

**THE ILLICIT DRUG REPORTING SYSTEM
(IDRS)
1996-2000**

Shane Darke, Wayne Hall & Libby Topp

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THE ILLICIT DRUG REPORTING SYSTEM

(*IDRS*)

1996-2000

**History and development of a national strategic early
warning system for monitoring trends in illicit drug use**

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EXECUTIVE SUMMARY

The 2000 Illicit Drug Reporting System (IDRS) represents the fifth year of existence for the IDRS. The main purpose of the IDRS is to provide annual *strategic* early warning of emerging drug trends in the major illicit drug classes. Specifically, annual data are collected and published on the price, purity and availability of heroin, amphetamine, cocaine, cannabis and (since 2000) ecstasy, through three convergent methodologies:

- (1) A quantitative survey of injecting drug users (IDU);
- (2) Qualitative key informant interviews with professionals working in the drug field; and
- (3) Examination of existing indicator data.

The original trial of the IDRS was conducted in NSW during 1996 and expanded in 1997 to encompass NSW, SA and VIC. The system was further expanded in 1999 to encompass all Australian states and territories. Funding was made available for the three original states (NSW, SA, VIC) to conduct all three aspects of the IDRS, with the remaining jurisdictions conducting key informant interviews and collecting indicator data. In 2000, the complete IDRS was conducted in all jurisdictions. In 2000 the IDRS was expanded to trial the feasibility of monitoring trends in ecstasy and other party drugs in NSW and QLD.

This report presents the history of the IDRS, and the major trends detected by the system over its first half decade.

Heroin

Price

There were large jurisdictional differences in the price of heroin in Australia over the period 1996-2000. The IDRS detected marked declines in the price of heroin in NSW and Victoria, commencing in 1997. In NSW the price of a gram of heroin halved from \$400 per gram in 1996 to \$220 per gram in 2000. A similar trend was detected in Victoria. In contrast, in South Australia the price of heroin remained stable until 2000, when it showed a sharp decline. By 2000, heroin was cheapest in NSW (\$220 per gram). Heroin was still often purchased in "caps" in many jurisdictions (a small amount typically used for a single injection), which were also cheaper in NSW (\$20-25), being up to \$50 in other jurisdictions. In 2000,

heroin was most expensive in the NT (\$600 per gram).

Purity

One of the most noticeable heroin trends in the first five years of the IDRS was the increase in purity in other jurisdictions to match that of NSW. In 1996/97, average purity levels of over 50% were found only in NSW and the ACT. By 1998/99, all jurisdictions reported average purity levels of over 50%, suggesting a diffusion of heroin distribution across Australia.

Availability

Heroin was consistently considered easy to obtain in all jurisdictions except for TAS and the NT, where morphine and other opioid preparations predominate. Although the population prevalence of lifetime heroin use in Australia is low (2.2%), all indications are that there was an increase in the number of heroin users in Australia over the life of the IDRS, particularly in NSW and Victoria. IDU and key informants have consistently indicated increases in the number of heroin users, the number of arrests for narcotic possession in Australia increased over the period of the IDRS, and the number of opioid-related deaths also increased.

Use patterns

Consistent with analyses of the National Household Survey, a pattern of earlier initiation into injecting was noted from the IDU surveys, key informant reports, and general comments of IDU. A concomitant trend first noted in 1999 was that more recent initiates into injecting reported that heroin was the first drug injected. Although approximately a half of older heroin users typically reported amphetamine to be the first drug injected, younger users overwhelmingly initiated injecting with heroin. The smoking of heroin also appears to have increased over the period of the IDRS.

Cocaine

Price

The price of cocaine was consistently cheapest in Sydney over the years of the IDRS. Although the price per gram of cocaine remained stable in Sydney over this time (\$200 per gram), the price of "caps" fell from \$80 to \$50 in 1998, and have remained at the lower price. The fall in cap prices in Sydney occurred when there was a large increase in the availability and use of the drug in that city. Other

jurisdictions did not report the availability of caps. The price of cocaine in other jurisdictions ranged from \$250-\$300 per gram. Few IDU or key informants outside NSW were able to comment on the price of cocaine.

Purity

As was the case with heroin, the average purity of cocaine seizures in Australia increased over the years of the IDRS. In 1999/2000, the average purity of cocaine in Australia was 48%, compared to 37% in 1996/97. There were no meaningful differences in the purity of seizures between jurisdictions.

Availability

There was a marked increase in 1998 in the reported recent use of cocaine among IDU in Sydney. This increase was not noted in other jurisdictions, all of which described cocaine use as uncommon. The IDU surveys conducted in 2000 for the first time in jurisdictions other than NSW, VIC and SA confirmed these trends, with low rates of cocaine use in the six months preceding interview reported in all jurisdictions: WA (22%), NT (18%), QLD (13%), ACT (13%), TAS (6%). The reports of key informants were consistent with those of IDU in indicating a major increase in the use of cocaine in Sydney during 1998, but not elsewhere. Since 1998, cocaine use among IDU in Sydney appears to have stabilised at the higher levels of use. The results of the Australian Needle and Syringe Program Survey also indicated an increase in the prevalence of cocaine injection in NSW, as did the number of arrests for cocaine use and/or possession.

Use patterns

The major increase in cocaine use that occurred in Sydney was primarily among existing heroin users. According to IDU and key informants, the drug was mainly administered by injection, with combinations of cocaine and heroin ("CCs", "speedballs"), or rapid sequential injection of heroin and cocaine increasingly common. It is important to note that the cocaine used in Australia, and Sydney in particular, was cocaine powder. Both IDU surveys and key informants indicated more frequent injecting associated with cocaine use, and associated increases in injection-related health problems. Cocaine users also spent more money on drugs than other IDU, and committed more crime to support this use.

Amphetamine

Price

The price of amphetamine remained relatively stable over the five years of the IDRS, predominantly ranging between \$50-\$100 per gram. Amphetamine has consistently been more expensive in NSW than in SA and VIC, costing twice as much to purchase in Sydney than in these latter jurisdictions. IDU estimates obtained in 2000 from all jurisdictions indicate large variations in prices of amphetamine across the country. Care must be taken in making direct comparisons, however, as the number of types of different amphetamine has increased in recent years. Although the cost of a gram of amphetamine powder in SA in 2000 was \$50, 0.1gm of crystalline methamphetamine also sold for \$50.

Purity

The purity of amphetamine has traditionally been low across all jurisdictions. In 1999/2000, however, substantial increases in the purity of both amphetamine and methamphetamine were noted, particularly in WA, SA, VIC and NSW. The majority of Australian seizures in all jurisdictions were methamphetamine, with the proportion of total seizures that were methamphetamine (as opposed to amphetamine) increasing over the years (1997/98 83%, 1998/99 89%, 1999/00 95%).

Availability

National Drug Strategy (NDS) Household Surveys have consistently reported a lifetime prevalence of amphetamine use of between 6-8% in the general population, making amphetamine the most commonly used illicit drug after cannabis. Consistent with these data, IDU and key informants in all years consistently rated amphetamine as easy to obtain in all jurisdictions except Victoria. In Victoria, large proportions of IDU regarded the drug as difficult to obtain in all years.

There appears to be large jurisdictional differences in the use of amphetamine, and of injected amphetamine. In particular, QLD and SA reported high rates of amphetamine injecting. In contrast, states with high levels of heroin use, such as NSW and VIC reported very low levels of amphetamine injection. Only NSW and VIC have reported low and stable levels of use; other jurisdictions (QLD, SA, WA, TAS) reported increases in the use of amphetamine.

Use patterns

The predominant form of amphetamine currently available in Australia is methamphetamine powder. In

1999, suggestions of an increase in NSW and QLD in the use of a crystalline form of methamphetamine ("ice", "shabu", "crystal meth") were noted. This form of amphetamine is substantially stronger than amphetamine powder, is typically smoked or injected, and is sold in 0.1gm amounts, known as "points". In 2000, this trend was confirmed, with the use of ice reported in all jurisdictions.

There appears to be jurisdictional differences in frequency of amphetamine use. Although the number of use days by users of the drug remained low and stable among IDU in NSW and VIC, there was a large and consistent increase in the frequency of use in SA since 1997. With the exception of the ACT, median frequency of amphetamine use among IDU in other jurisdictions in 2000 was substantially above those of NSW and VIC, but below that of SA.

Cannabis

Price

There were large jurisdictional differences in the price per ounce of cannabis. The ounce price was lowest in SA in all years since SA entered the IDRS, with prices consistently \$250 or lower. In contrast, most jurisdictions reported a median price of \$300 an ounce in 2000. Ounce prices fell in NSW, VIC and SA over the period of the IDRS. Gram purchases of cannabis were reported in all jurisdictions in all years, most commonly in the \$20-25 range. Consistent with the drop in the ounce price of cannabis, the gram price also fell. In SA, 2gm "bags" of cannabis were being sold for \$25, approximately half the price reported in other jurisdictions.

Purity

The THC content of cannabis seizures is not routinely tested in Australia. As such, unlike other illicit drugs, the accurate measurement of cannabis potency trends is not possible in this country. IDU and key informants in all jurisdictions, however, consistently rated the potency of cannabis as high throughout the period of the IDRS. This is consistent with the predominance in recent years of hydroponically grown cannabis heads in the Australian cannabis market.

Availability

Cannabis is the most widely used illicit drug in every jurisdiction in Australia, with the 1998 NDS

Household Survey reporting 39% lifetime exposure in the general population. Consistent with these figures, IDU and key informants in all jurisdictions and in all years consistently estimated cannabis to be very easy to obtain. These sources have also commented on an increase in the number of cannabis users, particularly younger cannabis users. Consistent with these observations, comparison of the 1998 and 1995 NDS Household Survey shows increases in population lifetime and recent cannabis use

Use patterns

Cannabis use was primarily of the more potent heads, rather than of leaf or hash products, in all years and in all jurisdictions. This represents a long term change in the form of cannabis smoked in Australia, as in past decades the smoking of the less potent cannabis leaf predominated. There have been only small increases in cannabis potency since the 1970s. Both key informants and IDU believed that there were more younger cannabis users. This is consistent with data indicating that the age of initiation into cannabis use has fallen in recent years.

Other drugs

Ecstasy

Reports on the use of ecstasy were, until 2000, based upon key informant and indicator data. Key informants consistently reported that the use of ecstasy was confined to infrequent recreational use of the drug used in conjunction with social events. Ecstasy tablets were taken orally, with a very low prevalence of injecting. The 1999 Australian NSP Survey found that less than 1% of IDU reported injection of ecstasy. Consistent with NDS Household Surveys, key informants reported that the use of ecstasy and other party drugs had increased. The modal range of cost of ecstasy tablets in all jurisdictions was between \$40-\$60 per tablet, and was substantially cheaper if purchased in bulk. The cost of a tablet of ecstasy appeared to have fallen in NSW from an estimated \$60 in 1997 to \$40 in 2000.

Methadone

Methadone syrup injection has repeatedly been shown to be common in NSW, where between 1996 and 1999 more than 20% of the IDU samples reported methadone injections in the preceding six months. In 2000, the percentage of IDU in NSW reporting recent methadone injecting fell to its lowest since data collection began (13%). In comparison, Victoria reported extremely low rates of methadone

injecting of less than 3%, while SA reported a range of 11-22% in the period 1996-2000. The IDU survey conducted in other jurisdictions in 2000 indicates the injection of methadone syrup is widespread across Australia: TAS (74%), QLD (32%), ACT (19%), NT (19%) and WA (8%).

Benzodiazepines

Over all years of the IDRS, and in all jurisdictions, benzodiazepine use was high among IDU (approximately 60% reporting use in the preceding six months). In 2000, all jurisdictions, with the exception of the NT, reported levels of benzodiazepine use ranging between 60%-78%. In six of the eight jurisdictions, diazepam was the most commonly used benzodiazepine among IDU, temazepam being predominant in the remaining two jurisdictions. There were substantial variations in benzodiazepine injecting between jurisdictions in 2000, ranging between 5%-36%. The highest rates of benzodiazepine injecting were reported in the states in which the easily injected temazepam was the most commonly used benzodiazepine among IDU (VIC, TAS).

Antidepressants

Substantial rates of antidepressant use were reported in all years and in all jurisdictions. The highest proportions of IDU reporting recent antidepressant use were in Victoria (range 23%-27%). In NSW and SA, there were lower levels of use (11%-17%). The extension of the IDRS in 2000 confirmed the nationwide use of antidepressants among IDU. High levels of recent antidepressant use were reported in WA (31%), QLD (51%), TAS (22%), NT (24%) and ACT (26%). There were no temporal trends in the prevalence of antidepressant use.

Drug-related issues

Heroin overdose

The number of opioid-related deaths among 15-44 year olds in Australia increased from 406 in 1994 to 737 in 1998, with NSW and Victoria contributing three quarters of opioid-related deaths. The typical fatal heroin overdose case is a opiate-dependent male in his early thirties, not in drug treatment, who has consumed other drugs in conjunction with heroin (primarily alcohol and benzodiazepines). Substantial proportions of heroin users in all jurisdictions and in all years had experienced recent non-fatal heroin overdoses. Downward trends in the rate of recent non-fatal overdose were noted in NSW (30% to

19%) and SA (29% to 16%) over the five years of the IDRS. In contrast, a trend towards higher levels of overdose was noted in VIC (27% to 42%).

Needle risk behaviours

Substantial minorities of IDU in each year and in each jurisdiction continued to share injecting equipment. However, declines in needle sharing can be seen from 1998 onwards. The rates of needle sharing detected by the IDRS are consistent with those reported by the Australian NSP Survey. The 1999 Survey reported that 23% of IDU surveyed had borrowed a used needle in the preceding month, a decrease relative to 1995, when the corresponding figure was 31%. The prevalence of HIV among Australian IDU has remained low. Since 1995, the prevalence of HIV among clients of needle and syringe programmes blood tested for the Australian NSP Survey has never exceeded 2%, while the prevalence of hepatitis C has never fallen below 49%.

Criminal activity

More than one half of IDU in all years and in all jurisdictions reported criminal activities in the month preceding interview. The most commonly reported recent crimes were drug dealing and property crime. Consistent with the self-reported rates of criminal behaviours, nearly one half of IDU from all jurisdictions in both 1999 (44%) and 2000 (46%) reported that they had been arrested in that period, most commonly for property crime and possession/use of illicit drugs.

1.0 INTRODUCTION

The 2000 Illicit Drug Reporting System (IDRS) represents the fifth year of existence for the IDRS, a system designed to monitor emerging trends in illicit drug use and associated problems. It is also the first year in which all methodological components of the system were implemented in each Australian state and territory. The IDRS has expanded from an initial trial in one state (NSW), to providing national data on current drug trends and local issue relevant to each jurisdiction¹⁻¹⁹. As such, it is an appropriate time to document the history of the IDRS, and the major trends detected by the system over its first half decade.

2.0 HISTORY OF THE IDRS

2.1 *Historical context of the IDRS*

In 1995, the National Drug and Alcohol Research Centre was commissioned by the Commonwealth Department of Health and Family Services (CDHFS) to revise and replace the defunct Illicit Drug Reporting System that was first implemented in Australia in 1989. The original system attempted to provide a coordinated approach to the monitoring of data associated with the use of opiates, cocaine, amphetamine and cannabis²⁰. Its two main components were a key informant study and compilation of existing indicator data sources. The major limitation of the original system was its essentially anecdotal nature²⁰. Other limitations were also noted, such as the failure to recruit knowledgeable and representative key informants, the difficulty of integrating regional data that may be based solely upon key informant reports, and the failure to identify key indicators that could lead to policy or practical outcomes²⁰. The original IDRS was discontinued in 1992.

Following this, the CDHFS commissioned a report reviewing options for an improved IDRS²⁰. As with the original system, a revised IDRS was to act as an early warning indicator of the availability and use of the main drug categories and related health problems. Recommendations were made to focus on *strategic* information, as the main consumers of the information were the health and law enforcement sectors. It was agreed that any revised IDRS must be sensitive enough to detect the existence of emerging problems of national importance rather than describe phenomena in detail. It would also need to suggest areas for more detailed data collection, as well as provide data in a timely manner, collect comprehensive data nationwide, ensure that the data were comparable, be simple to operate, be linked

to a mechanism which could commission the collection of more detailed data, and be cost effective.

2.2 Methodological development of the IDRS

In order to determine the appropriate method for a revised IDRS, NDARC conducted a 12 month trial in Sydney of four methods⁵. As the purpose of the IDRS was to detect emerging trends in illicit drug use of potential national importance, data collection for the IDRS was restricted to capital cities. Capital cities contain the major drug markets (e.g. the Sydney suburbs of Cabramatta and Kings Cross) wherein the majority of drug use occurs. As such, it is in these cities that new trends, that may diffuse to other areas, are likely to emerge. A focus on capital cities also avoided the problems associated with attempting to integrate regional data inherent in the old system. In determining the methods of data collection, it was of paramount importance to avoid the anecdotal nature of the preceding system. The new system would seek convergence from a number of more objective data sources, so as to form a more accurate picture of drug trends. Issues such as drug of choice, route of administration, number and type of illicit drug users, intensity of illicit drug use, drug-related problems, price and purity, and reactions to government strategies were considered. In addition, a number of methodological issues, such as the degree of convergent validity, feasibility, cost and time were examined to determine the most appropriate ways to measure trends in illicit drug use.

The four methods trialed were:

(1) A quantitative survey of injecting drug users (IDU)

Current IDU were targeted in the survey as they were considered to be a sentinel group for drug trends. Research conducted at NDARC has repeatedly shown the polydrug using nature of Australian IDU^{21,22}. They provide an excellent window into drug use patterns, and changes in those patterns. This represented a novel approach to the monitoring of drug trends. A structured interview was administered to 152 IDU that addressed issues such as the price, purity and availability of the four major illicit drug classes specified as core by the Wardlaw report²⁰ (heroin, amphetamine, cocaine and cannabis). IDU were also asked about their drug use patterns and history, health problems, risk-taking behaviours, perceptions of policing, and any general trends in drug use they had noticed recently. Demographic characteristics were recorded, so trends in the demographic characteristics of IDU could be monitored over time.

(2) Qualitative key informant interviews with professionals working in the drug field

This component involved interviews with 41 professionals recruited from health, law enforcement, research and outreach. All had good knowledge of current trends in illicit drug use and first hand contact with illicit drug users. Semi-structured interviews were conducted with key informants in both groups and on an individual basis to compare the efficacy of these techniques. Information was sought on the same areas as addressed in the IDU survey, e.g. price, purity and availability of the four main illicit drug classes, changes in demographic characteristics, and perceptions of emerging drug problems.

(3) Examination of existing indicator data

A range of indicators available on an annual basis were sought which would complement and validate original data obtained from other study methods. This data needed to be nationally available, in an accessible format and not require any special collections. Only sources with a large number of cases (>50) were included in an attempt to measure significant changes in drug trends. Criteria for inclusion of a data source in the IDRS were:

- i Available on at least an annual basis;
- ii Include 50 or more cases;
- iii Provide brief details of illicit drug use;
- iv Collected in the main study site , and
- v Include data on the four main illicit drugs.

(4) Ethnographic research among heroin users

In-depth ethnographic interviews and observational fieldwork designed to elicit information in relation to drug use patterns, local drug market conditions and emerging trends were undertaken in Cabramatta, Sydney, over a three month period. A total of forty subjects participated in a tape-recorded qualitative interview, and observational data in the form of field notes were collected on each subject and on the nature of interactions between subjects in the study.

As expected, IDU were well placed as a sentinel group to provide information on trends across a wide variety of drug classes. For the key informant study, individual interviews worked better than groups in

that they allowed greater flexibility, participation, time for discussion and substantiation of information. Data from individual interviews were also easier to transcribe and to analyse. Regular collation of key indicator data (e.g. overdose statistics, police seizure and purity data, calls to drug referral hotlines) was shown to be feasible, and to provide valuable convergent validity to the IDU survey and the reports of key informants. The ethnographic research, however, was time consuming and expensive, and required skilled field staff dedicated to penetrating and immersing themselves in the study environment. Ethnographic researchers are of greater utility to the IDRS as key informants on drug use patterns and trends. Overall, the IDU survey, key informant study and analysis of existing indicator data were the cheapest and easiest methods to implement, and covered a broader range of illicit drug use. As such, given that multiple methodologies are preferable for measuring drug trends, it was concluded that the most efficient means of collecting data for the revised IDRS were the IDU survey, key informant interviews, and analysis of indicators from health and law enforcement data. Thus, these three components formed the data collection methods of the IDRS in subsequent years.

2.3 Purpose of the IDRS

The main purpose of the IDRS is to provide annual *strategic* early warning of emerging drug trends in the major illicit drug classes. Specifically, annual data are collected and published on the price, purity and availability of heroin, amphetamine, cocaine, cannabis and (since 2000) ecstasy and other party drugs. The IDRS also provides annual data on demographic changes in drug user populations, patterns of other drug use, and harms associated with drug use. The national nature of the IDRS allows analysis and comparisons of jurisdictional trends, as well as national data.

The findings of the IDRS are disseminated through a series of annual and quarterly reports. The national findings of the IDRS are published annually in *Australian Drug Trends*¹⁻³. In addition, the results for each jurisdiction are published in individual Drug Trends reports (*NSW Drug Trends, South Australian Drug Trends, etc.*)⁴⁻¹⁹. Since 1998, a quarterly *Drug Trends Bulletin* has been published, so as to provide more timely reporting of results, and more detailed analyses of issues of importance. The results of each year's IDRS are initially presented at the annual IDRS National Drug Trends Conference, and through media releases on the day of the Conference.

2.4 *Expansion of the IDRS*

As noted above, the original trial of the IDRS was conducted in NSW during 1996^{5,6}. As a result of the successful pilot, the CDHFS funded an expansion of the IDRS in 1997 to three states: NSW, South Australia and Victoria. The National Drug and Alcohol Research Centre was designated the coordinating agency for the multistate trial.

After the successful implementation of the multistate IDRS¹, the system was expanded in 1999 to encompass all Australian states and territories. Funding was made available for the three original states (NSW, SA, VIC) to conduct all three aspects of the IDRS (IDU survey, key informants, indicator data), with the remaining jurisdictions conducting key informant interviews and collecting indicator data in the initial year. In 2000, the complete IDRS was conducted in all jurisdictions for the first time, with joint funding from the CDHFS and the National Drug Law Enforcement Research Fund.

At the request of the Ministerial Council on Drug Strategy, the IDRS was expanded in 2000 to trial the feasibility of monitoring trends in ecstasy and other party drugs in the same level of detail as heroin, amphetamine, cocaine and cannabis, using the existing IDRS methodology. A two year, two state trial was initiated in NSW and Queensland, with the Drug and Alcohol Services Council of SA contributing its own funding to allow SA to take part. However, because IDU are not the appropriate sentinel group for these drugs, the interviews were with current ecstasy users. As ecstasy users do not typically report to treatment agencies, key informants were also different. These included DJs, party promoters and health promotion workers. Indicator data relating to ecstasy and other party drug use were also collected, although fewer relevant data exist for these drugs than for the main illicit drugs.

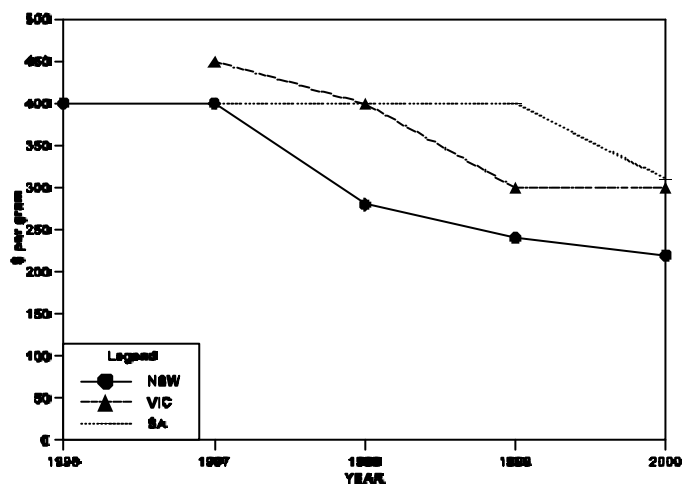
3.0 MAJOR FINDINGS OF THE IDRS 1996-2000

3.1 Heroin

3.1.1 Price

There were large jurisdictional differences in the price of heroin in Australia over the period 1996-2000. Figure 1 presents IDU estimates of gram purchases of heroin in the three jurisdictions in which IDU surveys have been conducted for several years (NSW, VIC, SA). The IDRS detected marked declines in the price of heroin in NSW and VIC, commencing in 1997. In NSW the price of a gram of heroin halved from \$400 a gram in 1996 to \$220 a gram in 2000. A similar trend was detected in VIC. In contrast, in SA the price of heroin remained stable until 2000, when it showed a sharp decline.

Figure 1
IDU estimates of heroin price per gram, 1996-2000



By 2000, heroin was cheapest in NSW (\$220 gram) (Table 1). The price of heroin in other jurisdictions appeared to be higher and more stable (Figure 1). Heroin was still often purchased in "caps" in many jurisdictions (a small amount typically used for a single injection), which were also cheaper in NSW (\$20-25), being up to \$50 in other jurisdictions.

Data over a number of years were not available for other jurisdictions. IDU estimates of the price of heroin from the 2000 IDRS, the first year in which IDU surveys were conducted in all states, are presented in Table 1. As can be seen, the first national figures of IDU heroin purchase prices showed large variations, with median prices ranging from \$220 a gram in NSW to \$600 a gram in the NT.

Table 1
IDU estimates of heroin price per gram, 2000

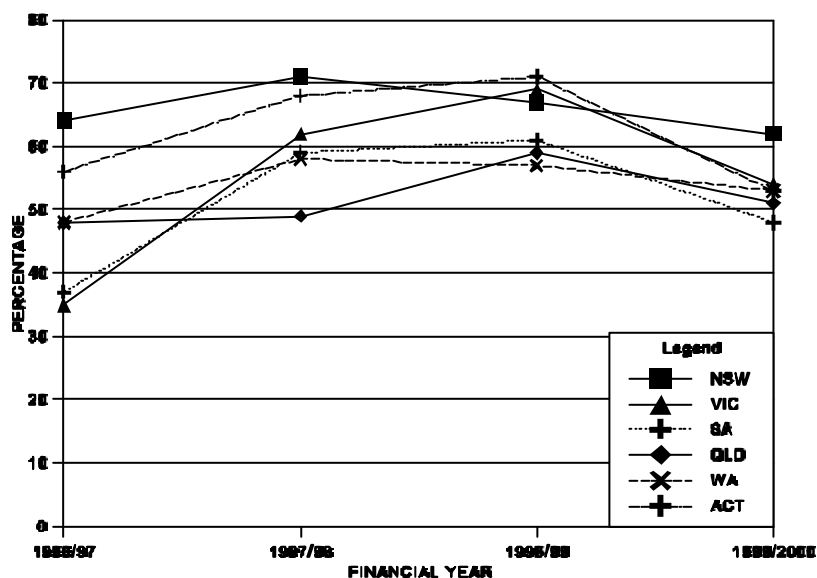
	Median \$ per gram
NSW	220
SA	310
VIC	300
QLD	350
WA	450
TAS	300
NT	600
ACT	300

3.1.2 Purity

One of the most noticeable heroin trends in the first five years of the IDRS was the increase in heroin purity across these years. The average purity of heroin seizures made in Australia over the 1999/2000 financial year was 53%. Comparable figures for previous years were: 1996/96 44%, 1997/98 58%, and 1998/99 65%.

As can be seen from Figure 2, the increase in the average purity over the past five years of Australian heroin seizures stems primarily from the convergence of purity in other jurisdictions on that of NSW. In 1996/97 average purity levels of over 50% were found only in NSW and the ACT. By 1998/99, all jurisdictions reported average purity levels of over 50%, suggesting a diffusion of heroin distribution across Australia.

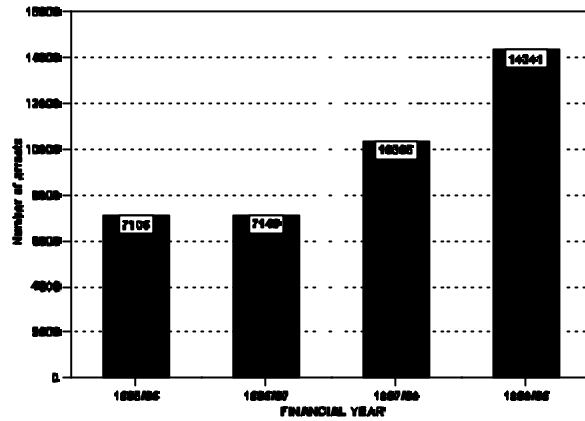
Figure 2
Mean purity of heroin seizures analysed in Australia by jurisdiction, 1996/97-1999/2000



3.1.3 Availability

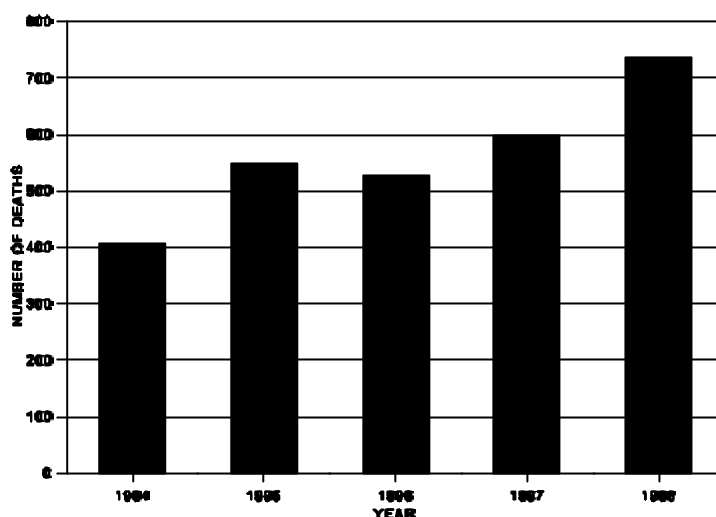
Heroin has consistently been considered easy to obtain in all jurisdictions except for TAS and NT, where morphine and other opioid preparations predominate. Although the population prevalence of lifetime heroin use in Australia is low (2.2%)²³, its use appears to have increased over the period of the IDRS. A consistent finding from the comments of both IDU and key informants, particularly in the major "heroin" states such as NSW and VIC (estimated to contribute three quarters of the dependent heroin users in Australia²⁴), has been that there have been increases in the number of heroin users. The perceived increases in heroin use reported in these two arms of the IDRS are consistent with other, independent indicators. For example, Figure 3 shows major increases in the number of arrests for narcotic possession in Australia over the period of the IDRS. A large increase occurred between the 1996/97 and 1997/98 financial years, the period in which the price of heroin began to decline markedly in NSW and VIC. It is also in these two states that the major increase in narcotic arrests occurred. Together these two states contributed 89% of all Australian narcotic arrests in 1998. Clearly there may be other explanations for the increase in arrests. Taken in the context of reports from IDU, key informants, and the decline in heroin prices, however, these figures are consistent with an increase in the number of heroin users.

Figure 3
Number of arrests for narcotic use and possession in Australia, 1995/96 to 1998/99



Consistent with the arrest statistics, the number of opioid-related deaths among 15-44 year olds in Australia increased from 406 in 1994 to 737 in 1998²⁵ (Figure 4). Also consistent with the arrest data, NSW (49%) and Victoria (29%) constituted three quarters of all opioid-related deaths in this country. The steady increase in the number of opioid-related deaths is consistent with other indicators of increasing numbers of heroin users in Australia.

Figure 4
Number of opioid overdose deaths among 15-44 year olds in Australia, 1994-1998



Finally, a recent study employing back projection techniques based upon overdose deaths and entrants to methadone maintenance estimated that the number of dependent heroin users in Australia increased during the 1990s from 40,000 in 1990 to 74,000 by 1997²⁴.

In summary, all indications are that there was an increase in the number of heroin users in Australia over the life of the IDRS, particularly in NSW and Victoria.

3.1.4 Use patterns

A pattern of earlier initiation into injecting was noted from the IDU surveys, key informant reports, and general comments of IDU. In NSW in 1999, for instance, the average age of initiation into injecting was 19 years for IDU aged over 25, and 17 for those 25 or younger. This is consistent with analyses of the National Household Survey^{26,27}. Comments from IDU and key informants that there are more younger users of heroin therefore appear to be well founded. A concomitant trend first noted in 1999 was that more recent initiates reported that heroin was the first drug injected. While approximately a half of older heroin users typically reported amphetamine as the first drug injected, younger users overwhelmingly initiated injecting with heroin. These results are also consistent with the findings from the Australian Needle and Syringe Program Survey^{28,29}.

The smoking of heroin also appears to have increased over the period of the IDRS. This trend was noted among IDU and key informants in NSW, VIC, SA and the ACT. In 2000, recent heroin smoking

among the IDU samples was noted in all jurisdictions, indicating widespread diffusion of the practice.

3.1.5 Summary of heroin trends

- . Heroin prices fell markedly in NSW, the largest heroin market.
- . Heroin purity increased across Australia to match the levels in NSW.
- . The number of heroin users appears to have increased throughout this period.
- . The age of initiation into heroin use has fallen, and the injection of other drugs prior to the injection of heroin has declined.
- . Smoking ("chasing") has emerged in Australia as a route of heroin administration.

3.2 *Cocaine*

3.2.1 Price

The price of cocaine has consistently been cheapest in Sydney over the years of the IDRS (the figure for the ACT should be treated with extreme caution, as it was based upon only three purchases) (Table 2). Although the price per gram of cocaine remained stable in Sydney over this time, the price of "caps" fell from \$80 to \$50 in 1998, and has remained at the lower level. The fall in cap prices in Sydney occurred when there was a large increase in the availability and use of the drug in that city (see section 3.2.3 below). The success of marketing smaller, more affordable amounts of heroin appears to have inspired a similar marketing strategy in the cocaine market in Sydney. In other jurisdictions caps of cocaine were not reportedly being purchased. Few IDU or key informants outside NSW were able to comment on the price of cocaine.

Table 2
IDU estimates of cocaine prices, 1996-2000

	1996	1997	1998	1999	2000
NSW <i>Grams</i>	200	200	200	200	200

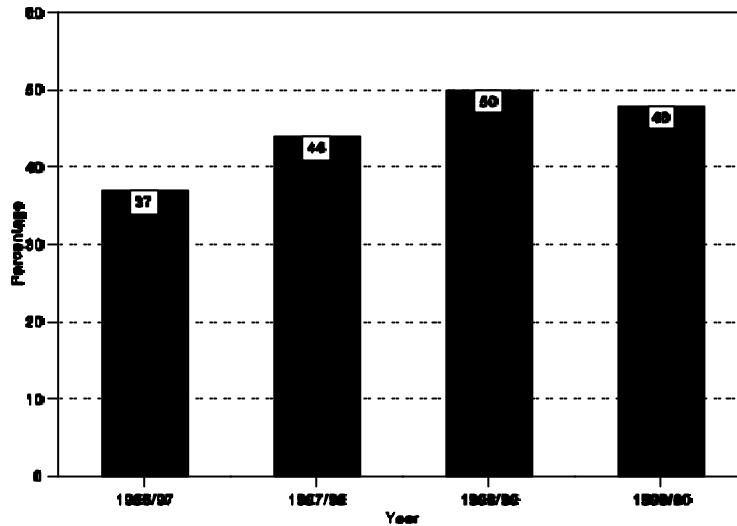
<i>Caps</i>	80	80	50	50	50
SA <i>Grams</i>	-	250	250	250	300
VIC <i>Grams</i>	-	300	200	250	250
Qld <i>Grams</i>	-	-	-	-	250
WA <i>Grams</i>	-	-	-	-	250
Tas <i>Grams</i>	-	-	-	-	300
NT <i>Grams</i>	-	-	-	-	250
ACT <i>Grams</i>	-	-	-	-	170

Data over a number of years were not available for other jurisdictions. IDU estimates of the price of cocaine from the 2000 IDRS, the first in which IDU surveys were conducted in all jurisdictions, are presented in Table 2.

3.2.2 Purity

As was the case with heroin, the average purity of cocaine seizures in Australia increased over the years of the IDRS (Figure 5). In 1999/2000, the average purity of cocaine in Australia was 48%. There were no meaningful differences in the purity of seizures between jurisdictions.

Figure 5
Purity of cocaine seizures analysed in Australia, 1996/97-1999/00

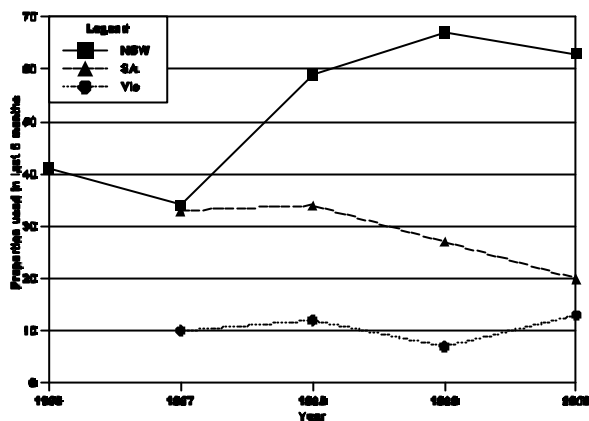


3.2.3 Availability

Cocaine use among the general population is low (4.3% lifetime exposure)²³. However, there are strong indications of an increase in the use, and in particular the injection, of cocaine. There was a marked increase in 1998 in the reported recent use of cocaine among IDU in Sydney (Figure 6). This increase was not noted in other jurisdictions, all of which described cocaine use as uncommon. The IDU surveys conducted for the first time in other jurisdictions confirmed these trends, with low rates of cocaine use in the six months preceding interview reported in all jurisdictions: WA (22%), NT (18%), QLD (13%), ACT (13%), TAS (6%). The reports of key informants were consistent with those of IDU in indicating a major increase in the use of cocaine in Sydney during 1998. Since 1998, cocaine use among IDU in

Sydney appears to have stabilised at the higher levels of use.

Figure 6



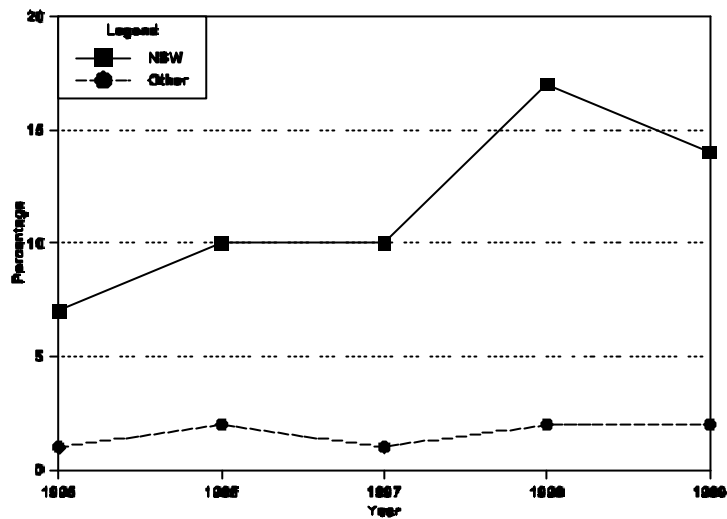
Cocaine use in preceding six months among IDU, 1996-2000

Consistent with reported use of cocaine, the drug was considered by IDU and key informants to be difficult to obtain in all jurisdictions, except NSW where it was considered easy.

The prevalence of cocaine as the drug most recently injected also reflected the reported increase in cocaine use in 1998 (Figure 7). In all years the Australian Needle and Syringe Program Survey has been conducted, prevalence of cocaine injection was highest in NSW^{28, 29}. In NSW in 1998, however, the prevalence of cocaine as last drug injected increased from 10% to 17%, while the other jurisdictions recorded only a minor increase from 1% to 2%²⁸. This pattern remained stable in 1999 (NSW 14%,

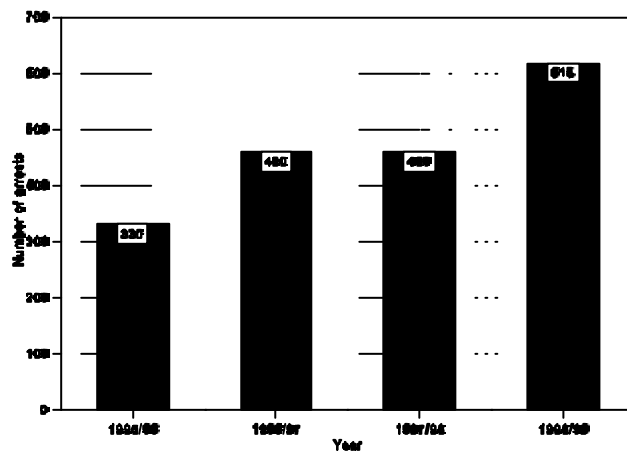
others 2%)²⁹.

Figure 7
Prevalence of cocaine injection, as last drug injected 1995-1999 (Australian Needle and Syringe Program Survey)



Finally, the number of arrests for cocaine use and/or possession increased substantially between 1997/98 and 1998/99 (Figure 8). The overwhelming majority of arrests (80%) that occurred in 1998/99 were in NSW.

Figure 8
Number of arrests for cocaine use and/or possession of cocaine in Australia, 1995/96-1998/99



3.2.4 Use patterns

The major increase in cocaine use that occurred in Sydney was primarily among existing heroin users. The drug was primarily being injected, with combinations of cocaine and heroin ("CCs", "speedballs"), or rapid sequential injection of heroin and cocaine increasingly common according to IDU and key informants. It is important to note that the cocaine being used in Australia, and Sydney in particular, was cocaine powder. Reported use of crack was extremely rare. The increase in cocaine use seen in Australia from 1998 onwards was almost exclusively cocaine powder that was being injected.

As has been seen overseas, there were serious consequences associated with the increased use and injection of cocaine in Sydney. Both IDU surveys and key informants indicated higher frequent injecting associated with cocaine use, and associated increases in injection-related health problems. There were also key informant reports from health professionals of serious psychological morbidity associated with frequent cocaine use. Cocaine users also spent more money on drugs than other IDU, and committed more crime to support this use. Overall, increased cocaine injecting presents more serious health and criminal problems than among heroin users who do not use cocaine.

3.2.5 Summary of cocaine trends

- . Cocaine injecting among heroin users increased substantially in Sydney from 1998 onwards.
- . Cocaine use among IDU outside NSW remained at low levels.

- . Cocaine purity increased between 1996 and 2000.
- . Crack was rare, with cocaine powder being the predominant form of cocaine.
- . Cocaine use was strongly associated with existing heroin users.
- . The price of cocaine "caps" fell between 1997 and 1998, and subsequently remained at lower levels.
- . The number of cocaine users appears to have increased throughout this period.

3.3 *Amphetamine*

3.3.1 Price

Unlike heroin and cocaine, the price of amphetamine has remained relatively stable over the first five years of the IDRS (Table 3). Amphetamine has consistently been more expensive in NSW than in SA and VIC, costing twice as much to purchase in NSW than in those jurisdictions. IDU estimates obtained in 2000 from all jurisdictions indicate large variations in amphetamine prices across the country. Care must be taken in making direct comparisons, however, as the number of different amphetamine types has increased in recent years. For instance, while the cost of a gram of amphetamine powder in SA in 2000 was \$50, 0.1gm of crystalline methamphetamine also sold for \$50. The estimates of amphetamine prices are broadly consistent with reports from key informants and police.

Table 3
IDU estimates of amphetamine prices per gram, 1996-2000

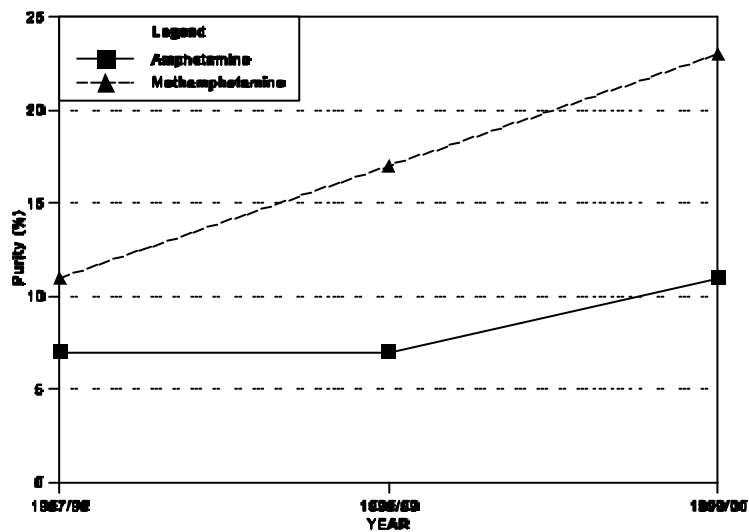
	1996 \$	1997 \$	1998 \$	1999 \$	2000 \$
NSW	100	100	100	80	90
SA	–	50	50	50	50
VIC	–	50	50	50	50
QLD	–	–	–	–	50
WA	–	–	–	–	200
TAS	–	–	–	–	80

NT	-	-	-	-	80
ACT	-	-	-	-	180

3.3.2 Purity

The purity of amphetamine has been low across all jurisdictions (Figure 9). In 1999/2000, however, substantial increases in the purity of both amphetamine and methamphetamine were noted, particularly in WA, SA, VIC and NSW. The majority of Australian seizures in all jurisdictions were methamphetamine, with the proportion of all seizures that were methamphetamine increasing over the years (1997/98 83%, 1998/99 89%, 1999/00 95%).

Figure 9
Purity of amphetamine seizures in Australia, 1997/98-1999/00



3.3.3 Availability

National Drug Strategy surveys have consistently reported a lifetime prevalence of amphetamine use of between 6-8% in the general population, making amphetamine the most commonly used illicit drug after cannabis during the periods covered by the surveys²³. Consistent with these data, IDU and key informants in all years have consistently rated amphetamine as easy to obtain in all jurisdictions except VIC. In VIC, large proportions of IDU regarded the drug as difficult to obtain in all years.

There appears to be large jurisdictional differences in the use of amphetamine, and of injected amphetamine in particular. In the 1999 NSP survey, 46% of QLD needle exchange and syringe exchange clients reported amphetamine as the last drug injected, as did 42% in SA. In contrast, states with high levels of heroin use reported very low levels of amphetamine injection (NSW 12%, VIC 7%)²⁹. Only NSW and VIC have reported low and stable levels of use; other jurisdictions (QLD, SA, WA, TAS) reported increases in amphetamine use.

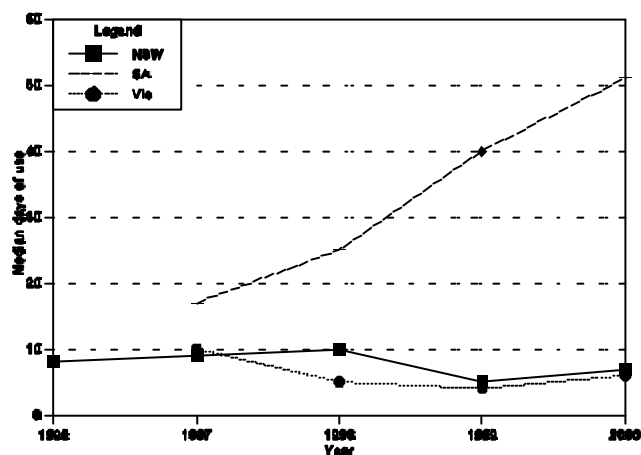
3.3.4 Use patterns

The predominant form of amphetamine currently available in Australia is methamphetamine powder. However, in 1999 suggestions of an increase in the use of a crystalline form of methamphetamine ("ice", "shabu", "crystal meth") in NSW and QLD were noted. This form of amphetamine is substantially stronger than amphetamine powder, and is typically smoked. The drug is sold in 0.1gm amounts, known as "points", which sold in 2000 for \$50 in all jurisdictions. In 2000, this trend was confirmed, with the use of ice reported in all jurisdictions. Substantial increases in the proportions of IDU who reported having used the drug in NSW, VIC and SA, the states where 1999 figures were available for comparison. Key informants and IDU commented on the increased availability and use of the drug. The emergence of a particularly potent and destructive form of methamphetamine has serious potential

consequences for the physical and psychological health of users of the drug.

There appears to be differences in jurisdictional trends of frequency of amphetamine use (Figure 10). Although the number of use days by users of the drug remained low and stable among IDU in NSW and VIC, there has been a large increase in the frequency of use in SA from a median of 17 days in 1997 to 51 days in 2000. Thus, in the "heroin" states of NSW and VIC, amphetamine use is low and infrequent, but use in the "amphetamine" state of SA seems to be increasing. With the exception of the ACT (10 days), median frequency of amphetamine use among IDU in other jurisdictions in 2000 was substantially above those of NSW and VIC, but below that of SA: WA (37), TAS (25), QLD (24), NT (20).

Figure 10
Median days of amphetamine use in the preceding six months, 1996-2000



3.3.5 Summary of

amphetamine trends

- . The price of amphetamine has remained stable over time.
- . Purity has remained low in all jurisdictions, with the highest purity recorded in QLD.
- . There are jurisdictional differences in amphetamine use. Amphetamine use appears most prevalent in QLD and SA, and least prevalent in NSW.
- . There is evidence of a recent increase in the availability and use of a crystalline form of methamphetamine ("ice", "shabu", "crystal meth").

3.4 *Cannabis*

3.4.1 Price

There were large jurisdictional differences in the price per ounce of cannabis (Table 4). As can be seen, the price of cannabis fell across the period of the IDRS. The ounce price was lowest in SA in all years since SA entered the IDRS, with prices consistently \$250 or lower. In contrast, most jurisdictions reported a median price of \$300 an ounce in 2000.

Gram purchases of cannabis were common in all jurisdictions in all years, most commonly in the \$20-25 range. Consistent with the drop in the ounce price of cannabis, the gram price fell. In SA, 2gm "bags" of cannabis were being sold for \$25, approximately half the price reported in other jurisdictions.

Table 4
IDU estimates of cannabis prices, 1996-2000

	1996 \$	1997 \$	1998 \$	1999 \$	2000 \$
NSW Ounce	400	400	350	350	300
Gram	25	25	20	20	20
SA Ounce	-	250	235	220	220
Gram		25	25	25*	25*
VIC Ounce	-	350	320	300	280
Gram		25	20	20	20
QLD Ounce	-	-	-	-	300
Gram					25
WA Ounce	-	-	-	-	300
Gram					25
TAS Ounce	-	-	-	-	300
Gram					25
NT Ounce	-	-	-	-	300
Gram					25
ACT Ounce	-	-	-	-	300
Gram					25

* Price is for 2gm bags

3.4.2 Purity

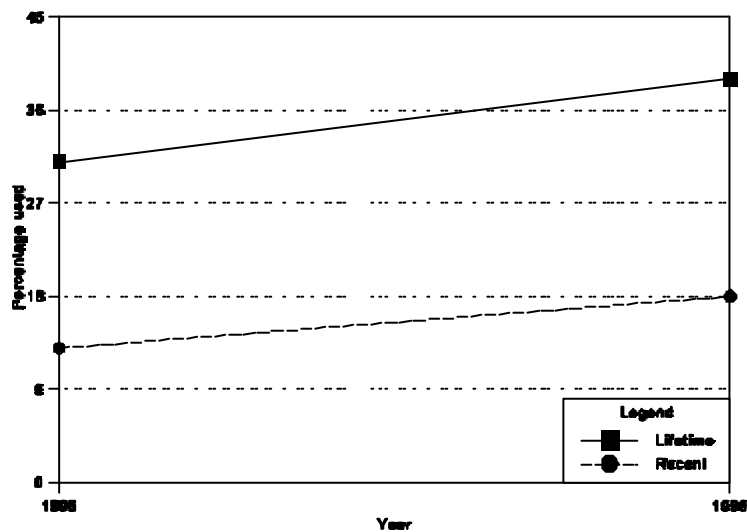
The THC content of cannabis seizures is not routinely tested in Australia. As such, unlike other illicit drugs, the accurate measurement of cannabis potency trends is not possible in this country. IDU and key informants in all jurisdictions, however, consistently rated the potency of cannabis as very high

throughout the period of the IDRS. This is consistent with the predominance in recent years of hydroponically grown cannabis heads in the Australian cannabis market.

3.4.3 Availability

Cannabis is the most widely used illicit drug in every jurisdiction in Australia, with the 1998 NDS Household Survey reporting 39% lifetime exposure²³. Consistent with these figures, IDU and key informants in all jurisdictions and in all years consistently estimated cannabis to be very easy to obtain. These sources have also commented on an increase in the number of cannabis users, particularly younger cannabis users. Consistent with these observations, comparison of the 1998 and 1995 NDS Household Survey shows increases in population lifetime and recent cannabis use²³ (Figure 11).

Figure 11
Prevalence of lifetime and recent cannabis use in Australia, 1995 and 1998 (Australian Institute of Health and Welfare, 1999)



3.4.4 Use patterns

Cannabis use was primarily of heads, rather than of leaf or hash products, in all years and in all jurisdictions. This represents a long term change in the form of cannabis smoked in Australia, as in past decades the smoking of the less potent cannabis leaf predominated³⁰. There has been a general perception that cannabis potency has increased dramatically in recent years. There is no evidence for this belief. Hall and Swift³⁰ demonstrated only small increases in cannabis potency since the 1970s. What has changed is that the more potent heads are now more commonly smoked than cannabis leaf. Both key informants and IDU believed that there were more younger cannabis users. This is consistent with data indicating that, as was seen with injecting, the age of initiation into cannabis use has fallen in recent years²⁶. This has implications, as earlier onset of use of any drug is associated with higher levels of drug-related problems.

3.4.5 Summary of cannabis trends

- . The price of cannabis fell over the period of the IDRS.
- . There were large jurisdictional variations in the price of cannabis.
- . Cannabis is perceived to be highly potent.
- . Cannabis is the most widely used illicit drug, and is perceived to be very easy to obtain.
- . There has been an increase in the number of cannabis users, and of younger users in particular.

3.5 *Other drugs*

3.5.1 Ecstasy

Prevalence of ecstasy use among the general population in 1998 was 4.7% for lifetime use and 2.4%

for recent use²³, an increase from the 1995 National Household Survey, which found 2.4% lifetime use and 0.9% recent use. These figures are consistent with key informant reports from NSW, SA, QLD, TAS, NT and the ACT indicating increased use of the drug.

Reports on the use of ecstasy were, until 2000, based upon key informant and indicator data. The prevalence of ecstasy use has been extremely low among IDU, and they were not considered the appropriate sentinel group to provide information about this drug. Key informants consistently reported that the use of ecstasy was confined to infrequent recreational use of the drug in conjunction with social events. Ecstasy tablets were taken orally, with a very low prevalence of injecting. For instance, the 1999 Australian NSP Survey found that less than 1% of IDU reported injection of ecstasy²⁹.

Consistent with national survey data, key informants reported that the use of ecstasy and other party drugs had increased. The modal range of cost of ecstasy tablets in all jurisdictions was between \$40-\$60 per tablet, and was substantially cheaper if bought in bulk. The cost of a tablet of ecstasy appeared to have fallen in NSW from an estimated \$60 in 1997 to \$40 in 2000.

The average purity of ecstasy seizures in Australia was 35% in 1999/2000, continuing a trend of slight yearly rises in purity: 1997/98 (31%), 1996/97 (32%), 1998/99 (34%). There were no meaningful differences between the purity of ecstasy seizures in each jurisdiction.

3.5.2 Methadone

The injection of methadone syrup is associated with vascular damage and increased risk of overdose³¹. In the years in which IDU interviews were conducted only in NSW, SA and VIC, this practice was most common in NSW, where between 1996 and 1999 over 20% of the IDU samples reported methadone injections in the preceding six months. In 2000, the percentage of IDU in NSW reporting recent methadone injection fell to its lowest since data collection began (13%). The decline in methadone injecting in NSW in recent years is consistent with the results of the NSP surveys²⁹. This is likely to be due to the fact that the distribution of large barrel syringes used for methadone injecting through NSW needle exchanges was banned. In comparison, VIC reported extremely low rates of methadone injecting of less than 3%, while SA reported a range of 11-22% in the period 1996-2000. The IDU survey conducted in other jurisdictions in 2000 indicates the injection of methadone syrup is

widespread across Australia: TAS (74%), QLD (32%), ACT (19%), NT (19%) and WA (8%). The high rate in TAS should be noted in conjunction with the fact that heroin use and availability is relatively low in that jurisdiction. The use of methadone tablets (Physeptone.) was rare, with the exception of SA, where between 10-20% of IDU reported recent use of the drug.

The findings of the IDRS are also consistent with studies that have specifically examined the practice, which indicated it to be common in NSW, rare in VIC and at an intermediate level in SA³¹⁻³³.

Overall, the IDRS has demonstrated methadone injection to vary greatly by jurisdiction, and appears to be currently in decline in NSW, presumably as a result of the withdrawal of large barrel syringes.

3.5.3 Benzodiazepines

Benzodiazepine use among IDU is associated with elevated levels of harm^{34,35}. Over all years of the IDRS, and in all jurisdictions, recent benzodiazepine use was high among IDU (approximately 60% reporting use in the preceding six months). In 2000, all jurisdictions, with the exception of the NT, reported levels of benzodiazepine use ranging between 60%-78% (Table 5). Use of benzodiazepines among IDU has been also reported to be common by key informants in all jurisdictions. In six of the eight jurisdictions, diazepam was the most commonly used benzodiazepine among IDU, temazepam being predominant in the remaining two jurisdictions.

Like the injection of methadone syrup, the injection of benzodiazepine tablets represents a major health risk for IDU^{34,35}. Substantial minorities of IDU in all years reported recent benzodiazepine injections, as was also noted by key informants. There were substantial variations in benzodiazepine injecting between jurisdictions in 2000, ranging between 5%-36% (Table 5). The practice has been relatively rare in SA, with less than 10% of IDU reporting recent benzodiazepine injections in all years. The high rate reported in VIC is consistent with previous years. It is important to note that the highest rates of benzodiazepine injecting were reported in the states in which the easily injected temazepam was the most used benzodiazepine (VIC, TAS).

Table 5
Use of benzodiazepines among IDU, 2000

	Used last 6 mths %	Injected last 6 mths %	Benzodiazepine most often used
NSW	61	13	Diazepam
SA	65	5	Diazepam
VIC	74	36	Temazepam
QLD	60	16	Diazepam
WA	69	21	Diazepam
TAS	78	36	Temazepam
NT	29	12	Diazepam
ACT	77	15	Diazepam

Consistent with specific studies of benzodiazepine preferences³⁴, fast acting benzodiazepines such as diazepam (e.g. Valium.) and flunitrazepam (e.g. Rohypnol.) were the preferred types. The preference for these drugs was consistently noted by key informants. The use of flunitrazepam declined from 1997 onwards, as negative publicity reduced the rate of prescribing of the drug and a change in its scheduling. Temazepam capsules (e.g. Normison.), containing a gel-like substance that is easily injected, were strongly associated with benzodiazepine injecting.

3.5.4 Antidepressants

Specific questions on the use of antidepressants were added to the IDU component of the IDRS in 1997. Substantial rates of antidepressant use were reported in all years and in all jurisdictions. The highest proportions of IDU reporting recent antidepressant use were in VIC (range 23%-27%). In NSW and SA, use was at lower levels (11%-17%). The extension of the IDRS in 2000 confirmed the nation-wide use of antidepressants among IDU. High levels of recent antidepressant use were reported in WA (31%), QLD (51%), TAS (22%), NT (24%) and the ACT (26%). There were no temporal

trends in the prevalence of antidepressant use.

The use of antidepressants is of relevance, as there are strong associations between such use and heroin overdoses^{36,37}. Antidepressants were detected in 7% of all heroin-related fatalities in NSW between 1992 and 1996, and the drugs implicated were specifically the tricyclic antidepressants³⁷. A detailed study arising from the high prevalence of antidepressant use detected by the IDRS found that antidepressant use was associated with higher levels of polydrug use, poorer health, higher levels of psychiatric distress, and a greater risk of heroin overdose³⁶. The excess risk of overdose was specifically associated with the older tricyclic antidepressants, rather than the more recent serotonin reuptake inhibitors (SSRIs) such as fluoxetine (e.g. Prozac.).

3.5.5 Summary of other drug trends

- . Ecstasy use appears to have increased over the course of the IDRS, and is primarily a recreational drug taken orally.
- . The injection of methadone syrup is common, but there are indications that the practice is in decline.
- . The use and injection of benzodiazepines was common in all jurisdictions, with strong preferences for rapid onset preparations such as diazepam.
- . Antidepressant use is common among IDU in all jurisdictions and is associated with elevated levels of harm. Tricyclic antidepressant use in particular is associated with increased risk of heroin overdose.

3.6 *Drug-related issues*

3.6.1 Heroin overdose

As noted above, the number of opioid-related deaths among 15-44 year olds in Australia increased from 406 in 1994 to 737 in 1998, with NSW and Victoria contributing three quarters of opioid-related

deaths. Adjusted for population, this represents an increase from 49.6 per million in 1994 to 87.1 per million in 1998²⁴. The typical fatal heroin overdose case is a opiate-dependent male in his early thirties, not in drug treatment, who has consumed other drugs in conjunction with heroin (primarily alcohol and benzodiazepines)^{24,37}.

The proportions of heroin users who had overdosed in the year preceding interview are presented in Table 6. As can be seen, substantial proportions of heroin users in all jurisdictions and in all years had experienced recent heroin overdoses. Downward trends in the rate of recent non-fatal overdose were noted in NSW (30% to 19%) and SA (29% to 16%) over the five years of the IDRS. In contrast, a trend towards higher levels of overdose was noted in VIC (27% to 42%). The high figure for WA should be treated with extreme caution, as a proportion of the sample were recruited from a study focusing on recent overdoses.

As is the case with fatal overdoses, the consumption of alcohol and/or benzodiazepines in conjunction with heroin occurs in the majority of non-fatal overdoses^{38,39}.

Table 6
Non-fatal heroin overdose in preceding 12 months, 1996-2000

	1996 %	1997 %	1998 %	1999 %	2000 %
NSW	30*	24	30	28	19
VIC	-	27	28	36	42
SA	-	29	23	20	16
QLD	-	-	-	-	24
WA	-	-	-	-	64
TAS	-	-	-	-	13

NT	-	-	-	-	49
ACT	-	-	-	-	35

* Proportions are of heroin users only

3.6.2 Needle risk behaviours

Since 1997, IDU have been asked about recent sharing of injecting equipment (Table 7). Substantial minorities in each year and in each jurisdiction continued to share injecting equipment. Declines in needle sharing can be seen from 1998 onwards. The rates of needle sharing detected by the IDRS are consistent with those reported by the Australian NSP Survey. The 1999 Survey reported 23% of IDU surveyed had borrowed a used needle in the preceding month, a decrease relative to 1995, when the corresponding figure was 31%²⁹.

Table 7

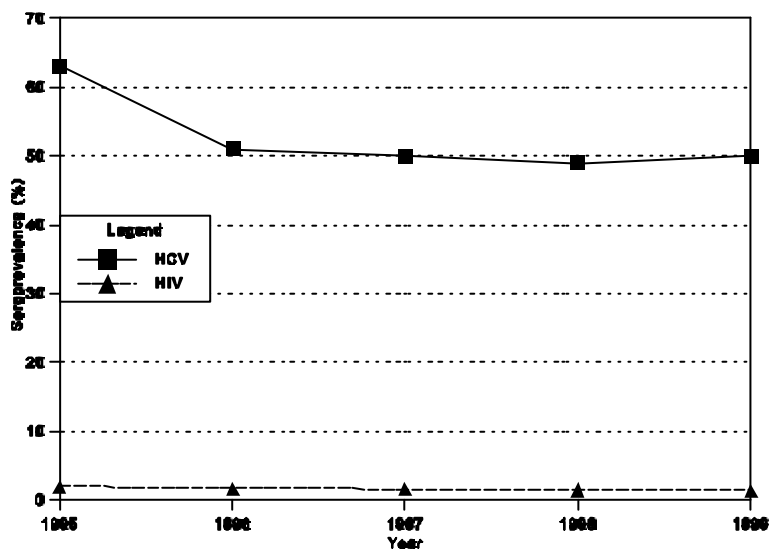
Needle sharing among IDU in month preceding interview, 1996-2000

	1996 %	1997 %	1998 %	1999 %	2000 %
<i>NSW</i>					
Borrowed	-	15	23	17	10
Lent		21	23	24	17
<i>VIC</i>					
Borrowed	-	22	23	9	19
Lent		26	34	22	35
<i>SA</i>					
Borrowed	-	19	21	9	24
Lent		18	24	9	21
<i>QLD</i>					
Borrowed	-	-	-	-	19
Lent					23
<i>WA</i>					
Borrowed	-	-	-	-	22
Lent					28
<i>TAS</i>					

Borrowed Lent	-	-	-	-	10 12
<i>NT</i> Borrowed Lent	-	-	-	-	10 12
<i>ACT</i> Borrowed Lent	-	-	-	-	9 14

The prevalence of HIV among Australian IDU has remained low (Figure 12). Since 1995, the prevalence of HIV among clients of needle exchanges blood tested for the Australian NSP Survey has never exceeded 2%²⁹. In contrast, the prevalence of HCV has never fallen below 49%.

Figure 12
HIV and HCV seroprevalence among IDU recruited for Australian NSP Survey, 1995-1999



3.6.3 Criminal activity

Table 8 presents self-reported criminal behaviours among IDU in the month preceding interview, aggregated over all jurisdictions. The prevalence of criminal behaviours among IDU was high over all years, and in all jurisdictions. More than one half of IDU in all years reported criminal activities in the preceding month. The most commonly reported recent crimes were drug dealing and property crime.

In 1999, IDU were asked for the first time whether they had been arrested in the preceding 12 months. Consistent with the self-reported rates of criminal behaviours, nearly a half of subjects in both 1999 (44%) and 2000 (46%) reported that they had been arrested in that period, most commonly for property crime and possession/use of illicit drugs.

Table 8
Self-reported criminal activity in month preceding interview, 1996-2000

	1996* %	1997 %	1998 %	1999 %	2000 %
Property crime	55	29	30	26	19
Dealing	33	39	39	38	40
Fraud	28	13	12	11	12
Violent crime	8	7	6	8	7
Any crime	72	56	56	55	54
Arrested in last 12 months	–	–	–	44	46

*NSW only

3.6.4 Summary of drug-related issues

- . Fatal heroin overdoses have risen dramatically since 1996.
- . Yearly rates of non-fatal overdose were high in all jurisdictions over all years.
- . A substantial minority of IDU continue to share injecting equipment. While HIV seroprevalence has remained low, approximately one half of IDU are infected with HCV.
- . The self-reported criminal behaviours and recent arrest rates of IDU were high over all years and in all jurisdictions.

4.0 DISCUSSION

The data presented in this report provide a snapshot of illicit drug use in Australia over the five year period 1996-2000. They represent the first comprehensive, comparable national data on drug trends to be regularly collated and analysed in this country. In their recent article examining early warning systems

for emerging drug trends, Griffiths et al⁴⁰ argue that what are required are integrated information systems in which data from different sources are collected and evaluated, a condition satisfied by the IDRS. The consistent use of a variety of data sources has enabled the IDRS to detect emerging Australian drug trends of national significance. In the first year of its existence, on the basis of analysis of a number of different data sources, the IDRS noted an increase in the number of heroin users, and the likely consequences of such an increase⁵. Data from subsequent years confirmed these warnings. Similarly, in 1998 the IDRS noted the emergence in Sydney of cocaine as a prominent part of the injecting drug use market, and the problems associated with such an occurrence. It is unlikely that this trend would have been detected at the time of emergence if a multi-sourced monitoring system was not in place. Subsequent years have confirmed that cocaine has remained an entrenched part of the Sydney drug scene, and has not diffused to other jurisdictions. The emergence of crystalline methamphetamine, noted in 1999 and 2000, may well prove to be a major new trend of critical importance.

One of the major outcomes of the national expansion of the IDRS has been to allow direct comparisons between jurisdictions of factors such as price, purity and availability of different drugs. Prior to the development of the IDRS, no comparable interstate data were regularly collected. Notable differences were found between jurisdictions. Heroin remained most widely used and cheapest in NSW throughout the five years of the IDRS. In contrast, heroin was rare in NT, but there was an active prescription opioid problem in that jurisdiction. Amphetamine were more common and cheaper in SA and QLD than in other jurisdictions. The price of cannabis in SA was more than \$100 per ounce less expensive than in NSW. Cocaine emerged as a major problem among NSW IDU, but this has not appeared elsewhere. There is clearly no one national drug market in Australia. Drug trends vary significantly in kind and in degree from jurisdiction to jurisdiction, and require different interventions to address their associated problems.

In addition to monitoring the price, purity and availability of different drugs, the regular collection of comparable data has allowed monitoring of changes in drug use patterns, and the demographics of drug users. The inclusion of an IDU component to the IDRS has enhanced the ability to detect such trends. One trend of major importance has been the fall in the age of initiation into injecting. This has major implications, as earlier onset of injecting is associated with greater levels of dependence and drug-

related problems²⁷. Similarly, the trend away from amphetamine and towards heroin as first drug injected in states such as NSW and VIC has major implications for health and policing policies.

In developing the revised IDRS during 1995, prior to pilot testing in 1996, some key methodological decisions were made in order to address the types of issues later raised by Griffiths et al⁴⁰. The use of IDU, key informants and key indicators as multiple data sources has led to less reliance on anecdotal data, the major problem with the preceding system. The triangulation of these disparate sources allows significantly greater confidence in data trends than was advisable under the defunct system. In particular, the IDU component, considered a somewhat radical arm of a monitoring system when initially implemented, has provided a wealth of data from heavy consumers of the major illicit drugs, rather than relying solely on the opinions of those who have professional contact with these populations.

The decision to focus on the major cities also appears to have been successful. Although drug problems are not restricted to the major cities, it is highly likely that it is in these major drug markets that new trends and problems will first emerge. The emergence of injecting cocaine use as a significant problem in Sydney is an excellent example of such a trend. The trend data presented above, as well as the expansion and longevity of the revised IDRS, indicate that these methodological decisions were warranted in order to produce an efficient monitoring system.

In summary, the implementation and expansion of the IDRS has, for the first time, enabled regular, comparable data on emerging trends to be collected in Australia. After five years of operation, long term trends can now begin to be examined. The expansion of the full IDRS methodology to all jurisdictions has enabled cost-effective comparable data to be collected in all jurisdictions, and divergent state trends to be monitored. The continuation of the IDRS as a strategic early warning system will ensure there is no loss of continuity in trend monitoring and enable appropriate responses at both national and state levels to emerging trends in complex illicit drug markets.

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