S. Kinner, J. Fischer and B. Lloyd

QLD DRUG TRENDS 2005
Findings from the Illicit Drug Reporting System (IDRS)

NDARC Technical Report No. 254

QUEENSLAND DRUG TRENDS 2005

Findings from the Illicit Drug Reporting System (IDRS)

Stuart Kinner, Jane Fischer and Belinda Lloyd

Queensland Alcohol and Drug Research and Education Centre (QADREC)
School of Population Health, The University of Queensland

NDARC Technical Report No. 254

ISBN 0 7334 2359 0

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

The IDRS would not be possible without the assistance and co-operation of a large number of individuals and agencies, both in Queensland and interstate. We would like to extend particular thanks to the following:

- The IDU who shared their personal experiences and views for the purposes of the survey.
- Our team of skilled and dedicated interviewers: Shelley Cogger, Sue Conrad, Kevin FolKE, Alex Naulls-Johnson, Kate Turton, Megan Williams.
- The NSPs whose on-going support, assistance and co-operation during data collection have made this project possible:
    - Biala Harm Reduction Centre
    - Inala Community Health Centre NSP
    - Logan Community Health Centre NSP
    - Queensland Injectors' Health Network (QuIHN).
- The many agencies who have kindly provided indicator data, against which findings from the IDU survey can be compared.
- Jenny Stafford from NDARC, for her good humour, patience, professionalism and, of course, national co-ordination of the IDRS project.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACS	Australian Customs Service
AFP	Australian Federal Police
ADIS	Alcohol and Drug Information Service
AIHW	Australian Institute of Health and Welfare
ATS	Amphetamine-type stimulant
A&TSI	Aboriginal and/or Torres Strait Islander
ATODS	Alcohol, Tobacco and Other Drugs Services (Queensland Health)
BBVI	Blood-borne viral infections
CBD	Central business district
CMC	Crime and Misconduct Commission
FDS	Family Drug Support
HBV	Hepatitis B virus
HCV	Hepatitis C virus
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user
KE	Key expert(s)
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
QAS	Queensland Ambulance Service
QPS	Queensland Police Service

EXECUTIVE SUMMARY

Demographic characteristics of injecting drug users (IDU)

In 2005, 106 IDU were interviewed in Queensland for the IDRS. About two-thirds of the sample was male, about two-thirds were unemployed, one in four had a grade 12 education or higher, 44% had a prison history and a significant minority (16%) identified as Indigenous. Almost a third were currently in some form of drug treatment, typically methadone or buprenorphine substitution therapy.

IDU in 2005 were on average 34 years old, with those identifying heroin as their drug of choice on average 5.7 years older (*Mean* = 36.6 years) than those nominating some form of methamphetamine (*M* = 30.9 years) as their drug of choice. The average age of the IDU sample interviewed for the IDRS has increased by an average of 1½ years each year since 2000, when IDU were on average 26.4 years old. This trend may reflect an ageing cohort of injecting drug users accessing NSPs in south-east Queensland.

Patterns of drug use among IDU

IDU in 2005 reported first injecting at 19.3 years of age on average – consistent with previous years. Also as in previous years, there was a positive correlation between age and age at first injection, indicating that more recent recruits into injecting may also be initiating into injecting at a younger age. This correlation was stronger for females than for males, suggesting that the trend towards earlier initiation to injection may be more marked for females.

As one would expect, older IDU reported having used more drug classes in their lifetime, and males reported using more drug classes than did females; however, despite the ageing sample in 2005, the trend towards increased polydrug use, observed in 2004, reversed in 2005. Nevertheless, IDU in 2005 still reported using an average of 6.1 drug classes in the last 6 months, and injecting 2.4 drug classes in the last 6 months.

In 2005 the IDRS documented a number of instances in which the prevalence of use of a particular drug decreased (i.e. fewer IDU reported recent use), while the average frequency of use, among those who had used recently, increased. These divergent trends underscore the importance of monitoring prevalence, frequency and quantity of use, in order to gain a full understanding of trends in illicit drug use.

Heroin

The impact of the 2001 heroin shortage continues to be evident in the Queensland heroin market, with evidence of on-going suppression of supply, decreased and unstable purity, and increased price ($400/gram). Perhaps reflecting reduced and unstable availability, fewer IDU in 2005 reported recent heroin use (64%); however, among those who had used recently, the average frequency of use doubled from an average of once a week in 2004 to twice a week in 2005. Evidently, for regular heroin users, availability is stable or perhaps even increasing. Despite this, the number of arrests for heroin use/possession in the state continues to be markedly lower than prior to and during the heroin shortage, and telephone helpline calls suggest a reduction in the number of people seeking assistance with heroin-related problems. Hospitalisation rates for heroin are also well below those seen during and before the heroin shortage, and the small increase in opioid-related admissions in 2005 may reflect problems related to other opioids, including prescription opioids, as well as or instead of heroin. The number of opioid

pharmacotherapy registrations in Queensland has continued to rise each year, with 852 registrations in 2004. In contrast to Australia as a whole, the vast majority of pharmacotherapy clients in Queensland (80% in 2004) are registered with a public prescriber. Despite high rates of injecting drug use and opiate dependence among new prison receptions, only 1% of client registrations in Queensland (vs. 6.4% nationally) were in correctional facilities.

Methamphetamine

The IDRS monitors trends in three forms of methamphetamine: powder, 'base' and crystal ('ice'). While the former two are mostly locally produced, often in small 'box labs', crystal methamphetamine or 'ice' is mostly imported. As in previous years, in 2005 patterns of use and trends associated with powder and base differed substantially from those for ice.

The price of powder and base did not change between 2004 and 2005 ($200/gram, $100/half gram); however, ice, which has traditionally been more expensive, fell to the same price as these less pure forms. While the majority of IDU once again rated all forms of methamphetamine as 'easy' or 'very easy' to get, ice was considered less readily available than the other forms, with availability less stable over time. The availability of all forms of methamphetamine fell in 2005. IDU consistently (and accurately) rate ice as higher in purity than powder and base; however, in 2005 the proportion of IDU rating ice as 'high' in purity increased, while the proportion rating powder and base as 'high' purity decreased. According to key experts, a growing proportion of IDU prefer powder and base to ice, which they perceive as *too pure*, and associate with a range of acute physical and mental health problems.

The proportion of IDU reporting recent methamphetamine use dropped in 2005 (78%), while the average frequency of use among those using recently increased. In order to interpret these trends, it is once again necessary to distinguish between ice and other forms of methamphetamine. The drop in recent methamphetamine use seems to have been driven largely by a fall in the proportion of IDU reporting recent ice use, which in 2005 fell to 36% – the lowest level recorded by the IDRS since 2000. Simultaneously, recent use of powder among IDU increased to 65% in 2005. These divergent trends in methamphetamine use provide support for key expert reports of a trend away from ice use to less pure forms of methamphetamine, among many IDU.

Indicator data suggest increasing health and legal problems associated with methamphetamine use in Queensland; however, these data must be interpreted cautiously. Telephone helpline statistics and hospital admission data show an increase in the number of amphetamine-related problems, but these increases may reflect increasing awareness and help-seeking among users, as well as or instead of an increase in the absolute number of problems. Similarly, while the number of arrests for use/possession of 'amphetamine-type stimulants' (ATS) in Queensland rose in 2005, key expert reports suggest that ATS are increasingly a priority for law enforcement, and thus that the observed increase in arrests may reflect increased law enforcement efforts in the ATS market, rather than increased market activity. Furthermore, the inclusive ATS category encompasses not only amphetamine and methamphetamine, but also ecstasy (MDMA). Until it is possible to disaggregate MDMA - and methamphetamine-related events in law enforcement data, arrest data will be of limited use in monitoring the methamphetamine market.

Cocaine

Cocaine use has traditionally been rare, sporadic and opportunistic among IDU in Queensland, and this continued to be the case in 2005. Among the small proportion (11%) who reported recent use, the frequency of use was very low (on average once a month) and most IDU reported using intranasally, rather than injecting. The small number of IDU reporting on cocaine renders reports of price, purity and availability less reliable; there was little evidence of change in the cocaine market in 2005, with the price continuing to vary between $200 and $300 per gram. IDU in 2005 rated the purity of cocaine as high; however, there was little agreement with respect to availability, illustrating that, in such a niche market, availability is both fickle and driven by the quality of one's 'connections'.

Although there seems to be relatively little contact between cocaine users and either health or law enforcement agencies in Queensland, available indicator data provide some evidence of an increase in the size of the cocaine market. The number of arrests for cocaine use/possession in Queensland increased by a factor of four between 1999/00 and 2004/05, although in the most recent year there was a total of only 20 arrests. The number of hospital admissions related to cocaine has also increased over this time, although, again, the overall number of such events remains small. Anecdotal reports from users and key experts suggest that there may be a sizeable and growing niche market for cocaine among non-injectors in Queensland; however, at present there is little reason to suspect that use of this drug will increase substantially among IDU.

Cannabis

The cannabis market in Queensland has traditionally been distinguished by its relative stability over time; however, trends emerging over the last few years show that the market is not entirely static. In order to better understand the cannabis market it is important to distinguish between two forms of the drug – hydroponic cannabis ('hydro') and 'bush' cannabis – although it remains unclear exactly what users mean when they refer to these two forms of the drug.

As in previous years, in 2005 IDU typically rated hydro as 'high' potency and bush cannabis as 'medium' or 'low' (and perhaps declining) potency; however, it is not currently possible to compare these reports with objective purity data. IDU also reported that the price of hydro was about one-third higher ($300/oz., $90/¼oz.) than for bush ($230/oz., $70/¼oz.) , with little evidence of a change in the price of either form over time. Consistent with previous years, hydro was reported to be 'easy' or 'very easy' to obtain by 88% of IDU; however, the availability of bush is lower (39% reporting easy/very easy) and may be decreasing.

Most IDU reported obtaining their cannabis from a friend or a dealer's home, with fewer in 2005 reporting sourcing cannabis from a street dealer or a mobile dealer. The number of arrests for cannabis use/possession rose markedly between 2000/01 (2,092 arrests) and 2004/05 (2,847 arrests); however, this number includes both actual arrests and an increasing number of instances of diversion for first-time cannabis possession. The proportion of IDU reporting recent cannabis use in Queensland has dropped slightly, but consistently, since 2000, with 76% reporting recent use in 2005. Until 2004 the average frequency of use among users was increasing; however, this has dropped in 2005 to an average of 4 days out of 7.

Use of illicit pharmaceuticals

Trends in use of illicit pharmaceuticals among IDU, particularly other opioids, reflect those for heroin. In the context of a sustained suppression of the heroin market in Queensland, IDU

appear to be increasingly sourcing and injecting a range of alternative opiates which, in contrast to heroin, are of consistent purity, and relatively consistent price and availability.

Illicit methadone

The proportion of IDU reporting recent use and injection of illicit methadone increased between 2003 (18%) and 2004 (23%), but decreased slightly in 2005 (21%). Nevertheless, in 2005 16% of IDU reported recent injection of illicit methadone. According to key experts, a proportion of IDU are becoming increasingly disenchanted with methadone maintenance therapy, and are deciding either not to seek treatment, to seek buprenorphine treatment instead, or to 'self-medicate' with illicit methadone, morphine or buprenorphine.

Illicit buprenorphine

Use and injection of illicit buprenorphine increased markedly between 2003 (7%) and 2004 (19%), and increased further in 2005 to 20%, with 17% reporting recent injection. There is evidence of extensive diversion of buprenorphine among IDU, with 63% of those who reported recent use indicating that they had *mostly* used illicit buprenorphine in the last six months. At least one dispensing service in south-east Queensland has implemented a policy precluding *any* buprenorphine take-away doses, in an effort to reverse this trend.

Morphine

Use and injection of illicit morphine increased rapidly among IDU from the time of the heroin shortage, with 50% of IDU in 2004 reporting recent use. In 2005 there was a significant drop in reports of morphine use and injection, with only 32% reporting recent use and 28% recent injection. MS Contin® 100mg tablets continue to be the favoured brand, however, the price for 100mg morphine tablets has risen from by 25% to $50 in 2005.

Other opioids

Prior to 2005, IDU interviewed for the IDRS were not asked specifically about oxycodone; however, in 2005 16% reported recent use, and 14% reported recent injection. Just as the majority of IDU report that they mainly use *illicit* (vs. licit) morphine, 84% of those reporting recent use of oxycodone in 2005 reported mainly using *illicit* oxycodone. The preferred brand for injection seems to be Oxycontin®.

Evidently, one undesirable consequence of the sustained heroin shortage in Queensland has been a marked increase in the use and injection of other, cheaper and more reliable opiates. These alternative opiates are not designed to be injected, and a proportion of IDU in 2005 reported a range of injection-related harms as a consequence of injecting these preparations.

Benzodiazepines

Following increased restrictions on the availability of 10mg temazepam gel capsules in May 2002, rates of benzodiazepine injection among IDU dropped markedly, and this reduction has been sustained through 2005. The prevalence of benzodiazepine use by any route also fell in 2005, with 51% reporting recent use. By contrast, the proportion reporting daily benzodiazepine use increased from 3% in 2004 to 15% in 2005, perhaps reflecting shifting prescribing practices rather than diversionary activity. Among those reporting recent benzodiazepine use, the average number of days injected recently increased in 2005, although to a median of only 7 days in six months. In 2005, 43% of those reporting recent benzodiazepine use stated that they had mostly used *illicit* (vs. licit) benzodiazepines in the last six months, indicating that benzodiazepine

diversion and injection is still a health concern for this population. As in previous years, in 2005 the vast majority of IDU reported mostly using Valium®.

Associated harms

The number of syringes being dispensed to IDU in Queensland has continued to climb, with 5,302,300 syringes dispensed throughout the state in the 2004/05 financial year. At the same time, the proportion of IDU reporting recent sharing of injecting equipment has declined from 51% in 2000 to 21% in 2005. The rate of hepatitis C notification in Queensland has also fallen, from 1,588 notifications in 1991 to 946 notifications in 2005 – a fall of 40% in 14 years. A notable exception to this encouraging trend is the rate of hepatitis C infection among prisoners in Queensland, which in 2004 was estimated at 30% of new prison receptions.

As in previous years, the majority of IDU in 2005 reported usually injecting in a private home; however, 20% reported usually injecting in riskier locations such as a car, the street or a public toilet. The number of injection-related problems reported by IDU fell noticeably between 2002 and 2003, driven largely by a reduction in reports of scarring or bruising at the injection site, difficulty injecting and thrombosis. There has been little change in reports of injection-related problems among IDU since 2003, with the most commonly reported problems in 2005 being scarring/bruising (37%) and difficulty injecting (31%).

Forty-six percent of IDU reported driving under the influence of drugs at least once in the last six months. The drugs mostly commonly used prior to driving were cannabis, heroin and powder methamphetamine. Twenty-five percent of IDU reported having become verbally aggressive after substance use recently, with 32% reporting becoming verbally aggressive during withdrawal. Fifteen percent reported becoming physically aggressive under the influence of a drug, with 11% reporting becoming physically aggressive during withdrawal. The drugs most commonly associated with aggression were alcohol, methamphetamine, heroin and cannabis.

The proportion of IDU reporting recent criminal activity (other than drug possession) dropped from 60% in 2000 to 44% in 2005. The majority of crimes were drug-related or acquisitive in nature. Forty-four percent of IDU in 2005 reported having a history of incarceration, and 37% reported having been arrested in the last year – the lowest proportion ever recorded by the IDRS in Queensland. Despite this, the proportion of IDU reporting recent acquisitive crime increased from 2004 to 2005, with 34% reporting recent drug dealing (vs. 26% in 2004) and 23% reporting recent property crime (vs. 22% in 2004). Between 2004 and 2005 the average amount spent by IDU on drugs 'yesterday' increased 14% from about $122 to $140.

Mental health problems – particularly anxiety and depression – continue to be common among IDU, with 26% reporting seeing a mental health professional recently in 2005. The proportion reporting experiencing mental health problems was considerably larger, indicating a degree of unmet healthcare need in this group.

Implications

Illicit drug markets in Queensland, as in other jurisdictions, continue to fluctuate and to interact. Accordingly, these markets should be monitored on a regular basis, and should not be interpreted in isolation from one another. The 2005 Queensland IDRS documented a number of new trends, and provided further evidence of inter-dependence among illicit drug markets in Queensland. In particular, it seems clear that changes in the availability of heroin have been associated with changes in the use of methamphetamine, and changes in the use of other opiates including morphine, methadone, buprenorphine and oxycodone. It is also clear that the cannabis market in Queensland is dynamic, and that further research is required to understand patterns of use and other market dynamics.

To the extent that illicit drug markets are interdependent, supply reduction, demand reduction and harm reduction policies should adopt a holistic view, recognising that targeting the use of one drug may impact on the availability and use of other drugs. In order to minimise drug-related harm, the realities of endemic polydrug use and interdependent illicit drug markets must be recognised. The data presented here further underscore the importance of this recognition.

1.0 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 it is now funded jointly by the Australian Government Department of Health and Ageing and the Ministerial Council on Drug Strategy, as a project under the Cost Shared Funding Agreement. 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 key findings are presented at the National Drug Trends 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. Selected findings from the IDRS are also published in peer-reviewed journals.

Data for the IDRS come from three complementary sources: (a) a survey of injecting drug users (IDU) who are considered a 'sentinel' group in the community, (b) structured interviews with key experts (KE) working in the drug and alcohol field, and (c) 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.

The IDU survey component of the IDRS has been conducted in Queensland since 2000, and with each passing year the value of the data set grows. Apparent trends from one year to the next can increasingly be interpreted within a broader historical context, and longer-term trends in drug use and associated harms can be identified. Along with other, complementary monitoring systems such as the national Party Drugs Initiative (PDI) and the crime-focused Drug Use Monitoring in Australia (DUMA) study, the IDRS helps to paint a contextualised picture of drug use and drug-related issues in Australia.

1.1 Study aims

As in previous years, the aims of the 2005 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.

2.0 METHOD

The IDRS maximises the reliability of its reported findings by triangulating information from three complementary sources: an IDU survey, a KE survey and contemporary indicator data. Comparability across years and jurisdictions is ensured by continued and nationwide use of the same survey instruments and data sets; minor improvements are made to the methodology 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 taKE place for at least 12 months. Given the ubiquity of polydrug use among IDU (Darke & Hall, 1995; S. Darke & Ross, 1997), 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 taKE around 50 minutes to complete and subjects are reimbursed $20 for their time and expenses incurred in participation. Whereas the key expert (KE) 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 experts (KE)

Key experts 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 KE 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 KE, 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 expert 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 KE for eligibility. Key experts 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 KE survey instrument includes sections on:

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

KE 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 and intelligence officers, and youth service personnel. Many KE have participated in the IDRS in previous years; however, a snowballing recruitment strategy is used each year to identify additional potential participants.

Data from the KE 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 KE 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 2005 the following data were obtained for the IDRS:

- ACC – number and purity of analysed drug seizures, and drug consumer/provider arrests;
- ADIS – telephone counselling statistics;
- NNDSS – BBV notifications by year;
- QPS – clandestine laboratory seizures, drug-related arrests;
- Queensland Health ATODS – syringes dispensed.

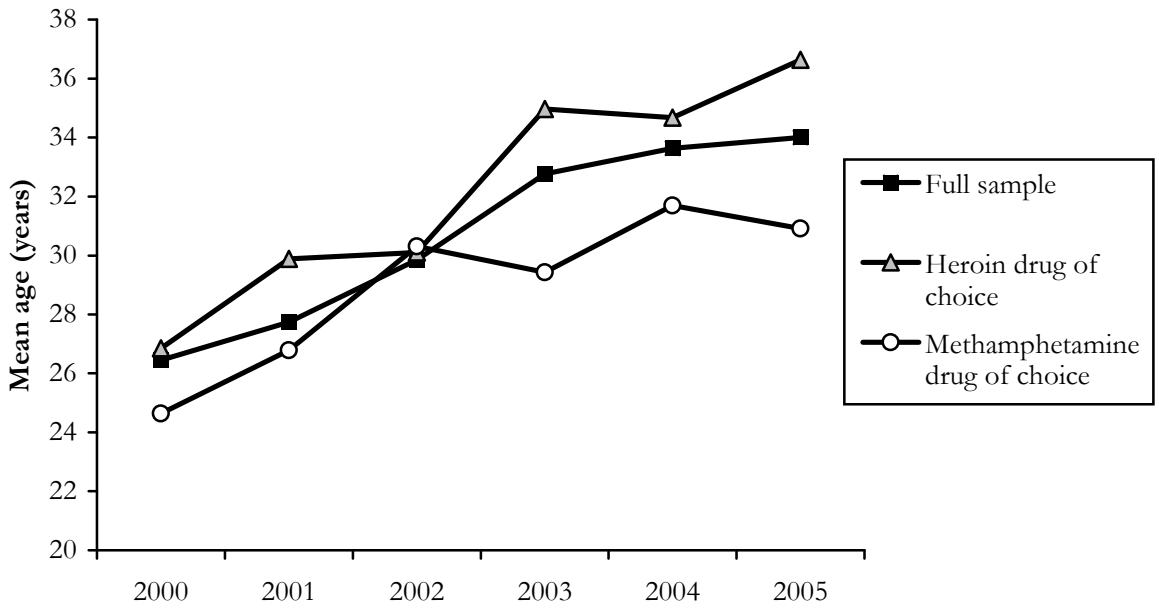
3.0 RESULTS

3.1 Overview of the IDU sample

In 2005, 106 IDU were interviewed in south-east Queensland. As in previous years, about two-thirds of the sample was male (see Table 1). Also consistent with previous years, and with key expert perceptions, IDU in 2005 were on average older than those in 2004. This trend has been consistent since 2000, when IDU interviewed for the IDRS were on average only 26.4 years of age. Since 2000 the IDRS IDU sample has aged by an average of 1.5 years each year (see Figure 1); according to key experts this trend may reflect an ageing cohort of injecting drug users accessing NSPs in south-east Queensland. Also of note is the fact that, excluding 2002, IDU nominating heroin as their drug of choice have been on average 3.9 years older than those nominating methamphetamine. This observation is consistent with key expert reports that heroin users are typically older than those who predominantly use methamphetamine. Some key experts also reported an increasing number of chronic physical health complaints among this ageing cohort of injectors.

In all other respects, the 2005 IDU sample was very similar to that recruited in previous years: the majority of IDU in 2005 were unemployed (64%) and one in four (27%) had a grade 12 education, although almost a third (31%) reported having some form of trade or technical qualification. A significant minority (16%) identified as Indigenous. About one-third reported currently receiving some form of drug treatment – typically methadone (11%) or buprenorphine (8%) maintenance – and almost half (44%) reported a history of incarceration. As in previous years, and consistent with key expert reports, the 2005 IDU sample constituted a distinctly disadvantaged group of individuals.

Figure 1: Mean age of full IDU sample, and of those nominating heroin and methamphetamine as drug of choice, 2000-2005



Source: IDRS IDU Interviews

Table 1: Demographic characteristics of the IDU sample, 2004-2005

	2004 N=129	2005 N=106
Age (mean years, range)	33.6 (18-56)	34.0 (18-53)
Sex (% male)	66	62
Employment (%):		
Not employed	72	64
Full-time	5	12
Part-time/casual	14	13
Home duties	9	9
Student	0	2
Sex work	0	0
A&TSI (%)	12	16
Heterosexual (%)	--	82
School education (mean years, range)	10.1 (4-12)	9.9 (2-12)
Tertiary education (%):		
None	53	56
Trade/technical	38	31
University/college	9	13
Currently in drug treatment (%)	36	32
Prison history (%)	43	44

Source: IDRS IDU Interviews

3.2 Drug use history and current drug use

Table 2 presents a summary of the injection history, drug use preferences and polydrug use of the 2005 IDU sample. The mean age of first injection among IDU interviewed in 2005 was 19.3 years, which is consistent with that reported in previous years. As in previous years, however, there was a moderate positive correlation between age and age at first injection ($r = .30$, $p = .002$), indicating that more recent recruits into injecting may also be initiating into injecting at a younger age. Although males typically reported initiating into injecting at a younger age than females (18.4 vs. 20.8 years, $p = .04$), the correlation between age and age of first injection was stronger for females (r=.26 for males vs. r=.38 for females), suggesting that the trend towards earlier initiation to injection may be stronger for females.

As in 2004, in 2005 over half of the sample reported that the drug they first injected was methamphetamine, with most of the remainder reporting first injecting heroin. Whereas almost two-thirds of IDU in 2004 nominated heroin as their drug of choice, only 45% of IDU in 2005 nominated heroin, with over a third (37%) nominating methamphetamine. Despite this, there was no change in the proportion of IDU identifying heroin as the drug most often injected in the last month or the last drug injected. The proportion of IDU nominating methamphetamine as the drug last and most often injected did increase from 2004 to 2005, with the vast majority of

these nominating powder methamphetamine as the preferred form. A small proportion of IDU in 2005 nominated morphine as the drug most often injected in the last month (8%) and as the last drug injected (6%); however, these proportions are lower than in 2004 (see Table 2).

Finally, given that IDU in 2005 were on average older than those interviewed in 2004, one might reasonably have expected an increase in the number of drug classes ever tried and injected. IDU in 2005 reported having tried a mean of 9.87 different drug classes in their lifetime (out of a total of 18), and a mean of 6.25 drug classes in the last six months. Out of a total of 15 injectable drug classes, IDU reported having injected a mean of 4.76 drug classes in their lifetime and 2.63 drug classes in the last six months. Although there was therefore a high degree of polydrug use in the 2005 sample, the level of polydrug use was considerably lower than in 2004 (see Table 2). There was a significant positive correlation between age and number of drug classes ever injected (r = .24, p= .013) and, as in 2004, males on average reported significantly greater polydrug use than did females (all $p < .05$).

Table 2: Injection history, drug preferences and polydrug use of IDU, 2004-2005

	2004 N=129	2005 N=106
Age first injection (mean years, range)	20.0 (9-48)	19.3 (11-36)
First drug injected (%)		
Heroin	40	35
Amphetamine	55	59
Cocaine	1	4
Morphine	1	0
Drug of choice (%)		
Heroin	61	45
Cocaine	2	2
Methamphetamine (any form)	23	37
Speed	14	29
Base	3	6
Crystal methamphetamine (ice)	6	1
Benzodiazepines	0	0
Cannabis	8	7
Drug injected most often in last month (%)		
Heroin	43	42
Cocaine	0	1
Methamphetamine (any form)	38	46
Speed	26	40
Base	9	4
Crystal methamphetamine (ice)	3	2
Benzodiazepines	0	0
Morphine	11	8
Other	9	4
Most recent drug injected (%)		
Heroin	39	39
Cocaine	1	1
Methamphetamine (any form)	37	50
Speed	23	41
Base	9	6
Crystal methamphetamine (ice)	5	3
Benzodiazepines	0	0
Morphine	11	6
Frequency of injecting in last month (%)		
Less than daily	62	56
Once a day	11	18
2–3 times a day	22	20
>3 times a day	5	7
Polydrug use		
Mean number of drug classes ever tried	11.40	9.67
Mean number of drug classes used in last 6 months	7.20	6.15
Mean number of drug classes ever injected	5.51	4.59
Mean number of drug classes injected in last 6 months	3.05	2.54

Source: IDRS IDU interviews

Note: For the purposes of comparison of polydrug use, in 2005 oxycodone and morphine have been collapsed into one category, resulting in a total of 17 drug classes and 14 injectable drug classes.

Table 3 details the polydrug use history of IDU participants, as a function of route of administration. More than half of the sample reported recent (last 6 months) use of tobacco (88%), methamphetamine (78%), cannabis (76%), alcohol (71%), opioids (62%) and benzodiazepines (51%). The majority of IDU also reported recent injection of heroin (64%), and methamphetamine powder (62%).

Among those who reported recent use, the drugs used most frequently were prescribed methadone, tobacco and anti-depressants (median = 180 days, daily). Prescribed buprenorphine was used on a median six days per week by recent users. Recent cannabis users reported use on 104 days in the preceding six months (average of four days per week). Alcohol use was reported as occurring on average once a week in the previous six months, while methamphetamine users reported use on average between one and two days per week. Recent heroin use was reported by IDU as occurring twice a week in the preceding six months (see Table 3).

Table 3: Polydrug use history of the IDU sample, 2005

Drug Class	Ever used %	Ever injected %	Injected last 6 mths %	Days injected in last 6 mths*	Ever smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed %	Swallowed last 6 mths %	Used^ last 6 mths %	Days used^ in last 6 mths*
Heroin	83	82	64	52	34	4	9	1	15	5	64	52
Methadone (prescribed)	40	25	13	24					39	26	26	180
Methadone (not prescribed)	36	27	16	2					21	11	21	3
Physeptone (prescribed)	8	5	0	--	0	0	0	0	6	0	0	--
Physeptone (not prescribed)	22	17	3	10	0	0	0	0	8	1	3	10
Buprenorphine (prescribed)	21	9	4	64	0	0	0	0	18	10	10	152
Buprenorphine (not prescribed)	27	21	17	5	0	0	0	0	11	5	20	5
Any methadone	62	47	26	26	0	0	0	0	51	34	43	180
Morphine	65	60	28	10	1	0	0	0	20	9	32	10
Oxycodone (prescribed)	9	6	5	2	0	0	0	0	4	4	7	2
Oxycodone (not prescribed)	22	21	16	3	0	0	0	0	5	2	17	3
Homebake	19	19	4	11	2	0	0	0	0	0	4	11
Other opioids	16	7	4	5.5	0	0	1	0	10	5	9	13
Any opioids (exc. Heroin)	83	74	47	91	3	0	0	0	62	44	62	180
Speed powder	92	89	62	15	13	5	34	5	38	16	65	15
Base/point/wax	54	52	39	15	3	2	11	1	16	9	40	15
Ice/shabu/crystal	63	54	31	4	21	10	6	2	9	4	36	4
Amphetamine liquid	32	30	16	2					6	2	17	2.5
Pharmaceutical stimulants	21	5	2	6	1	1	2	1	17	10	12	3
Any form meth/amphetamine	98	95	78	26	29	14	37	7	51	27	78	35
Cocaine	59	41	5	5	4	2	33	9	9	2	11	6.5
Hallucinogens	63	17	2	1.5	0	0	3	0	60	5	5	2.5
Ecstasy	51	21	5	1	1	0	4	2	47	22	25	8
Benzodiazepines	68	23	7	7	1	0	1	1	62	49	51	21
Alcohol	91	5	1	2					91	71	71	26
Cannabis	85										76	104
Anti–depressants	33	1	0	--					32	18	18	180
Inhalants	20										3	2
Tobacco	88										88	180

Source: IDRS IDU interviews ^ Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting * Among those who had used/injected.

4.0 HEROIN

In this section the price, purity and availability of heroin are considered, and patterns of use among IDU are discussed. The heroin shortage documented throughout Australia in 2001 had a significant impact on the market for heroin and other illicit drugs. As the following section will show, the impact of this shortage continues to be evident in Queensland drug markets.

4.1 Price

In Section 3 it was noted that heroin use among IDU seems to have decreased in 2005. Consistent with this, the reported price of heroin increased from a median of $380 per gram in 2004 to $400 per gram in 2005 (see Table 4). At the same time, however, the median price of more commonly purchased quantities – a half gram ($200) and quarter gram ($100) – dropped from 2004 to 2005, with the price of a cap remaining stable at $50. According to some IDU and key experts, a 'cap' can be roughly equated with '$50 worth' of heroin, and as such it may be a poor indicator of price fluctuations.

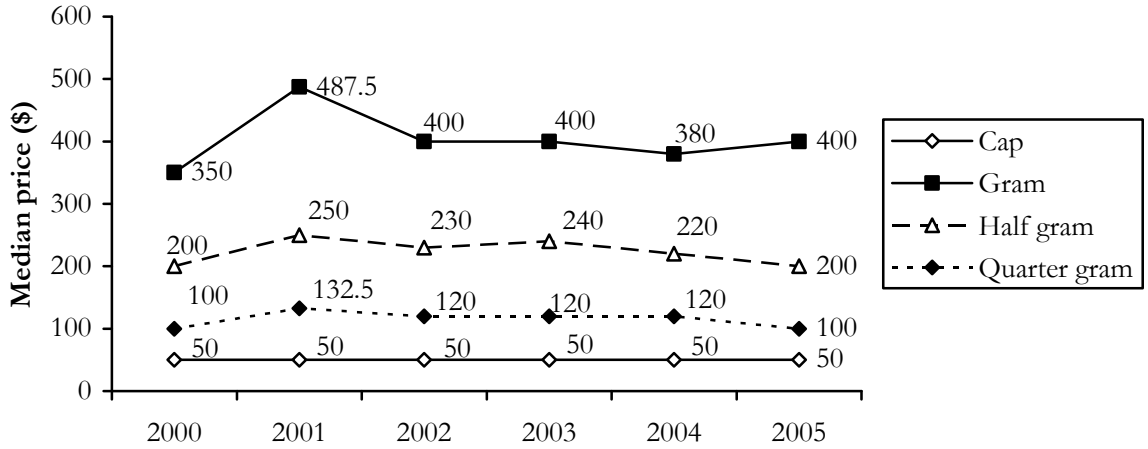
While these prices remain marginally higher than those reported prior to the heroin shortage in 2001 (see Figure 2), they suggest a gradual return of heroin to the market in south-east Queensland. Perhaps indicative of growing stability in the heroin market after this shortage, 69% of IDU in 2005 who commented on changes in the price of heroin stated that it had been stable in the last 6 months.

Table 4: Price of most recent heroin purchases by IDU, 2004-2005

Amount	Median price* $	Number of purchasers*
Gram	400 (380)	14 (19)
Cap	50 (50)	24 (29)
Half gram	200 (220)	26 (24)
Quarter gram	100 (120)	36 (42)

Source: IDRS IDU interviews
* 2004 data are presented in brackets

Figure 2: Median price of heroin estimated from IDU purchases, 2000-2005

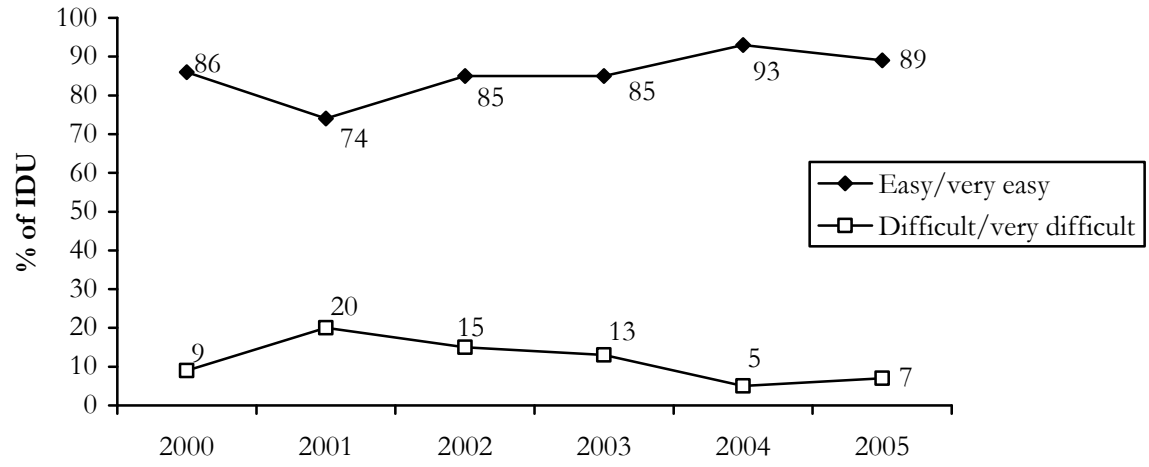


Source: IDRS IDU Interviews

4.2 Availability

The majority of respondents (89%) reported that heroin was easy or very easy to obtain in 2005, although this proportion is marginally lower than that recorded in 2004 (93%). There was also a slight increase in the proportion of respondents reporting that heroin was difficult or very difficult to obtain in the previous six months (5% in 2004 to 7% in 2005). The reported availability of heroin in 2005 is considerably greater than that reported during the heroin shortage in 2001, when 74% of respondents reported heroin to be easy/very easy to obtain, and 20% reported that heroin was difficult/very difficult to obtain (see Figure 3). Consistent with these data, a number of key experts suggested that the heroin drought in Queensland is "partially over"; others reported that the number of heroin overdoses had increased in recent months; however, due to funding restrictions, overdose data from Queensland Ambulance Service are no longer available to verify these reports. Given that many overdoses involve a range of CNS depressants including heroin, alcohol and benzodiazepines (Darke, 2003), even these indicator data may not be able to provide a full picture of the incidence of heroin overdose.

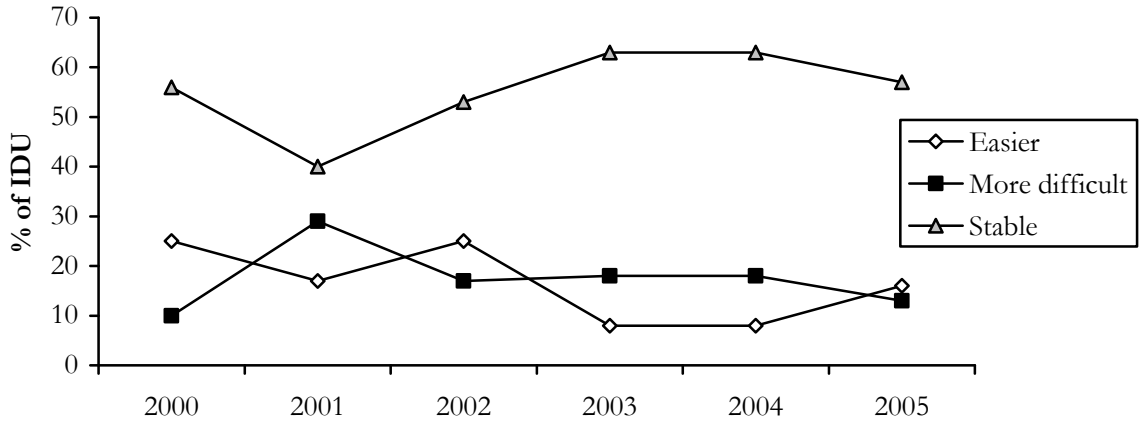
Figure 3: IDU reports of ease of availability of heroin in the past six months, 2000-2005



Source: IDRS IDU Interviews

While the proportion of IDU reporting that heroin availability was stable decreased (63% in 2004 vs. 57% in 2005), a larger proportion of IDU reported that heroin had become easier to obtain (8% in 2004 vs. 16% in 2005), and fewer reported that it had become more difficult to obtain (18% in 2004 vs. 13% in 2005). One key expert from the law enforcement sector reported that heroin availability was still suppressed in Queensland, while another reported fluctuating availability with dealers becoming more "choosy" about who they supplied to. Taken together, these data suggest that heroin availability is either fluctuating or increasing in south-east Queensland, although it has not returned to pre-shortage levels (see Figure 4).

Figure 4: IDU reports of change in availability of heroin in the past six months, 2000-2005



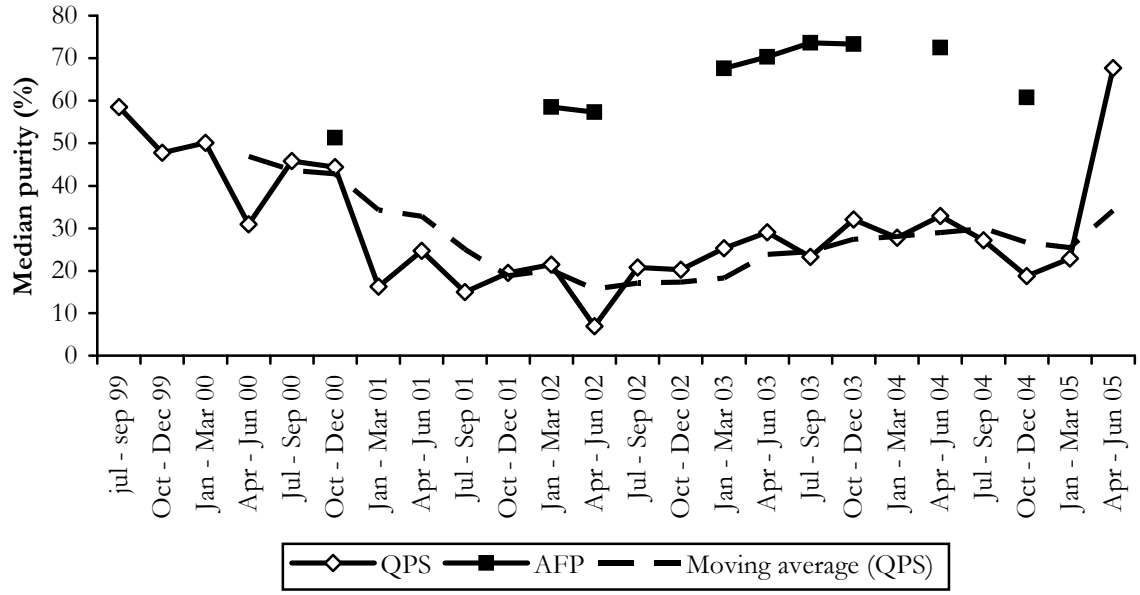
Source: IDRS IDU Interviews

4.3 Purity

Figures 5 and 6 show the median purity and number of heroin seizures made by QPS and AFP in Queensland, from 1999/00 to 2004/05. The median purity of QPS seizures dropped markedly from the fourth quarter of 2000 (44%) to the first quarter of 2001 (16%), in the context of the heroin shortage; however, the lowest median purity was recorded during the second quarter of 2002. The median purity of QPS seizures has risen since this time, and over the 2004/05 financial year the median purity of analysed QPS seizures was 23.4%. The median purity rose dramatically in the last quarter of 2004/05 to 67.7%; however, as this figure is based on only 16 seizures, it would be premature to conclude that the average purity of heroin in the market has risen. Nevertheless, Figure 5 also shows the moving average of QPS seizures, averaged across 4 quarters – this trendline clearly shows the decline in purity during the heroin shortage, and also suggests an upward trend in heroin purity since mid-2002.

Whereas QPS is likely to make a relatively large number of seizures within the Queensland border, AFP seizures are likely to reflect border interdiction efforts. Consequently, AFP seizures tend to be smaller in number, but higher in purity. The median purity of AFP seizures in Queensland rose between 2002 and 2004, from 57% in the second quarter of 2002 to 73% in the second quarter of 2004; however, in 2004/05 only 3 seizures were made in Queensland, with a median purity of 60.8% (see Figure 5).

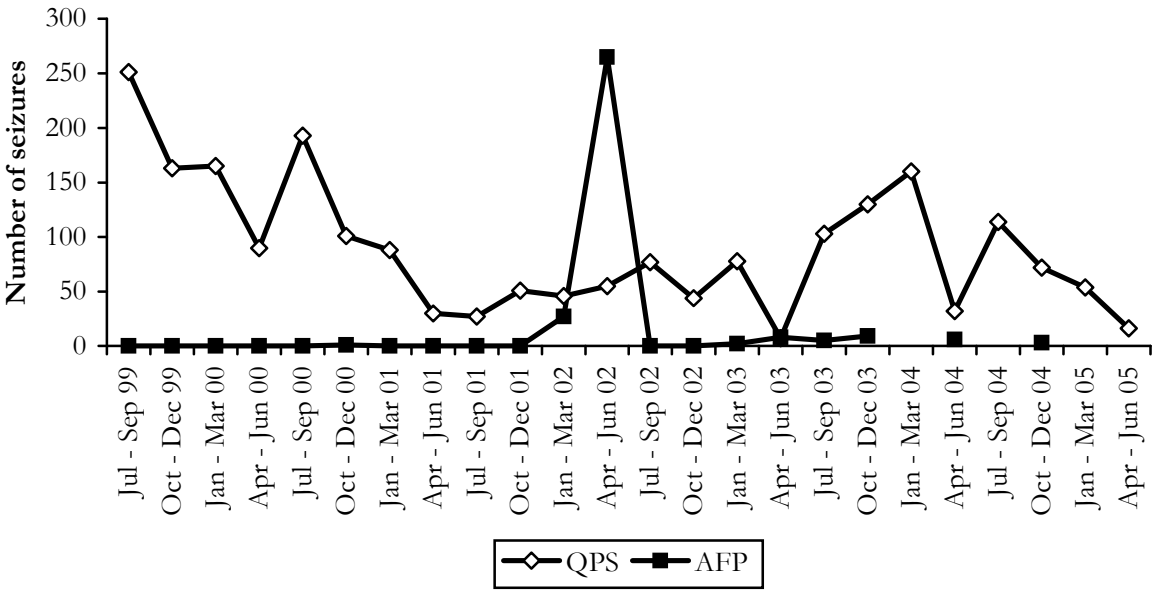
Figure 5: Purity of heroin seizures analysed in QLD, by quarter, 1999/00-2004/05



Source: Australian Crime Commission

The number of AFP heroin seizures in Queensland is typically small; however, the one exception to this occurred in the second quarter of 2002, when AFP made 265 heroin seizures in Queensland. Perhaps significantly, this is also the quarter in which the median purity of QPS heroin seizures was at its lowest (see Figure 5). These findings provide some indirect evidence for an impact of law enforcement activity on the purity of heroin in the market. The number of heroin seizures made by QPS fell throughout most of the 2004/05 financial year, with only 16 seizures made in the April-June 2005 quarter and a total of 256 for the year, compared with 425 in 2003/04.

Figure 6: Number of heroin seizures analysed in QLD, by quarter, 1999/00-2004/05



Source: Australian Crime Commission

Table 5 shows IDU perceptions of heroin purity, and changes in purity over the previous six months, from 2000 to 2005. In 2005 over a third (39%) of IDU reported the purity of heroin as medium; however, another 23% reported the purity as low. One in three IDU (33%) reported the purity as decreasing over the previous six months; however, more than a quarter (28%) reported that the purity was stable over this time and 20% reported that it had fluctuated. Overall, there was poor agreement among IDU with respect to recent changes in the purity of heroin (see Table 5).

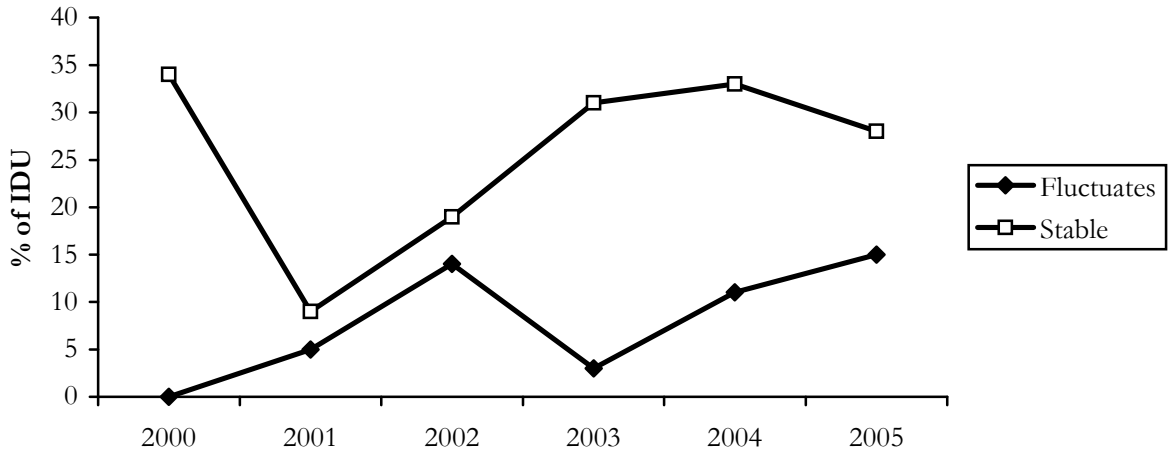
Table 5: Purity of heroin and changes in purity, as reported by IDU, 2000-2005

	IDRS 2000	IDRS 2001	IDRS 2002	IDRS 2003	IDRS 2004	IDRS 2005
Current purity (%)						
High	14	9	12	17	16	13
Medium	44	19	24	22	38	39
Low	13	28	24	53	30	23
Fluctuates	0	5	14	3	11	15
Don't know	30	39	27	5	5	10
Purity change last 6 mths (%)						
Increasing	16	5	16	10	14	13
Stable	34	9	19	31	33	28
Decreasing	19	36	26	36	26	33
Fluctuating	7	14	13	13	19	20
Don't know	25	36	26	9	8	7

Source: IDRS IDU interviews

The impact of the heroin shortage in 2001 is particularly evident in the proportion of IDU reporting the current purity of heroin as fluctuating and the proportion reporting that the purity had been stable over the last six months. As Figure 7 shows, IDU perceived a large drop in the stability of heroin purity in 2001, and, although the proportion reporting purity as stable increased until 2004, in 2005 fewer IDU reported the purity as stable, and more reported that it was fluctuating. These data seem to indicate on-going instability in the heroin market in south-east Queensland, since the heroin shortage.

Figure 7: Proportion of IDU reporting heroin purity as fluctuating and stable, 2000-2005



Source: IDRS IDU Interviews

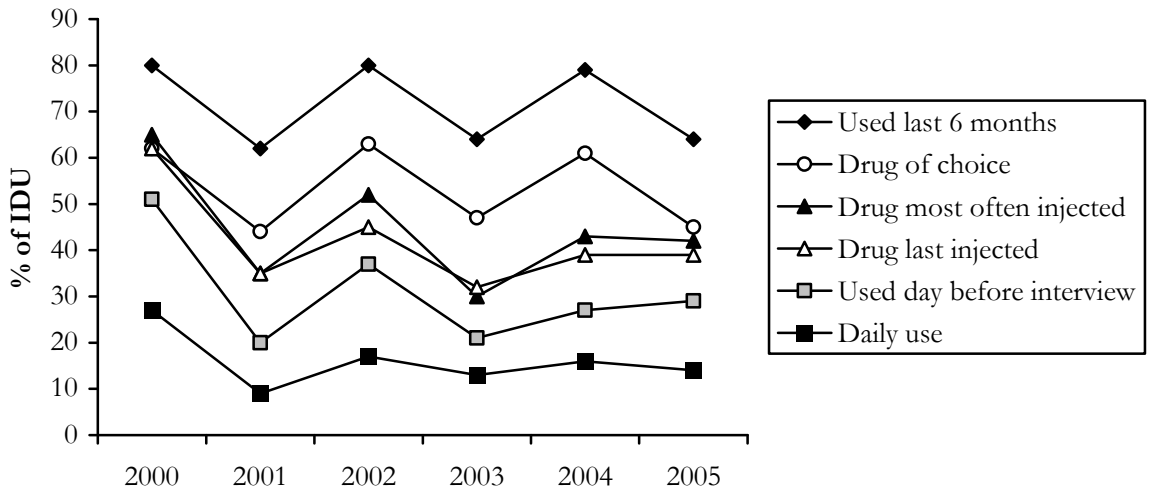
4.4 Use

4.4.1 Heroin use among IDU

Just under two-thirds (64%) of IDU in 2005 reported recent use of heroin – a significant drop from 2004 (79%). Although all respondents reporting recent heroin use reported recent injection of heroin, a proportion also reported heroin use through other routes of administration including smoking (6%), snorting (2%) and swallowing (7%). According to key experts, regular (dependent) heroin users in Queensland typically inject two or three times a day, using one or two points each time or about half a gram ($200) per day.

Most indicators of use suggest that heroin use among IDU decreased in 2005 (see Figure 8). Between 2004 and 2005 there was a drop in the proportion reporting recent use (from 79% to 64%) and in the proportion nominating heroin as their drug of choice (from 61% to 45%); smaller decreases were observed in the proportion reporting daily heroin use (from 16% to 14%) and the proportion nominating heroin as the drug most injected in the last month (from 43% to 42%). At the same time, however, the proportion nominating heroin as the last drug injected remained stable (39%) and there was a small increase in the proportion reporting using heroin the day before interview (from 27% to 29%). Heroin use among IDU has fluctuated each year since 2000, with a large drop in use evident in 2001; data from 2005 suggest that this instability in the heroin market has continued into 2005.

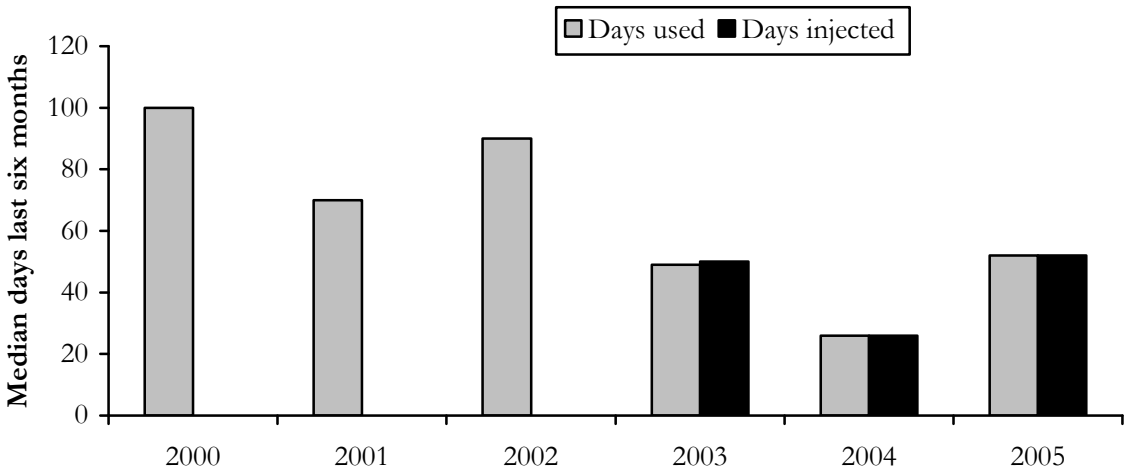
Figure 8: Prevalence and frequency of heroin use in preceding six months, 2000-2005



Source: IDRS IDU Interviews

Despite an apparent decrease in the prevalence of heroin use among IDU in 2005, Figure 9 shows that there has been a simultaneous increase in the frequency of heroin use among those IDU who had used recently in 2005. Between 2004 and 2005 the median number of days used and injected doubled, from 26 days in the last six months (i.e. once a week) in 2004 to 52 days (i.e. twice a week) in 2005.

Figure 9: Median days of use and injection of heroin in last six months among IDU, 2000-2005



Source: IDRS IDU Interviews
Note: Prior to 2003, IDU were not asked separately about frequency of injection

Table 6 shows which forms of heroin have been used and used most by IDU in the last six months, from 2000 to 2005. As in previous years, in 2005 the majority of IDU reported recent use of both powder and rock heroin, with only a small proportion (4%) reporting recent use of homebake heroin. Also consistent with previous years, in 2005 IDU were more likely to nominate rock (57%) than powder heroin (42%) as the form they had used most; only 2% of IDU identified homebake heroin as the form used most. According to one key expert, despite user perceptions that rock is of higher purity and therefore more desirable than powder, rock heroin is not necessarily more pure and it is possible to compress powder into a substance which is sold as 'rock'.

Table 6: Forms of heroin used and used most in the last six months, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
Powder	66	--	58	56	72	35	54	41	69	41	58	42
Rock	76	--	56	60	79	65	55	59	66	57	54	57
Homebake	--	--	--	--	--	--	7	0	9	2	4	2

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

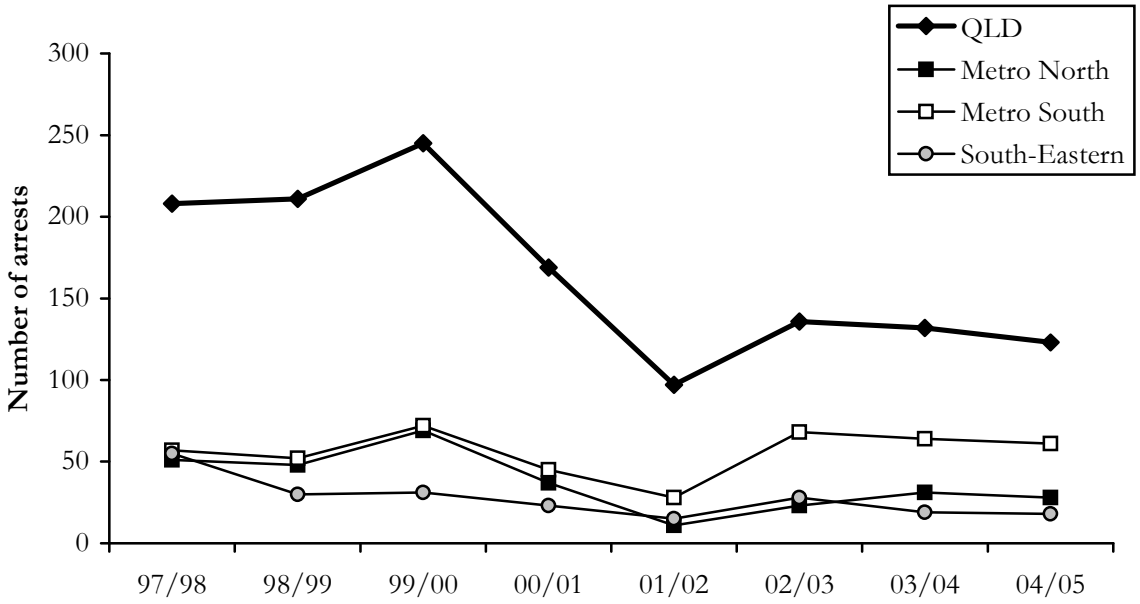
4.5 Heroin-related harms

4.5.1 Law enforcement

Figure 10 shows the number of heroin possession/use arrests made by QPS during each financial year from 1997/98 to 2004/05. In addition to a total figure for the state, Figure 10 shows the number of arrests made in each of the three regions from which IDU are sampled for the IDRS. The total number of arrests rose to a peak of 245 during the 1999/00 financial year, before dropping sharply to only 97 arrests in 2001/02, during the heroin shortage. The total number of heroin use/possession arrests in Queensland during 2003/04 was 132, decreasing to 123 in

2004/05. Half of the heroin use/possession arrests that occurred in QLD during 2004/05 occurred in the Metro South region.

Figure 10: Number of heroin possession/use arrests by geographic area 1997/98-2004/05



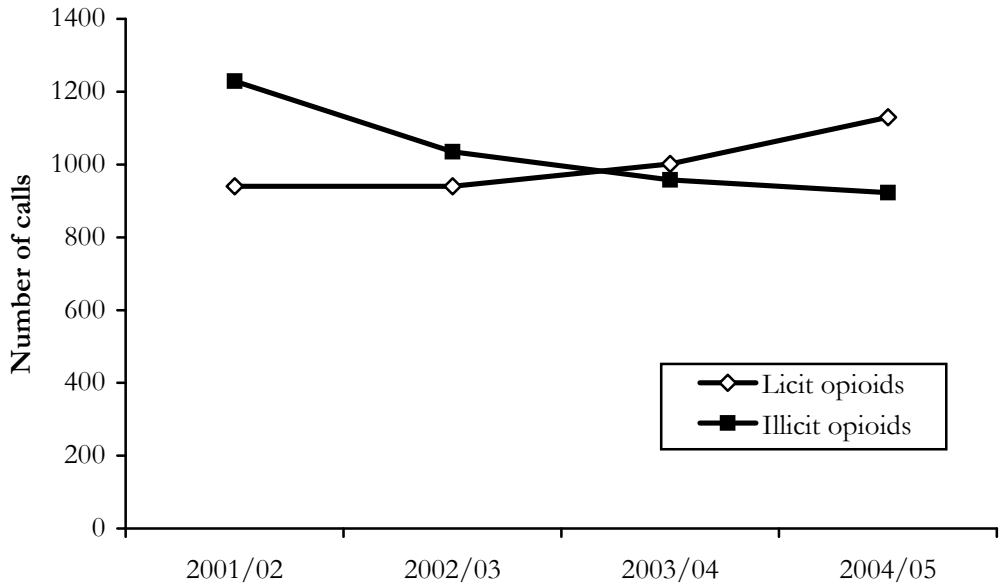
Source: Queensland Police Service

4.5.2 Health

Calls to telephone help lines

Figure 11 shows the number of calls made to the Queensland Alcohol and Drug Information Service (ADIS) in relation to licit and illicit opioids, from 2001/02 to 2004/05. ADIS records do not distinguish between heroin and other illicit opioids; however, the vast majority of calls in relation to illicit opioids relate to heroin (ADIS, personal communication, Feb. 2005). By contrast, the licit opioid category includes calls in relation to licit opioids such as morphine, methadone, buprenorphine and oxycodone, whether used as prescribed or not. Since 2001/02, the number of calls in relation to illicit opioids has dropped consistently, to a low of 923 calls in 2004/05, while the number of calls in relation to licit opioids has risen – from 940 calls in 2001/02 to 1,130 calls in 2004/05. This is consistent with key expert reports of less frequent heroin use and correspondingly greater use of other opiates by IDU, including diverted morphine, methadone, buprenorphine and oxycodone.

Figure 11: Number of enquiries to ADIS regarding licit and illicit opioids, 2001/02-2004/05

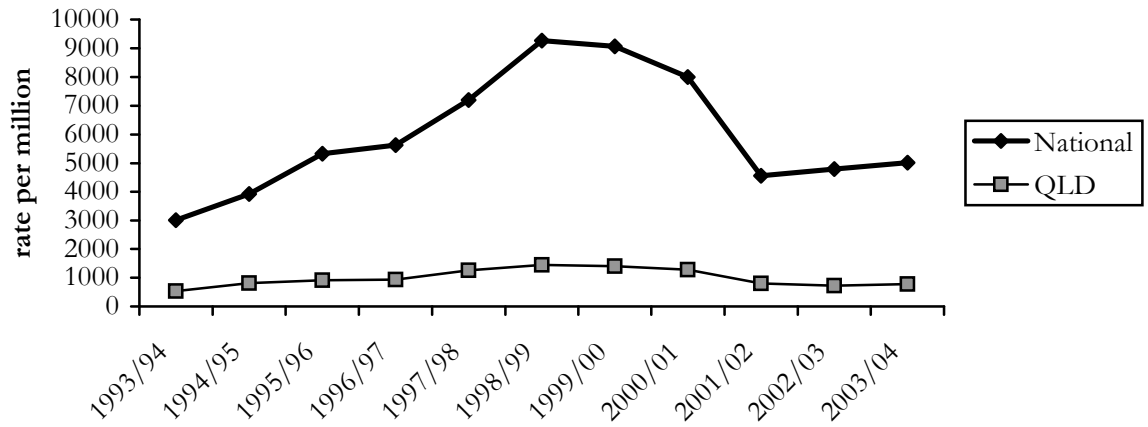


Source: Queensland ADIS

Hospital admissions

The number of hospital admissions in Queensland where opioids were the primary diagnosis peaked in 1998/99 at a rate of 1,444 per million persons aged 15–54, before falling rapidly over the next four years to a rate of 725 per million in 2003/03. Since 2003/03 this rate rose slightly in 2003/04 to a rate of 784 per million, paralleling the national trend (see Figure 12).

Figure 12: Rate of inpatient hospital admissions where opioids were the primary diagnosis per million people aged 15–54 years, QLD and nationally, 1993/1994 to 2000/2005

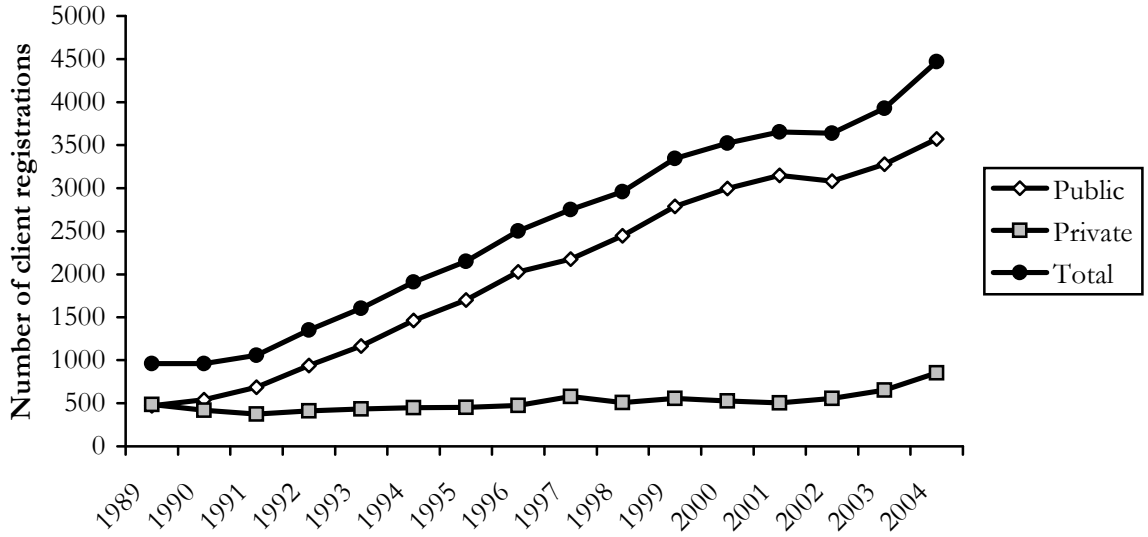


Source: Roxburgh & Degenhardt, in press

Treatment

Despite considerable fluctuations in the heroin market in recent years, the rate of registration for opioid pharmacotherapy has been reasonably consistent in Queensland for many years. As Figure 13 shows, the number of client registrations rose consistently from 861 in 1990 to a high of 3,653 in 2001. This figure reached a plateau briefly in 2002 before rising again to 4,470 registrations in 2004 – an increase of 22% in two years. Throughout this time the majority of registrations (80% in 2004) have been with public prescribers; however, since 2001 the number of private client registrations increased by 69%, from 505 in 2001 to 852 in 2004.

Figure 13: Number of registrations for opioid pharmacotherapy, QLD 1989-2004



Source: AIHW analysis of 2004 NOPSAD collection.

Note: Total also includes 45 clients in correctional facilities.

As Table 7 shows, Queensland is unusual in that most opioid pharmacotherapy clients are registered with a public prescriber. Nationally, only 24% of clients in 2004 were registered with a public prescriber, compared with 80% of clients in Queensland. Queensland is also distinguished by its low rate of opioid pharmacotherapy in prisons, with only 1% of registrations among clients in correctional facilities, compared with 6.4% nationally. Given that the vast majority of both male and female prisoners have a history of illicit drug use (Butler & Milner, 2003; Johnson, 2004; Makkai & Payne, 2003), it is likely that demand for treatment in these settings is not currently being met.

Table 7: Proportion of pharmacotherapy clients in Queensland and Australia by prescriber, 2004

	QLD	Australia
Public prescriber (%)	79.9	24.1
Private prescriber (%)	19.1	68.9
Public/private prescriber (%)	--	0.6
Correctional facilities (%)	1.0	6.4

Source: AIHW, 2003

Although most clients are registered with a public prescriber, once stabilised, most clients typically pick up their dose from a pharmacy (83%), with most of the remainder (9%) picking up from a public clinic (see Table 8).

Table 8: Proportion of pharmacotherapy clients in Queensland and Australia by dosing site, 2004

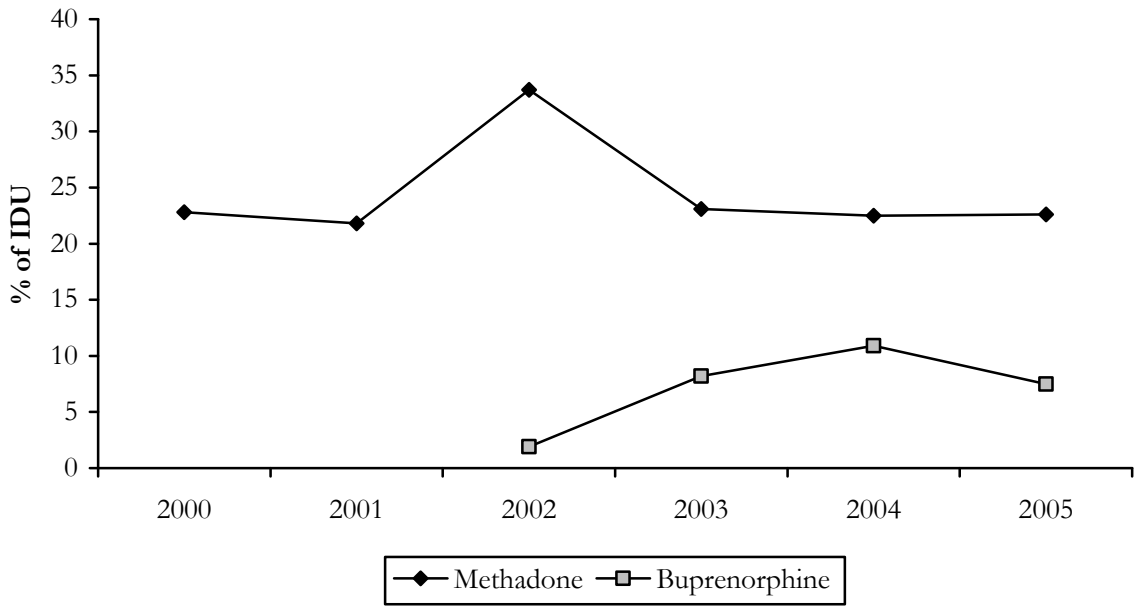
	QLD	Australia
Public clinics (%)	9.3	12.2
Pharmacies (%)	83.0	68.6
Private clinics (%)	0.0	7.9
Correctional facilities (%)	0.8	5.2
Other (%)	6.9	6.3

Source: AIHW, 2003

Methadone and buprenorphine treatment

Figure 14 shows the proportion of IDU from 2000 to 2005 who were receiving pharmacotherapy (methadone or buprenorphine) at the time of interview. The proportion in methadone treatment rose markedly in 2002 – possibly in response to the heroin shortage – but declined thereafter, while the proportion receiving buprenorphine treatment increased from 2% in 2002 to 11% in 2004. In 2005 the proportion of IDU in buprenorphine treatment declined slightly to 8%, while the proportion in methadone treatment remained stable at 23%. According to key experts, many IDU (particularly younger IDU) are becoming increasingly disenchanted with methadone maintenance, with some perceiving a high degree of stigma associated with the treatment. By contrast, key experts suggested that IDU do not perceive the same degree of stigma associated with buprenorphine; however, despite an increasing demand for buprenorphine treatment, key experts reported that the often long waiting time to get onto the program is a significant deterrent.

Figure 14: Proportion of IDU reporting current methadone and buprenorphine treatment, 2000-2005



Source: IDRS IDU Interviews
Note: Buprenorphine has only been available in QLD since 2002

4.6 Summary of heroin trends

- In 2005 the **price** of heroin increased slightly but overall was stable. The price in 2005 was lower than during the heroin shortage in 2001, but higher than prior to shortage.
- The majority of IDU reported that heroin was easy/very easy to get, with mixed reports of changes in **availability** reflecting on-going instability in the heroin market.
- There was poor agreement among IDU with respect to heroin **purity**, with some evidence of decreasing stability of purity in 2005. Seizure data provide some evidence of increasing heroin purity at the retail level.
- The prevalence of heroin **use** among IDU may have decreased in 2005, with fewer occasional users, indicating on-going instability of supply (and consequently demand) in the heroin market. Nevertheless, among regular users the median frequency of use has doubled, indicating that a regular supply of heroin is available for dependent users.
- **Arrests** for heroin use/possession continue to be lower than prior to the heroin shortage, with about half of the arrests in the state in 2004/05 occurring in the Metropolitan South police region.
- Continuing the trend from 2004, in 2005 the number of calls to the ADIS **help line** regarding illicit opioids (mostly heroin) declined, while the number of calls regarding licit opioids increased, suggesting that a growing proportion of IDU are turning to prescription opioids (e.g. morphine and oxycodone) in response to on-going suppression of the heroin market. The number of **hospital admissions** with a primary diagnosis related to opioids increased slightly in 2005, mirroring the national trend. Current hospitalisation rates are, however, well below those seen prior to the heroin shortage, and in fact are the lowest they have been since the early 1990s.
- Despite this, the number of **opioid pharmacotherapy registrations** in QLD has continued to climb: after a brief plateau in 2001/02 the number of registrations rose from 3,929 in 2003 to 4,470 in 2004. Most registrations in QLD are with public prescribers, and despite the high rates of injecting drug use among prisoners, only 1% of registrations in QLD are in correctional facilities. Among IDU interviewed for the IDRS, buprenorphine registrations rose rapidly form 2002 to 2004, but have declined somewhat in 2005.

5.0 METHAMPHETAMINE

As in previous years, the heroin and methamphetamine markets in south-east Queensland seem to be operating in a reciprocal fashion, with an increase in the use of one substance paralleled by a decrease in use of the other. This reciprocal relationship is reflected in the main indicators of market activity – price, purity and availability – although the relationship is complicated by the presence of multiple forms of methamphetamine, and an increasing array of alternative opiates (e.g., morphine, oxycodone, methadone and buprenorphine) on the market. The IDRS distinguishes among powder, base and crystal methamphetamine ('ice'), with the former two mostly produced locally in small clandestine laboratories ('box labs'), and the latter mostly imported from South East Asia (ACC, 2004; CMC, 2003). As the following section will illustrate, this distinction is important to understanding the dynamics of the methamphetamine market in Queensland. Note: methamphetamine is also known as methylamphetamine.

5.1 Price

The reported price of methamphetamine powder and base changed little from 2004 to 2005, and in both years there was no difference in price between the two forms (see Table 9). IDU in 2005 reported that powder and base cost $200 per gram, $100 for a half gram, $50 for a 'point' and $500 for an 'eightball' (3.5 grams). These prices are the same as those reported in 2004, with the exception that the reported price of an eightball of powder or base was $450 in 2004.

By contrast, there was some evidence of a decrease in the price of crystal methamphetamine ('ice'), with IDU reporting a median price of $200 per gram in 2005 (vs. $250 in 2004) and $100 for a half gram (vs. $120 in 2004). The price of a point of ice remained stable from 2004 to 2005 at $50, while the reported price of an eightball fell from $500 in 2004 to $450 in 2005 (see Table 9).

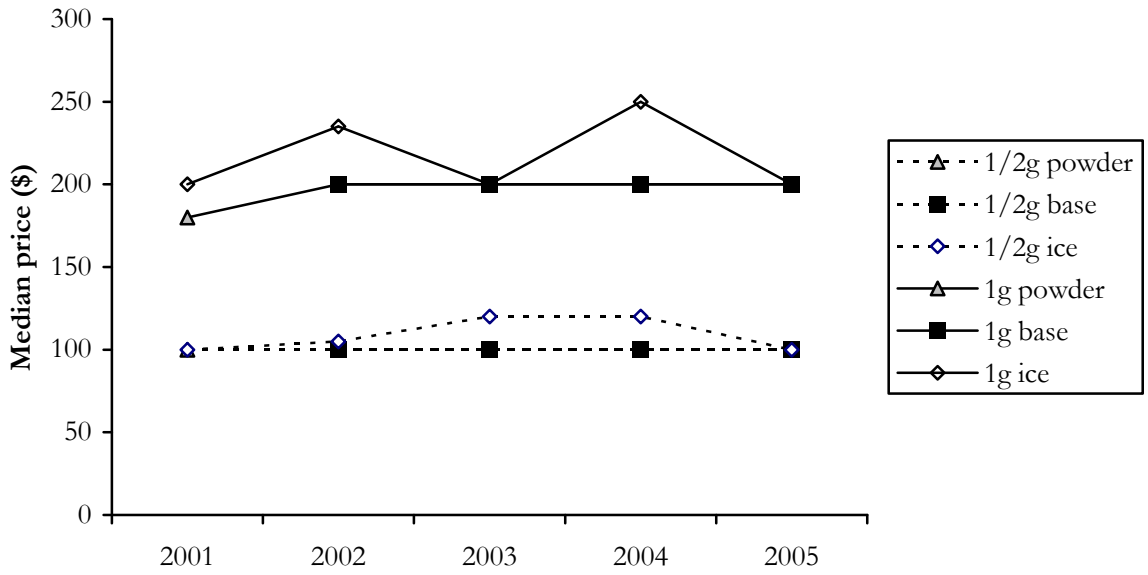
Table 9: Price of most recent methamphetamine purchases by IDU, 2005

Amount	Median price* $	Number of purchasers*
Powder		
Gram	200 (200)	20 (25)
"Halfweight" (0.5 grams)	100 (100)	24 (37)
"Eightball" (3.5 grams)	500 (450)	21 (12)
Point (0.1 gram)	50 (50)	26 (36)
Base		
Gram	200 (200)	6 (26)
"Halfweight" (0.5 grams)	100 (100)	13 (35)
"Eightball" (3.5 grams)	500 (450)	7 (16)
Point	50 (50)	8 (26)
Ice		
Gram	200 (250)	3 (15)
"Halfweight" (0.5 grams)	100 (120)	9 (19)
"Eightball" (3.5 grams)	435 (500)	6 (7)
Point (0.1 gram)	50 (50)	9 (26)

Source: IDRS IDU interviews
* 2004 data are presented in brackets

The distinction between price patterns for powder and base, and for ice, are evident in Figure 15. Whereas the price of powder and base have been quite consistent over this period, the median price of a gram and half gram of ice have fluctuated considerably. In 2005 the price of ice dropped to $100 for a half gram and $200 for a gram, consistent with the price for powder and base.

Figure 15: Median price of a gram and half gram of powder, base and ice, estimated from IDU purchases, 2001-2005

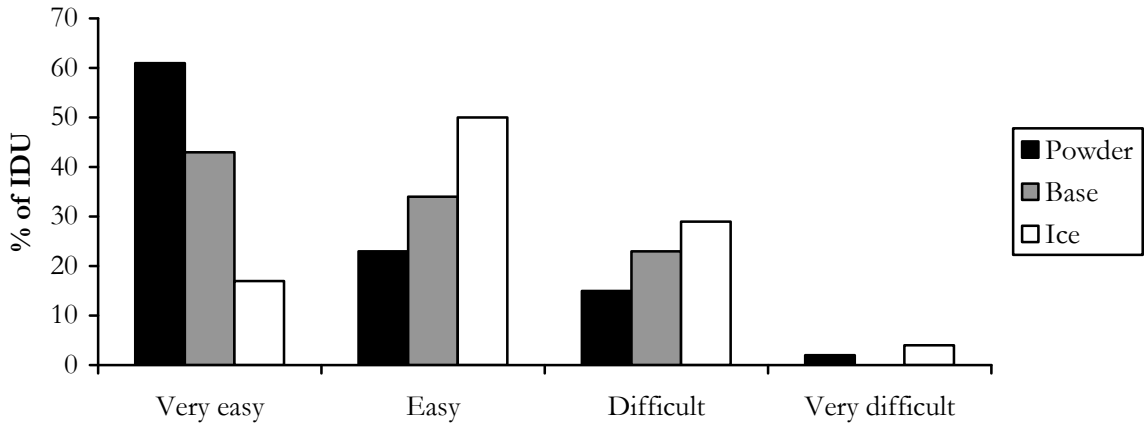


Source: IDRS IDU Interviews

5.2 Availability

As in previous years, the majority of IDU reported that all forms of methamphetamine were either easy or very easy to obtain; however, ice appears to be less readily available than other forms. The availability of powder and base was rated as 'easy or very easy' by 84% and 77% of IDU respectively, compared with only 67% of IDU who rated ice as easy or very easy to get. While powder and base were rated as 'difficult or very difficult' to get by only 17% and 23% of IDU respectively, 31% rated ice as difficult or very difficult to get (see Figure 16). Consistent with this, key experts reported that all forms of methamphetamine were relatively easy to obtain, although some key experts perceived that the availability of ice was increasing, while powder and base were becoming less readily available. One law enforcement KE reported an increase in seizures of ice; however, as law enforcement seizure data do not distinguish between ice and other forms of methamphetamine, this report is impossible to verify.

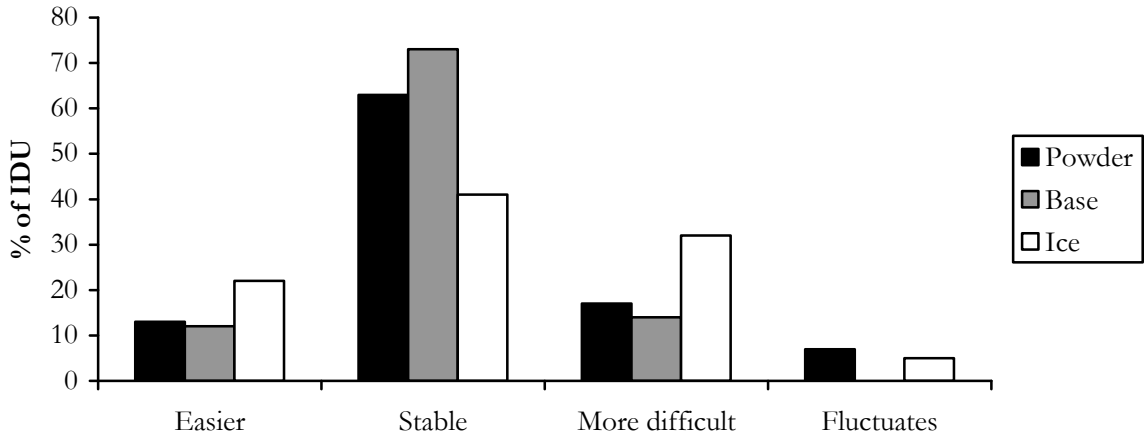
Figure 16: IDU reports of ease of availability of methamphetamine powder, base and ice in the past six months, 2005



Source: IDRS IDU Interviews
Note: In the interests of comparability, 'don't know' responses have been excluded. Valid percentages are shown.

Ice is distinguished from powder and base in terms of price trends, and as Figure 17 shows, it is also distinguished by trends in availability. The majority of IDU in 2005 rated the availability of powder (63%) and base (73%) as stable, compared with only 41% rating the availability of ice as stable. Compared to other forms of methamphetamine, there was more *disagreement* among IDU with respect to changes in the availability of ice, with 22% reporting that ice had become easier to get, 32% reporting that it had become more difficult to get, and 5% reporting that availability had fluctuated recently (see Figure 17).

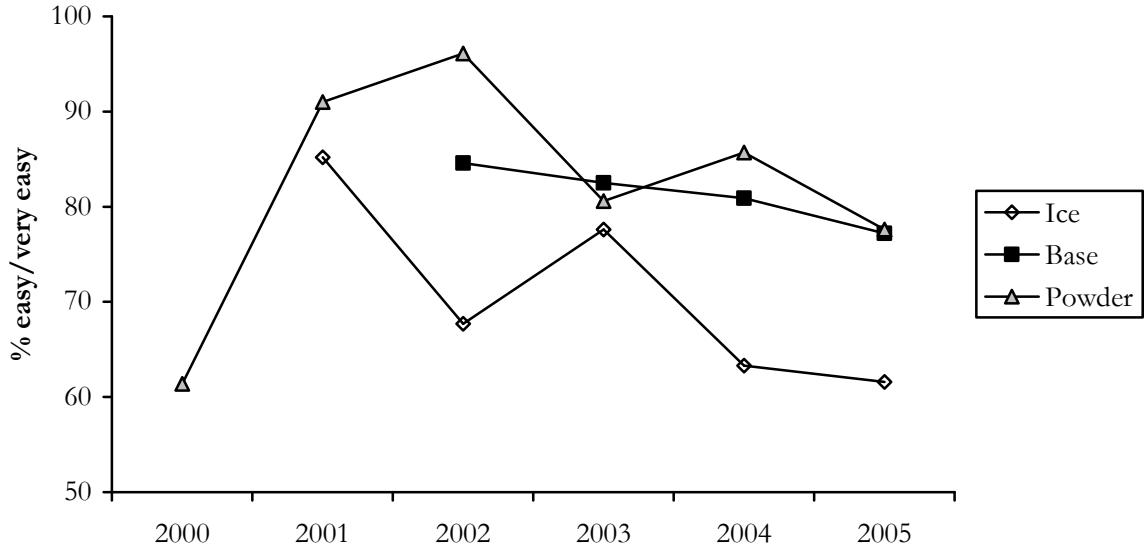
Figure 17: IDU reports of recent changes in the availability of methamphetamine powder, base and ice, 2005



Source: IDRS IDU Interviews
Note: In the interests of comparability, 'don't know' responses have been excluded. Valid percentages are shown.

Trends in the reported availability of methamphetamine powder, base and ice from 2000 to 2005 are shown in Figure 18. Although ice again displays patterns distinct from those of powder and base, the reported availability of all forms of methamphetamine declined in 2005.

Figure 18: IDU reports of ease of availability of methamphetamine in the past six months, 2000-2005

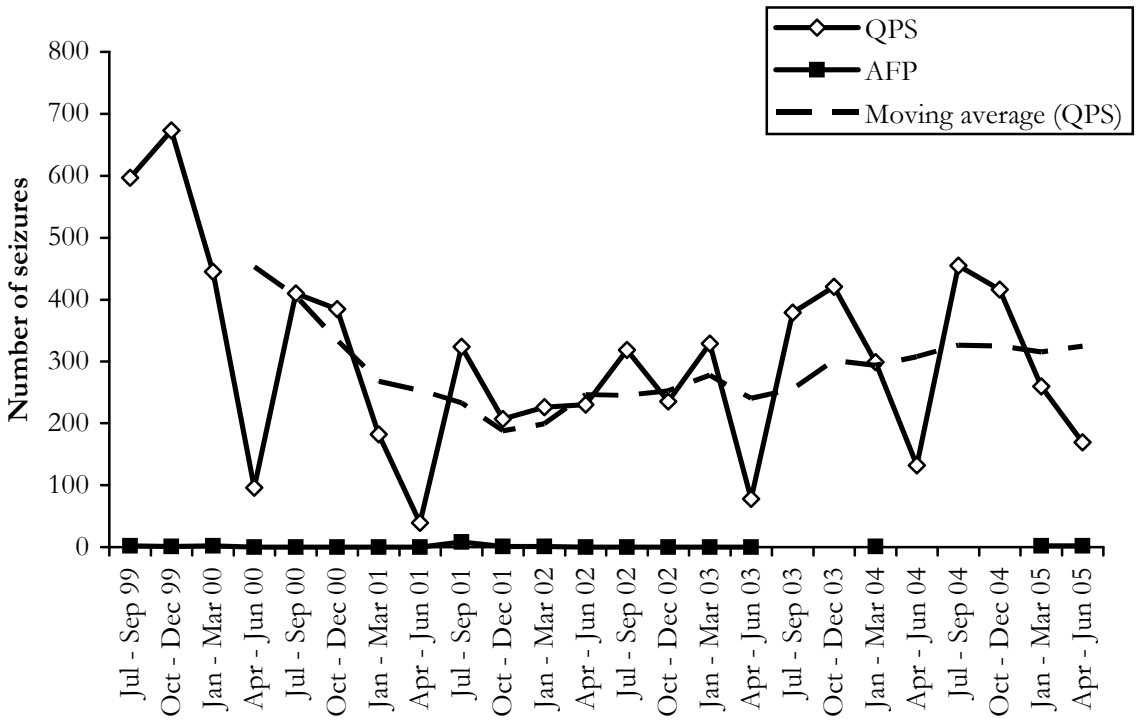


Source: IDRS IDU Interviews
Note: Valid percentages are shown.

5.3 Purity

Figures 19 and 20 show the number and median purity of methylamphetamine seizures made in Queensland by QPS and AFP, from 1999/00 to 2004/05. The vast majority of methylamphetamine seizures in Queensland have been made by QPS, with AFP typically only making one or two seizures in each quarter. The number of QPS seizures has varied considerably over this time, and is typically lower in the last quarter of each financial year; however, averaged across quarters, the number of seizures has increased slightly over the past few years (see Figure 19).

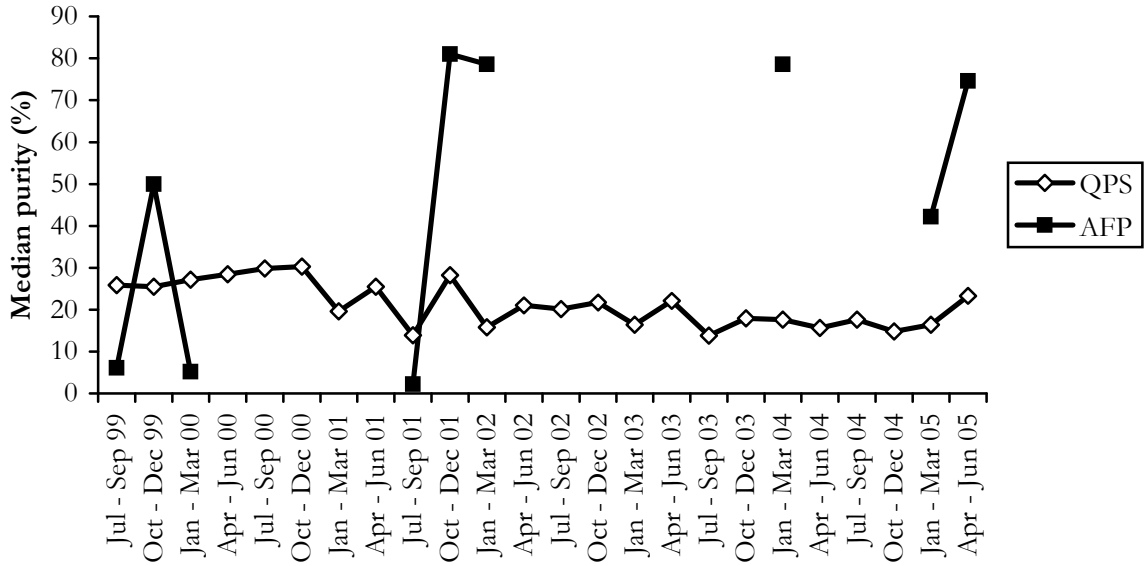
Figure 19: Number of methylamphetamine seizures analysed in QLD, by quarter, 1999/00-2004/05



Source: ACC

Whereas the number of seizures has fluctuated over time, the median purity of methylamphetamine seizures in Queensland by QPS has been more consistent, despite a decline in purity in 2003/04. In 2004/05 the median purity of QPS seizures was 17.3%, compared with 20% in both 2002/03 and 2001/02 (see Figure 20). During the last quarter of 2004/05 the median purity of QPS seizures was 23.3%. Unfortunately, seizure data do not distinguish between ice and other forms of (domestically produced) methylamphetamine, so these fluctuations in purity are difficult to interpret.

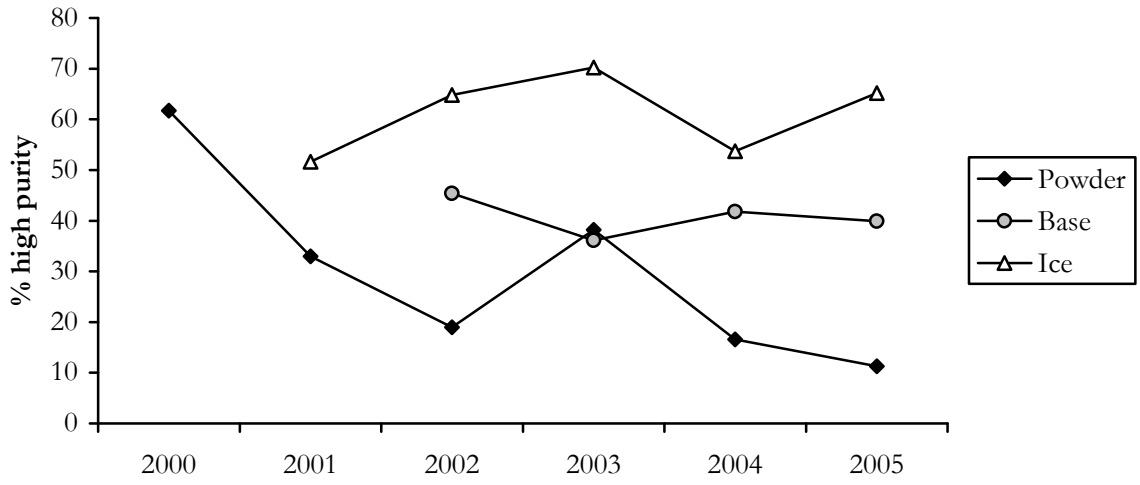
Figure 20: Purity of methylamphetamine seizures analysed in QLD, by quarter, 1999/00-2004/05



Source: ACC

The perceived purity of methamphetamine powder, base and ice as reported by IDU, is shown in Figure 21. As the figure shows, ice has consistently been rated as the most pure form of methamphetamine, with the proportion of IDU rating the purity as 'high' increasing from 54% in 2004 to 65% in 2005. By contrast, between 2004 and 2005 there was a decline in the proportion of IDU rating the purity of powder (from 17% to 11%) and base (from 42% to 40%) as high.

Figure 21: Proportion of IDU reporting speed, base and ice purity as 'high', 2000-2005



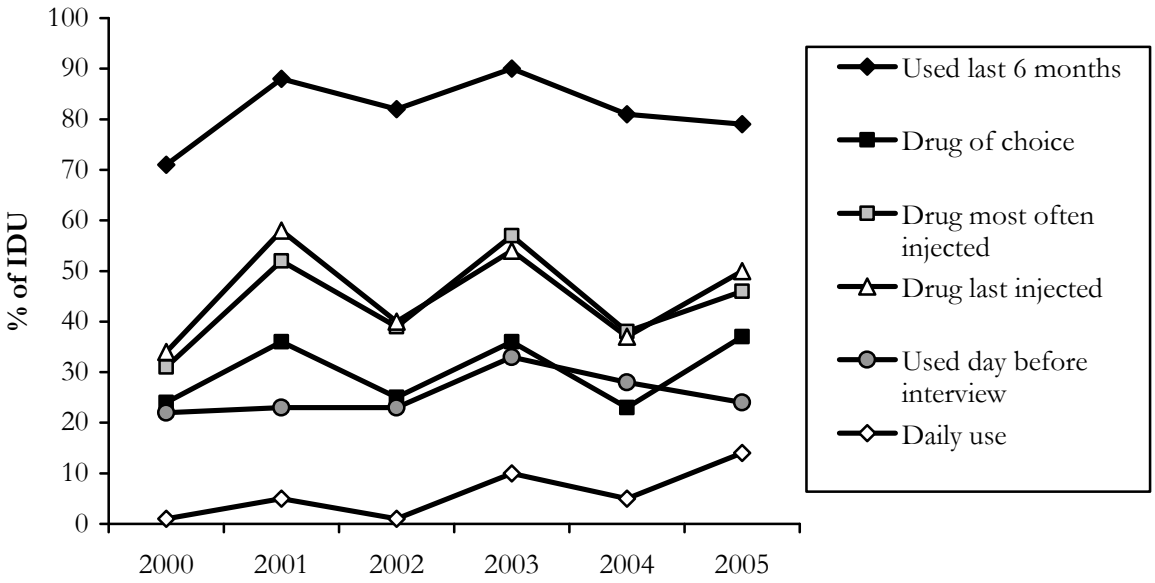
Source: IDRS IDU Interviews
Note: In the interests of comparability, 'don't know' responses have been excluded. Valid percentages are shown.

5.4 Use

5.4.1 Methamphetamine use among IDU

Patterns of methamphetamine use among IDU from 2000 to 2005 are shown in Figure 22. Continuing the trend from 2003 to 2004, the proportion of IDU reporting recent methamphetamine use decreased slightly from 2004 (81%) to 2005 (79%), while the proportion reporting use the day before interview declined from 28% in 2004 to 24% in 2005. All other indicators suggest an increase in methamphetamine use among IDU: between 2004 and 2005 there were marked increases in the proportion of IDU nominating methamphetamine as their drug of choice (from 23% to 37%), the drug most often injected in the last month (from 38% to 46%) and the last drug injected (from 37% to 50%). The proportion of IDU reporting daily use of methamphetamine almost tripled in this time, from 5% in 2004 to 14% in 2005.

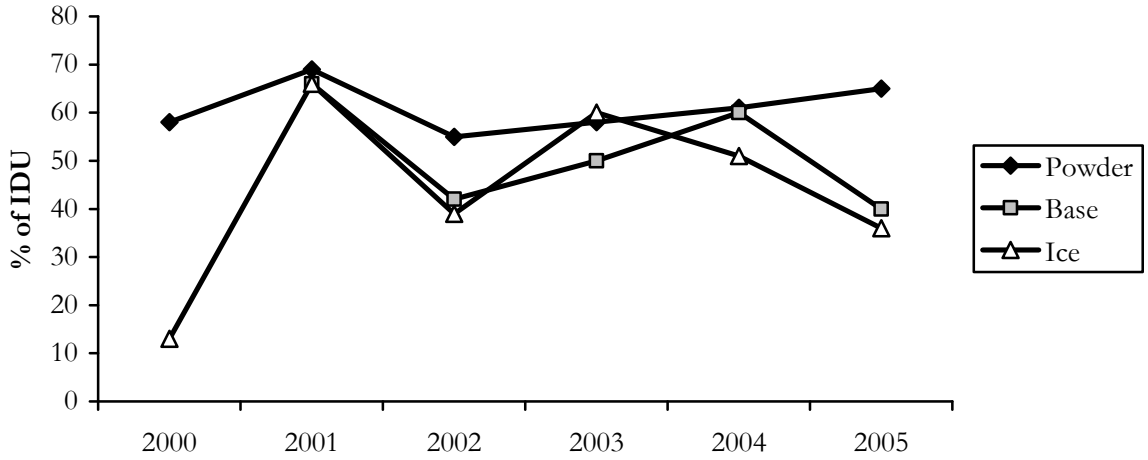
Figure 22: Proportion of IDU reporting methamphetamine use in the past six months, 2000-2005



Source: IDRS IDU Interviews

Trends in the recent use of methamphetamine among IDU are different for powder, base and ice (Figure 23). Whereas the proportion of IDU reporting recent powder use has risen consistently since 2002, the proportion reporting recent base use has fluctuated, increasing between 2002 (42%) and 2004 (60%) before dropping to a record low of 40% in 2005. Similarly, while the proportion of IDU reporting recent ice use rose dramatically during the heroin shortage in 2001, it has fluctuated since, dropping from 60% in 2003 to a low of 36% in 2005. As noted above, this pattern mirrors that for heroin, which may be imported into Australia through the same channels as crystal methamphetamine (ABCI, 2001). A number of key experts reported increasing smoking of ice, typically through glass pipes, and two KE from the law enforcement sector reported an increase in glass pipes at clandestine laboratories. These reports of increased ice smoking are not necessarily inconsistent with the IDU data presented below: according to a number of key experts, most IDU favour powder or (particularly) base for injecting, while ice use and smoking are increasingly becoming a feature of the recreational drug use culture.

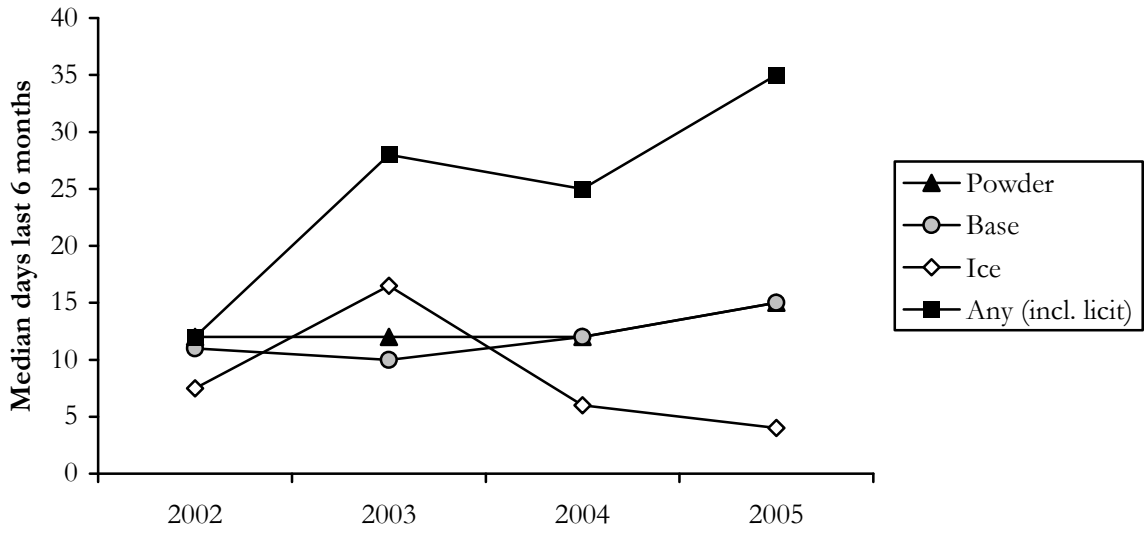
Figure 23: Proportion of IDU reporting recent use of methamphetamine powder, base and ice, 2000-2005



Source: IDRS IDU Interviews
Note: recent use of base not asked about in 2000

Figure 24 shows the median days of use of methamphetamine among IDU in the last six months, among those who had used recently, from 2002 to 2005. The frequency of methamphetamine use increased markedly from 2002 to 2003, but then declined somewhat in 2004 before increasing again in 2005. The median frequency of powder and base use was quite stable from 2002 to 2004, increasing somewhat in 2005; however, again the pattern for ice is different: the median frequency of ice use rose from 8 days (out of 180) in 2002 to 17 days in 2003, dropping to 7 days in 2004 and 4 days in 2005. These data suggest that, at least in south-east Queensland, the ice market is quite distinct from the market for other, domestically-produced forms of methamphetamine.

Figure 24: Median days of methamphetamine use among IDU, 2002-2005



Source: IDRS IDU Interviews
Note: Due to poor comparability, data prior to 2002 have been excluded from this figure.

5.4.2 Current patterns of methamphetamine use

In 2005, nearly all IDU who had used methamphetamine recently reported mostly using either powder (54%), base (29%) or ice (10%). As in previous years, only a small proportion (5%) reported mostly using liquid methamphetamine, and although a few IDU reported recent use of either licit (4%) or illicit (10%) prescription methamphetamine, only 1% reported mostly using this form of the drug (see Table 10).

Table 10: Forms of methamphetamine used and used most in the last six months, 2000-2005

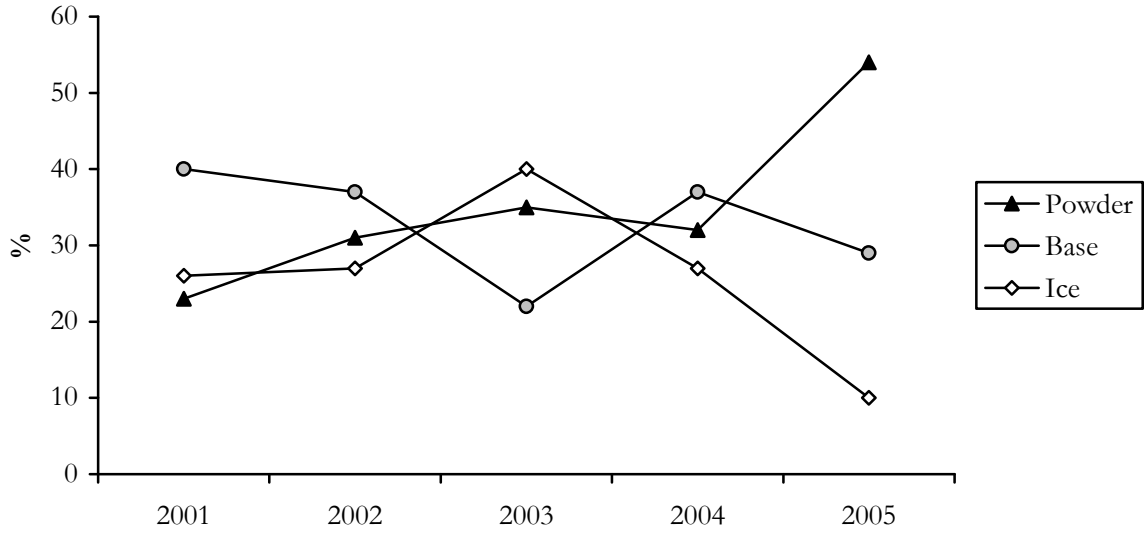
	2000		2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
Powder	58	--	69	23	56	31	65	35	61	32	65	54
Base	--	--	66	40	49	37	52	22	62	37	39	29
Crystal	13	--	66	26	48	27	64	40	58	27	35	10
Liquid	42	--	29	2	27	6	24	4	14	4	17	5
Prescription (licit)	9	--	2	0	1	0	2	0	1	0	4	1
Prescription (illicit)		--	9	1	5	0	3	0	6	0	10	1

Source: IDRS IDU interviews

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

Changes over time in the proportion of IDU nominating each form of methamphetamine as the form most used are shown in Figure 25. Between 2001 and 2005 there was a substantial increase in the proportion of IDU nominating powder as the form most used, with most of this increase occurring between 2004 (32%) and 2005 (54%). There was a corresponding decrease between 2004 and 2005 in the proportion of IDU nominating the purer forms of methamphetamine as the form most used: the proportion nominating base fell from 37% to 29%; ice from 27% to 10%. While an increasing proportion of IDU seem to be using mostly powder methamphetamine, the proportion reporting mostly using ice has decreased markedly since 2003, paralleling a corresponding decrease in the reported availability of this high-purity form (see Figure 18).

Figure 25: Methamphetamine form most used in the preceding six months, 2001-2005



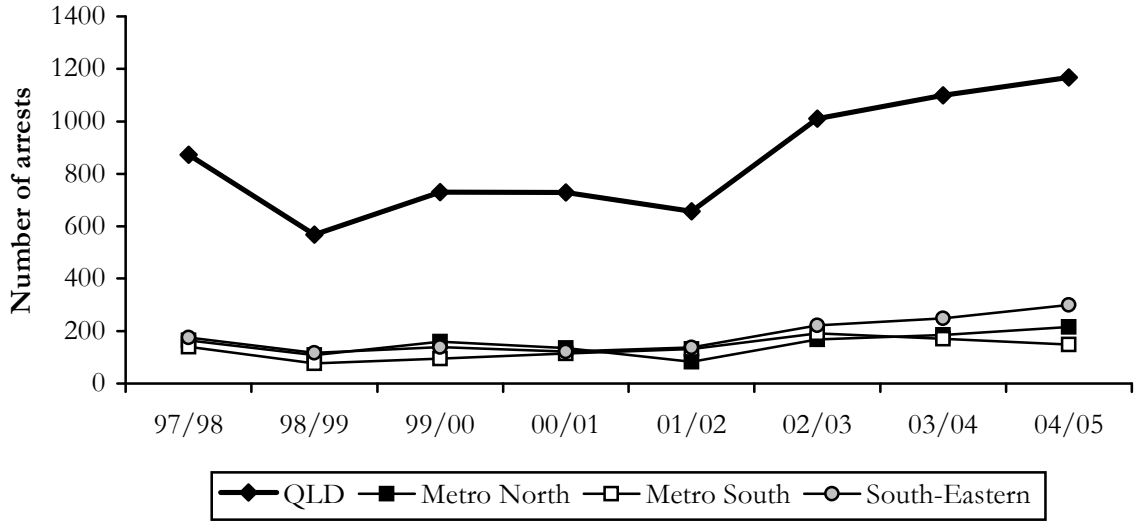
Source: IDRS IDU Interviews

5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Figure 26 shows the number of amphetamine-type stimulant (ATS) arrests made by QPS from 1997/98 to 2004/05 in Queensland, and in the three south-east Queensland regions from which IDU are sampled for the IDRS. Overall, the number of arrests increased sharply from 2001/02 (657) to 2004/05 (1,167), although this trend is only partially reflected in the figures for south-east Queensland regions. The apparent rise in ATS arrests in Queensland is difficult to interpret for two reasons: (a) the ATS category includes amphetamine, methylamphetamine and MDMA (ecstasy), and (b) an increase in arrests may indicate increased production, distribution and use of the drug class, and/or it may indicate increased operational activity around that drug class. Indeed, one key expert from the law enforcement sector reported an increased focus by QPS on the ecstasy market in far north Queensland, while another reported an increased focus on ATS drugs generally.

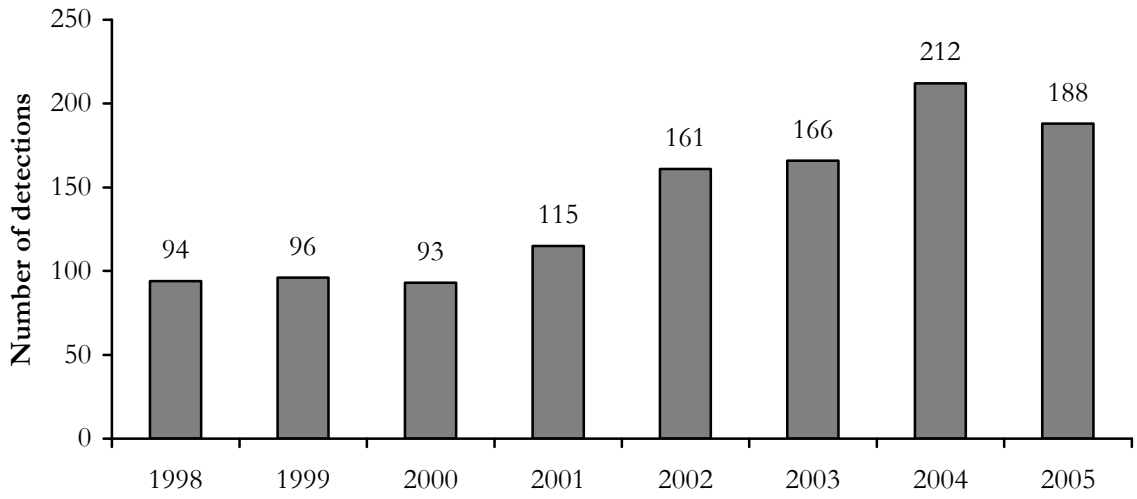
Figure 26: Number of amphetamine-type stimulant (ATS) possession/use arrests by geographic area, 1997/98-2004/05



Source: Queensland Police Service
Note: ATS includes amphetamine, methamphetamine and phenethylamines (e.g. MDMA)

Figure 27 shows the number of clandestine laboratories detected by QPS from 1998 to 2005. Over this seven year period the number of labs detected has doubled, reaching a peak of 212 labs in 2004. According to key experts from the law enforcement sector, the increase in lab detections is indicative of both increased operational activity and detection rates among QPS officers, and a real increase in attempts to produce methylamphetamine within the state. The number of labs detected in QLD each year is considerably larger than that reported in other states; however, this difference must be interpreted with caution: according to law enforcement KE, methylamphetamine production in QLD is characterised by a large number of (typically) small, low-yield labs, whereas most other Australian jurisdictions report fewer lab detections, but with each lab producing a larger quantity of methylamphetamine.

Figure 27: Number of clandestine laboratory detections in QLD, 1998-2005

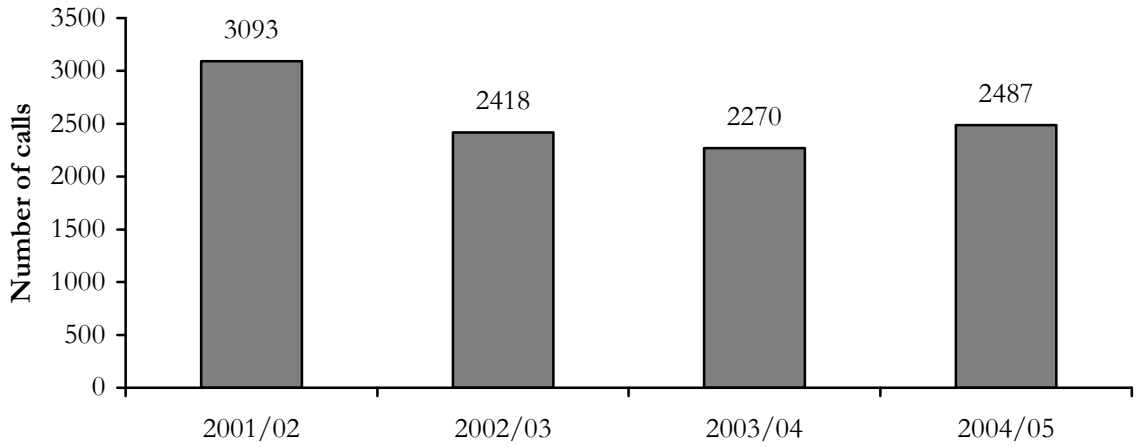


Source: Queensland Police Service

5.5.2 Health

Figure 28 shows the number of telephone calls made to the Queensland Alcohol and Drug Information Service (ADIS) regarding amphetamines from 2001/02 to 2004/05. Consistent with an increase in IDU reports of methamphetamine use in 2005, ADIS data show an increase in amphetamine-related inquiries from 2,270 in 2003/04, to 2,487 in 2004/05.

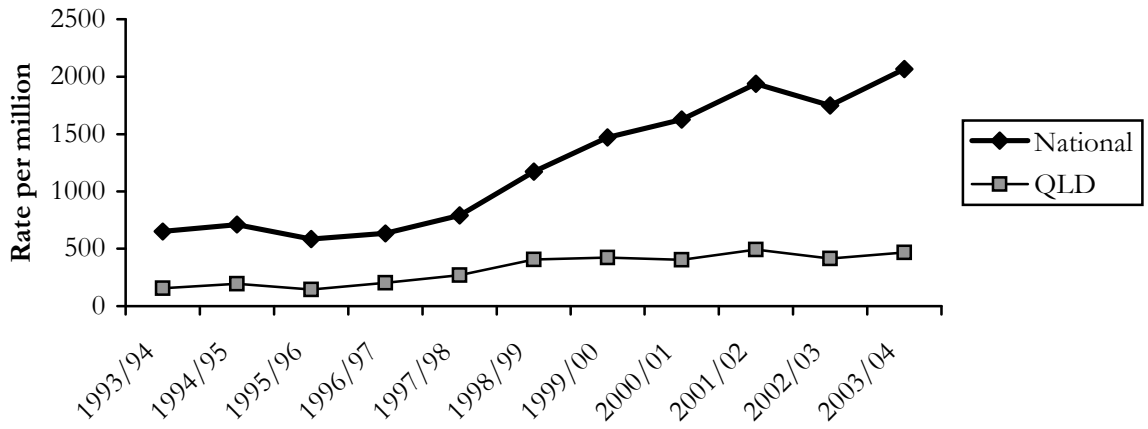
Figure 28: Number of enquiries to ADIS and FDS regarding amphetamines, including 'ice', 1996-2005



Source: IDRS IDU Interviews

Figure 29 shows the rate per million of amphetamine-related hospital admissions in Queensland from 1993/94 to 2003/04. Nationally, the rate has risen more than three-fold, from 652 to 2,066, while in Queensland the rate rose from 155 to 468 over the same time period. As with all indicator data, this increase is likely to reflect a combination of an increase in amphetamine-related problems, and an increase in awareness and treatment-seeking behaviour among amphetamine users.

Figure 29: Rate of inpatient hospital admissions where amphetamines were the primary diagnosis per million people aged 15-54 years, QLD and nationally, 1993/1994 to 2003/2004



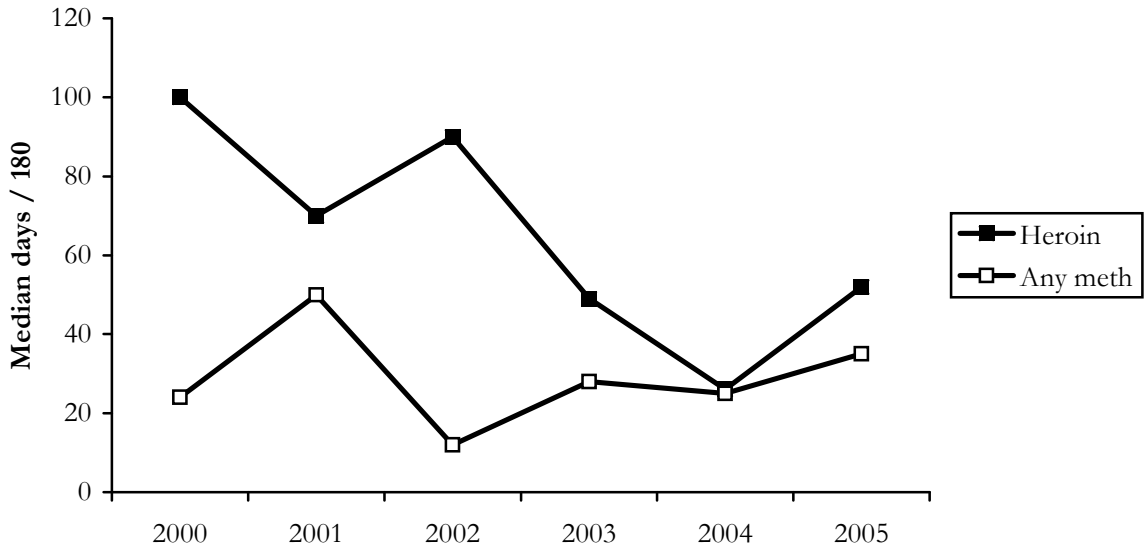
Source: Roxburgh & Degenhardt, in press

5.6 Trends in methamphetamine use

As noted earlier, the heroin and methamphetamine markets in south-east Queensland seem to be interdependent, with changes in one market typically mirrored by changes in the other. In 2005, this continues to be the case, with these trends driven largely by changes in the market for crystal methamphetamine ('ice'). According to the Australian Bureau of Criminal Intelligence (now the ACC), the same groups may be involved in importing both heroin and crystal methamphetamine into Australia (ABCI, 2001). The reciprocal patterns of use and market activity for heroin and ice, documented in the IDRS, are consistent with this view.

The inter-dependent nature of the heroin and methamphetamine markets in Queensland is illustrated below in Figure 30. When heroin use decreased during the shortage in 2001, use of methamphetamine increased commensurately. The reverse occurred in 2002, with a large decrease in the frequency of use of methamphetamine among IDU. An interesting shift has occurred in 2005, with an increase in the frequency of both heroin and methamphetamine use; however, closer analysis of this trend reveals that while use of powder methamphetamine use has increased, use and availability of ice have decreased. According to key experts, a growing subset of IDU are using both heroin and methamphetamine, with methamphetamine users injecting heroin to help them 'come down' and heroin users injecting methamphetamine while they are in treatment or attempting to 'get clean' (i.e. remain abstinent from heroin).

Figure 30: Median days of use of methamphetamine and heroin in the last six months, 2000-2005



Source: IDRS IDU Interviews

5.6 Summary of methamphetamine trends

- Heroin and methamphetamine are the two main drugs of choice for IDU in Queensland, and as such they tend to operate in a **reciprocal fashion**. This continued to be the case in 2005. As in previous years, trends in the crystal methamphetamine ('ice') market have been distinct from those for domestically produced powder and 'base' methamphetamine.
- The **price** of ice has fluctuated in recent years and decreased in 2005, down to the same price as powder and base.
- As in previous years, the majority of IDU rated all forms of methamphetamine as 'easy' or 'very easy' to get, however once again ice was rated as more difficult to obtain than other forms, with the **availability** less stable and less agreement among IDU with respect to availability of ice. Reported availability of all forms of methamphetamine declined in 2005.
- IDU in 2005 continued to identify ice as the most pure form of methamphetamine, followed by base and then ice. The proportion of IDU rating ice **purity** as high increased in 2005, while the proportion rating powder as high decreased. Key expert reports suggest that, given the very high purity of ice, 'high purity' may not be synonymous with 'desirable' for all IDU. Seizure data show little change in the purity of methamphetamine; however, these data do not distinguish between ice and other forms of methamphetamine.
- Most indicators of use suggest an **increase in methamphetamine use** among IDU in 2005. Fewer IDU (although still the majority) reported recent methamphetamine use in 2005, however among those who had used recently, the frequency of use increased. This increase is largely due to increasing use of powder methamphetamine, with use of base and ice among IDU dropping markedly in 2005. The proportion of IDU reporting recent ice use is the lowest it has been since 2000.
- The number of **arrests** for ATS use/possession in Queensland has risen markedly since 2000/01; however, this increase is difficult to interpret because: (a) changes in arrests may indicate shifting operational priorities rather than changes in consumer behaviour, and (b) the ATS category includes not only methamphetamine but also ecstasy (MDMA). The number of **clandestine labs** detected in QLD more than doubled between 2001 and 2004; however, this number has dropped somewhat in 2005.
- The number of **calls to ADIS** regarding methamphetamine rose between 2004 and 2005, as did the number of **hospital admissions** where amphetamines were the primary diagnosis

6.0 COCAINE

Despite some relatively small fluctuations each year, IDU reports suggest that cocaine use continues to be relatively uncommon among IDU in Queensland. Because the number of IDU reporting on price, purity and availability is small, in the following section all price, purity and availability data are presented in tabular form rather than as figures. In each table, the number of IDU reporting is also indicated.

6.1 Price

There has been considerable fluctuation in the reported price of cocaine in Queensland between 2000 and 2005, with the price for a gram ranging from $200 to $300 and a similar degree of variation in the price of other quantities (see Table 11). The cocaine market in Queensland seems to be quite small, with relatively few IDU reporting recent use or even knowledge of the cocaine market. Levels of cocaine use among other groups may be higher. Given that the prices reported here are based on small numbers, they can be considered indicative only. Overall, the price of cocaine in south-east Queensland continues to fluctuate between $200 and $300 for a gram, with the price of a half gram ranging from $100 to $200.

Table 11: Median price of a gram and cap of cocaine estimated from IDU purchases, 1996-2005

Amount	Median price					
	2000	2001	2002	2003	2004	2005
Gram	250	200	220	300	200	*300*
(*n*)	*(5)*	*(11)*	*(5)*	*(8)*	*(1)*	*(4)*
Cap	50	80	--	--	150	--
(*n*)	*(3)*	*(3)*	*(0)*	*(0)*	*(1)*	*(0)*
Half gram	150	135	--	100	200	*120*
(*n*)	*(5)*	*(5)*	*(0)*	*(1)*	*(2)*	*(1)*

Source: IDRS IDU Interviews

6.2 Availability

In 2005, ten IDU reported on the current availability of cocaine, with half of these stating that it was either very easy or easy to obtain. Another four respondents reported that cocaine was difficult or very difficult to obtain. Six IDU reported that the availability of cocaine had been stable over the past six months, with no respondents reporting that cocaine had become more difficult to obtain. Although these reports are based on small numbers, there is some evidence of increasing stability in the availability of cocaine among IDU in south-east Queensland (see Table 12). One key expert from the law enforcement sector reported that the cocaine market in south-east Queensland was very cyclical, with use fluctuating as a function of (variable) availability. Another key expert reported increased availability of cocaine in 2005.

Table 12: IDU reports of availability of cocaine, current and last six months, 2000-2005

Availability (%)	2000	2001	2002	2003	2004	2005
Current						
Very easy	0	20	29	8	0	10
Easy	11	20	29	15	13	40
Difficult	39	60	29	46	38	20
Very difficult	17	0	0	8	38	20
Don't know	33	0	14	23	13	10
(n)	*(18)*	*(20)*	*(7)*	*(13)*	*(8)*	*(10)*
Last 6 months						
Easier	11	30	14	15	0	20
Stable	44	40	29	31	50	60
More difficult	6	10	14	0	38	0
Fluctuates	0	5	14	15	0	10
Don't know	39	15	29	39	13	10
(n)	*(18)*	*(20)*	*(7)*	*(13)*	*(8)*	*(10)*

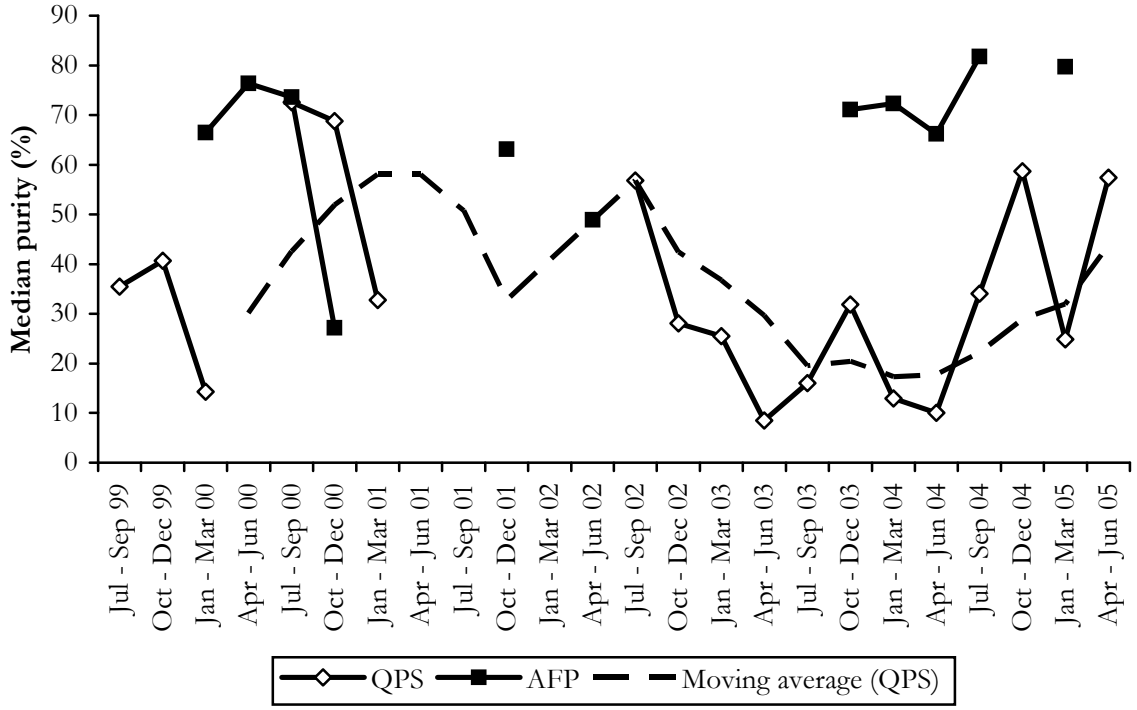
Source: IDRS IDU Interviews

6.3 Purity

Only ten IDU in 2005 were able to comment on cocaine. Of these, eight rated the current purity as 'high' and two stated that they didn't know. With respect to changes in purity over the last six months, three reported the purity as stable and three reported that it had increased; four did not know.

Figures 31 and 32 show the median purity and of cocaine seizures in Queensland by QPS and AFP, from 1999/00 to 2004/05. The purity of cocaine seizures in Queensland has fluctuated considerably over the past five years, but may have risen in 2004/05. In 2004/05 the median purity of analysed QPS seizures was 35.2%, compared with a median of 17.7% in 2003/04 and 29.7% in 2002/03; no QPS seizures were analysed in 2001/02. AFP seizures have consistently been higher in purity than those made by QPS, reflecting the fact that cocaine is usually cut with other substances after arriving in Queensland, but before being distributed at a retail level. In 2004/05, the median purity of analysed AFP cocaine seizures in Queensland was 79.9%.

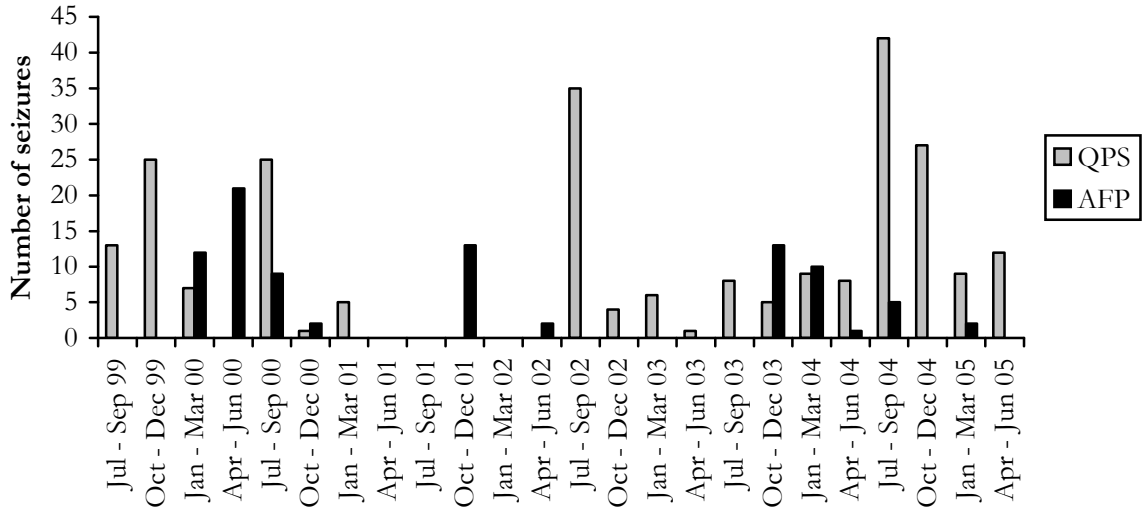
Figure 31: Purity of cocaine seizures analysed in QLD, by quarter, 1999-2005



Source: ACC

In comparison to heroin, methamphetamine and cannabis, the total number of cocaine seizures in Queensland is small, with only 90 seizures by QPS and 7 seizures by AFP in 2004/05. The number of seizures per quarter has fluctuated over time, with no clear pattern apparent.

Figure 32: Number of cocaine seizures analysed in QLD, by quarter, 1999-2005



Source: ACC

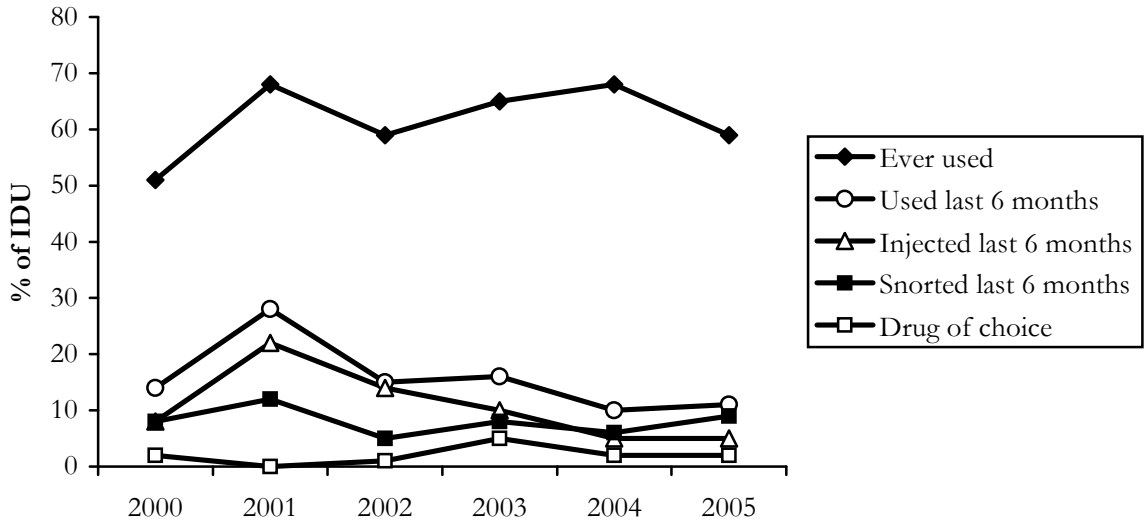
6.4 Use

6.4.1 Cocaine use among IDU

In 2005 nearly 60% of IDU reported having ever used cocaine, although only 11% reported recent use (within the last six months). Somewhat surprisingly for a sample of regular injecting drug users, only 5% of respondents reported injecting cocaine in the preceding six months, with 9% reporting snorting cocaine in the six months prior to interview.

Trends in cocaine use among IDU from 2000 to 2005 are shown in Figure 33. The proportion of IDU reporting recent cocaine use and injection increased in 2001 during the heroin shortage, but has decreased quite consistently since this time. Overall, rates of cocaine use among IDU in 2005 seem to be stable and low.

Figure 33: Prevalence and frequency of cocaine use among IDU in QLD, 2000-2005



Source: IDRS IDU Interviews

6.4.2 Current patterns of cocaine use

As in previous years, very few IDU in 2005 reported recent use of crack cocaine, with a minority reporting recent use of powder cocaine. Among those who had used cocaine recently in 2005, 100% reported mostly using the powder (vs. crack) form (see Table 13).

Table 13: Forms of cocaine used and used most in the last six months, 2000-2004

	2000		2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
Powder	15	--	27	68	12	86	15	95	8	91	11	100
Crack	3	--	10	32	2	14	2	5	2	9	2	0

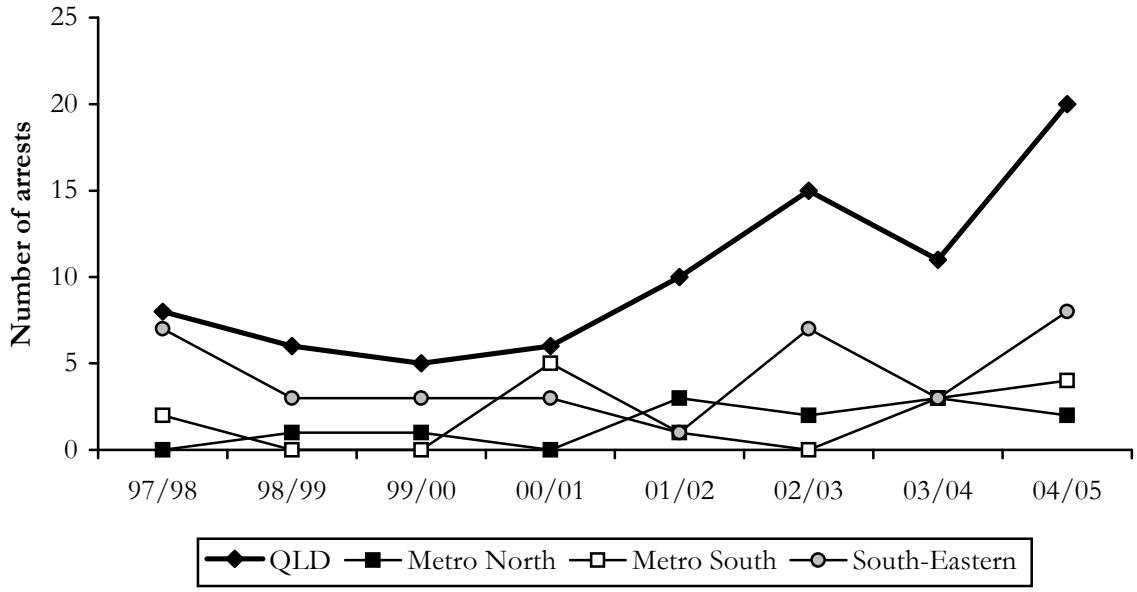
Source: IDRS IDU interviews
Note: Valid percentages shown for 'form most used'. Based on small numbers.

6.5 Cocaine-related harms

6.5.1 Law enforcement

Despite a reasonably consistent decline in reported rates of recent cocaine use among IDU since 2001, the number of arrests for cocaine use/possession in QLD has increased substantially in the last five years, from 5 arrests during the 1999-00 financial year to 20 during the 2004-05 financial year (see Figure 34). Although this number is still comparatively small (e.g. in 2004-05 there were 1,167 arrests for ATS use/possession in QLD) it represents a four-fold increase during this time. According to key experts, cocaine use is uncommon among IDU but considerably more common among other groups of drug users, including 'party drug' users and some higher-income earners in large centers such as Brisbane, the Gold Coast and Cairns. The increase in cocaine-related arrests may reflect increased activity in a cocaine market that overlaps only slightly with the injecting drug use market in Queensland; it may also reflect an increase in law enforcement activity unrelated to actual market activity.

Figure 34: Number of cocaine possession/use arrests by geographic area, 1997/98-2004/05



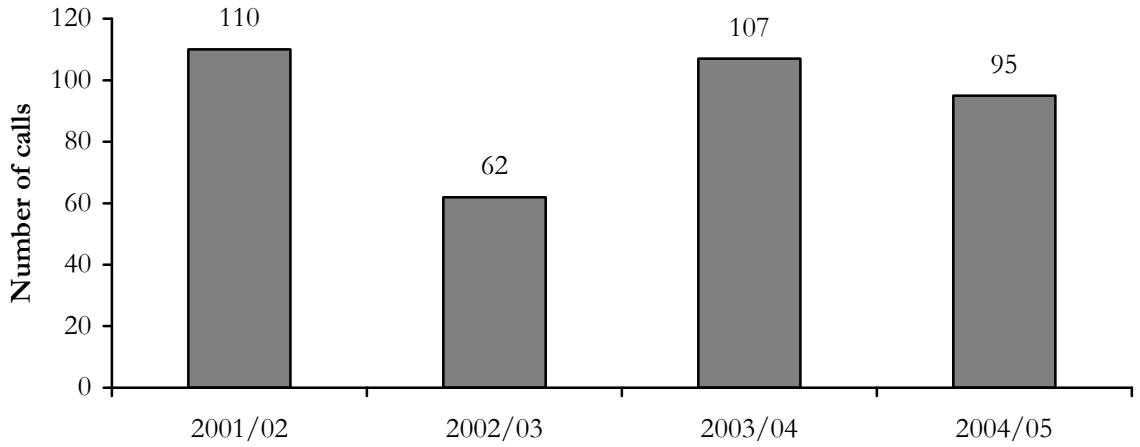
Source: Queensland Police Service

6.5.2 Health

Calls to telephone help lines

Figure 35 shows the number of telephone calls made to the Alcohol and Drug Information Service (ADIS) helpline in Queensland from 2001/02 to 2004/05. The number of calls has fluctuated from year to year, with 95 calls made in the 2004/05 financial year; however, in each year calls regarding cocaine have constituted less than one percent of all calls to ADIS.

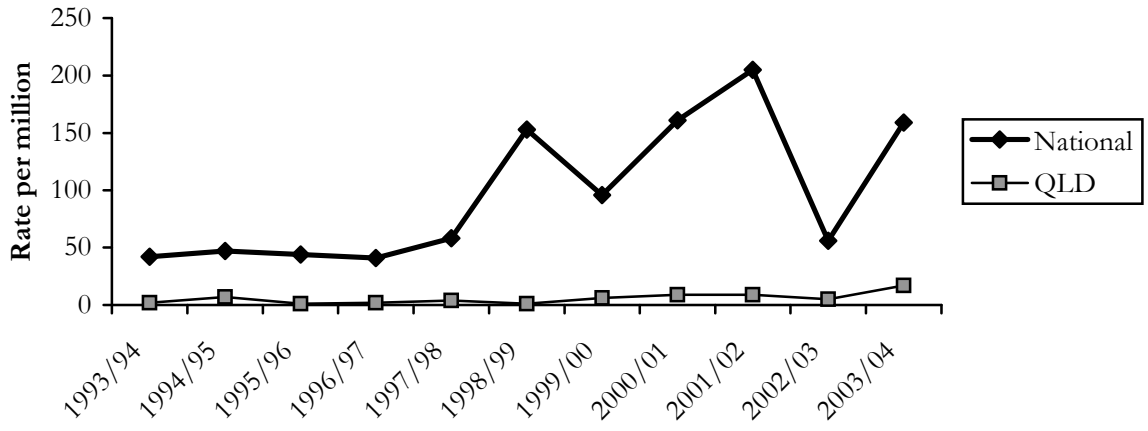
Figure 35: Number of enquiries to ADIS and FDS regarding cocaine, 2001-2005



Source: ADIS

Figure 36 shows the rate of hospital admission per million persons aged 15-54 years in Queensland and nationally, where cocaine was the primary diagnosis, from 1993/94 to 2003/04. Nationally, the rate of admission was stable until 1996/97 but has fluctuated considerably since. In Queensland, the rate of admission has been low in every year; however, in 2003/04 there were 17 such admissions, compared with a maximum of 9 admission in any previous year. One key expert from a hospital emergency department reported an increase in the number of presentations with acute problems related to cocaine. Monitoring of emergency department presentations may be a useful way of monitoring acute drug-related problems among non-treatment samples of users (Kinner et al., 2005).

Figure 36: Rate of inpatient hospital admissions where cocaine was the primary diagnosis per million people aged 15-54 years, NSW and nationally, 1993/1994 to 2003/2004



Source: Roxburgh & Degenhardt, in press

6.6 Summary of cocaine trends

- Although the majority of IDU in 2005 reported having used cocaine at some point in the past, few reported **recent cocaine use**. As such, relatively few IDU were able to comment on trends in the cocaine market in Queensland.
- The **price** of cocaine in south-east Queensland has varied between $200 and $300 a gram since 2000.
- Among IDU who had used cocaine recently, there was little agreement with respect to **availability.**
- IDU are in agreement that the current **purity** of cocaine is 'high'; however, seizure data suggest that purity is variable.
- About one in ten IDU reported recent cocaine use, with the majority of these reporting snorting rather than injecting. Use was typically **opportunistic and irregular** – on average about once a month in the last six months.
- Despite little change in patterns of cocaine use among IDU, **arrests** for cocaine use/possession in QLD have risen sharply in the last five years, although the total number of such arrests remains small. Key expert reports suggest that most cocaine users in QLD are not IDU, but rather individuals of above average socio-economic position who have both the connections and the funds to support use of what continues to be a relatively unavailable, expensive drug.
- **Telephone helpline** calls (to ADIS) regarding cocaine in QLD continue to constitute less than one percent of calls each year; however, the number of **hospital admissions** with a primary diagnosis related to cocaine has risen considerably since 1997/98.
- Cocaine use continues to be uncommon among IDU in Queensland; however, available indicators suggest that the market may have **expanded slightly**, and that closer monitoring of this market may be warranted.

7.0 CANNABIS

Compared to other illicit drug markets in Queensland, the cannabis market is distinguished by its relative stability over time. Consistently, the majority of IDU report recent use of cannabis, and a substantial minority report daily use in the last six months. Nevertheless, the cannabis market is not entirely static, and in 2005 some potentially significant changes have been identified.

7.1 Price

In 2005 the price of cannabis remained relatively stable, with hydroponic cannabis again selling at a considerably higher price than bush cannabis.

Hydro

Between 2004 and 2005 there was no change in the median price of a gram ($25), quarter ounce ($90) or ounce ($300) of cannabis. The median price of a half ounce dropped from $180 in 2004 to $150 in 2005; however, with only 7 IDU reporting purchasing this quantity, this price difference may simply represent sampling variation (see Table 14).

Bush

Relatively few IDU reported purchasing bush cannabis in the last six months (Table 14); however, there was some evidence of an increase in the price of bush in 2005: the median price of a gram increased from $20 in 2004 to $25 in 2005, while the median price of an ounce increased from $200 to $230. The price of a quarter ounce did not change and each of the three IDU who reported purchasing a half ounce of cannabis recently reported paying between $90 and $120 – less than the median price of $125 reported in 2004.

Table 14: Price of most recent cannabis purchases by IDU, 2005

Amount	Hydro Median price* ($)	Range ($)	Hydro Number of purchasers	Bush Median price* ($)	Range ($)	Bush Number of purchasers
Ounce	300 (300)	200 – 380	14	230 (200)	200 – 250	4
Half ounce	150 (180)	125 – 200	7	110 (125)	90 – 120	3
Quarter ounce	90 (90)	60 – 100	29	70 (70)	50 – 100	5
Gram	25 (25)	10 – 50	14	25 (20)	20 – 25	5

Source: IDRS IDU interviews
*2004 median prices are in brackets

Although more than three-quarters of IDU in 2005 reported recent cannabis use, 50% of respondents reported that they did not know whether the price of either hydro or bush had changed in the preceding six months (Table 15). Among those who were able to comment, the vast majority (78%) reported that the price of both hydro and bush were stable. Although the reports of a stable price are consistent with previous years, in previous years the majority of IDU have been able to comment on cannabis price changes.

Table 15: IDU reports of cannabis price change in last six months, 2000-2005

	2000	2001	2002	2003	2004		2005	
					Hydro	Bush	Hydro	Bush
Price change (%)								
Increasing	10	11	11	20	11	10	3	3
Stable	56	74	74	65	73	52	39	39
Decreasing	10	5	8	10	8	13	5	5
Fluctuating	0	1	4	2	4	6	3	3
Don't know	24	9	4	3	4	18	50	50

Source: IDRS IDU interviews
Note: Valid percentages are shown

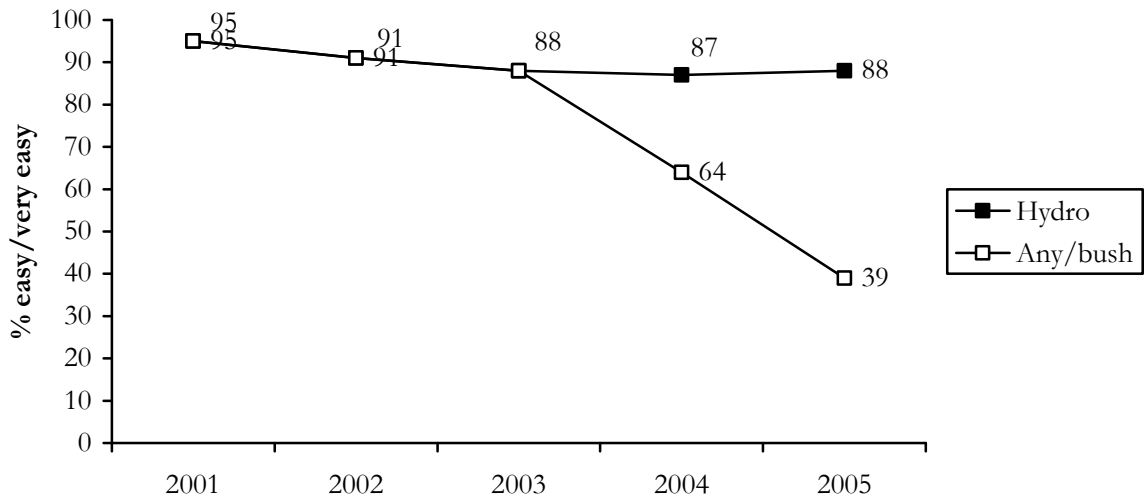
Hash and hash oil

In 2005 two IDU reported having purchased a gram of hash recently: one paid $25, the other $50.

7.2 Availability

Figure 37 shows the proportion of IDU stating that cannabis was 'easy' or 'very easy' to obtain from 2001 to 2005. Since 2001 there has been a gradual but consistent decline in the proportion of IDU reporting that cannabis was 'easy' or 'very easy' to get, with this proportion dropping from 95% in 2001 to 88% in 2003. In 2004, for the first time, IDU were asked separately about the availability of hydro and bush cannabis: 87% reported that hydro was easy or very easy to get, compared with 64% for bush. While hydro has remained readily available in 2005, IDU reported decreasing ease of availability of bush in 2005, with only 39% stating that bush was easy or very easy to get. Consistent with reports from key experts, it appears that bush is becoming more difficult to obtain, while the hydroponic form of cannabis is more readily available to IDU.

Figure 37: Proportion of IDU reporting current availability of cannabis as 'easy/very easy', 2001-2005



Source: IDRS IDU Interviews
Note: Valid percentages are shown. Due to different interviewing procedures in 2000, 2000 data are not comparable and have been excluded. Prior to 2004, IDU were asked about availability of cannabis generally – in 2004 they were asked separately about hydro and bush.

Changes in the reported availability of cannabis are detailed in Table 16. As shown, and consistent with previous years, the majority of IDU (74%) in 2005 reported that hydro availability had remained stable in the preceding six months. Perhaps reflecting the relative unavailability of bush cannabis, half of those responding reported that they did not know whether the availability of bush had changed recently. Among those who were able to report, 76% (39% of the full sample) reported that the availability of bush had remained stable.

Table 16: IDU reports of cannabis availability change in last six months, 2000-2005

	2000	2001	2002	2003	2004		2005	
					Hydro	Bush	Hydro	Bush
Availability change (%)								
Easier	6	8	9	22	14	13	9	5
Stable	60	74	78	60	67	52	74	38
More difficult	13	7	9	12	14	19	8	4
Fluctuates	1	8	5	4	4	3	1	3
Don't know	21	2	0	2	1	12	8	50

Source: IDRS IDU interviews
Note: Valid percentages are shown.

In contrast to previous years, in 2005 the most commonly reported source of cannabis was a friend (hydro 41%, bush 18%), with the second most commonly reported source a dealer's home (hydro 26%, bush 14%). Between 2004 and 2005 there was a substantial decrease in the proportion of IDU reporting sourcing cannabis from either a street dealer or mobile dealer, although in all years since 2000 the most common sources have been a friend and a dealer's home. There has been little change since 2002 in the average 'time to score' cannabis, as reported by IDU (see Table 17).

Table 17: Usual source of cannabis and time to score, 2000-2005

	2000	2001	2002	2003	2004		2005	
					Hydro	Bush	Hydro	Bush
Usual source last 6 months.(%)	18	4	0	1	0	6	7	49
Don't use	9	2	10	12	13	15	9	5
Street dealer	20	27	35	26	40	23	26	14
Dealer's home	43	42	35	38	33	39	41	18
Friend	1	2	0	2	0	0	0	3
Grow your own	0	0	8	12	12	11	4	1
Mobile dealer	0	0	9	5	0	0	7	1
Home delivery	2	5	3	1	0	5	7	8
Gift from friend	7	18	0	3	3	2	0	1
Other								
Usual time to score (mins)								
Median	--	--	20	20	15	20	15	20

Source: IDRS IDU interviews
Note: Valid percentages are shown.

Since 2002, IDU have been asked where the cannabis they obtain has come from: the 'production source'. In 2005, IDU were asked to respond separately with respect to hydro and bush, and some substantial differences emerged. Whereas over a third of IDU (38%) reported that their hydro came from a large-scale cultivator, the modal response with respect to bush was a small-time user/grower (33%). Equally telling, almost half of IDU who had obtained cannabis recently reported that they did not know the production source of the cannabis they had obtained. Nevertheless, among those who did nominate a production source, almost all were either moderately or very confident that this was indeed the original source (Table 18).

Table 18: Usual production source of cannabis, 2002-2005

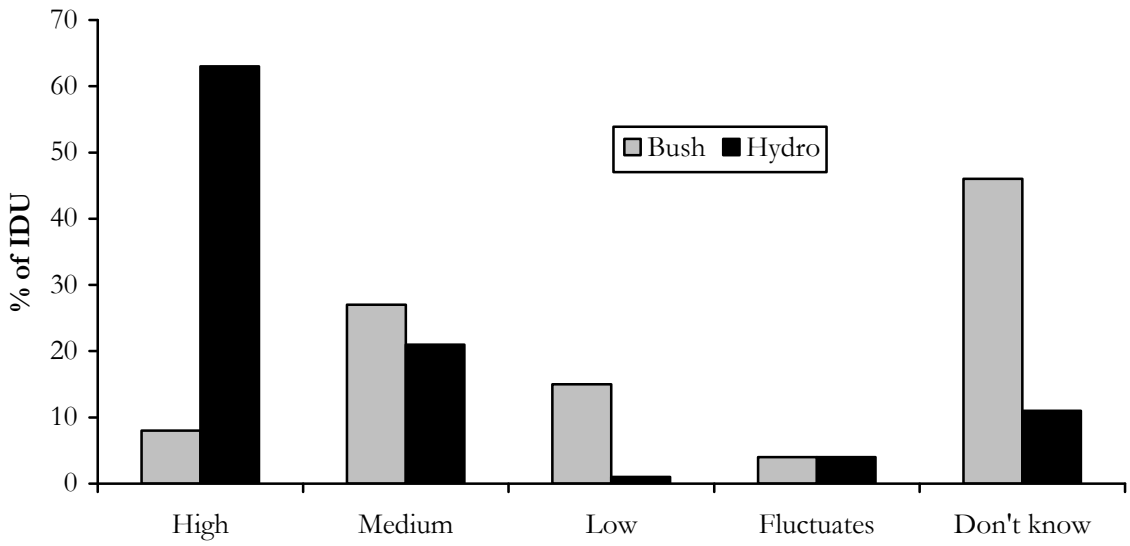
	2002	2003	2004	2005	
				Hydro	Bush
Production source (%)					
Don't know	32	25	30	42	48
Grew my own	0	2	1	0	6
Small-time back yard user/grower	19	33	37	20	33
Large-scale cultivator/supplier	47	40	28	38	13
Other	2	0	4	0	0
% of IDU reporting	76	69	59	70	51
Confidence in source (%)					
Very sure	62	78	72	60	82
Moderately sure	31	16	23	32	18
Moderately unsure	6	4	4	8	0
Very unsure	2	2	2	0	0
% of IDU reporting	50	50	41	35	21

Source: IDRS IDU interviews

7.3 Potency

Figure 38 shows the perceived potency of cannabis as reported by IDU in 2005. There was a high level of agreement regarding the potency of hydro, with 84% of respondents reporting either high or medium potency in 2005; however, there was less agreement regarding the potency of bush: 46% did not know the potency and 27% reported the potency as medium.

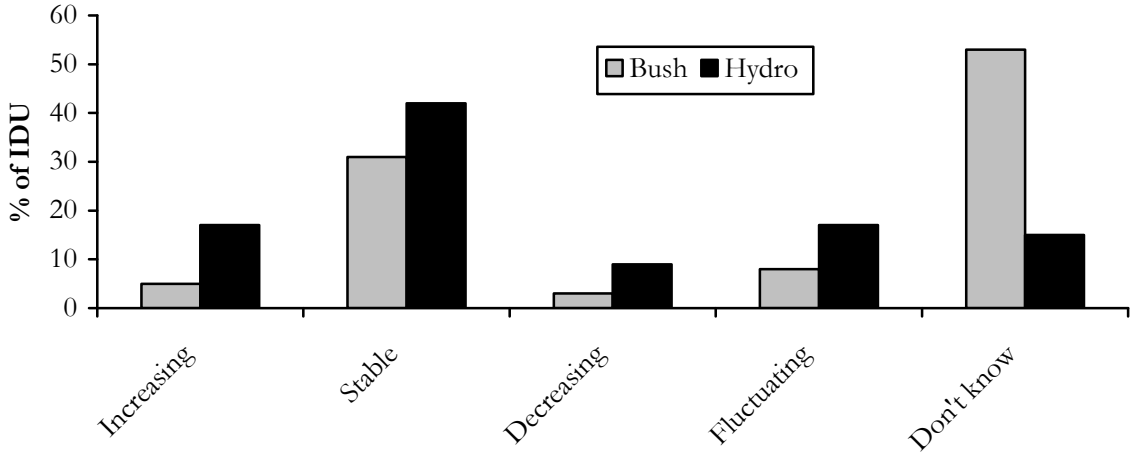
Figure 38: IDU reports of current potency of cannabis, 2005



Source: IDRS IDU Interviews
Note: Valid percentages shown.

A significant proportion of IDU did not know whether the potency of cannabis had changed in the preceding six months (15% hydro, 53% bush), and the majority of those who were able to comment reported that potency for both bush (31%) and hydro (42%) remained stable (see Figure 39).

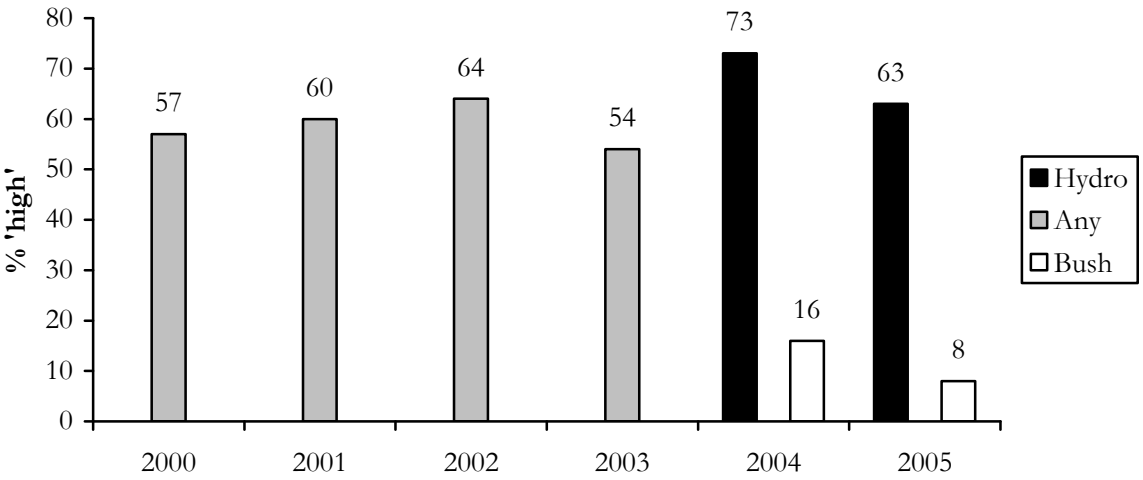
Figure 39: IDU reports of change in cannabis potency, 2005



Source: IDRS IDU Interviews
Note: Valid percentages shown.

Figure 40 shows the proportion of IDU who reported cannabis potency as high, from 2000 to 2005. Since 2004, respondents have been asked separately about the potency of bush and hydro cannabis. As the figure shows, the proportion of IDU reporting the potency of cannabis as high dropped from 2004 to 2005 for both hydro (from 73% to 63%) and bush (from 18% to 8%).

Figure 40: Proportion of IDU reporting current potency of cannabis as high, 2000-2005



Source: IDRS IDU Interviews
Note: Valid percentages are shown. Prior to 2004, IDU were asked about cannabis potency in general; from 2004 onwards IDU were asked separately about hydro and bush.

7.4 Use

7.4.1 Cannabis use among IDU

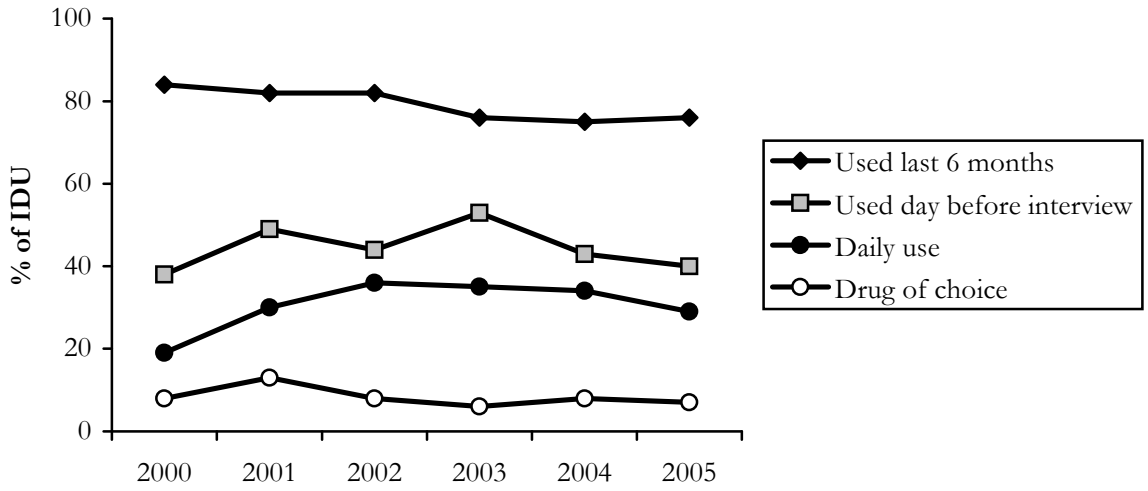
In 2005, 85% of IDU reported that they had ever used cannabis, with 76% reporting recent use. Although the majority of IDU reported recent cannabis use, only 7% identified cannabis as their

drug of choice. A number of key experts observed that cannabis use is very common among IDU, with one stating that around 70% of pharmacotherapy clients are also dependent on cannabis and another observing that cannabis is perceived by many IDU as a relatively innocuous drug. Many key experts in 2005 commented on behavioural and mental health problems associated with cannabis use (see Section 7.5.2 below); however, many also reported a strong association between cannabis use and methamphetamine use among IDU, which might confound any apparent association between cannabis use and behavioural and mental health problems.

7.4.2 Current patterns of cannabis use

Since 2000 there has been a slight but consistent decline in the number of IDU reporting recent cannabis use, from 84% in 2000 to 76% in 2005. In 2005, 29% of IDU reported daily use of cannabis in the preceding six months, and 40% reported using cannabis the day before interview – a decrease from previous years. The proportion of respondents reporting cannabis as their drug of choice has remained relatively stable since 2000 (see Figure 41).

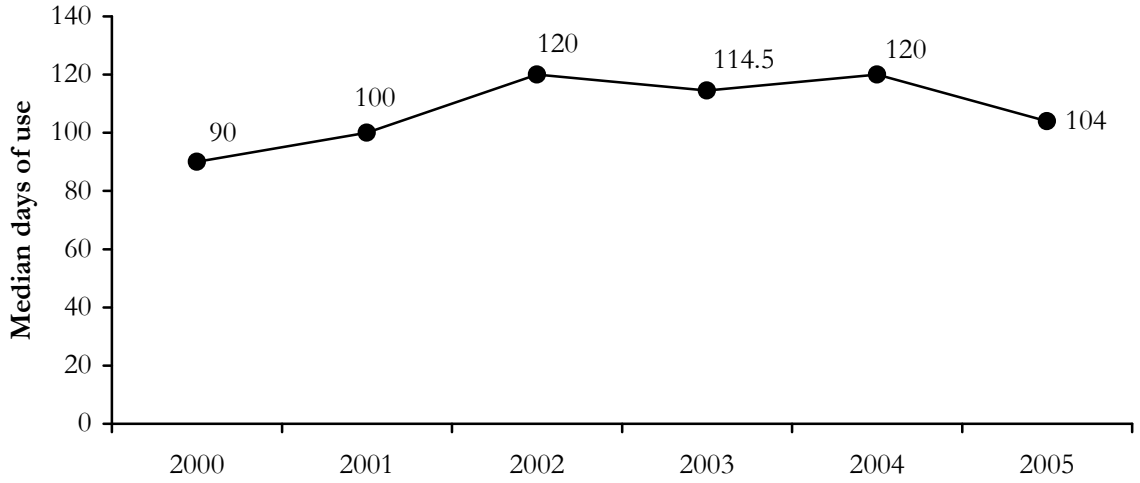
Figure 41: Prevalence and frequency of cannabis use among IDU, 2000-2005



Source: IDRS IDU Interviews

Among those who had used cannabis recently, the median number of days of use in the preceding six months is shown in Figure 42. In 2005, IDU who had used cannabis recently reported using on average four times a week (104/180 days). Although relatively frequent, this constitutes a decrease in frequency of use from previous years, and is considerably lower than the national average of daily use (i.e. 180/180 days) among IDU interviewed for the IDRS (Stafford et al., 2005).

Figure 42: Median number of days of cannabis use in the past six months, among those who had used recently, 2000-2005



Source: IDRS IDU Interviews

As in previous years, the majority of IDU reported recent use of both hydro (74%) and bush (67%) cannabis, with the vast majority of these (90%) reporting mostly using hydro. Although about one in ten IDU reported recent use of hash and hash oil, none identified hash as the form most used in the last six months. Consistent with IDU and key expert reports of decreasing availability of bush cannabis, the proportion of IDU reporting recent use of bush in 2005 was lower than in previous years (Table 19).

A number of key experts from the health sector reported that younger IDU are more likely to prefer hydro cannabis, while older IDU and those experiencing mental health problems are more likely to prefer the 'milder' bush cannabis. Two KE from law enforcement, however, stated that the hydro/bush distinction was misunderstood by most IDU, and that much of the cannabis on the market was still bush. According to one KE, potency depends on the seed, rather than the growing method. In the absence of objective purity data from cannabis seizures, it remains difficult to interpret either IDU or KE reports of cannabis potency, or to fully understand the distinction between hydroponic and 'bush' cannabis.

Table 19: Forms of cannabis used and used most in the last six months, 2000-2005

	2000[a]		2001		2002		2003		2004		2005	
	Used	Most	Used	Most[b]	Used	Most	Used	Most	Used	Most	Used	Most
Hydro	83	--	78	78	77	85	75	75	74	85	74	90
Bush	48	--	74	27	68	15	68	24	67	14	56	10
Hash	38	--	42	1	24	0	17	1	12	1	12	0
Hash oil	13	--	24	1	16	0	13	0	12	0	11	0

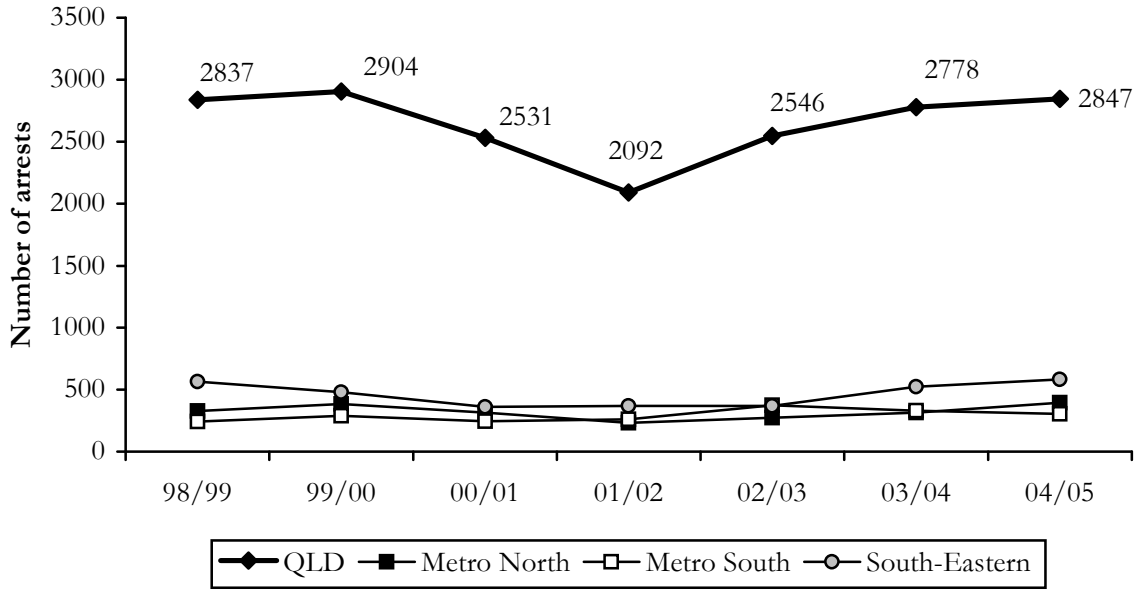
Source: IDRS IDU Interviews
Note: Valid percentages shown for 'form most used'
[a] IDU in 2000 were asked about cannabis head (instead of hydro) and leaf (instead of bush). Although head is more potent than leaf, these types are not directly comparable with hydro and bush;
[b] percentages do not add to 100 as question was not asked in a forced-choice format in 2001

7.5 Cannabis-related harms

7.5.1 Law enforcement

Figure 43 shows the number of arrests for cannabis use/possession in Queensland, from 1998/99 to 2004/05. The total number of arrests for the state dropped to a low of 2,092 in 2001/02, but has risen consistently since this time to 2,847 cannabis use/possession arrests in the 2004/05 financial year. Given that this figure includes instances where the individual was processed through the cannabis diversion program, however, the increase is not necessarily indicative of increased cannabis use or dealing.

Figure 43: Number and proportion of cannabis possession/use arrests by geographic area, 1998/99-2004/05



Source: Queensland Police Service

According to key experts, many regular cannabis users (including IDU) do not perceive dealing cannabis as a crime, and driving under the influence of cannabis is common. According to KE from the law enforcement sector, cannabis production in Queensland is highly organised, with established groups growing large 'bush' crops which are then distributed by members of organised motorcycle gangs (OMCGs). Increasingly, however, organised groups from Sydney may be moving to south-east Queensland and setting up organised 'hydro' plantations involving a number of houses. Despite this trend, according to KE, production of bush cannabis still greatly exceeds hydro production: whereas a 'hydro house' may yield about 60 cannabis plants, a bush crop may contain anywhere from 2,000 to 5,000 plants.

7.5.2 Health

A large proportion of key experts in 2005 expressed concern regarding the harmful health and behavioural effects of regular cannabis use. A common observation was that regular, chronic cannabis use was associated with mental health problems, particularly paranoia and psychotic symptoms, but also anxiety, depression, labile mood and anger. A number of KE observed that these problems were particularly common among younger users, and many commented on the high incidence of aggressive and violent behaviour among regular cannabis users, again

particularly among younger users. According to one key expert, the most common type of client presenting for treatment for cannabis-related problems is a "young, aggressive male". Other problems that key experts associated with cannabis use included impaired cognitive functioning, poor general health and nutrition, with one KE observing that dependent users could spend up to $200 per week on cannabis, leaving insufficient funds to cover basic expenses such as accommodation and food. Despite a growing perception that regular cannabis use is associated with a range of health and behavioural problems, a full understanding of the link between cannabis use and associated harms is limited by:

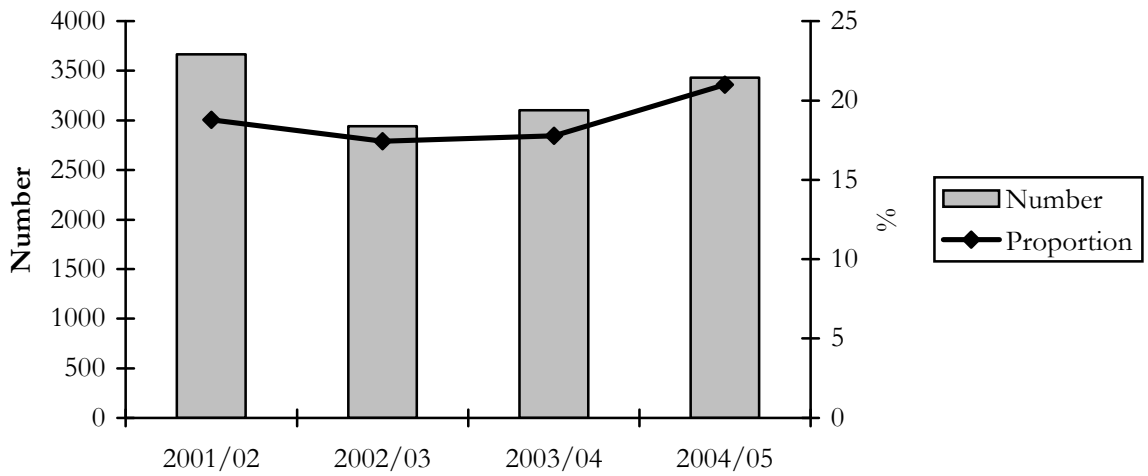
(a) poor understanding of patterns of use among regular cannabis users: How much cannabis is in the typical 'cone', and what proportion of users mix it with tobacco? How many cones per day is typical?

(b) poor understanding of the substance itself: Has the potency of cannabis changed in recent years? Is the distinction between hydro and bush meaningful, and how much do these two forms of cannabis differ with respect to THC content?

Calls to telephone help lines

Figure 44 shows the number of calls made to ADIS regarding cannabis from 2001/02 to 2004/05. In 2004/05, 3,432 calls were made regarding cannabis, compared with 3,101 in 2003/04. The proportion of calls to ADIS in relation to cannabis has increased slightly over this time, from 18.8% in 2001/02 to 21% in 2004/05.

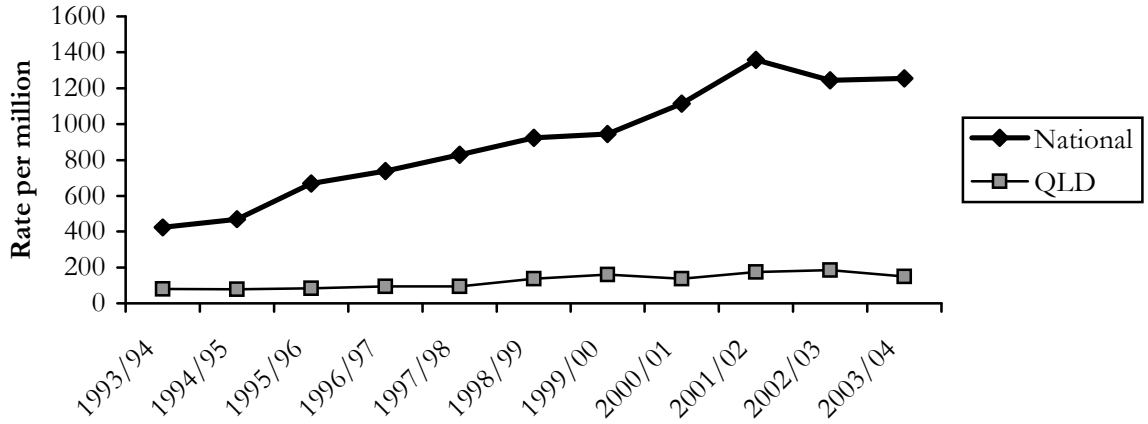
Figure 44: Number and proportion of enquiries to ADIS regarding cannabis, 2001/02-2004/05



Source: ADIS

Figure 45 shows the rate of inpatient hospital admission for cannabis-related problems from 1993/94 to 2003/04, for Queensland and nationally. Nationally, the rate of admission increased by 320% between 1993/94 (424) and 2001/02 (1,358) before falling slightly to 1,254 admissions in 2003/04. In Queensland the pattern was very similar, with the rate rising from 80 per million in 1993/94 to 175 per million in 2001/02, then falling to 150 per million in 2003/04. Some key experts reported a growing recognition of cannabis as a drug for which treatment may be necessary, and the increase shown here may reflect this growing awareness to some extent. It is likely, however, that it is also indicative of an increase in cannabis-related problems among regular users.

Figure 45: Rate of inpatient hospital admissions where cannabis was the primary diagnosis per million people aged 15-54 years, 1993/1994 to 2003/2004



Source: Roxburgh & Degenhardt, in press

7.6 Summary of cannabis trends

- The cannabis market in QLD has traditionally been distinguished by its **relative stability**; however the market is not entirely static.
- The **price** of hydroponic cannabis has been stable in recent years, and hydro is consistently more expensive than bush. The price of bush may have increased in 2004/05; however, the majority of IDU consider the price of both forms stable.
- The perceived **availability** of hydro is stable and most IDU consider it 'easy' or 'very easy' to get; the perceived availability of bush is lower and has dropped considerably from 2004, although again the majority report availability as stable.
- The most commonly cited **sources** of cannabis were a friend and a dealer's home; fewer IDU reported sourcing cannabis from street or mobile dealers, perhaps indicating an increasingly closed market.
- IDU believe that hydro is most likely to come from a large-scale supplier/cultivator, whereas bush cannabis is more likely to come from a small-time, back-yard producer. There remains a large **gap in our knowledge** of cannabis products in QLD, and as such it is unclear precisely what IDU mean when they refer to hydro and bush. What is clear is that IDU typically consider hydro to be of high **potency**, whereas bush is considered to be of medium to low (and perhaps declining) potency.
- As in previous years, the majority of IDU in 2005 reported **recent cannabis use**, although this proportion has dropped slowly but consistently since 2000. Among those who had used recently, use was on average four days per week, and the number of **daily users** has declined in recent years.
- Key experts suggest that a proportion of IDU prefer bush to hydro, because it is perceived to be less potent and 'milder' or more 'natural'; however, presumably due to the **relative availability** of hydro cannabis, the majority of IDU report mostly using this form.
- The number of **arrests** for cannabis use/possession in QLD has risen markedly since 2001/02, possibly reflecting an increasing law enforcement focus on cannabis, rather than an increase in consumption.
- The number of calls to the ADIS **telephone helpline** for cannabis increased 17% from 2002/03 to 2004/05; however, the rate of **hospital admission** in QLD where cannabis was the primary diagnosis remained largely unchanged from 2002/03 to 2003/04.

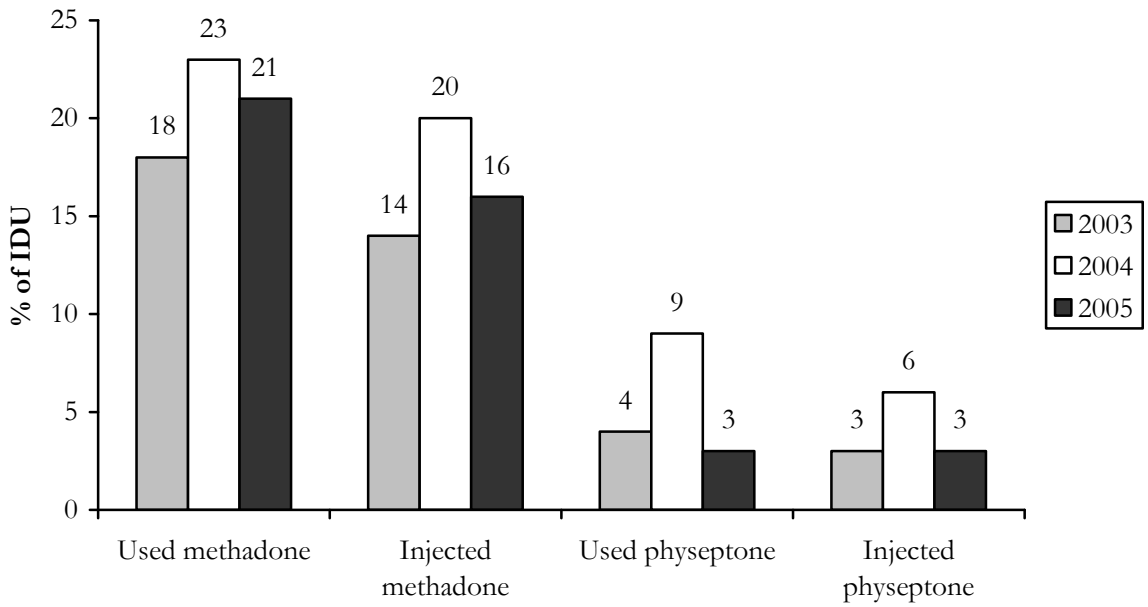
8.0 OPIOIDS

With on-going (although perhaps diminishing) uncertainty in the heroin market, a proportion of IDU appear to have turned to alternative opiates which, although perhaps less desirable than heroin, are more readily available and offer a more consistent effect, at a more consistent and affordable price. In Queensland, patterns of use of three pharmaceutical opiate preparations – methadone, buprenorphine and morphine – have closely mirrored trends in the availability and use of heroin, among IDU.

8.1 Use of illicit methadone

In 2005 about one in five IDU (21%) reported recent use of illicit methadone (i.e. methadone which was not prescribed to them), and 16% reported recent injection of illicit methadone. These rates are slightly lower than in 2004, but still higher than in 2003. By contrast, rates of recent use (3%) and injection (3%) of illicit physeptone in 2005 are comparable with those in 2003, and considerably lower than in 2004 (see Figure 46).

Figure 46: Use and injection of illicit methadone and illicit physeptone among IDU in the last six months, 2003-2005



Source: IDRS IDU Interviews

IDU were also asked what forms of methadone they had used in the last six months, and used most in the last six months[1]. In 2005 a quarter of IDU reported recent use of licit methadone and 21% reported use of illicit methadone, with only 3% reporting recent use of illicit physeptone. When asked which form of methadone they had used most in the last six months, all IDU identified either licit (57%) or illicit (43%) methadone. The proportion of IDU reporting *mostly* using illicit methadone has risen consistently since 2001 (see Table 20).

[1] Responses to these questions (see Table 22) may be inconsistent with Figure 49, as some IDU failed to respond to these questions

Table 20: Forms of methadone used and used most in the last six months, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
Methadone (licit)	33	--	31	69	36	66	29	68	28	59	25	57
Methadone (illicit)		--	14	19	24	25	22	30	26	35	21	43
Physeptone (licit)	12	--	4	2	8	2	2	2	2	2	0	0
Physeptone (illicit)		--	6	2	12	8	4	0	4	4	3	0

Source: IDRS IDU Interviews
Note: Valid percentages shown for 'form most used'. "Form most used' question not asked in forced choice format in 2001, so percentages may not add to 100.

Injection of methadone in the last month was reported by 18% of IDU, which was a decrease from 23% in 2004. Among those who reported methadone injection in the last month, almost two-thirds (61%) reported problems associated with this practice; the most commonly reported methadone injection-related problems were scarring and bruising (4%), methadone dependence (6%) and difficulty finding veins (6%) (see Table 21).

Table 21: Problems associated with methadone injection in the last month, 2003-2005

	2003	2004	2005
Injected last month (%)	15	23	18
No problems (%)	6	12	7
Problems (%)			
Overdose	0	2	0
Abscess/infection	2	2	1
Dirty hit	2	2	3
Scarring/bruising	4	5	4
Thrombosis/blood clot	0	2	1
Swelling of arm	4	2	1
Swelling of leg	1	0	0
Swelling of hand	3	3	2
Swelling of feet	1	0	0
Hospitalisation	0	0	0
Contact with ambulance	1	1	0
Contact with police	0	2	1
Methadone dependence	4	5	6
Difficulty finding veins	7	4	6
Skin ulcers	0	0	0
Gangrene	0	0	0
Other	0	1	1

Source: IDRS IDU interviews
Note: Overall percentages shown

In 2005, most respondents reported that the price of methadone remained stable (44%). Compared to previous years, however, the proportion reporting the price as stable decreased, while the proportion reporting the price as increasing increased (see Table 22). Most IDU in 2005 reported that illicit methadone was easy or very easy (65%) to get, and that availability was stable (61%), which is consistent with IDU reports from 2004 (67% and 61% respectively). Compared

with 2004, IDU in 2005 were less likely to report obtaining illicit methadone from a friend (30% vs. 67%), and more likely to report their source as a street dealer (13% vs. 6%) (see Table 22).

Table 22: Price change and availability of methadone, as reported by IDU, 2003-2005

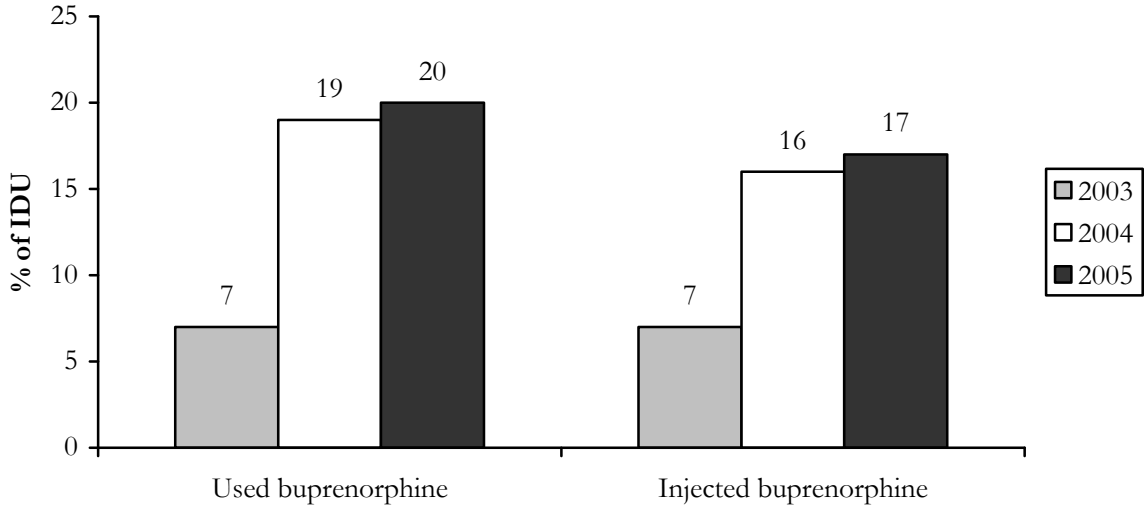
	2003	2004	2005
Price change (%)			
Increasing	5	6	17
Stable	76	55	44
Decreasing	0	9	0
Fluctuating	0	6	0
Don't know	19	24	39
Availability (%)			
Very easy	0	18	13
Easy	33	49	52
Difficult	43	18	4
Very difficult	0	0	4
Don't know	24	15	26
Availability change (%)			
Easier	0	6	0
Stable	59	61	61
More difficult	5	0	4
Fluctuates	14	3	0
Don't know	23	30	35
Usual source (%)			
Friend	60	67	30
Street dealer	10	6	13
Other	20	15	17
Don't use	10	12	39
Median time to score (mins)	10	10	45
Illicit dose origin (%)			
Take-away	76	90	72
Daily dose	5	0	0
Friend	0	3	0
Don't know	19	7	26

Source: IDRS IDU Interviews
Note: no reliable price estimates available. Valid percentages are shown

8.2 Use of illicit buprenorphine

In 2005, one in five IDU reported recent use of illicit buprenorphine, compared with only 7% in 2003 and 19% in 2004. Similarly, the proportion of IDU reporting recent injection of illicit buprenorphine increased from 7% in 2003 to 16% in 2004, and 17% in 2005 (Figure 47). According to some key experts, use and injection of diverted buprenorphine is increasingly common in prisons in Queensland, and a growing number of ex-prisoners are registering for buprenorphine treatment soon after release from custody, after quickly relapsing to heroin use. A number of KE also reported increased concern about diversion of take-away buprenorphine doses (which sell for $40-50 on the street), and a perception that injection of buprenorphine (either licit or illicit) was becoming more common. KE also reported a significant number of injection-related problems associated with this practice, and one public clinic reported recently implementing a policy precluding any take-away doses, in an effort to reduce the diversion and injection of buprenorphine.

Figure 47: Recent (last six months) use and injection of illicit buprenorphine among IDU, 2003-2005



Source: IDRS IDU Interviews

Table 23 shows the proportion of IDU from 2002 to 2005 who reported recent use of licit and illicit buprenorphine, and indicates which form of buprenorphine IDU used most in the last six months. In contrast to previous years, in 2005 more IDU reported recent use of illicit (19%) than licit (11%) buprenorphine, and almost two-thirds (63%) reported that they had mostly used illicit, rather than licit, buprenorphine.

Table 23: Forms of buprenorphine used and used most in the last six months, 2002-2005

	2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most
Buprenorphine (licit)	11	65	17	71	23	57	11	37
Buprenorphine (illicit)	7	35	10	29	19	44	19	63

Source: IDRS IDU Interviews
Note: Valid percentages shown for 'form most used'

Between 2004 and 2005 there was no change in the proportion of IDU reporting injection of buprenorphine in the last month (13%) (Table 24). Among these IDU, more than half (7%) reported problems associated with injecting, including difficulty finding veins (5%), buprenorphine dependence (4%), swelling of arm (4%), and scarring or bruising (4%).

Table 24: Problems associated with buprenorphine injection in the last month, 2003-2005

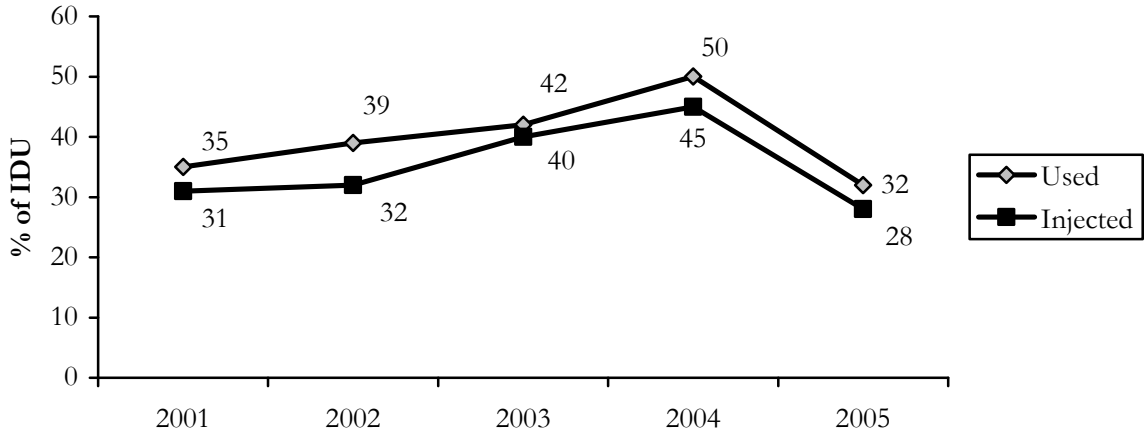
	2003	2004	2005
Injected last month (%)	6	13	13
No problems (%)	2	5	6
Problems (%)			
Overdose	0	0	1
Abscess/infection	0	1	1
Dirty hit	1	2	1
Scarring/bruising	1	3	4
Thrombosis/blood clot	1	0	2
Swelling of arm	1	1	4
Swelling of leg	1	1	0
Swelling of hand	0	2	1
Swelling of feet	0	0	0
Hospitalisation	0	0	0
Contact with ambulance	0	0	0
Contact with police	0	0	0
Buprenorphine dependence	3	4	4
Difficulty finding veins	2	3	5
Skin ulcers	0	0	1
Gangrene	0	0	0
Other	0	0	0

Source: IDRS IDU interviews

8.3 Morphine

After increasing consistently from 2001 to 2004, in 2005 the proportion of IDU reporting recent use and injection of morphine dropped markedly in 2005 (see Figure 48): the proportion reporting recent use fell from 50% in 2004 to 32% in 2005, while the proportion reporting recent injection fell from 45% in 2004 to 28% in 2005. Despite this, a number of key experts, particularly those working in treatment settings, reported an increase in morphine use, injection and dependence among IDU. Key experts observed that over the last few years morphine has "taken the place of heroin" for some IDU, due to its reliable availability, consistent purity and lower price. One KE noted that whereas a few years ago many IDU would use morphine occasionally, there are now a growing number of IDU who are regular, dependent morphine users, typically using twice a day and each time 'going halves' with someone in a 100mg tablet. A number of KE described the 'typical' morphine user as a male in his mid-30s, with a long history of injecting drug use, who sources morphine either from a regular GP or from a patient on-selling their script.

Figure 48: Proportion of IDU reporting morphine use and injection in the past six months 2001-2005



Source: IDRS IDU interviews
Note: Prior to 2001 IDU were not asked specifically about morphine.

Table 25 details the forms of morphine used and most used by IDU in the preceding six months. The proportion of IDU reporting recent use of both licit and illicit morphine fell sharply in 2005; however, as in previous years, the vast majority of IDU who had used morphine recently (97%) reported mostly using illicit morphine. The proportion of IDU reporting mostly using illicit (vs. licit) morphine has increased steadily since 2003. As in previous years, the main brand of morphine used by IDU in 2005 was MS Contin® (Table 25).

Table 25: Forms of morphine used and used most in the last six months, 2001-2005

	2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
Morphine (licit)	6	15	11	18	12	20	9	8	4	3
Morphine (illicit)	28	82	32	82	36	80	47	92	32	97
Main brand										
MS Contin®	--		53		92		74		73	
Kapanol®	--		8		3		13		0	
Other	--		39		5		13		27	

Source: IDRS IDU interviews
Note: Valid percentages shown for 'form most used' and 'main brand'. "Form used most' question not asked in forced-choice format in 2001, so percentages may not add to 100.

In 2004, one-quarter of IDU reported injecting morphine in the last month, with 40% of these reporting no problems associated with injection of this drug. The most commonly reported problems in 2005 were morphine dependence (6%), difficulty finding veins (6%), scarring or bruising (9%) and swelling of the arm (4%) (see Table 26). According to key experts, an increasing proportion of IDU are using pill filters when they inject pharmaceutical opioids such as morphine, and this has resulted in reduced injection-related harm among this group.

Table 26: Problems associated with morphine injection in the last month, 2003-2005

	2003	2004	2005
Injected last month (%)	27	30	25
No problems (%)	15	15	10
Problems (%)			
Overdose	0	0	0
Abscess/infection	4	3	0
Dirty hit	2	2	1
Scarring/bruising	4	4	9
Thrombosis/blood clot	2	2	1
Swelling of arm	2	4	4
Swelling of leg	0	0	1
Swelling of hand	2	4	1
Swelling of feet	0	1	0
Hospitalisation	0	1	0
Contact with ambulance	1	1	0
Contact with police	1	1	1
Morphine dependence	5	8	6
Difficulty finding veins	7	7	6
Skin ulcers	0	1	1
Gangrene	0	0	0
Other	0	0	1

Source: IDRS IDU interviews

Table 27 shows IDU reports of the price and availability of morphine in 2003, 2004 and 2005. In 2005 the median price of a 100mg MS Contin® ('grey nurse') was $50 (vs. $40 in 2004), with a 60mg MS Contin® selling for $25 (vs. $20 in 2004). The median price of a 100mg Kapanol® rose slightly from $35 in 2003 to $40 in 2004, and again in 2005 to $50. Despite these apparent increases, the majority of IDU in 2005 reported the price of morphine as 'stable' (64%). Consistent with this, key experts reported that the favoured brand for injection was a 100mg MS Contin ($30-$60), with smaller proportions of IDU using 60mg MS Contin or Kapanol ($30).

Also consistent with 2003 and 2004, in 2005 the majority of IDU considered the availability of morphine to be 'easy or very easy' (82%), and the majority reported that availability had been stable (61%) or easier (18%) in the last six months. Most IDU in 2005 reported usually obtaining their morphine from a friend (33%) or a street dealer (30%), although 12% reported usually obtaining morphine from a mobile dealer (see Table 27).

Table 27: Price and availability of morphine, as reported by IDU, 2003-2005

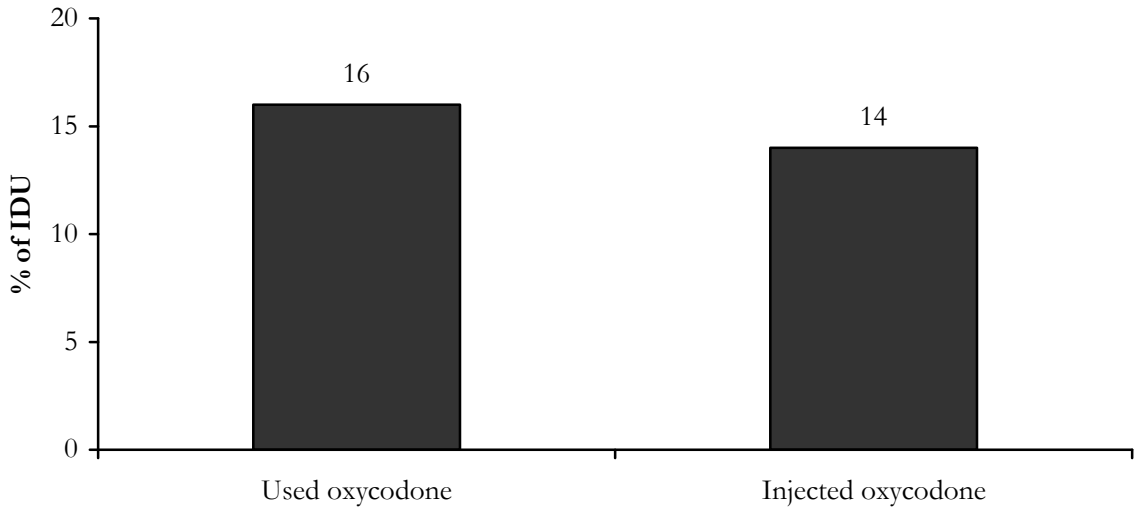
	2003	2004	2005
Median price ($)			
MS Contin® 60mg	25	20	25
MS Contin® 100mg	40	40	50
Kapanol® 100mg	35	40	50
Price change (%)			
Increasing	15	9	3
Stable	68	65	64
Decreasing	4	11	9
Fluctuating	2	5	3
Don't know	11	11	21
Availability (%)			
Very easy	19	25	21
Easy	55	54	61
Difficult	19	12	9
Very difficult	2	5	3
Don't know	4	4	6
Availability change (%)			
Easier	23	18	18
Stable	53	54	61
More difficult	13	19	9
Fluctuates	0	4	3
Don't know	11	5	9
Usual source (%)			
Friend	33	33	33
Street dealer	41	39	30
Mobile dealer	7	12	12
Other	13	14	15
Don't use	7	2	9
Median time to score (mins)	12.5	20	30

Source: IDRS IDU interviews
Note: Valid percentages are shown

8.4 Use of illicit oxycodone

In 2005 16% of IDU reported recent use of illicit oxycodone, with 14% reporting recent injection (Figure 49). Although IDU were not asked about use of oxycodone in previous years, a number of key experts from the health sector reported an increase in the use of oxycodone among IDU, with one reporting a stable price of $30/80mg. Of note, this increase parallels a decrease in the use and injection of illicit morphine among IDU.

Figure 49: Recent (last six months) use and injection of illicit oxycodone among IDU, 2005



Source: IDRS IDU interviews

Consistent with the pattern of use for morphine, IDU in 2005 were more likely to report recent use of illicit (15%) than licit (6%) oxycodone, with 84% reporting that they mostly used illicit oxycodone (Table 28). The most commonly used brand of oxycodone among IDU was reported to be Oxycontin® (79%).

Table 28: Forms of oxycodone used and used most in the last six months, 2005

	2005	
	Used	**Most**
Oxycodone (licit)	6	16
Oxycodone (illicit)	15	84
Main brand		
Oxycontin®		79
Oxycodone (generic)		11
Oxynorm®		5
Endone®		5

Source: IDRS IDU interviews
Note*:* Valid percentages shown for 'form most used'.

8.5 Other opioids

Among IDU in Queensland the main opiates of choice are heroin, morphine, methadone and buprenorphine; however, a proportion of IDU in 2005 reported using various other opiates. In 2005, 7% of IDU reported using other licit opiates and 3% reported using other illicit opiates. It must be noted that in previous years oxycodone was included in the category of "other opioids" and this has influenced comparison of 2005 figures with previous years. Of those who had used other opiates recently, the majority (67%) reported mostly using other *licit* opiates (see Table 29).

Table 29: Forms of other opiate used and used most in the last six months, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
Other opiates (licit)	31	--	8	26	11	35	4	63	9	41	7	67
Other opiates (illicit)		--	16	68	11	65	2	38	12	59	3	33

Source: IDRS IDU interviews

Note: Valid percentages shown for 'form most used'. Percentages are not directly comparable, as in 2000 'other opiates' included morphine and until 2004 'other opiates' included oxycodone.

Table 30 shows the main types of other opiates used in the last six months as reported by IDU. Panadeine Forte® was reported as the main type of other opiate used in the preceding six months by one-third of respondents – the same proportion as in 2004. In 2005, Tramadol and "other" were each reported by 22% of respondents as main type of other opiate used in the previous six months.

Table 30: Main type of other opiate used in the last six months, 2000-2005

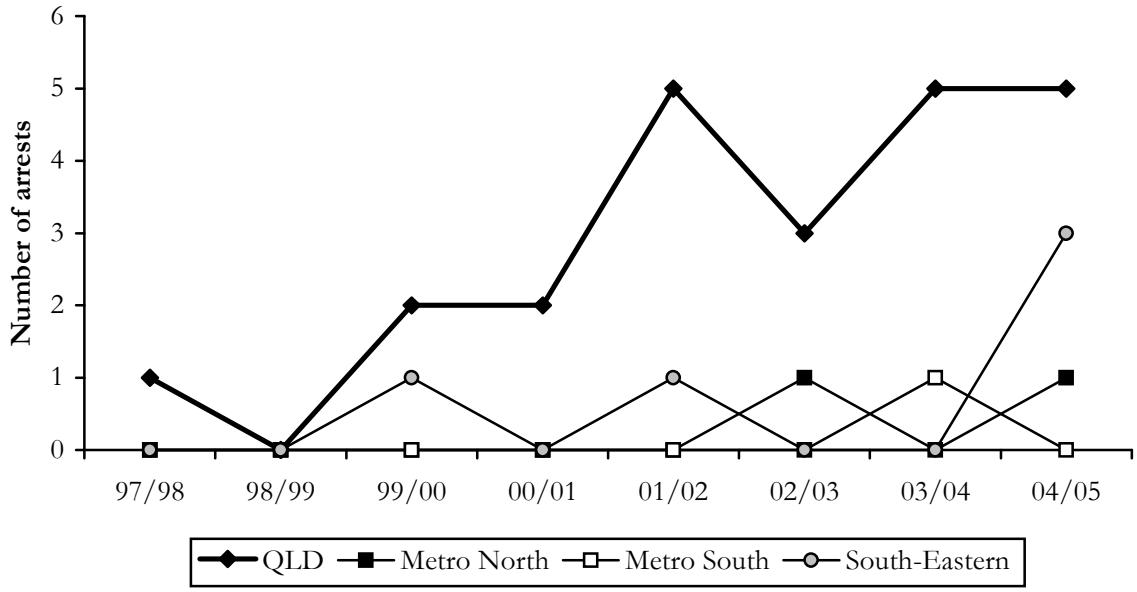
	2000	2001	2002	2003	2004	2005
Panadeine Forte ®	4	4	12	0	33	33
Pethidine	7	3	12	20	24	11
Oxycodone	0	0	0	0	19	--
Codeine	0	3	18	0	10	11
Tramadol	0	0	0	0	5	22
Other	89	90	58	80	14	22

Source: IDRS IDU interviews

Note: Valid percentages are shown. Percentages are not directly comparable, as in 2000 'other opiates' included morphine and until 2004 'other opiates' included oxycodone.

The overall number of 'other opioid' possession/use arrests in Queensland remained low and stable in 2004/05 (see Figure 50).

Figure 50: Number of other opioid possession/use arrests by geographic area, 1997/98-2004/05



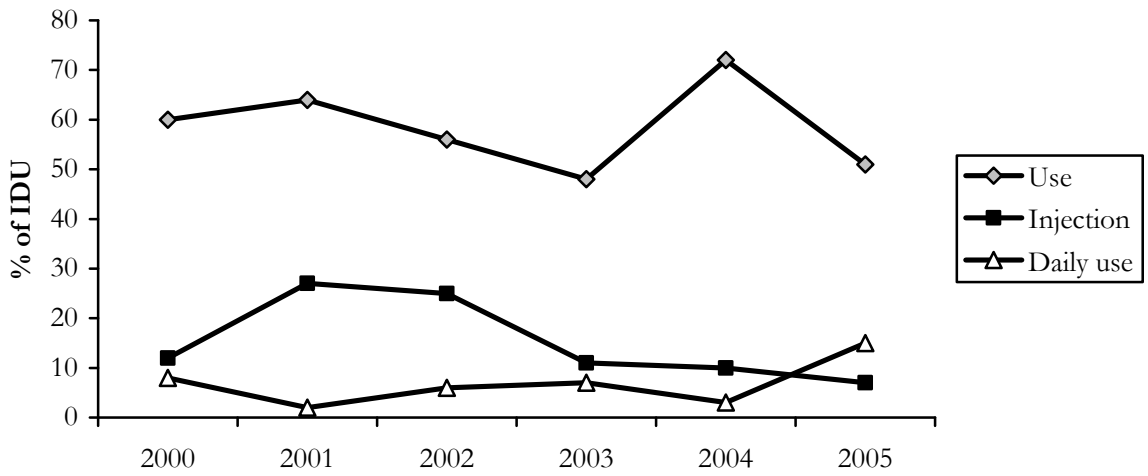
Source: Queensland Police Service

9.0 OTHER DRUGS

9.1 Benzodiazepines

The use of benzodiazepines among IDU decreased in 2005, with 51% reporting use in the preceding six months, compared with 72% reporting recent use in 2004. Since 2001 there has also been a consistent decrease in injection of benzodiazepines, with 7% of IDU reporting recent injection in 2005 compared with 64% in 2001. While injection of benzodiazepines has dropped markedly since 10mg Temazepam® gel capsules were removed from the PBS in 2001 (Breen et al., 2003), the proportion of IDU reporting daily use of benzodiazepines (including licit use) increased from 3% in 2004 to 15% in 2005 (see Figure 51). According to key experts, use of benzodiazepines among IDU is common and increasing, although injecting use is uncommon. A number of KE expressed concern that the combined use of benzodiazepines, opiates and alcohol is common – simultaneous use of multiple CNS depressants is a significant risk factor for overdose (Shane Darke, 2003).

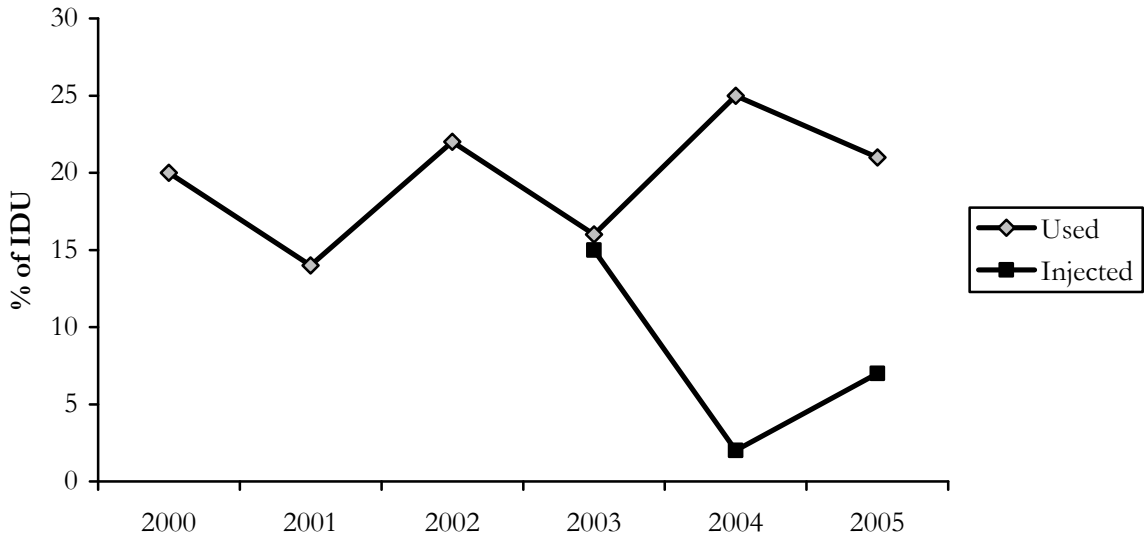
Figure 51: Proportion of IDU reporting benzodiazepine use, injection and daily use in the preceding six months, 2000-2005



Source: IDRS IDU interviews

Among IDU who reported recent use of benzodiazepines in 2005, there was a decrease in the median number of days of use from 25 (out of 180) in 2004 to 20 in 2005. Despite this, however, there was an increase in the median number of days injected – from 2 days (out of 180) in 2004 to 7 in 2005 (see Figure 52).

Figure 52: Median days use and injection of benzodiazepines in the past six months, 2000-2005



Source: IDRS IDU interviews

Table 31 show the forms of benzodiazepines used and most used, and the main brand used by IDU from 2000 to 2005. In 2005, almost equal proportions of IDU reported recent use of licit (34%) and illicit (33%) benzodiazepines, with over half (57%) reporting mostly using licit benzodiazepines. As in previous years, the main brand of benzodiazepine used by most IDU was Valium® (62%).

Table 31: Forms and main brand of benzodiazepine used and used most in the last six months, 2001-2005

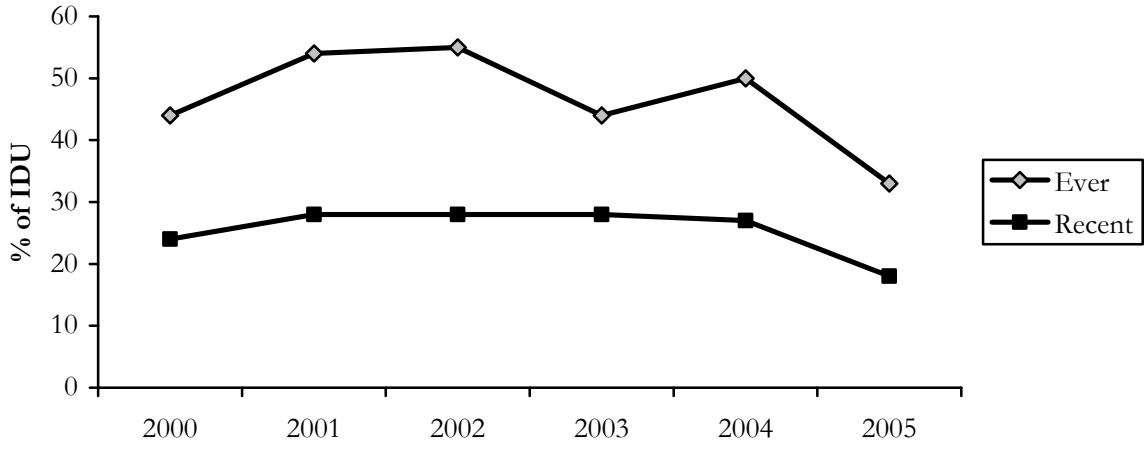
	2000		2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
Benzos (licit)	--	--	41	56	41	61	33	68	42	65	34	57
Benzos (illicit)	--	--	41	43	36	39	26	32	39	35	33	43
Main brand												
Valium®	43		50		39		62		50		62	
Temazepam	27		21		29		4		8		4	
Xanax®	2		0		2		15		6		15	
Serepax®	3		7		7		4		14		4	
Other	25		22		23		15		22		15	

Source: IDRS IDU interviews
Note: Valid percentages shown for 'form most used'

9.2 Anti-depressants

The proportion of IDU reporting lifetime use of anti-depressants has declined in recent years, from 55% in 2002 to 33% in 2005. Between 2004 and 2005 the proportion of IDU reporting recent anti-depressant use also declined from 27% to 18% (Figure 53).

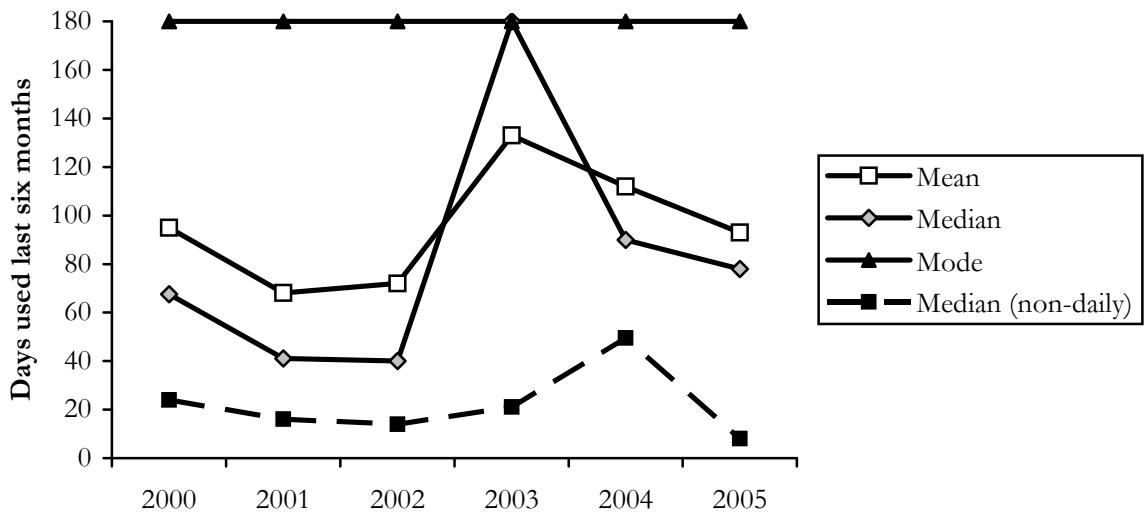
Figure 53: Proportion of IDU reporting lifetime and recent (last six months) use of anti-depressants, 2000-2005



Source: IDRS IDU interviews

An unknown proportion of IDU reporting recent anti-depressant use are doing so as prescribed, and typically daily. By excluding those IDU reporting daily anti-depressant use, trends in the frequency of use become more apparent. Figure 54 shows the mean, median and modal frequency of anti-depressant use among IDU who reported recent use between 2000 and 2005. As the figure shows, among non-daily anti-depressant users, the average frequency of use has declined markedly since 2003.

Figure 54: Frequency of anti-depressant use in the last six months, among IDU who had used 2000-2005



Source: IDRS IDU interviews

The forms of anti-depressants used and most used by IDU in the last six months are shown in Table 32. As in previous years, the vast majority (89%) of IDU who reported use of anti-depressants in the preceding six months reported mostly using licit anti-depressants.

Table 32: Forms of anti-depressant used and used most in the last six months, 2001-2005

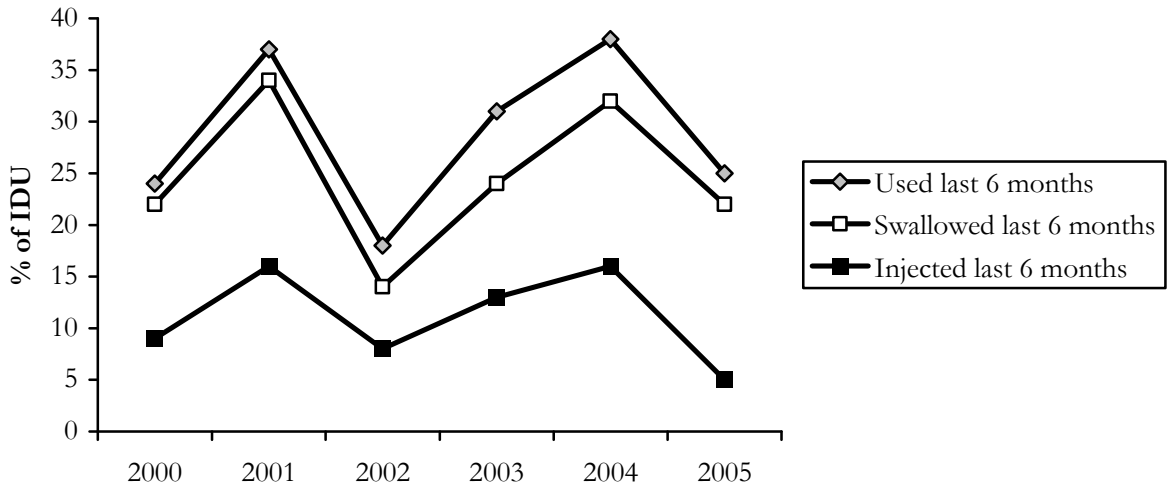
	2001		2002		2003		2004		2005	
	Used	Most	Used	Used	Most	Most	Used	Most	Used	Most
Anti-depressants (licit)	21	72	22	24	87	79	26	97	17	89
Anti-depressants (illicit)	11	24	6	5	13	21	3	3	4	11

Source: IDRS IDU interviews
Note: Valid percentages shown for 'form most used'

9.3 Ecstasy

Ecstasy use among IDU in Queensland seems to be largely opportunistic; however, the proportion of IDU reporting recent use has varied markedly in recent years. After increasing sharply during the heroin shortage in 2001 (to 37%), use of ecstasy among IDU dropped sharply in 2002 (18%) before rising again until 2004 (38%). In 2005, the proportion of IDU reporting recent use of ecstasy fell again (to 25%), with most recent users reporting swallowing (22%) rather than injecting (5%). Among those reporting recent use, the median frequency of use was 8 days in the last 6 months – slightly more often than once a month (see Figure 55).

Figure 55: Proportion of IDU reporting use, swallowing and injection of ecstasy in the last six months, 2000-2005

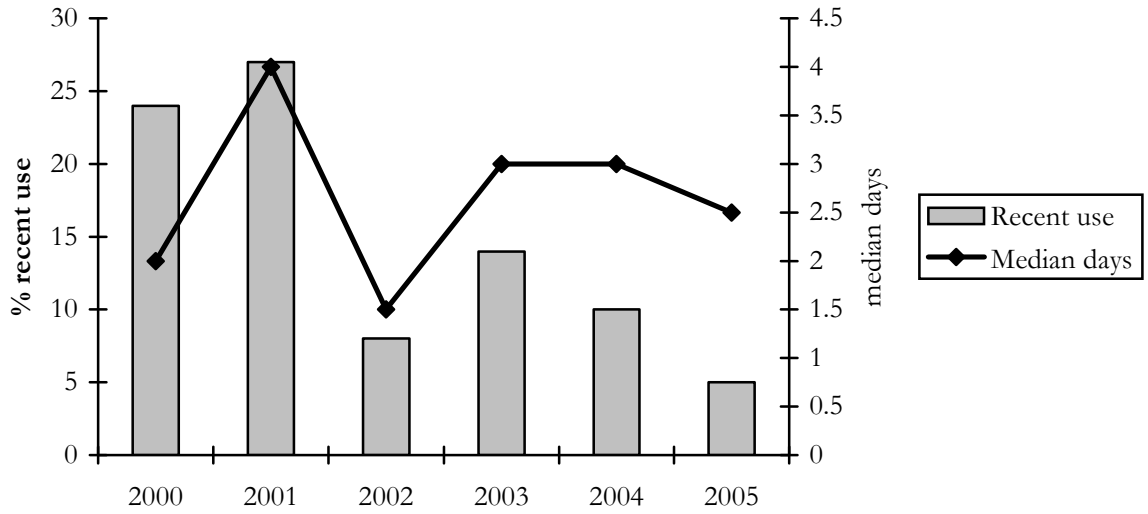


Source: IDRS IDU interviews

9.4 Hallucinogens

Only a small proportion of IDU in Queensland report use of hallucinogens each year. As shown in Figure 56, use has continued to decrease in 2005, with 5% of IDU reporting recent use – half the number reporting recent use in 2004. The median number of days of use has also decreased, from 3 days in the last six months in 2004 to 2.5 days in the last six months in 2005. Despite this, one KE from the law enforcement sector reported a recent and significant resurgence of hallucinogens, in the form of micro-dots (2mm tabs) and pills which look similar to ecstasy. An increase in availability and use of hallucinogens is more likely to be evident among party drug users, and to be picked up in the Party Drugs Initiative (PDI).

Figure 56: Prevalence and frequency of recent hallucinogen use among IDU, 2000-2005



Source: IDRS IDU interviews

Whereas in previous years small proportions of IDU reported recent use of both LSD/'trips' and mushrooms, in 2005 all IDU who reported recent use of hallucinogens reported using LSD/trips only (see Table 33).

Table 33: Forms of hallucinogen used and used most in the last six months, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most	Used	Most
LSD/Trips	23	--	29	87	4	38	10	56	5	60	5	100
Mushrooms	6	--	13	7	6	63	8	44	5	40	0	0

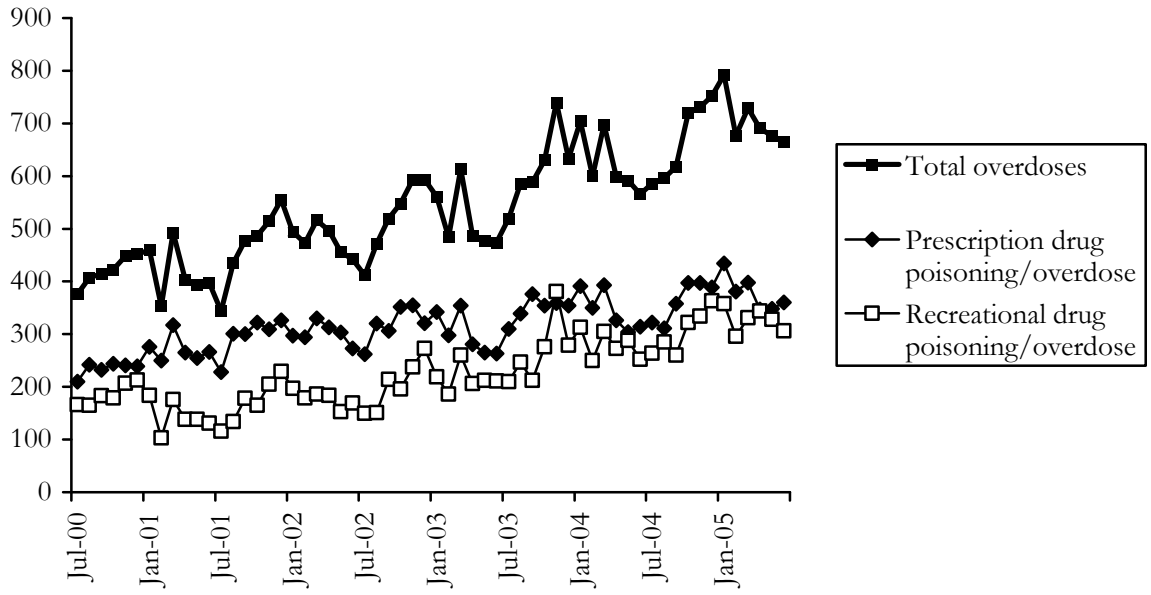
Source: IDRS IDU interviews
Note: Valid percentages shown for 'form most used'. 'Form most used' question not asked in forced-choice format in 2001, so percentages may not add to 100.

10.0 ASSOCIATED HARMS

10.1 Drug overdose

When Queensland Ambulance Service (QAS) paramedics attend an incident they deem to be a drug poisoning or overdose, they record whether the substance involved is believed to be a prescription drug (e.g. benzodiazepines or morphine) or a recreational drug (e.g. heroin, methamphetamine, ecstasy) overdose. At present it is not possible to disaggregate these figures to monitor trends in overdose associated with a particular drug; however, Figure 57 shows the number of prescription drug poisoning/overdose incidents, and the number of recreational drug poisoning/overdose incidents, attended by QAS paramedics between July 2000 and June 2005. As the Figure shows, there has been a consistent increase in the number of such incidents attended by QAS during this time, from a total of 5,020 attendances during the 2000/01 financial year to 8,233 instances during the 2004/05 financial year (a 64% increase). Also evident in the Figure is a cyclical pattern, with the number of overdoses markedly higher around December and January than at other times of the year. As with all indicator data, it is difficult to establish to what extent this increase reflects an increase in the incidence of overdose, or the operational activity of QAS.

Figure 57: Number of recreational drug and prescription drug poisoning and overdose incidents attended by paramedics in Queensland, 2000-2005



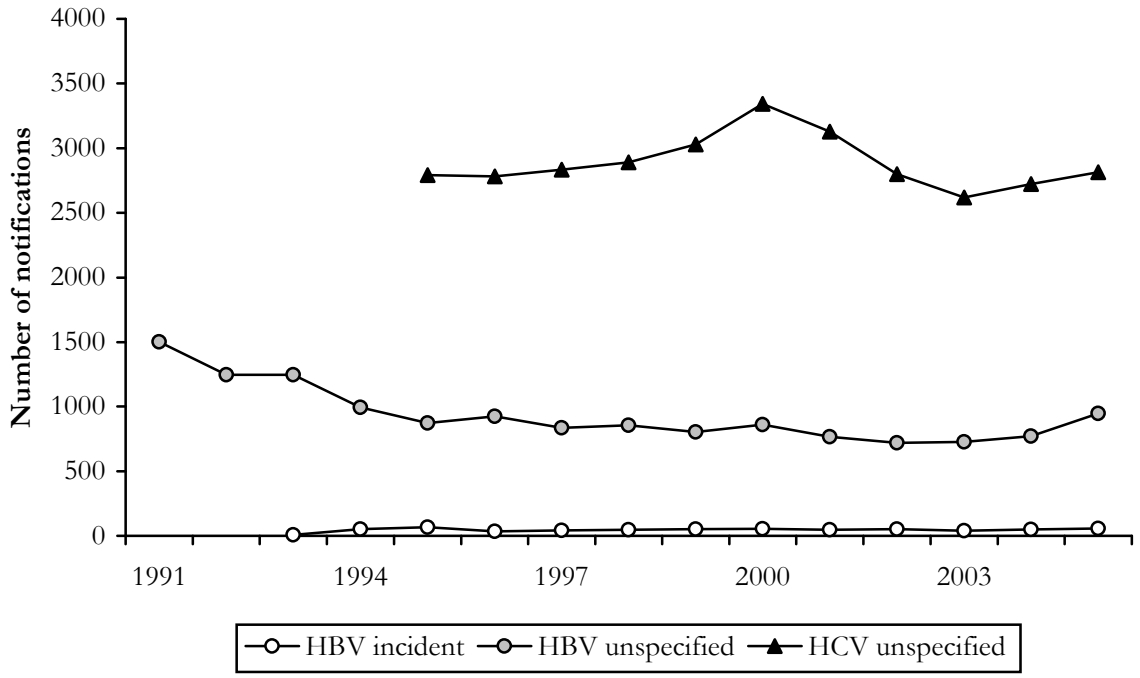
Source: Queensland Ambulance Service

10.2 Blood-borne viral infections

Rates of HBV infection notification in Queensland have dropped reasonably consistently since 1991, with the rate of unspecified notifications dropping from 1,588 in 1991 to 946 in 2005. The number of HBV incident notifications has been low and quite stable over this time, with 52 notifications in 1994 and 59 notifications in 2005 (see Figure 58).

The rate of HCV infection in Queensland has also decreased over this time, although Queensland data aggregate incident and unspecified notifications. After recording 2,808 notifications (incident and unspecified) in 1995, the HCV notification rate in Queensland rose to 3,153 in 2000. The 2005 rate of 2,813 HCV notifications constitutes a slight increase from 2003 (2,618) and 2004 (2,722) (see Figure 58). This decline in HCV notifications is consistent with key expert reports of increased knowledge about safe injecting, and reduced sharing of injection equipment. Despite this, one KE reported that the rate of HCV among prisoners continues to be high, with a recent national survey finding 34% of prison receptions HCV positive (Butler, Boonwaat, & Hailstone, 2005).

Figure 58: Total notifications for (unspecified and incident) HBV and HCV infections, QLD 1991-2005

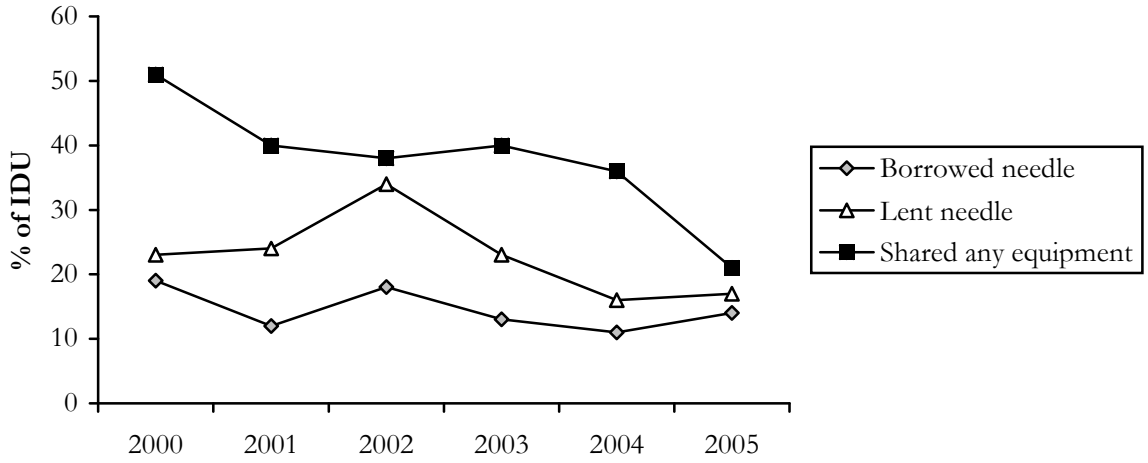


Source: Communicable Diseases Network Australia - National Notifiable Diseases Surveillance System*, 2006*
Note: QLD reports all hep C notifications (incident and unspecified) as unspecified. Data for hep B notifications in 1993 unavailable at time of printing

10.3 Sharing of injecting equipment among IDU

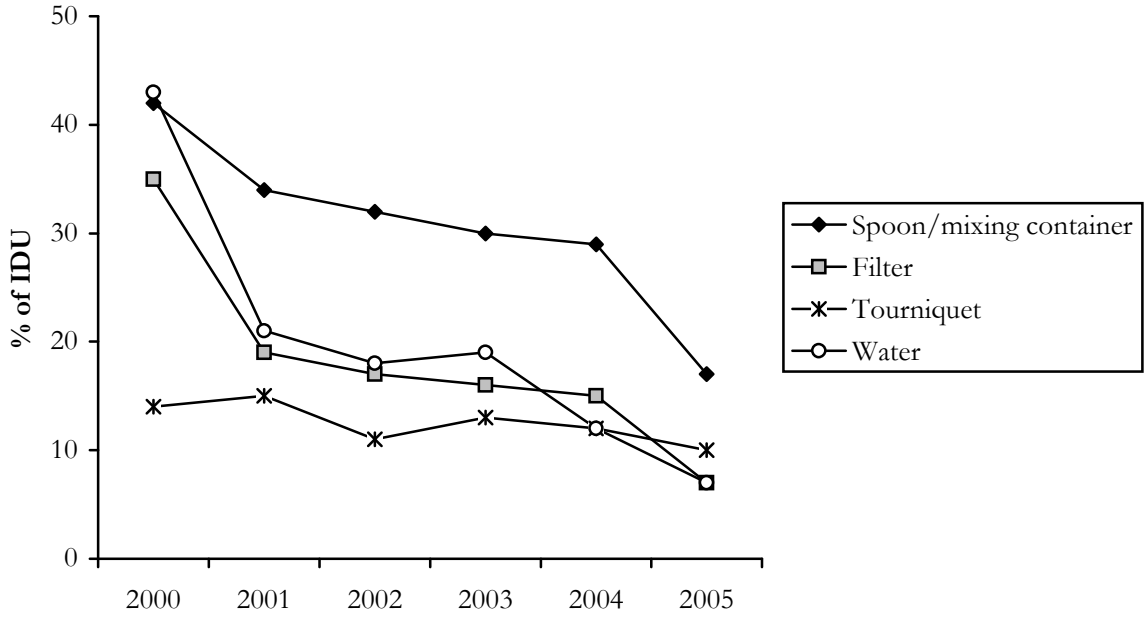
Consistent with key expert reports, the proportion of IDU reporting sharing of injection equipment in the last month has dropped markedly from 2000 (51%) to 2005 (21%); however, compared with 2004, the proportion reporting borrowing (11% to 14%) or sharing (16% to 17%) a needle in the last month increased slightly in 2005. Other equipment shared by IDU in 2005 included spoons/mixing containers (17%), filters (7%), tourniquets (10%) and water (7%) (see Figures 59 and 60).

Figure 59: Proportion of IDU reporting sharing injecting equipment in the month preceding interview, 2000-2005



Source: IDRS IDU Interviews

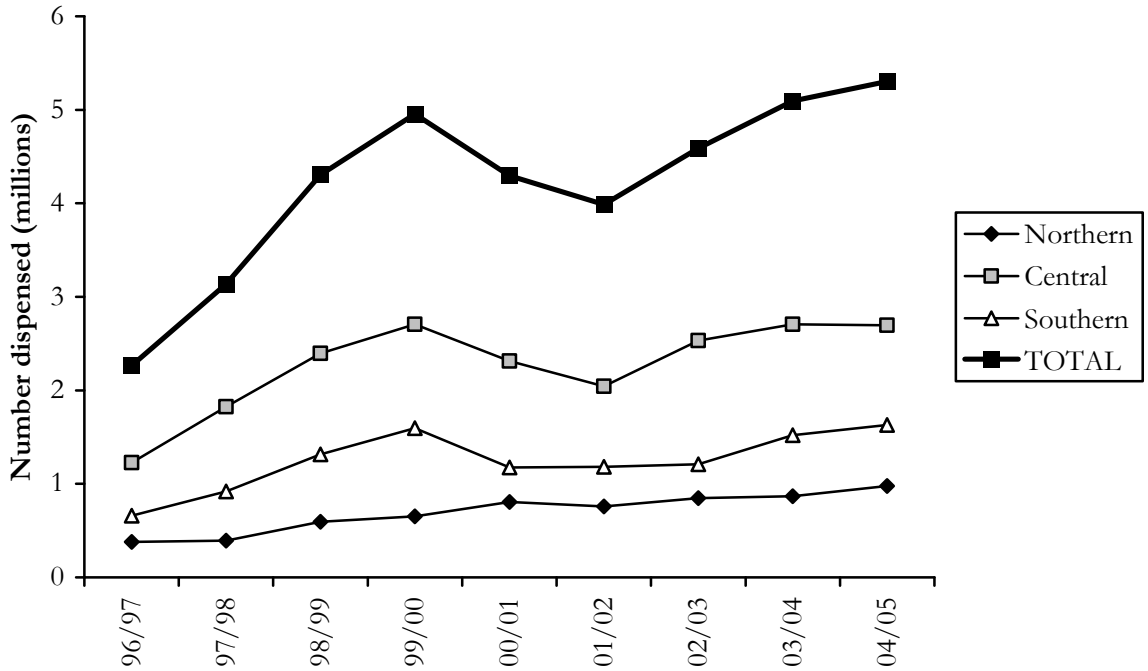
Figure 60: Proportion of IDU reporting sharing other injecting equipment by type, 2000-2005



Source: IDRS IDU Interviews

Figure 61 details the number of syringes dispensed to NSPs by Queensland Health from 1996/97 to 2004/05, by region and for the state as a whole. The figure shows an increase in syringes dispensed in 1999/00, followed by a decline in the following two years; however, these data reflect the number of syringes dispensed to NSPs by QLD Health, rather than the number dispensed by NSPs to IDU. Since 2001/02, there has been a steady increase in the number of syringes dispensed in Queensland, with a total of 5,302,300 syringes dispensed in the 2004/05 financial year.

Figure 61: Number of syringes dispensed in Queensland, 1996/97-2004/05

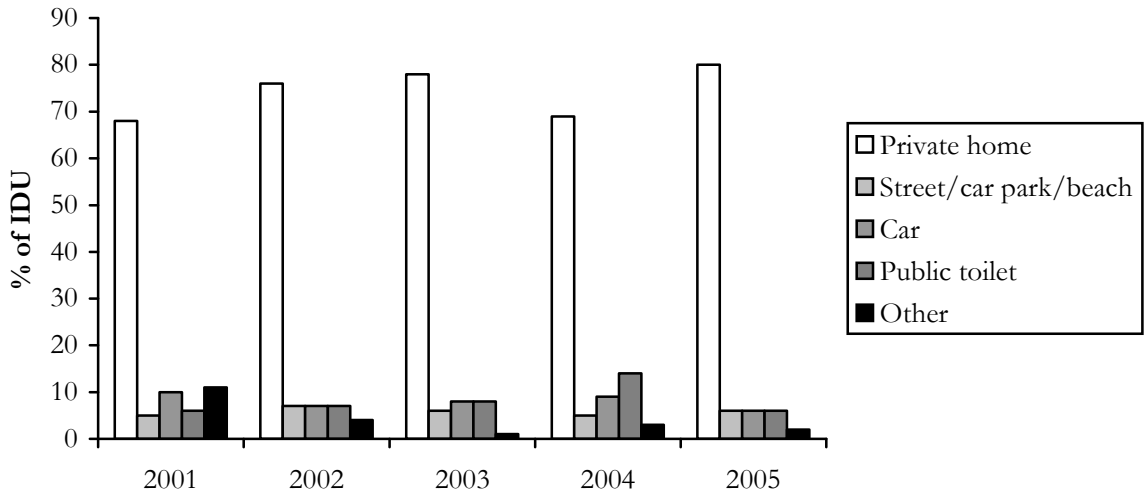


Source: Queensland Health ATODS

10.4 Location of injections

As has been the pattern in previous years, the majority of IDU in 2005 reported usually injecting in a private home (80%); however, small proportions of IDU reported usually injecting on a street, car park or beach (6%), in a car (6%), in a public toilet (6%) or in some other location (2%). There has been no significant change in the location of usual injection among IDU interviewed for the IDRS, since 2001 (see Figure 62).

Figure 62: Usual location for injection in the month preceding interview, 2001-2005



Source: IDRS IDU Interviews

10.5 Injection–related health problems

There was little change in self-reported rates of injection-related health problems among IDU from 2004 to 2005. In 2005 over a third of IDU (37%) reported scarring or bruising relating to injecting in the last month, while 31% reported difficulty injecting, 14% reported experiencing a 'dirty hit', 5% reported abscesses or infections, 7% reported thrombosis and 3% reported an overdose. Overall, the average number of injection-related problems reported by IDU has changed little since 2003, although the number of injection-related problems has fallen slightly since 2002 (see Table 34).

Table 34: Proportion of IDU reporting injection-related problems in the last month, by problem type, 2000-2005

	2000	2001	2002	2003	2004	2005
Overdose	8	7	6	7	3	3
Dirty hit	28	18	18	19	16	14
Abscesses/infections	14	10	14	16	11	5
Scarring/bruising	56	45	51	37	48	37
Difficulty injecting	36	32	43	35	40	31
Thrombosis	8	10	11	7	8	7
TOTAL (mean)	1.50	1.43	1.46	1.22	1.26	1.20

Source: IDRS IDU interviews

10.6 Driving risk behaviours

IDU in 2005 were asked about driving a vehicle under the influence of a drug in the last six months. As shown in Table 35, 46% of IDU in 2005 reported driving under the influence in the last six months. The drugs most commonly consumed prior to driving were those used by the largest proportion of IDU: cannabis (52%), heroin (48%) and speed (41%).

Table 35: IDU reports of driving risk behaviour 2005

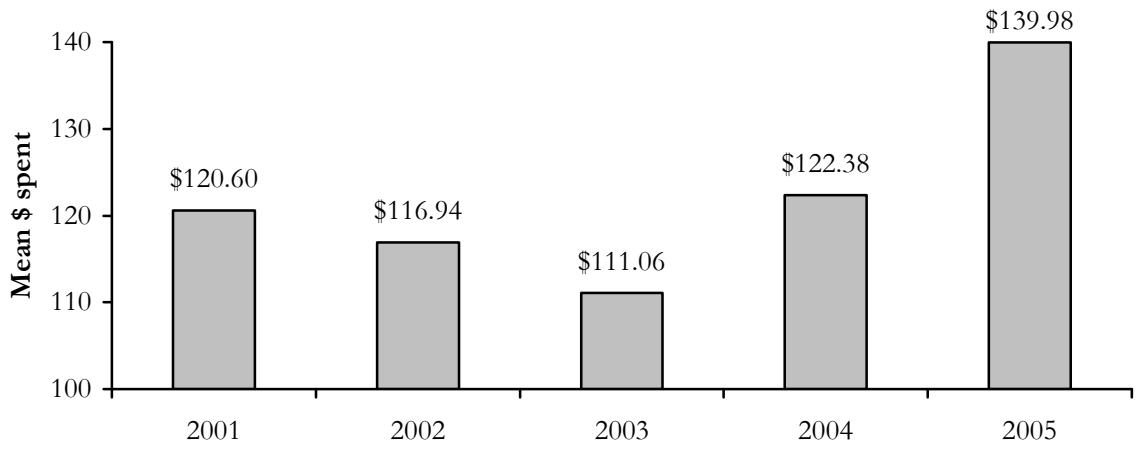
	IDRS 2005
Driven after drugs in last 6 months (%)	
Yes	46.2
No	38.5
Haven't driven in last 6 months	17.3
Drugs consumed prior to driving in last 6 months (%)	
Heroin	47.9
Methadone	14.6
Buprenorphine	8.3
Morphine	12.5
Other opiates	4.2
Cocaine	6.3
Ecstasy	6.3
Benzodiazepines	18.8
Cannabis	52.1
Speed	41.7
Base	14.6
Ice	2.1

Source: IDRS IDU interviews
Note: Valid percentages shown..

10.7 Expenditure on illicit drugs

The mean amount of money spent on illicit drugs the day before interview, from 2001 to 2005, is shown in Figure 63. The mean expenditure in 2005 was approximately $140 – an increase of 26% from 2003.

Figure 63: Mean amount of money spent by IDU on illicit drugs on day before interview, 2001-2005



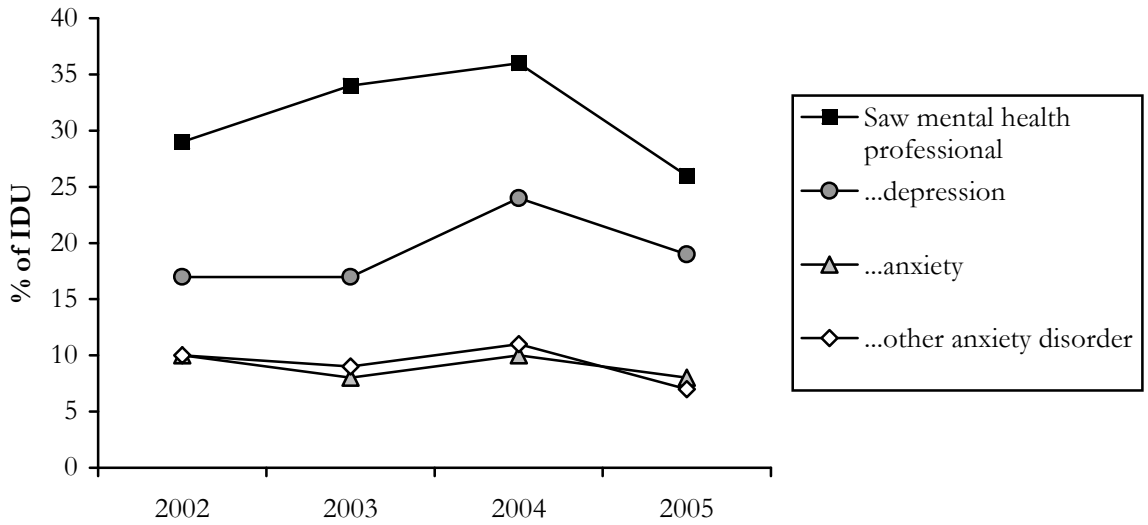
Source: IDRS IDU interviews
Note: Among those who spent money on drugs yesterday. Comparable data are not available for 2000.

10.8 Mental health problems

Approximately one-quarter of IDU in 2005 (26%) reported having seen a mental health professional in the last six months, for a problem other than drug dependence – a decrease from 2004 when 36% of IDU reported seeing a mental health professional. The mental health problems for which IDU most often sought help were depression (19%), generalised anxiety (8%), and other anxiety disorders such as panic attacks, paranoia and phobias (7%) (see Figure 64).

Although a number of key experts commented on paranoia and psychosis, particularly in relation to cannabis and methamphetamine use (see Section 7.5.2), there was strong consensus that the most common mental health problem in this group was depression. While a number of KE expressed concern regarding the under-diagnosis of comorbidity among drug treatment clients, others asserted that the incidence of comorbidity (i.e. a clinical diagnosis other than drug dependence) among drug dependent clients was in fact quite low. Nevertheless, a number of KE reported that the incidence and severity of mental health problems among IDU and other regular drug users had increased, with paranoia, psychosis, anxiety and general 'scatters' – symptoms typically associated with cannabis and/or methamphetamine use – becoming more prominent, particularly among younger users.

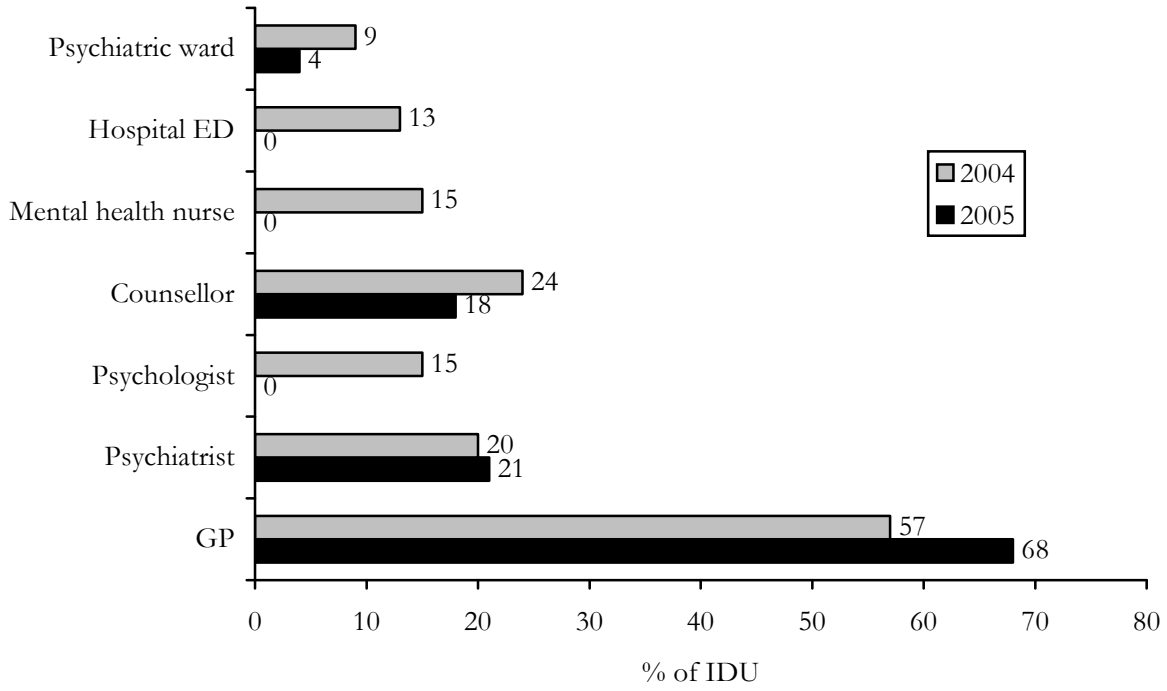
Figure 64: Proportion of IDU who saw a mental health professional in the last six months, for a problem other than drug dependence, 2002-2005



Source: IDRS IDU interviews
Note: 'Other anxiety disorders' include panic, paranoia, OCD and drug-induced psychosis.

The types of mental health professionals seen by IDU in 2004 and 2005 are shown in Figure 65. Among those who reported seeing a mental health professional recently, the majority in both years reported seeing a general practitioner (68%). IDU in 2005 also reported seeing a counsellor, psychiatrist, or attending a hospital psychiatric ward, in relation to their mental health problems.

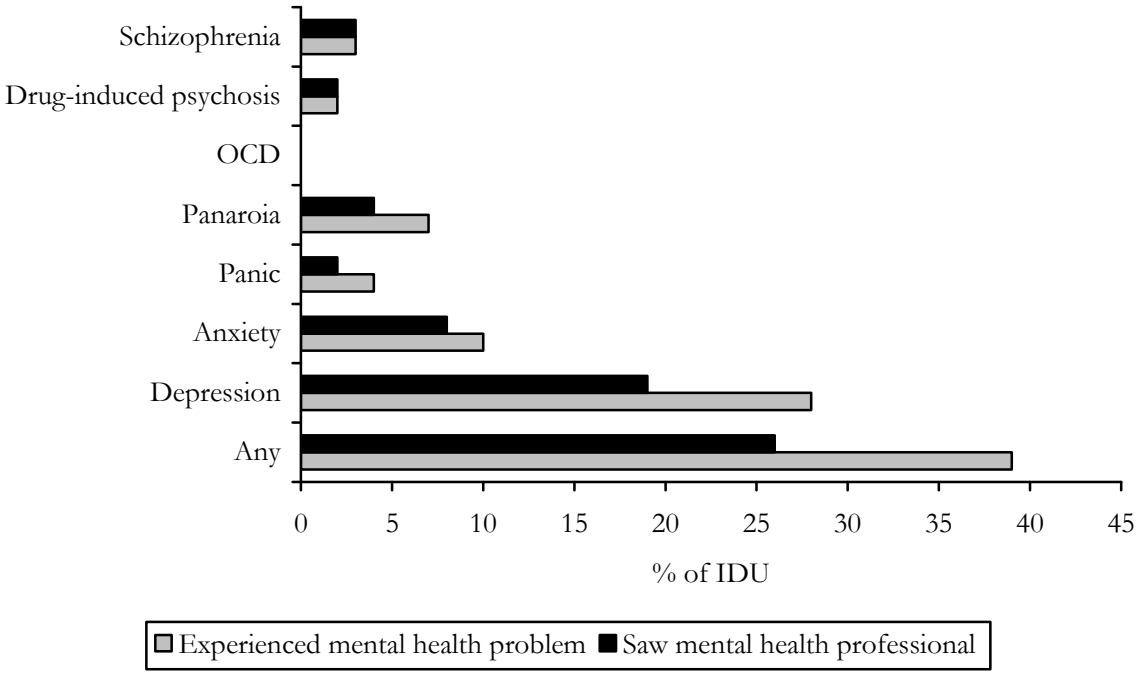
Figure 65: Types of mental health professional seen by IDU in the last six months, 2004-2005



Source: IDRS IDU interviews
Note: Valid percentages (proportion of those who had seen any mental health professional) shown.

Figure 66 shows the proportion of IDU reporting experiencing and seeking help for each of a range of mental health problems in the last six months. While almost one in three IDU (39%) reported experiencing a mental health problem other than drug dependence in the last six months, only 26% reported seeing a mental health professional in this time. Similarly, while 28% of IDU reported experiencing depression in the last six months, only 19% reported seeing a mental health professional about depression in this time (see Figure 66). Evidently, a significant proportion of IDU who are experiencing mental health problems are not accessing appropriate mental health care.

Figure 66: Proportion of IDU who experienced a mental health problem and who saw a mental health professional recently, 2005



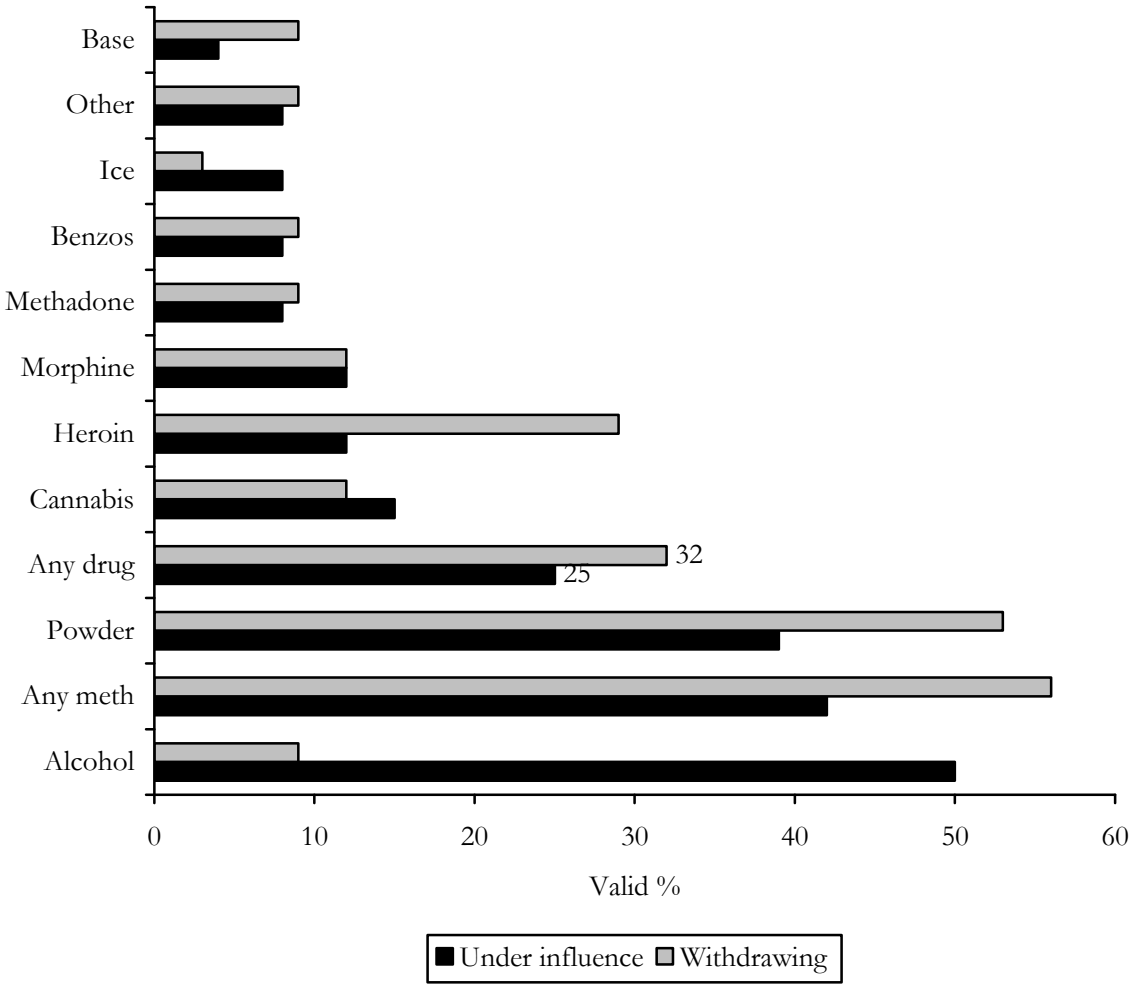
Source: IDRS IDU interviews

10.9 Substance-related aggression

In 2005, IDU were asked whether they had become verbally aggressive whilst under the influence of, or withdrawing from, alcohol or any other drug, in the last six months. One-quarter of IDU (25%) reported becoming verbally aggressive while under the influence of a drug, and approximately one-third (32%) reported becoming verbally aggressive while withdrawing from a drug recently (see Figure 67).

The substances most frequently associated with self-reported verbal aggression whilst under the influence were alcohol (50%), methamphetamine (42%) and cannabis (15%). By contrast, the substances most frequently associated with reports of verbal aggression during withdrawal were methamphetamine (56%), heroin (29%), morphine (12%) and cannabis (12%) (see Figure 67).

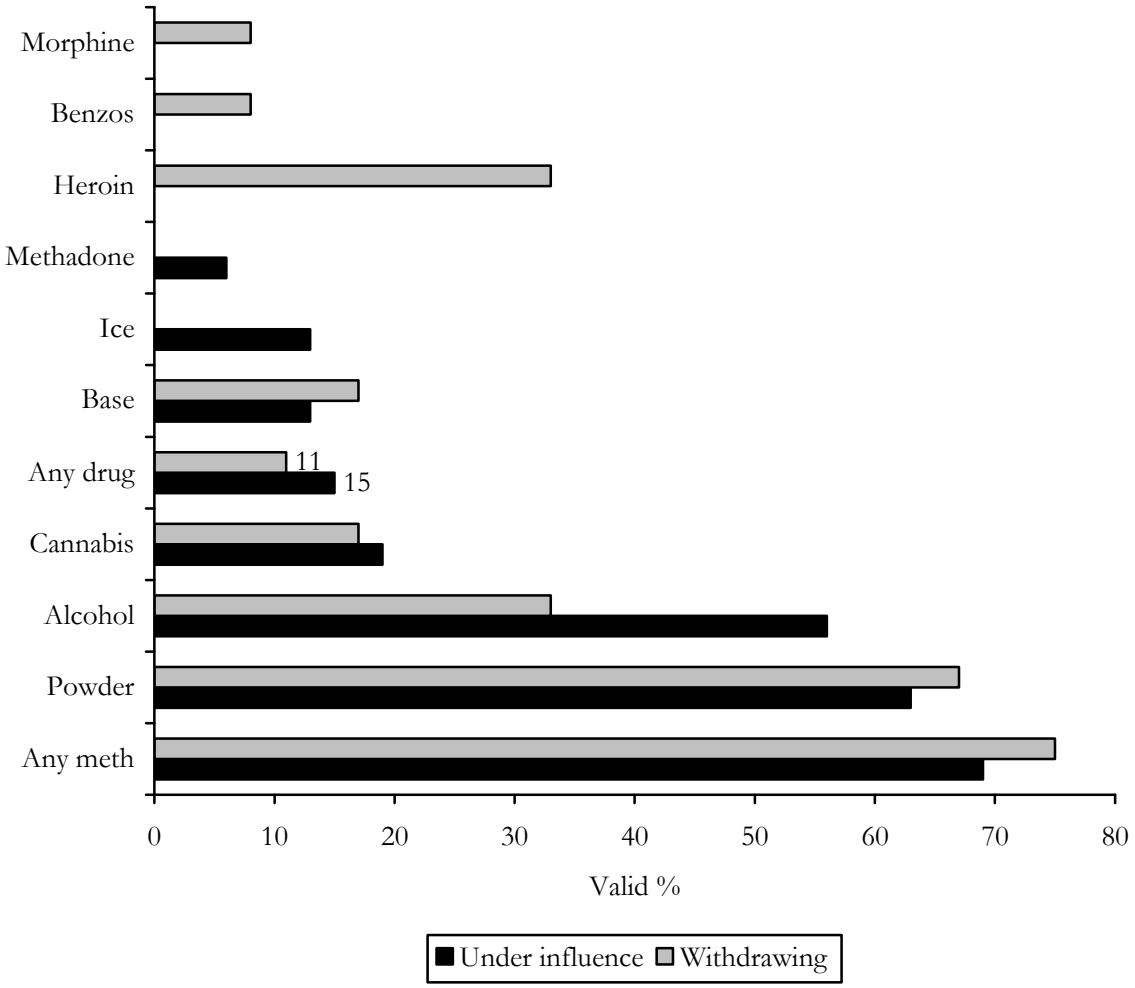
Figure 67: Proportions of IDU reporting verbal aggression while under the influence or following use of a drug, 2005



Source: IDRS IDU interviews

IDU in 2005 were also asked about physical aggression related to substance use in the last six months (Figure 68). Overall, 15% of IDU reported being physically aggressive whilst under the influence of a substance, and 11% reported being physically aggressive while withdrawing from a drug. The substances most commonly associated with self-reported physical aggression while under the influence were methamphetamine (69%), alcohol (56%) and cannabis (19%). The substances most commonly associated with physical aggression during withdrawal were methamphetamine (75%), alcohol (33%) and heroin (33%). Consistent with this, one key expert reported that the comedown from ice was often associated with a heightened emotional state, aggression and occasional violence.

Figure 68: Proportions of IDU reporting physical aggression while under the influence or following use of a drug, 2005



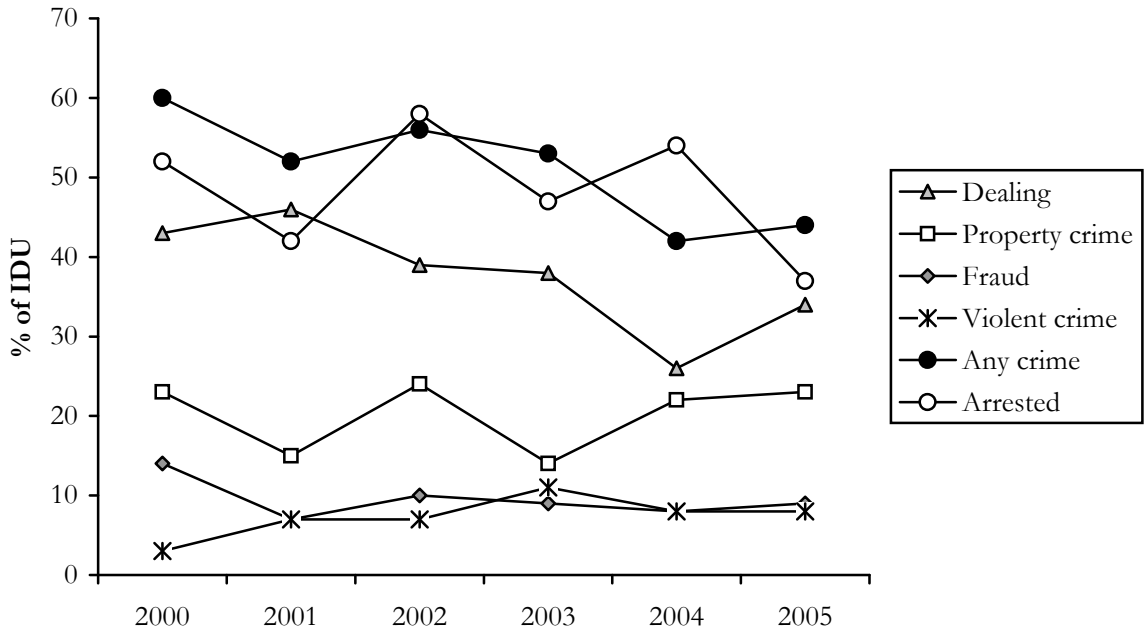
Source: IDRS IDU interviews

10.10 Criminal and police activity

In 2005 44% of IDU reported engaging in some form of criminal activity in the last month, and just over a third (37%) reported having been arrested in the last 12 months. As in previous years, the most common type of crime reported by IDU was drug dealing (34%), with smaller proportions reporting engaging in property crime (23%), fraud (9%) and violent crime (8%) in the last month (see Figure 69). A number of key experts reported that more IDU, particularly younger IDU, were becoming involved in low-level dealing, to fund their own drug use and/or under pressure from their supplier. Two key experts also reported an increase in fraud involving prescriptions, consistent with the increase in use and injection of pharmaceutical preparations among IDU.

Overall, the proportion of IDU reporting criminal activity in the last month increased slightly from 42% in 2004 to 44% in 2005, which is considerably lower than the rate reported in 2000 (60%). Also, the proportion of IDU reporting having been arrested in the last 12 months in 2005 (37%) was the lowest reported over the six years included in Figure 69.

Figure 69: Proportion of IDU reporting engagement in criminal activity in last month by offence type, and proportion of IDU arrested last 12 months, 2000-2005



Source: IDRS IDU interviews

Consistent with decreased reports of arrest, IDU in 2005 (48%) were less likely than in 2004 (56%) to report a recent increase in police activity. Similarly, more IDU in 2005 (33%) than in 2004 (30%) described police activity as stable (see Table 36). The proportion of IDU stating that police activity had made it harder to obtain drugs recently also decreased from 2004 (27%) to 2005 (19%).

Table 36: Police activity as reported by IDU, 2003–2005

	2003 N=135 %	2004 N= 129 %	2005 N=106 %
Police activity in last 6 months			
More activity	50	56	48
Stable	39	30	33
Less activity	1	1	4
Don't know	10	13	15
More difficult to obtain drugs recently			
Yes	17	27	19
No	82	71	78
Don't know	1	2	3

Source: IDRS IDU interviews

Table 37 shows the number of consumer and provider arrests made in Queensland during 2004/05, by drug type. In 2004/05, 85% of arrests were of drug consumers, compared with 84% in 2003/04. The total number of drug consumer and provider arrests in Queensland increased by

7% from 30,197 in 2003/04 to 32,226 in 2004/05. and almost three quarters of arrests (72%) were in relation to cannabis. The proportion of arrests in relation to amphetamine-type stimulants rose from 9% in 2002/03 to 10% in both 2003/04 and 2004/05, however, because the ATS class includes amphetamine, methamphetamine and MDMA, the significance of this increase is unclear.

Table 37: Consumer and provider arrests by drug type in Queensland, 2004/05

	Consumer	Provider	Total	% of arrests
Cannabis	20840	2515	23355	72%
Amphetamine-type stimulants	2578	759	3337	10%
Heroin and other opioids	251	73	324	1%
Cocaine	32	33	65	<1%
Hallucinogens	21	7	28	<1%
Steroids	50	8	58	<1%
Other/unknown	3750	1309	5059	16%
All drugs	27522	4704	32226	100%
% of arrests	85%	15%	100%	

Source: ACC

11.0 DISCUSSION

The 2005 Queensland IDRS identified a number of new trends, and confirmed that other trends, identified in previous years, continued into 2005. With each passing year the IDRS dataset becomes more valuable, as it is increasingly able to document both short-term changes and longer-term trends in illicit drug markets. Interpretation of these changes is complicated by the ageing sample of IDU accessed for the IDRS survey, but is facilitated by consideration of statewide indicator data and information provided by key experts.

11.1 Heroin

The impact of the 2001 heroin shortage continues to be evident in the Queensland heroin market, with evidence of on-going suppression of supply, decreased and unstable purity, and increased price. Perhaps reflecting reduced and unstable availability, fewer IDU in 2005 reported recent heroin use; however, among those who had used recently, the average frequency of use doubled from 2004. Evidently, for regular heroin users, availability is stable or increasing. Despite this, the number of arrests for heroin use/possession in the state continues to be markedly lower than prior to and during the heroin shortage, and telephone helpline calls suggest a reduction in the number of people seeking assistance with heroin-related problems. Hospitalisation rates for heroin are also well below those seen during and before the heroin shortage, and the small increase in opioid-related admissions in 2005 may reflect problems related to other opioids, including prescription opioids, as well as or instead of heroin. The number of opioid pharmacotherapy registrations in Queensland has continued to rise each year, with the vast majority of clients registered with a public prescriber. Despite high rates of injecting drug use and opiate dependence among new prison receptions, only 1% of client registrations in Queensland (vs. 6.4% nationally) were in correctional facilities.

11.2 Methamphetamine

The IDRS monitors trends in three forms of methamphetamine: powder, 'base' and crystal ('ice'). While the former two are mostly locally produced, often in small 'box labs', crystal methamphetamine or 'ice' is mostly imported. As in previous years, in 2005 patterns of use and trends associated with powder and base differed substantially from those for ice.

The price of powder and base did not change between 2004 and 2005; however, ice, which has traditionally been more expensive, fell to the same price as these less pure forms. While the majority of IDU once again rated all forms of methamphetamine as 'easy' or 'very easy' to get, ice was considered less readily available than the other forms, with availability less stable over time. The availability of all forms of methamphetamine fell in 2005. IDU consistently (and accurately) rate ice as higher in purity than powder and base; however, in 2005 the proportion of IDU rating ice as 'high' in purity increased, while the proportion rating powder and base as 'high' purity decreased. According to key experts, a growing proportion of IDU prefer powder and base to ice, which they perceive as *too pure*, and associate with a range of acute physical and mental health problems.

The proportion of IDU reporting recent methamphetamine use dropped in 2005, while the average frequency of use among those using recently increased. In order to interpret these trends, it is once again necessary to distinguish between ice and other forms of methamphetamine. The drop in recent methamphetamine use seems to have been driven largely by a fall in the proportion of IDU reporting recent ice use, which in 2005 fell to the lowest level recorded by the IDRS since 2000. Simultaneously, use of powder among IDU increased in 2005. These divergent

trends in methamphetamine use provide support for key expert reports of a trend away from ice use to less pure forms of methamphetamine, among many IDU.

Indicator data suggest increasing health and legal problems associated with methamphetamine use in Queensland; however, these data must be interpreted cautiously. Telephone helpline statistics and hospital admission data show an increase in the number of amphetamine-related problems, but these increases may reflect increasing awareness and help-seeking among users, as well as or instead of an increase in the absolute number of problems. Similarly, while the number of arrests for use/possession of 'amphetamine-type stimulants' (ATS) in Queensland rose in 2005, key expert reports suggest that ATS are increasingly a priority for law enforcement, and thus that the observed increase in arrests may reflect increased law enforcement efforts in the ATS market, rather than increased market activity. Furthermore, the inclusive ATS category encompasses not only amphetamine and methamphetamine, but also 3,4-methylenedioxymethamphetamine (MDMA), or ecstasy, which is now the second most commonly used illicit drug in Queensland and Australia after cannabis (AIHW, 2005). Until it is possible to disaggregate MDMA - and methamphetamine-related events in law enforcement data, arrest data will be of limited use in monitoring the methamphetamine market.

11.3 Cocaine

Cocaine use has traditionally been rare, sporadic and opportunistic among IDU in Queensland, and this continued to be the case in 2005. Among the small proportion who reported recent use, the frequency of use was very low and most IDU reported using intranasally, rather than injecting. The small number of IDU reporting on cocaine renders reports of price, purity and availability less reliable; there was little evidence of change in the cocaine market in 2005, with the price continuing to vary between $200 and $300 per gram. IDU in 2005 rated the purity of cocaine as high; however, there was little agreement with respect to availability, illustrating that in such a niche market availability is both fickle and driven by the quality of one's 'connections'.

Although there seems to be relatively little contact between cocaine users and either health or law enforcement agencies in Queensland, available indicator data provide some evidence of an increase in the size of the cocaine market: the number of arrests for cocaine use/possession in Queensland increased by a factor of four between 1999/00 and 2004/05, although in the most recent year there was a total of only 20 arrests. The number of hospital admissions related to cocaine has also increased over this time, although, again, the overall number of such events remains small. Anecdotal reports from users and key experts suggest that there may be a sizeable and growing niche market for cocaine among non-injectors in Queensland; however, at present there is little reason to suspect that use of this drug will increase substantially among IDU.

11.4 Cannabis

The cannabis market in Queensland has traditionally been distinguished by its relative stability over time; however, trends emerging over the last few years show that the market is not entirely static. As is the case with methamphetamine, in order to better understand the cannabis market it is important to distinguish between two forms of the drug: hydroponic cannabis ('hydro') and so-called 'bush' cannabis. Although these terms reflect the common understanding that 'hydro' is typically grown in small, indoor hydroponic plantations, while 'bush' is grown in large, outdoor crops in remote locations, there is surprisingly little evidence to confirm this view. Given our present level of knowledge, it would be prudent to simply consider 'hydro' synonymous with 'higher potency' and 'bush' with 'lower potency' cannabis.

As in previous years, in 2005 IDU typically rated hydro as 'high' potency and bush cannabis as 'medium' or 'low' (and perhaps declining) potency, although, again, without objective purity data

against which these perceptions can be compared, it is difficult to know how informative these reports are. Consistent with their ratings of potency, IDU reported that the price of hydro was about one-third higher than that for bush, with little evidence of a change in the price of either form over time. Hydro was reported to be 'easy' or 'very easy' to obtain, as in previous years; however, IDU reported that bush was less readily available, and some indicated that the availability was dropping.

Most IDU reported obtaining their cannabis from a friend or a dealer's home, with fewer in 2005 reporting sourcing cannabis from a street dealer or a mobile dealer. This may indicate that the cannabis market is becoming an increasingly closed market, which would have implications for both health and law enforcement intervention. Consistent with this, there is evidence of increasing law enforcement focus on the cannabis market, with the number of arrests for cannabis use/possession rising markedly since 2000/01. This arrest figure includes both arrests and instances of diversion, however, and is difficult to interpret. There is a clear need for further research into the dynamics of the cannabis market in Queensland.

The proportion of IDU reporting recent cannabis use in Queensland has dropped slightly, but consistently, since 2000, with about three-quarters of those surveyed in 2005 reporting recent use. Until 2004 the average frequency of use among users was increasing, but this has dropped in 2005 to an average of 4 days out of 7 – considerably lower than the national average of daily use among IDU interviewed for the IDRS (Stafford et al., 2005).

11.5 Other opioids

Trends in other opioid use among IDU are, to an extent, the mirror image of those for heroin. In the context of what appears to be a sustained suppression of the heroin market in Queensland, IDU appear to be increasingly sourcing and injecting a range of alternative opiates including morphine, methadone, buprenorphine and, more recently, oxycodone. In contrast to heroin, these alternative, pharmaceutical opioid preparations are of consistent purity, and relatively consistent price and availability on the black market.

The proportion of IDU reporting recent use and injection of illicit methadone increased between 2003 and 2004, but decreased slightly in 2005. Nevertheless, in 2005 more than one in five IDU reported recent use of illicit methadone, with almost one in five reporting recent injection. Use and injection of illicit buprenorphine also increased markedly between 2003 and 2004, and increased further in 2005 with, again, almost one in five reporting recent injection. There is evidence of extensive diversion of buprenorphine among IDU, with two-thirds of those who reported recent use indicating that they had *mostly* used illicit buprenorphine in the last six months. At least one dispensing service in south-east Queensland has implemented a policy precluding *any* buprenorphine take-away doses, in an effort to reverse this trend.

Use and injection of illicit morphine increased rapidly among IDU from the time of the heroin shortage, with one in two IDU in 2004 reporting recent use. In 2005, however, there was a significant drop in reports of morphine use and injection, with fewer than one in three reporting recent use. MS Contin® 100mg tablets continue to be the favoured brand for injection; however, the reported price of this and other 100mg preparations has risen from $40 to $50 in 2005. At the same time, there appears to have been a trend towards use and injection of illicit oxycodone: Prior to 2005, IDU interviewed for the IDRS were not asked specifically about oxycodone, but in 2005, 16% reported recent use, and 14% reported recent injection. Just as the majority of IDU report that they mainly use *illicit* (vs. licit) morphine, 84% of those reporting recent use of oxycodone in 2005 reported mainly using *illicit* oxycodone. The preferred brand for injection seems to be Oxycontin®.

Evidently, one undesirable consequence of the sustained heroin shortage in Queensland has been a marked increase in the use and injection of other, cheaper and more reliable opiates. These alternative opiates are not designed to be injected, and a proportion of IDU in 2005 reported a range of injection-related harms as a consequence of injecting these preparations.

11.6 Benzodiazepines

Following increased restrictions on the availability of 10mg temazepam gel capsules in May 2002, rates of benzodiazepine injection among IDU dropped markedly in 2003 (Breen et al., 2003), and this reduction has been sustained through 2005. After an increase in use (by any route) in 2004, the overall proportion of IDU reporting recent benzodiazepine use also fell in 2005. By contrast, the proportion reporting daily benzodiazepine use increased five-fold between 2004 and 2005 (from 3% to 15%), perhaps reflecting shifting prescribing practices rather than diversionary activity. It is of some concern, however, among those reporting recent benzodiazepine use, that there was an increase in the average number of days injected recently, from 2 days (out of 180) to 7 days. In 2005 43% of those reporting recent benzodiazepine use stated that they had mostly used *illicit* (vs. licit) benzodiazepines in the last six months, indicating that benzodiazepine diversion and injection is still a health concern for this population. As in previous years, in 2005 the vast majority of IDU reported mostly using Valium®.

11.7 Associated harms

The number of syringes being dispensed to IDU in Queensland has continued to climb, with well over five million syringes dispensed throughout the state in the 2004/05 financial year. At the same time, and in the context of on-going harm reduction efforts targeting safe injecting, the proportion of IDU reporting recent sharing of injecting equipment has declined from 51% in 2000 to 21% in 2005. The rate of hepatitis C notification in Queensland has also fallen, from 1,588 notifications in 1991 to 946 notifications in 2005 – a fall of 40% in 14 years. A notable exception to this encouraging trend is the rate of hepatitis C infection among prisoners in Queensland, which in 2004 was estimated at 30% of new receptions (48% of those with a history of injecting drug use) (Butler et al., 2005). At present, important harm reduction measures such as needle exchanges are not extended to IDU incarcerated in Queensland, or any other state or territory of Australia (Black, Dolan, & Wodak, 2004).

As in previous years, the majority of IDU in 2005 reported usually injecting in a private home; however, one in five reported usually injecting in riskier locations such as a car, the street or a public toilet. The number of injection-related problems reported by IDU fell noticeably between 2002 and 2003, driven largely by a reduction in reports of scarring or bruising at the injection site, difficulty injecting and thrombosis. There has been little change in reports of injection-related problems among IDU since 2003, with the most commonly reported problems in 2005 being scarring/bruising and difficulty injecting, reported by around a third of IDU.

Although 80% of IDU reported usually injecting in a private home, almost half reported driving under the influence of drugs at least once in the last six months. The drugs most commonly used prior to driving were those used by the largest proportion of IDU: cannabis, heroin and powder methamphetamine. Given the significant risks associated with this behaviour, there is a need for further research to examine when, where and why IDU choose to drive under the influence of drugs, and what level of risk they perceive to be associated with this activity.

One-quarter of IDU in 2005 reported having become verbally aggressive after substance use recently, with one in three reporting becoming verbally aggressive during withdrawal. Smaller, although not insignificant, proportions reported becoming physically aggressive under the

influence of (15%) or withdrawing from (11%) a drug recently. The drugs most commonly associated with aggression during intoxication were alcohol, methamphetamine and cannabis, while the drugs most commonly associated with aggression during withdrawal were methamphetamine, heroin, alcohol (physical aggression) and cannabis (verbal aggression). Evidently, substance-related aggression is common among IDU. Given the relatively limited use of alcohol in this group, the proportion reporting aggression associated with alcohol use is particularly high.

The proportion of IDU reporting recent criminal activity has dropped considerably in the last six years, from 60% of those interviewed in 2000 to 44% of those interviewed in 2005 reporting at least one crime (other than drug possession) in the last month. As in previous years, the majority of this crime was drug-related or acquisitive in nature, with more than a third reporting drug dealing and almost one in four reporting property crime in the last month. Forty-four percent of IDU in 2005 reported having a history of incarceration, and over a third (37%) reported having been arrested in the last year – the lowest proportion ever recorded by the IDRS in Queensland. Despite this, the proportion of IDU reporting recent acquisitive crime increased from 2004 to 2005, with 34% reporting recent drug dealing (vs. 26% in 2004) and 23% reporting recent property crime (vs. 22% in 2004). Between 2004 and 2005 the average amount spent by IDU on drugs 'yesterday' increased 14% from about $122 to $140.

Mental health problems – particularly anxiety and depression – continue to be common among IDU, with one in four reporting seeing a mental health professional recently, in 2005. The proportion reporting experiencing mental health problems is considerably larger, indicating a degree of unmet healthcare need in this group.

12.0 IMPLICATIONS

Illicit drug markets in Queensland, as in other jurisdictions, continue to fluctuate and to interact. Accordingly, these markets should be monitored on a regular basis, and should not be interpreted in isolation from one another. The 2005 Queensland IDRS documented a number of new trends, and provided further evidence of inter-dependence among illicit drug markets in Queensland. In particular, it seems clear that changes in the availability of heroin have been associated with changes in the use of methamphetamine, and changes in the use of other opiates including morphine, methadone, buprenorphine and oxycodone. It is also clear that the cannabis market in Queensland is dynamic, and that further research is required to understand patterns of use and other market dynamics.

To the extent that illicit drug markets are interdependent, supply reduction, demand reduction and harm reduction policies should adopt a holistic view, recognising that targeting the use of one drug may impact on the availability and use of other drugs. In order to minimise drug-related harm, the realities of endemic polydrug use and interdependent illicit drug markets must be recognised. The data presented here further underscore the importance of this recognition.

REFERENCES

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

ACC (2004). *Australian Illicit Drug Report 2002-2003*. Canberra: Australian Crime Commission.

AIHW (2003). *Alcohol and other drug treatment services in Australia 2001-02: Report on the national minimum data set* (No. HSE 28). Canberra: Australian Institute of Health and Welfare.

AIHW (2005). *2004 National Drug Strategy Household Survey: First Results* (Drug Statistics Series No. 13). Canberra: Australian Institute of Health and Welfare.

Black, E., Dolan, K., & Wodak, A. (2004). *Supply, demand and harm reduction strategies in Australian prisons* (ANCD research paper No. 9). Canberra: Australian National Council on Drugs.

Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Fry, C., Duquemin, A., et al. (2003). *The impact of changes in the availability of publicly subsidised 10mg temazepam gel caps in Australia* (NDARC Technical Report No. 158). Sydney: University of New South Wales.

Butler, T., Boonwaat, L., & Hailstone, S. (2005). *National prison entrants' blood-borne virus survey report, 2004* (CHRCJ Research Report No. 1). Sydney: Centre for Health Research in Criminal Justice.

Butler, T., & Milner, L. (2003). *The 2001 Inmate Health Survey*. Sydney: NSW Corrections Health Service.

CMC (2003). *Amphetamine: Still Queensland's No. 1 Drug Threat* (Crime Bulletin No. 5). Brisbane: Crime and Misconduct Commission.

Darke, S. (2003). Polydrug use and overdose: Overthrowing old myths. *Addiction, 98*, 711.

Darke, S., & Hall, W. (1995). Levels and correlates of polydrug use among heroin users and regular amphetamine users. *Drug and Alcohol Dependence, 39*(3), 231-235.

Darke, S., & Ross, J. (1997). Polydrug dependence and psychiatric comorbidity among heroin injectors. *Drug and Alcohol Dependence,* 48(2), 135-141.

Johnson, H. (2004). *Drugs and crime: A study of incarcerated female offenders* (AIC Research and Public Policy Series No. 63). Canberra: Australian Institute of Criminology.

Kinner, S. A., Alati, R., Watt, K., Najman, J. M., Fowler, G., & Green, D. (2005). Substance misuse, mental health and urgency of presentation to a public emergency department in Australia. *Emergency Medicine Australasia,* 17, 363-370.

Makkai, T., & Payne, J. (2003). *Drugs and Crime: A Study of Incarcerated Male Offenders* (AIC Research and Public Policy Series No. 52). Canberra: Australian Institute of Criminology.

Roxburgh, A., & Degenhardt, L. (in press). *Inpatient hospital stays for illict drug-related problems in Australia* (NDARC Technical Report). Sydney, NSW: University of New South Wales.

Stafford, J., Degenhardt, L., Black, E., Bruno, R., Buckingham, K., Fetherston, J., et al. (2005). *Australian Drug Trends 2004: findings from the Illicit Drug Reporting System (IDRS)* (Monograph No. 55). Sydney: National Drug and Alcohol Research Centre, University of New South Wales.