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Northern Territory Drug Trends 2000

Findings of the Illicit Drug Reporting System (IDRS)

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LIST OF ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ANSP	Australian Needle Syringe Program
ATSI	Aboriginal and/or Torres Strait Islander
AUS	Australia
CDHAC	Commonwealth Department of Health and Aged Care
DINS	Drug (cannabis) Infringement Notices
GHB	chemical gamma-hyroxybutyrate, also called Fantasy
GP	General medical practitioner
IDRS	Illicit Drug Reporting System
IDU	Injecting Drug User
KIS	Key Informant Survey
MDMA	3,4-methylenedioxymethamphetamine (known as ecstasy)
NESB	Non- English Speaking Background
NDARC	National Drug and Alcohol Research Centre
NGO	Non Government Organization
NSP	Needle Syringe Program (NT AIDS Council)
NSW	New South Wales
NT	Northern Territory
NTAC	Northern Territory AIDS Council Incorporated
OTHER	refers to other (secondary) indicator data
OWMP	Opiate Withdrawal Management Program
QLD	Queensland
SA	South Australia
TAS	Tasmania
THC	tetrahydrocannabinal, the psychoactive substance in cannabis
THS	Territory Health Services
TINES	Territory Infringement Notices Enforcement Scheme
VIC	Victoria
WA	Western Australia

EXECUTIVE SUMMARY

In 1998, the Commonwealth Department of Health and Aged Care commissioned the National Drug and Alcohol Research Centre (NDARC) to trial the Illicit Drug Reporting System (IDRS) and in 2000, the full IDRS was conducted nationally for the first time, with all jurisdictions following standard procedure manuals. The purpose of the IDRS is not to explore and verify trends, but to detect them and indicate what may require more in-depth research and contribute to other policy decisions. It acts as an early warning system and detects significant changes or emerging trends in drug use patterns through:

- A quantitative survey of 100 current injecting drug users (IDUs) recruited throughout greater Darwin. Inclusion criteria were injecting at least monthly for the past six months and Darwin as the principal place of residence in the preceding 12 months.
- Qualitative interviews with 31 key informants recruited from professional settings. Inclusion criteria were at least weekly contact with illicit drug users in the six months preceding the study or contact with at least ten illicit drug users in the previous six months.
- Analysis of secondary indicator data on illicit drug use or associated harm.

This report examines illicit drug use patterns and trends through the analysis of data collected by these three methods.

Survey of Injecting Drug Users (IDU)

The 100 IDUs were surveyed in August 2000 and the sample was predominantly male, of Caucasian origin, mean age of 31.5 years, unemployed and not currently in drug treatment. Eleven percent of the sample identified as Aboriginal and/or Torres Strait Islander (ATSI) and this proportion is higher than key informant estimates in 1999. Almost half of the sample had a history of involvement with the criminal justice system. The mean age of first injection was 19 years and amphetamine was most likely to be the first drug injected. Heroin was the preferred drug of most IDUs, but morphine was the drug most likely to be last injected. Polydrug use was prevalent, with eight drugs being the median number ever used. The median number of drugs used in the six months before the survey was 5.5 and 2 on the day before the survey. Most IDUs injected daily.

Key Informant Interviews

The 31 key informants were employed in alcohol and drug treatment agencies (Government and non-Government), other health services, non-Government organizations (NGOs), NT police, NT Correctional Services, the Needle and Syringe Program or in private practice. Eight key informants (25.8%) identified amphetamine as the main illicit drug used, eleven nominated cannabis (35.5%) and twelve selected morphine (38.7%). None identified heroin or cocaine.

Other Indicators

Information from a range of secondary data sources complemented and validated the injecting drug user survey and key informant interviews. These sources included population surveys, needle and syringe program data, health and law enforcement data and treatment agency client admission and separation information.

Amphetamine trends

- Most likely to be first drug injected, particularly by youth;
- Most likely to be last drug injected by youth;
- A diverse population of users and use patterns;
- Intravenous use was the most common means of administration and becoming more prevalent;
- Increasing numbers of youth and ATSI users;
- Polydrug use was common and increasing;
- Most users were not in any form of treatment;
- An increase in non-users seeking assistance because of another's amphetamine use;
- More people were supplying;
- Powder was the main form of amphetamine available;
- Purity was generally low and stable;
- Cost per gram was usually $70-$80 and stable;
- Easy to obtain and availability stable;

- Increase in local manufacture; and
- Cannabis use was also common, often on a daily basis.

Cannabis trends

- Number of cannabis users was increasing and users becoming younger;
- Cannabis of concern in ATSI communities, with more young people, women and traditional ATSI using;
- Most users were not in any form of treatment;
- Polydrug use was common, particularly among young people and ATSI;
- More young users were selling cannabis;
- The price was usually $25 for 1 gram and stable;
- Potency was high and stable;
- Cannabis was very easy to obtain and stable;
- Hydroponic and locally grown cannabis were becoming more common;
- Cannabis was becoming more available on some ATSI communities;
- Amphetamine and alcohol were also commonly used; and
- Cannabis was often used on a daily basis.

Morphine and heroin trends

- Heroin was the preferred opiate;
- Morphine was most commonly used opiate and the drug most often last injected by IDUs;
- ATSI users were seen as an emerging group;
- More people were using, especially young people;
- Most users did not access treatment;
- Polydrug use was common;
- Intravenous use was the most common route of administration;
- MS Contin® 100mg tablets were most common form of morphine;
- A 100mg MS Contin® tablet usually cost $50 and the price had increased since 1999;
- Diversion of legal prescriptions was common and the morphine black market was becoming busier;
- Consumption of many Schedule 8 opiate narcotics had increased from 1994 to 1999, particularly MS Contin® 100mg;
- Morphine was easy to obtain;
- Heroin was usually $600 a gram and $50 a cap;
- Heroin availability fluctuated;
- Close to half of opiate users had a criminal justice history;
- Polydrug was common and increasing;
- Opiate users also often used benzodiazepines, particularly temazepam;
- Cannabis was also commonly used; and
- Fatal heroin/opiate overdoses were very rare.

Cocaine trends

- 18% of the IDU sample had used cocaine in the previous six months;
- Cocaine use was not common in Darwin;
- Snorting was the most common route of administration, followed by injection;
- Powder was the most common form available;
- Purity was medium to high;
- The average price per gram was $270 (range $180-$400) and was stable; and
- Cocaine remained difficult to obtain.

Other drugs

- Polydrug use was prevalent and increasing;
- Alcohol use was common, especially among IDUs and cannabis users;
- Benzodiazepines were often taken by opiate users, particularly intravenous use of temazepam;
- Hallucinogens and ecstasy use were common among IDUs;
- Ecstasy (MDMA) was popular with some cannabis and amphetamine users, but availability was sporadic;
- Injection was the main route of administration of ecstasy among the IDUs;
- LSD was available and more popular with cannabis and amphetamine users than with opiate users;
- Inhalants were sometimes used by urban youth and petrol sniffing occurred on some ATSI communities;
- Cannabis users consumed hallucinogens occasionally, mainly on a recreational basis;

- Anti-depressant use was common, particularly among IDUs;
- Other designer drug use was uncommon;
- Tobacco was smoked on a daily basis by the majority of illicit drug users;

Drug-related issues

- Criminal activity was prevalent among IDUs, particularly dealing and fraud;
- An increase in the number of apprehensions for drug offences in the NT from 1995/96 to 1998/99;
- Property crime was more prevalent among youth;
- There were more suppliers and an increase in exchanging goods for drugs;
- Young women were exchanging sex for drugs;
- There was awareness of safe injecting, but sharing injecting equipment was prevalent;
- Injecting-related health problems were common, particularly bruising, scarring, infections, difficulty injecting and Hepatitis C;
- Admissions to Darwin alcohol and drug services for opiates and amphetamine as principal drug problem had increased from 1996/97 to 1999/00
- An increase in non-users presenting due to amphetamine use by others;
- An increase in users with mental health and behavioural issues;
- Cannabis was linked to emotional blackmail and self harm among ATSI youth;
- Non-fatal drug overdoses common among injecting drug users; and
- Needle and syringe distribution figures indicated a 414 percent increase in the five years to 1999/2000 and a 5.3 percent rise in the last financial year.

Policy/Research Implications

The findings from this study suggest the following key areas for further investigation:

1. Research into patterns of and trends in licit and illicit drug use and availability amongst Aboriginal and Torres Strait Islanders in the Northern Territory, particularly in relation to emerging groups of injecting users.
2. Research into the psychological impact of amphetamine, cannabis and polydrug use in people at risk of developing mental health and behavioural disorders.
3. Research into the health and social problems arising from the marginalisation of illicit drug users.
4. Factors affecting transition between types of drugs used (eg cannabis to amphetamine, amphetamine to opiates) and routes of administration (snorting or swallowing to injecting).
5. Research into and development of interventions for those experiencing harm from amphetamine and cannabis use.
6. Research into and development of interventions for those experiencing harm from another person's drug use.
7. Development of harm minimisation advice for polydrug users.
8. Development of relevant and culturally appropriate harm minimization resources to overcome literacy and cultural barriers.
9. An analysis of NT government policies and strategies aimed at reducing Schedule 8 narcotics (morphine) and other opiate consumption rates.

1.0 INTRODUCTION

The National Drug and Alcohol Research Centre (NDARC) coordinates the Illicit Drug Reporting System (IDRS), which was first piloted in Sydney for 12 months during 1995-96 (Hando, O'Brien, Darke, Maher & Hall, 1997; O'Brien, Darke & Hando, 1996) and then trialed in 1997 by three states: New South Wales, Victoria and South Australia. The pilot and trials recommended three methods: interviews with injecting drug users, structured interviews with key informants working in the drug field (for example, health, law enforcement, drug treatment agencies and research professionals) and an examination of existing drug indicators (for example, survey data, health and police data). These methods allow a combination of qualitative and quantitative approaches from a range of perspectives. A number of researchers have argued that the use of multiple methods to measure drug trends is preferable, allowing a more complete assessment of the situation (Hartnoll, Lewis, David & Mitcheson, 1985; National Institute on Drug Abuse, 1995). In 1998, the Commonwealth Department of Health and Aged Care commissioned NDARC to trial the IDRS nationally. In 1999 the full IDRS was repeated in New South Wales, Victoria and South Australia and the remaining jurisdictions were invited to conduct a trial of the IDRS consisting of key informant interviews and examination of existing drug indicators (McKetin, Darke, Humeniuk, Dwyer, Bruno, Fleming, Kinner, Hargraves & Rysavy, 2000). In 2000, the full IDRS was conducted nationally for the first time, with all jurisdictions following standard procedure manuals to conduct the three core methods (Hando et al, 1997).

1.1 Study Aim

The IDRS acts as an early warning system and identifies significant changes or emerging trends in drug use patterns within jurisdictions and nationally. Information from the IDRS allows prioritising of more in-depth research and contributes to other policy decisions within a harm reduction framework, a particular focus of which is minimizing negative health consequences associated with illicit drug use. Those participating, other professionals, federal, state and territory bodies are assisted in identifying and prioritising research needs of local and national significance and in developing and informing policy.

Participation of the Northern Territory (NT) in the 1999 IDRS aimed to provide an accurate baseline description of the illicit drug use patterns in Darwin at the time and, thereby, to contribute to a national perspective which will serve to identify intervention priorities and guide further research. Participation in the 2000 IDRS will allow detection of significant changes in drug use patterns and emerging trends in the one-year period. It will also ensure that the NT will be included in the anticipated ongoing national monitoring system. In addition, the procedure manuals will have been trialed in all capital cities on two occasions. An ongoing national monitoring system, using the standard protocols, may be established in 2001 following completion of this first national IDRS trial.

2.0 METHODS

This study employed three methods:

- A quantitative survey of injecting drug users (IDU) utilizing face-to-face interviews;
- A qualitative study of key informants (KIS) working in the alcohol and drug field (for example, counsellors, support and outreach workers, health professionals, law enforcement and correctional services personnel and researchers); and
- An examination of drug-related harm indicators (for example, health, client and criminal justice data).

The three study components utilized the procedures developed by Hando et al (1997).

2.1 Survey of Injecting Drug Users

The survey involved quantitative face-to-face interviews with injecting drug users (IDU) recruited from Darwin in August 2000. Multiple methods were employed to recruit the IDUs, including advertisements at alcohol and drug services and the Needle Syringe Program (NSP), active recruitment by NSP staff and word of mouth. Potential interviewees were informed of set times that interviewers would be at the NSP, located at the NT AIDS Council (considered to be a safe place in Darwin for IDUs). Those wanting to participate were provided with a study information sheet and consent form. They were screened against the entry criteria: injecting at least monthly in the preceding six months and residing in Darwin for the past year.

The standardised structured interview was based on previous IDRS research (Hando & Darke, 1998; McKetin, Darke, Hayes & Rumbold, 1999; McKetin et al, 2000) and included sections on demographics, drug use, price, purity and availability of drugs, crime, risk-taking behaviour, health and general drug trends (see Appendix A). Each interview took approximately 30 minutes to complete and the participants were reimbursed $30 for out-of-pocket expenses and time. The interview data were analysed using SPSS for Windows Version 10.

2.2 Key Informant Interviews

A previous study (Hando et al., 1997) noted that phone interviews were more effective as a rapid data collection tool among key informants, compared to focus groups. The standard procedures manual identified 30-40 key informants per site as sufficient to monitor drug patterns and identify some robust trends. This technique was successfully employed in Darwin in 1999 (O'Reilly, Rysavy & Moon, 1999; Rysavy, O'Reilly & Moon, 2000). The semi-structured interview instrument was based on previous research conducted at NDARC for the World Health Organization (Hando and Flaherty, 1993) and paralleled the structure of the IDU survey (McKetin et al, 2000). It included questions on drug use patterns, availability, purity, forms of administration, criminal behaviour and health issues. Telephone interviews with informants took between 30 to 45 minutes to complete.

The informants were interviewed in July 2000. Criteria for inclusion were:

- A minimum of weekly contact with illicit drug users in the preceding six months; or
- Contact with at least 10 illicit drug users in the previous six months.

All the informants were employed in alcohol and drug treatment agencies (Government and non-Government), other health services, non-Government organizations (NGOs), NT police, NT Correctional Services, the NSP or in private practice. The research team selected IDRS informants from known professionals and NGO workers and through peer referral. Potential informants received study information sheets and consent forms and those interested in participating provided the research team with contact details, a completed consent form and a time to conduct the screening and interview. The interviewer contacted each informant at the pre-arranged time, screened each informant for inclusion into the study (according to set questions to ensure the criteria listed above were met) and either conducted the interview immediately or arranged a mutually convenient time.

Thirty one key informants were interviewed, consisting of 13 males and 18 females. The sample was composed of:

- General practitioner (n=1)
- Alcohol and drug services personnel, including a GP (n=9)

- Detoxification workers, including a GP (n=4)
- Youth workers, one outreach and one specialising with ATSI injecting drug users (n=5)
- Drug squad officers (n=2)
- Senior police policy officer (n=1)
- Correctional services employees, including one in juvenile detention (n=3)
- Needle/syringe program workers (n=2)
- Community service workers (n=3)
- Mental health professional (n=1)

The informants were requested to identify the main illicit drug used by the drug users with whom they had the most contact in the six months preceding the study (the first half of 2000). Eight key informants identified amphetamine as the main illicit drug used (25.8%), eleven nominated cannabis (35.5%) and twelve selected morphine (38.7%). None identified heroin or cocaine. A large majority of informants stated that their work brought them into contact with drug users and the remainder indicated that they had contact through both their work and social/personal life.

The responses to open-ended questions were transcribed shortly after the completion of the interview in order to record as much detail as possible. All data were tabulated and content analysis was conducted with a word processor.

2.3 Drug-Related Harm Indicators

To complement and validate the IDU and key informant data a range of secondary data sources were accessed. The pilot study for the IDRS (Hando et al, 1997) recommended that databases accessed for secondary indicator data should meet at least four of the following criteria:

- Include 50 or more cases
- Available at least annually
- Provide brief details of illicit drug use
- Collected in the main study site (Darwin or the NT for the current study)
- Include details on the four main illicit drugs under investigation

The following databases meet at least four of the above criteria and were accessed for this study:

- NT Police, Fire and Emergency Services Integrated Justice Information System
- Banyan House (therapeutic community) client data for the Darwin region (client data from Alcohol and Other Drugs Client Database)
- Needle Syringe Program distribution figures (collected by NT AIDS Council)
- Consumption of Schedule 8 narcotics (Poisons and Pharmacy, Territory Health Services)
- National Drug Strategy Household Survey data (Australian Institute of Health and Welfare)
- Australian Bureau of Statistics opioid deaths
- Australian Needle and Syringe Program
- Australian Bureau of Criminal Intelligence illicit drug prices
- Federal and Northern Territory Police illicit drug seizures

Some additional secondary data sources were not available at the time and these included hospital separations, accident and emergency data and St John Ambulance service data.

3.0 CURRENT DRUG SCENE AND RECENT TRENDS

Current illicit drug use patterns and related issues are discussed from the perspectives of the 100 injecting drug users and 31 key informants and results are summarised according to the major illicit drug groups.

3.1 Overview of the Sample of Injecting Drug Users (n = 100)

The demographics of the injecting drug user (IDU) sample are summarised in Table 1.

Table 1: Demographic characteristics of the IDU sample

Sample Characteristics	N=100
Mean Age (years)	31.5 (range 16-64)
Age Ranges (%)	
20 years or less	9
21-30	45
31-40	30
41-50	13
51 or older	3
Sex (% male)	78
Ethnicity (%)	
English speaking background	99
Aboriginal and/or Torres Strait Islander	11
Place of Residence (%)	
Darwin inner	65
Northern suburbs	10
Palmerston/rural	10
No Fixed Address	15
Employment (%)	
Not employed	81
Full time	6
Part time	8
School education (mean years)	10
Tertiary Education (%)	
None	63
Trade/technical	25
University/college	12
Prison history (%)	46
Treatment history (%)	
Currently in treatment	34
Length of time in treatment (%)	
Less than one month	33
1 - 2 months	19
3 - 4 months	11
5-6 months	22
More than 6 months	15

The majority of the IDU sample was male (78%) and the mean age of the sample was 31.5 years (range 16-64). One in ten identified as Aboriginal/Torres Strait Islander (ATSI) and the vast majority had English as the main language. Two thirds of the IDUs lived in inner Darwin, one in ten in the northern suburbs and another one in ten in Palmerston (Darwin's satellite city) and the rural area. The remainder (15%) had no fixed address. The majority were unemployed, the average level of education was year 10 of secondary school and most had not attended any post-secondary courses. Two thirds were not participating in any drug treatment and almost half had a prison history.

3.2 Drug Use History of the IDU Sample

The mean age of the first injection was 19 years (median 17), ranging from 10 to 62 years (Table 2). The mean age for females was 18.5 years (median 17) compared to 19.2 years (median 17) for males. The mean age of first injection was lower among IDUs who were aged under 25 years (16.3 : 20.7).

Table 2: Injecting initiation, drug use history and preferred drug (n=100)

Drug Use History	Statistic
Mean age first injection (years)	19
Drug first injected (%)	
Amphetamine	59
Heroin	33
Methadone	1
Other opiates	6
Benzodiazepines	1
Number of drugs ever used (%)	
1	2
2	3
3 –5	21
6-8	28
9-11	34
12-15	12
Median	8
Mode	11
Number of drugs used previous 6 months (%)	
1	3
2	9
3-5	38
6-8	29
9-11	18
12-15	3
Median	5.5
Mode	4
Preferred Drug (%)	
Amphetamine	21
Heroin	44
Morphine	18
Methadone	1
Other opiates	1
Cocaine	2
Ecstasy	4
LSD	3
Cannabis	6

Amphetamine was the first drug injected by 59% of the IDUs, followed by heroin (33%). This was the case for both the younger and older age groups (63% : 57%), but a higher proportion of those aged 25 years or more had first injected heroin (23% : 37%).

A third of the IDU sample had used from nine to eleven drugs (of a total of 15) in their lifetime, just over a quarter had used between six and eight drugs and just under a quarter had used three to five drugs. The median number of drugs ever used was eight. Only a very small proportion (5%) of the sample had ever used only one or two drugs. Polydrug use was prevalent in the six months before the interviews, with over a third of IDUs using 3-5 drugs and almost a third using 6-8 drugs. The median number of drugs used in the previous six months was 5.5, but one in every five IDUs (21%) had used nine or more drugs.

Heroin was mentioned most often as the preferred drug, followed by amphetamine and morphine. In contrast, morphine was most likely to be the last drug injected (Table 3). The other drug frequently last injected was amphetamine. Users under 25 years of age were more likely to have last injected amphetamines (40% : 26%). Morphine and amphetamine were the drugs most often injected in the month before the interviews and there were no apparent differences between younger and older users. On the day before the survey, 94% of the IDU sample had used drugs and the most frequently used were morphine (62%), cannabis (50%), amphetamine (22%) and alcohol (22%). Polydrug use was evident, with two drugs being the median number used on the previous day.

Table 3: IDU recent drug use (n=100)

Last drug injected (%)	
Amphetamine	30
Heroin	9
Morphine	56
Methadone	4
Steroids	1
Drugs used yesterday (%)	94
Amphetamine	22
Heroin	11
Morphine	62
Methadone	9
Cocaine	1
Benzodiazepines	5
Cannabis	50
Alcohol	22
Other drugs (Ecstasy, LSD, opium etc)	1
Mean number used	1.9
Median number used	2
Drug injected most often previous month (%)	
Amphetamine	28
Heroin	14
Morphine	53
Methadone	3
Cocaine	1
Other	1

Figure 1 indicates that most IDUs injected daily (68%), with a third injecting 2-3 times per day (31%). Those aged 24 or less injected less often than the older group, with 27% injecting weekly or less compared to 9% of the older group. Just over half of the younger group (53%) injected once a day or more, in contrast to 74% of older IDUs. One quarter of the IDUs spent $50 to $99 on illicit drugs the day before the interview (Figure 2), 18% spent between $100-$199 and 11% spent $200 or more. Table 4 indicates that most IDUs last injected at a private home (72%).

Figure 1: Frequency of injecting in the last month (IDU survey, n=100)

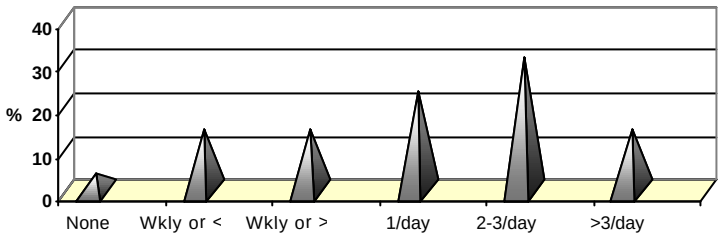


Figure 2: IDU expenditure on illicit drugs on day before interview (n=100)

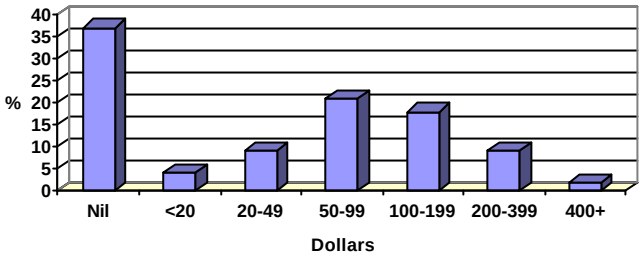


Table 4: Location at which IDU last injected (n=100)

Location	%
Private home	72
Public toilet	1
Street/park or beach	15
Car	8
Other (eg car park)	4

A wide variety of illicit and licit drugs was used (Table 5). The majority of the IDUs had used heroin, morphine, amphetamine, hallucinogens, alcohol, cannabis and tobacco at some time in their lives. Almost half had used methadone, cocaine and ecstasy. IDUs had used an array of drugs and the majority had injected heroin (50%), morphine (73%) and amphetamine (62%) in the last six months. Morphine, cannabis, anti-depressants and tobacco were the drugs most likely to be used on a daily or almost daily basis. Heroin, methadone, amphetamine and alcohol tended to be used on a weekly basis. The variety of methods employed to ingest drugs, some unusual, is also noteworthy.

The NT does not have a methadone maintenance program but, in February 2000, Territory Health Services (THS) introduced a 3-month methadone withdrawal program (Opiate Withdrawal and Management Program, OWMP). Of the 88 IDUs stating they were not in the OWMP, 16% (n=18) had used methadone in the previous six months (15% injected it) for an average of 33 days (range 3-180). Eleven were in the OWMP and half of these had injected methadone in the previous six months, using it for an average of 72 days (range 21-160).

Table 5: Drug use history of IDU sample (n=100)

Drug Class	Ever Used	Ever Injected	Injected last 6 months	Ever smoked	Smoked last 6 months	Ever snorted	Snorted last 6 months	Ever swallow	Swallo last 6 month			
	%	%	%	%	%	%	%	%	%			
1. Heroin	78	74	50	36	14	18	3	9	4			
2a Methadone [a]	48	35	19					29	11			
2b Methadone [b]	46	33	15					26	7			
3. Morphine	76	73	73	12	8	5	2	26	17			
4. Other opiates	18	8	0	7	1	2	1	7	1			
5 Amphetamine	82	79	62	16	5	38	15	33	16			
6. Cocaine	41	28	8	7	2	23	12	3	1			
7. Hallucinogens	58	23	5	4	0	2	1	43	32			
8. Ecstasy	44	22	9	3	1	8	5	32	17			
9. Benzodiazepines	37	19	12	1	0	1	0	26	19			
10. Steroids	7	3	2					3	2			
11. Alcohol	78	8	2					78	51			
12. Cannabis	87											
13. Anti-depressants	35											
14. Inhalants	17											
15. Tobacco	89											

*Among those who had used in the last 6 months
a Entire sample

b Those not on the on methadone withdrawal program (n=88)

3.3 Amphetamine

3.3.1 IDU Survey

Two thirds of the IDUs used amphetamine in the six months before the survey (Table 5) and 21% indicated that amphetamine was their preferred drug (Table 2). Amphetamine was mainly in powder form, but small proportions reported use of amphetamine liquid (15%), prescription amphetamine (10%) or the crystal methamphetamine known as Ice/Shabu (6%) in the preceding six months.

Amphetamine was the first drug injected by 59% of respondents. It was the last drug injected by 30% of the IDU sample and 22% had used it the previous day. Of those who had used amphetamine in the previous six months, 98% injected it and sizeable proportions had snorted (24%) or swallowed it (25%). In the previous six months, amphetamine was used for an average of 45 days (median 20 days). Those who had used amphetamine in the preceding six months were likely to more often use amphetamine (37%) or morphine (46%) in the previous month. Of those for whom amphetamine was most often used in the previous month, 44% had used it weekly and 30% injected it more than weekly but not daily. A quarter of those who had used amphetamine most often in the last month had injected it at least once a day.

Price, purity and availability of amphetamine

Almost two thirds (n=63) of the IDU sample was able to provide information on the price, purity and availability of amphetamine in Darwin (Table 6).

Table 6: IDU estimates of amphetamine price, purity and availability

Median price	$80 gram, $1400 oz $250 8-ball (1/8th ounce)
Change in price	Increased 21% Stable 65% Fluctuates 13%
Purity	Low 45% Medium 44%
Changes in purity	Stable 20% Decreased 39% Fluctuates 27%
Availability	Very easy 42% Easy 42% Difficult 13%
Availability change	Stable 55% Easier 23% Fluctuates 23%

Note: Only larger proportions recorded, n=63

The median price for a gram of amphetamine was reported to be $80 (mean price $94) and an ounce was $1400 (mean $1834). IDUs stated that an "eight ball" (an eighth of an ounce) held a median price of $250 (mean $250). The majority of IDUs who could comment on price stability indicated that the price had been stable for the past six months. Those commenting on purity of amphetamine were in disagreement, with 44% stating medium purity and another 45% indicating it was low. Only a small proportion considered the purity as high (11%). While 39% of those who commented on purity indicated that it had decreased over the previous six months, another 27% thought the purity fluctuated. The large majority (84%) considered amphetamine easy or very easy to obtain and just over half thought that availability had been stable in the previous six months. A quarter of IDUs thought that it had become easier to obtain amphetamine. A dealer's home was the main source for obtaining amphetamine in the previous six months for a third of the IDUs, while a quarter obtained it from a friend. Another quarter bought amphetamine from a street dealer.

Amphetamine trends

The IDU sample was provided the opportunity to comment on any drug trends in the Darwin region. A third of the sample indicated that there had been changes in the type and number of users, with increasing

numbers of people, particularly youth, using amphetamine. Young people were using both amphetamine and morphine and would use whatever was available to "get high and get high faster". Some IDUs considered that injecting amphetamine was becoming more prevalent.

3.3.2 Key Informant Interviews (n = 8)

Current amphetamine use patterns

Six of the eight informants stated amphetamine users resided in all suburbs of Darwin. The other two informants held opposite beliefs with one remarking that users resided primarily in the city while the other expressed the belief that most users lived in Darwin's northern suburbs. One informant also noted that some users were homeless.

The age range of amphetamine users was 15 to 50 years, with most informants placing the average age in the early to mid 20's. One informant identified a group of long-term users in their 40's. Some informants (n=3) stated there were equal numbers of male and female users, while some others (n=3) believed that males constituted 60% of users. Another informant stated there were more male users, particularly in ATSI communities, but in urban settings this gender difference was not as pronounced.

All informants believed users were primarily Caucasian. Estimates of the proportion of ATSI users were low, at less than 5% of the amphetamine user population. Similarly, estimates of Non English Speaking Background (NESB) were less than 5% of the user population (n=5). Informants were unanimous in their belief that the majority of amphetamine users were heterosexual.

Half the informants stated user education levels varied widely and included some with tertiary level education. The other four informants believed the majority of users were secondary school educated, ranging from Year 9 to Year 12. Most informants (n=5) noted the majority of users were on unemployment or other benefits. Only one informant stated most users were employed. Another informant remarked that users must be engaged in gainful employment or criminal activities to support their habit. The final informant identified a mixture of employed, unemployed and student users.

All informants stated the vast majority of users were not in treatment. Additional comments were that amphetamine users were difficult to retain in treatment and 5% or less of the Darwin Detoxification Unit admissions were amphetamine-related.

There was less agreement in relation to previous criminal history and numbers currently incarcerated. Estimates of the number of users with a criminal history ranged from 50% (n=1), many (n=3), 25% (n=1) to only a small proportion (n=1). Only two informants commented on the proportion of users currently incarcerated, with one identifying "some" and the other estimating 5%-10%.

Informants agreed that amphetamine in powder form was the type most commonly available. One informant mentioned sporadic availability of "wet speed". All informants identified intravenous use as the most popular means of administration, followed by snorting or swallowing. One informant commented that intravenous use was continuing to increase and another estimated that 75% of users injected the drug. Most amphetamine users were thought to use on a daily basis. Two informants noted that use by recreational users was sporadic and the amount and frequency used often depended upon availability. Only two informants provided estimations of amounts used, one suggesting three injections daily of one gram per injection was common whereas the other estimated dedicated users injected up to seven or eight grams per day.

Most informants stated cannabis was also commonly used by amphetamine users and its use was high, mainly daily (n=7). Most informants also thought alcohol use was common, although not as regular as cannabis. Its use tended to be social or recreational and one informant added that many amphetamine users drank alcohol to help them when they were "coming off" amphetamine. Another made the point that many users did not drink while using amphetamine as this defeated the purpose of using stimulants. Occasional use of ecstasy was also mentioned (n=4), as was some morphine (n=2) and gamma-hydroxybutyrate (GHB) use (n=2). One informant noted that GHB was only available sporadically. Two informants mentioned LSD, one stating use was rare while the other estimated that 50% of amphetamine users ingested this substance occasionally. Finally, one informant noted some steroid and cocaine use, adding that cocaine was rarely available, and another informant identified some ATSI kava and inhalant use.

Amphetamine use trends

Amphetamine users represented a diverse population, including a large number of recreational users. While half the informants stated there were no obvious trends in numbers using amphetamine, the other half identified an increasing number of users. One of these informants also identified a trend to increasing intravenous use. Two informants commented upon a growing number of younger users and a third noted youth often viewed amphetamine as a trendy party drug. A fourth informant identified amphetamine use by Year 12 students, particularly at end of school year parties, and suggested that free samples may be provided in order to recruit new users. Two informants discussed ATSI amphetamine use trends. One remarked that use was increasing in this population and, in some cases, use was becoming a rite of passage to manhood for young males. The other informant believed prison exposed ATSI people to amphetamine and opiates and, when released, many would experiment with these substances. These individuals introduced other members of their community to drug use, and the typical pattern was to begin with amphetamine then move on to morphine.

Most informants did not identify changes in types of amphetamine available, although one stated Ice/Shabu had been briefly available late in 1999 and another noted the sporadic availability of "wet speed". A third informant indicated locally manufactured amphetamine varied considerably in texture, colour and quality. This informant explained that some formulas were sometimes insufficiently processed, resulting in moist or wet granules.

Two informants commented upon changes in treatment agency presentations. One stated there was a continuing trend towards polydrug use by amphetamine users, and the other reported an increasing demand for support by users' family members.

Table 7: Key informant views of amphetamine use and trends

	1999	2000
User Profile	Early teens to 40's, mostly men and women in their 20's Mostly Caucasian, increasing number of ATSI users Usually high school education Prior criminal convictions common	Early teens to 50's with average age early to mid 20's Slightly more males than females Mostly Caucasian users Varied education but mostly high school level Mostly unemployed or on benefits Prior criminal convictions common
Changes in user demographics	More ATSI and younger users	Continuing trend
Routes of administration	Most injecting Snorting and swallowing also common	Intravenous use remains most common, followed by snorting and swallowing
Changes in routes of administration	Injecting becoming more common and acceptable	Continuing increase in intravenous use
Other Drug Use	Polydrug use common, primarily alcohol and cannabis Benzodiazepines used to assist withdrawal	Polydrug use remains common, primarily cannabis, then alcohol Occasional ecstasy use

Cost, purity and availability of amphetamine

Estimates of the cost of a street gram varied from $50 to $80, with $70 the average cost reported. Two informants stated weighed grams cost $100. Four informants provided estimates of the cost of eight balls,

with one quoting $200 to $250 and the remainder estimating between $250 and $300. One informant noted this was becoming a common unit of purchase. Three informants provided costs for half ounces, one at $400 and the other two at $600. One informant estimated an ounce cost $2000 to $3000 (depending on quality) while another quoted $1300 to $1600. Most informants (n=6) thought prices had been stable over the past six months and two stated prices fluctuated, with one of these informants emphasising that cost fluctuated with purity.

Purity was generally rated as low (n=6), but one informant commented that it varied widely, with higher purity amphetamine becoming more commonly available. Purity levels were considered stable in the previous six months (n=6), but two informants believed the levels fluctuated. All informants rated availability as easy or very easy and most informants (n=7) stated availability had been stable over the past six months. Only one informant believed amphetamine had become easier to obtain.

Table 8: Key informant estimates of amphetamine price, purity and availability

	1999	2000
Price	$50 to $100 per gram, $70 per gram average	$50 to $80 a street gram, $70 per gram average
Change in price	Stable	Stable
Purity	Low to medium Estimated at 5% to 20%	Low
Change in purity	Increased 33% Stable 67%	Stable 75% Fluctuating 25%
Availability	Very easy 33% Easy 67%	Very easy 75% Easy 25%
Change in availability		Stable 88% Easier 12%

Note: Only larger proportions recorded

3.4 Opiates (heroin and morphine)

3.4.1 IDU survey

In the preceding six months 74% of the IDU sample had used morphine and 50% had used heroin (Table 5). Morphine was the preferred drug of 18% of IDUs, compared to the 44% indicating heroin (Table 2). MS Contin® 100mg was the most common form of morphine, while heroin was usually powder or rock (compressed heroin powder).

None of the IDU sample injected morphine as the first drug, but heroin was first injected by 33%. Morphine was the last drug injected by 56% of the IDU sample, compared to only 9% last injecting heroin. On the day before the interview, 62% of the sample had used morphine and 11% used heroin. Injection was the standard route of administration for those who had used morphine in the previous six months (99%), although a proportion of IDUs had also swallowed it (23%). For those who had used heroin in the preceding six months, 100% had injected it and 20% smoked it.

Of those who had used morphine in the previous six months, the average number of days used was 129 (median 180 days). The average was 76 days (median 30 days) for those who had used heroin (Table 5). Those who had used morphine in the last six months were more likely to have mostly used morphine (69%) or heroin (15%) in the previous month, while those who had used heroin were more likely to have used heroin (19%), morphine (60%) or amphetamine (19%). Among those for whom morphine was the drug most often injected in the previous month, 96% did so at least once per day. Of these, 40% injected 2-3 times a day and 19% injected more than three times a day. Heroin was injected at least daily by 86% of

those who had more often used heroin in the last month and, of these, 36% injected 2-3 times a day and 14% more frequently.

Price, purity and availability of heroin and morphine

In all, 29 IDUs could comment on the price, purity and availability of morphine and 46 on heroin (Table 9).

Table 9: IDU estimates of opiate price, purity and availability

	Morphine	**Heroin**
Median price	$50 100mg MS Contin®	$600 gm $50 a rock
Change in price	Increasing 50% Stable 35% Decreasing 10%	Increasing 30% Stable 37% Fluctuates 30%
Purity	Not applicable	High 13% Medium 39% Low 48%
Change in purity	Not applicable	Increasing 20% Stable 16% Decreasing 24% Fluctuates 40%
Availability	Very easy 37% Easy 17% Difficult 29% Very difficult 17%	Very easy 15% Easy 30% Difficult 27.5% Very difficult 27.5%
Change in availability	More difficult 37% Stable 47% Fluctuates 11%	More difficult 32% Stable 44% Easier 12% Fluctuates 12%

Note: only larger proportions recorded

The average price of a 100mg tablet of morphine sulphate (MS Contin®) was reported to be $50 (median $50, range $15-$100) and 50% of the IDUs stated the price had risen in the last six months. Another third indicated that the price was stable. Just over half of the IDUs indicated morphine was easy or very easy to obtain and that availability had not changed over the past six months. However, almost a third of those able to comment considered that morphine was difficult to obtain and had become more difficult in the last six months. Some IDUs commented that the NT government attempts to curb the dispensing of morphine prescriptions were forcing up the prices on the streets. On the last day of conducting the IDU interviews, two interviewees returned to provide additional information on the price of morphine, namely that some dealers had commenced selling MS Contin® 100mg tablets for $100. The main sources of morphine in the previous month were a dealer's home (40%) and street dealers (28%).

Heroin was reported to sell for an average of $523 per gram (median $600) and the range was between $600-$700 for the majority of those reporting on the price. Only eight IDUs could comment on other quantities and all stated that a rock cost $50. The average price for a ¼ gram was $134 (median $125) and a ½ weight was $229 (median $225). There was some disagreement over the stability of the price of heroin in the previous six months, with slightly over a third indicating the price was stable, just under a third stating it was increasing and another third reporting that it fluctuated. There was also disagreement over purity, with 48% indicating it was low and 39% stating it was medium. A sizeable proportion thought the purity of heroin had fluctuated (40%) in the previous six months, a quarter thought it had decreased and an

opposing 20% indicated it had increased. Those commenting on availability were split over ease of obtaining heroin, with 55% stating it was difficult or very difficult and the remaining 45% indicating it was easy or very easy. Some IDUs noted availability depended very much on the users contacts and networks. The availability of heroin was considered stable by 44% of IDUs and another 32% thought it had become harder to obtain in Darwin in the previous six months. The main sources of heroin in the previous six months were friends (31%), dealers' homes (26%) and mobile dealers (20%).

Morphine and heroin trends

A number of IDUs noted there were more people using morphine, particularly young people, and people were using it more often. Some IDUs stated both morphine and amphetamine were used more often and at higher levels. Two IDUs commented that it was surprising who was using morphine and there were more everyday working people using morphine and amphetamine. While some IDUs had ready access to heroin, others thought it was almost impossible to obtain in Darwin. Those purchasing morphine on the 'black market' stated it was becoming busier on the streets as it became more difficult to obtain prescription morphine and the price was rising as it became less available. At the time of the interviews some IDUs were having difficulty obtaining morphine (either because of supply or lack of funds) and some stated they had friends who were 'hanging out and very sick.' At these times, IDUs would resort to a variety of drugs, particularly benzodiazepines and cocktails of drugs. One young IDU stated she had injected benzodiazepines and then alcohol (spirits) that morning in order to relieve the symptoms but neither was effective.

3.4.2 Key Informant Interviews (n = 12)

Current opiate use patterns

This section focuses primarily on morphine use as all informants reported that morphine is the opiate most often used in Darwin. Most informants agreed that morphine users resided in all suburbs of Darwin. Five informants commented that Palmerston has a disproportionately high number of users, possibly due to cheaper accommodation. Two informants identified morphine use in the rural area while another two suggested a number of users had no fixed address. The age range of users was large, from 14 years to 70 years. Almost half the informants suggested the average age of users was 30 years, while two informants identified 35 as the average age and one informant stated not many were older than 40 years.

Two thirds of the informants stated 60% to 75% of users were male. The other informants noted even higher proportions of males. Caucasians were the primary user group (n=12) but estimates of ATSI proportions varied from 10% or less (n=3), 5% or less (n=4) to 1% (n=2). Estimates of the NESB population ranged from nil to almost 30%, but most informants (n=10) stated this group accounted for 5% or less of the user population. Only one informant estimated the Asian proportion at less than 5%.

Education levels of users varied widely and most users had some secondary education. Some users had been educated at tertiary level (n=4). Several informants noted some users were employed in trades, but the majority of informants stated most users were unemployed or on Centrelink benefits. Users were more likely to be in either full or part time employment if they were undertaking treatment (n=2). Morphine users were mostly heterosexual although three informants added they did not elicit this information.

The vast majority of users were not in treatment, with informant estimations ranging from 90% to almost 100%. One informant identified more users in treatment than in preceding years, another stated more users wanted support and a third stated more users from southern states were accessing Darwin services because of lengthy waiting lists in their home states. Three informants mentioned the Opiate Withdrawal and Management Program, with two highlighting the increasing demands upon this new service. It had increased the desire by users for the establishment of a methadone maintenance program. One informant identified the problem of those on this program having to detoxify abruptly from methadone if incarcerated. One informant mentioned many users were initially interested in Naltrexone but lost interest when they learned it had no subjective hedonic effect.

Half the informants suggested 50% or more users had some prison history while another four estimated 10% to 30%. A few informants were able to comment on numbers currently imprisoned and estimations varied from "several" to 20%.

MS Contin® in 100mg tablets was the most common form of morphine available and currently used, although Kapanol® (n=3), Anamorph® (n=2) and Pethedine® (n=1) use were also mentioned. Nearly all users injected and most informants estimated the majority of users injected between 200mg to 400mg daily. One informant stated some users were injecting up to 1200mg daily and another pointed out new users

injected considerably less than long-term users. Other relevant comments were that use depended upon availability, the THS Pain Clinic was currently prescribing Kapanol, most users preferred heroin but this was rare, expensive and of low purity, and there was a subpopulation of recreational users which did not use on a daily basis. Estimations of frequency of use varied from one to four injections daily, with three most often reported.

Most informants stated morphine users often also used benzodiazepines, particularly temazepam (Normison®), and intravenous use was common. Two informants noted users were becoming more aware of the dangers associated with injecting temazepam. Diazepam (Valium®) was the other benzodiazepine mentioned as commonly used, particularly when morphine was unavailable. One informant noted a reduction in availability of flunitrazepam (Rohypnol®). Most informants identified cannabis use as common among morphine users. Amphetamine use was occasional, with one informant noting that younger morphine users were more likely to use this substance, primarily on a recreational basis. Most informants considered alcohol use as minimal to moderate, while ecstasy and LSD use was rare. One informant commented upon anti-depressant use, estimating that 50% of users were prescribed this medication.

Morphine use trends

Some informants (n=5) stated they had not observed any changes in morphine use trends. While only one informant provided an estimate of the total number of morphine users in Darwin, putting this figure at 1600, another two informants noted an increase in the user population. Several informants identified more users arriving in Darwin from southern states and one added these users were generally younger than the average Darwin user. Three other informants commented upon age, agreeing there were increasing numbers of younger users. The number of ATSI users was reported to be increasing (n=5) and one informant remarked that ATSI women were vulnerable to manipulation through drug use. Another informant suggested many ATSI users learned about morphine and amphetamine while in prison. Some ATSI begin using these substances after release and would initiate family members and peers into drug use. One informant stated ATSI users rarely accessed the Darwin Detoxification Unit and another suggested the low literacy rates of ATSI users meant much drug education, including written resources, did not reach these users.

Four informants commented upon the reduction in MS Contin® availability. One informant stated this resulted in more Kapanol® use and increased health risks due to difficulties in injecting this drug. This informant added that continued reduction in MS Contin® availability would inevitably result in price increases. The second informant identified some desperation among morphine users, explaining MS Contin® was becoming difficult to obtain even by chronic pain patients. The third informant also noted the reduction in availability but added that the Health Insurance Commission (HIC) investigation in August 1999 had not had the impact that many users and treatment personnel had anticipated. This informant added the reduction in MS Contin® availability was leading to a busier black-market trade and price increases in all forms of morphine. The fourth informant identified increased polydrug use by opiate users, explaining even long term morphine users were using a range of other substances due to the reduction in morphine availability. This informant also identified the diversion of methadone tablets.

The perceived reduction in MS Contin® availability had not resulted in the predicted increase in heroin, according to one informant. Another noted heroin was more available for a time but was again rare and a third informant reiterated the belief that continued reduction in morphine availability would inevitably result in a heroin trade.

Table 10: Key informant estimates of opiate (morphine) use and trends

	1999	2000
User Profile	Unemployed or manual labour Caucasian heterosexual males Late teens to 60's High school educated Some ATSI and Asians	Unemployed or other benefits Mostly Caucasian males Early teens to 70's with average age early to mid 30's Varied but mostly high school ATSI population 10% or less NESB population 5% or less
Changes in user demographics	More youth and ATSI	ATSI user population increasing
Routes of administration	Intravenous	Intravenous
Changes in routes of administration	Unchanged	Unchanged
Other drug use	Polydrug use common, primarily alcohol and benzodiazepines	Polydrug use common, primarily benzodiazepines and cannabis

Morphine cost and availability

The majority of informants (n=9) reported the cost of morphine had increased in the last six months, with one informant adding the price depended on the source of the substance. Three informants believed the cost had remained stable. Estimates of the cost of a MS Contin® 100mg tablet varied from $30 to $100, but the majority of informants put the cost at $50 to $60. Two informants mentioned MS Contin® 60mg tablets, one stating these tablets usually sold from $20 to $25 each and the other quoting $40. Another informant observed that Kapanol® 50mg tablets cost from $40 to $50 each but the price was not consistent. Most informants (n=8) rated availability as very easy and the remaining informants rated it as easy. However, there was a trend towards decreased availability with the majority of informants (n=7) suggesting it had become more difficult to obtain in the previous six months. Four informants rated availability as stable and one said it fluctuated. Five informants remarked that GPs were more cautious in prescribing morphine, with one informant observing this reluctance had led to a more active black-market. Another suggested many GPs were now more likely to prescribe temazepam rather than morphine.

Table 11: Key informant estimates of morphine price and availability

	1999	2000
Price 100mg morphine	$30 to $80, $40 average	$50 to $60
Change in price	Uncertain	Increased 75% Stable 25%
Availability	Very easy 57% Easy 43%	Very easy 66% Easy 33%
Change in availability	Uncertain	More difficult 58% Stable 33% Fluctuating 8%

Note: Only larger proportions recorded

3.5 Cocaine

3.5.1 IDU Survey

Cocaine use was not as common as that of amphetamine and opiates, with 18% of the IDUs having used cocaine in the previous six months (Table 5). Those who had used cocaine in the last six months were more likely to most often use morphine (60%) or amphetamine (25%) in the previous month. Only 1% of the sample had used cocaine on the day before the interview. Use appeared to be intermittent with an average of 9 days (median 3 days) for the previous six months. Only 2% indicated cocaine was their preferred drug. Among those who had used cocaine, snorting was the most common route of administration (29%) in the preceding six months, followed by injecting (20%). Powder was the most common form of cocaine used and only a small proportion of the IDU sample had used crack cocaine (2%).

Price, purity and availability of cocaine

Almost a quarter (23%) of the IDU sample was able to provide information on the price, purity and availability of cocaine (Table 12).

Table 12: IDU estimates of cocaine price, purity and availability

Median price	$250 a gram, $75 a cap
Change in price	Increasing 20% Stable 60% Fluctuates 20%
Purity	High 27% Medium 64% Low 9%
Change in purity	Stable 33.3% Decreased 33.3% Fluctuates 33.3%
Availability	Very easy 8% Easy 25% Difficult 25% Very difficult 42%
Change in availability	More difficult 18% Stable 36% Fluctuates 36%

Note: Only larger proportions recorded

The average price for a gram of cocaine was $270 (median $250), and ranged from $180 to $400. The majority (60%) reporting on the price of cocaine indicated it had been stable for the previous six months. A third of those reporting on cocaine purity stated it was medium and another quarter considered purity to be high. The respondents were split three ways regarding purity changes in the preceding six months, with a third each stating stable, decreased and fluctuated. The majority of respondents (67%) thought cocaine was difficult or very difficult to obtain, 36% thought availability had been stable in the last six months and another 36% considered availability to fluctuate. The main source of cocaine in the previous six months had been friends (82%) and the remaining 18% bought from street dealers.

3.5.2 Key Informant Interviews (n=0)

No informants nominated cocaine as the main illicit drug used by the drug users with whom they had the most contact in the preceding six months (the first half of 2000).

3.6 Cannabis

3.6.1 IDU Survey

In the six months before the survey, 82% of the IDU sample had used cannabis (Table 5) and frequency was daily or almost daily (mean 114 days, median 104 days). The most common form of cannabis used was the plant head (82%), with smaller proportions having used leaf (36%), hashish (38%) or "hash" oil (20%). Cannabis was the preferred drug for 6% of the IDU sample (Table 2).

Price, potency and availability of cannabis

Two thirds (66%) of the IDU sample were able to provide information on the price, potency and availability of cannabis (Table 13).

Table 13: IDU estimates of cannabis price, potency and availability

Median price	$25 gm, $25 foil, $100 ¼ oz, $175 ½oz , $300 oz
Change in price	Increased 22% Stable 67% Fluctuates 9%
Potency	High 69% Medium 24%
Change in potency	Increased 16% Stable 68% Fluctuates 10%
Availability	Very easy 68% Easy 25%
Change in availability	Stable 57% Easier 12% Fluctuates 11%

Note: Only larger proportions recorded

The average price of a gram of cannabis was $24 (median $25) and the range was $20 to $25. The price range for an ounce was $180 to $450, with an average price of $304 (median $300). Foils cost $25 (median $25) with a range of $20 to $40. A quarter of the IDUs commented on the prices of ¼ and ½ounces and the respective averages were $93 (median $100) and $165 (median $175). Two thirds of respondents stated the price was stable, while a quarter thought the price had increased in the previous six months. Of the IDUs commenting on cannabis potency and availability, two thirds indicated the potency was high and had been so for six months and that availability was very easy. Just over half thought availability was stable over the previous six months. Another 12% stated cannabis had become easier to obtain. The main sources of cannabis in the previous six months were dealers' homes (43%), street dealers (26%) and friends (19%). Only 6% reported growing their own cannabis.

3.6.2 Key Informant Interviews (n=11)

Current cannabis use patterns

All informants stated cannabis use was prevalent in all geographic locations in the NT: urban, rural, remote and ATSI communities. Users lived in all suburban areas of Darwin and one informant noted a high number of young users in Palmerston.

The overall age range of cannabis users was 8 to 57 years. Ranges provided by individual informants varied according to client group. Six informants placed the average in the 20s, four stated it was the mid teens and the remaining one said it was in the early 30s. Males were reported to outnumber females (n=8), but three informants reported equal numbers. Most informants (n=9) described cannabis users as heterosexual but two stated it was irrelevant. Most cannabis users were Caucasian and estimates of the proportion of ATSI users varied from less than 5% (n=2), 10-20% (n=3), 60-70% (n=3) to 100% (n=1). The latter two estimates reflected the predominant client group with whom informants had contact. Estimates of the proportion of NESB users were less than 1% (n=6), less than 5% (n=2) and 20% (n=1).

Education levels ranged from primary to tertiary and most informants (n=7) stated users had some secondary education. Two informants noted cannabis users generally only had primary education. Those cannabis users who were not still in the education system were usually unemployed or on Centrelink benefits (n=8). No particular areas of employment were mentioned. Most informants (n=9) believed the vast majority of users were not in treatment. The reasons were lack of treatment options (particularly for youth), cannabis use not seen as an issue and difficulty motivating young users because peers thought seeking assistance was "weak." Little information was known about how many were currently incarcerated, but most informants estimated 40% or less had a criminal justice history.

The majority of informants (n=9) stated users smoked cannabis on a daily basis (or would if they had sufficient funds) and 40-60% of users smoked cannabis a number of times each day. Quantity estimates varied from up to 5 cones/bongs per session (with a number of sessions each week), 1-2 cones/bongs a day, to many cones/bongs per day (up to 9 or 10). Five informants stated money was a limiting factor in quantity used and many users would smoke throughout the day every day if they could afford it. All informants stated hydroponic head was the most common form smoked and users resorted to leaf only if head was not available. Cannabis was smoked in a variety of ways, the most common being bongs, bucket bongs, pipes and joints. Younger users preferred bongs and two informants noted some were smoking cannabis and amphetamine (referred to as "snow cones") or cannabis and hallucinogens (called "leopard leaf" by one informant). Older users tended to smoke pipes or joints.

Polydrug use was common and most informants (n=10) stated cannabis users also drank alcohol, with estimates varying from 40% to 100%. Most informants indicated cannabis users would regularly drink alcohol, often on a daily basis if it was obtainable. Four informants indicated young cannabis users would regularly binge on alcohol. Most informants (n=8) reported cannabis users would also use amphetamine and estimates ranged from 10-30% and frequency was 1-3 times a week. Some snorted amphetamine while others injected it. One informant stated cannabis users would prefer amphetamine but did not have sufficient money. Three other informants also indicated that financial constraints limited amphetamine use. Two informants stated cannabis users would also use morphine or heroin and one said they moved on to morphine when cannabis no longer had the desired effect. A small number of cannabis users were reported to use benzodiazepines (n=3). Younger users would occasionally take ecstasy for partying and nightclubbing and sometimes LSD ("trips"). On ATSI communities, inhalant use was common (particularly petrol by young males). Only a small proportion of urban youth inhaled substances such as glue, paint and permanent marking pens. One informant stated kava use was high on ATSI communities, with people regularly drinking large amounts all night.

Cannabis use trends

Informants stated there had been an increase in cannabis use and this was most evident in younger people who were starting to use cannabis at an earlier age. One informant remarked cannabis use was commencing as early as seven years of age and by the time users were in their early to mid teens they were also using amphetamine. This substance was used more often than morphine, particularly at parties and nightclubs. Informants believed cannabis use was increasing among ATSI people, in both urban and community settings. One informant stated there had been a shift from alcohol to cannabis as the preferred drug. On communities there were reported to be increases in the number of youth and females using cannabis. A greater proportion of traditional ATSI people were using it and using more frequently. Cannabis was thought to be more available on some communities than it had been in the past. Two informants who had contact with ATSI reported that polydrug use was increasing among these people.

Cannabis use tended to be a social activity and groups would pool money to purchase cannabis. Because those on pensions can now nominate the day of the week they wish to receive their Centrelink payment, a group can usually manage to use cannabis regularly with all their payments staggered over the week.

Because of the high level of sharing among some users, actual individual purchases did not necessarily reflect the level of use.

Four informants commented on presentations for treatment and three of these noted an increase in the number of people seeking assistance, particularly young people and polydrug users. Income and housing were the main issues identified for youth.

Table 14: Key informant views of cannabis use and trends

	1999	2000
User Profile	Early teens to 50's, most 15-35 Equal males and females Mostly Caucasian, 10-25% ATSI 10-25%; NESB < 5% Mostly secondary education and unemployed Few in treatment or prison, < than 40% with criminal justice history	Pre-teens to 50's, most 15 to 40's More males than females. No changes noted No changes noted No changes noted Increase in numbers presenting for treatment
Change in user demographics	Users becoming younger & more ATSI users	More young people, commencing at earlier age, more ATSI, more females
Routes of administration **Changes in routes of administration**	Smoking using bongs, bucket bongs, cones/pipes & joints Youth prefer bongs & bucket bongs	No changes noted No change
Other drug use	Polydrug common, especially among youth Alcohol, morphine & amphetamine Young people using "snow cones" (cannabis & amphetamine)	Polydrug common, increasing in youth & ATSI Alcohol, amphetamine, morphine & ecstasy Young people using "snow cones" and "leopard leaf" (cannabis & hallucinogens)

Cost, potency and availability of cannabis

Two amphetamine informants also provided information on the price, purity and availability of cannabis, thus resulting in thirteen cannabis informants. The price quoted for a 1-gram bag varied from $25 to $30 and most informants indicated $25 was the usual price. The price for foils/sticks (approximately one gram) ranged from $20-$40, and could be as high as $60 on ATSI communities. The usual price was $20 or $25. One ounce bags sold for $250-$400, the higher purchase price being for "skunk" (a hybrid of cannabis sativa plant using hydroponic cultivation methods). Hydroponic head sold for around $350 and an ounce of head was cheaper if not hydroponically grown. Most informants (n=8) considered the price to be stable, while three thought it had increased. One informant thought it had decreased and another stated it fluctuated.

Of the twelve informants who could comment on potency, all stated it was very high and hydroponic cannabis was very potent. Most informants (n=7) believed potency had increased over the last six months but four informants considered potency to be stable. All informants agreed cannabis was readily available and very easy to obtain. Informants were divided over changes in the ease of obtaining cannabis, with five stating it had remained stable over the previous six months and another five reporting it had become easier to obtain. Most informants considered the increase in accessibility to hydroponic cannabis was a result of an increasing demand and more local production. One informant reported an increase in the availability of skunk. The net or coverage of cannabis distribution had increased, including into ATSI communities.

Table 15: Key informant estimates of cannabis price, potency and availability

	1999	2000
Price	$15 to $25 per gram, usually $25 $250 to $300 per ounce Foils/sticks from $20 to $25	$25 to $30 per gram, usually $25 $250 to $380 per ounce Foils/sticks from $20 to $40, up to $60 on ATSI communities
Change in price	Stable 60% Increased 20% Decreased 20%	Stable 61% Increased 23% Decreased 8% Fluctuates 8%
Potency	High 100%	High 100%
Change in potency	Increased 56% - especially hydroponic Stable 11% Decreased 11% Fluctuates 22%	Increased 64% - especially hydroponic Stable 36% Decreased 0% Fluctuates 0%
Availability	Very easy 100%	Very easy 100%
Change in availability	Stable 62% Easier 38%	Stable 61% Easier 39%

Note: Only larger proportions recorded

3.7 Other Drugs

3.7.1 IDU Survey

The IDU sample had used a number of prescription drugs in the six months before the survey. A quarter of the sample had used methadone syrup and injecting methadone was more frequent than swallowing it. Physeptone® tablets were used by 15% of the IDUs. The use of opiates other than morphine, heroin and methadone was rare and very few IDUs had used opium or poppies.

Benzodiazepine use was widespread in the preceding six months, with 29% of the IDUs stating they had used various forms of this drug group. Of those who had used benzodiazepines, 41% had injected them and 65% had swallowed them. The most common forms used were temazepam (Normison®), diazepam (Valium®), oxazepam (Serapax®) and flunitrazepam (Rohypnol®).

The use of anti-depressants was also high, with 35% having ever used them and 24% using them in the previous six months. These drugs tended to be used daily or almost daily (median 100 days). Many different brands were used and it is not clear whether the use of anti-depressants constituted abuse or not. Further study would be needed to identify trends and patterns of use.

The use of hallucinogens was common among the IDUs. LSD was used by 33% of the sample and 20% had also used hallucinogenic mushrooms in the previous six months. Ecstasy use was also prevalent, with 21% having used it in the last six months. Of those who had used ecstasy, 43% had injected it and 24% had snorted it.

Half of the IDU sample consumed alcohol in the six months prior to the survey and it was generally used more than weekly but not daily (mean 52 days). The vast majority of the IDUs (89%) smoked tobacco on a daily basis. Inhalant use was not common and only 5% of the sample had used inhalants in the previous six months. The inhalants mentioned by IDUs were amyl nitrate and glue. Very few IDUs reported using steroids in the previous six months.

3.7.2 Key Informant Interviews

Alcohol

Twenty seven informants commented upon alcohol use. Cannabis users were viewed as the most frequent drinkers, with seven of the eleven cannabis informants stating the majority of cannabis users were regular drinkers. Three cannabis informants mentioned binge drinking and a fourth highlighted youth binge drinking. Amphetamine users did not drink as heavily as cannabis users, and half the informants noted this group drank mainly in social or recreational circumstances. Ten informants discussed the alcohol consumption of opiate users, but only two identified high rates of alcohol use. The remainder viewed alcohol use as either minimal or moderate, with one suggesting alcohol was used to assist with opiate withdrawal and another suggesting heavy drinking sometimes followed cessation of morphine use.

Benzodiazepines

Benzodiazepine use was associated mainly with opiate users. Eleven of the twelve informants noted benzodiazepine use was common in opiate users, with temazepam being the most popular form. Diazepam and to a lesser extent flunitrazepam were also popular. Three informants stated benzodiazepine use was particularly common when morphine was scarce, and another stated there was a marked increase in intravenous use of temazepam. Three cannabis informants mentioned benzodiazepine use by a small number of cannabis users. Use of this drug group by amphetamine users appeared to be rare, with only one informant stating it was uncommon.

Hallucinogens

Four cannabis informants commented on use of hallucinogens by cannabis users with one reporting that hallucinogens were occasionally mixed with cannabis, two identifying occasional or recreational use and the other suggesting hallucinogens were more popular with younger cannabis users. The three opiate informants and two amphetamine informants who commented agreed that use of hallucinogens was occasional or rare.

Ecstasy (MDMA)

Nine informants discussed ecstasy use. One cannabis informant stated it was a party drug, another noted only some cannabis users took ecstasy, adding that availability was sporadic and the drug was expensive at $80 per tablet, and the third cannabis informant stated the quality was poor. Three amphetamine informants believed amphetamine users took ecstasy only occasionally whereas a fourth stated it was

popular but availability limited its use. The two opiate informants agreed that opiate users rarely took ecstasy.

Other designer drugs

Other designer drug use was uncommon with one amphetamine informant stating GHB (Fantasy) was sporadically available, while another amphetamine informant suggested the liquid form of GHB was occasionally used to spike drinks in date rape cases.

Steroids

One amphetamine informant commented on steroid use, estimating that a subpopulation of amphetamine users, often in the security industry, used steroids.

Inhalants

Three informants (two cannabis and one amphetamine) stated inhalant use (petrol sniffing) continued to occur on some ATSI communities. One of the cannabis informants stated some younger cannabis users in Darwin sniffed glue and paint thinners.

Heroin

The four opiate informants who mentioned heroin agreed its use continued to be rare compared to morphine use. One informant stated heroin was difficult to obtain and purity was low while another indicated that availability was increasing. Morphine users preferred heroin and a small subpopulation of opiate users only used heroin.

Cocaine

Cocaine use continued to be rare in Darwin. Cocaine was mentioned by one informant, who stated many amphetamine users would use cocaine when it was available, but it rarely was.

Antidepressants

One opiate informant referred to antidepressants, estimating that 50% of morphine users were prescribed antidepressants by GPs.

3.8 Drug-Related Issues

3.8.1 IDU Survey

Injection-related Health Problems

Table 16 indicates the types of injection-related health problems IDUs experienced in the month before the survey. For over half of the sample injecting had resulted in bruising or prominent scarring. Almost half of the IDUs also experienced difficulty injecting in the previous month. Dirty hits were common and 38% of the IDU sample had become sick because of such hits.

Table 16: IDU injection-related health problems in the previous month (n=100)

Type of problem	%
Prominent scarring and/or bruising	57
Difficulty injecting	49
Dirty hit (feel sick from it)	38
Abscesses/infections from injecting	16
Thrombosis	10
Overdose	18

Drug overdose

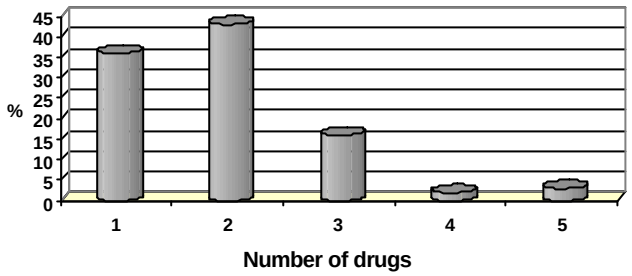
Non-fatal drug overdoses were common among the IDU sample and close to one in every five had overdosed in the month before the survey (Table 16). One in four of the IDUs who had ever used morphine or heroin (n=84) had overdosed at least once in their life (Table 17) and one in every three had overdosed in the last six months. Narcan®, a fast-acting opioid antagonist (naloxone), had been administered to 22% of those who had ever used heroin or morphine. The mean length of time since the last overdose was 42 months (median 13.5 months) and the average time since Narcan® administration was 25 months (median 12 months). The majority of these IDUs had witnessed at least one overdose and the average number of times they had been present when someone else overdosed was 15 (median 2).

Table 17: Drug overdose history of IDU (ever used heroin or morphine) (n=86)

Overdose history	%
Ever overdosed	41
Overdosed at least once in last 6 months	29
Overdosed 2-3 times	16
Overdosed 4 times or more	10
Ever been administered Narcan®	22
Administered Narcan® in last 6 months	21
Witnessed an overdose	66

Polydrug use is a major risk factor in drug overdose and polydrug use was common among the IDU sample (Tables 2 and 3). The median number of drugs used in the last six months was 5.5 (mean 4) and on the day before the survey, IDUs had used, on average, two drugs (Figure 3). Sixty nine percent of the sample had used opiates the previous day, 7% of these had concurrently used benzodiazepines and 22% consumed alcohol. This is of concern given the risk of overdose is exacerbated when opiates are used in conjunction with drugs that depress the central nervous system, such as benzodiazepines and alcohol.

Figure 3: Polydrug use on the day before the IDU survey (n=94)



Injection equipment sharing

Sharing of injecting equipment increases the risk of exposure to blood borne viruses such as HIV, Hepatitis B and C. Ten percent of the IDUs had used a needle/syringe after someone else in the month preceding the survey (Table 18) and in most cases only one person had used the needle/syringe beforehand. Those using the needle/syringe before were usually close friends. Two percent of the IDU reported six or more people had used the needle/syringe before them.

Table 18: IDU injecting equipment sharing in the previous month (n=100)

Type of injecting equipment	%
Used needle/syringe after another	
Once	3
Twice	5
3-5 times	2
Number people used needle/syringe before you	
One	9
6-10	1
11 or more	1
Frequency others used needle/syringe after you	
One	5
Twice	4
3-5 times	1
6-10 times	2
Used other equipment after other/s	28
Type of equipment	
Spoons or mixing containers	78
Filters	33
Tourniquets	44
Water	26
Barrel	7
Number pieces equipment used after others	
One piece	41
Two pieces	37
Three or more pieces	22

The IDUs reported a higher incidence of sharing other injecting equipment and 28% had used such equipment after others. This raises concerns regarding the transmission of
Hepatitis C, which can be contracted through the sharing of equipment associated with injecting. Spoons or mixing containers were most frequently cited as being shared (78%), followed by tourniquets (44%). Of

those who had used other injecting equipment after someone else, two thirds had used more than one type of equipment.

Crime

Almost half of the IDU sample (46%) had been in prison at some stage and 28% were arrested in the previous year. A third of these arrests were for property crime, 14% for dealing/trafficking, 10% for use/possession and 31% for other offences, principally drink driving. When asked what crimes had been committed in the previous month, one in three had been dealing drugs and 12% had engaged in fraud (Table 19). One in ten stated that they engaged in dealing on a daily basis. Very few IDUs reported committing violent crime in the previous month. These results may be under-estimates as some IDUs refused to answer questions relating to crime and others were hesitant in their responses.

Table 19: IDU criminal activity in the previous month (n=96)

Type of crime	%
Property crime	8
Dealing	30
Fraud	12
Violent crime	2

Police activity

When asked about any changes in police activity in the last 6 month, half of the IDUs stated they did not know if there were any changes. One in three (30%) indicated that there had been more police activity and 16% thought activity had remained stable. A third of the IDU did not know if police activity made it harder to obtain drugs, another third thought it had become harder because of police activity and the remaining third did not think it had affected their ability to acquire drugs. Half of the sample (55%) did not think there was a change in the number of friends arrested on drug charges, while a third (32%) stated that the police had arrested more of their friends recently.

3.8.2 Key Informant Interviews

Amphetamine: Law enforcement and health findings

Crime

Many informants did not comment on criminal activity by amphetamine users. However, most informants were able to comment upon trends in supply. Two informants identified organised motorcycle gangs as continuing to be a major source of supply. One of these informants stated these gangs recruit dealers to distribute amphetamines and the other commented that organised motor cycle gangs' control of supply was decreasing and a new group of non-using profit motivated manufacturers and dealers were establishing themselves in Darwin. Three informants noted there was a proliferation of younger dealers while another informant remarked there were more dealers in general. One informant also observed many users were also dealing to fund their own habit.

Three informants stated they had observed no changes in rates or types of property crime whereas two informants noted an overall increase in property crimes by amphetamine users, including shoplifting, thefts, break and enters and car thefts. Another informant commented that most recreational users were employed and were not involved in crime.

Three informants stated there had been no change in fraud crimes but another two stated card fraud was becoming common, with young users acquiring cards through theft or using parents' credit cards.

Only three informants commented on violent crime and two thought it had increased among amphetamine users, often against family members. The third informant mentioned amphetamine psychosis and the resulting aggression and violence in a variety of contexts.

The majority of informants commented on changes in manufacture and importation, reporting an increase in local manufacture. Two informants stated this had been rare in the past. One informant noted most amphetamine continued to be imported from southern Australia.

Police activity

Law enforcement informants commented upon arrest and seizure rates and trends. Two viewed arrest rates as stable while the third stated there has been a steady decrease in drug-related apprehensions. Two of

these informants noted an increase in amphetamine seizure, but a third stated seizure rates were similar to preceding years.

Comments by other informants varied. One thought police activity had increased, one discussed police interviewing suspected users and dealers at home using hand-held tape recorders and another stated police were targeting organised motorcycle gangs. This informant also noted a recent increase in undercover operations and continuing police harassment of suspected and known amphetamine suppliers.

Health

Health risks commonly mentioned were Hepatitis C and vein damage. Two informants stated there was a continuing improvement in knowledge of safe injecting practices. However, three other informants stated greater awareness had not translated into behaviour change and unsafe practices continued. One stated culturally appropriate harm minimisation resources and educational tools remained scarce. This informant also noted some users could not access the NSP in the Darwin city and emphasised the need for a mobile needle and syringe service.

Two informants identified amphetamine psychosis as an ongoing mental health issue. One informant discussed the continuing trend of young women exchanging sex for drugs and another stated chronic users experienced a range of health problems as a result of poor hygiene and nutrition, inadequate accessing of GP services and homelessness.

Other issues raised related to alcohol and drug treatment services. Five informants reported an increase in the number of drug users presenting to services, and two of these also stated there was an increase in presentations of families affected by a family member's drug use. Two informants commented it was challenging to incorporate drug users into services that traditionally dealt with problematic alcohol use. The increase in drug presentations was creating additional work but there had not been a concomitant increase in resources. These agencies required information, skills and training to work with both users and those affected by another's use. Two informants commented on the lack of appropriate services for youth, particularly those aged less than 18 years and the problems associated with drug exclusion policies of youth services. One of these informants reported staff of youth services were not skilled to work with drug issues.

Opiates: Law enforcement and health findings

Crime

Many informants had little or no information regarding user criminal behaviour or police activities. Most were not aware of any changes in types of crimes committed. Four informants noted that property crime, particularly shoplifting, was common. Only two informants suggested fraud was common, whereas three informants identified an increase in violent crimes, including assault using knives, sexual assault and armed robbery. Most informants did not know of any changes in drug supply trends. Two informants stated there was no change in supply sources.

Police activity

Four informants identified no change in police activity in the previous twelve months while another four stated they were not aware of any changes in police activity. Two informants remarked police did not target morphine users, one commenting that police did not bother with suppliers known to them. Two informants explained police had difficulty making arrests as morphine was a licit substance and there was difficulty in proving diversion. Only one informant stated there was an increased police presence in the Darwin City Mall.

Health

Most comments on health issues were related to unsafe injecting practices. Three informants identified poor injecting techniques, infections and using alone. Another four informants commented specifically on the health consequences of injecting temazepam. Three informants acknowledged the harm minimisation value of the NSP but one stressed the difficulties with access and the need for a mobile service. Three informants mentioned Hepatitis C and one estimated this virus had infected 60% to 70% of users. Users seemed to have better awareness of the health risks associated with intravenous drug use but these risks were often ignored.

Three informants reported an increase in presentations to alcohol and drug services by both users and non-users. Two informants stated dual diagnosis users had unique treatment and health issues but these were not addressed by existing services. Another informant commented that youth do not present for drug

problems and the drug exclusion policies of some youth services were a major issue. This informant believed that personnel at youth services did not have the necessary skills to work with drug issues. Finally, one informant remarked that health status was linked to economic status and another suggested that most morphine users had general health problems, specifically related to nutrition, hygiene and dental health.

Cannabis: Law enforcement and health findings

Crime

Comments on drug dealing activities varied, with three informants noting no change in trends and another three stating there were more dealers. There was reportedly a significant increase in young dealers, including students selling within schools. Three other informants identified an increasing trend toward dealers exchanging cannabis for stolen goods. Four informants stated there was more local cultivation of cannabis, including hydroponic varieties, and another believed that more cannabis was grown on ATSI communities.

Informants identified property crime as the main offence committed by cannabis users. Four informants identified an increase in property crime, with one suggesting that difficulties in obtaining Youth Allowance contributed to this trend. Another two informants stated property crimes were committed in order to obtain goods to exchange for cannabis. One informant identified increased property crime rates specifically by younger users and another stated organised motorcycle gangs recruited young users to both supply and to commit property offences.

Fraud was not common. One informant identified an increase in the number of youth misusing their parents' credit cards and another informant believed most credit card fraud was of an opportunistic rather than planned nature.

Four informants believed violent crime was rare among cannabis users. However, another two stated violent crimes were becoming more common, with one informant identifying an increase in violent crimes by males and teenage girls.

Police activity

Law enforcement informants did not comment on police activity but other informants expressed a variety of views. One informant stated police were increasing their activities on ATSI communities, two suggested police harassment of cannabis users was increasing and another two stated the police were unconcerned with cannabis use. In contrast, the final informant noted a general increase in police activity surrounding cannabis-related offences.

Health

Mental health issues dominated, with seven informants observing many cannabis users suffered from a range of mental health problems, including depression and subsequent suicide risk, psychosis, aggression, paranoia and loss of motivation. Respiratory problems were highlighted by three informants and a further three informants identified health problems resulting from poor nutrition. Two of these informants noted many heavy cannabis users spent most of their money on drugs rather than food. Three informants discussed sexual issues and one commented on the incidence of date rape, particularly when young women mixed alcohol with cannabis. Another stated there was a loss of libido and the third identified a trend toward young women exchanging sex for drugs. Two informants commented on the general health risks associated with homelessness, with one observing that young women, in particular, left home because of parental disapproval of cannabis use. Other issues identified were poor mother-baby bonding with heavy cannabis use and workplace stress resulting from difficulties concentrating.

Informants working with ATSI people stated cannabis use was alarming and problematic, particularly in relation to emotional blackmail and youth suicide. Some young people reportedly became agitated, aggressive and threatening when they did not have sufficient funds to buy cannabis. They would demand money from the family and if they were not provided with any they would attempt to blackmail the family with threats of self-harm. Some had actually carried out the threats when they did not obtain money. Three informants believed the attempted suicide rate was high, was rising and was linked with cannabis use.

Some informants commented on issues relating to services for cannabis users. Although three informants reported an increase in cannabis presentations, one stated there was no treatment available for cannabis users, particularly for youth, and another commented there were inadequate services for youth and that

they do not tend to present to alcohol and drug agencies. Youth specific services were attempting to deal with substance use issues without the funding for this purpose. Another believed there was very little appropriate education or educational material on the detrimental effects of cannabis use.

3.9 Other Indicators

Overdose deaths

The Australian Bureau of Statistics (ABS) maintains a database on the number of deaths in which opioids were coded as the underlying cause of death. These data are presented for each jurisdiction for the period 1988 to 1999 in Table 20. Table 21 indicates the population rates for each jurisdiction. The NT has relatively low numbers of opioid overdoses each year, especially when compared to New South Wales, Victoria, Queensland and Western Australia. In 1999 the rate per million was lower than in all jurisdictions other than Tasmania.

Table 20: Number of opioid overdose deaths among those aged 15-44 years by jurisdiction, 1988-1999

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1988	201	99	15	12	18	0	0	2	347
1989	154	98	19	8	18	1	2	2	302
1990	193	78	8	18	14	5	0	0	316
1991	142	63	9	12	12	3	0	2	243
1992	178	77	18	28	21	0	1	4	327
1993	177	84	22	40	23	4	2	5	357
1994	201	91	34	32	38	4	5	1	406
1995	251	136	42	34	68	6	0	13	550
1996	244	142	27	30	61	5	2	15	526
1997	292	168	26	36	70	1	1	6	600
1998	358	210	38	45	59	7	10	10	737
1999	402	348	70	52	73	3	4	8	960

In 1999 coded according to the International Classif ication of Disease, 10th Revision (ICD-10) classification system
1988-1998 coded by the ICD-9 system

Table 21: Rates per million population aged 15-44 years of opioid overdose deaths by jurisdiction, 1988-1999

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1988	75.1	48.5	11.4	18.1	23.8	-	-	13.7	45.3
1989	56.6	47.2	14.0	12.0	23.2	4.7	22.2	13.5	38.3
1990	70.4	37.1	5.8	26.8	17.7	23.4	-	-	39.9
1991	51.5	29.8	6.4	17.8	15.1	14.0	-	13.0	30.1
1992	64.3	36.5	12.6	41.6	26.3	-	10.9	25.7	40.6
1993	64.2	40.1	15.1	59.9	28.8	18.8	21.9	31.9	43.6
1994	72.8	43.8	22.8	48.2	47.3	19.0	55.2	6.4	49.6
1995	90.5	65.7	27.7	51.6	83.7	28.7	-	82.8	67.0
1996	87.3	68.4	17.5	45.8	74.2	24.1	21.9	95.3	62.9
1997	103.8	80.3	16.7	55.6	83.6	4.9	10.0	38.7	71.5
1998	126.4	99.6	24.2	69.7	69.4	34.6	99.8	65.8	87.1
1999	141.0	163.9	44.2	80.9	85.0	15.1	39.6	52.9	112.8

Schedule 8 morphine narcotics

The Poisons and Pharmacy Branch of THS collates information on Schedule 8 drugs. Table 22 indicates the changes in the consumption of Schedule 8 morphine narcotics in the NT from 1994 to 1999.

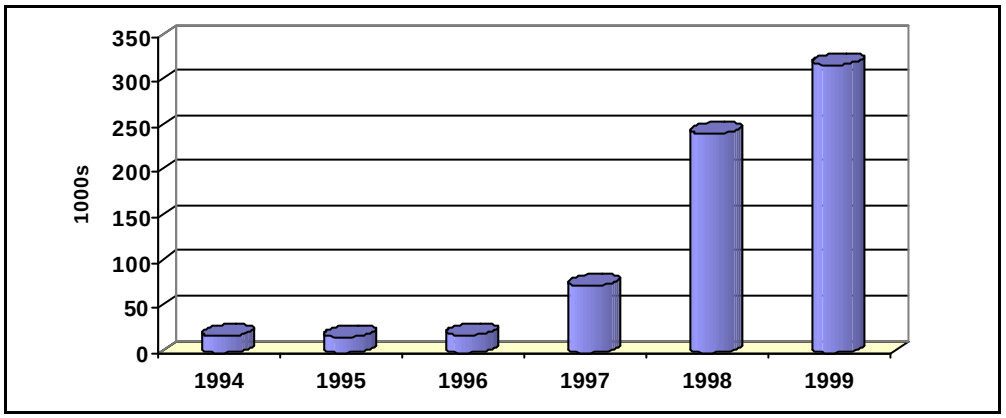
Table 22: Consumption of Schedule 8 morphine narcotics, 1994–1999*

Drug name	1994	1995	1996	1997	1998	1999
MS Contin 10mg tabs	19,680	17,000	33,160	36,140	20,253	26,262
MS Contin 30mg tabs	18,880	20,380	31,580	34,100	27,653	24,900
MS Contin 60mg tabs	26,840	20,800	44,940	86,620	118,790	66,010
MS Contin 100mg tabs	18,540	17,440	19,820	74,400	242,808	319,135
Kapanol 20mg tabs	220	6,200	12,080	14,980	18,400	20,910
Kapanol 50mg tabs	160	3,580	8,240	15,080	18,986	17,580
Kapanol 100mg tabs	220	4,340	13,060	24,240	31,119	37,278
Anamorph 30mg tabs	54,120	48,840	59,020	62,140	80,135	54,494

*Oral doses only, injections and syrups not included

Consumption of all Schedule 8 morphine narcotics increased from 1994 to 1998 and very large rises were evident in MS Contin® 60mg and 100mg tablets and all doses of Kapanol®. From 1998 to 1999, there was a drop in consumption of MS Contin® 30mg and 60mg, Kapanol® 50mg and Anamorph® 30mg tablets. However, consumption of all other Schedule 8 morphine narcotics continued to rise. MS Contin® 100mg is the preferred, most often used form of morphine, and the dramatic rise in the consumption of these tablets from 1996 onwards is illustrated in Figure 4.

Figure 4: Consumption of MS Contin® 100mg tablets, 1994-1999

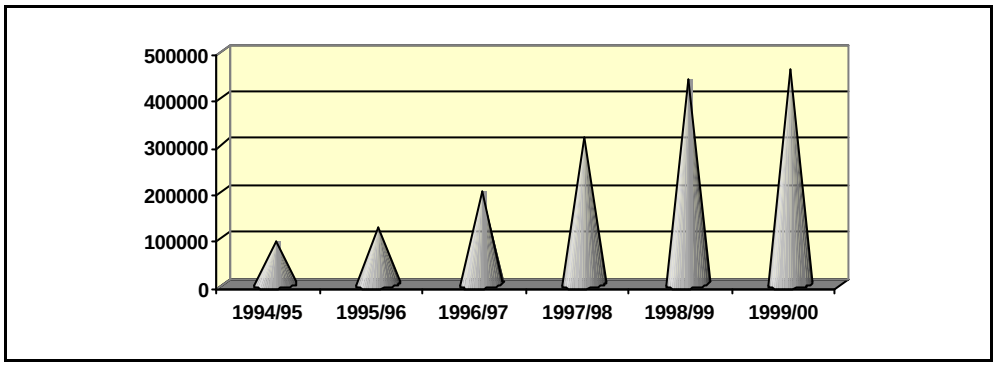


Needle/Syringe data

Needle/Syringe Program figures

The NT AIDS Council collects data on the number of needles and syringes distributed and these are presented in Figure 5. There has been a steady rise in the distribution figures, from 89,475 in 1994/95 to 459,619 in 1999/00, a 414 percent increase over the last five years. There was a 5.3 percent increase from 1998/99 to 1999/00. Darwin had the highest distribution at 275,771, followed by 78,135 in the rural area surrounding Darwin, 64,347 in Palmerston and 41,366 in unidentified areas.

Figure 5: Number of needles and syringes distributed, 1994/95 to 1999/00



Source: Needle/Syringe Program figures (Northern Territory AIDS Council)

Last drug injected

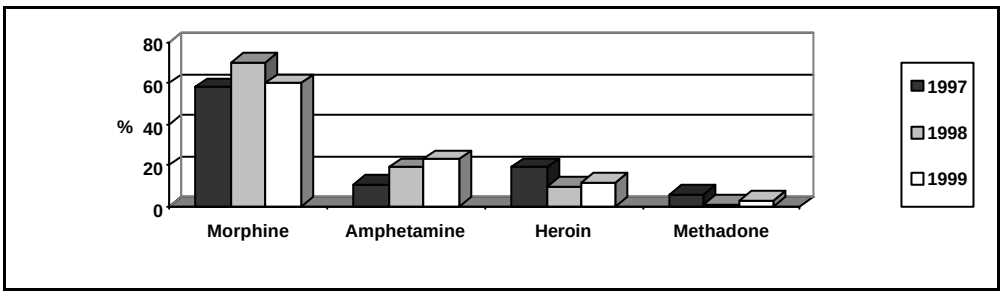
The Australian Needle and Syringe Program (ANSP) collates survey information on the prevalence of the last drug injected and the NT data from 1995 to 1999 are contained in Table 23. The number of IDUs who had last injected morphine increased markedly from 1995 to 1998 (33% to 70%), but dropped to 60% in 1999. This has been accompanied by a steady increase in the proportion of IDUs last injecting amphetamine and, in 1999, 23% last injected it. At the same time, the proportion that last injected heroin decreased from 20% in 1995 to 12% in 1999.

Table 23: Prevalence of last drug injected, 1995 to 1999

	1995		1996		1997		1998		1999	
DRUG	No	%	No	%	No	%	No	%	No	%
Cocaine	0	0	0	0	0	0	0	0	1	1
Heroin	6	20	7	37	19	19	10	10	11	12
Methadone	4	13	3	16	6	6	1	1	3	3
Morphine	10	33	3	16	59	58	71	70	56	60
Other	1	3	2	11	4	4	1	1	1	2
Amphetamine	6	20	4	21	11	11	19	19	21	23
> One drug	3	10	0	0	3	3	0	0	0	0
Not reported	0	0	0	0	0	0	0	0	0	0
Total	30		19		102		102		93	

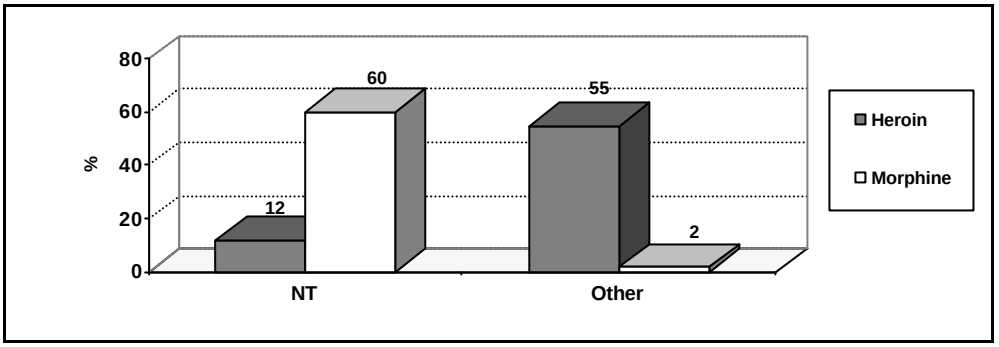
Cite : National Centre in HIV Epidemiology and Clinical Research on behalf of the Collaboration of Australian Needle and Syringe Programs. In some years, the sample size is too small to make meaningful comparisons.

Figure 6: Prevalence of last drug injected among IDU in the NT, 1999.



The ANSP survey data highlights a unique pattern of opiate injection in the NT, where morphine was the most frequently injected drug among the IDU. In 1999, 60% of IDUs in the NT last injected morphine, in contrast to a low 2% in other jurisdictions (range 0% to 6%). Only 12% of IDUs in the NT reported injecting heroin, compared to 55% in the rest of Australia (Figure 7).

Figure 7: Prevalence of morphine and heroin injection in the NT and other jurisdictions, 1999



Survey data

1998 National Drug Strategy Household Survey: State and Territory Results[1]

Comment: 1

The Northern Territory results of the 1998 National Drug Strategy (NDS) Household Survey were compared to other jurisdictions and Australia (Tables 24a and 24b).

Table 24a: Lifetime use of selected drugs in the NT, other jurisdictions and Australia, 1998*

DRUG	NT	NSW	VIC	QLD	WA	SA	TAS	ACT	AUS
Cannabis	59.1	38.9	35.3	40.2	44.8	39.3	37.6	46.1	39.1
Heroin	4.5	2.0	2.2	2.3	3.2	1.8	1.8	1.8	2.2
Amphetamines	17.6	8.8	8.7	8.0	10.6	8.2	6.5	8.9	8.8
Cocaine/crack	5.6	5.8	3.6	3.5	4.1	2.3	2.4	5.0	4.3
Ecstasy/designer drug	5.6	5.3	4.8	3.8	6.9	2.8	2.4	5.6	4.8
LSD/hallucinogens	21.8	9.8	8.8	10.4	12.3	9.0	7.9	11.3	9.9
Ever used any illicit	62.0	45.1	43.5	47.6	52.0	48.5	46.2	51.5	46.4
Injected illegal drugs	4.3	1.4	2.2	3.0	3.1	1.7	1.6	1.4	2.1

1. Source: Fitzsimmons, G. & Cooper-Stanbury, M. 2000

* Aged 14 years or more

In terms of lifetime use of the selected drugs, the proportions of people in the NT that had ever used cannabis, heroin, amphetamines and LSD/synthetic hallucinogens were higher than in any other jurisdiction and the Australian proportion. The NT also had higher proportions that had ever used any illicit drug and had injected illegal drugs.

Recent use (last 12 months) of illicit drugs indicates the NT had the highest proportion of people who had recently used any illicit drug and also the highest proportions that had recently used cannabis, amphetamines and LSD/synthetic hallucinogens. When cannabis was excluded from the analysis the NT still had the highest proportion of people who had recently used illicit drugs (14.6%).

Table 24b: Recent use of selected drugs in the NT, other jurisdictions and Australia, 1998

DRUG	NT	NSW	VIC	QLD	WA	SA	TAS	ACT	AUS
Cannabis	36.5	16.7	17.8	17.5	22.3	17.6	15.9	20.3	17.9
Heroin	0.5*	0.6	1.0	0.6	1.5	0.5*	0.5*	0.4*	0.8
Amphetamines	7.2	3.8	3.4	3.0	6.0	3.5	1.6	3.1	3.7
Cocaine/crack	1.6*	2.1	1.3	0.7	1.3	0.6*	0.1*	1.2	1.4
Ecstasy/designer drug	3.1	2.1	3.1	1.4	5.1	1.0	0.7*	2.8	2.4

LSD/hallucinogens	5.8	2.6	3.6	2.5	3.9	3.1	2.0	2.8	3.0
Recent use any illicit	39.9	20.5	23.5	22.5	26.9	23.9	22.6	24.7	22.8
Injected illegal drugs	0.9*	0.3*	0.9	1.0	1.8	0.4*	0.6*	0.2*	0.8

1. Source: Fitzsimmons, G. & Cooper-Stanbury, M. 2000
Recent use = used in last 12 months
* Result not reliable as relative standard error greater than 50%

Admissions to alcohol and drug services

Table 25 depicts the admissions for the four drug groups at Darwin alcohol and drug services from 1996/97 to 1999/00. The proportion of admissions for drug use doubled over the four years (15.4% : 34.7%). Admissions for opiate use increased from 1996/97 to 1998/99, but dropped in 1999/00. Cannabis admissions increased slightly during the four-year period. However, the proportion of people admitted because of another's cannabis use increased from 1996/97 to 1998/99 and then dropped in 1999/00.

Table 25: Drug admissions to alcohol and drug services, 1996/97 to 1998/99

	1996/97		1997/98		1998/99		1999/00	
Substance	**Users**	**Non-users**	**Users**	**Non-users**	**Users**	**Non-users**	**Users**	**Non-users**
Opiates	97 21.5%	20 10.2%	161 27.1%	23 7.4%	315 44.2%	18 7.8%	207 38.7%	10 8.7%
Amphetamine	15 3.3%	7 3.6%	32 5.4%	13 4.2%	67 9.4%	20 8.7%	73 13.6%	20 17.4%
Cannabis	88 19.5%	20 10.2%	135 22.7%	69 22.2%	116 16.3%	50 21.7%	119 22.2%	20 17.4%
Cocaine	2 0.4%	0 0.0%	1 0.7%	0 0.0%	1 0.1%	2 0.9%	1 0.2%	0 0%
Polydrug	83 18.4%	19 9.7%	134 22.6%	23 7.4%	144 20.2%	41 17.8%	97 18.1%	7 6.1%
Total	285	66	463	128	643	131	497	57
Total all drug	451	196	594	310	713	230	535	115
% of all drug	63.2%	33.7%	77.9%	41.3%	90.2%	57.0%	92.9%	49.5%
% all admission	15.4%	10.6%	19.6%	5.4%	22.8%	4.6%	34.7%	3.7%

Source: Banyan House (therapeutic community)

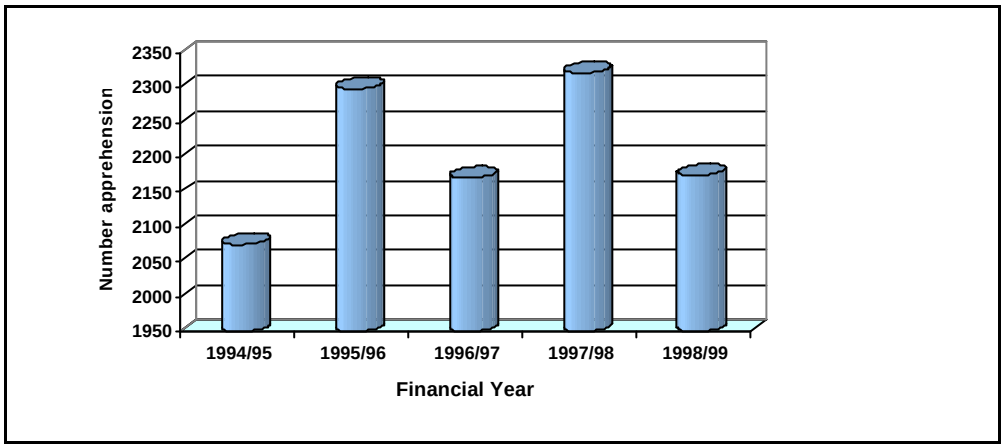
Amphetamine admissions increased over the four-year period. The proportion of people seeking admission because of another's amphetamine use increased marginally from 1996/7 to 1997/98, then doubled in both 1998/99 and 1999/00. Overall, non-users seeking assistance in relation to amphetamine use displayed a 383 percent rise over the four year period.

Law enforcement data

Apprehensions for drug offences

Figure 8 indicates that from 1994/5 to 1998/99 there was considerable variation in the number of drug apprehensions. Apprehensions include all arrests, summons and the issue of Drug (cannabis) Infringement Notices (DINS) under the Territory Infringement Notices Enforcement Scheme (TINES). The overall increase in the number of drug apprehensions from 1994/95 to 1998/99 is a combined effect of a decrease in the number of arrests and summons offset by an increase in the number of DINs issued (Northern Territory Police, Fire and Emergency Services, 1999).

Figure 8: Apprehensions for drug offences in the NT, 1994/95 to 1998/99*



Source: Northern Territory Police, Fire and Emergency Services

* Apprehensions include arrests, summons and the issue of Drug (cannabis) Infringement Notices

Illicit drug seizures

Tables 26a, b and c depict the number and purity of seizures of methamphetamine, amphetamine and heroin by NT Police and the Australian Federal Police in 1998/99 and 1999/2000. No cocaine or ecstasy seizures were reported. The purity levels of amphetamine seizures in 1998/99 were consistent with informant reports of purity ranging from 5% to 20%, generally about 5%. In 2000, many IDUs and key informants reported that amphetamine purity was low. No seizures were recorded for 1999/2000 and, therefore, it is not possible to examine any changes in the purity of amphetamine seizures. In 1999/2000 the purity levels of methamphetamine seizures ranged from 0.2% to 11% (average purity 5%). The IDU survey and key informant interviews did not provide any data on methamphetamine purity levels. The IDUs reported that heroin purity was medium to low. Key informants provided little information on the purity of heroin. The average purity levels of police seizures for each jurisdiction in 1999/2000 are depicted in Figure 9 and the NT had the lowest average purity level.

Table 26a: Methamphetamine seizures and purity levels in the NT, 1998/99 and 1999/00

	1998/99					1999/2000				
	No. Cases	Average Purity	Median Purity	Range Min	Range Max	No. Cases	Average Purity	Median Purity	Range Min	Range Max
<=2gm	10	6		<1	34	4	5.5	5.0	3.0	9.0
>2gm	21	15		<1	98	34	4.6	4.0	0.2	11.0
Total	31	12		<1	98	38	4.7	4.0	0.2	11.0
(AFP) **<=2gm**	ns					ns				
>2gm	ns					ns				
Total	ns					ns				

Table 26b: Amphetamine seizures and purity levels in the NT, 1998/99 and 1999/00

	1998/99					1999/2000				
	No. Cases	Average Purity	Median Purity	Range Min	Range Max	No. Cases	Average Purity	Median Purity	Range Min	Range Max
<=2gm	2	2		1	4	ns				
>2gm	2	29		2	56	ns				
Total	4	16		1	56	ns				

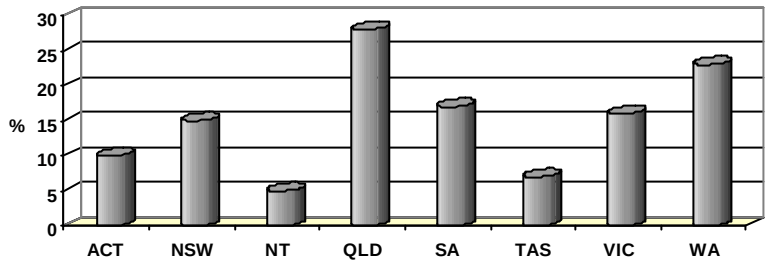
(AFP) <=2gm	ns	ns
>2gm	ns	ns
Total	ns	ns

Table 26c: Heroin seizures and purity levels in the NT, 1998/99 and 1999/00

	1998/99					1999/2000				
	No. Cases	Average Purity	Median Purity	Range Min	Max	No. Cases	Average Purity	Median Purity	Range Min	Max
<=2	ns					ns				
>2	ns					ns				
Total	ns					ns				
(AFP) <=2gm	ns					ns				
>2gm	1	56		1	56	ns				
Total	1	56		1	56	ns				

Figures are the purity levels received at the laboratory within the relevant quarter. The time between date of seizure by police and date of receipt at the laboratory could vary from a few days to several months.
ns = no seizures recorded

Figure 9: Average purity level of amphetamine seizures by jurisdiction, 1999/2000



Source: Darke, S., Kaye, S. & Topp, L. 2000

Australian Bureau of Criminal Intelligence

The cost of various forms and quantities of cannabis, heroin, amphetamine, LSD and ecstasy (Table 27) indicate the NT prices for all drugs other than heroin are not dissimilar to those reported in this study.

Table 27: Price of various forms and quantities of cannabis, heroin, amphetamine, LSD and ecstasy MDMA, 1999*

DRUG	Jan – Mar 99	Apr – Jun99

Cannabis			
Leaf	a deal (1gm approx)	25	25
Head	a deal (1gm approx)	30	30
Hydro	a deal (1gm approx)	30	30
Skunk	a deal (1gm approx)	30	30
Hash/resin	a deal (1gm approx)	60-100	60-100
Oil	a deal (1gm approx)	60-100	60-100
Leaf	¼ bag (7gms)	-	-
Head	¼ bag (7gms)	-	-
Hydro	¼ bag (7gms)	-	-
Skunk	¼ bag (7gms)	-	-
Leaf	½bag (14gms)	-	-
Head	½bag (14gms)	-	-
Hydro	½bag (14gms)	-	-
Skunk	½bag (14gms)	-	-
Leaf	Ounce bag (28gms)	300	300
Head	Ounce bag (28gms)	300	300
Hydro	Ounce bag (28gms)	300	300
Skunk	Ounce bag (28gms)	300	300
Hash/resin	1 Ounce	-	-
Oil	1 Ounce	-	-
Leaf	1 lb	3500	3500
Head	1 lb	3500	3500
Hydro	1 lb	3500	3500
Skunk	1 lb	3500	3500
Hash/resin	1 kg	-	-
Oil	1 kg	-	-
Plant*	1 mature plant * potential value	1000	1000
Ecstasy MDMA			
1 tablet/capsule		50-100	50-100
25-100		-	-
100-1000		-	-
1000+		-	-

DRUG	**Jan – Mar 99**	**Apr – Jun 99**

Heroin		
1 taste/cap (0.1 – 0.3gm)	100	100
Quarter weight	-	-
½weight (0.4 – 0.6gm)	350-400	350-400
Full gram	600-800	600
½ounce	-	-
1 ounce	12-14000	12-14000
1 pound	-	-
1 kg	-	-
½Asian unit (350gm)	-	-
Asian unit (Catti) (700gm)	-	-
Amphetamines		
1 street deal	80-100	80-100
Quarter weight	-	-
1 weight (gm)	100	100
Eightball (1/8 ounce)	-	-
1 ounce	1000	1000
1 lb	-	-
1 kg	-	-
1 vial (ie 1ml ox blood)	-	-
Methamphetamine pills	-	-
LSD		
1 tab	25-50	25-50
25-100	-	-
100-1000	-	-
1000+	-	-
A microdot	-	-

* No prices were recorded for the NT during the period July 1999 to June 2000.

4.0 SUMMARY AND DISCUSSION

4.1 Summary of Main Findings and Comparison of Trends by Source

Table 28 summarises the key findings and data congruence from the three sources.

Table 28: Summary of major findings from injecting drug user survey (IDU), the key informant interviews (KIS) and other indicator data (Other)

Issue	*Summary of Major Findings*	*IDU*	*KIS*	*Other*
Amphetamine	➢ Most likely to be first drug injected	X	X	
	➢ Most likely to be last drug injected by youth	X		
	➢ A diverse population of users and use patterns	X	X	X
	➢ Intravenous use becoming more common	X	X	X
	➢ Increasing numbers of youth and ATSI users	X	X	X
	➢ Polydrug use common and increasing	X	X	
	➢ Most users not accessing treatment	X	X	
	➢ More people supplying	X	X	
	➢ Purity generally low and stable	X	X	X
	➢ Cost per gram usually $70-$80 and stable	X	X	X
	➢ Easy to obtain and availability stable	X	X	
	➢ Increase in local manufacture	X	X	
Opiates	➢ Heroin the preferred opiate	X	X	
	➢ Morphine most commonly used opiate	X	X	X
	➢ ATSI users seen as an emerging group	X	X	
	➢ More people using, especially young people	X	X	
	➢ Most users not accessing treatment	X	X	X
	➢ Polydrug use common	X	X	
	➢ Intravenous the most common route of administration	X	X	X
	➢ MS Contin® 100mg tablets most common form of morphine	X	X	X
	➢ Diversion of legal prescriptions common and the morphine black market becoming busier	X	X	X
	➢ 100mg MS Contin® tablet usually cost $50 and the price had increased since 1999	X	X	
	➢ Morphine easy to obtain	X	X	X
	➢ Heroin usually $600 a gram and $50 a cap	X	X	X
	➢ Heroin availability fluctuated	X	X	
Cocaine	➢ Cocaine difficult to obtain	X	X	X
	➢ Snorting the main route of administration	X		
	➢ Powder the usual form of cocaine	X		

	➢ Average price per gram $270 and stable	X		
Issue	***Summary of Major Findings***	***IDU***	***KIS***	***Other***
Cannabis	➢ Number of cannabis users increasing and users becoming younger	X	X	
	➢ Cannabis of concern in ATSI communities, with more young people, women and traditional ATSI using	X	X	
	➢ Most users not in any form of treatment	X	X	X
	➢ Polydrug use common, particularly among young people and ATSI	X	X	
	➢ More young users selling cannabis	X	X	
	➢ Price usually $25 for 1 gram and stable	X	X	X
	➢ Potency high and stable	X	X	
	➢ Cannabis very easy to obtain and stable	X	X	
Other drugs	➢ Polydrug use prevalent and increasing	X	X	
	➢ Alcohol use common, especially among IDUs and cannabis users	X	X	
	➢ Benzodiazepines often used by opiate users, particularly injecting temazepam	X	X	
	➢ Hallucinogens and ecstasy use common among IDUs	X		
	➢ Ecstasy often used as a "party" drug and popular with cannabis and amphetamine users	X	X	
	➢ LSD available and more popular with cannabis and amphetamine users		X	
	➢ Inhalants sometimes used by urban youth and petrol sniffing occurred on some ATSI communities		X	
	➢ Anti-depressant use common	X		
Drug-related issues	➢ Criminal activity prevalent among IDUs, particularly dealing and fraud	X		
	➢ Property crime more prevalent among youth		X	
	➢ No apparent changes in police activity	X	X	X
	➢ More suppliers and exchanging goods for drugs	X	X	
	➢ Young women exchanging sex for drugs	X	X	
	➢ Awareness of safe injecting, but still sharing injecting equipment	X	X	
	➢ Increase in presentations to treatment services		X	X
	➢ Increase in non-users presenting due to amphetamine use by others		X	X
	➢ Increase in users with mental health and behavioural issues		X	X

Comparison of the KIS components of the IDRS from 1999 to 2000 indicates few new trends in the NT illicit drug scene. Trends detected in 1999 of increasing numbers of users, particularly young people and ATSI, and increased polydrug use continue in 2000. Morphine and amphetamine continue to dominate the drug scene and the use of cocaine is low among the drug using population. Cannabis continues to be the most widely used drug in the NT, excluding tobacco and alcohol.

4.1.1 Amphetamine

The use of amphetamines was prevalent among the injecting drug user population, with the majority of IDUs having used this drug in the six months before the survey. It was the preferred drug of one in every five IDUs and the first drug injected by three in five injecting users. It was the last drug injected by almost a third of the IDU sample and one in five IDUs had used it the day before the survey. Young IDUs were more likely to have last injected amphetamine. NSP information also indicates there has also been a steady rise in the proportion of users who had used amphetamine the last time they injected. Over the past four years the proportion of people accessing Darwin alcohol and drug agencies due to problematic amphetamine use, either their own or another persons, has increased fourfold.

Amphetamine was easy to obtain and availability was stable. Both the IDUs and KIS reported an increase in both local manufacture of amphetamine and greater numbers of people supplying the drug. There is some concern regarding "suitcase" laboratories and the health risks associated with improper manufacture of amphetamine. Ice/Shabu was sporadically available and 6% of the IDUs had used it in the previous six months. The availability and use of this drug needs to be closely monitored given the public health concerns surrounding Ice/Shabu. Both the IDUs and KIS reported increasing numbers of young people and ATSI using amphetamine and intravenous use of the drug was prevalent and increasing. Young people tended to be polydrug users and would also use morphine, cannabis and alcohol. The trend toward increasing intravenous use and polydrug use is a major public health concern.

4.1.2 Opiates

Although heroin was the preferred drug of IDUs, its fluctuating availability has resulted in morphine (particularly MS Contin 100mg) continuing to be the opiate most often used in the NT. Morphine was the last drug injected by over half of the IDUs and the majority used it on the day before the survey. Morphine tended to be used on a daily basis. There were trends toward more people using morphine and using it more often and reports of increasing numbers of young people and ATSI injecting it. Morphine was still readily availability, but the price had risen in the past six months. The price rise was attributed to NT government attempts to curb the dispensing of prescriptions and diversion to the black market. The attempt at restricting supply appears to have forced up prices on the streets and while the survey was being conducted some IDUs reported a number of dealers had put the price up to $100 per 100mg of MS Contin.

Both the IDUs and KIS were very concerned that a reduction in supply, without a concomitant reduction in demand, would result in an increase in the cost of drug-related harm to the NT community. The rising price of morphine could result in an increase in crime and IDUs had already reported an increase in drug-related armed robbery and violent crime. Opiate users will resort to a number of other substances if morphine is difficult to obtain, or financially unobtainable, and desperate polydrug use is a serious public health risk. If morphine becomes increasingly difficult to obtain there is also the risk that the current supplies of heroin may expand and a viable heroin trade would bring with it a variety of health and social costs.

4.1.3 Cocaine

Cocaine was not as common as opiates and amphetamine, with only 18% of the IDU sample reporting use in the previous six months. Snorting was the most common route of administration. Cocaine was difficult to obtain and this availability had not changed in the past six months. Only a small proportion of the IDUs had used crack cocaine and very low prevalence suggests this may not present a serious public health concern.

4.1.4 Cannabis

This remained the most prevalent drug, with 82% of the IDU sample using it, often on a daily or almost daily basis. It was very easy to obtain and the price was stable. Its distribution footprint appeared to be

expanding, with reports of increasing availability in some ATSI communities. There were reports of more people using it, younger people commencing use at an earlier age and more ATSI users, particularly young ATSI, women and traditional people. Some KIS reported that cannabis was linked to emotional blackmail and self-harm by youth on some ATSI communities. This suggests that a concerted approach needs to be taken in conjunction with ATSI communities to explore and understand any relationships between cannabis use and mental health among ATSI youth.

Despite the prevalence of cannabis, and reports of high potency, there is little or no empirical evidence on the characteristics and tetrahydrocannabinol (THC) levels of the various forms grown and used (for example, skunk and hydroponically grown forms). Given its widespread use by a diverse group of people, it is important to conduct research to expand knowledge on the characteristics of the various forms of the drug.

4.1.5 Other Drugs and Drug-Related Issues

Hallucinogens and ecstasy use were common among the IDU sample, with one third using hallucinogens and almost a quarter using ecstasy in the preceding six months. Of those who had used ecstasy, 43% had injected the drug and this may indicate a trend toward an increasing injecting rate. The high rate of prescription drug use continued, notably morphine, anti-depressants and benzodiazepines. Use of the latter is of concern given that 29% of the IDU sample had used various forms in the preceding six months and there was an increasing trend towards injection of temazepam. One in every four IDUs had injected benzodiazepines and both the IDU and KIS reported an increase in serious injection-related health problems.

Polydrug use was prevalent and increasing, particularly among youth and ATSI. The IDU sample had used an average of 4 drugs (median 5.5) in the preceding six months and on the day before the survey, they had used, on average, 2 drugs. Polydrug use is a major risk factor in overdose. Although fatal overdoses were rare in the NT, one in every three IDUs who had ever used heroin or morphine had overdosed in the previous six months and one every five had overdosed in the preceding month. On the day before the survey, 7% of opiate users had also used benzodiazepines and 22% had consumed alcohol. This is of concern given the increased risk of overdose when opiates are used in conjunction with drugs that depress the central nervous system.

Injection of drugs still posed a variety of health risks to many IDUs, despite reports of increased awareness of safe injecting practices. Over one third of the IDUs had become sick from "dirty hits" and half experienced problems injecting. Needle and syringe sharing was occurring and in the month before the survey one in every ten IDUs had used a needle or syringe after someone else. One in every three had also used other injecting equipment (such as spoons, mixing containers and tourniquets) after others. Sharing of injecting equipment increases the risk of exposure to blood borne viruses such as HIV, Hepatitis B and C. The high incidence of sharing other injecting equipment raises concerns regarding the transmission of Hepatitis C, which can be contracted through the this type of sharing. KIS estimated the majority of IDUs were infected with Hepatitis C and continued sharing of equipment would further inflate prevalence rates of this virus.

KIS and IDUs acknowledged the harm minimization value of the NSP but some IDUs experienced difficulties accessing a service located in the centre of Darwin. Users in Palmerston and the surrounding rural area stressed the need for a NSP in Palmerston and a mobile service. Some KIS commented on the lack of relevant and culturally appropriate harm minimization material and believed much drug education information did not reach many young people or ATSI users. Literacy was also an issue and material was required that did not rely on high levels of literacy and/or education.

Health status is linked to economic status and the majority of IDUs are not employed, have low levels of education and a proportion is homeless. Two of the main reasons why young people accessed services were financial difficulties and homelessness. IDUs and KIS reported that the health of users was generally declining and quite rapidly among chronic users. Poor health was reported to be a result of poor hygiene and nutrition, inadequate or inappropriate housing, homelessness, lack of access to health services, few treatment options and diminished social opportunities. Illicit drug users have a variety of health problems that can be linked to their marginalisation. Drug use can be both a cause and consequence of marginalisation (Dwyer & Rumbold, 1999) and increasing marginalisation of drug users will exacerbate health problems.

4.2 Study Limitations

The IDRS acts as an early warning system and aims to detect significant changes or emerging trends in drug use patterns both within jurisdictions and nationally. The key informant method employed relies on the perception of individuals who have contact with illicit drug users or who are in contact with the drug scene. Key informants are generally from the health, service or law sectors and may not necessarily have contact with users who are representative of all illicit drug users (given the hidden nature of drug use). However, the IDU survey and other indicator analysis are more objective and used to substantiate key informant reports. The IDRS use of multiple methods to measure drug trends appears to provide an efficient and complementary means of monitoring trends over time. It must be remembered that the purpose of the IDRS is not to explore and verify trends, but to detect them and indicate what may require more in-depth research and contribute to other policy decisions. The IDRS could be enhanced by the development of further other indicator data within jurisdictions and nationally and through specialist research into illicit drug use and drug users.

4.3 Policy and Research Implications

The findings from this study suggest the development and implementation of a number of initiatives in key areas. However, the success of any initiatives relies on an overarching NT Government drug strategy, with clear goals and objectives based on empirical evidence on the current state of licit and illicit drug use in the NT. This strategy would provide both direction and guidance for all sectors involved in drug issues in the NT and would be committed to a collaborative and transparent process to develop and expand strategic initiatives to reduce the harm to the NT community arising from drug use. A research and evaluation framework would be essential to establish an extensive, reliable and objective evidence base to inform licit and illicit policy and strategic direction and to determine the effectiveness of various initiatives.

The key areas identified in this study that could be incorporated into such a strategic approach are:

1. **Research into patterns of and trends in licit and illicit drug use and availability amongst Aboriginal and Torres Strait Islanders in the Northern Territory, particularly in relation to emerging groups of injecting users.** Drug use, including polydrug use, appeared to be increasing among ATSI people and key informants believed that many ATSI were exposed to illicit drug use in prison. After release, they would initiate peers and other members of their community into drug use. There were also reports of amphetamine injection as a rite of passage for young males. Amphetamine was thought to act as a "gateway" drug to opiate use. The present study did not attempt to access ATSI communities, however, a number of key informants stated that drug use was of major concern in some communities and cannabis was linked to emotional blackmail and self harm among ATSI youth.

2. **Research into the psychological impact of amphetamine, cannabis and polydrug use in people at risk of developing mental health and behavioural disorders.** Both amphetamine and cannabis were reported to be associated with mental health and behavioural disorders. The easy availability of both drug types, widespread use and increasing polydrug use suggest the immediate need to identify at risk individuals and early intervention strategies to reduce the risks associated with drug use. There is a distinct service gap for dual diagnosis users, who have unique treatment and health issues.

3. **Research into the health and social costs arising from the marginalisation of illicit drug users.** The deteriorating health of illicit drug users results from poor hygiene and nutrition, inadequate or inappropriate housing, homelessness, lack of access to health services, limited treatment options and diminished social opportunities. Many health problems can be linked to marginalisation. As drug use can be both a cause and consequence of marginalisation, the increasing marginalisation of drug users will exacerbate their health problems.

4. **Factors affecting transition between types of drugs (for example, cannabis to amphetamine, amphetamine to opiates) and routes of administration (snorting or swallowing to injecting).** Some key informants stated cannabis users would move onto amphetamine or morphine once cannabis no longer had the desired effect. ATSI users were reported to shift from amphetamine to morphine use. There is little evidence to either support or repudiate such reports. This is an area requiring further research to determine the nature, frequency of and reasons for such transition. Intravenous use of a variety of drugs continues to increase and the factors influencing this required further exploration.

5. **Research into and development of interventions for those experiencing harm from amphetamine and cannabis use.** Amphetamine and cannabis users appeared to be experiencing some form of drug-related harm. The number of amphetamine users presenting to alcohol and drug services has increased four-fold over the last four years, yet this has not been matched by the development of effective interventions for this group. Personnel from some alcohol and drug services report they have neither the resources nor trained personnel to adequately deal with many of the issues confronting illicit drug users. In particular, services that have traditionally focussed on problematic alcohol use state it is a challenge to incorporate drug users into their service provision and they are not well equipped to deal with other drug issues. Acknowledging the key role played by the non-government sector in harm minimization and reduction is critical. Priority should be given to providing appropriate resources, training and ongoing support to services that have contact with these user groups.

6. **Research into and development of interventions for those experiencing harm from another person's drug use.** There has been an increase in the number of non-users presenting to treatment agencies because of another's drug use, particularly amphetamine use. This continuing trend indicates an immediate need to research, develop and implement appropriate services for these people. Furthermore, existing services should be expanded and supported.

7. **Development of harm minimisation advice for polydrug users. Polydrug use was prevalent and increasing among all drug users.** It is imperative that users are informed of strategies to reduce the harm associated with such drug use. Strategies need to be implemented to ensure that this information is accessible to a diverse range of users.

8. **Development of relevant and culturally appropriate harm minimization resources to overcome literacy and cultural barriers.** Resources need to be flexible and versatile so that they could be used in a range of settings (urban and remote) and with a variety of groups, particularly in light of increasing ATSI use of a variety of illicit drugs.

9. **Analysis of NT government policies and strategies aimed at reducing Schedule 8 narcotics (morphine) and other opiates consumption rates.** This would entail monitoring of changes in the cost and availability of morphine and heroin in the NT, identifying market factors and quantification of the health and social costs associated with adoption of particular illicit drug strategies.

5.0 REFERENCES

Darke, S., Kaye, S. & Topp, L. (2000). *Drug Trends Bulletin*. December 2000. NDARC, Sydney, University of NSW.

Dwyer, R. & Rumbold, G. (1999). *Victorian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS).* NDARC Technical Report No 89. Sydney, University of NSW.

Fitzsimmons, G. & Cooper-Stanbury, M. (2000). *1998 National Drug Strategy Household Survey: State and Territory results.* Drug Statistic Series No 5. Canberra, Australian Institute of Health and Welfare.

Hando, J. and Flaherty, B. (1993). *Procedure manual for the key informant study*. World Health Organization Initiative on Cocaine. Geneva, World Health Organization Programme on Substance use.

Hando, J. & Darke, S. (1998). *NSW Drug Trends 1997, Findings from the Illicit Drug Reporting System (IDRS).* NDARC Technical Report No 56. Sydney, University of NSW.

Hando, J., O'Brien, S., Darke, S., Maher, L. and Hall, W. (1997). *The Illicit Drug Reporting System (IDRS) Trial: Final Report.* NDARC Monograph No. 31. Sydney, University of NSW.

Hartnoll, R., Lewis, R., David, E. & Mitcheson, M. (1985). *Drug problems: Assessing local needs. A practical manual for assessing the nature and extent of problematic drug use in the community*. London Drug Indicators Project.

McKetin , R., Darke, S., Hayes, A. & Rumbold, G. (1999). *Drug Trends 1998: Findings from the Illicit Drug Reporting System (IDRS).* NDARC Monograph No. 41. Sydney, University of NSW.

McKetin, R., Darke, S., Humeniuk, R., Dwyer, R., Bruno, R., Fleming, G., Kinner, S., Hargraves, K. & Rysavy, P. (2000). *Australian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS).* NDRAC Monograph No. 43. Sydney, University of NSW.

National Institute on Drug Abuse (1995). *Epidemiological Trends in Drug Abuse. Volume 1: Highlights and Executive Summary*. Community Epidemiology Work Group. Rockville, MD, National Institute on Drug Abuse.

Northern Territory Police, Fire and Emergency Services (1999). *1998/99 Annual Report*. Darwin, Government Printer.

O'Brien, S., Darke, S. & Hando, J. (1996). *Drug Trends: Findings from the Illicit Drug Reporting System.* NDARC Technical Report No. 38. Sydney, University of NSW.

O'Reilly, B., Rysavy, P. & Moon, C. (1999). The Illicit Drug Reporting System (IDRS) 1999: Northern Territory Drug Patterns and Trends. South Pacific Journal of Psychology. Special Issue: Community Development in Northern Australia, 11(2), 48-61.

Rysavy, P., O'Reilly, B. & Moon, C. (2000) *Northern Territory Drug Trends 1999: Findings of the Illicit Drug Reporting System.* NDARC Technical Report No 81. Sydney, University of NSW.

6.0 APPENDIX A

6.1 IDU Survey Instrument

(See overleaf)