) or hand (8%), a dirty hit (6%), a thrombosis or blood clot (6%) and contact with either the ambulance (3%) or police (3%) to morphine injection.

Problems (%)	Benzodiazepines	Buprenorphine	Methadone	Morphine
	(n = 7)	(n = 8)	(n = 20)	(n = 36)
No problems	29	38	40	56
Overdose	0	0	0	0
Abscess/infection	14	0	11	14
Dirty hit	29	13	11	6
Scarring/bruising	43	13	26	14
Thrombosis/blood clot	0	13	0	6
Swelling of arm	29	13	26	8
Swelling of leg	29	13	5	0
Swelling of hand	14	0	21	8
Swelling of feet	14	0	5	0
Hospitalisation	14	0	0	0
Contact with ambulance	14	0	5	3
Contact with police	0	0	0	3
Dependence	14	50	26	19
Difficulty finding veins	57	25	47	28
Skin ulcers	0	0	0	0
Gangrene	0	0	0	0
Other problems	0	0	0	0

Table 52. Self-reported problems in the last month, attributed to injection of pharmaceutical preparations

Note: valid percentages are shown.

#### 10.5 Expenditure on illicit drugs

Since 2001 IDU have been asked to specify how much they spent on illicit drugs during the day before the interview. In 2003 56% of IDU reported spending money on illicit drugs during the day before interview. The average expenditure reported in 2003 - a median of \$80 and a mean value of \$111 -- was comparable to that reported in previous years (see Figure 29).



Figure 29. Average expenditure on illicit drugs by IDU the day before interview, 2001 - 2003

#### 10.6 Mental health problems

Table 53 shows the proportion of IDU who reported seeing a mental health professional for an issue other than drug dependence, in the six months prior to interview. From 2002 to 2003 there was a slight increase in the proportion of IDU reporting seeing a mental health professional, from 29% in 2002 to 34% in 2003. As in previous years, IDU most frequently consulted a GP for their mental health problem (19% of IDU in 2003), however there was a notable increase in 2003 in the proportion of IDU reporting seeing a psychiatrist (from 7% in 2002 to 16% in 2003) or attending a psychiatric ward (from 0% in 2002 to 7% in 2003).

Again mirroring responses from 2002, and consistent with high reported levels of licit antidepressant use (see Section 9.3 on page 70), the most common mental health problem experienced by IDU in 2003 was depression, which was reported by almost one in five (17%) respondents. In addition, 8% of respondents reported experiencing anxiety and 7% reported experiencing manic depression, in the six months prior to interview. Consistent with key informant reports of methamphetamine-related mental health problems, 4% of IDU in 2003 reported experiencing a drug-induced psychosis in the last six months<sup>15</sup>, compared to 2% in 2002. In addition, 3% of IDU reported experiencing panic attacks; 2% reported paranoia, obsessive-compulsive disorder (OCD) or a psychosis not associated with drug use; one IDU reported suffering from a phobia and one reported experiencing manic episodes.

	<b>IDRS 2002</b>	<b>IDRS 2003</b>
	<u>(N</u> = 104)	<u>(N</u> = 135)
Saw mental health professional (%)	29	34
Type of professional seen (%)		
GP	18	19
Psychiatrist	7	16
Psychologist	5	6
Counsellor	6	7
Social worker		4
Community health nurse	3	1
Mental health nurse	1	2
Hospital emergency department	1	2
Psychiatric ward	0	7
Type of mental health problem (%)		
Depression	17	17
Anxiety	10	8
Manic depression	2	7
Schizophrenia	0	4
Drug induced psychosis	2	4
Panic	5	3
Paranoia	5	2
Other psychosis	0	2
Personality disorder (not ASPD)	2	2
OCD	1	2
Phobias	2	1
Mania	1	1
Other	7	4

# Table 53. Self-reported mental health problems among IDU in the six months preceding interview, 2002 - 2003

Note: no IDU reported being diagnosed with ASPD in the last six months.

<sup>&</sup>lt;sup>15</sup> and of these, four (67%) identified methamphetamine as the drug most injected in the last month, while one identified cocaine as the drug most injected in the last month.

One useful indicator of drug-related problems is records from telephone counselling services. Both the Alcohol and Drug Information Service (ADIS) and the Drug ARM telephone counselling service keep a record of the number of telephone calls received over time, in relation to each of a number of drug types. Whereas ADIS services the entire State, Drug ARM receives the vast majority of its calls from within the Brisbane metropolitan area. Differences between calls to these two services may therefore, to some extent, reflect differences in patterns of drug use in regional areas and in south-east Queensland. Telephone counselling statistics from ADIS and Drug ARM from 2002 and 2003 are shown below in Tables 54 and 55.

There was little change in the patterns of calls to ADIS from 2002 to 2003. In 2003 almost a third of calls (32%) were in relation to alcohol, with smaller proportions in relation to cannabis (17%) and amphetamines (14%). A further 12% of calls were in relation to either licit or illicit opioids (see Table 54).

Table 54. Number and proportion of calls to the Alcohol and Drug Information Service (ADIS) by drug type, 2001/02 - 2002/03

Drug type	2001/2002	2002/2003
Alcohol	5832 (30%)	5410 (32%)
Cannabis	3666 (19%)	2940 (17%)
Amphetamines	3093 (16%)	2418 (14%)
Illicit Opioids	1229 (6%)	1035 (6%)
Licit Opioids	940 (5%)	940 (6%)
Benzodiazepines	855 (4%)	798 (5%)
Cocaine	110 (1%)	62 (<1%)
Ecstacy	381 (2%)	382 (2%)
Hallucinogens	85 (<1%)	29 (<1%)
Other	3316 (17%)	2850 (17%)

Source: Alcohol and Drug Information Service

By contrast, around one third of calls to the Drug ARM lines were in relation to cannabis, with a further 24% (in the second half of 2003) in relation to amphetamines. Smaller numbers of calls in this time were in relation to heroin (8%), ecstasy (4%) and cocaine (1%).

Drug type	Jul – Dec 2002	Jan – Jun 2003	Jul – Dec 2003
Cannabis	380 (37%)	354 (32%)	378 (32%)
Amphetamines (speed)	245 (24%)	210 (19%)	289 (24%)
Alcohol	103 (10%)	124 (11%)	163 (14%)
Heroin	78 (8%)	87 (8%)	95 (8%)
Prescription drugs	56 (6%)	59 (5%)	21 (2%)
Ecstasy (MDMA)	39 (4%)	53 (5%)	47 (4%)
Inhalants/solvents	28 (3%)	31 (3%)	32 (3%)
Other	26 (3%)	29 (3%)	30 (3%)
Polydrug	20 (2%)	69 (6%)	28 (2%)
Methadone	11 (1%)	31 (3%)	19 (2%)
Cocaine	7 (1%)	16 (1%)	13 (1%)
Benzodiazepines	7 (1%)	14 (1%)	16 (1%)
Nicotine	7 (1%)	4 (<1%)	27 (2%)
Morphine	4 (<1%)	7 (1%)	10 (1%)
Buprenorphine	3 (<1%)	3 (<1%)	11 (1%)
(Subutex)			
Hallucinogens	1 (<1%)	6 (1%)	7 (1%)
Antidepressants and	d 0 (0%)	21 (2%)	10 (1%)
antipsychotics			
Naltrexone	0 (0%)	1 (<1%)	2 (<1%)

Table 55. Number and proportion of calls to the Drug ARM telephone counselling service by drug type, July 2002 – Dec 2003

Source: Drug ARM Queensland

## 10.7 Criminal and police activity

Table 56 shows the proportion of IDU who reported engaging in each of a range of criminal activities at least once in the month prior to interview, from 2000 to 2003. As in previous years, the most frequently reported criminal activity among IDU in 2003 was drug dealing, which was reported by 37% of respondents. Smaller proportions reported engaging in property crime (14%), violent crime (10%) or fraud (8%). In total, over half of the 2003 sample (53%) reported engaging in some form of criminal activity in the last month, while 47% reported having been arrested at least once in the last 12 months.

Among those arrested in the last 12 months, the most common charges in 2003 related to drug use or possession (27%), violent crime (22%) and property crime (21%). Smaller proportions reported having been arrested for dealing or trafficking (10%), fraud (10%), prostitution (10%) or a driving offence (10%), at some time in the last year.

There were some notable changes in self-reported criminal activity among IDU from 2000 to 2003. Perhaps most significantly, the proportion of IDU reporting having engaged in violent crime in the last month increased from 3% in 2000 to 7% in 2001 and 2002, and 10% in 2003. The proportion who reported having been arrested for a violent crime also increased markedly over this time, from 4% in 2000 to more than one in five (22%) in 2003.

From 2002 to 2003 there was also an increase in the reported incidence of arrest for drug dealing/trafficking (from 3% to 10%) prostitution (from 0% to 6%), drink driving (from 2% to 5%) and drug driving (from 0% to 6%). Over the same period IDU reported a

substantial reduction in the incidence of arrest for drug use/possession (from 45% to 27%), and a reduced incidence of arrest for driving offences (from 22% to 10%) and property crime (from 27% to 21%). It is unclear from these data whether this change reflects changing patterns of criminal activity among IDU generally, changes in police activity towards IDU, or simply sample variation from year to year. Another possibility, suggested by seven key informants in 2003, is that the increase in violence parallels an increase in the use of methamphetamine. According to one key informant from the health sector, methamphetamine "is the most behaviourally toxic drug we see".

	<b>IDRS 2000</b>	IDRS 2001	IDRS 2002	IDRS 2003
	( <u>N</u> = 101)	<u>(N</u> = 102)	<u>(N</u> = 104)	( <u>N</u> = 135)
Property crime (%)	23	15	24	14
Drug dealing (%)	43	46	39	37
Fraud (%)	14	7	10	8
Violent crime (%)	3	7	7	10
Any crime last month (%)	60	67	56	53
Arrested last 12 months (%)	52	58	58	47
Arrested for (%) $^{1}$				
Use/possession	10	45	45	27
Dealing/trafficking			3	10
Property crime	25	16	27	21
Fraud	6	7	12	10
Violent crime	4	9	15	22
Driving offence			22	10
Alcohol & driving			2	5
Drugs & driving			0	6
Prostitution			3	10
Other offence	56	20	30	30

Table 56. Self-reported criminal activity among IDU in the month preceding interview, 2000 - 2003

<sup>1</sup> valid percentages, based on proportion who had been arrested last 12 months, are shown

IDU perceptions of changes in police activity during the last six months are shown in Table 57. As in previous years, around half of the sample in 2003 (49%) considered police activity to be increasing, with over a third (39%) believing that police activity was 'stable'. Consistent with previous years, very few IDU believed that there had been a decrease in police activity in the last six months. Fewer than one in five IDU in 2003 believed that police activity had made it harder for them to score drugs.

Three key informants in 2003 made favourable comments about the behaviour of police officers towards IDU. One commented that police attitudes and knowledge had improved considerably in recent years, and that the relationship between police and NSPs was often one of collaboration and mutual respect. Nevertheless, two KI commented that some IDU still feel unfairly targeted by police, particularly when approached in the vicinity of an NSP.

	IDRS 2000 $(N = 101)$	IDRS 2001 $(N = 102)$	IDRS 2002 (N = $104$ )	IDRS 2003 (N = $135$ )
Changes in activity last 6 months (%)				
Don't know	16	18	16	10
More activity	51	51	53	49
Stable	31	28	29	39
Less activity	3	4	2	1
Police activity made harder to score (%)	26	23	14	17

Table 57. Perceived changes in police activity according to IDU, 2000 - 2003

Table 58 shows the number of drug consumer and drug provider arrests made in Queensland by either the Queensland Police Service or the AFP, during the 2002/03 financial year. A total of 26,808 arrests were made in this time, representing an 18% increase from the 22,726 arrests made in the previous financial year. Consistent with the previous year, however, the majority of arrests were of males (79%) and were of drug consumers (84%) rather than providers (16%). Given the prevalence of cannabis use in the community it is perhaps not surprising that the majority of arrests were made in relation to cannabis (74%). As in 2001/02, 9% of arrests made during the 2002/03 financial year were in relation to amphetamine-type stimulants, while only 1% of arrests were in relation to cocaine, hallucinogens or steroids. Consistent with reports of a growing overlap between the heroin and methamphetamine markets (see Section 5.7 on page 46), two key informants in 2003 noted an increasing overlap between heroin providers, with increasing polydrug use paralleled by increased "polydrug dealing".

	Consumer	Provider	Total	% of arrests
Cannabis	17,295	2,584	19,879	74
Amphetamine-type stimulants	1,975	558	2,533	9
Heroin and other opioids	212	86	298	1
Cocaine	19	17	36	<1
Hallucinogens	15	7	22	<1
Steroids	49	5	54	<1
Other/unknown	2,821	1,165	3,986	11
All drugs	22,386	4,422	26,808	100
% of arrests	84	16	100	

Table 58. Consumer and provider arrests by drug type in Queensland, 2002/03

Source: (ACC, in press)

## **11 DISCUSSION**

This is the fourth consecutive year in which the full IDRS has been conducted in Queensland. With each year the IDRS generates a more complete picture of patterns of illicit drug use and associated harms among IDU. In 2003, as in previous years, the various drug markets investigated by the IDRS did not operate in isolation, but instead interacted in predictable ways: Decreases in the use of one drug were paralleled by commensurate increases in the use of other drugs, and vice-versa.

The interdependent character of illicit drug markets in Queensland is most clearly evident in patterns of use of heroin and methamphetamine. During the well-documented heroin shortage in 2001, use of heroin among IDU decreased while use of methamphetamine – a stimulant rather than a depressant – increased. Data from the 2002 IDRS suggested that this trend was reversing again with greater use of heroin and, as expected, a commensurate decrease in methamphetamine use among IDU. In 2003, heroin use among IDU seems to have declined once again, paralleled by a corresponding increase in use and injection of not only methamphetamine, but also such disparate substances as morphine and ecstasy. The nature and dynamics of these apparent drug market interactions should be a key area for future research.

## 11.1 Heroin

Despite evidence of an increase in heroin use among IDU interviewed in 2002, use appears to have declined again in 2003. This prolonged decrease in heroin use among IDU reporting to the IDRS has been paralleled by a sustained increase in price, a sustained reduction in purity and, to a lesser extent, a sustained decrease in the perceived availability of heroin in Queensland. Whether these market dynamics have *caused* or simply *paralleled* the observed changes in heroin use among IDU, is a question for a future research project.

Among those who have continued to use heroin in 2003, there appears to have been little change in patterns of use. IDU who nominate heroin as their drug of choice are still characterised by above-average levels of polydrug use, with recent use of other CNS depressants including alcohol, benzodiazepines and morphine not uncommon. Despite this, there was some evidence of a continued reduction in the incidence of both fatal and non-fatal overdose among heroin users in 2003.

The number of opioid treatment registrations in Queensland has continued to rise, with 3,929 client registrations throughout the State in 2003. In the context of apparently growing disenchantment with methadone maintenance among some IDU, an increasing minority are opting to receive buprenorphine rather than methadone. Opioid pharmacotherapy clients in Queensland are unusual in at least two respects: (a) the vast majority receive their dose from a public, rather than a private, prescriber; and (b) only a very small minority currently receive their dose within a correctional setting.

## 11.2 Methamphetamine

The methamphetamine market in Queensland is in some respects a mirror image of that for heroin, with decreases in heroin use offset by corresponding increases in methamphetamine use. However the converse seems less true, with methamphetamine increasingly establishing itself as a relatively cheap, readily available and potent injectable drug in Queensland. Crystal methamphetamine in particular seems to have gained a reputation among many IDU as a potent, highly desirable drug, despite the negative physical, social and psychological effects that many associate with its use.

In 2003 methamphetamine was the most frequently injected drug among IDU sampled for the IDRS, despite the fact that a larger proportion nominated heroin as their drug of choice. Ninety percent of IDU reported having injected some form of methamphetamine in the last six months, with over half reporting recent injection of ice. Fewer than one in ten reported smoking ice recently although anecdotal reports suggest that smoking of ice may be more common among non-injecting drug users, among younger users and in the party drug subculture.

Whereas IDU who nominated heroin as their drug of choice were characterised by above-average levels of polydrug use, those who nominated methamphetamine as their drug of choice in 2003 were characterised by below-average levels of polydrug use. Furthermore, whereas those in the former group often appeared to be using a range of *substitutes* for heroin (e.g., morphine), those in the latter group more often reported using drugs which are typically used *in addition to* methamphetamine, such as tobacco, alcohol and cannabis.

## 11.3 Cocaine

Although two thirds of IDU sampled for the IDRS in 2003 reported having used cocaine at some point in their life, fewer than a quarter reported using recently and only one in ten reported recent injection. Cocaine use among IDU in Queensland remains sporadic and, for the most part, opportunistic. Nevertheless, there were anecdotal reports in 2003 of an increase in the use of cocaine in a party drug context, perhaps with methamphetamine, and typically among more affluent users. While methamphetamine remains clearly the psychostimulant of choice among IDU in Queensland, cocaine may be making inroads in other drug-using groups.

Consistent with this, while IDU report that the price of cocaine is still high, the availability low and the purity variable, law enforcement data show an increase in the number of cocaine seizures in Queensland, in the last financial year. Whether the cocaine market in Queensland continues to develop, and whether it extends to include injecting drug users, is at present a matter for further investigation.

## 11.4 Cannabis

The cannabis market in Queensland, as in other jurisdictions, continues to be distinguished by its consistency. Despite significant fluctuations in the prevalence of use of a range of other illicit drugs, the IDRS has recorded very little change in the price, potency, availability or use of cannabis among IDU, over the past four years.

Cannabis use continues to be endemic among IDU in Queensland with roughly four out of every five reporting recent use. Over the last few years, however, there appears to have been a consistent increase in the frequency of use, with the average user in 2003 smoking cannabis on four or five days out of every week and more than a third smoking daily. There were some reports in 2003 of users experiencing cannabis-related mental health problems, and of a reticence on the part of users to access appropriate treatment services.

The majority of IDU report recent use of both hydroponic and 'bush' cannabis, however roughly three quarters report mostly using 'hydro' – a form they report to be both more

potent, and more expensive. Most report obtaining their cannabis from either a friend or a dealer's home, while roughly equal proportions identify the original source of their cannabis as a large-scale cultivator, or a small-time backyard grower.

## 11.5 Other opioids

The 2002 IDRS identified an increase in the use and injection of morphine, particularly MS Contin<sup>®</sup>, among IDU. This trend has continued in 2003 with forty percent of IDU reporting recent injection of morphine. In the context of continued poor quality heroin, unreliable supply and (relatively) inflated heroin prices, many IDU seem to consider morphine a more reliable and desirable option. A 50mg 'grey nurse' (a grey coloured tablet containing 50mg of morphine sulphate) costs \$50 on the illicit market, compared with \$200 or more for a comparable quantity of heroin.

Rates of injection of methadone, physeptone and buprenorphine have also increased in 2003, although not to the same level as morphine. While more IDU in 2003 are being prescribed buprenorphine, a larger proportion of these are reporting injection. More remarkably, while the proportion of IDU being prescribed methadone seems to have decreased in 2003, the proportion injecting methadone has also increased. In light of the potential harms associated with injecting these pharmaceutical preparations, prompt intervention in this area seems prudent.

## 11.6 Ecstasy

Although ecstasy (MDMA) is not traditionally associated with injecting drug use, over a third of IDU in 2003 reported recent ecstasy use and more than one in ten reported recent injection. Again reflecting the interdependent nature of drug markets in Queensland, patterns of ecstasy use among IDU seem to have paralleled those for methamphetamine, with use increasing when heroin use decreases, and decreasing when heroin use increases. Ecstasy injectors in 2003 were significantly more likely to inject methamphetamine than heroin.

Key informants in 2003 noted an increase in the availability of ecstasy and reported the recent discovery by law enforcement of a number of pill presses, indicating that some ecstasy is being produced (or at least pressed into pills) locally. Not all ecstasy pills contain MDMA, however. Some manufacturers are reportedly combining methamphetamine, caffeine and ketamine in an attempt to simulate the effects of MDMA.

## 11.7 Benzodiazepines

The 2003 IDRS identified a reduction in the use and, in particular, injection of benzodiazepines among IDU in Queensland. Perhaps due to the restrictions placed on 10mg Temazepam<sup>®</sup> gel capsules on May 1 2002, the reported incidence of recent benzodiazepine injection dropped by over 50% in one year from 25% in 2002 to 11% in 2003. Whereas the benzodiazepine most commonly used by IDU in 2002 was Temazepam<sup>®</sup>, in 2003 the overwhelming majority reported using Valium<sup>®</sup>. By identifying, reporting and monitoring the injection of benzodiazepines among IDU in Queensland, the IDRS has facilitated an effective intervention in this population.

## 11.8 Associated harms

Blood-borne viruses (BBV), injection-related problems, mental health problems and involvement in the criminal justice system continue to feature prominently among the

hazards faced by IDU in Queensland. While Hepatitis C rates seem to be dropping in the general Australian population, they may be climbing among IDU: In 2002, almost half of the IDU surveyed in the Queensland arm of the national NSP survey tested positive for Hepatitis C.

Despite an almost linear increase in the number of syringes being distributed to NSPs in Queensland since 1996/97, sharing of needles and other injecting equipment among IDU remains far from uncommon. In 2003 more than one in ten IDU reported using a needle after someone else *in the last month*, and more than one in five reported that someone had used a needle after them *in the last month*. It appears that while IDU are, in general, well educated about safer injecting practices, their behaviour is often inconsistent with this knowledge. Reasons for this gap between knowledge and behaviour must be addressed.

While the majority of IDU in 2003 reported injecting in a private home, more than one in ten reported last injecting in a community location, and more than one in ten reported last injecting in a car. Those injecting heroin were particularly likely to inject in either a car or a public toilet. These figures are comparable to 2002 and underscore the continued importance of providing safe disposal bins in community locations, and educating IDU about safe disposal of syringes.

Over half of the IDU surveyed in 2003 reported at least one injection-related problem in the last month, with the most common problems being scarring or bruising, and difficulty injecting. Again, these figures are not significantly different from those recorded in 2002, 2001 or 2000, underscoring the continued importance of providing vein care services and education to IDU whenever possible. Injection-related problems were particularly common among those reporting recent injection of benzodiazepines, buprenorphine or methadone, although almost half of those reporting recent morphine injection also reported at least one problem related to injection, in the last month. Injection of diverted pharmaceutical preparations continues to be a significant health risk among IDU in Queensland.

In 2003 over a third of IDU reported seeing a mental health professional in the last six months, with the most common problem (other than drug dependence) being depression. There has been little change from 2002 to 2003 in the (remarkably high) prevalence of self-reported mental health problems among IDU in Queensland.

As in previous years, over half of the IDU surveyed in 2003 reported engaging in some form of criminal activity in the past month – typically drug dealing or property crime, however in 2003 one in ten reported engaging in some form of violent crime *in the last month.* Since 2000, self-reported rates of violent crime and of arrest for violent crime among IDU have increased linearly, with more than one in five IDU in 2003 reporting arrest for a violent crime in the last year. While the reasons for this are unclear, the possibility that this increase is to some extent associated with the increased use of increasingly potent forms of methamphetamine, cannot be ignored. Research into the links between methamphetamine use, mental health problems and aggressive behaviour is urgently required.

## **12 IMPLICATIONS**

With each passing year the IDRS becomes more valuable as a drug monitoring system, as an early-warning system for drug-related harms, and as an instigator of more focussed research and intervention. With the ability to investigate patterns of use both at a single point in time and across years and jurisdictions, it is increasingly possible to take both a micro and a macro view, informing both focussed intervention and broad-level policy decision-making. The IDRS is now in its fifth year in Queensland, and macro-level trends in drug markets are becoming increasingly evident.

The IDRS identified a number of drug trends in 2003, and confirmed that other trends, observed in 2002, have continued into the current year. Among the key questions arising from this year's report are:

- What is the nature of the relationship between the heroin and methamphetamine markets in Queensland? Will a decrease in the availability of one drug result in increased use of the other, and if so, why? What are the implications of this for supply reduction policies, and for appropriate service delivery?
- Among what proportion of cannabis users is the frequency of cannabis use increasing? Does this trend extend beyond IDU? What are the causes and likely consequences of this apparent increase in use?
- What is the level of cocaine use among non-injecting users in Queensland? Is this use increasing and, if so, will cocaine move into the injecting drug market in the future?
- If IDU are well educated with respect to safe injecting practices, why is their behaviour inconsistent with this knowledge? How can this gap between knowledge and behaviour be addressed?
- What will be the likely consequences of increased availability and use of crystal methamphetamine in Queensland? How prevalent is the smoking of ice and what are the risks and benefits associated with this route of administration?
- Is the IDRS sampling an ageing cohort of injecting drug users? While the average age of IDU surveyed increases each year, the reported age of first injection decreases. Is there a younger cohort of IDU who are not accessing NSPs, where IDRS participants in Queensland are recruited? If so, what are the implications of this for service delivery and for the IDRS?

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