#### Chris Moon

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

NDARC Technical Report No. 181

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# **Chris Moon**

NT Department of Health and Community Services Alcohol and Other Drugs Program

NDARC Technical Report No. 181

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# **Table of Contents**

LIST	OF TABLES	3
List	OF FIGURES	5
ACKN	NOWLEDGMENTS	6
Аввя	REVIATIONS	7
Exec	CUTIVE SUMMARY	8
1.0 1.1	INTRODUCTION	
2.0	Метнор	12
2.1	Survey of Injecting Drug Users (IDU)	
2.2	Survey of Key Informants (KI)	
2.3	Other indicators	
3.0	RESULTS	15
3.1	Overview of the IDU sample	
3.2	Drug use history and current drug use	16
4.0	Heroin	21
4.1	Price	21
4.2	Availability	21
4.3	Purity	21
4.4	Use	21
4.5	Current patterns of heroin use	22
4.6	Trends in heroin use	22
4.7	Summary of heroin trends	23
5.0	METHAMPHETAMINE	24
5.1	Price	24
5.2	Availability	25
5.3	Purity	27
5.4	Use	28
5.6	Health and methamphetamines	30
5.7	Flashcard Analysis	32
5.8	Trends in methamphetamine use	33
5.9	Summary of methamphetamine trends	34
6.0	COCAINE	
6.1	Price	
6.2	Availability	
6.4	Use	
6.5	Summary of cocaine trends	35
7.0	CANNABIS	
7.1	Price	
7.2	Availability	
7.3	Potency	
7.4	Use	
7.5	Health and cannabis	
7.6	Trends in cannabis use	
7.7	Summary of cannabis trends	43

8.0	OPIOIDS	44
8.1	Morphine	44
8.2	Methadone	50
8.3	Buprenorphine	53
8.4	Other opiates	54
8.5	Health and opioids	55
8.6	Trends in opioid use	56
8.7	Summary of trends in opioid use	58
9.0	OTHER DRUGS	59
9.1	Ecstasy	59
9.2	Hallucinogens	59
9.3	Inhalants	60
9.4	Benzodiazepines	60
9.5	Anti-depressants	61
9.6	Summary of other drug trends	62
10.0	ASSOCIATED HARMS	63
10.1	Injecting	63
10.2	Blood borne viruses	
10.3	Sharing of injecting equipment among IDU	
10.4	Location of injections	
10.5	Injection related health problems	65
10.6	Expenditure on illicit drugs	67
10.7	Mental health problems	68
10.8	Criminal and police activity	68
10.9	Trends in associated harms	71
10.10	Summary of trends in associated harms	71
11.0	DISCUSSION	72
12.0	IMPLICATIONS	75
13.0	References	76

# LIST OF TABLES

Table 1: Demographic characteristics of IDU sample	15
Table 2: Injection history, drug preferences and polydrug use of IDU	17
Table 3:Polydrug use history and routes of administration, IDU sample	19
Table 4: Selected trends in heroin use, IDU sample	22
Table 5: Price of most recent methamphetamine purchase by type and amount, ID 2002 and 2003	
Table 6: Methamphetamine price movements, IDU 2003	25
Table 7: Estimates of methamphetamine availability, IDU 2003	26
Table 8: Methamphetamine source and length of time to score, IDU 2003	27
Table 9: Purity and recent changes to purity of methamphetamine, IDU 2003	28
Table 10: Forms of stimulant used previous six months and primary form	29
Table 11: Flashcard identification by methamphetamine users, IDU 2003	32
Table 12: Price of most recent cannabis purchase by type and amount, IDU 2001 to	
Table 13: Cannabis price movements, IDU sample 2003	37
Table 14: Estimates of cannabis availability, IDU 2003	
Table 15: Source and length of time to score cannabis, IDU 2003	38
Table 16: Potency and recent changes to potency of cannabis, IDU 2003	
Table 17: Forms of cannabis used previous six months and primary form, IDU 200	3 40
Table 18: Price of most recent morphine purchase by type and amount, IDU 2002 2003	
Table 19: Morphine price movements, IDU sample 2003	45
Table 20: Estimates of morphine availability, IDU 2003	45
Table 21: Source and length of time to score morphine, IDU 2003	46
Table 22: Forms and main brand of morphine used previous six months and prima form, IDU 2003	•
Table 23: Polydrug use in IDU sample who used morphine daily over previous 6 m	
Table 24: Methadone price movements, IDU sample 2003	50
Table 25: Estimates of Methadone availability, IDU 2003	51
Table 26: Source and length of time to score morphine, IDU 2003	51
Table 27: Methadone use, selected characteristics, IDU 2003	
Table 28: Forms of buprenorphine used previous six months and primary form, ID 2003	
Table 29: Forms of other opiates used previous six months and primary form, IDU	

Table 30: Ecstasy use, selected characteristics, 2000-2003	59
Table 31: Hallucinogen use, selected characteristics, 2000-2003	60
Table 32: Benzodiazapine use, selected characteristics, 2000-2003	60
Table 33: Forms of benzodiazepines used previous six months and primary form, IDU 2000-2003	
Table 34: Forms of anti-depressants used previous six months and primary form, IDU 2000-2003	
Table 35: Notification of HBV, HCV and HIV, NT 1999-2003	63
Table 36: HIC and HCV antibody prevalence among NSP survey respondents 1999-20	
Table 37: Sharing of injection equipment in the month prior to interview, 2000-2003	
Table 38: Location of last injection 2000-2003	65
Table 39: Injection related health problems, month prior to interview, 2000-2003	66
Table 40: Injection related problems by selected drugs, 2003 IDU sample (n)	67
Table 41: Amount spent on drugs on the day before interview, 2002-2003	68
Table 42: Self reported criminal and police activity, 2000-2003	68
Table 43: Arrests in the twelve months prior to interview, 2000-2003	69
Table 44: Number of cleared offences for selected illicit drug related crimes, 00/01-02/03	69
Table 45: Number of consumer and provider arrests by selected drug type, NT, 2000/0	

# LIST OF FIGURES

Figure 1: NT hospital separations with stimulant (exc. cocaine) mentions, 2000/01 to 2002/03	31
Figure 2: Number of episodes of treatment for own drug use where amphetamines are the principal drug of concern, 2000/01 to 2002.03	31
Figure 3: NT hospital separations with cannabinoid mentions, 2000/01 to 2002/03	11
Figure 4: AODTS treatment episodes where cannabis os the principal drug of concern, 2000/01 to 2002/03	
Figure 5: Number of MS Contin 100mg tablets and Kapanol 100mg capsules prescribed by quarter	
Figure 6: Methadone use among the IDU, 2001 to 20035	53
Figure 7: NT hospital separations with opioid mentions, 2000/01 to 2002/03 (n) 5	55
Figure 8: Rate of accidental deaths due to opioids per million persons, ages 15-54, 1988-	
Figure 9: AODTS treatment episodes where morphine is the principal drug of concern, 2000/01 to 2002/03 (n)	
Figure 10: Recent injection in the IDU sample, 2000-2003 (%)	53
Figure 11: The number of infringement notices served for cultivation or possession of cannabis 99/00-02/03	

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#### **ABBREVIATIONS**

ABS Australian Bureau of Statistics
ACT Australian Capital Territory
AFP Australian Federal Police

BBV Blood Borne Virus

CDHA Commonwealth Department of Health and Ageing

GP General Practitioner
HBV Hepatitis B Virus
HCV Hepatitis C Virus

HIC Health Insurance Commission
HIV Human Immuno-deficiency Virus
IDRS Illicit Drug Reporting System

IDU Illicit Drug User KI Key Informant

NCHECR National Centre in HIV Epidemiology and Clinical Research

NDARC National Drugs and Alcohol Research Centre
NNDSS National Notifiable Diseases Surveillance System
NSP Needle Syringe Program (NT AIDS Council)

NT Northern Territory

NTAHC Northern Territory AIDS and Hepatitis Council NTDHCS NT Department of Health and Community Services

PBS Pharmaceutical Benefit Scheme

#### **EXECUTIVE SUMMARY**

This report presents the results of the 2003 Illicit Drug Reporting System (IDRS) for the Northern Territory (NT). This is the fifth year that the IDRS has been conducted in the NT.

The IDRS is coordinated by the National Drug and Alcohol Research Centre (NDARC) which is part of the University of NSW. It is jointly funded by the Australian Government Department of Health and Ageing (the Department) and by the National Drug Law Enforcement Research Fund (NDLERF).

The IDRS combines data from a survey of injecting drug users (IDU), a survey of key informants and the collation of illicit drug related indicator data to monitor the price, purity and availability of a range of illicit drug classes and to identify emerging trends in illicit drug use and the illicit drug market.

#### **IDU** Sample characteristics

As in previous years the IDU sample was primarily male (69%), aged in the mid-thirties (mean =37 years), spoke English at home and was unemployed (75%). Thirteen percent of the sample identified as indigenous (compared to 20% in 2002), 48% had been in prison, and 24% were in treatment at the time of interview.

#### Drug use patterns

The five illicit drugs most commonly used by the IDU sample in the last six months remains unchanged from the previous year: morphine, cannabis, speed powder, benzodiazapines and methadone. The proportion who used speed powder has dropped from 67% to 60% while the proportions who used methamphetamine base and crystal forms have increased, from 21% to 30% and from 20% to 34% respectively. The proportion who used methadone is noticeably higher, increasing from 37% to 51%, while the proportion who used heroin has declined from 22% to 19%. Morphine, mainly in the form of the diverted pharmaceutical MS Contin, remains the most commonly injected drug in Darwin at 84% of the IDU sample.

#### Heroin

- Occurrence of heroin use in the NT IDU sample remains low and is declining.
- At a median of \$50 per cap, the price of heroin is stable or declining and purity remains low.
- Availability is restricted and sporadic.

#### Methamphetamine

- Recent methamphetamine use remains high (68% of the IDU sample) which is consistent with previous years.
- Powder continues to be the most common and most frequently used form, although base (30%) and crystal (33%) show an increased presence.
- The median price of a gram of powder has increased from \$80 in 2002 to \$100 in 2003.
- Methamphetamine continues to be easy to obtain, with the availability of the more pure forms (base and crystal) increasing.
- Methamphetamine was the most frequently injected drug in the month prior to interview for 28% of the IDU sample, increasing from 19% in 2002.
- The decline in treatment agency episodes involving amphetamines does not reflect the stability of use and availability.

#### Cocaine

• Cocaine use in the NT is low and its use amongst the IDU sample continues to decline, from 18% in 2000 to 3% in 2003.

#### Cannabis

- Cannabis remains the most prevalent and frequently used illicit drug in the NT (83% of the IDU sample), with high availability and potency.
- Cannabis price, potency and availability have been stable; a gram costs \$25 and an ounce \$300.
- The number of separations from NT hospitals involving cannabinoids has increased by 49% over the last three financial years.
- Episodes of treatment for problematic cannabis use have declined.

#### Other opioids

- Diverted MS Contin continues to be the primary injected opiate in Darwin, with the rate of illicit use in the IDU sample stable compared to earlier years at 84%.
- The use of licit morphine among the IDU sample dropped from 42% in 2002 to 35% in 2003.
- The price of MS Contin 100mg has increased from \$50 in 2002 to \$60 this year.
- The availability of diverted morphine continues to be rated as 'easy' or 'very easy' to obtain by most of the IDU sample (68%) and key informants; the proportion rating it as difficult to obtain has declined from 44% in 2001 to 25% this year.
- Seventy-three percent of primary recent morphine injectors reported injecting daily; key informants report that daily users inject two-four times a day using a total of between 300mg and 800mg.
- Morphine use is associated with a patterns of polydrug use, particularly: cannabis, benzodiazepine, methamphetamine, alcohol and illicit physeptone.

- The rate of accidental deaths per million due to opioid use is higher in the NT than other jurisdictions and shows a steady upward trend since 2001.
- There is some indication that modifications to morphine prescribing practices have had some impact on the supply of MS Contin for illicit use, but this has been compensated for by a higher rate of diversion and substitution by other drugs, possibly including Kapanol, benzodiazepines and physeptone.
- The proportion of the IDU sample reporting recent methadone use increased from 37% in 2002 to 51% in 2003, mainly due to a marked increase in the use of illicit physeptone over the last two IDRS years.

#### Other drugs

- The level of recent use in the IDU sample of ecstasy, benzodiazepines, inhalants and anti-depressants remain similar to that seen in previous years.
- The level of recent use of LSD shows continuing decline from 33% of the IDU sample in 2000 to 7% this year.
- Benzodiazepine use continues to be closely associated with regular morphine use and temazepam remains the form of choice amongst illicit benzodiazepine users.

#### Associated harms

- The hepatitis C antibody continues to be found at high levels in the injecting drug user population (62%).
- Needle sharing in the IDU remains at a low level of around 6%.
- Injection related problems show mixed trends, with the number of IDU reporting overdose, dirty hits and abscess/infection declining while scarring/bruising and difficulty injecting has increased.
- Morphine injectors were more likely to report an injection related problem than benzodiazepine or methadone injectors.
- Self reported arrests for property crime have increased from 5% in 2002 to 9% in 2003.
- Police activity around possession and use of illicit drugs has declined while activity concerning manufacture, dealing and trafficking is stable.

#### 1.0 Introduction

This report presents the results of the 2003 Illicit Drug Reporting System (IDRS) for the Northern Territory (NT).

The IDRS is coordinated by the National Drug and Alcohol Research Centre (NDARC) which is part of the University of NSW. It is jointly funded by the Australian Government Department of Health and Ageing (the Department) and by the National Drug Law Enforcement Research Fund (NDLERF). As a jointly funded project, the IDRS demonstrates the shared recognition by the Department and NDLERF of the value of collaborative work between the sectors of health and law enforcement to identify and address issues relating to supply, demand and use of illicit drugs.

The purpose of the IDRS is to provide a standardised, comparable approach to the monitoring of data relating to the use of opiates, cocaine, methamphetamine and cannabis. It is intended to act as a 'strategic early warning system' – identifying emerging drug problems of national and jurisdictional concern.

In the NT, a partial IDRS, not including the IDU survey, was conducted by the then Territory Health Services (now NT Department of Health and Community Services (NTDHCS)) in 1999. In 2000 and 2001 the full methodology was conducted through the then Northern Territory University (now Charles Darwin University). In 2002 and this year the full IDRS has been conducted by NTDCHS. Reports of these studies are available from NDARC: Rysavy, O'Reilly & Moon 2000, O'Reilly & Rysavy 2001, O'Reilly 2002, Duquemin and Gray 2003.

Reports of the IDRS findings for individual states and territories are published by NDARC, and each year NDARC produces and publishes a national report presenting an overall picture and comparing jurisdictions.

# 1.1 Study Aims

The specific aims of the NT component of the IDRS are:

- 1. to monitor the price, purity and availability of a range of illicit drug classes in the NT; and
- 2. to identify emerging trends in illicit drug use and the illicit drug market in the NT.

#### 2.0 METHOD

The methodology for the IDRS was trialed during 1996 and 1997, initially in Sydney and then in other states (Hando et al, 1998). The methodology (described in the following section) was partially used in every state and territory in 1999 and since 2000 has been fully applied in each state and territory on an annual basis.

The IDRS uses three types of data, which are described below.

# 2.1 Survey of Injecting Drug Users (IDU)

Face to face structured interviews are conducted in the capital city of each state and territory, with a minimum of 100 people, who regularly inject drugs. To participate in the study people must have injected drugs at least once a month during the past six months, and have lived in the relevant capital city for at least the past twelve months. Regular injecting drug users are selected for their first hand knowledge and ability to comment on the price, purity, availability and use of illicit drugs in the city in which they live. This group is treated as a sentinel group likely to reflect emerging trends.

As in previous years each state and territory used a standardised interview schedule. The schedule closely followed the one used in previous years, requesting information about the interviewee's demographics and drug use, and about the price, purity and availability of the four main categories of drugs under investigation. Questions were also asked about treatment, crime, risk-taking and health.

Ethical approval for the study was granted by the Human Research Ethics Committee of the University of New South Wales, and for the NT component by the Human Research Ethics Committee of the NTDHCS and Menzies School of Health Research.

In the NT interviews were conducted in Darwin and Palmerston during June 2003 with 109 people meeting the criteria mentioned above. Participants were recruited through fliers posted at the Needle and Syringe Program (NSP) and at the sexual health clinic, and through word of mouth. The interviews were conducted by three trained peer interviewers, two of whom had conducted interviews in 2002. Interviews were conducted at the Darwin and Palmerston NSP's. The Palmerston NSP opened early 2003 and so this was the first year that interviews were conducted in that venue.

The IDU who met the inclusion criteria were given an information sheet that described the content of the interview. If they wished to participate they were invited to sign a consent form explaining that the information provided was entirely confidential and that they were free to withdraw from the survey without prejudice or to decline to answer any questions they chose.

Interviews generally lasted about 30 minutes and participants were reimbursed \$30 for their time.

Data analysis was conducted using SPSS for Windows Version 11.1 (SPSS Inc.).

# 2.2 Survey of Key Informants (KI)

The second component of the IDRS involves semi-structured interviews with thirty or more key informants, selected because their work brings them into regular contact with illicit drug users. Criteria for inclusion in this part of the study are at least weekly contact with illicit drug users in the past six months or contact with a minimum of 10 illicit drug users during the same period.

Information from key informants corroborates data from IDU, but also provides a broader context in which to place the IDU data. A standardised interview schedule is used by all states and territories that closely mirrors the IDU questionnaire. Each KI is asked to nominate the main illicit drug used by most of the illicit drug users they work with and information is then gathered about use, availability, price and purity of that drug category. Further questions are asked about health, treatment, crime and police activity.

In Darwin and Palmerston interviews were conducted with 31 key informants during July and August. All interviews were conducted face-to-face. Key informants included: four AOD counsellors, three police officers, three school counsellors, two pharmacists, two general practitioners, two ambulance officers, two user group representatives, two prison rehabilitation workers, two withdrawal service workers, an AIDS council educator, a family support worker, a youth crisis accommodation worker, a forensic mental health worker, a researcher, an AIDS/STD clinic worker, a youth service worker, a drug court counsellor and a mental health worker.

Eleven key informants provided information chiefly about morphine, eight about methamphetamine, 12 about cannabis. Interviews took between 40 minutes and two hours. Notes were taken at the time of interview and later transcribed and analysed for recurring themes.

#### 2.3 Other indicators

The third set of information comprises secondary data sources that relate to illicit drug use. Recommended criteria for inclusion in the study are that the data must be available at least annually, include 50 or more cases, be collected in the city or jurisdiction of the study, provide brief details on illicit drug use, and must include details of the four main illicit drugs under investigation (Hando et al, 1998).

Due to the small population of the NT many of the data sources available to other states and territories report very small numbers in the NT and fail to meet the above criteria. Where no other secondary sources are available some findings from such data sources are noted, but should be interpreted with caution. Data is presented for a time period that overlaps as closely as possible with the period of the IDRS, but where this is not available the most recent data available is included.

Indicator data derived from the following data sources and publications<sup>1</sup> have been included in this report:

- 2002 Australian Bureau of Statistics data on opioid overdose deaths in Australia.
- · Annual report of the National Notifiable Diseases Surveillance System.
- · Australian Needle and Syringe Program Survey National Data Report 1995-2002.
- · Northern Territory Aids and Hepatitis Council Needle and Syringe Program data.
- · Northern Territory Integrated Justice Information System.
- · Poisons Control Branch, NT Department of Health and Community Services.
- The Australian Crime Commission Illicit Drug Report, various years.
- The NT Alcohol and Other Drug Treatment Services Client Database.
- The NT DHCS Corporate Information Services.

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<sup>&</sup>lt;sup>1</sup> full publication details are provided in the References list

#### 3.0 RESULTS

# 3.1 Overview of the IDU sample

A total of 109 injecting drug users were interviewed, 75 men and 34 women. The mean age of the entire sample was 37 years (Table 1). The mean age for men (39 years) was significantly higher than the mean age for women (32 years, F=16.9, p<.01). Thirteen percent of the sample identified as indigenous (6 women and 8 men) and the entire sample listed English as the main language spoken at home.

Table 1: Demographic characteristics of IDU sample

Variable		2002	2003
variable		(n=111)	(n=109)
Age (yrs)	Mean	34	37
	Range	16-55	19-62
	SD	9.4	8.8
Sex (% male)		64	69
Ethnicity (% indigenous)		20	13
Language (% LOTE at home)		1	0
Employment (%)	Not employed	78	75
	Full time	1	9
	Part time/casual	8	14
	Home duties	10	2
	Sex worker	2	0
School education (mean yrs)		10	10
Post school education (%)	None	48	45
	Trade/technical	31	39
	University/college	22	17
Ever in prison (%)		46	48
Currently in treatment (%)		14	24

Source: Duquemin and Gray, 2003; 2003 IDU sample.

Most respondents were not employed (75%), although 23% were employed at least parttime. The mean number of years at school was 10, with 55% of the sample having some form of post-school education. Almost half of the entire sample (48%) had been in prison, although this was significantly more likely for men (59%) than women (24%,  $\chi^2$ =11.59, p<.01). Almost a quarter (24%) of the sample were currently in treatment, including 14 receiving methadone and five receiving buprenorphine. A higher proportion of women (32.4%) than men (20%) were currently in treatment. No treatment other than pharmacotherapy was recorded.

These characteristics show some changes from the previous year. The proportion of the sample identifying as indigenous is lower than in 2002 (20%), although similar to that seen in 2000 and 2001. The proportion working is higher than in 2002 (8%) and is similar to that seen in 2001. This is also the case for the proportion currently in treatment, 14% in 2002 and 24% in 2001. The drop in current treatment participation in the 2002 report is consistent with the closing of the Darwin residential detoxification unit in June 2001 and the introduction of the Opioid Pharmacotherapy Program soon after.

### 3.2 Drug use history and current drug use

The mean age of first injection was 21 years (SD 6.8, range 12-41, Table 2), and is comparable to previous years. Amphetamines were the most frequently listed first drug injected (57%), showing an increase from 48% in 2002 and 50% in 2001. This increase is matched by decreases in the proportions who first injected heroin, morphine and cocaine.

Heroin was the main drug of choice (43%), showing a small reduction from 2002 (46%) corresponding to an increase in the proportion preferring methamphetamines from 18% to 23%.

Sixty-four percent of the sample injected morphine most often in the month prior to the interview, down from 74% in 2002. This decrease is matched by an increase in the proportion injecting methamphetamine most often from 19% in 2002 to 28% in 2003. A similar exchange in seen in the most recently injected drug: 61% nominated morphine as their most recently injected drug, down from 69% in 2002, and 30% nominated methamphetamine, up from 22%. In both cases the proportions injecting methamphetamine and morphine are similar to that found in 2001. Over the three years, shown in Table 2, there is a suggestion that the proportion injecting heroin has declined and that injecting methadone has increased.

Forty-one percent of the sample reported injecting less than daily, a substantial increase from 20% in 2002, but similar to that found in 2001. Thirty-eight percent reported injecting two or more times a day, compared to 56% in 2002, and 28% in 2001.

The median number of different drug classes ever used by respondents was 11, and the median number used in the last six months was six. Respondents had injected a median of six different classes of drug in their lives, and three within the last six months. This pattern of polydrug use is similar to previous years although the number of drugs ever tried shows a small increase over each of the last three years.

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

Variable	2001	2002	2003
Variable	(n=135)	(n=111)	(n=109)
Age of first injection (mean yrs)	20.1	19.5	21
Drug first injected (%)			
Heroin	36	37	34
Cocaine	1	2	0
Methamphetamine	50	48	57
Morphine	11	10	5
Methadone	na	na	1
Other	2	3	3
Drug of choice (%)			
Heroin	39	46	43
Cocaine	2	3	3
Methamphetamine	26	18	23
Morphine	22	20	19
Methadone	1	1	2
Cannabis	4	5	4
Other	6	7	5
Drug injected most often in the last month (%)			
Heroin	5	2	1
Methamphetamine	27	19	28
Morphine	65	74	64
Methadone	2	4	4
Other	1	1	3
Most recent drug injected (%)			
Heroin	7	2	1
Cocaine	0	0	0
Methamphetamine	31	22	30
Morphine	57	69	61
Methadone	3	5	4
Other	2	2	3
Frequency of injecting in last month (%)			
Not in the last month	4	1	1
Less than daily	38	20	40
Once a day	12	24	21
2-3 times a day	41	48	33
More than 3 times a day	7	8	5
Polydrug use (median)			
Drug classes ever tried	9	10	11
Drug classes used in last 6 months	6	6	6
Drug classes ever injected	na	6	6
Drug classes injected last 6 months	na	3	3

Source: O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

Polydrug use histories and routes of administration are shown in Table 3. The five illicit drugs most commonly used by the IDU sample in the last six months remain unchanged from the previous year: morphine, cannabis, speed powder, benzodiazapines and methadone. The proportion who used speed powder has dropped from 67% to 60% while the proportions who used methamphetamine base and crystal forms have increased, from 21% to 30% and from 20% to 34% respectively. The proportion who used methadone is noticeably higher, increasing from 37% to 51%, while the proportion who used heroin has declined from 22% to 19%.

Table 3:Polydrug use history and routes of administration, IDU sample

Drug Class	Used	l (%)	Inje	cted (%)	Smo	oked (%)	Sno	rted (%)	Swalle	owed (%)	Days used
<del>-</del>	Ever	Last 6 months	Ever	Last 6 months	last 6 months (median)						
Heroin	79	19	79	16	49	5	24	0	17	2	5
Methadone*	39	17	23	10					37	16	30
Methadone^	37	13	30	13					24	6	4
Physeptone*	21	14	17	12	0	0	1	0	15	10	90
Physeptone^	50	35	46	35	0	0	0	0	23	14	6
Morphine	90	82	87	80	3	1	3	1	55	28	180
Homebake	30	7	28	6	3	2	1	0	2	0	12
Other opiates	42	17	21	4	11	2	0	0	29	13	7
Speed powder	79	60	77	59	16	2	43	9	38	9	14
Amphetamine liquid	39	17	34	17					11	2	4
Amphetamine base#	41	30	41	30	2	0	5	0	5	2	26
Amphetamine crystal@	49	34	46	33	9	6	9	2	6	2	6
Pharmaceutical stimulants	40	16	23	10	1	0	0	0	28	8	3
Cocaine	54	5	39	3	15	1	34	2	8	1	4
Hallucinogens	73	6	27	1	2	1	1	0	67	6	2
Ecstasy	62	30	46	21	3	2	4	3	43	17	2
Benzodiazepines	74	54	45	30	5	1	4	1	68	45	14
Alcohol	88	63	10	0					88	63	20
Cannabis	95	83									120
Anti-Depressants	43	21	4	1					42	21	42
Inhalants	37	3									3
Tobacco	95	95									180
Buprenorphine*	14	9	5	3	0	0	0	0	14	8	50
Buprenorphine^	16	13	6	5	0	0	0	0	12	9	1

\* prescribed Source: 2003 IDU sample

#### 4.0 HEROIN

While twenty respondents had used heroin within six months of the interview only nine were able to answer any of the questions relating to heroin price, purity or availability and only five had purchased heroin within the last six months. Given these small numbers, typical of the level of response found in previous years, these results must be treated with caution. Seventeen were able to provide information about routes of administration.

#### 4.1 Price

Five respondents had purchased a cap of heroin in the six months prior to interview. The price ranged from \$50 to \$100, \$50 being the median. No respondents had bought any other amount, however one respondent was able to report that a gram of heroin costs \$500. The median price for a cap is lower than that reported in 2002 (\$85), although the range is similar (\$60-\$100).

#### 4.2 Availability

Five respondents commented on the ease of access to heroin in Darwin. All five rated heroin as 'difficult' or 'very difficult' to access, three stated that ease of access was 'stable' over the last six months and one stated that it 'fluctuates'.

Six respondents nominated the source of their heroin and the length of time it took them to score. Four said they usually scored from a friend and had scored from a friend the last time they used heroin. One nominated a street dealer and one a dealer's home. The length of time taken to usually score and for the last time scored varied with no sensible median or mean from one minute to three hours.

Although forty-seven respondents nominated heroin as their drug of choice, none of these nominated heroin as their most frequently injected drug in the month prior to interview. In all but two cases this was attributed to lack of availability.

# 4.3 Purity

Three out of five respondents willing or able to comment rated the purity of heroin in Darwin at the time of interview as 'low'. There was no consistency in opinion about whether or not purity had changed in the last six months.

#### 4.4 Use

#### 4.4.3 Heroin use among IDU

Nineteen percent of the sample reported using heroin in the six months prior to interview. One respondent reported it as their most frequently injected drug in the

month prior and their most recently injected drug. This person also reported an injecting frequency of weekly or less.

# 4.5 Current patterns of heroin use

Of the twenty people who had used heroin in the last six months, 65% had used powder, 15% homebake and 60% rock. Fifty-five percent nominated heroin powder as their most common form used, 40% heroin rock and one person homebake. Only six people had used more than one form of heroin in the last six months.

Sixteen percent (n=17) of the IDU sample provided information about route of administration of heroin over the six months prior to interview. Of these, all had injected, 25% had smoked, none had snorted and 10% had swallowed. This group had used heroin for a median of five days, ranging from one to 60 days.

Of the 47 people who nominated heroin as their drug of choice, 40 (85%) injected morphine most often in the month prior to interview, four (9%) injected methamphetamine and three injected methadone or physeptone. A similar pattern applied to last drug injected with 38 people (79%) injecting morphine, including one who injected a benzodiazepine and morphine mix. No one had taken heroin on the day before interview.

#### 4.6 Trends in heroin use

The proportion of the IDU sample who had used heroin in the six months prior to interview has declined steadily over the four years in which the IDRS has been conducted in the NT, although it remains popular as a drug of choice (Table 4). The median price for a cap has declined, although the range has remained stable, the majority IDU heroin users continue to rate the purity as median to 'low'. No users reported heroin as 'easy' to obtain this year, compared to substantial proportions reporting it as 'easy' to 'very easy' to obtain in previous years. The number of IDU able to report on price, purity and availability remains small and results must be interpreted with caution.

Table 4: Selected trends in heroin use, IDU sample

	2000	2001	2002	2003
Variable	(n=100)	(n=135)	(n=111)	(n=109)
Used last 6 months (%)	50	36	22	16
Days used last 6 months (%)	30	6	2	5
IDU drug of choice (%)	44	39	46	43
Median price 1 cap (\$, range)	-	100	85 (60-100)	50 (60-100)
Purity (majority)	Medium-low	Medium-low	Medium-low	Low
Availability (%)				
easy to very easy	45	30	46	0

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

Key informant reports concerning heroin supply and use are consistent this year with previous years. Regular heroin use appears to be restricted to a small number of people who have personal avenues of supply. Small amounts of heroin become available on the street sporadically and are taken up quickly.

# 4.7 Summary of heroin trends

- Occurrence of heroin use in the NT IDU sample remains low and is declining.
- At a median of \$50 per cap, the price of heroin is stable or declining and purity remains low.
- Availability is restricted and sporadic.

#### 5.0 METHAMPHETAMINE

Up to 47 IDU survey respondents were able to comment on the price, purity and availability of methamphetamines. Eight key informants nominated methamphetamine as the main drug type used by the drug users they had had most contact with in the previous six months: two drug treatment workers, one prison rehabilitation staff, one ambulance officer, one clinician, two law enforcement officers, one emergency medical staff.

#### 5.1 Price

Table 5 displays the median price of each form of methamphetamine across the samples.

Table 5: Price of most recent methamphetamine purchase by type and amount, IDU 2002 and 2003

Form	Amount	2001	2002	200	)3
	_	Median price \$	Median price \$	No. of purchasers	Median price \$
Speed powder	Point		50	18	50
	1/8 gram	65	-	1	250
	1/4 gram	-	-	2	100
	1/2 gram	50	-	8	150
	1 gram	80	80	18	100
	Eightball	250	250	11	250
	Ounce	1400	-	1	1000
Base/wax/pure	Point	-	-	14	50
	1/8 gram	-	50	1	70
	1/4 gram	-	-	0	-
	1/2 gram	-	-	7	150
	1 gram	-	-	5	250
	Eightball	-	-	4	300
	Ounce	-	-	0	-
Crystal/ice/shabu	Point	50	80	8	50
	1/8 gram	-	-	0	-
	1/4 gram	-	-	0	-
	1/2 gram	-	-	5	200
	1 gram	200	300	6	300
	Eightball	-	-	1	1100
	Ounce	-	-	1	2000

- data not available

Source: O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample

The median price for the last purchase of one point of speed powder prior to interview was \$50, identical to 2002 (Table 5). Eight purchasers of half a gram reported a median of \$150 and the median price for a gram was \$100, an increase from the \$80 median found in 2002. The median price for an eightball was the same as that found in 2002 at \$250.

Small amounts of methamphetamine base were the same price as speed powder: \$50 for a point of base and \$150 for half a gram. One gram of base cost a median of \$250 and an eightball cost \$300. A point of crystalline methamphetamine cost a median of \$50, down from a median of \$80 in 2002. Half a gram cost \$200 and a gram \$300, as in 2002.

Additionally, 2003 IDU participants were able to comment on the prices of the various amounts and forms although they had not purchased any in the six months prior to interview. Their estimates agreed with the purchase prices listed in Table 5 with two exceptions: five additional people commented on the price of an ounce of speed powder, reporting a median of \$1350; six additional people commented on the price of one gram of base, reporting a median of \$300.

The majority of people able to comment on price movement felt that price had been 'stable' over the six months prior to interview for each of the three main forms of methamphetamine (Table 6). This was also the case in 2002. Fourteen percent of those able to comment on crystal methamphetamine this year felt that it had 'increased' in price.

Table 6: Methamphetamine price movements, IDU 2003

Change in price last six months	Speed powder	Base	Crystal
	(n=47)	(n=19)	(n=22)
Increased (%)	4	0	14
Stable (%)	77	84	59
Decreased (%)	0	0	0
Fluctuates (%)	6	5	9
Don't know (%)	13	11	18

Source: 2003 IDU sample

Key informants reported methamphetamine prices similar to, or slightly higher than, those reported by the IDU sample: \$80-\$100 for a gram at 5-10% purity, \$350 for an eightball, \$500 for four grams at 30-40% purity. Three key informants reported that prices had been 'stable' over the previous six months while two others reported that there had been a slight 'increase'.

# 5.2 Availability

Sixty-six percent of the 47 respondents who commented on methamphetamine powder availability reported that it was 'easy' or 'very easy' to get at the time of interview (Table 7) and 24% reported it as 'difficult' or 'very difficult' to get. All but one of the forty who commented in 2002 rated powder as 'easy' or 'very easy' to get. This year, 53% felt that

availability had remained 'stable' over the preceding six months, 13% thought that it was 'more difficult' to get and 11% believed that it was 'easier'. In 2002, 87% rated the availability of powder as 'stable'.

As with powder, the majority of base and speed users reported that these forms were 'easy' or 'very easy' to get, 67% and 55% respectively. A lower proportion of powder users reported that form as difficult' or 'very difficult' to obtain (24%) compared to base (28%) and crystal (36%) users. Fifty-three percent felt that base availability had remained 'stable' with equal proportions, 16% each, reporting that it was 'easier' or 'more difficult' to get. Fifty-nine percent felt that crystal availability had been 'stable' and eighteen percent reported it as 'more difficult' to get while no one reported it as 'easier' to obtain.

Table 7: Estimates of methamphetamine availability, IDU 2003

Variable		Powder (n=47)	Base (n=19)	Crystal (n=22)
Current availability (%)	Very easy	43	17	14
	Easy	23	50	41
	Difficult	15	22	27
	Very difficult	9	6	9
	Don't know	11	6	9
Availability change (%)	More difficult	13	16	18
	Stable	53	53	59
	Easier	11	16	0
	Fluctuates	11	5	5
	Don't know	13	11	18

Source: 2003 IDU sample

Half the people who used powder usually scored from a friend over the six months prior to interview (50%, Table 8). One quarter (24%) usually scored from a street dealer and one in ten (11%) usually scored from a dealer's home. An almost identical distribution of sources was reported for the last time that people scored powder prior to interview. The median length of time to usually score was 30 minutes.

Scoring from a friend was the most common source for base users as well (42%, Table 8), but scoring from a mobile dealer (11%) or through a home delivery (21%) was more common amongst base users than amongst powder users (7% each). The median length of time to usually score was 30 minutes.

The usual sources for crystal users were also more evenly distributed, with 30% scoring from a friend, 20% from a mobile dealer and 15% each form a street dealer, at a dealer's home of through a home delivery. The median length of time to usually score was 43 minutes.

Table 8: Methamphetamine source and length of time to score, IDU 2003

Variable		Powder (n=46)	Base (n=19)	Crystal (n=20)
Usual source (%)	Street dealer	24	11	15
	Dealers home	11	11	15
	Friend	50	42	30
	Mobile dealer	6	11	20
	Home delivery	7	21	15
	Gift from friend	2	5	5
Last source (%)	Street dealer	22	11	15
	Dealers home	11	11	15
	Friend	54	42	25
	Mobile dealer	9	16	20
	Home delivery	2	16	15
	Gift from friend	2	5	10
Time to score (median mins)	Usually*	30	30	43
	Last time	30	30	30
Time to score (median mins)	j			

\* over the six months prior to interview

Source: 2003 IDU sample

Key informants reported current availability as 'easy' or 'very easy', and availability over the preceding six months as 'stable'. The availability of crystal methamphetamine was reported as 'increasing', sourced primarily from southern states. One user group key informant reported that there appeared to be more people in Darwin able to 'cook up' base forms of methamphetamine that there had been in the past, although the 'quality' and reliability of the product was questionable.

# 5.3 Purity

Four out of ten users rated the purity of methamphetamine powder as 'low' (43%, Table 9) and just under a quarter (21%) rated it as 'high'. Thirty-four percent felt that the purity had 'decreased' over the six months prior to interview and 26% felt that it had 'fluctuated'. Almost half (47%) of the base users rated the purity of base as 'medium', while 32% felt that the purity of base had 'increased' and 32% felt that it had remained 'stable' over the previous six months. Fifty percent of users rated the purity of crystal methamphetamine as high', while 36% reported that it's purity had been 'stable' and 27% that it had 'increased'.

Table 9: Purity and recent changes to purity of methamphetamine, IDU 2003

Variable		Powder	Base	Crystal
		(n=47)	(n=19)	(n=22)
Current purity (%)	High	21	11	50
	Medium	15	47	18
	Low	43	16	14
	Fluctuates	11	16	9
	Don't know	11	11	9
Purity change (%)	Increasing	11	32	27
	Stable	9	32	36
	Decreasing	34	5	9
	Fluctuating	26	16	9
	Don't know	11	16	18

Source: 2003 IDU sample

Forensic analysis of methamphetamine seizures by NT Police<sup>2</sup> in 2001/02 showed a median purity of approximately 6%, the lowest of all Australian jurisdictions that reported purity. A very small number of seizures in that year showed purity levels up 95% ( $n \le 3$ ). Four AFP seizures in 2002/03<sup>3</sup> found a median purity of 77%.

Key informants reported that the purity of the most common form of methamphetamine, speed powder, is generally low (5-10%). Methamphetamine of higher purity levels, 30-40% was reported as being available, mainly marketed as 'ice' and to a lesser degree as 'base'. However, some key informants commented that the purity of these forms varied and that low purity methamphetamine was being marketed under these names to imply a higher purity.

#### 5.4 Use

#### 5.4.1 Methamphetamine use among IDU

Sixty-eight percent of the IDU sample had used some form of methamphetamine in the six months prior to interview (Table 10). Fifty-nine percent had used speed powder, 30% base and 33% ice. In addition, 17% had used amphetamine liquid and 10% had used some type of pharmaceutical stimulant (eg duromine or Ritalin). In total, 70% of the IDU sample had used one or more of these forms of stimulant.

<sup>&</sup>lt;sup>2</sup> Australian Crime Commission, 2003.

<sup>&</sup>lt;sup>3</sup> Australian Crime Commission, in press.

Table 10: Forms of stimulant used previous six months and primary form

2001		2002		2003	
(n=135)		(n=111)		(n=109)	
used	most often	used	most often	used	most often
63	51	67	56	59	44
18	7	21	7	30	9
24	9	20	9	33	13
13	1	18	0	17	2
8	2	1	0	2	1
15	3	7	0	10	1
	73		72		70
	used 63 18 24 13 8	(n=135)           used         most often           63         51           18         7           24         9           13         1           8         2           15         3	(n=135)         (n=135)           used         most often         used           63         51         67           18         7         21           24         9         20           13         1         18           8         2         1           15         3         7	(n=135)         (n=111)           used         most often         used         most often           63         51         67         56           18         7         21         7           24         9         20         9           13         1         18         0           8         2         1         0           15         3         7         0	(n=135)         (n=111)         (n=111)           used         most often         used         most often         used           63         51         67         56         59           18         7         21         7         30           24         9         20         9         33           13         1         18         0         17           8         2         1         0         2           15         3         7         0         10

Source: O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample

Twenty-eight percent of the sample reported methamphetamine as the drug injected most often in the month prior to interview. Twenty-nine percent reported methamphetamine as the last drug they injected. Thirteen percent reported taking speed powder on the day before interview, and one person reported taking ice.

#### 5.4.2 Current patterns of methamphetamine use

#### **Form**

Speed powder was also the form most used by methamphetamine users, 44% of the IDU sample (Table 10). Base was the form most used by 13% and ice by 9%. Only 4% of the total sample reported liquid or pharmaceutical amphetamine as the form they used most in the last six months.

#### Frequency

Speed powder was used on a median of 14 days (range 1-180) over the six months prior to interview, double the median of seven days found in 2002. Fifty-seven percent of speed users used it on more than 10 days (equivalent to at least fortnightly) over the previous six months, 48% had used it for 24 days (at least weekly) or more and 29% for 50 days or more (at least twice a week). Seven people reported daily use. This compares to 38% using on more than 10 days, 20% using on 50 or more days and two people reporting daily use in 2002.

Methamphetamine base was used on a median of 26 days (range 1-180). Fifty-seven percent of base users used it on more than 10 days, 40% used on more than 50 days and four people reported daily use. The equivalent proportions in 2002 were 52%, 35% and no reports of daily use.

Methamphetamine ice was used on a median of 6 days (range 1-180) in the six months prior to interview, compared to a median of 9 days in 2002. Forty-two percent of ice users used it on more than 10 days, 22% used it on 50 days or more and two people reported daily use. In 2002, 41% used it on more than 10 days, 23% used it on more than 50 days and there were no reports of daily use.

Considering all forms of methamphetamines as a group, the median days used over the six months prior to interview was 18.5 (range 1-180). Seventy percent of this group used one or more forms of methamphetamine on more than 10 days in the previous six months, 35% on more than 50 days and 10 people (12%) report daily use.

Of the 31 people who reported injecting some form of methamphetamine more often than any other drug over the month prior to interview, 55% (n=17) reported injecting at least weekly but not daily and 32% (n=10) reported injecting at least daily.

#### Routes of administration

As in previous years, injecting remained the most used route of administration for methamphetamine users, with over 95% of those who had used each of the main forms (ie speed, base or ice) injecting. Only one person had used methamphetamine in the last six months and not injected.

#### 5.4.2 Key informant comment

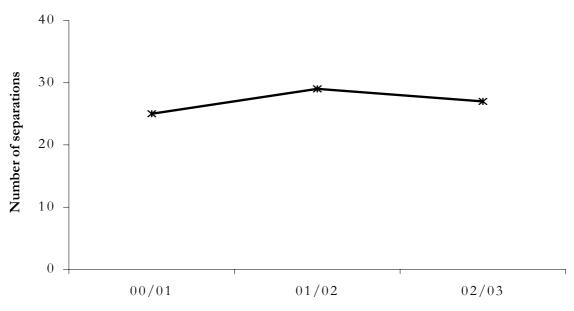
Key informant comments supported the IDU survey results shown above. Speed powder was reported as the most common form of methamphetamine and the primary form for 80-90% of speed users. Key informants had encountered users whose primary forms were base, crystal or liquid with estimates of the proportions using these forms varying from 5% to 10%. The availability of crystal methamphetamine, in the form of 'ice', was reported as having increased over the previous six to 12 months, although as mentioned above some key informants had caveats about the accuracy of user identification of the various forms.

Key informants reported a high proportion of daily or almost daily use: '80% using daily', 'most using daily', 'daily if available [and there is] plenty of availability'. The main route of administration was reported as intravenous for 80-90% of users. Daily and almost daily users are reported as injecting 3-4 times a day and using around two grams a day.

# 5.6 Health and methamphetamines

The number of separations from NT hospitals where stimulants are mentioned as either the primary of a secondary diagnosis code are shown in Figure 1. The number is relatively stable over the period shown. In each financial year the numbers are primarily accounted for by diagnoses of 'harmful use'.

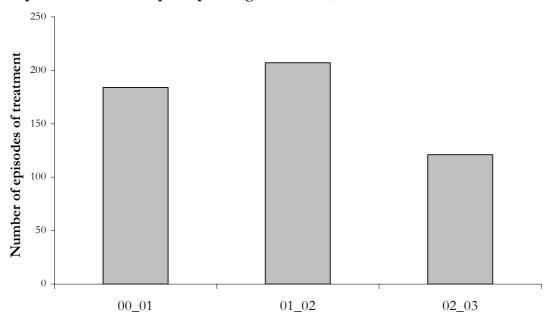
Figure 1: NT hospital separations with stimulant (exc. cocaine) mentions, 2000/01 to 2002/03



Source: NTDHCS

The number of treatment episodes for own drug use in Alcohol and Other Drug Treatment Services (AODTS) where amphetamines is the principal drug of concern shows fluctuation over the last three financial years, with a drop in 2002/03 to 121, or 6% of all episodes from 207 (9%) in 2001/02 (Figure 2).

Figure 2: Number of episodes of treatment for own drug use where amphetamines are the principal drug of concern, 2000/01 to 2002.03



Source: NTDHCS

Key informants report no particular change in treatment service seeking behaviour or activity associated with methamphetamines. Some key informants noted increased chaotic and aggressive behaviour associated with the use of crystal methamphetamine (ice) and thought that this would have a growing impact on service providers.

## 5.7 Flashcard Analysis

IDU participants who reported using one or more types of methamphetamine (powder, base or crystal) in the six months prior to interview were shown a 'flashcard' comprised of photographs of various forms of methamphetamine and asked to identify which photograph(s) most closely resembled what they had used. They were also asked to nominate which form they had most often used. Photographs were grouped into three categories (A, B and C) assumed to correspond to powder, base and crystal form respectively. The results of this identification are shown in Table 11, and are discussed below.

It is worth noting that relatively large proportions in most categories, from 19% to 36%, were unwilling or unable to make an identification. Interviewers reported a variety of reasons for this, with some respondents not seeing a familiar photograph, some being unwilling to commit to a particular photograph, and others complaining about the quality of the photographs.

Table 11: Flashcard identification by methamphetamine users, IDU 2003

	Powder		Base		Ice	
	Used 6 months <sup>1</sup> (n=65)	Primary form <sup>2</sup> (n=48)	Used 6 months <sup>1</sup> (n=23)	Primary form <sup>2</sup> (n=10)	Used 6 months <sup>1</sup> (n=24)	Primary form <sup>2</sup> (n=14)
A (%)	57	67	12	0	8	0
B (%)	6	4	45	50	8	0
C (%)	6	11	18	20	57	64
Not specified (%)	31	19	24	30	27	36

<sup>1. %</sup> used this form in the last 6 months

Source: 2003 IDU sample

#### 5.7.1 Speed

The majority of those who had used powder within the last six months (57%, Table 11) and those who nominated powder as their most often used form (67%) identified photographs from the A group. People who nominated powder as their primary form were slightly more likely than those who had used powder to identify a photograph from group B or C: 15% compared to 12%. A surprisingly large proportion of users, 31%, did not specify a photograph.

<sup>2. %</sup> who nominated this as the form they used most often

#### 5.7.2 Base

Forty-five percent of base users and 50% of those who named base as their primary form identified a photograph from the B group. Large proportions of users (30%) and primary users (20%) identified photographs from groups A or C. Again, surprisingly large proportions of each did not identify a photograph.

#### 5.7.3 Ice/crystal meth

Fifty-seven percent of users and 64% of primary crystal users identified a photograph from group C as the form they had used. Sixteen percent of users and no primary users identified an A or B group photograph. Twenty-seven percent of users and 36% of primary users did not identify any photograph.

#### 5.7.4 Summary

Powder and crystal users were most likely to choose photographs from the image-groups assumed to show those forms. Base users showed a more mixed response – they were less likely to choose photographs from the nominally base image-group and more likely to identify photographs from one of the other image-groups.

## 5.8 Trends in methamphetamine use

The level of use of all forms of methamphetamine has remained consistent over the last three IDU samples: 73%, 72% and 70%. The proportions reporting powder use has dropped, compensated for by increased use of base and crystal forms. Frequency of use of speed powder has increased, with more than half powder users reporting at least fortnightly use compared to just over a third in 2002. The median days of use of powder has increased from seven in 2002 to 14 in 2003. The median days of use in the last six months is 19, a substantial increase from 8 in 2002 but lower than the 26 found in 2001. Injecting remains the predominant route of administration.

Consistent with key informant reports, the median price of a gram of speed powder has increased from \$80 in 2001 and 2002 to \$100 this year, and the price of 1/8 gram of base has increased from \$50 in 2002 to \$70 this year.

Purity of all forms has remained stable and consistent with the form: powder is reported as 'low', base as 'medium' and crystal as 'high'. Similarly, availability of powder is higher than base or ice, although more than half of the users of each form rate them as 'easy' or 'very easy' to obtain.

Key informants reported an increased availability of base and crystal forms, along with an increased occurrence of 'passing off' low purity forms as higher purity. This may be reflected in the relatively high proportions of IDU respondents unwilling or unable to identify forms from the flashcards.

# 5.9 Summary of methamphetamine trends

- Recent methamphetamine use remains high (68% of the IDU sample) and consistent with previous years.
- Powder continues to be the most common and most frequently used form although base (30%) and crystal (33%) show an increased presence.
- The median price of a gram of powder has increased from \$80 in 2002 to \$100 in 2003.
- Methamphetamine continues to be easy to obtain, with the availability of the more pure forms (base and crystal) increasing.
- Methamphetamine was the most frequently injected drug in the month prior to interview for 28% of the IDU sample, increasing from 19% in 2002.
- The decline in treatment agency episodes involving amphetamines does not reflect the stability of use and availability.

## 6.0 COCAINE

#### 6.1 Price

No IDU participants reported buying cocaine in the six months prior to interview. Two people commented on the price of one gram of cocaine, one quoting \$280 and the other \$350.

## 6.2 Availability

No IDU participants commented on recent price change, current purity or changes to purity. One person commented that cocaine was 'very difficult' to obtain, getting 'more difficult' and that they had last scored from a friend.

#### **6.4** Use

### 6.4.1 Cocaine use among IDU

Three percent (n=3) of the IDU sample reported cocaine as their drug of choice. Five people reported using cocaine in the six months prior to interview for a median of 3.5 days. Three of the five had injected. Cocaine powder was the only form reported. Two people reported using cocaine on the day before interview and no one reported cocaine as the drug injected most often in the month prior to interview. The proportion of the IDU sample reporting cocaine use within six months of interview has declined steadily over the last four years: 18% in 2000, 13% in 2001 and 10% in 2002.

## 6.5 Summary of cocaine trends

• Cocaine use in the NT is low and it's use amongst the IDU sample continues to decline, from 18% in 2000 to 3% in 2003.

### 7.0 CANNABIS

### 7.1 Price

Thirty-seven people paid a median \$25 for a gram of hydroponic cannabis in their last purchase prior to interview, and 22 people paid a median of \$305 for their last purchase of an ounce of hydro (Table 12). Smaller numbers of participants had paid similar prices for bush weed, although the median price of one ounce was substantially lower at \$200.

Additional 2003 participants were able to comment on the prices of selected amounts and forms although they had not purchased any in the six months prior to interview. Gram prices are unaffected by the additional comments. An extra 37 people commented on the price of an ounce of hydroponic cannabis, raising the median price slightly to \$310, and an extra 12 people commented on the price of an ounce of bush weed, raising the median to \$230.

The forms of cannabis distinguished in the price questions of the 2003 IDU survey were not distinguished in previous years and so direct comparison is impossible, however the general prices found in 2002 are shown alongside the hydroponic prices found this year in Table 12.

Table 12: Price of most recent cannabis purchase by type and amount, IDU 2001 to 2003

		2001	2002*	200	)3
Form	Amount	Median	Median	Number of	Median
		price \$	price \$	purchasers	price \$
Hydroponic	Gram	25	25	37	25
	2 grams		25	20	30
	3 grams	-	-	8	50
	Bag	25	25	14	28
	½ ounce	95	78	5	100
	½ ounce	177	150	4	170
	Ounce	300	300	22	305
	Other	-	-	7^	50
Hash / hash oil	Gram	50	_	3	50
	Cap	50	_	0	-
Bush weed	Gram	_	_	18	25
	2 grams	_	_	2	25
	3 grams	_	_	2	50
	Bag	-	-	6	25
	½ ounce	_	-	1	60
	½ ounce	_	-	1	120
	Ounce			9	200

<sup>-</sup> data not available

<sup>\*</sup> hydroponic and bush weed were not distinguished in the price questions in these years

<sup>^</sup> foil, 2.4g, 1.4g, 1.5g, 4g, sachet

Most cannabis users (64%, Table 13) who were able to comment on price reported that it had been 'stable' over the six months prior to interview, although almost a quarter (23%) reported that it had been 'increasing'.

Table 13: Cannabis price movements, IDU sample 2003

Variable		2003 (n=86)
Change in price last six months		
	Increasing	23
	Stable	64
	Decreasing	1
	Fluctuating	5
	Don't know	7

Source: 2003 IDU sample

Key informant comments about the price of cannabis are consistent with the IDU survey findings, with bush weed being generally cheaper than hydroponic.

# 7.2 Availability

A large majority of cannabis users who were able to comment rated cannabis as 'easy' or 'very easy' to obtain (81%, Table 14), with most (63%) reporting that availability had remained 'stable' over the preceding six months and 20% reporting it as more 'difficult'. In 2002 all cannabis users, and in 2001 98%, reported it as 'easy' or 'very easy' to obtain

Table 14: Estimates of cannabis availability, IDU 2003

Variable		2001 (n=101)	2002 (n=68)	2003 (n=86)
Current availability (%)	Very easy	72	100	43
	Easy	26		37
	Difficult	-	-	13
	Very difficult	-	-	1
	Don't know	-	-	6
Availability change (%)	More difficult			20
	Stable			63
	Easier			4
	Fluctuates			7
1	Don't know			7

- data not available

Over the six months prior to interview cannabis users usually (42%, Table 15) scored cannabis from a friend. Seventeen percent usually scored from a street dealer and another 17% from a dealer's home. This distribution of sources also applied to the last score prior to interview: 46% from a friend, 16% from a street dealer and 17% from a dealer's home.

Comparable data from previous years is shown in Table 15. While only partial data is available it does suggest that the proportion usually scoring from a friend has increased and that scoring from street dealer or dealer's home has declined.

Table 15: Source and length of time to score cannabis, IDU 2003

Variable		2001	2002	2003
valiable		(n=106)	(n=68)	(n=86)
Usual source (%)	Street dealer	21	-	17
	Dealer's home	39	-	17
	Friend	23	-	42
	Grow your own	2	-	1
	Gift from friend	-	-	4
	Mobile dealer	-	-	7
	Home delivery	-	-	5
	Next door neighbour	-	-	1
	Don't use	-	-	6
Last source (%)	Street dealer	-	14	16
	Dealer's home	-	28	17
	Friend	-	46	46
	Grow your own	-	-	1
	Gift from friend	-	-	4
	Mobile dealer	-	-	5
	Home delivery	-	5	5
	Next door neighbour	-	-	1
	Don't use	-	-	6
Time to score (median mins)	Usually*	-	-	30
	Last time	-	5^	30

<sup>-</sup> data not available

<sup>\*</sup> over the six months prior to interview

<sup>^</sup> modal value

Most cannabis users (57%) did not know the original source of the cannabis they used; 22% reported that it had come from a 'small-time/backyard user/grower' and 19% from a 'large scale cultivator/supplier'. Only 2% reported growing their own.

Key informants reported cannabis as being readily available and that availability had been stable or increasing.

## 7.3 Potency

Almost half (49%) of cannabis users who were able to comment rated it's potency as 'high', with 31% rating it as 'medium'. Over half (59%) felt that the potency of cannabis had been 'stable' in the six months prior to interview while 12% felt it had 'increased' and 12% that it had decreased.

Partial comparison data is available from 2001 and 2002 and is shown in Table 16, although no particular pattern is apparent across the years.

Table 16: Potency and recent changes to potency of cannabis, IDU 2003

Variable		2001 (n=106)	2002 (n=68)	2003 (n=86)
Current potency (%)	High	51	52	49
	Medium	46	37	31
	Low	nr	nr	6
	Fluctuates	nr	nr	8
	Don't know	nr	nr	6
Potency change (%)	Increasing	14	13	12
	Stable	70	65	59
	Decreasing	nr	nr	12
	Fluctuating	11	nr	12
	Don't know	nr	nr	6

Source: O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample

Key informants report that the potency of hydroponic cannabis is high and consistent, and that this contributes to it's popularity and to a relative paucity of other forms such as hash and hash oil.

#### 7.4 Use

### 7.4.1 Cannabis use among IDU

Only 4% of the 2003 IDU nominated cannabis as their main drug of choice, although 83% had used cannabis within the six months prior to interview (Table 3). Cannabis remains the single most used illicit drug in the NT.

### 7.4.2 Current patterns of cannabis use

#### **Form**

Eighty-three percent (Table 17) of the IDU sample had used hydroponic cannabis in the six months preceding interview, with 77% nominating it as their most often used form. Sixty-three percent had used bush weed, although this was the most often used form for only 6%. Only 5% of the IDU sample had used hash oil.

Table 17: Forms of cannabis used previous six months and primary form, IDU 2003

Form	(	2001 (n=135)		2002 (n=111)		2003 (n=109)	
	Used	Most often	Used	Most often	Used	Most often	
Hydroponic (%)	79	72	83	74	83	77	
Bush (%)	60	8	72	10	63	6	
Hash (%)	30	2	24	2	17	0	
Hash oil (%)	21	1	23	0	5	0	
All forms (%)	83		86		83		

Source: O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample

Table 17 compares the use of cannabis over the last three IDU surveys. Hydroponic cannabis has retained it's popularity as the form used by the highest proportion of the IDU and as the form used most often, and bush weed continues to be the second most used form. The use of hash or hash oil, however, has declined over the last three years from 51% in 2001, to 47% in 2002 to 21% in 2003.

## Frequency

Almost half of recent users (46%) had used cannabis on 180 days over the preceding six months, ie daily, and 60% reported using for at least 90 days, ie every second day. These proportions are lower than those found in 2002, where 53% used daily and 75% used on at least 90 days. The median number of days used over the six months in 2003 was 120, compared to 180 in 2002 and 90 in 2001.

Key informant reports suggest that the pattern of cannabis use varies somewhat with age and other drug use. Most report that cannabis is used as an adjunct by other drug users to manage withdrawal or psychological states such as depressions or anxiety, rather than

because it is the drug of choice. School based key informants report that cannabis is the illicit drug favoured by young people still at school. They also report that at least some students manage an infrequent use of cannabis without impact on their schooling, while more frequent users generally show problems with their attendance and quality of work. Cannabis use in schools was reported to be strongly associated with alcohol use.

### 7.5 Health and cannabis

NT hospital separations where cannabinoids are mentioned shows a steady upward trend over the past three financial years (Figure 3), with an increase of 49% on the 2000/01 financial year. This rise is primarily comprised of increases in separations recording harmful use (55% over the period) and psychotic disorder (63%).

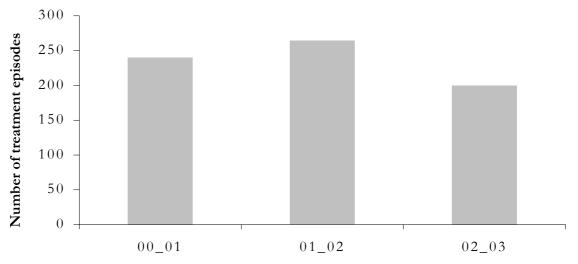
250 200 - 150 - 150 - 100 - 50 - 00/01 01/02 02/03

Figure 3: NT hospital separations with cannabinoid mentions, 2000/01 to 2002/03

Source: NTDHCS

The number of treatment episodes at AODTS where cannabis is the principal drug of concern has dropped from 264 in 2001/02 to 200 in 2002/03 (Figure 4), although as a proportion of total episodes it remains stable at around 10%.

Figure 4: AODTS treatment episodes where cannabis os the principal drug of concern, 2000/01 to 2002/03



Source: NTDHCS

### 7.6 Trends in cannabis use

Over the last four years cannabis has consistently been the illicit drug used by most of the IDU sample, the most frequently used drug, and the most common drug reported by the key informants. The proportion of the samples use is consistent with key informant reports that cannabis use is high amongst all drug users, somewhere between 'at least 80%' and 'all of them'.

The price of cannabis appears stable as does it's potency. Some key informants report potency increasing over a period of years, although this due to the increasing availability of consistently potent hydroponic cannabis rather than an increase in the potency of cannabis as such.

Cannabis remains 'easy' to obtain. Most IDU and key informants report that the recent introduction of 'drug house' legislation<sup>4</sup> and associated policing has had no impact on ease of availability, but that it has required users to rely on 'home deliveries' or street dealing more than previously. This change is not clearly reflected in the IDU results (see Table 15) although it may explain the drop in the IDU proportion sourcing from 'dealers home' compared to 2001.

The decline in the number of AOD treatment episodes where cannabis is the principal drug of concern contrasts to the stability of use, price and availability found in the IDU survey, the KI reports of increasing use particularly amongst young people at school and the increase in hospital separations involving cannabinoids.

42

<sup>&</sup>lt;sup>4</sup> Misuse of Drugs Act, 2002; enacted August 202.

# 7.7 Summary of cannabis trends

- Cannabis remains the most prevalent and frequently used illicit drug (83% of the IDU sample), with availability and potency high.
- Cannabis price, potency and availability have been stable; a gram costs \$25 and an ounce \$300.
- The number of separations from NT hospitals involving cannabinoids has increased by 49% over the last three financial years.
- Episodes of treatment for problematic cannabis use have declined.

### 8.0 OPIOIDS

## 8.1 Morphine

#### 8.1.1 **Price**

Sixty-eight people in the IDU 2003 sample paid a median price of \$60 for 100mg tablets of MS Contin within six months of interview (Table 18). Thirty-four people paid a median of \$30 for 60mg tablets of MS Contin, and 7 people paid \$15 for 30mg tablets. The price of Kapanol was slightly lower, at \$50 for 100mg capsules. Prices for 100mg and 60mg doses of unspecified morphine type were provided by additional participants who had not purchased morphine in the last six months but were able to comment. These estimates confirmed the prices paid by purchasers.

Table 18: Price of most recent morphine purchase by type and amount, IDU 2002 and 2003

		2001	2002	20	03
Form	Amount	Median price	Median price	Number of	Median price
		\$	\$	purchasers	\$
MS Contin (n)	5mg	-	-	0	-
	10mg	-	-	1	10
	30mg	-	15	7	15
	60mg	-	30	34	30
	100mg	50	50	68	60
	200mg	-	-	2	100
Kapanol (n)	20mg	-	-	3	15
	50mg	-	25	11	25
	100mg	-	40	52	50
Anamorph (n)	30mg	-	-	30	20

- data not available

Source: O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample

Comparable data from previous years is limited (Table 18) but suggests that the price of 100mg tablets of both MS Contin an Kapanol has increased from, respectively, the \$50 and \$40 found in previous years.

Most participants, 68% Table 19, reported that the price of morphine had been 'stable' in the six months prior to interview, although 18% reported that it had 'increased'.

Table 19: Morphine price movements, IDU sample 2003

Variable	•	2003 (n=72)
Change in price last six months (%)		
	Increasing	18
	Stable	68
	Decreasing	1
	Fluctuating	6
	Don't know	7

Source: 2003 IDU sample

### 8.1.2 Availability

Most morphine users reported it as 'easy' (52%, Table 20) or 'very easy' (16%) to obtain, while over a quarter felt that availability was 'difficult' (25%) or very difficult (3%). Morphine availability appears to have fluctuated over the last three years. In 2001 54% reported it as 'easy' or 'very easy' to obtain while almost half (47%) reported it as at least 'difficult' to obtain. In 2002 over half (54%) the morphine users reported it as 'easy' to obtain and over a third (35%) as 'very easy' to obtain.

Almost half (48%) of the users this year reported availability as 'stable' in the six months prior to interview while a third reported that it was 'more difficult' to obtain.

Table 20: Estimates of morphine availability, IDU 2003

Variable		2001 (n=98)	2002 (n=78)	2003 (n=73)
Current availability (%)	Very easy	15	35	16
	Easy	39	54	52
	Difficult	44	-	25
	Very difficult	3	-	3
	Don't know	0	-	4
Availability change (%)	More difficult			33
	Stable			48
	Easier			3
	Fluctuates			12
	Don't know			4

- data not available

In the six months prior to interview 46% (Table 21) of users usually scored their morphine from a friend, 31% scored from a street dealer and 13% at a dealer's home. This pattern also applied to the source of the last score before interview. While only partial data is available for comparison to previous years it appears that the proportion scoring from a friend has increased. The median time to usually score morphine in the six months prior to interview was 30 minutes.

Table 21: Source and length of time to score morphine, IDU 2003

Variable		2001	2002	2003
		(n=98)	(n=78)	(n=71)
Usual source (%)	Don't use	-	-	1
	Street dealer	30	-	31
	Dealers home	-	-	13
	Friend	29	-	46
	Mobile dealer	-	-	7
Last source (%)	Don't use	-	-	1
	Street dealer	-	27	37
	Dealers home	-	19	12
	Friend	-	26	46
	Mobile dealer	-	-	4
Median time to score (mins)	Usually	-	-	30
	Last time	-	10	15

<sup>-</sup> data not available

Source: O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample

#### 8.1.3 Use amongst the IDU

Eighty-two percent of the IDU sample had used morphine within six months of interview. While only 19% nominated morphine as their drug of choice, 64% had injected it more often than any other drug in the month prior to interview, 60% nominated it as the last drug they injected prior to interview and 55% had used morphine on the day before interview. Eighty-two percent of those who injected morphine most often in the month prior to interview nominated heroin as their drug of choice while 90% of those who preferred another drug but most often injected morphine, did so because of the poor availability of their drug of choice.

#### 8.1.4 Form

Most users of morphine in the six months prior to interview used illicit morphine (73% of the IDU sample, Table 22), while 56% nominated it as the form they used most often. While the total proportion of the IDU using morphine and the proportion using illicit

morphine are similar to that found in 2002 (87% and 76% respectively), the proportion using licit morphine has declined from 42% in 2002 to 35% in 2003.

Of the 89 people who said they had used morphine in the previous six months, 11% had used only licit morphine, 60% only illicit and 29% both.

MS Contin was by far the most common brand of morphine used most often (by 72% of the IDU sample and 86% of morphine users). Choice of brand was unaffected by whether licit or illicit morphine was the most used form and is consistent with the pattern seen in 2002.

Table 22: Forms and main brand of morphine used previous six months and primary form, IDU 2003

	20	00	20	01	20	02	20	03
Variable	(n=	100)	(n=	135)	(n=	111)	(n=	109)
	Used	Most	Used	Most	Used	Most	Used	Most
		often		often		often		often
Form (%)								
Licit	-	-	42	30	42	40	35	28
Illicit	-	-	73	54	76	47	73	56
All forms	74		84		87		84	
Brand used most often								
MS Contin					74		72	
Kapanol					6		5	
Morphine Liquid							1	
Anamorph					2		3	
MS Contin/Kapanol							1	
Unsure							3	

<sup>-</sup> data not available

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

The number of 100mg doses of both MS Contin and Kapanol dispensed through community pharmacies is shown in Figure 5. It shows that prescription levels have declined for each financial year since 1999/2000. In contrast, the proportion of the IDU sample using all forms of morphine increased from 2000 into 2001 and has since remained stable (Table 22). The proportion using licit morphine has declined slightly from the 2002 IDRS to this year, while the proportion using illicit morphine is stable. The proportion using MS Contin as their main brand has also been stable over 2002 and 2003. Together, the prescription and IDU use data suggest that the marked decline in the number of morphine doses dispensed since 1999 has had little impact on the level of illicit morphine use amongst the IDU samples.

Similarly, the relationship between prescription and availability is not transparent. The proportion of the IDU sample reporting morphine as 'easy' or 'very easy' to obtain is higher in the 2003 IDRS (68%, Table 20) than in the 2001 IDRS (54%), although the

prescription levels are lower. At the same time, a 'spike' in prescriptions seen in the second quarter of 2002 (not shown) may be reflected in the high proportion of the IDU sample (89%) from that year's IDRS reporting 'easy' or 'very easy' availability of morphine.

Prescriptions of Kapanol capsules show a small but steady increase over the period graphed, again showing no obvious relation to morphine or Kapanol prevalence in the IDU sample.

300000 250000 200000 150000 100000 50000 99\_00 00\_01 01\_02 02\_03

Figure 5: Number of MS Contin 100mg tablets and Kapanol 100mg capsules prescribed by quarter

Source: NT Poisons Control

Key informants suggest that the supply of morphine available for diversion into the illicit market has been affected by the reduction in the numbers of doses being prescribed. One result of this has been that alternative opiates have become slightly more prevalent on the market – including buprenorphine, codeine and pethidine – either for personal use or to trade for morphine. Also, it was proposed by two key informants that the proportion of available prescriptions being diverted has increased through increased forging, theft of legitimate prescriptions, and false reports of stolen scripts, and by one that interstate importation had increased. The opinion of key informants is that morphine remains easy to obtain and that there has been no substantial impact on price or availability.

### 8.1.5 Frequency

The majority of morphine users, 56%, reported daily use (ie 180 days over the six months prior to interview), compared to 63% in 2002. Sixty-nine percent reported using on at least 90 days, ie every second day.

Sixty-six percent of morphine users injected at least daily in the month prior to interview. Of those who had injected morphine more than any other drug in the month prior to interview, 73% had injected at least daily.

Key informant estimates of daily users vary upwards from 50% and suggest that daily users inject 2-4 times a day, using between 300 and 800mg per day.

### 8.1.6 Poly-drug use

Of the sixty people who had used morphine on the day prior to interview, 43% had also used cannabis, 13% benzodiazapines and 12% alcohol. Speed powder and methadone had each been used by 5% of this group. Forty-nine people reported using morphine at least daily over the six months prior interview. Selected characteristics of the other drug use of this group is shown in Table 23.

Table 23: Polydrug use in IDU sample who used morphine daily over previous six months

Drug type	Percent of daily morphine users	Median number of days used
Tobacco	98	180
Cannabis	78	95
Benzodiazapines	67	13
Alcohol	57	17
Any form of amphetamine	57	12
Physeptone illicit	49	4
Antidepressants	22	42
Buprenorphine illicit	20	2
Methadone licit	18	30
Other opiates	18	7
Ecstasy	16	2
Methadone illicit	14	13
Heroin	14	4
Physeptone licit	12	60
Buprenorphine licit	4	44
Hallucinogens	4	2
Homebake	4	1
Inhalants	2	3

Source: 2003 IDU sample

Tobacco and cannabis were the most used other drugs, both in terms of the proportion of the group using and the median days used. Benzodiazapines, alcohol and amphetamines were each used by more than half the group but less frequently than antidepressants, licit methadone, licit physeptone or licit buprenorphine. Illicit

physeptone and illicit buprenorphine were used by more people than the licit forms of these drugs. Licit methadone was more commonly used than illicit methadone.

Key informant comments are generally consistent with the pattern of polydrug use found among the IDU sample. Benzodiazepines were seen as the main morphine withdrawal management drug. Methadone was identified by some key informants as a growing morphine alterative, although only one mentioned physeptone specifically. The relatively high level of illicit physeptone use found in the IDU sample was not identified by key informants. The proportion using methamphetamines was estimated at less than 50%.

### 8.2 Methadone

A small number of people, less than half of those who reported using methadone in the six months prior to interview, were able to respond to questions about price and availability, and so results are reported as counts, rather than percentages, and must be treated with caution. Corresponding results were not reported in previous years.

#### 8.2.1 Price

Fifteen people reported purchasing 10mg Physeptone tablets in the six months prior to interview for a median price of \$10. Only two people reported purchasing methadone syrup, at: \$50 for 50mg and \$70 for 30mg. Twenty-five people were willing to comment on price movement in methadone over the six months prior to interview, with 10 reporting that price had been 'stable' (Table 24).

Table 24: Methadone price movements, IDU sample 2003

Variable	2003 (n=25)
Change in price last six months (n)	
Increasing	3
Stable	10
Decreasing	1
Fluctuating	2
Don't know	9

Source: 2003 IDU sample

#### 8.2.2 Availability

Opinions on availability of methadone among the small number willing to comment were mixed, with approximately equal numbers reporting it as 'easy' (n=9) or 'difficult' (n=7) to obtain. Forty-four percent (n=11) reported that availability had been 'stable' in the six months prior to interview (Table 25).

Table 25: Estimates of Methadone availability, IDU 2003

Variable		2003 (n=109)
Current availability (n)	Very easy	0
	Easy	9
	Difficult	7
	Very difficult	1
	Don't know	8
Availability change (n)	More difficult	5
	Stable	11
	Easier	1
	Fluctuates	0
	Don't know	8

Source: 2003 IDU sample

The most common usual and last sources for obtaining methadone were street dealer (n=7 and n=4 respectively) and friend (n=5 and n=8), with a median usual time to score of 45 minutes (Table 26).

Table 26: Source and length of time to score morphine, IDU 2003

Variable		2003
		(n=109)
Usual source (n)	Don't use	9
	Street dealer	7
	Dealers home	1
	Friend	5
	Mobile dealer	1
	Unsure	1
Last source (n)	Don't use	9
	Street dealer	4
	Dealers home	1
	Friend	8
	Mobile dealer	1
	Doctor	1
Median time to score (mins)	Usually	45
, ,	Last time	30

Source: 2003 IDU sample

#### 8.2.3 Use and Form

Half (51%) of the IDU sample had used some form of methadone in the six months prior to interview, an increase on the 37% found in 2002. Two percent nominated methadone as their drug of choice and 5% injected methadone more than any other drug in the month before interview, compared to 4% found in 2002. Methadone was the last drug injected by 5% percent of the IDU, identical to the proportion found in 2002, and 9% had used it on the day before interview.

Physeptone was the most used form of methadone used illicitly by the IDU sample: 35% used this form and 23% used it more than any other (Table 27). Illicit methadone syrup was used by 12% of the IDU sample, although it was the most used form for only 1%. Licit methadone syrup was used by 16% of the sample and licit physeptone by 14%. The median number of days some form of methadone was used over the six months prior to interview was 11. The median days of use of licit forms of methadone were substantially higher than those of the illicit forms (Table 27).

Table 27: Methadone use, selected characteristics, IDU 2003

Variable	Used (%) (n=109)	Most often (%) (n=109)*	Median days used	Injected (%) (n=users)	Median days injected
Physeptone illicit	35	23	6	93	6
Methadone illicit	12	1	4	100	2
Physeptone licit	14	13	90	87	60
Methadone licit	16	11	30	58	3

\* 4 cases missing data Source: 2003 IDU sample

Trends in the proportion of the IDU sample using various forms of methadone are shown in Figure 6. While methadone use, both licit and illicit shows variation across the years, physeptone use, particularly illicit physeptone use, shows consistent increases.

Of the 56 IDU participants who used methadone in 2003, 50% (n=28) used only illicit methadone (mainly physeptone tablets, n=24) in the six months prior to interview, 23% (n=13) used only licit methadone (physeptone tablets or methadone syrup), and 27% (n=15) used both (again, mainly physeptone tablets, n=13).

Thirty-nine percent of methadone users in 2003 (n=22) were in drug treatment at the time of interview; 14 receiving methadone, 4 buprenorphine, 1 physeptone and 3 morphine, with a median treatment length of 6 months (range 0.5 to 168days). Three additional methadone users had had previous treatment in the six months prior to interview; 2 methadone and 1 buprenorphine.

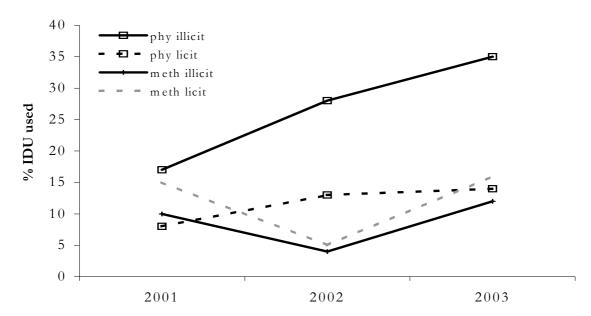


Figure 6: Methadone use among the IDU, 2001 to 2003

Source: O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample

As noted above, key informant comment suggests that methadone is more available on the illicit drug market, in both syrup and tablet forms, and that to some extent it is used a substitute by primary morphine users when MS Contin is not available.

# 8.3 Buprenorphine

No one nominated buprenorphine as their drug of choice, the drug injected most often in the month prior to interview, or the drug last injected. Four people had taken buprenorphine on the day before interview.

Nineteen percent (n=21, Table 28) of the IDU sample had used some form of buprenorphine in the six months prior to interview (for a median of 4 days) compared to 14% in 2002.

Table 28: Forms of buprenorphine used previous six months and primary form, IDU 2003

Variable		2002 =111)	2003 (n=109)		
	Used	Most often	Used	Most often	
Licit (%)	4	4	7	7	
Illicit (%)	10	10	15	12	
All forms (%)	14		19		

Source: Duquemin and Gray, 2003; 2003 IDU sample

Nine percent of the sample had used licit buprenorphine on a median of 50 days (ie twice weekly). Over the six months prior to interview the preferred method of administration for licit users was oral (8% of IDU sample) and injection (3%). Thirteen percent of the sample had used illicit buprenorphine for a median of one day, with oral (8% IDU sample) and injecting (5%) being the preferred methods. Of the 21 people who had used buprenorphine in the six months prior to interview, 24% (n=5) used only licit buprenorphine, 62% (n=13) used only illicit, and 14% (n=3) used both. Use of both licit and illicit buprenorphine in the IDU sample increased from 2002 to 2003 (Table 28).

Half the recent buprenorphine users (n=10) were in treatment at the time of interview: two were receiving methadone, five buprenorphine, and three morphine. Of the five people who had used only licit buprenorphine, all were either currently receiving buprenorphine treatment or had done so within six months of interview. The three people who had used both licit and illicit buprenorphine were in buprenorphine treatment at the time of interview.

## 8.4 Other opiates

Forty-two percent of the IDU sample had used other opiates during their life, 17% using them within six months of interview (Table 29). The median days of use over the previous six months was seven (range 1-180), with two people reporting daily use. Swallowing was the preferred method of use (13% within the previous six months), followed by injecting (4%).

Of the nineteen people reporting recent other opiate use, six had used licit forms only, nine illicit and four both licit and illicit. Of the 13 who had used illicit forms, 12 reported that as the main form used. Panadeine Forte was the only type of other opiates used by licit users. Illicit users mentioned Panadeine Forte (n=6), opium (n=2) and temazepam (n=1) (4 people were unsure or did not reply).

Overall use of other opiates in the IDU sample declined from 2002 to 2003 (Table 29), mainly due to a decline in licit use. The proportion using illicitly has increased and of the three years where data is available, 2003 is the first where illicit other opiate use exceeds licit use.

Table 29: Forms of other opiates used previous six months and primary form, IDU 2003

Variable	2000 (n=100)				2002 (n=111)		2003 (n=109)	
		Most		Most		Most		Most
	Used	often	Used	often	Used	often	Used	often
Licit (%)	-	-	5	3	17	17	9	6
Illicit (%)	-	-	3	2	8	5	12	11
All forms (%)	2		7		24		17	

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

Six of the nineteen recent other opiate users were in some form of drug treatment (all pharmacotherapy) at the time of interview. Of the remaining 13, 12 reporting having received no drug treatment over the preceding 6 months.

## 8.5 Health and opioids

Separations from NT hospitals involving opioids declined by 16% from 2001/02 to 2002/03, mainly due to a drop in the number of diagnoses of opioid dependence syndrome (Figure 7).

Sumper of separations 40 - 20 - 00/01 01/02 02/03

Figure 7: NT hospital separations with opioid mentions, 2000/01 to 2002/03 (n)

Source: NTDHCS

The rate of accidental deaths due to opioids in the NT in 2002 was 48 deaths per million, higher than all other jurisdictions (Figure 8).

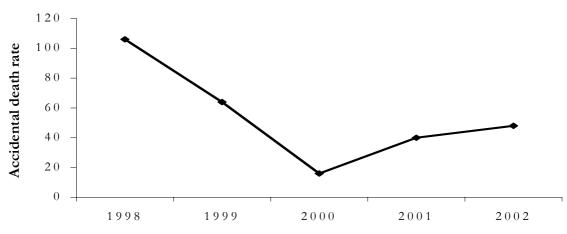


Figure 8: Rate of accidental deaths due to opioids per million persons, ages 15-54, 1988-2002

Source: Degenhardt. & Barker, 2003

Over the period shown, this rate shows a sharp decline followed by a slower but still marked increase to its current level. This increase goes counter to a national decline from 85 deaths per million to 32 deaths per million over the same period, a decline attributed to the reduction in heroin availability seen in southern states from around 2001.

The number of episodes of treatment at AOD treatment services where morphine was the principal drug of concern has experienced a decline over each of the last three financial years (Figure 9). As a proportion of all episodes, however, morphine episodes have been stable at around 8%.

Figure 9: AODTS treatment episodes where morphine is the principal drug of concern, 2000/01 to 2002/03 (n)

Source: NTDHCS

## 8.6 Trends in opioid use

### 8.6.1 Morphine

Diverted MS Contin continues to be the primary injected opiate in Darwin, evidenced by the consistent proportion of IDU samples over the last four years reporting its recent use and by similarly consistent key informant reports. The use of licit morphine, ie morphine prescribed in the users name, appears to have dropped in 2003 compared to previous years. Morphine also continues to be something of a substitute for the more preferred but unavailable heroin.

The median price of the most common dose of morphine in use, MS Contin 100mg, increased from \$50 in 2002 to \$60 in 2003. Kapanol 100mg, the use of which is reported by some KIs as growing, also showed a \$10 increase, from \$40 to \$50. The increased use reported by KIs is not substantiated by the IDU results.

IDU participants and relevant key informants, including those from law enforcement, continue to report that morphine is 'easily' and readily available for illicit use, with that

availability being 'stable' over time. IDU reports show a marked increase in the use of friends as the main source to score morphine.

Of particular interest in the NT is the relation between the volume of morphine prescriptions dispensed by pharmacies and it's illicit use. Following action by the Health Insurance Commission and the then Territory Health Services around 1999, the rate of morphine prescribing declined sharply to levels more consistent with the size of the NT population, action which was in part a response to the then very high rate of opioid related deaths in the NT and intended to place limits on the availability of morphine for illicit use.

As described above, the use of illicit morphine has not declined in the indicator IDU population, nor is it rated as harder to obtain. However, the large jump in benzodiazepine use seen between 2000 and 2001 (see below) and the increasing physeptone use, in both cases primarily associated in the IDU sample with regular morphine use, are consistent with the prescription reduction strategies having had an impact on illicit supply. Key informant comment suggests that the total amount of morphine available for diversion has declined, and that substitution with other opioids is occurring. It also suggests that a larger proportion of prescribed morphine is being diverted, involving more instances of fraud and violence, an explanation which may be consistent with the increase in price found this year. In addition, comments from two user group key informants to the effect that the morphine user cohort established in the 1980s and 1990s constitutes a 'generation' that has a different drug use pattern to more recent users. This suggests that the supply restrictions may be having a greater impact on new entrants into regular illicit drug use. This implies that a decline in use among the indicator population may be seen in future IDRS.

Of major concern is the high rate of accidental deaths due to opioids in the NT compared to other jurisdictions reported here, and its steady increase over the years 2000 to 2002 while the national rate declined. The level of analysis available in this report enables no particular explanation of that trend but its reporting strongly suggests the need for further investigation including investigation of the role of diverted pharmaceuticals, such as morphine and physeptone, in those deaths.

### 8.6.2 Methadone, buprenorphine and other opiates

Methadone use within the IDU sample has increased compared to previous years. In part this increase is due to a rise in the use of licit methadone syrup, most probably explained by the introduction of pharmacotherapy maintenance in the NT in late 2002. In large part, however, the increase is attributable to the continuation of a marked upward trend in the use of illicit physeptone amongst IDU. Key informants did not note an increase in physeptone use.

Less than half of the IDU recent methadone users were either in current drug treatment or had been in treatment within six months of interview. At the same time, almost all of those who were in treatment at the time of interview were utilising the relatively new pharmacotherapy program. This is consistent with the increased proportion of episodes where morphine was the principal drug of concern reported from AOD treatment services.

Methadone price and availability information from previous years is not available for comparison.

While the proportion of the IDU reporting recent buprenorphine use increased in 2003, this consisted primarily of an increase in licit use with most users in current or recent drug treatment. This is consistent with the increases being attributable to the introduction of the pharmacotherapy program mentioned above.

Overall use of other opiates in the IDU sample declined from 2002 to 2003, mainly due to a decline in licit use. The proportion using illicitly has increased and of the three years where data is available, 2003 is the first where illicit other opiate use exceeds licit use.

## 8.7 Summary of trends in opioid use

- Diverted MS Contin continues to be the primary injected opiate in Darwin, with the rate of illicit use in the IDU sample stable compared to earlier years at 84%.
- The use of licit morphine among the IDU sample dropped from 42% in 2002 to 35% in 2003.
- The price of MS Contin 100mg has increased from \$50 in 2002 to \$60 this year.
- The availability of diverted morphine continues to be rated as 'easy' or 'very easy' by most of the IDU sample (68%) and key informants; the proportion rating it as difficult to obtain has declined from 44% in 2001 to 25% this year.
- Seventy-three percent of primary recent morphine injectors reported injecting daily; key informants report that daily users inject 2-4 times a day using a total of between 300mg and 800mg.
- Morphine use is associated with a patterns of polydrug use, particularly: cannabis, benzodiazepine, methamphetamine, alcohol and illicit physeptone.
- The rate of accidental deaths per million due to opioid use is higher in the NT than other jurisdictions and shows a steady upward trend since 2001.
- There is some indication that modifications to morphine prescribing practices have had some impact on the supply of MS Contin for illicit use, but that this has been compensated for by a higher rate of diversion and substitution by other drugs, possibly including kapanol benzodiazepines and physeptone.
- The proportion of the IDU sample reporting recent methadone use increased from 37% in 2002 to 51% in 2003, mainly due to a marked increase in the use of illicit physeptone over the last two IDRS years.

### 9.0 OTHER DRUGS

## 9.1 Ecstasy

Ecstasy had been used by 30% (Table 30) of the IDU sample in the six months prior to interview, for a median of 2 days (range 1-160). Injecting was the preferred method of use (21%), followed by swallowing (17%).

The profile of ecstasy use in the IDU sample appears stable since 2002 (Table 30), the total proportion using and the proportion injecting has grown since 2000.

Table 30: Ecstasy use, selected characteristics, 2000-2003

Variable	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Ever used (%)	44	49	62	62
Used last 6 months (%)	21	31	34	30
Swallowed last 6 months (%)	17	25	21	17
Injected last 6 months (%)	9	22	21	21
Median days used (%)	5	3	2	2

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

Key informants report that ecstasy use is still small scale in Darwin, but that it's use is growing and spreading to younger users, with some suggestion that, along with alcohol, tobacco, and cannabis, it is becoming an 'initiation' drug. The proportion of 'genuine' ecstasy (ie MDMA rather than amphetamine based) being sold in Darwin is unknown, but some key informants estimate that it is up to 50%.

### 9.2 Hallucinogens

While almost three quarters (74%, Table 3) of the IDU sample had used hallucinogens in the past, only 7% had used it within six months of interview, for a median of 2 days (range 1-12). Swallowing (6%) was the preferred method of use, with less than 1% employing the other methods. One person reported using mushrooms in the previous six months, otherwise LSD was the main form used.

The proportion of recent hallucinogen use in the IDU showed marked decline since 2000 (Table 31), with a slight decline into this year. Swallowing as the preferred method remains proportional to the rate of recent use.

Table 31: Hallucinogen use, selected characteristics, 2000-2003

Variable	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Ever used (%)	58	66	77	74
Used last 6 months (%)	33	18	9	7
Swallowed last 6 months (%)	32	17	7	6
Median days used (%)	4	5	2	2

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

### 9.3 Inhalants

Three percent (n=3) of the IDU sample reported using inhalants in the six months prior to interview, one each using 'butane gas', nitrous oxide and amyl nitrate. This proportion is comparable to previous years: 5% in 2000 and 2001, and 3% in 2002.

# 9.4 Benzodiazepines

Benzodiazepines were used by over half the IDU sample (54%, Table 32) in the six months before interview, for a median of 14 days (range 1-180). The principal method of use was swallowing (45%), although 30% had injected.

Table 32: Benzodiazapine use, selected characteristics, 2000-2003

Variable	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Ever used (%)	37	62	77	74
Used last 6 months (%)	29	53	53	54
Swallowed last 6 months (%)	19	47	51	45
Injected last 6 months (%)	12	27	17	30
Median days used (%)	12	26	10	14

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

Prevalence of recent benzodiazepine use in the IDU sample has remained stable following a sharp rise from 2000 to 2001 (Table 32). The proportion of the sample that injected benzodiazepines within six months of interview has increased sharply from 17% in 2002 to 30% this year and is at it's highest level for the previous four years.

Table 33: Forms of benzodiazepines used previous six months and primary form, IDU 2000-2003

Variable	2001 (n=135)		2002 (n=111)		2003 (n=109)	
	Used	Most often	Used	Most often	Used	Most often
Licit (%)	39	33	34	30	36	28
Illicit (%)	30	21	30	23	33	22
All forms (%)	53		53		54	

Source: O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

In 2003, slightly more than a third (36%, Table 33) of the sample reported using licit benzodiazepines in the six months prior to interview and 33% reported using illicit benzodiazepines. Twenty-eight percent used the licit forms most often, while 22% used illicit forms most often.

The main brand used by recent benzodiazepine users was Valium, used by 48% of primary licit users and 43% of primary illicit users. Temazepam was used by 14% of primary licit users and 29% of primary illicit users. A range of other brands were mentioned by at least one user: Mogadon (used by 3 primary licit users), Normison 20mg (used by 4 primary illicit users), Valium, Hypnodol, Temazepam, Xanax, Clonazepm, Hypnodorm, Cypramil and Rohyphnol.

Of the 15 people who used benzodiazepines on the day before interview, two also used speed powder, nine used cannabis, four used methadone, eight used morphine and two used anti-depressants.

# 9.5 Anti-depressants

Just over one fifth of the IDU sample (21%) had used anti-depressants six months prior to interview on a median of 42 days (range 1 –180). The entire group had used orally.

Anti-depressants were most commonly used as a licit drug (15% of the sample, Table 34), with only 2% using it illicitly. Illicit use was the primary form for only one person. Levels of anti-depressant use in 2003 are similar to previous years.

Table 34: Forms of anti-depressants used previous six months and primary form, IDU 2000-2003

	2001 n=135			2002	2003	
Variable			n=111		n=109	
	Used	Most often	Used	Most often	Used*	Most often
Licit (%)	23	22	17	nr	15	16
Illicit (%)	4	2	4	nr	2	1
All forms (%)	27		21		21	

\*some missing data in certain survey responses

# 9.6 Summary of other drug trends

- The level of recent use in the IDU sample of ecstasy, benzodiazepines, inhalants and anti-depressants remain similar to that seen in previous years.
- The level of recent use of LSD shows continuing decline from 33% of the IDU sample in 2000 to 7% this year.
- Benzodiazepine use continues to be closely associated with regular morphine use and temazepam remains the form of choice amongst illicit benzodiazepine users.

### 10.0 ASSOCIATED HARMS

## 10.1 Injecting

The proportion of the IDU injecting within six months of interview is shown in Figure 10 for selected drug classes. Over the period shown the proportions injecting methadone and benzodiazepines in particular have increased. It also appears that from 2000 to 2001 the proportions injecting amphetamines and ecstasy rose to levels that have since been sustained.

100  $\square 2000$ 87 85 **2**001 70 80 71 % recent injection 70 **2**002 2003 60 40 30 21 21 18 20 0 Benzodiazepines Amphetamine Methadone Morphine Other opiates Ecstasy Heroin

Figure 10: Recent injection in the IDU sample, 2000-2003 (%)

Source: 2003 IDU sample.

### 10.2 Blood borne viruses

Notifications of Hepatitis B and Hepatitis C reported to the National Notifiable Diseases Surveillance System over recent years are shown in Table 35. Both series fluctuate with no clear general trends. HIV notifications are available only until 2002 and show a decline from a low base in 1999 through to 2001, then an increase into 2002.

Table 35: Notification of HBV, HCV and HIV, NT 1999-2003

Variable	1999	2000	2001	2002	2003
Hepatitis B (incident) (n)	20	6	3	22	15
Hepatitis C (unspecified) (n)	191	183	213	193	214
HIV new cases (n)	5	2	3	8	na

Source: NNDSS & NCHECR

The finger prick survey carried out in Darwin and Alice Springs and auspiced by the National Centre in HIV Epidemiology and Clinical Research<sup>5</sup> reported no presence of HIV antibodies in the most recent sample (2002, Table 36), maintaining the zero prevalence found in the previous year. Hepatitis C antibody prevalence, however, shows a fluctuating but generally increasing trend from 1998 to 2002, with 62% of the 2002 sample showing HIV antibodies.

Table 36: HIC and HCV antibody prevalence among NSP survey respondents 1999-2003

Variable	1998	1999	2000	2001	2002
HIV antibody (% (n))	5 (87)	4 (79)	1 (90)	0 (79)	0 (47)
HCV antibody (% (n))	40 (88)	49 (79)	42 (91)	60 (84)	62 (47)

Source: NCHECR

As in previous years, comparison of HCV notifications to NNDSS and it's prevalence in the NSP surveys suggests that notification rates may be influenced by changes in surveillance methods as well as changes in disease behaviour. Sexual contact between men continues to be the primary means of HIV transmission with low prevalence reported nationally among injecting drug users<sup>6</sup>.

# 10.3 Sharing of injecting equipment among IDU

A small proportion of the IDU sample either borrowed (6%) or lent (6%) used needles in the six months prior to interview, with larger proportions sharing other injecting equipment (Table 37). Of those who borrowed a used needle, 3 used it after their regular sex partner, 3 after a close friend and only 1 after an acquaintance. No one reported sharing a needle with a casual sex partner.

As can be seen in Table 37, the proportion of the IDU sharing needles has dropped compared to previous years, while the proportion sharing other injecting equipment shows little change from 2002.

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<sup>&</sup>lt;sup>5</sup> Buddle et al, 2003.

<sup>&</sup>lt;sup>6</sup> National Centre in HIV Epidemiology and Clinical Research, 2002.

Table 37: Sharing of injection equipment in the month prior to interview, 2000-2003

Variable	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Spoons/mixing containers (%)	22	30	15	17
Filters (%)	9	12	10	11
Tourniquets (%)	12	17	16	17
Water (%)	8	7	8	10
Lent needle to others (%)	11	10	9	10
Borrowed used needle (%)	11	11	6	6

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

## 10.4 Location of injections

Ninety-six percent of IDU reported that in the month prior to interview they usually injected in a private home, with 92% last injecting in a private home. This proportion is slightly lower than that found in 2002 (Table 38) but still higher than that found in 2000 and 2001.

Table 38: Location of last injection 2000-2003

Variable	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Private home	71	84	95	92
Street/car park/beach	15	8	2	2
Car	8	4	1	4
Public toilet	1	2	2	2

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

## 10.5 Injection related health problems

Seventy-eight percent of the IDU sample reported at least one injection related health problem, and the median number of problems reported was 2. The most common problem reported was prominent scarring or bruising (59%, Table 39), followed by difficulty injecting (51%). The number of IDU reporting overdose, dirty hits and abscess/infection has declined since 2001, while scarring/bruising and difficulty injecting has increased.

Table 39: Injection related health problems, month prior to interview, 2000-2003

Variable	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Overdose (%)	18	10	0	1
Dirty hit (%)	38	40	18	17
Abscess or infection (%)	16	13	12	10
Scarring or bruising (%)	57	40	44	59
Difficulty injecting (%)	49	41	31	51
Thrombosis (%)	10	9	5	8

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

IDU were asked whether they had injected selected drugs in the month prior to interview and if so whether they had experienced any problems as a result (see Table 40). The most often injected drug was morphine (76% of the IDU sample), with 28% of that group reporting no associated problems. However, 48% reported difficulty finding veins to inject into, 27% reported prominent scarring or bruising and 24% reported dependence. Twenty-five percent of morphine injectors reported swelling in a limb, most commonly the arm or hand.

Benzodiazepines (18%) and methadone (17%) were injected by similar proportions of the IDU, and in each case approximately half experienced no associated problems (45% and 53% respectively). Difficulty find a vein was the most commonly reported problem (50% and 32%), with 25% of benzodiazepine injectors and 26% of methadone injectors reporting swelling in a limb.

Table 40: Injection related problems by selected drugs, 2003 IDU sample

	Benzodiazepine	Methadone	Buprenorphine	Morphine
Injected in the last month (n)	20	19	2	83
Problems (n)				
No problem	9	10	2	23
Overdose	0	0	0	1
Abscesses/infections from inject	2	1	0	4
Dirty hit	0	0	0	13
Prominent scar/bruising	1	3	0	22
Thrombosis/blood clot	0	0	0	5
Swelling of arm	2	1	0	8
Swelling of leg	0	0	0	2
Swelling of hand	3	2	0	7
Swelling of feet	0	1	0	4
Hospitalisation	0	1	0	2
Contact with Ambulance	0	0	0	1
Contact with Police	0	0	0	0
Dependence	1	1	0	20
Difficulty finding veins to inject	10	6	0	40
Skin ulcers	0	1	0	0
Gangrene	0	0	0	0

Source: 2003 IDU sample

# 10.6 Expenditure on illicit drugs

Fifty-six percent of the IDU sample spent a median of \$60 on drugs on the day before the interview. The most common amount was between \$50 and \$99, with somewhat higher proportions of the sample spending smaller amounts than in 2002 (Table 41).

Table 41: Amount spent on drugs on the day before interview, 2002-2003

Variable	2002 (n=111)	2003 (n=109)
\$0 (%)	44	44
Less than \$20 (%)	3	3
\$20-49 (%)	9	13
\$50-99 (%)	16	22
\$100-199 (%)	20	13
\$200 or more	8	6

Source: Duquemin and Gray, 2003; 2003 IDU sample.

## 10.7 Mental health problems

Eighteen people (16.5% of the IDU sample) reported attending a health practitioner for mental health problems other than drug dependence in the six months prior to interview. Of that group, 44% attended a psychiatrist, 28% a GP, 22% a psychologist, and 17% a counsellor. The most common mental health issue mentioned was depression (38%), followed by schizophrenia (22%) and anxiety (17%).

# 10.8 Criminal and police activity

Twenty-eight percent of the IDU sample reported criminal activity within one month of interview, dealing drugs being the most common (20% IDU, Table 42). Property crime was the next most frequent criminal activity (9%), with small proportions reporting violent crime (5%) and fraud (3%). The proportions reporting each crime type show variation across the four years shown in Table 42, with no clear trends. The distribution across the crime types in 2003 resembles 2001 more than 2002.

Table 42: Self reported criminal and police activity, 2000-2003

Variable	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Property crime (%)	8	12	14	9
Dealing (%)	30	24	31	20
Fraud (%)	12	5	13	3
Violent crime (%)	2	3	12	5

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

Eighteen percent of the IDU sample had been arrested in the twelve months before interview (Table 43), the lowest proportion reported for the period shown. With the

exception of property crime (9%), the proportions arrested for the various crime types are the same as or lower than in previous years.

Table 43: Arrests in the twelve months prior to interview, 2000-2003

Arrested for	2000 (n=100)	2001 (n=135)	2002 (n=111)	2003 (n=109)
Use/possession (%)	3	2	5	1
Dealing/trafficking (%)	4	2	1	1
Property crime (%)	11	11	5	9
Fraud (%)	nr	0	1	1
Violent crime (%)	nr	4	5	2
Driving offence* (%)	nr	nr	nr	3
Prostitution (%)	nr	nr	nr	1
Other offences (%)	nr	nr	nr	3
Arrested in last 12 months (%)	28	32	22	18

<sup>\*</sup> includes alcohol and driving, drugs and driving

Source: Rysavy et al, 2000; O'Reilly and Rysavy, 2001; O'Reilly, 2002; Duquemin and Gray, 2003; 2003 IDU sample.

The number of confirmed offences cleared by police by either an arrest or summons to attend court for 2000/2001 to 20002/2003 are shown in Table 44. Arrests or summons for dealing or trafficking in non-commercial quantities of illicit drugs show increases in each year, while those for possession show a decline.

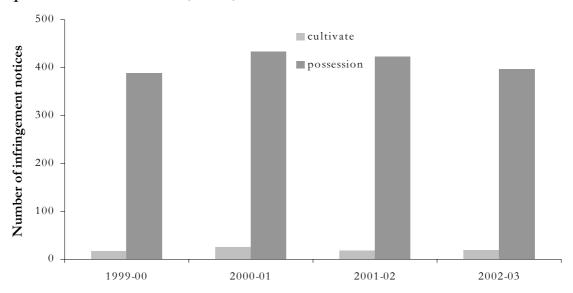
Table 44: Number of cleared offences for selected illicit drug related crimes, 00/01-02/03

Variable	2000/01	2001/02	2002/03
Deal/Traffic illicit drugs - commercial quantity	122	86	96
Deal/Traffic illicit drugs - non-commercial quantity	16	30	35
Manufacture or cultivate illicit drugs	43	72	40
Possess illicit drug	222	196	159
Use illicit drug	24	12	17

Source: NTPFES

Figure 11 shows the number of cannabis infringement notices issued by police since financial year 1999/2001. Notices issued in both categories show a slow but steady decline since 2000/2001, continuing in the current year.

Figure 11: The number of infringement notices served for cultivation or possession of cannabis 99/00-02/03



Source: NTPFES

Consumer and provider arrests by drug type up to 2001/02 are shown in Table 45. They show that police activity reflects the low prevalence of heroin and cocaine in the NT, with a focus on cannabis and amphetamine type stimulants. They also record a marked shift in cannabis related activity from consumers to providers in 2001/02 compared to 2000/01.

Table 45: Number of consumer and provider arrests by selected drug type, NT, 2000/01-2001/02

Variable	2000-	2001	001 2001-20	
	Consumer*	Provider^	Consumer*	Provider^
Cannabis	328	113	122	328
Opioids	13	0	1	2
Amphetamine type stimulants	144	0	21	0
Cocaine	0	0	2	0
Hallucinogens	5	0	3	0

\*people charged with user-type offences, eg possessing or administering drugs for their own use

^people charged with supply-type offences, eg selling, trafficking

Source: ACC Illicit Drug Report, 2002 and 2003

Thirty percent of the IDU sample felt that police activity around illicit drug use had increased over the six months prior to interview. In most cases this activity was described in a general sense, eg 'they're everywhere' or 'more police patrols' and a small number of responses referred to increased arrests, eg 'more people are getting busted'. Two respondents mentioned police activity in relation to the 'drug house' legislation introduced in 2002. Eighteen percent of respondents stated that police activity had made scoring drugs more difficult, although not all of this group attributed that difficulty to increased police activity.

Key informant comment suggests that property crime and drug dealing remain the offence type most closely associated with illicit drug use, and that the prevalence of these activities has been stable. As mentioned above, there is some indication that offences associated with the diversion of pharmaceuticals – script forging, script theft, medication theft, false reports of break-ins with theft, violence and use of weapons associated with theft or break-ins of pharmacies – have increased due to the impact of morphine supply restrictions.

#### 10.9 Trends in associated harms

Change can be seen in some aspects of the harms associated with injecting drug use. The Hepatitis C antibody continues to be found at high levels in the NSP annual survey, a population likely to have similar characteristics to the IDU sample. At the same time, risky behaviours around the sharing of injecting equipment continues to be low and in some instances declining. High proportions of the IDU sample inject in what may be seen as the relatively less harmful environment of private homes, with less injecting in public places. Immediate injection related health problems show increases in the areas of scarring and bruising and difficulty injecting, reversing the declines seen since the 2000 IDRS. Injection related problems were reported by a larger proportion of morphine injectors than was the case for methadone or benzodiazepines, although this may relate to a higher frequency of injecting among that group.

Self reported criminal activity in the IDU shows declines in all categories compared to 2002, with a similar pattern to that found in 2001. Self reported arrest patterns show an overall decline, with an increase in arrests for property crime. Police arrest and summons figures show stability over the last three years for manufacture and dealing/trafficking offences and declines for possession and use, the latter reflected in the decline seen in cannabis infringement notices.

## 10.10 Summary of trends in associated harms

- The hepatitis C antibody continues to be found at high levels in an injecting drug user population (62%).
- Needle sharing in the IDU remains at a low level of around 6%.
- Injection related problems show mixed trends, with the number of IDU reporting overdose, dirty hits and abscess/infection declining while scarring/bruising and difficulty injecting has increased.
- Morphine injectors were more likely to report an injection related problem than benzodiazepine or methadone injectors.
- Self reported arrests for property crime increased from 5% in 2002 to 9% in 2003.
- The number of offences cleared by Police around possession and use of illicit drugs has declined while activity concerning manufacture, dealing and trafficking is stable.

# 11.0 DISCUSSION<sup>7</sup>

As indicated throughout this report, overall the illicit drug scene in Darwin has remained fairly stable since the last IDRS. Cannabis, morphine and amphetamines are the most widely used illicit drugs, and continue to be easily available. Heroin and cocaine are a rare presence in Darwin and their use appears to be declining even further. The sharing of needles amongst IDU remains low and property crime and drug dealing are the main offence types associated with illicit drug use. However, there are some specific areas of change or trend that are noteworthy.

## 1. Increased availability and use of more pure forms of methamphetamine

Almost all the key informants who chose to discuss methamphetamine use noted the increased presence of base and crystal ('ice') methamphetamine. This is reflected in the proportion of IDU respondents who use those forms – between 2001 and 2002 base use increased from 18% to 30% and crystal use increased from 24% to 33%. The implications of the increased use of crystal forms mentioned most often by key informants included: violent, aggressive or chaotic presentations to service providers; individual risk taking behaviours; incidents of violent crimes or crimes involving violent behaviour.

### 2. Diversion of pharmaceuticals

As mentioned above, a diverted pharmaceutical, MS Contin, continues to be the main injected drug and the main opiate used in Darwin. Key informants consistently report that restrictions on prescribing practices and new modes of patient case management have decreased the amount of MS Contin available for diversion. However, the restriction on supply appears to have had no impact on key informant or IDU ratings of morphine availability (68% of the IDU sample rated morphine as 'easy' or 'very easy' to obtain, compared to 54% in 2001), nor on the rate of use by the IDU sample. At the same time, key informants report that a wider range of diverted pharmaceuticals are being used by primary morphine users when morphine is not available - including methadone syrup, methadone tablets (Physeptone), buprenorphine, amyl nitrite, Kapanol, Pethidine, codeine and opiate based suppositories. These drugs are for use or for on-selling/swapping to secure morphine. In addition there are some reports that a higher proportion of that MS Contin that is available is being diverted, involving increases in fraud and violence. It is also generally acknowledged that the introduction of a pharmacotherapy maintenance program for opiate dependent people is likely to increase the amount of methadone and buprenorphine available for illicit use.

#### 3. Opioid related deaths

While the NT has a small absolute number of opioid related accidental deaths each year, that number has grown in each of the last two years, to where the NT currently has the highest rate of such deaths (per million population) in Australia. As mentioned above, the level of analysis available in the IDRS does not allow us to report the role in these deaths played by specific drugs nor whether there was licit or illicit use. However, given

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<sup>&</sup>lt;sup>7</sup> Readers are referred to the Executive Summary for summary information concerning the project, the IDU sample and drug specific trends.

the magnitude of pharmaceutical diversion in the NT these issues should clearly be investigated further.

### 4. Illicit drug using population getting younger

Continuing a theme found in previous NT IDRS reports, a number of key informants reported that more younger people are using, and in particular injecting, illicit drugs and that people are starting younger. For the first time this year school based key informants were included in the IDRS. Their major drug use concerns were related to the increased use of cannabis (to some extent normalised as a drug of initiation) in combination with alcohol (along with a move towards spirits rather than beer). This is seen to be a slow but steady trend, manifesting over a period of years.

### 5. Injecting in Indigenous populations

Although the focus of the NT IDRS is Darwin, previous reports have noted key informant comment about the increased use of illicit drugs among Indigenous populations, particularly cannabis and amphetamines. This theme arose again this year with comments about increased injecting of amphetamines amongst urban Indigenous people and the increased movement of injectors between urban and remote communities. Key informants report this increase as 'small' but persistent. It should be noted that the IDRS methodology does not allow this trend to be confirmed by either IDU reports or indicator data.

### 6. Shift of Police activity towards dealing

IDU and key informants reported that Police activity had shifted towards the surveillance and prosecution of dealers and traffickers of illicit drugs rather than users, and these reports are supports to some extent by the indicator data included in this report. The Misuse Use of Drugs Act, 2002 (the 'drug house laws') was mentioned specifically in this context, and may have contributed to the strong shift to 'friends' as the source of cannabis amongst the IDU between 2001 and 2003. There is no indication that this change in Police activity has had any impact on the magnitude of cannabis use and it's availability.

### 7. Polydrug use

Polydrug use continues to be the context within which specific drug use occurs. Virtually all the IDU sample used cannabis, alcohol and tobacco as well as one or more other illicit drugs, a pattern supported by key informant comment. There are suggestions also that drug class is not an unambiguous way to distinguish user groups. In the words of one key informant "(the) distinction between morphine uses and amphetamine (users is) less now more overlap. Users using both drugs depending on what is available", a contention supported by the high rate of amphetamine use amongst daily morphine users found in the IDU.

#### 11.0.1 Methodological considerations

As noted above the IDRS uses three distinct sources of information – an IDU survey, a key informant survey and indicator data – to report on changes, new trends and ongoing trends in illicit drug use patterns both nationally and in each jurisdiction. Key informants

often work with or have knowledge of specific groups of drug users who may not be representative of the general illicit drug using population. The IDU survey is perhaps the most crucial component of the IDRS as it collects information on price, availability and use patterns that would not otherwise be available. Indicator data is in a sense the 'objective' source of information but can be affected by changes in activity and data collection practices as much as changes in what it purports to measure. It should be noted then that the main role of the IDRS is to act as an 'early warning system' and to indicate areas for further research, rather than to explore emerging trends in detail.

## 12.0 IMPLICATIONS

In relation to the points raised in the discussion the following recommendations are made:

- 1. That the impact of increased methamphetamine, particularly crystal methamphetamine, and polydrug use on service providers and it's involvement in criminal activities be monitored.
- 2. That further investigation into the diversion of a wide range of pharmaceuticals be carried out, particularly in relation to the impact of restrictions on the supply of MS Contin and substitution by other drugs.
- 3. That the role of illicit drug use in recent accidental opioid related deaths be investigated.
- 4. That specific projects investigating illicit drug use and injecting amongst urban and remote Indigenous populations be carried out.
- 5. That existing harm reduction resources be further developed and distributed, in particular:
  - relevant and culturally appropriate resources for illicit and polydrug use amongst Indigenous populations and young people
  - resources concerning the use and effects of crystalline forms of methamphetamine
  - · resources concerning the injection of pharmaceuticals
- 6. That the Department of Health and Community Services develop an illicit drug harm indicator collection to be published an a regular basis.

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