

Queensland

Fairlie McIlwraith, Sophie Hickey and Rosa Alati

**Queensland DRUG TRENDS 2010
Findings from the
Illicit Drug Reporting System (IDRS)**

Australian Drug Trends Series No. 63

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DRUG TRENDS
2010**



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(IDRS)**

**Fairlie McIlwraith, Sophie Hickey
and Rosa Alati**

Queensland Alcohol and Drug Research and Education Centre

Australian Drug Trends Series No. 63

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACS	Australian Customs Service
AGDH&A	Australian Government Department of Health and Ageing
ADHD	Attention Deficit Hyperactivity Disorder
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AIHW	Australian Institute of Health and Welfare
AOD	Alcohol and other drug(s)
ATS	Amphetamine-type stimulant
AUDIT-C	Alcohol Use Disorders Identification Test-Consumption
BBVI	Blood-borne virus infection
DUMA	Drug Use Monitoring in Australia
EDRS	Ecstasy and Related Drugs Reporting System
GP	General practitioner
HCV	Hepatitis C virus
Hydro	Hydroponically grown cannabis
IDRS	Illicit Drug Reporting System
KE	Key expert(s)
K10	Kessler Psychological Distress Scale
LSD	Lysergic acid diethylamide
MDMA	3,4-methylenedioxymethylamphetamine ('ecstasy')
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Modifiable Diseases Surveillance System
NSP	Needle and Syringe Program(s)
OST	Opioid Substitution Treatment
OTC	Over the counter
PWI	Personal Wellbeing Index
QAS	Queensland Ambulance Service
QPS	Queensland Police Service
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
STI	Sexually transmitted infection
WHO	World Health Organization

GLOSSARY OF TERMS

Cap	Small amount, typically enough for one injection
Frequency	Number of occurrences within a given time period
Halfweight	0.5 gram
Illicit	In the context of this report, refers to pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner
Indicator data	Sources of secondary data used in the IDRS (see Method section for further details)
Key expert (KE)	A person participating in the key expert survey component of the IDRS (see Method section for further details)
Licit	In the context of this report, refers to pharmaceuticals (e.g. methadone, buprenorphine, morphine, oycodone, benzodiazepines, antidepressants) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: injecting, smoking, snorting, and swallowing
Mean	The average
Median	The middle value of an ordered set of values
Participant	In the context of this report, refers to a person who participated in the injecting drug user survey (does not refer to key expert participants unless stated otherwise)
Point	0.1 gram; although may also be used as a term referring to an amount for one injection (similar to a 'cap' which is explained above)
Recent injection	Injected at least once in the previous six months
Recent use	Used at least once in the previous six months
Sentinel group	A surveillance group with the potential to points towards trends and harms
Use	Use via one or more of the following routes of administration: injecting, smoking, snorting, and swallowing

Guide to days of use/injection in preceding six months

180 days	daily
90 days	every second day
24 days	weekly
12 days	fortnightly
6 days	monthly

EXECUTIVE SUMMARY

The Illicit Drug Reporting System (IDRS) is a monitoring system designed to identify emerging trends of local and national concern in illicit drug markets. The reporting system comprises data collected each year from three sources: interviews with a sentinel group of people who regularly inject drugs (participants); interviews with key experts; and analysis of pre-existing data related to illicit drugs.

Demographic characteristics of participants

One hundred people who inject drugs participated in the 2010 IDRS survey in South East Queensland. The mean age of participants was 40 years and 70% were male. The majority of participants were unemployed (83%); nearly half had completed a post-school course; and 41% were currently involved in some sort of drug treatment, most commonly opioid maintenance treatment.

Consumption pattern results

Current drug use

The mean age of first drug injection was 20 years. Sixty-one per cent of participants reported methamphetamine as their first drug injected, almost double the number reporting heroin as the first drug injected (33%).

Fifty-nine per cent of participants nominated heroin as their drug of choice and 14% named some form of methamphetamine. Heroin and methamphetamines were the drugs injected most often in the month prior to the interview by the majority of participants (52% and 22% respectively), and they were also the last drugs injected by the majority of participants (39% and 33% respectively). Reported reasons for discrepancy between drug of choice and the drug injected most in the past month included limited availability, drug of choice non-injectable, and price.

Heroin

Heroin use continued to follow the upward trend of the previous year with 81% of participants using heroin in the preceding six months. Of those, 33% used heroin daily, and 51% of all participants reported heroin as the drug most often injected. Use of homebake remained low.

Methamphetamine

There was a trend towards declining use of methamphetamines with 59% of participants reporting use in the past six months. Participants' use of each of the four forms of methamphetamine was speed (41%), crystal (37%), base (30%), and liquid (6%). Methamphetamine was the drug of choice for 14% of participants, and 22% reported that it was the drug most often injected in the past month.

Cocaine

Cocaine use continued to be low with 13% using it in the past six months. Frequency of use was low (i.e. a median of five days in the preceding six months).

Cannabis

As in previous years, the majority of participants had used cannabis in the preceding six months, with nearly a third of all participants using it daily. Hydro continued to be used more often than bush.

Other opioids

Methadone and buprenorphine-naloxone were the two most commonly used forms of prescribed substitution pharmacotherapy; buprenorphine was the most commonly used form of substitution pharmacotherapy used illicitly.

Amongst participants prescribed methadone or buprenorphine, injection of some doses was relatively common, but was less common amongst participants prescribed buprenorphine-naloxone. The majority of participants who used non-prescribed substitution pharmacotherapy injected them.

Use of illicit morphine remained stable at 38% with nearly all participants injecting it. Use of licit oxycodone was rare, but 26% of participants reported recently using illicit oxycodone with nearly all injecting. Thirty-eight per cent of participants (23% in 2009) reported using over the counter codeine (predominantly Nurofen Plus[®]) on a median of seven days in the preceding six months.

Other drugs

Use of ecstasy in the preceding six months was relatively uncommon (18%) with injection of ecstasy even more uncommon (6%).

Although 10% of participants reported having injected a hallucinogen in their lifetime, none had done so in the past six months.

Nearly two-thirds of participants had used benzodiazepines in the preceding six months, and a third reported illicit use in this period.

Use of pharmaceutical stimulants (e.g. dexamphetamine and methylphenidate) was very low (3%). A small minority of participants (7%) had used inhalants in the past six months.

The majority of respondents (70%) reported alcohol use. Tobacco use was also very common.

Drug market: Price, purity, availability and purchasing patterns

Heroin

Price of heroin was typically \$400 per gram or \$50 per cap, and was readily available. Purity was generally reported as medium or low. Most participants purchased heroin from friends or a known dealer. Nearly half of purchases occurred at an agreed public location.

Methamphetamine

Price of speed and base was very similar to the previous year at around \$50 per cap and \$100 per half-gram. There appeared to be an increase in the price of ice/crystal but this may only be an effect of the small numbers reporting on this market. All three forms (speed, base, and ice/crystal) were generally considered easy or very easy to obtain. There was no clear consensus on their purity; however about half considered the purity of speed to be low.

Cocaine

Very few participants commented on the market, and there was no clear consensus on price, purity, and availability.

Cannabis

The potency of cannabis remained high, and the price fairly stable at around \$25 per gram for hydro and \$20 per gram for bush. Hydro continued to be more readily available than bush (97% compared with 69% finding it easy/very easy to obtain). Bush was most likely to be purchased from a friend, and to be purchased at a friend's house. Hydro was most commonly purchased from a friend or known dealer, and there was diversity in the purchasing venue.

Methadone

Only a small number of participants commented, but all considered price to be stable. There was no consensus on current ease of access, but availability was generally regarded as stable.

Buprenorphine

Price and availability was usually regarded as stable.

Buprenorphine-naloxone

Price and availability was generally considered stable with a two milligram tablet costing \$10 and an eight milligram tablet costing around \$40.

Morphine

The price of 100 milligrams of morphine was around \$70, with price considered to be generally stable or increasing. MS Contin[®] was the most common brand of morphine used followed by Kapanol[®]. Morphine was obtained from a variety of source people and venues.

Oxycodone

The price of 80 milligrams of oxycodone was around \$45, with most participants considering price to be stable. There was no consensus on ease of obtaining oxycodone, but most participants considered that there had been no change in availability. Oxycodone was most commonly sourced from a friend and purchased at a friend's home.

Health-related trends associated with drug use

Overdose and drug-related fatalities

About a third of participants (35%) had overdosed on heroin in their lifetime. Eight reported overdosing in the past 12 months. One-fifth of participants had overdosed on another drug in their lifetime. Six reported overdosing in the past 12 months. By far the majority of overdose cases attended by Queensland Ambulance Service were for alcohol, followed by antidepressants, benzodiazepines, and heroin.

Drug treatment

Forty-one per cent of participants reported current treatment, with most receiving opioid substitution pharmacotherapy. The number of calls to the Queensland Alcohol and Drug Information Services increased for illicit opioids but decreased for amphetamines, cocaine and cannabis from 2009 to 2010.

Hospital separations

At the time of going to print, hospital separation data for 2008–2009 was not available. However, the data presented shows that opioid-related separations have been stable in recent years. Amphetamine-related separations show a gradual downward trend. Cocaine-related separations have continued to be low, and the trend for Queensland to have lower separation rates than the national rates also continued. Cannabis-related separations have steadily increased over time, but have remained relatively stable in the past few years. As with cocaine, Queensland rates for cannabis-related separations are lower than national rates.

Injecting risk behaviours

Needle and syringe programs were the main source of needles and syringes. Sixteen per cent of participants borrowed used needles and 25% lent used needles. Two-thirds shared equipment other than needles.

Mental health problems and psychological distress

Self-reported mental health problems were common (43%) with the most common problems being depression, anxiety, and panic disorders. Participants were considerably more likely to score in the 'high' or 'very high distress' categories than the general Australian public as measured by the Kessler Psychological Distress Scale (K10) (64% versus 10%).

Driving risk behavior

Thirteen per cent of participants reported driving under the influence of alcohol in the preceding six months, with 43% of these having driven over the legal limit.

Most participants (88%) reported having driven soon after taking an illicit drug in the past six months. Heroin and cannabis were the drugs most often consumed prior to driving. About two-thirds of participants (67%) considered that the drug/s taken prior to driving had no impact on their driving ability.

Trends in law enforcement associated with drug use

Reports of criminal activity

Dealing and property crime were the most commonly reported criminal activity.

Arrests

Nearly half (44%) of participants reported being arrested in the preceding 12 months with the most common reasons being property crime (30%) and use/possession of drugs (30%).

Expenditure on illicit drugs

Those participants who purchased illicit drugs on the previous day reported spending a mean of \$164.

Special topics of interest

Personal Wellbeing Index

Scores on the Personal Wellbeing Index, which enquires about satisfaction with aspects of life, were well below general population scores except for safety.

Sexual health

Slightly over half of participants were tested for a sexually transmitted infection in the past two years and about two-thirds of these tests were carried out by a general practitioner (GP). Participants gave diverse reasons for being tested.

Most pap smears were also carried out at a GP's and these were mainly routine tests. Less than half the female participants reported having a pap smear in the past two years, and there was no clear common reason for not having one.

Body Mass Index

Both males and females had a higher proportion of participants who were in the underweight category compared to the general Australian population.

Social networks

The majority of participants were in regular contact with family and friends though 9% reported they were never in contact with family and 13% reported not having any friends.

Stimulant and opioid dependence

Of those who had recently used a stimulant, 43% scored four or more on the Severity of Dependence Scale (SDS) indicating dependence; this was nearly always for methamphetamines. There were no significant gender differences.

Of those who had recently used an opioid, 81% scored five or more on the SDS indicating dependence; this was most commonly for heroin. There were no significant gender differences.

General medical practitioners

Nearly all participants had visited a GP in the past 12 months, and the median number of visits was six. Of those who had visited a GP, 40% had visited a GP for mental health problems. The mean age of participants when they first visited a GP for mental health problems was 23 years (range = 3-46 years).

1 INTRODUCTION

The Illicit Drug Reporting System (IDRS) is an ongoing research project that serves as a strategic early-warning system for emerging trends and patterns in illicit drug use and associated harms. Since 2000, the IDRS has been conducted annually in every state and territory of Australia, and it is currently funded by the Australian Government Department of Health and Ageing (AGDH&A). The IDRS focuses primarily on four main illicit drugs: heroin, amphetamines, cocaine, and cannabis, but also monitors trends in other drugs and in drug-related harms.

An important feature of the IDRS is that it aims to disseminate its findings in a timely fashion, highlighting current issues that require further attention rather than providing a more protracted, in-depth analysis of available data. Each year, key findings are presented at the National Drug Trends Conference in October, and the final report is published by the National Drug and Alcohol Research Centre (NDARC) early the following year. In addition, NDARC produces an annual national report and, in collaboration with jurisdictional researchers, quarterly Drug Trends Bulletins highlighting issues of particular relevance. Selected findings from the IDRS are also published in peer-reviewed journals. Reports and other publications are available at www.ndarc.med.unsw.edu.au.

Data for the IDRS come from three complementary sources: (a) a survey of people who regularly inject drugs (participants) who are considered a ‘sentinel’ group in the community; (b) structured interviews with key experts working in the drug and alcohol field; and (c) pre-existing data sets related to illicit drugs. By triangulating information from these three sources, the IDRS aims to increase confidence in the reliability and validity of its findings.

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

1.1 Study aims

As in previous years, the aims of the 2010 Queensland IDRS were to:

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

2 METHOD

The IDRS maximises the reliability of its findings by presenting information from three complementary sources:

- structured interviews with people who inject drugs (participants)
- semi-structured interviews with key experts (KE) who are working in a professional capacity in the drug field
- recent indicator data collected from a variety of sources.

Comparability across years and jurisdictions is maintained by the continued use of the same survey instruments and data sets nationwide, with minor adjustments made to the study methodology each year in accordance with developments and trends in illicit drug markets.

2.1 Survey of people who regularly inject drugs

During June 2010, 101 IDRS participants were individually interviewed face-to-face. Data from one interview was rejected due to questionable validity, resulting in a final sample size of 100. IDRS participants were people aged 17 years or older who inject drugs, had injected an illicit drug at least monthly in the previous six months, and had lived in South East Queensland for 12 months. Participants were recruited and interviewed at five Needle and Syringe Program (NSP) sites located in the Brisbane-Gold Coast area.

Participants provide a sentinel group of people who regularly inject drugs rather than a representative sample of all those who regularly inject drugs.

The interview schedule was administered by trained research staff in a private room at the NSP sites. All participants gave informed consent prior to interview, and the information they provided remains anonymous and confidential (i.e. their responses were de-identified). The interviews took approximately 45 minutes to complete and participants were reimbursed \$40 for their time and travel expenses. The 2010 IDRS survey included sections on:

1. participant socio-demographic characteristics
2. drug use history
3. the price, purity and availability of illicit drugs
4. criminal involvement
5. risk-taking behaviour
6. physical and psychological health
7. general trends.

2.2 Survey of key experts

In August and September 2010, 27 professionals working in the alcohol and other drugs (AOD) sector were interviewed as key experts for the Queensland IDRS. Key experts are individuals working in the health or law enforcement sectors who are equipped to provide information on trends and patterns in illicit drug use and associated harms due to their regular contact with people who inject illicit drugs. However, some law enforcement key experts with no direct contact with illicit drug users, but considerable knowledge of manufacture, importation, supply, and seizure of illicit drugs were also included in the survey.

In 2010, 17 of the key experts were from the health sector and 10 were from law enforcement. They included NSP workers, nurses, mental health clinicians, staff of drug treatment agencies,

researchers, outreach workers, youth workers, forensic chemists, and law enforcement and intelligence officers.

Key expert interviews were conducted face-to-face or over the telephone. The information key experts provided remains anonymous and confidential (i.e. their responses were de-identified). Interviews took approximately 45 minutes to complete and included a range of open-ended and closed-ended questions. Questions were about what the key expert considered to be the main problematic drugs, the resulting issues (health and legal), price/purity/availability of problematic drugs, and any subsequent recommendations. Responses to interview questions were analysed thematically according to recurring issues and class of drugs.

2.3 Other indicators

Secondary data was also collected to corroborate data from those who regularly inject drugs and from key experts. Suggested entry criteria for indicator data were:

- be available at least annually
- include 50 or more cases
- provide details of illicit drug use
- be collected in Queensland
- include details on the four main illicit drugs under investigation (i.e. heroin, methamphetamines, cocaine, and cannabis).

The following indicator data sources largely fitted these criteria and are used in the report:

- Alcohol and Drug Information Service (ADIS): telephone counselling statistics
- Australian Bureau of Statistics (ABS): National Health Survey data
- Australian Crime Commission (ACC): median purity of drugs seized by Queensland Police Service (QPS) and the Australian Federal Police (AFP) in Queensland
- Australian Customs Service (ACS): total weight and number of drugs seized in Queensland by QPS and the AFP
- Australian Institute of Health and Welfare (AIHW): Queensland pharmacotherapy client registrations
- National Hospital Morbidity Data: total number and rate per million persons where a drug was specified
- National Notifiable Diseases Surveillance System (NNDSS): blood-borne virus infections (BBVI) notifications by year
- Queensland Ambulance Service (QAS): overdose and poisoning data
- Queensland Needle and Syringe Program (QNSP): needles and syringes dispensed to NSP in Queensland
- QPS: clandestine laboratory detections and drug-related arrests.

2.4 Data analysis

Participant survey results were analysed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 17.0. Standard frequencies were calculated and categorical variables were analysed using χ^2 . Tests for significant differences between 2009 and 2010 data were conducted for drug of choice, last drug injected, drug injected most often in the past month, recent use, purity and availability, as well as median days of use for the major drug types. Overall, most test results were not statistically significant, and these results are only reported when a significant difference was found.

3 DEMOGRAPHICS

Key points

- The sample of people who inject drugs regularly continues to age (mean age 40 compared with 29 in 2000).
- Demographic characteristics remain similar to previous years: typically unemployed, male, many with prison and drug treatment history.

3.1 Overview of the IDRS participant sample

The demographic characteristics of the 2010 sample of 100 participants from South East Queensland were similar to those in 2009 (Table 1).

Table 1: Demographic characteristics, 2009 and 2010

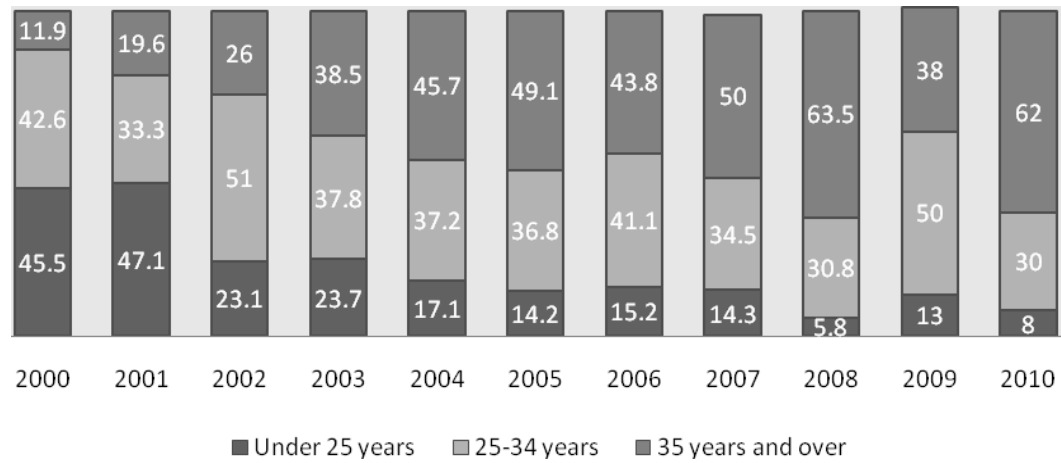
	2009 N = 80	2010 N = 100
Age (mean, range)	33 (19-61)	40 (19-55)
Gender (% male)	70	70
Aboriginal and/or Torres Strait Islander (%)	11	20
Sexual identity (%)		
Heterosexual	93	87
Gay male	0	3
Lesbian	0	1
Bisexual	6	7
Other	1	2
Relationship status (%)		
Married/de facto	24	25
Partner	23	19
Single	50	49
Separated	1	5
Divorced	2	1
Widowed	0	1
Highest school grade completed (mean)	10	10
Course completed post-school (%)		
None	47	53
Trade/technical	45	38
University/college	8	9
Unemployed	94	83
Mean income/week (\$)	385	354
Prison history	57	56
Currently in drug treatment *	39	41

Source: Queensland IDRS participant interviews, 2009 and 2010

* Refers to any form of drug treatment (e.g. pharmacotherapy, counselling, detoxification)

The mean age of the sample was 40 years old, and this continued a trend towards older participants since surveying for the Queensland IDRS began in 2000 (Figure 1).

Figure 1: Age distribution, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

4 CONSUMPTION PATTERNS

Key points

- Methamphetamine was the most common drug first injected by participants in their lifetime.
- Over half of participants nominated heroin as their drug of choice.
- Heroin was the most common drug injected in the preceding month.
- The most recent injection was most commonly heroin, followed by methamphetamine.
- About half of participants injected at least once per day.

4.1 Current drug use

Drug use patterns for 2010 are presented alongside those of 2009 in Table 2. Although the pattern in 2010 is largely the same as in 2009, there is indication of lower use of methamphetamine (i.e. a drop in the proportion who reported it being the drug injected most often in the past month as well as the last drug injected). Heroin continues to be by far the most common drug of choice and the drug injected most often in the past month. Frequency of use remained similar to 2009 with some variation in number of times used in a day.

Table 2: Drug use patterns, 2009 and 2010

	2009 N = 80	2010 N = 100
Age first injection (mean years, range)	19 (11-48)	20 (10-42)
First drug injected (%)		
Heroin	33	25
Methamphetamine (any form)	61	67
Cocaine	1	2
Morphine	3	4
Other	2	2
Drug of choice (%)		
Heroin	53	59
Cocaine	0	1
Methamphetamine (any form)	18	14
Speed powder	(6)	(8)
Base methamphetamine	(3)	(3)
Crystal methamphetamine	(9)	(3)
Cannabis	17	11
Morphine	9	7
Other	3	6
Drug injected most often in past month (%)		
Heroin	46	51
Cocaine	0	0
Methamphetamine (any form)	31	22
Speed powder	(13)	(12)
Base methamphetamine	(8)	(5)
Crystal methamphetamine	(10)	(5)
Morphine	13	13
Other/have not injected in past month	10	14

	2009 N = 80	2010 N = 100
Most recent drug injected (%)		
Heroin	39	47
Cocaine	0	1
Methamphetamine (any form)	33	21
Speed powder	(19)	(12)
Base methamphetamine	(4)	(6)
Crystal methamphetamine	(10)	(3)
Morphine	15	16
Buprenorphine/buprenorphine-naloxone	9	6
Other drug	4	9
Frequency of injecting in past month (%)		
Weekly or less	18	19
More than weekly, but less than daily	27	27
Once per day	14	20
2-3 times a day	27	22
>3 times a day	15	9

Source: Queensland IDRS participant interviews, 2009 and 2010

4.1.1. Drug of choice

Heroin was reported as the drug of choice for over half of participants (Table 2), similar to 2009. However, in 2010 the percentage of participants nominating heroin as their drug of choice was slightly up, whereas a smaller percentage of participants nominated cannabis

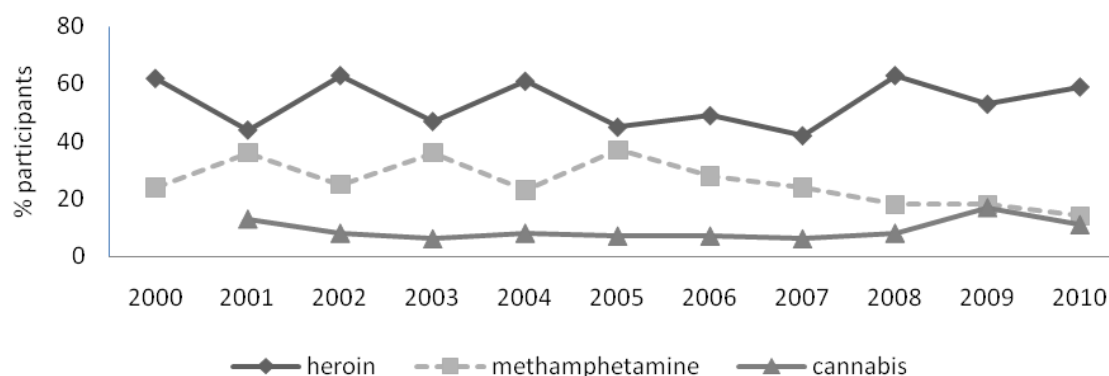
4.1.2. Drug last injected and injected most often in the past month

There was no significant difference in drug use patterns between 2010 and 2009; although in 2010 the percentage of participants nominating heroin as last drug injected rose and the percentage nominating methamphetamine fell (Table 2).

4.1.3 Trends over time

Since 2000, the three most common drugs of choice have continued to be heroin, methamphetamine, and cannabis (Figure 2). The choice of heroin has fluctuated over the decade but is now preferred by a similar proportion to that of 2000. The choice of methamphetamine is roughly a reverse mirror image of heroin, particularly in the first half of the decade. Choice of cannabis (only provided as a possible response since 2001) has remained stable, although there was a noticeable spike to 17% of participants choosing cannabis in 2009.

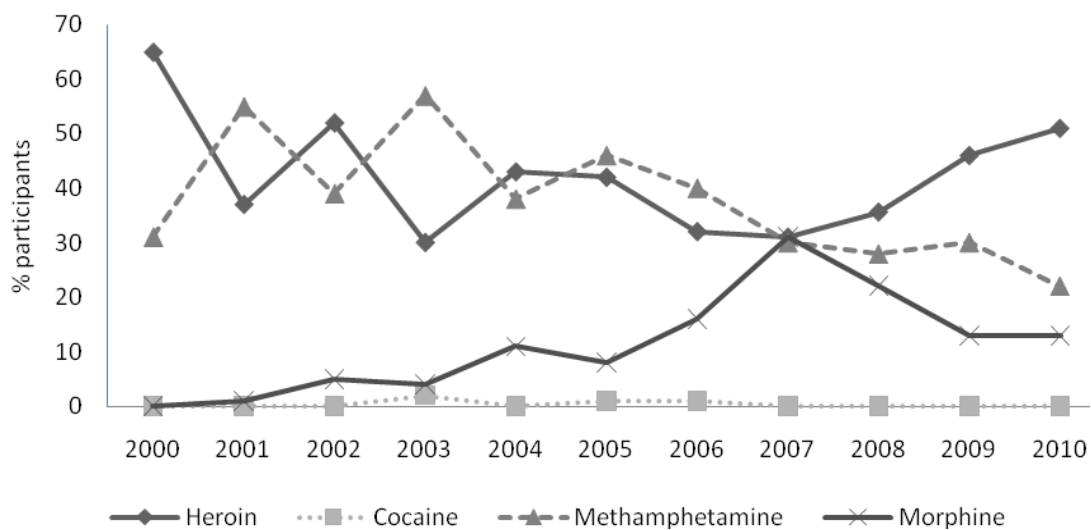
Figure 2: Drug of choice, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

When looking over the past decade at the drug most often injected in the previous month, the three most commonly injected drugs (heroin, methamphetamine and morphine) have fluctuated in use (Figure 3). Though included because of its high profile, cocaine is rarely reported as the most often injected drug. The percentage of participants reporting that they most often injected heroin was 51% in 2010, and this represents a steady increase since a low of 31% in 2007 (from a high of 65% in 2000). In general, there has been a trend for fewer participants to report most often injecting methamphetamine since the middle of the decade; and in 2010, 22% of participants nominated methamphetamine (in 2003, 57%). With morphine, there has been a levelling off to 13% in 2009 and 2010 since a fall from the peak of 31% in 2007. At the beginning of the decade, morphine was not nominated by any of the participants as the drug most often injected in the past month.

Figure 3: Drug injected most often in previous month, 2000-2010

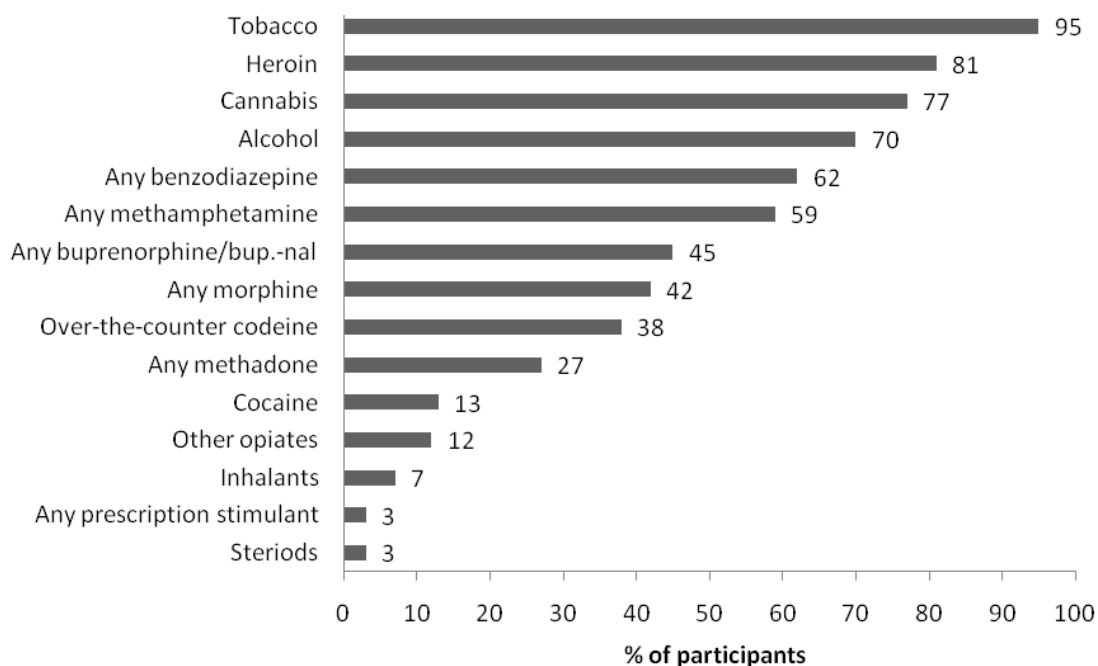


Source: Queensland IDRS participant interviews, 2000-2010

4.1.4 Polydrug use

As in previous years, participants were polydrug users. Figure 4 shows the main types of drugs used by participants in the past six months. Also consistent with previous years, substantial proportions of participants reported recent use of three of the four main drugs monitored by the IDRS: heroin, cannabis, and methamphetamine; with a minority reporting cocaine use.

Figure 4: Main types of drugs used in preceding six months



Source: Queensland IDRS participant interviews, 2010

Note: 'Any' refers to both licit and illicit. 'Use' refers to any form of administration and does not necessarily imply injection.

4.1.5 Forms of drugs used in preceding six months

Participants were asked about their use of the main drug types (ever, last six months' use), the sub-types used, and the mode of administration; and this information is presented in Table 3.

Table 3: Drug history, 2010

Drug class	Ever used %	Ever injected %	Injected last 6 months %	Ever Smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallow %	Swallowed last 6 months %	Used last 6 months %	Median days used in last 6 months (180 days)*	Median days injected in last 6 months (180 days)*
Heroin	89	89	81	38	4	21	2	27	5	81	90	90
Homebake	33	31	8	2	1	2	1	2	2	9	9	9
Any heroin	89	89	81	38	5	22	3	28	6	81	90	80
Methadone <i>licit</i>	36	19	12					35	18	18	180	18
Methadone <i>illicit</i>	46	32	10					29	5	13	5	3
Physeptone <i>licit</i>	7	4	0	0	0	0	0	5	0	0	0	0
Physeptone <i>illicit</i>	23	18	3	0	0	0	0	6	0	3	1	1
Any methadone	62	46	18	0	0	0	0	51	23	27	180	10
Buprenorphine <i>licit</i>	24	13	5	0	0	0	0	24	8	8	165	48
Buprenorphine <i>illicit</i>	44	33	22	0	0	0	0	18	9	27	10	18
Buprenorphine-naloxone <i>licit</i>	28	16	6	3	0	2	0	26	16	16	35	18
Buprenorphine-naloxone <i>illicit</i>	30	22	18	0	0	0	0	14	8	21	17	21
Any bup/bup-nal.	63	45	31	3	0	2	0	48	31	45	43	33
Morphine <i>licit</i>	26	20	8	0	0	0	0	12	4	10	69	14
Morphine <i>illicit</i>	63	60	36	1	1	0	0	19	9	38	8	8
Any morphine	74	68	38	1	1	0	0	27	13	42	12	13
Oxycodone <i>licit</i>	9	7	5	0	0	0	0	2	0	5	18	18
Oxycodone <i>illicit</i>	48	43	24	0	0	0	0	12	6	26	5	5
Any oxycodone	51	46	27	0	0	0	0	12	6	29	8	6
Over-the-counter codeine	51	1	0	0	0	0	0	51	38	38	7	0

Table 3: Drug history, 2010

Drug class	Ever used %	Ever injected %	Injected last 6 months %	Ever Smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallow %	Swallowed last 6 months %	Used last 6 months %	Median days used in last 6 months (180 days)*	Median days injected in last 6 months (180 days)*
Other opiates	22	2	0	1	0	1	1	19	12	12	6	0
Speed powder	98	95	41	25	4	49	3	57	3	41	6	6
Amphet. Liquid	24	24	6					6	2	6	6	6
Base/point/wax	62	61	30	11	4	8	2	16	0	30	13	10
Ice/crystal/shabu	73	69	36	27	11	5	1	7	1	37	3	3
Any methamphet.	99	98	59	44	17	52	6	61	6	59	8	8
Pres. stimulants <i>licit</i>	6	1	0	0	0	0	0	6	1	1	180	0
Pres. stimulants <i>illicit</i>	22	6	1	0	0	0	0	17	2	2	7	7
Any pres. stimulants	25	7	1	0	0	0	0	20	3	3	8	7
Cocaine	62	50	10	9	2	35	5	6	2	13	5	4
Hallucinogens	66	10	0	0	0	0	0	66	6	6	1	0
Ecstasy	66	26	6	1	1	6	1	57	16	18	2	1
Benzodiazepines <i>licit</i>	70	9	3	3	0	1	0	70	43	43	90	5
Benzodiazepines <i>illicit</i>	57	9	3	2	0	1	0	56	32	33	5	3
Any benzodiazepines	88	14	5	4	0	1	0	87	61	62	27	5
Alcohol	96	5	0					95	70	70	12	0
Cannabis	98									77	96	
Inhalants	24									7	12	
Tobacco	99									95	180	
Steroids	10	10	3					2	0	3	10	10

Source: Queensland IDRS participant interviews, 2010

* among those who had used injected

4.2 Heroin

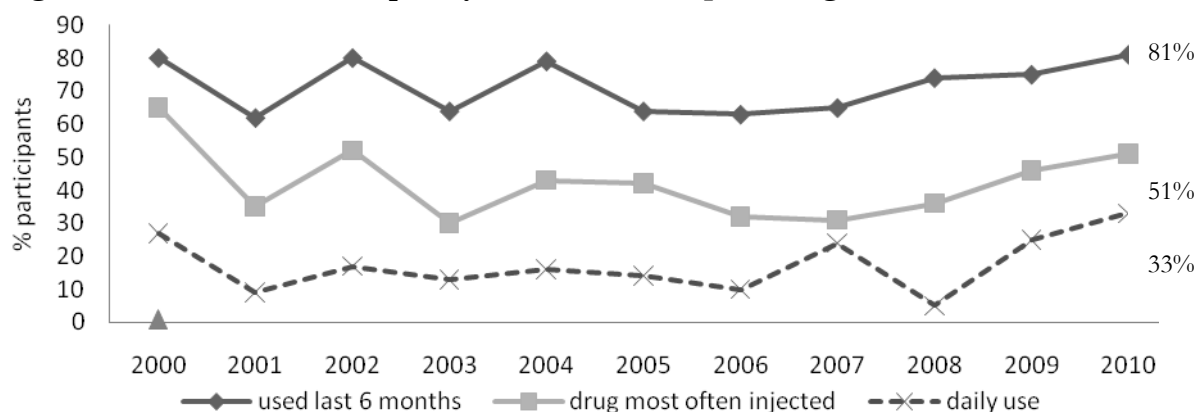
Key points

- Heroin use continued to follow the upward trend of the previous year.
- Heroin was used on a median of two days in the preceding six months.
- Use of homebake remained low.

4.2.1 Use of heroin

Figure 5 shows that although the use of heroin has had minor peaks and troughs between 2000 and 2010, prevalence and frequency in 2010 were quite similar to 2000, particularly for those who reported using heroin recently (81% versus 80%). The proportion nominating heroin as the drug most often injected has not returned to the highest level of 65% in 2000 but, at 51% in 2010, is showing an upward trend from previous lows. More participants than in previous years reported daily use of heroin (27% in 2000).

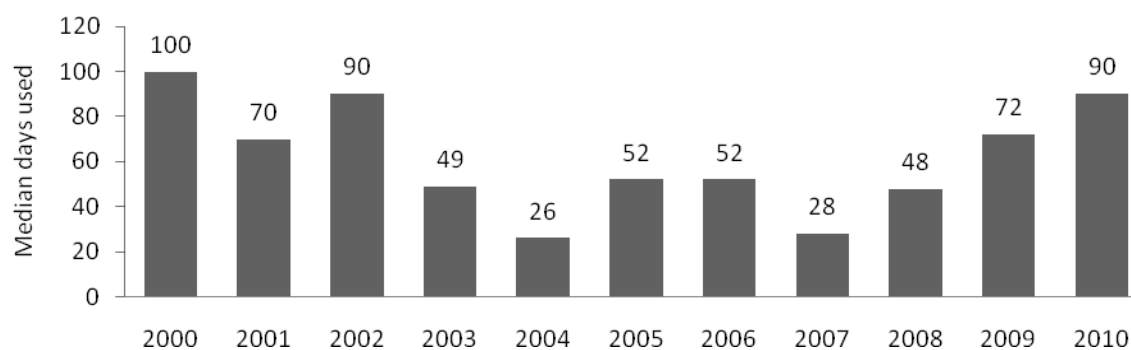
Figure 5: Prevalence and frequency of heroin use in preceding six months, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

The median days of reported heroin use has fluctuated over the past 10 years. However, there has been an upward trend since 2007 with the median days of use reported as every second day (90 in 2010; see Figure 6).

Figure 6: Median days of heroin use in preceding six months, 2000-2010

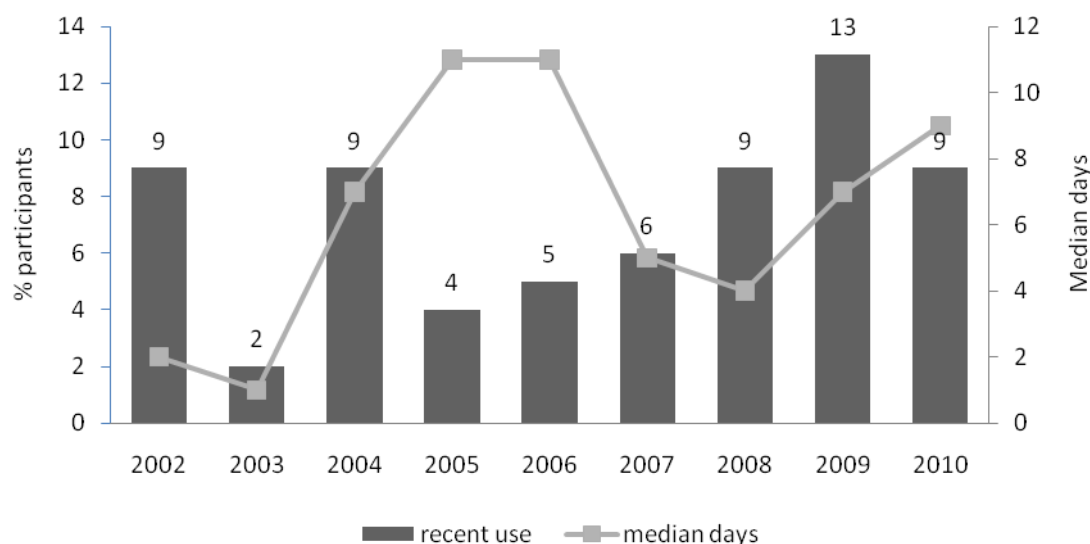


Source: Queensland IDRS participant interviews, 2000-2010

4.2.2 Homebake

Homebake is a form of heroin made from pharmaceutical products and involves the extraction of diamorphine from pharmaceutical opioids such as codeine and morphine. Questions about homebake were included in 2002. Figure 7 shows that despite some fluctuation, overall use has remained low. In 2010, 9% of participants had used homebake in the preceding six months and the median days of use were nine.

Figure 7: Prevalence and frequency of homebake use in preceding six months, 2002-2010



Source: Queensland IDRS participant interviews, 2002-2010

4.2.3 Heroin forms used

Table 4 shows that a variety of different forms of heroin were used in 2010; however, the two forms most often used were white/off-white heroin powder and brown rock. Queensland Health Forensic & Scientific Services reported that heroin that they received from seizures was most commonly 'off-white compressed material'.

Table 4: Heroin forms used, 2010 (n = 81)

	Heroin powder			Heroin rock			Homebake
	White/ off- white %	Brown %	Other colour %	White/ off- white %	Brown %	Other colour %	%
Used in past six months*	66	40	7	60	63	7	12
Most used in past six months	34	13	0	21	33	00	0

Source: Queensland IDRS participant interviews, 2010

* more than one form could be reported

4.2.4 Heroin preparation

As Table 5 shows, in 2010 and 2009, similar proportions of recent heroin users heated and/or used acid in preparing their last injection. The lower proportion who used heating and/or acid when preparing other coloured heroin relates to its low rate of use.

Table 5: Use of heat and acid in the preparation of most recent heroin injection, 2009 and 2010

	2009 n = 53 %	2010 n = 81 %
Heated in the last injection	40	37
Acid in the last injection	6	4
Main colour*		
White	35	48
Brown	52	48
Other	13	4

Source: Queensland IDRS participant interviews, 2009 and 2010

* among those who reported either heating or using acid to prepare their last injection

4.2.5 Key expert comments

There were reports from key experts working in the needle and syringe programs that heroin use was increasing: 'Heroin has risen to the foreground in the last year, it has become more available' and 'People are going back to heroin'. A treatment provider reported recently seeing more people whose primary drug of choice was heroin. There were also comments that people who use heroin are the 'older users', 'older, entrenched group'; but one key expert noted that older people who use heroin may be more visible because they are more inclined to attend clinics and needle and syringe programs.

4.3 Methamphetamines

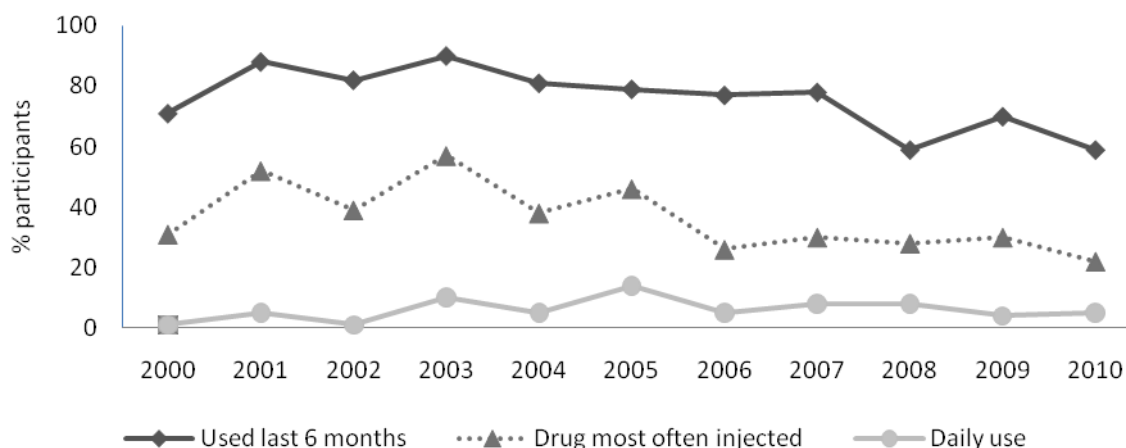
Key points

- A declining trend of methamphetamine use.
- Speed powder was the most commonly used form of methamphetamine.

4.3.1 Use of methamphetamines

Figure 8 shows that methamphetamine use (includes speed, base, crystal, and liquid) spiked in 2003 (90%) but has now followed a downward trend with 59% of participants reporting recent use of any form of methamphetamine. Methamphetamine was the drug of choice for 14% of the sample, and 22% reported that it was the drug most often injected in the past month. The percentage of participants using a form of methamphetamine daily has generally been low, and in 2010 it was 5%.

Figure 8: Use of methamphetamine (in any form) in preceding 6 months, 2000-2010



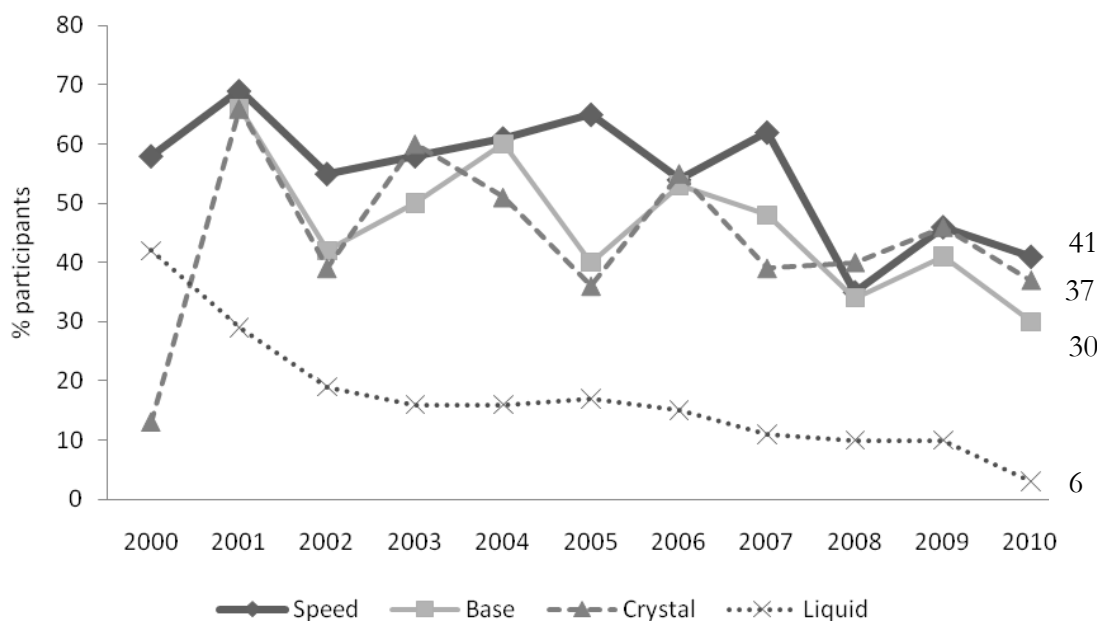
Source: Queensland IDRS participant interviews, 2000-2010

4.3.2 Methamphetamine form most used

As in previous years, data was collected on four different forms of methamphetamines: methamphetamine powder (speed), base methamphetamine (base), crystal methamphetamine (crystal/ice), and methamphetamine liquid.

Over the past 11 years there has been fluctuation in the recent use of these various forms of methamphetamine with speed powder nearly always being the most commonly used form (Figure 9). Use of liquid amphetamine was 42% in 2000 but use has been low for several years, and only 6% of participants reported recent use in 2010. Due to this low use, no further details about liquid methamphetamine will be presented. The percentage of participants reporting recent use of the other three forms of methamphetamine in 2010 is presented in Figure 9.

Figure 9: Forms of methamphetamine used in preceding six months, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

4.3.3 Methamphetamine frequency of use

Table 6 shows that in 2010 the median number of days of methamphetamine use for all types of methamphetamine was lower than in 2009 with a significant decrease for speed ($p = 0.039$).

Table 6: Median number of days of methamphetamine use in preceding six months, 2009 and 2010

	Median days	
	2009	2010
Speed	24	6
Base	22	13
Ice/crystal	10	3
Any form*	31	8

Source: Queensland IDRS participant interviews, 2009 and 2010

* includes speed powder, base, ice/crystal and liquid forms

Note: Maximum number of days (i.e. daily use) = 180

4.3.4 Key expert comments

In general, key expert comments reflect a decrease in the use of methamphetamines, particularly speed. One key expert pointed out, however, that their clients ‘*don’t always differentiate or know the difference*’ between the various forms of methamphetamines. It was also apparent that methamphetamine use was traditionally more apparent in some geographical areas than others. One key expert in the treatment sector identified that use of methamphetamines was highest in the 20 to 30 years age group and that young females were most likely to be speed users. Another key expert noted a decrease in the injecting of methamphetamine, and a trend towards smoking crystal methamphetamine.

4.4 Cocaine

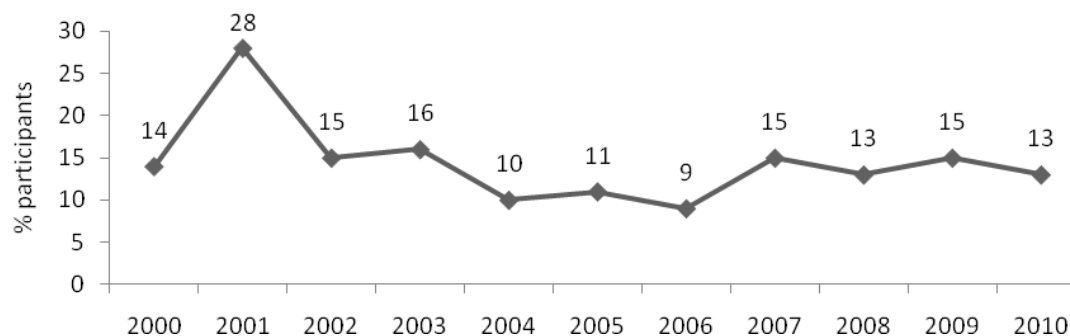
Key points

- Cocaine use continues to be uncommon among people who regularly inject drugs.
- Participants who use cocaine tend towards low frequency of use.

4.4.1 Cocaine use

Except for a spike in 2001, the proportion of participants reporting recent cocaine use remained low in recent years, and this continued in 2010 (Figure 10). Amongst those who had used cocaine, the median days of cocaine use were five in the preceding six months (two in 2009).

Figure 10: Cocaine use in preceding six months, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

4.4.2 Key Expert comments

As in previous years, key experts reported that the use of cocaine is typically contained within groups of drug users in higher socio-economic strata than the regular injecting participants who are recruited by the IDRS in South East Queensland. There was agreement among key experts that cocaine use is not generally associated with injecting drugs, but rather with the ‘recreational’ drug scene, where it is used relatively infrequently, and on an opportunistic and/or a situational (e.g. celebration) basis.

4.5 Cannabis

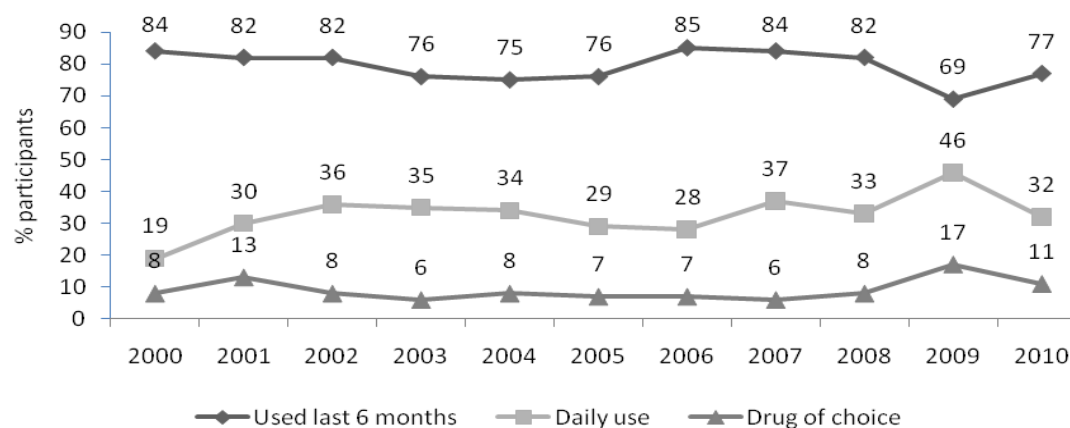
Key points

- Cannabis use continued to be common.
- Hydro rather than bush was the main form used.

4.5.1 Use of cannabis

In 2010, almost all participants (98%) reported using cannabis at least once in their lifetime. As shown in Figure 11, in 2010 over three-quarters of participants had recently used cannabis with nearly a third using cannabis daily. Although these proportions are somewhat different to 2009, they are in keeping with the long-term trend of cannabis use.

Figure 11: Prevalence and frequency of cannabis use, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

4.5.2 Cannabis forms used

Of those who had used cannabis recently, 89% mainly used hydroponically grown (hydro) cannabis, with the remaining 11% mainly using bush. Other forms of cannabis were only used by a small number of participants in the past six months (five had used hash and one had used hash oil).

4.5.3 Key experts

The ubiquity of cannabis use was confirmed by key experts; as one key expert pointed out: ‘*Nearly all clients use cannabis. They don’t consider it as an illicit drug*’. Similarly, another key expert from the treatment setting reported that their clients do not see cannabis ‘*as an issue*’. Key experts reported use of hydro or bush was related to some degree to geographical areas with hydro being more common in the inner city area.

There was also a report from the legal sector that the size of the cannabis market was reducing but the volume of cannabis on the market was stable, leading to speculations of heavier use of cannabis by a smaller group of people.

4.6 Other opioids

Key points

- Methadone and buprenorphine-naloxone were the two most commonly used forms of prescribed substitution pharmacotherapy.
- Buprenorphine was the most commonly used illicit (i.e. not prescribed) substitution pharmacotherapy.
- Amongst those prescribed methadone or buprenorphine, injection of some doses was relatively common, but less so amongst those prescribed buprenorphine-naloxone.
- The majority of participants who used a non-prescribed substitution pharmacotherapy injected it.
- Use of illicit morphine remained stable with use by 38% and injecting by 36%.
- Use of licit oxycodone was rare but 26% of participants reported use of illicit oxycodone with 24% injecting it.
- 38% reported use of over-the-counter (OTC) codeine (predominantly Nurofen Plus[®]) in the preceding six months.

4.6.1 Substitution pharmacotherapy

Methadone is prescribed as a substitute drug for opioids, and is usually prescribed as a liquid preparation and commonly dosed under supervision. Physeptone tablets are less common in Australia and are usually prescribed for people in methadone treatment who are travelling, or in a minority of cases, where methadone is not tolerated.

More recently buprenorphine was introduced as an alternative to methadone, and since 2005 buprenorphine-naloxone is widely prescribed because of its agonist/anti-agonist properties. The pattern of use of all four substitution drugs by participants is presented in Table 7. As the table shows, the pattern of use varies according to whether use is licit or illicit (e.g. a higher proportion of participants used illicit buprenorphine than licit buprenorphine).

Table 7: Use of licit and illicit substitute drugs in preceding six months, 2010

	Licit (prescribed)		Illicit (not prescribed)	
	Used %	Injected %	Used %	Injected %
Methadone	18	12	13	10
Physeptone	0	0	3	3
Buprenorphine	8	5	27	22
Buprenorphine-naloxone	16	6	21	18

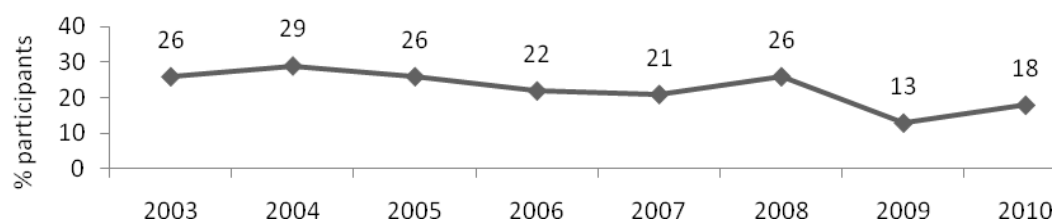
Source: Queensland IDRS participant interviews, 2010

Use of methadone

The proportion of participants reporting that they had been prescribed methadone at least once in their lifetime (i.e. licit use) was 36% in 2010, a lower proportion than in 2009 (47%) or 2008 (48%). In contrast the proportion of participants reporting illicit use in their lifetime was higher in 2010 than in 2009 (46% versus 36%).

The percentage of participants who reported injecting methadone (prescribed or not prescribed) was 18% in 2010. Though slightly higher than 2009, this was lower than previous years (Figure 12).

Figure 12: Participants injected methadone (prescribed or not prescribed) in the preceding six months, 2003-2010



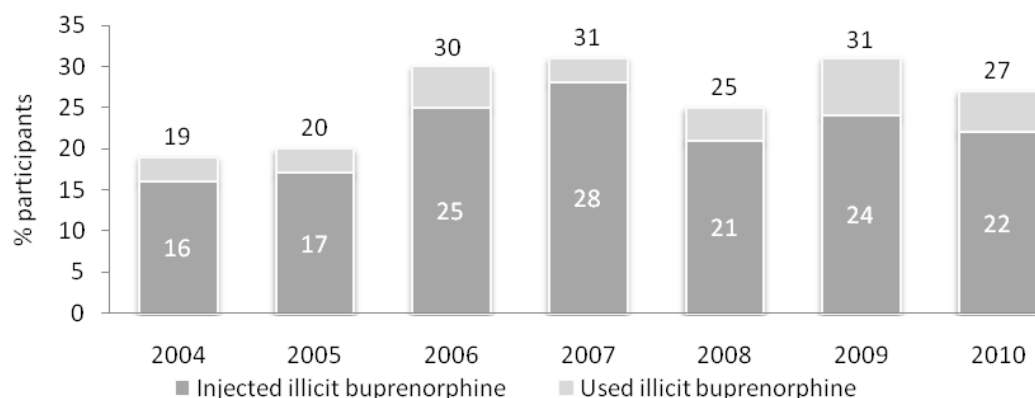
Source: Queensland IDRS participant interviews, 2003-2010

Participants on prescribed methadone (daily use) injected their prescribed dose on a median of 18 days out of 180 days. The 10 participants who reported injecting illicit methadone in the preceding six months injected on a median of three days.

Use of buprenorphine

Thirty per cent of participants had used buprenorphine (licit and/or illicit) in the previous six months, with 8% reporting licit use and 27% reporting illicit use. Figure 13 shows the proportion of participants using and injecting illicit buprenorphine has been stable over the past couple of years, and that illicit buprenorphine was primarily injected. Illicit buprenorphine was injected on a median of 18 days. Most common reasons for using illicit buprenorphine were: substitute for heroin (69%), self treatment (50%), intoxication (36%), and away from home (20%) (multiple responses were allowed).

Figure 13: Use and injection of illicit buprenorphine in preceding six months, 2004-2010

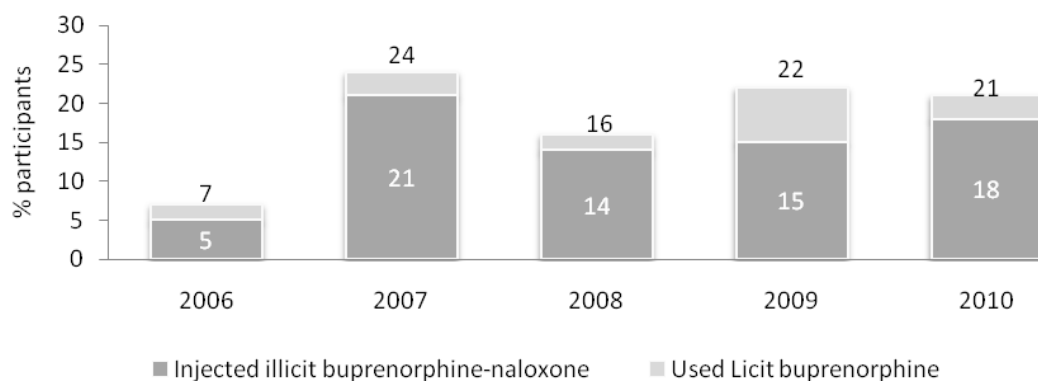


Source: Queensland IDRS participant interviews, 2004-2010

Illicit buprenorphine-naloxone

Thirty-three per cent of participants had used buprenorphine-naloxone (licit and/or illicit) in the previous six months, with 16% reporting licit use and 21% reporting illicit use. Similar numbers of participants used illicit buprenorphine-naloxone in 2009 and 2010 with most injecting it (Figure 14). Only a small number of those who used illicit buprenorphine-naloxone commented on why they used it, with the most common reason being self treatment, followed by substitute for heroin, and intoxication

Figure 14: Use and injection of illicit buprenorphine-naloxone in preceding six months, 2006-2010



Source: Queensland IDRS participant interviews, 2006-2010

4.6.2 Use of morphine

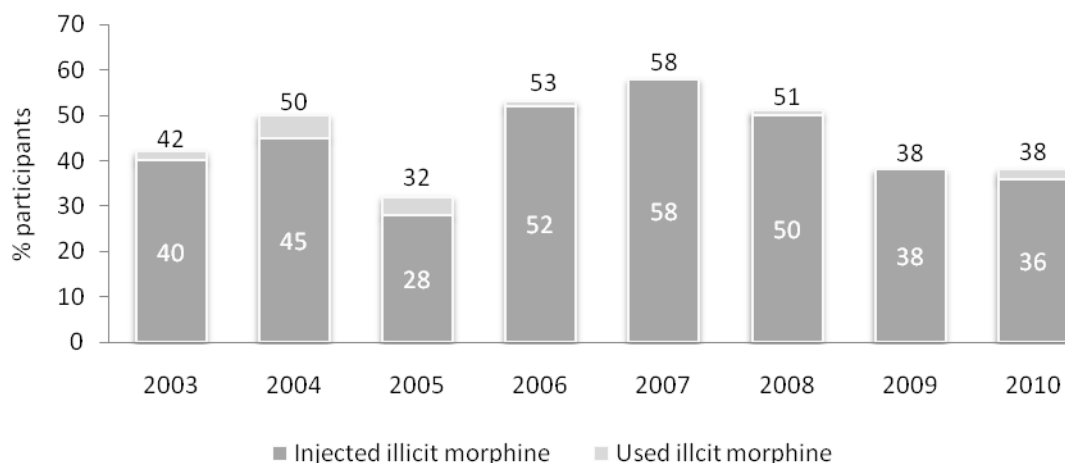
Ten per cent of participants had used licit morphine (i.e. prescribed to them) in the preceding six months, and 8% reported injecting licit morphine in this period.

Illicit morphine

The proportion of participants using illicit morphine in the preceding six months was the same as in 2009 (Figure 15). Consistent with previous years, the mode of administration in 2010 was primarily injecting. Illicit morphine was used a median of eight days in the preceding six months (18 days in 2009).

Participants were asked to choose the main reasons that they used illicit morphine. Reasons chosen were: substitute for heroin/other opiates (62%), intoxication (42%), self treatment (41%), and other (21%) (Multiple responses were allowed, n~27).

Figure 15: Use and injection of illicit morphine in preceding six months, 2003-2010



Source: Queensland IDRS participant interviews, 2003-2010

4.6.3 Use of oxycodone

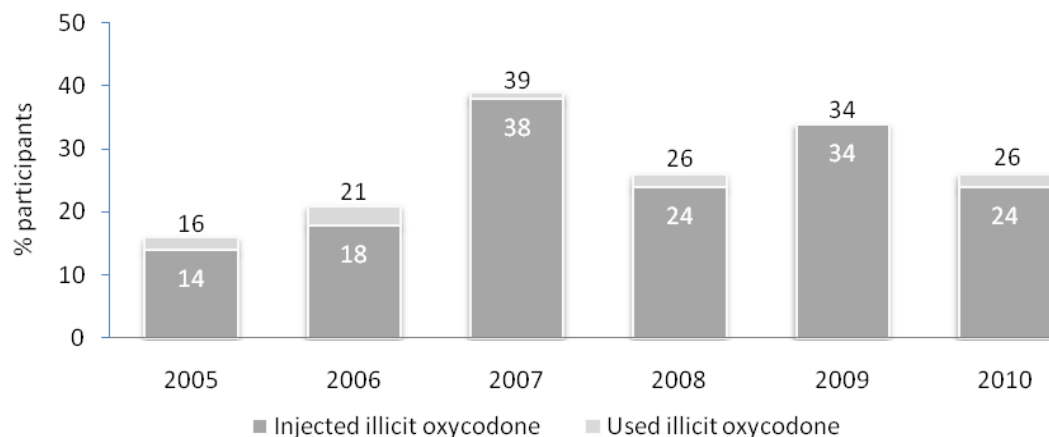
Data has been gathered on licit and illicit forms of oxycodone (e.g. OxyContin[®], Endone[®]) since 2005. Five per cent of participants reported using licit oxycodone in the previous six months, and all reported having injected it.

Illicit oxycodone

Use of illicit oxycodone was down in 2010 compared with 2009 but not significantly. As in previous years, injection was the route of administration (Figure 16). Within the six month period, illicit oxycodone was used on a median of five days.

Almost equal proportions of participants nominated self treatment, substitute for heroin, and intoxication as the reason for using illicit oxycodone.

Figure 16: Use and injection of illicit oxycodone in preceding six months, 2005-2010



Source: Queensland IDRS participant interviews, 2005-2010

4.6.4 Use of over the counter codeine

About half of participants (51%) reported having ever used over the counter codeine, and 38% reported using it in the preceding six months which was a significant increase from 23% in 2009 ($p = 0.019$). Participants most commonly nominated Nurofen Plus[®] as the brand most used (i.e. nominated by 42%). The median days of use over the preceding six months were seven (21 days in 2009).

4.6.5 Use of other opioids (not already specified)

Twenty-two per cent of participants had used another type of opioid (not already specified) in their lifetime, and 12% had used another opioid type in the preceding six months. One participant reported that the ‘other opioid’ used was illicit and two participants reported injecting as their mode of administration.

4.6.6. Key expert comments

Key experts in the health sector noted that take-away substitution pharmacotherapy may be injected and voiced concern at the potential vein damage that this may produce. Use of morphine and oxycodone was reported as increasing. MS Contin[®] was regarded as the most popular brand of morphine. One key expert explained: ‘*Steady increase in use of Oxycontin and MS Contin over about the last three years with the majority injecting.*’ Another key expert noted that use of morphine ‘*peaked and troughed but had increased in last months*’. Self medication was considered to be common, particularly with people who were experiencing mental health issues.

One key expert observed a ‘*mild reduction in codeine products – rarer, possibly due to scheduling and also pharmacists more vigilant.*’

Although key experts noted that only small numbers of people had reported using Fentanyl[®], it was identified as problematic because of the high risk of overdose: ‘*tolerance between stoned and dead is very narrow*’. It was felt that Fentanyl’s high potency was not commonly understood. One key expert spoke of the dilemma of providing information without promoting inadvertently.

4.7 Other drugs

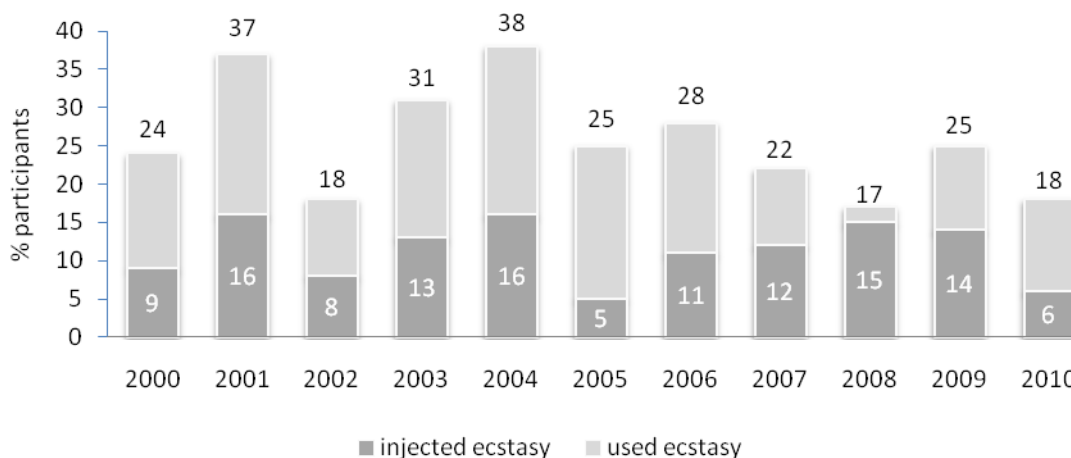
Key points

- Use of ecstasy in the preceding six months was relatively uncommon (18%), with injecting of ecstasy even more uncommon (6%).
- Although 10% of participants reported having injected a hallucinogen in their lifetime, none had done so in the preceding six months.
- Nearly two-thirds of participants had used benzodiazepines in the preceding six months, and a third reported illicit use in this period.
- Use of pharmaceutical stimulants (e.g. dexamphetamine and methylphenidate) was very low (3%).
- A small minority of participants (7%) had used inhalants in the past six months.
- The majority of respondents (70%) reported alcohol use in the preceding six months.
- Almost all participants used tobacco (95%).

4.7.1 Ecstasy and related drugs

The pattern of ecstasy use has fluctuated somewhat since 2000 (Figure 17). In 2010, participants reported using ecstasy on a median of two days in the preceding six months, the same number as in 2009.

Figure 17: Use and injection of ecstasy in preceding six months, 2000-2010

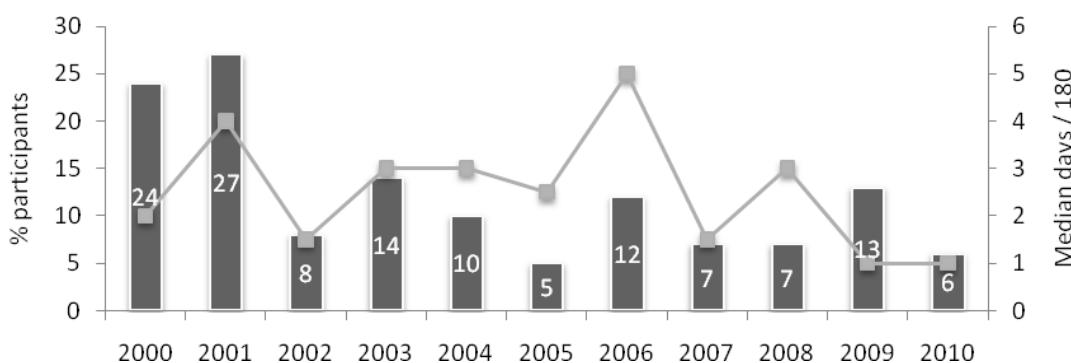


Source: Queensland IDRS participant interviews, 2000-2010

4.7.2 Hallucinogens

Figure 18 shows that hallucinogens were used by a higher proportion of IDRS participants at the beginning of the decade. Median days used has fluctuated and was down to one day in 2010. Although 10% of participants reported having injected a hallucinogen in their lifetime, none had done so in the preceding six months.

Figure 18: Prevalence and frequency of hallucinogen use in preceding six months, 2000-2010

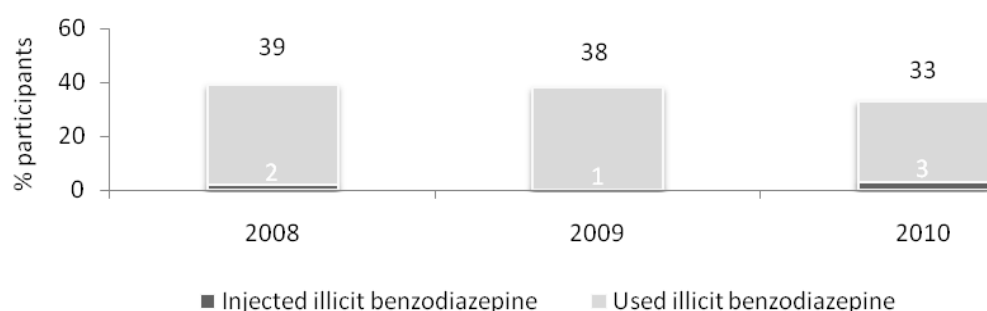


Source: Queensland IDRS participant interviews, 2000-2010

4.7.3 Benzodiazepines

Eighty-eight per cent of participants reported having used benzodiazepine in their lifetime (80% in 2009), and 62% had used benzodiazepine in the past six months (59% in 2009). Since 2008, participants have been asked to report separately on their licit and illicit use of benzodiazepine, and Figure 19 shows that use of illicit benzodiazepine has been fairly stable over the past three years with minimal reports of injection.

Figure 19: Use and injection of illicit benzodiazepine in preceding six months, 2008-2010



Source: Queensland IDRS participant interviews, 2008-2010

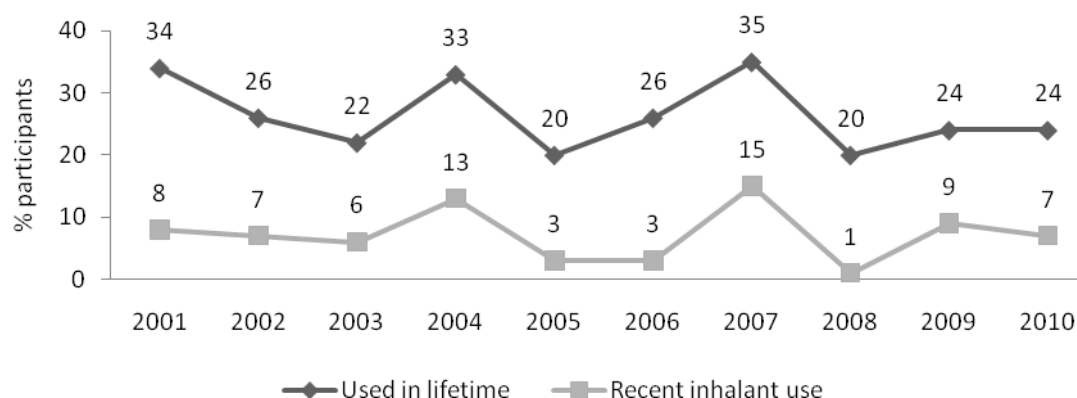
4.7.4 *Pharmaceutical stimulants*

In 2010, use of pharmaceutical stimulants (e.g. dexamphetamine and methylphenidate) was very low (3%) as has been the case in recent years (5% in 2009, 4% in 2008). In the six months preceding interview, only one participant had used licit pharmaceutical stimulants and this had not been injected. Two participants had used illicit pharmaceutical stimulants (relatively infrequently) with one of these participants reporting injection as the route of administration.

4.7.5 *Inhalants*

The prevalence of inhalant use has peaked and troughed in the past decade but prevalence in 2010 was very similar to that of 2009 (Figure 20).

Figure 20: Prevalence of inhalant use, 2001-2010



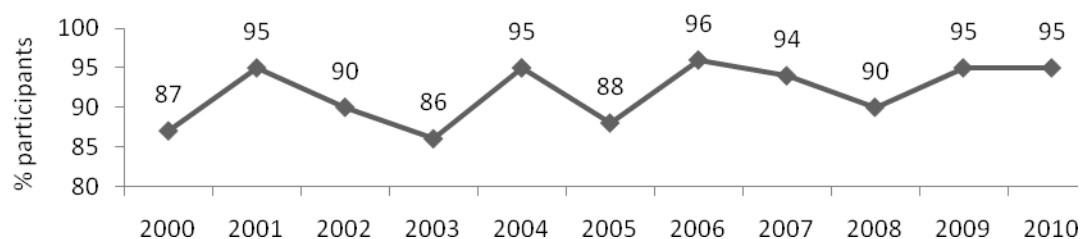
Source: Queensland IDRS participant interviews, 2003-2010

4.7.6 *Alcohol and tobacco*

The majority of respondents (96%) reported having used alcohol in their lifetime with 70% reporting using alcohol in the preceding six months (68% in 2009). Five per cent of participants had injected alcohol in their lifetime but none had done so in the preceding six months. The median frequency of alcohol use was fortnightly.

As in previous years, nearly all participants reported recent tobacco use (Figure 21), and of these participants, 93% reported daily use.

Figure 21: Prevalence of tobacco use in preceding six months, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

Lately there has been much focus on the use of alcohol in the community, specifically among young people. This has been partly driven by current political and media attention. There has, however, been much less focus on alcohol use amongst people who regularly inject drugs. People who regularly inject drugs are particularly at risk for alcohol related harms due to a high prevalence of the hepatitis C virus (HCV). In the Australian NSP Survey of people who inject drugs (N = 1,912), 62% were found to have HCV antibodies and the prevalence was higher for those who were Indigenous and/or recently incarcerated (National Centre in HIV Epidemiology and Clinical Research, 2007). Given that the consumption of alcohol has been found to exacerbate HCV infection and to increase the risk of both non-fatal and fatal opioid overdose and depressant overdose (Coffin et al., 2007; Darke, Duflou, & Kaye, 2007; Darke, Ross, & Hall, 1996; Schiff & Ozden, 2004), it is important to monitor risky drinking among people who regularly inject drugs. To this end, the Alcohol Use Disorders Identification Test – Consumption (AUDIT-C) was included in the 2010 questionnaire as a valid measure of identifying heavy drinking (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998). The three-question AUDIT-C is part of a longer 10-question AUDIT.

Amongst participants, 38% obtained a score on AUDIT-C that indicated they were at moderate or high risk of dependency (i.e. a score of 5 or more from a total of 12), with males (44%) significantly outnumbering females (23%) ($p = 0.038$). According to Dawson and colleagues (2005) and the Australian Government Department of Health and Ageing Guidelines for the Treatment of Alcohol Problems (Haber, Lintzeris, Proude, & Lopatko, 2009), a cut-off score of five or more indicates that further assessment is required.

4.7.7 Key expert comments

Key experts reported that although ecstasy was commonly used, it was rarely mentioned by people who inject drugs. Ecstasy was seen as closely linked to entertainment rather than regular injection of illicit drugs.

Hallucinogens such as ketamine, lysergic acid diethylamide (LSD), and mushrooms were generally considered to be infrequently used; but that there was an upward trend in their use. It was also noted that there was an increase in the amount of LSD per tab, and that there was a resurgence of LSD on sugar cubes and biscuits (i.e. Tiny Teddies). One key expert identified LSD users as a specific sub-group of drug users. Another key expert pointed out that the increasing use of ketamine was in line with an overall rise in illicit use of prescription drugs. Key experts reported that generally hallucinogens were part of polydrug use, and their use amongst people who inject drugs tended to be occasional and opportunistic.

There was concern from key experts about the use of Xanax[®], and reports of increased use in the past 6 to 12 months among people who inject drugs. Some key experts felt that there was limited knowledge about its effect and that it was used in conjunction with opioids, increasing

the risk of overdosing. Xanax[®] is prescribed in large amounts and can also be prescribed by a general practitioner (GP) on a private script so there is no monitoring. It is relatively cheap to buy illicitly. Xanax[®] tablets were crushed and mainly injected – often used to ‘*supplement their supply of heroin*’. As one key expert pointed out, ‘*when heroin is good they don’t bother to use Xanax. It is opportunistic. They use it when they can’t get their drug of choice*’. It was also felt that ‘*A lot of people were self medicating*’. One key expert in the treatment sector said that people on substitution pharmacotherapy often continued to take Xanax[®].

Inhalant use was not raised as a problem issue by key experts. However, one key expert commented that sniffing was used by a wider group of people as a substitute to injecting because it is cheaper. The key expert noted that it ‘*had gone underground because it is looked down on. It is happening but less public*.’

Many of the key experts reported problematic use of alcohol, and some considered alcohol it to be the most problematic drug. Easy accessibility, particularly the popularity of home brew in one lower socio economic area, was thought to encourage problematic use. The combination of alcohol and other drugs was also seen as causing problems, most noticeably in regard to law breaking.

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS

This section is about the market characteristics (i.e. price, perceived purity, availability, and purchasing patterns) of the main drugs of interest. Participants were asked to provide information about a drug only if they were confident that they knew about that particular market. Consequently, the number of participants providing market information about each drug varies considerably.

5.1 Heroin market

Key points

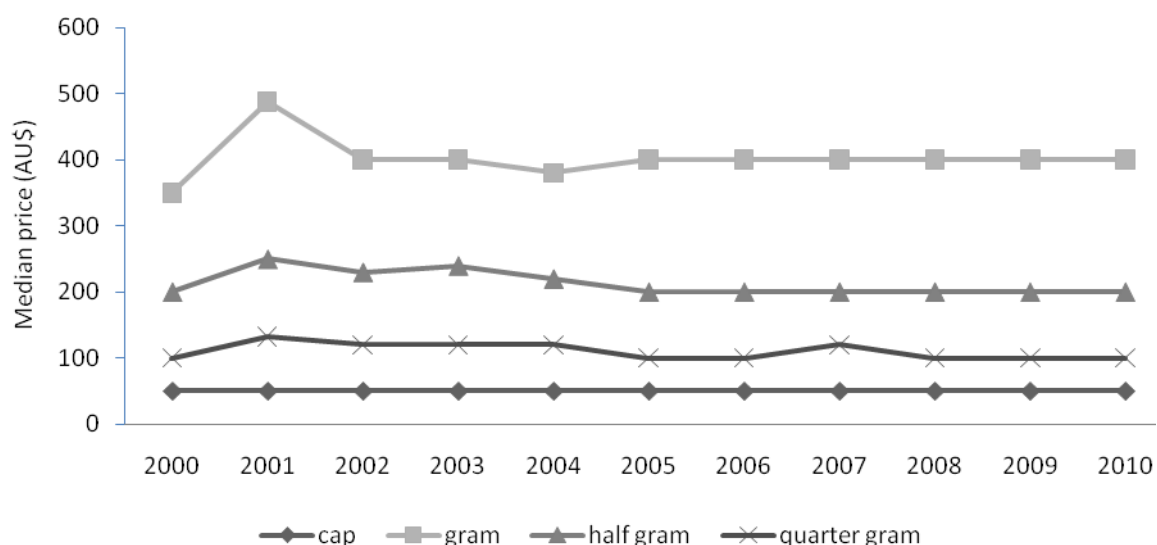
- Heroin price stable at \$400 per gram (\$50 cap).
- Purity generally reported as medium or low.
- Readily available.
- Mostly purchased from friends or a known dealer, and most commonly at an agreed public location.

About three-quarters of the sample (n = 76) answered questions about the heroin market. Responses in this section are reported from this sub-sample.

5.1.1 Heroin price

Other than a spike in 2001, the overall median price of heroin has remained stable over the past 10 years (Figure 22). Price per cap has not deviated from \$50 regardless of the increase in the price of larger quantities in 2001. In the years following 2001, prices for large quantities gradually became stable at \$400 per gram, \$200 per half gram, and \$100 per quarter gram.

Figure 22: Median prices of heroin estimated from most recent participant purchases, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

Note: Responses are from participants who answered questions about the heroin market.

Consistent with the stability of pricing in recent years, most participants reporting on the heroin market (73%) considered heroin prices to be stable. Not surprisingly, this was a similar assessment to previous years (73% in 2009, 78% in 2008).

5.1.2 Heroin form and purity

Most respondents who answered questions about the heroin market considered the current purity of heroin to be low or medium (Table 8). This was similar to 2009; although, in 2010 fewer participants considered that purity fluctuates (11% versus 23%). This reduced perception of fluctuation was consistent with 2010 participants' views on changes to purity over the preceding six months. Participants in 2010 were more likely to report that purity was stable (43% versus 29%) than in 2009; although this was not statistically significant.

Table 8: Perceptions of heroin purity in preceding six months, 2009 and 2010

	2009 %	2010 %
Current purity	n = 58	n = 73
High	9	14
Medium	22	30
Low	45	45
Fluctuates	24	11
Purity change over the past six months	n = 57	n = 70
Increasing	16	11
Stable	30	46
Decreasing	33	29
Fluctuating	21	14

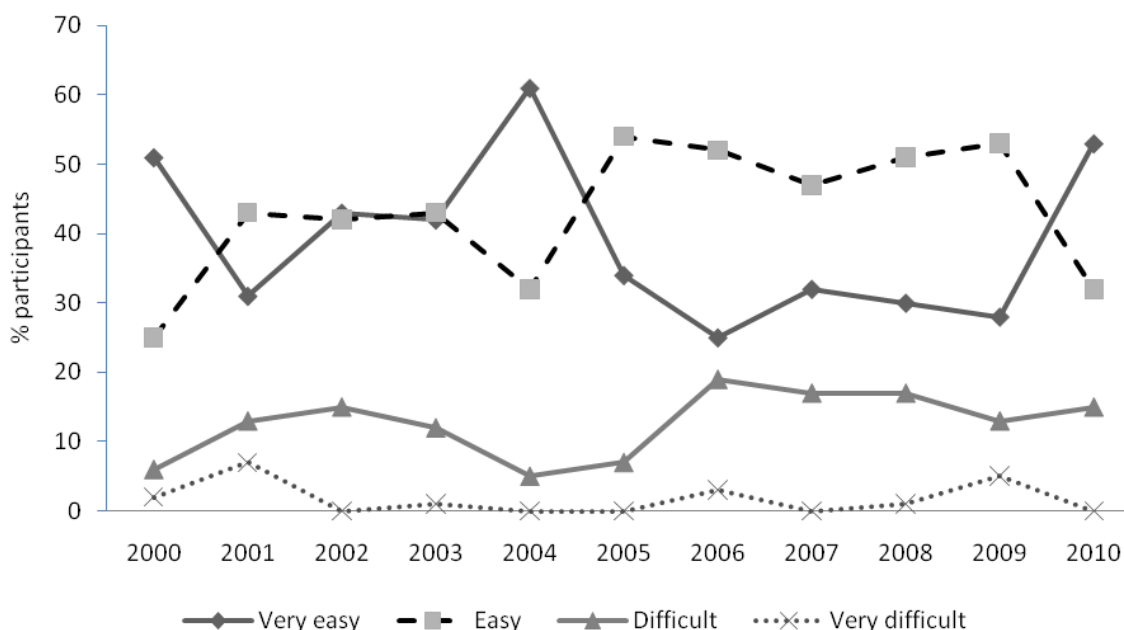
Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the heroin market

5.1.3 Heroin availability

Over the past decade, participant reports of current heroin availability have oscillated between very easy to easy (Figure 23). In 2010, 53% of participants who commented on heroin availability (n = 75) reported that it was very easy to obtain, with 32% reporting it was easy, and the remaining 15% reporting it was difficult. There were no reports of heroin being very difficult to obtain.

Figure 23: Current heroin availability, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

Note: Responses are from participants who answered questions about the heroin market.

Participants were also asked about changes in heroin availability in the preceding six months. As shown in Table 9, the majority of participants who reported on availability considered it to be stable. This was up from 2009 (78% versus 60%).

Table 9: Changes in heroin availability in preceding six months, 2009 and 2010

	2009 (n = 58) %	2010 (n = 73) %
More difficult	16	8
Stable	60	78
Easier	16	10
Fluctuates	9	4

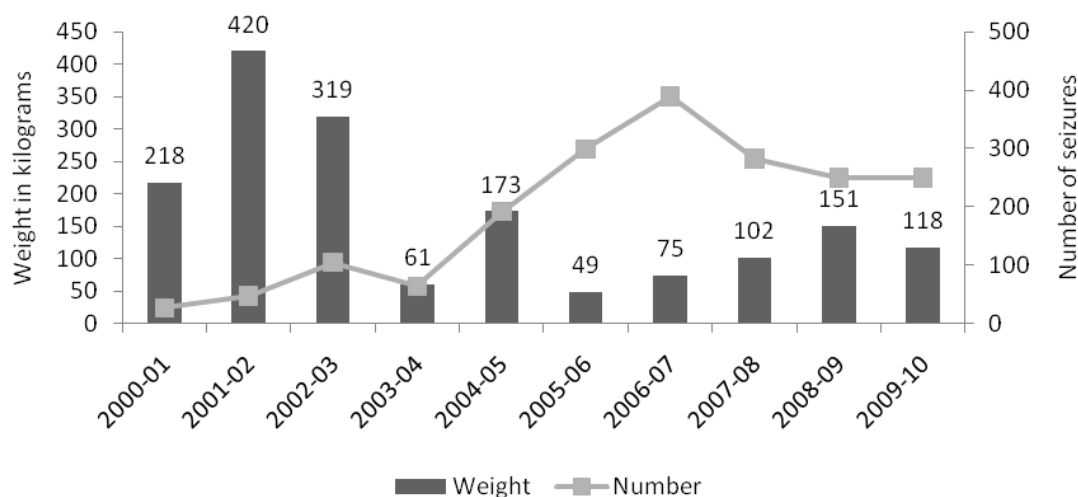
Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the heroin market.

5.1.4 Heroin detected at the Australian border

The total weight and number of heroin seizures at the border by the Australian Customs Service from financial years 2000-2001 to 2009-2010 is shown in Figure 24. Between 2000 and 2003, there were fewer seizures but a greater weight of seizures than in more recent years when the number of seizures has been higher but the overall weight of seizures has been lower. This trend has been stable for the past few years.

Figure 24: Weight and number of heroin border seizures by the Australian Customs Service, 2000-2001 to 2009-2010



Source: Australian Customs Service

5.1.5 Purchasing patterns of heroin

As shown in Table 10, in 2010 there was a noticeable shift towards purchasing heroin from a friend (31% versus 16% in 2009) and in keeping with this, purchasing at a friend’s home (21% versus 5% in 2009). Conversely, there was a shift away from purchasing from a known dealer and purchasing at an agreed public location.

Table 10: Purchasing patterns of heroin, 2009 and 2010

	2009 %	2010 %
Last purchased from	n = 57	n = 74
Street dealer	4	16
Friends	16	31
Known dealer	75	43
Acquaintance	4	4
Unknown dealer	2	3
Mobile dealer	0	0
Other	0	3
Place of most recent purchase	n = 57	n = 72
Home delivery	9	8
Dealer’s home	16	7
Friend’s home	5	21
Acquaintance’s house	2	0
Street market	4	15
Agreed public location	63	46
Other	1	3

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the heroin market

5.1.6 Key expert comments

Law enforcement key experts considered the heroin market to be stable.

5.2 Methamphetamine market

Key points

- Price of a cap is stable at \$50 but price per gram appears to have increased for speed and crystal.
- No clear consensus on purity; although about half considered the purity of speed to be low.
- Speed was considered readily available (easy or very easy).

Of the entire sample, 26% answered questions about the speed market, 17% about base, and 12% about crystal/ice. Responses in this section are reported from these sub-samples.

5.2.1 Methamphetamine price

The median prices of participants' most recent purchase of each form of methamphetamine are presented in Table 11. Changes in price in the preceding six months are presented in Table 12.

Table 11: Price of most recent methamphetamine purchase, 2009 and 2010

Amount	Median price	Range	Number of purchasers
	AU\$ 2010 (2009)	AU\$ 2010 (2009)	
Speed			
Point (0.1g)	50 (50)	50-100 (20-80)	10 (24)
Half-gram (0.5g)	100 (100)	- (80-280)	5 (24)
Gram (1g)	250 (200)	180-500 (100-400)	4 (22)
Base			
Point (0.1g)	50 (50)	25-100 (20-100)	6 (12)
Half-gram (0.5g)	100 (100)	100-150 (100-200)	3 (17)
Gram (1g)	200 (200)	180-180 (150-500)	3 (20)
Ice			
Point (0.1g)	100 (50)	50-100 (20-60)	3 (15)
Half-gram (0.5g)	250 (100)	250-250 (100-250)	1 (13)
Gram (1g)	450 (350)	200-500 (40-500)	3 (10)

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the methamphetamine market.

Table 12: Methamphetamine price changes in preceding six months, 2009 and 2010

Changes to price	Speed powder		Base		Crystal/ice	
	2009 n = 42 %	2010 n = 25 %	2009 n = 28 %	2010 n = 17 %	2009 n = 32 %	2010 n = 9 %
Increasing	26	28	14	35	25	44
Stable	64	64	68	59	59	44
Decreasing	2	0	0	0	0	0
Fluctuating	7	8	18	6	16	11

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the methamphetamine market.

5.2.2 Purity of methamphetamines

Reports of purity varied across the three forms of methamphetamine (Table 13). Similarly to 2009, nearly half of participants regarded the purity of speed to be low. There was not much consensus about the purity of base, but over half regarded it as being medium or high. Only 10 people reported on the purity of crystal/ice and most regarded it as being high or medium.

Participants generally regarded the purity of speed and base to be decreasing or fluctuating but reported no clear trend for crystal/ice (Table 13).

Table 13: Perceptions of methamphetamine purity in preceding six months, 2009 and 2010

	Speed powder		Base		Crystal/ice	
	2009 %	2010 %	2009 %	2010 %	2009 %	2010 %
Current purity/strength	n = 40	n = 25	n = 28	n = 17	n = 32	n = 10
High	10	24	25	24	44	60
Medium	20	12	32	35	25	20
Low	45	48	21	18	16	0
Fluctuates	25	16	21	24	16	20
Changes to purity/strength	n = 39	n = 23	n = 27	n = 17	n = 33	n = 10
Increasing	10	17	7	12	15	30
Stable	26	9	41	24	33	30
Decreasing	36	35	19	35	33	10
Fluctuating	28	39	33	29	18	30

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the methamphetamine market.

5.2.3 Availability of methamphetamines

Table 14 shows that in 2010 most people who regular injected drugs reported methamphetamine to be easy or very easy to obtain and that this remained stable in the six months preceding the interview.

Table 14: Methamphetamine availability in preceding six months, 2009 and 2010

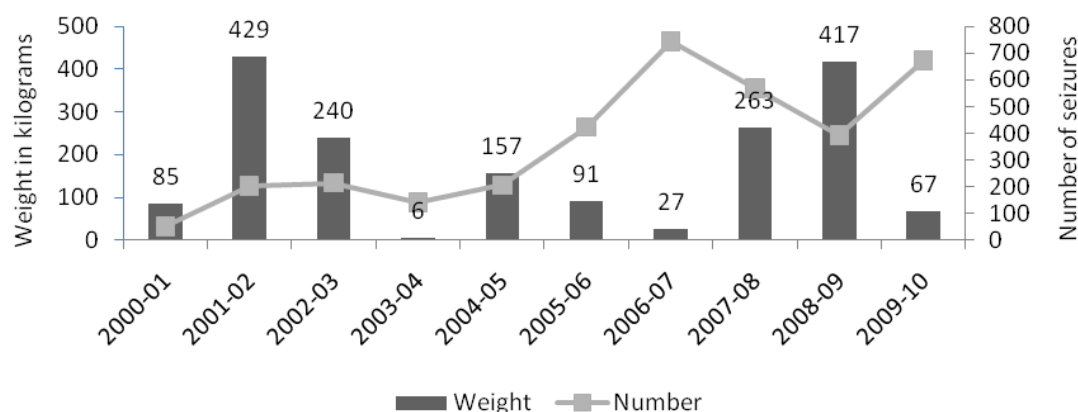
	Speed powder		Base		Crystal/ice	
	2009 %	2010 %	2009 %	2010 %	2009 %	2010 %
Current availability	n = 43	n = 25	n = 31	n = 17	n = 32	n = 12
Very easy	51	36	39	41	25	50
Easy	23	48	42	41	31	42
Difficult	21	16	16	18	28	8
Very difficult	5	0	3	0	16	0
Changes to availability	n = 43	n = 25	n = 30	n = 17	n = 32	n = 11
More difficult	26	4	13	24	34	9
Stable	58	76	67	65	44	46
Easier	12	4	10	6	9	18
Fluctuates	5	16	10	6	13	27

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the methamphetamine market.

Figure 25 shows that the total weight (in kilograms) and number of amphetamine-type stimulants (ATS) seizures at the border by the Australian Customs Service from the financial years 2000-2001 to 2009-2010 vary considerably from year to year., and that weight is not always correlated with the number of seizures. This is exemplified in the past two years when there were more seizures in 2009-2010 than in 2008-2009 but the weight in 2009-2010 was much lower than in the previous year.

Figure 25: Weight and number of amphetamine-type stimulants* detections by the Australian Customs Service, financial years 2000-2001 to 2009-2010



Source: Australian Customs Service

* includes amphetamine, methamphetamine and crystal methamphetamine detections, but excludes MDMA

5.2.4 Purchasing patterns of methamphetamines

Participants were asked about their most recent purchase of methamphetamine. All three types of methamphetamine were most commonly purchased from friends, followed by a known dealer (Table 15). The place of most recent purchase was quite varied for speed and base but a friend's home was the most common place for ice/crystal.

Table 15: Purchasing patterns of methamphetamine, 2010

	Speed powder %	Base %	Ice/crystal %
Last purchased from	n = 24	n = 16	n = 11
Street dealer	13	0	0
Friend	42	56	55
Known dealer	21	19	36
Acquaintance	13	13	9
Unknown dealer	8	0	0
Other	4	13	0
Place of most recent purchase	n = 24	n = 16	n = 11
Home delivery	21	31	9
Dealer's home	17	13	9
Friend's home	25	19	55
Acquaintance's house	21	6	9
Street market	13	6	9
Agreed public location	4	13	9
Other	0	13	0

Source: Queensland IDRS participant interviews, 2010

Note: Responses are from participants who answered questions about the methamphetamine market.

5.2.5 Key expert comments

Key experts commonly reported naming of the various forms of methamphetamines and that this had implications for reports of price paid by participants. One group of law enforcement key experts commented that the price range for methamphetamines was \$400 to \$1,000 per gram.

5.3 Cocaine market

Key points

- Very few participants commented on the cocaine market, and there was no clear consensus on price, purity, and availability.

Only six participants answered questions about the cocaine market; consequently, caution needs to be exercised in interpreting the information presented.

5.3.1 Cocaine price

Three participants provided the price of their most recent purchase of cocaine. All three bought one gram and they paid: \$200, \$300, and \$1,000.

5.3.2 Cocaine purity

Of the five participants who commented on the purity of cocaine, two regarded purity as being high, two as being low, and one as fluctuating. Due to the small number of participants commenting on purity and their lack of consensus, no conclusions can be drawn.

5.3.3 Cocaine availability

As with purity, no firm conclusions could be drawn on availability of cocaine. Of the five participants reporting on availability, two regarded availability as being easy, two as being difficult, and one very difficult.

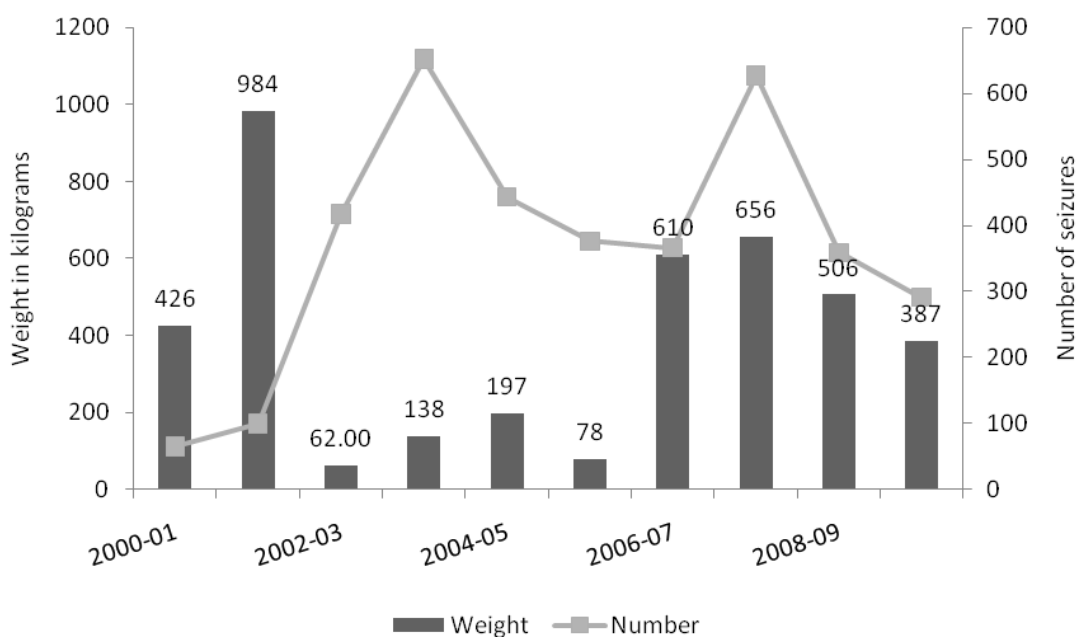
5.3.4 Purchasing patterns of cocaine

Of the five participants who commented on the cocaine market, four made their most recent purchase from a friend, and the other from a known dealer. Places of usual purchase included a friend's home, a dealer's home, and a bikie clubhouse.

5.3.5 Cocaine detected at the Australian border

The total weight (in kilograms) and number of cocaine detections at the border by the Australian Customs Service from the financial years 2000-2001 to 2009-2010 are presented in Figure 26. Both the number of seizures and weight of cocaine seized decreased in 2009-2010.

Figure 26: Weight and number of cocaine border seizures by the Australian Customs Service, 2000-2001 to 2009-2010



Source: Australian Customs Service

5.3.6 Key expert comments

Law enforcement key experts commented that the price of cocaine was \$6,000 per ounce and \$300 per gram; and suggested that people may pool their resources to get one or two grams to share.

5.4 Cannabis market

Key points

- Potency of cannabis remains high and price fairly stable.
- In general, hydro continues to be more readily available than bush; nevertheless, just over two-thirds of participants find bush very easy/easy to obtain.

Participants were asked if they were able to distinguish between hydroponically cultivated cannabis (hydro) and outdoor-cultivated cannabis (bush). Of the entire sample, 38% answered questions about the hydro market and 33% about the bush market.

5.4.1 Cannabis price

The higher median prices for bush when bought by the quarter ounce and half ounce in 2010 compared with 2009, reflect the wider range of prices paid in 2009 than in 2010 (Table 16). The majority (60%) of those who commented on the price of hydro (n = 35) considered the price to be stable, with 26% considering it to have increased and 14% to have fluctuated. Likewise of those who commented on the price of bush (n = 31), 74% considered the price to be stable, with 16% considering it to have increased, 7% to have fluctuated, and 3% to have decreased.

Table 16: Price of most recent cannabis purchase, 2009 and 2010

Amount	Median price	Range	Number of
	AU\$ 2010 (2009)	AU\$ 2010 (2009)	purchasers 2010 (2009)
Hydro			
Gram	25 (25)	10-25 (15-25)	10 (16)
Quarter ounce	100 (90)	80-100 (80-100)	18 (23)
Half ounce	180 (170)	100-350 (150-200)	9 (12)
Ounce	355 (300)	300-450 (280-400)	10 (17)
Bush			
Gram	20 (20)	10-25 (8-25)	11 (11)
Quarter ounce	85 (70)	70-100 (30-120)	13 (19)
Half ounce	150 (140)	150-200 (100-360)	5 (13)
Ounce	280 (280)	50-360 (60-400)	11 (19)

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the cannabis market

5.4.2 Cannabis purity

Overall, reports of cannabis potency in 2010 followed a similar pattern to 2009 (Table 17). However, in 2010, fewer participants than in 2009 considered hydro to have high potency, and more considered that potency fluctuated. On the other hand, more participants considered bush to have high potency than in 2009, and over two-thirds considered the potency to be stable.

Table 17: Perceived cannabis potency in preceding six months, 2009 and 2010

	Hydro		Bush	
	2009 %	2010 %	2009 %	2010 %
Current potency	n = 36	n = 37	n = 34	n = 33
High	58	41	41	55
Medium	33	32	35	33
Low	6	3	15	12
Fluctuates	3	24	9	0
Changes to potency	n = 34	n = 36	n = 33	n = 32
Increasing	24	22	39	16
Stable	59	53	46	69
Decreasing	9	6	9	9
Fluctuates	9	19	6	6

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the cannabis market.

5.4.3 Cannabis availability

Cannabis continued to be readily available in 2010; however, 19% participants reported that bush was difficult to obtain compared with 6% in 2009 (Table 18).

Table 18: Cannabis availability in preceding six months, 2009 and 2010

	Hydro		Bush	
	2009 %	2010 %	2009 %	2010 %
Current availability	n = 36	n = 36	n = 34	n = 32
Very easy	64	58	56	38
Easy	28	39	24	31
Difficult	6	3	15	25
Very Difficult	3	0	6	6
Changes to availability	n = 36	n = 36	n = 34	n = 32
More difficult	6	3	6	19
Stable	81	75	68	59
Easier	11	14	24	13
Fluctuates	3	8	3	9

Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the cannabis market.

5.4.4 Purchasing patterns of cannabis

As in 2009, most participants reported that their most recent purchase of hydro was from a friend or known dealer and this was reflected in the place of purchase (Table 19). The pattern was somewhat similar for bush. The majority of respondents reported purchasing bush from a friend and at a friend's home.

Table 19: Purchasing patterns of cannabis, 2009 and 2010

	Hydro		Bush	
	2009 %	2010 %	2009 %	2010 %
Last purchased from	n = 34	n = 37	n = 27	n = 31
Friend	44	46	44	61
Known dealer	47	35	22	16
Street dealer	0	5	7	3
Acquaintance	6	5	15	0
Unknown dealer	0	3	7	7
Mobile dealer	0	0	0	7
Other	3	5	5	7
Place of purchase	n =	n = 37	n = 27	n = 31
Friend's home	24	27	48	45
Dealer's home	41	22	22	13
Home delivery	18	16	11	19
Agreed public location	12	16	7	10
Street market	0	14	7	7
Acquaintance's house	3	3	7	0
Other	2	3	0	7

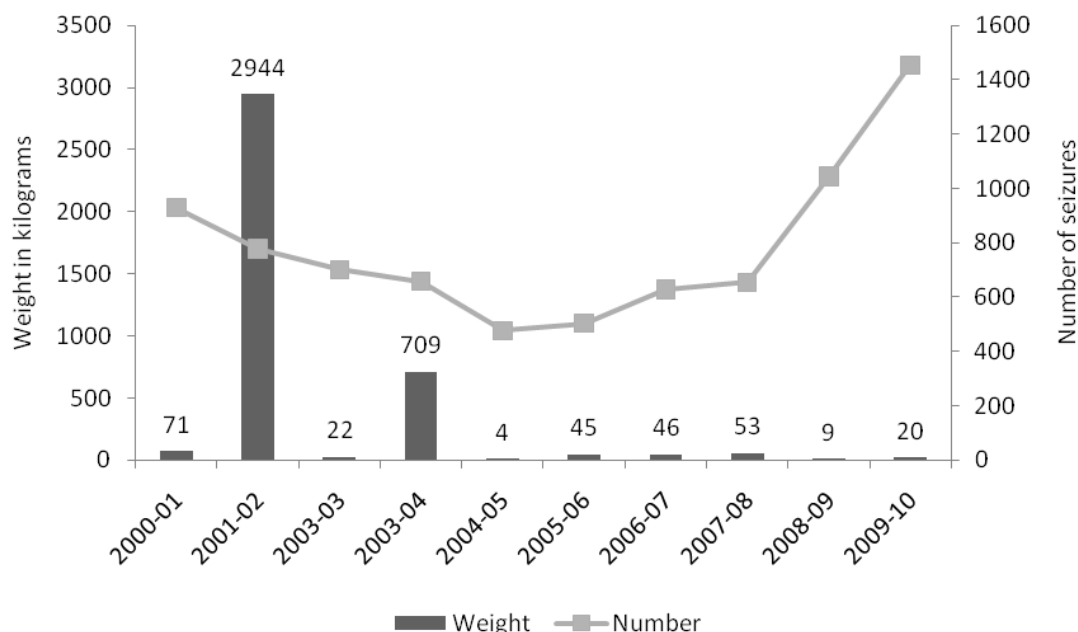
Source: Queensland IDRS participant interviews, 2009 and 2010

Note: Responses are from participants who answered questions about the cannabis market.

5.4.5 Cannabis detections at the Australian border

The total weight (in kilograms) and number of cannabis detections at the border by the Australian Customs Service from the financial year 2000-2001 to 2009-2010 is shown in Figure 27. These detections include cannabis, cannabis leaf, oil, seed, and resin.

Figure 27: Weight and number of cannabis border seizures by Australian Customs Service, financial years 2000-2001 to 2009-2010



Source: Australian Customs Service

Key expert comments

Only one key expert commented on cannabis price. Both hydro and bush were the same price: \$50 for 3.5 grams. Key experts in the legal sector considered that the cannabis market was stable.

5.5 Methadone market

Key points

- Only a small number of participants commented on the methadone market, but all considered price to be stable.
- No consensus on current ease of access, but availability was generally regarded as stable.

Only nine participants answered questions about the methadone market, and the information provided should therefore be interpreted with caution.

5.5.1 Methadone price

Only five participants commented on the price of methadone and these all reported the price as stable. The median price paid for one millilitre of methadone syrup was \$0.62.

5.5.2 Methadone availability

Six participants commented on the current availability of illicit methadone: one considered it very easy to access, two considered that it was easy, and three difficult. Of the six, five reported availability as stable and one as more difficult.

5.5.3 *Purchasing patterns of illicit methadone*

Four participants reported on the source of their illicit methadone: three had obtained it from a friend and the one from an unidentified person. Place of purchase was a friend's home (two) and an agreed public location (two).

5.6 Buprenorphine market

Key points

- Price and availability of buprenorphine was generally considered stable.

Eighteen per cent of participants answered questions about the buprenorphine market.

5.6.1 *Buprenorphine price*

Only three participants reported on price paid for two milligrams of buprenorphine (i.e. Subutex®). Two paid \$10 and the other \$20. Eleven participants reported on price paid for eight milligrams of buprenorphine, and the median price was \$40 (ranging from \$5 to \$50). Most of the participants who reported on price changes (n = 15) considered it to be stable (60%) with 27% considering it to be increasing and 13% fluctuating.

5.6.2 *Buprenorphine availability*

There was no consensus on ease of access of buprenorphine; however, most respondents considered that availability was stable (Table 20)

Table 20: Availability of buprenorphine, 2010

Ease of access	Respondents (n = 17) %	Changes to ease of access in last 6 mths	Respondents (n = 16) %
Difficult	47	Stable	69
Very easy	42	More difficult	19
Easy	12	Easier	6
		Fluctuates	6

Source: Queensland IDRS participant interviews, 2010

Note: Responses are from participants who answered questions about the buprenorphine market.

5.6.3 *Purchasing patterns of illicit buprenorphine*

For those who purchased illicit buprenorphine (n = 16), their most recent purchase was generally from friends (69%). The venue where they obtained their most recent purchase varied, but the most common venue was an agreed public location (38%).

5.7 Buprenorphine-naloxone market

Key points

- Price and availability of buprenorphine-naloxone was generally considered stable with a two milligram tablet costing \$10 and an eight milligram costing around \$40.

Fourteen per cent of participants answered questions about the buprenorphine-naloxone market.

5.7.1 Buprenorphine-naloxone price

Only three participants reported on the price of a two milligram tablet of buprenorphine-naloxone and all had paid \$10 which was the same price as in 2009. Six participants reported on the price of a eight milligram tablet, and price paid ranged from \$20 to \$50 with a median of \$40. Of the 11 participants who reported on price changes, 55% considered it to be stable, 27% considered it to be increasing, 9% decreasing, and 9% fluctuating.

5.7.2 Buprenorphine-naloxone availability

There was very little consensus about ease of access of buprenorphine; however, nearly all respondents considered that its recent availability had been stable (Table 21).

Table 21: Availability of buprenorphine-naloxone, 2010

Ease of access	Respondents (n = 11) %	Changes to ease of access in last 6 mths	Respondents (n = 11) %
Difficult	46	Stable	91
Very easy	36	More difficult	9
Easy	18		

Source: Queensland IDRS participant interviews, 2010

Note: Responses are from participants who answered questions about the buprenorphine-naloxone market.

5.7.3 Purchasing patterns of buprenorphine-naloxone

All but two of the ten participants who reported on their purchase of illicit buprenorphine-naloxone had made their last purchase from friends (the other two source people were: street dealer and acquaintance). The purchase venue varied (e.g. street market, friend's home, agreed public location) with no clear common venue.

5.8 Morphine market

Key points

- The median price for 100 milligrams of morphine was \$70, with price changes considered to be generally stable or increasing.
- MS Contin[®] was the most common brand of morphine used, followed by Kapanol[®].
- Morphine was readily available.
- Morphine was obtained from a variety of source people and locations with no prominent common source person or location.

Thirty-four per cent of participants answered questions about the morphine market.

5.8.1 Morphine price

Participants were asked about the price of the specific brands of morphine (i.e. MS Contin[®] and Kapanol[®]) that they had purchased. The median prices are as follows:

MS Contin [®]	5, 10, 30mg	\$30 (each quantity received only one price report)
	60mg	\$40 (ranging from \$30 to \$45, n = 9)
	100mg	\$70 (ranging from \$30 to \$100, n = 23)
Kapanol [®]	50mg	\$20 (only one price report)
	100mg	\$70 (ranging from \$40 to \$70, n = 7)

Reports on price changes from those who reported on the morphine market (n = 31) were as follows: stable (58%), increasing (32%), decreasing (6%), and fluctuating (3%).

5.8.2 Morphine availability

Most participants who commented on the morphine market considered morphine to be readily available (Table 22).

Table 22: Availability of morphine, 2010

Ease of access	Respondents (n = 32) %	Changes to ease of access in last 6 mths	Respondents (n = 33) %
Very easy	44	Stable	64
Easy	38	More difficult	18
Difficult	19	Fluctuates	15
		Easier	3

Source: Queensland IDRS participant interviews, 2010

Note: Responses are from participants who answered questions about the morphine market.

5.8.3 Purchasing patterns of morphine

Respondents (n = 31) purchased morphine from friends (39%), street dealers (23%), known dealers (19%), acquaintances (13%), unknown dealers (3%), and other 3%.

Venues for the most recent purchase of morphine were (n = 31): friend's home (27%), street market (23%), agreed public location (20%), home delivered (13%), other (10%), dealer's home (3%), and acquaintances' house (3%).

5.9 Oxycodone market

Key points

- The median price of 80 milligrams of oxycodone was \$45, with most participants considering price to be stable.
- There was no consensus on the ease of obtaining illicit oxycodone, but most participants considered that there had been no recent change in availability.
- Illicit oxycodone was most commonly sourced from a friend.

Fourteen per cent of participants answered questions about the oxycodone market.

5.9.1 Price of illicit oxycodone

Participants were asked about the price of the specific brands of illicit oxycodone that they had purchased, but reports were only received for Oxycontin[®]. Median price of the most recent purchase was:

Oxycontin [®]	20mg	\$10 (only one price report)
	40mg	\$20 (ranging from \$20 to \$25, n = 3)
	80mg	\$45 (ranging from \$20 to \$80, n = 12)

Eighty-five per cent of the 13 participants who commented on the oxycodone market considered the price to be stable, and the remaining 15% considered it to be increasing.

5.9.2 *Illicit oxycodone availability*

There was no clear consensus on the availability of oxycodone but about two-thirds of those who commented reported availability as stable (Table 23).

Table 23: Availability of oxycodone, 2010

Ease of access	Respondents (n = 14) %	Change to ease of access in last 6 mths	Respondents (n = 14) %
Very easy	29	Stable	64
Easy	29	More difficult	29
Difficult	36	Fluctuates	7
Very difficult	7		

Source: Queensland IDRS participant interviews, 2010

Note: Responses are from participants who answered questions about the oxycodone market.

5.9.3 *Purchasing patterns of illicit oxycodone*

Eight (57%) of the 14 participants who commented on the oxycodone market reported their most recent source person as being friends. There was little commonality of source person for the remaining 43% of participants (i.e. street dealers, known dealers, unknown dealers, mobile dealers, and acquaintances).

The last time illicit oxycodone was obtained, the venue nominated was: friend's home (50%), agreed public location (29%), street market (14%), home delivery (7%) (n = 14).

6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

Key points

- Thirty-five per cent of participants had overdosed on heroin in their lifetime. Of these, 24% had overdosed in the preceding year and 11% had overdosed more than five times in their lifetime.
- Twenty per cent of participants had overdosed on another drug in their lifetime. Of these, 35% had done so in the past year and 6% in the past month.
- By far the most overdose cases attended by Queensland Ambulance Service were for alcohol, followed by antidepressants, benzodiazepines, and then heroin.
- Forty-one per cent of participants reported receiving current treatment, with most of these receiving opioid substitution treatment.
- There were more calls to the Queensland Alcohol and Drug Information Services for illicit opioids but less for amphetamines, cocaine, and cannabis.
- Needle and Syringe Programs were the main source of needles and syringes.
- Sixteen per cent of participants borrowed used needles and 25% lent used needles. Two-thirds shared equipment other than needles.
- Forty-three per cent self-reported a mental health problem with the most common problems being depression, anxiety, and panic attacks.
- Compared with the general Australian population, IDRS participants were more likely to score in the high distress or very high distress categories of the Kessler Psychological Distress Scale (K10) (64% of participants).
- Thirteen per cent of participants reported driving under the influence of alcohol in the preceding six months, with 43% of these having driven over the legal limit.
- Eighty-eight per cent of participants reported having driven soon after taking an illicit drug in the past six months. Heroin and cannabis were the drugs most often consumed prior to driving.
- Sixty-seven per cent of participants considered that the drug/s taken prior to driving had no impact on their driving ability.

6.1 Overdose and drug-related fatalities

6.1.1 Heroin and other opioid overdose

In 2010, 35% of participants reported overdosing on heroin at least once in their lifetime (53% in 2009). Of those participants who had overdosed ($n = 35$), 89% reported overdosing one to five times, with the remaining 11% reporting overdosing from 6 to 30 times. Of the 33 participants who reported on the time period since their last overdose, 24% had overdosed in the preceding 12 months. The median time from most recent heroin overdose was 60 months with range from 1 to 300 months (in 2009, the median was 65 months and the range 2 to 300 months).

Participants were asked if Narcan[®] was given to them the last time they accidentally overdosed. Of the 34 participants who responded to this question, 41% were given Narcan[®]. Participants were also asked to report the treatment or information they received if they had accidentally overdosed in the past year. Multiple responses were allowed and they are reported in Table 24.

Table 24: Treatment/information received after overdose, 2010

	Participants n = 15
Got Narcan [®]	7
CPR from friend/partner/peer	5
Ambulance attendance	5
Hospital emergency department	2
GP	2
Drug health service	2
CPR from health professional	1
Got oxygen	1
Counsellor	1
Psychiatrist	1
Other (cold shower)	1
Don't know/can't remember	1
Did not receive information or treatment	3

Source: Queensland IDRS participant interviews, 2010

Note: Multiple responses were allowed. Overdose was accidental and occurred in past 12 months.

6.1.2 Other drugs overdose

Twenty per cent of all participants reported an overdose on another drug (besides heroin) in their lifetime. Seventeen of these reported on the time period since their most recent overdose: 35% reported overdosing in the past 12 months, and 6% in the past month.

6.1.3 Queensland Ambulance Service data

Table 25 presents the number of attendances during the 2009-2010 financial year by the Queensland Ambulance Service to people who were coded as having a drug overdose and the primary drug was recorded. There were very similar patterns in both years. Alcohol was by far the most common primary drug followed by antidepressants and benzodiazepines, with heroin in fourth place.

Table 25: Overdose cases attended by Queensland Ambulance Service where primary substance was recorded, 2008-2009 to 2009-2010

Primary drug	2008-2009	2009-2010
Alcohol	3,414	3,629
Antidepressants	724	766
Benzodiazepines	445	467
Heroin	189	242
Antipsychotics	-	228
Cannabis	169	182
Ecstasy	222	166
Amphetamines	129	132
Inhalants	63	74
Methadone	28	39
GHB	-	38
Cocaine	23	33
Buprenorphine	5	5

Source: Queensland Ambulance Service

These data are conservative and cannot be considered a definitive record of the number of overdoses attended by the service in the specified time period¹.

6.2 Drug treatment

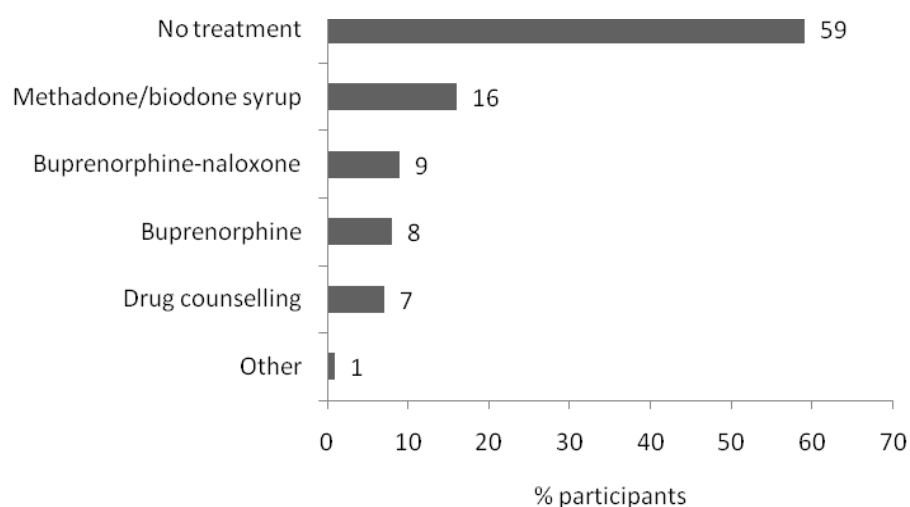
6.2.1 Current drug treatment

Participants were asked about their current treatment status. Forty-one per cent of participants were receiving treatment, and this was mainly opioid substitution treatment (Figure 28).

¹ Queensland Ambulance Service data do not include formal diagnoses, as these are not made until the patient has received treatment at a hospital emergency department. Also the ambulance service may have attended people who had overdosed without an overdose code being assigned, thus excluding them from the data shown.

Moreover, the 'drug type' field is optional as it is not always possible for paramedics to establish the drug type involved. Only the primary drug is recorded so the data does not capture the range of different illicit drugs that may be involved in each overdose case. Finally, these data relate only to cases where the primary case nature was coded as overdose. Any overdose cases where the overdose was coded as secondary to the primary problem are not included (e.g. cardiac arrest due to drug overdose, trauma, and/or psychiatric cases).

Figure 28: Current treatment status, 2010



Source: Queensland IDRS participant interviews, 2010

6.2.2 Estimated number of pharmacotherapy clients

The estimated number of pharmacotherapy clients in Queensland has been steadily increasing with 5,116 clients receiving pharmacotherapy treatment on a ‘snapshot’/specified day in 2009 (Australian Institute of Health and Welfare, 2009). Of these, 55% were receiving methadone, 15% were receiving buprenorphine (Subutex[®]), and 30% were receiving buprenorphine-naloxone (Suboxone[®]). These were similar proportions to 2008 data.

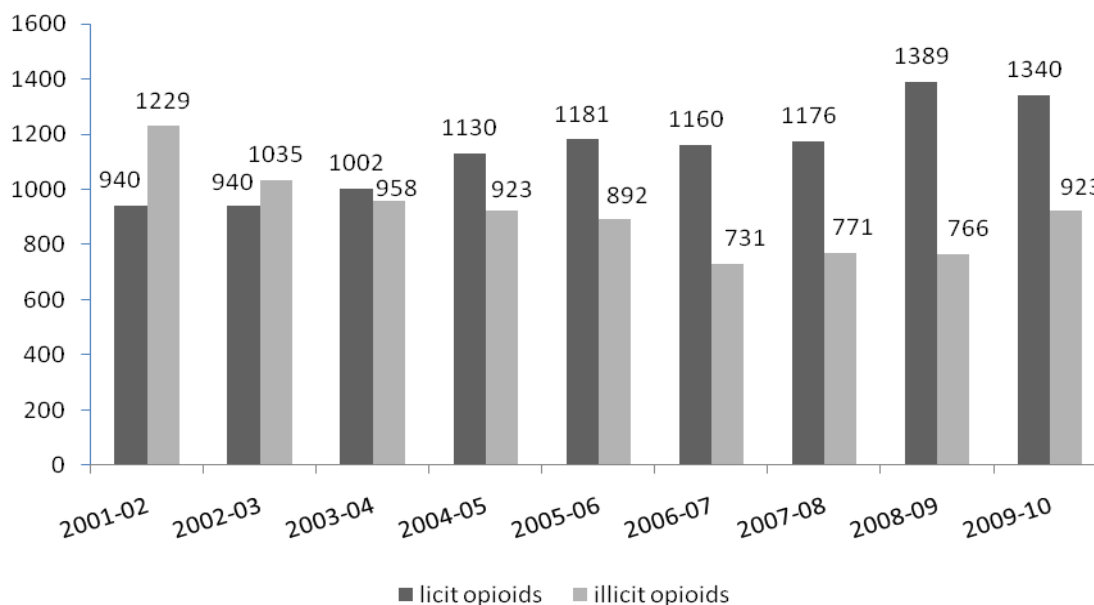
As in previous years, dosing point sites in Queensland were most commonly pharmacies (75%) with the remainder located in public clinics, correctional facilities, private clinics and other locations. The number of Queensland dosing points has declined in recent years from 503 in 2005–2006 to 474 in 2008–2009. This decline includes a decrease in correctional services dosing points from 20 in 2005–2006 to 12 in 2008–2009. The number of prescribers registered to prescribe pharmacotherapy drugs has also declined from 134 in 2006 to 121 in 2009, but this does represent an upward trend from a low of 99 prescribers in 2007.

6.2.3 Calls to telephone help lines

The following data was obtained from the Queensland Alcohol and Drug Information Service (ADIS). It represents the number of calls about each drug from people who had a drug history and were willing to provide information about it.

Since 2003–2004, there have been more calls to ADIS about licit opioids than illicit opioids (Figure 29). The 2010 calls about both licit and illicit opioids followed a similar pattern to 2009 calls. Licit opioids accounted for 11% and illicit opioids accounted for 8% of all calls.

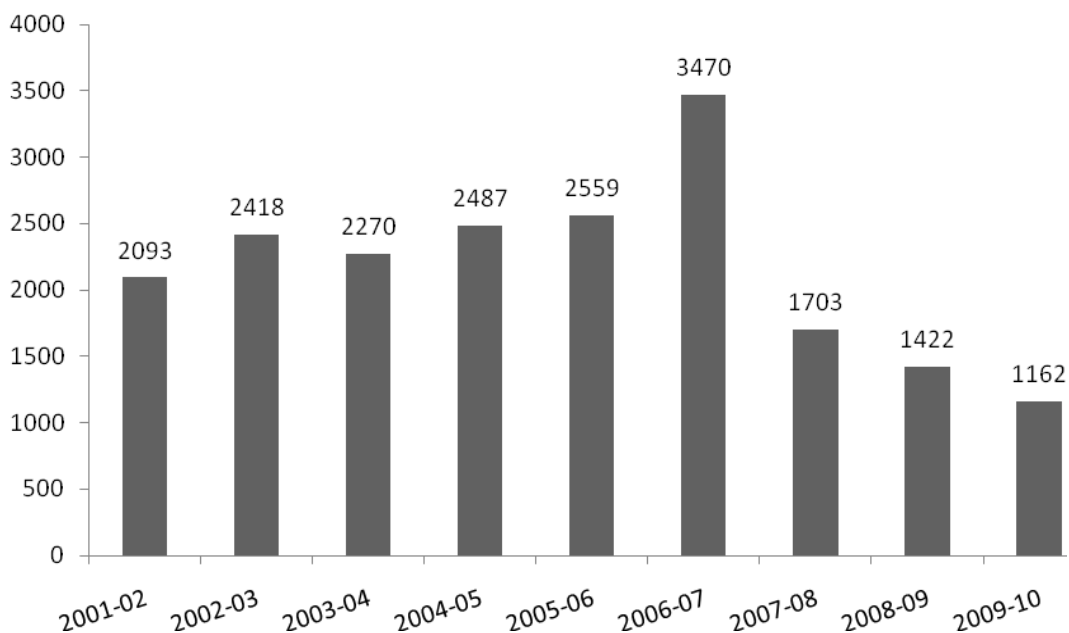
Figure 29: Number of enquiries to ADIS regarding licit and illicit opioids, 2001-2002 to 2009-2010



Source: Queensland Alcohol and Drug Information Service

Over the past three years there has been a downward trend in the number of calls to ADIS pertaining to methamphetamines (Figure 30). In 2010, methamphetamine related calls comprised 10% of all calls.

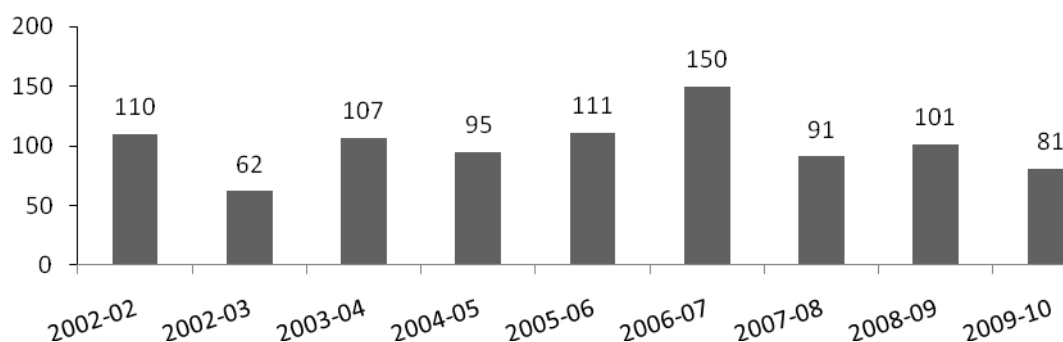
Figure 30: Number of enquiries to ADIS regarding amphetamines, including methamphetamines, 2001-2002 to 2009-2010



Source: Queensland Alcohol and Drug Information Service

There has consistently been a low number of calls to ADIS about cocaine and in 2009-2010, the 81 calls about cocaine comprised 1% of all calls (Figure 31).

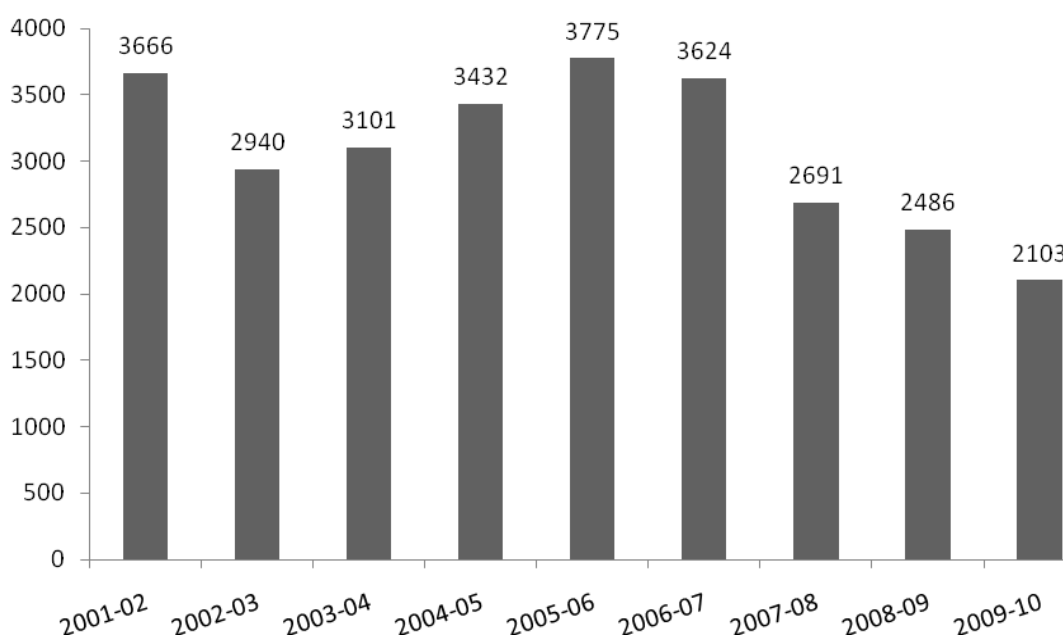
Figure 31: Number of enquiries to ADIS regarding cocaine, 2001-2002 to 2009-2010



Source: Queensland Alcohol and Drug Information Service

As Figure 32 shows, the number of enquiries to ADIS has been falling in the past few years with calls in 2009-2010 being the lowest number received in the past nine years.

Figure 32: Number of enquiries to ADIS regarding cannabis, 2001-2002 to 2009-2010



Source: Queensland Alcohol and Drug Information Service

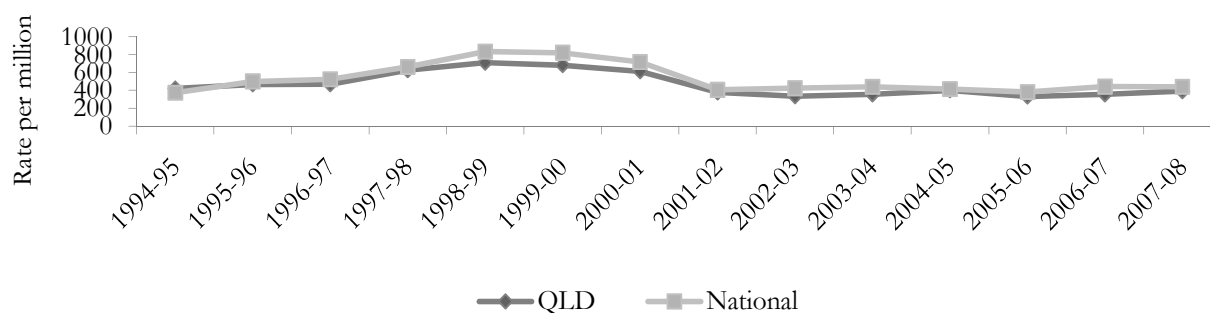
6.3 Hospital admissions

At time of print, hospital admission data for 2008-2009 was not yet available.

6.3.1 Opioids

Figure 33 shows the rate of hospital admissions per million persons aged 15 to 54 years, where opioids were the primary diagnosis from 1994-1995 to 2007-2008 (both in Queensland and nationally). In 1998-1999, the rate peaked in Queensland at 708 per million persons, followed by a downward trend to a low of 334 per million persons during 2002-2003. This trend has remained relatively stable and in 2008-2009, the rate in Queensland was 390 per million and nationally it was 440 per million.

Figure 33: Rate of inpatient hospital admissions where opioids were the principal diagnosis per million persons aged 15–54 years, Queensland and nationally, 1994–1995 to 2007–2008

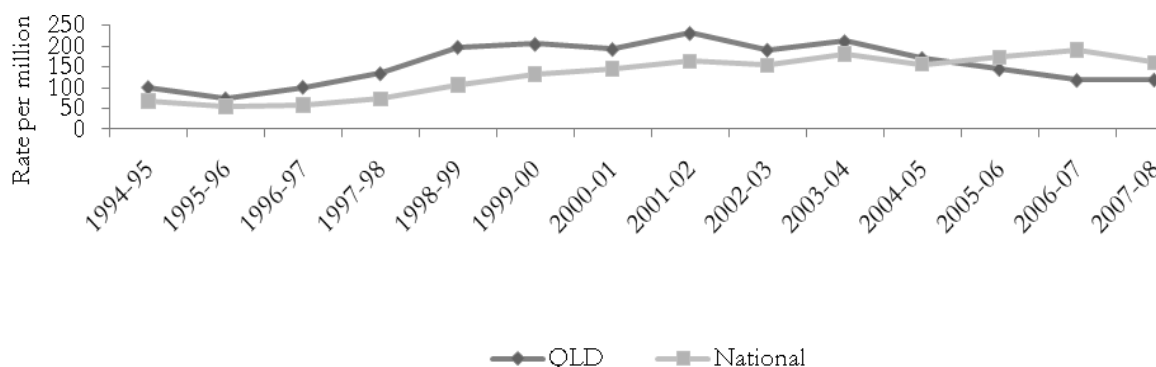


Source: National Hospital Morbidity Database; Roxburgh & Burns (in press)

6.3.2 Methamphetamine

Figure 34 illustrates the rate of hospital admissions per million persons aged 15 to 54 years, where amphetamines were the principal diagnosis, from 1994–1995 to 2007–2008 (both in Queensland and nationally). In 2001–2002, the rate peaked in Queensland at 232 per million persons, before decreasing to a rate of 119 per million persons during 2007–2008.

Figure 34: Rate of inpatient hospital admissions where amphetamines were the principal diagnosis per million persons aged 15–54 years, Queensland and nationally, 1994–1995 to 2007–2008

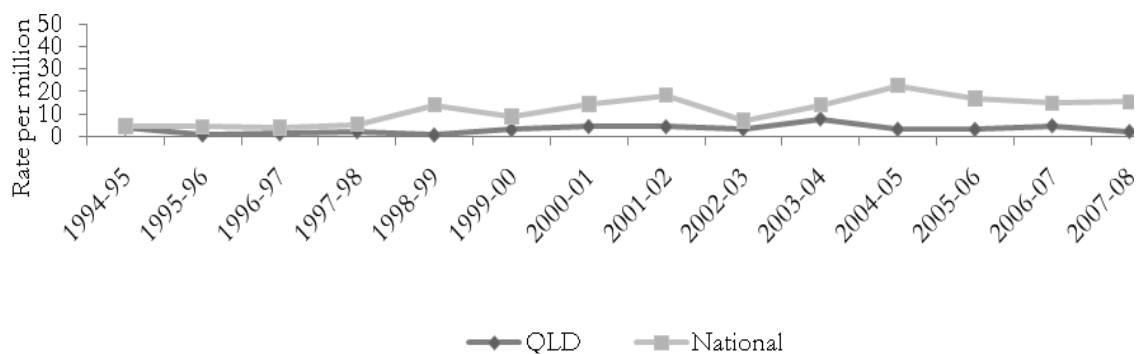


Source: National Hospital Morbidity Database; Roxburgh & Burns (in press)

6.3.3 Cocaine

Figure 35 shows the rate of hospital admissions per million persons aged 15 to 54 years, where cocaine was the principal diagnosis, from 1994–1995 to 2007–2008 (both in Queensland and nationally). Across Queensland the rate has remained relatively low, peaking at seven per million persons in 2003–2004. In 2007–2008, the rate in Queensland was two per million and nationally it was 15 per million.

Figure 35: Rate of inpatient hospital admissions where cocaine was the principal diagnosis per million persons aged 15-54 years, Queensland and nationally, 1994-1995 to 2009-2010

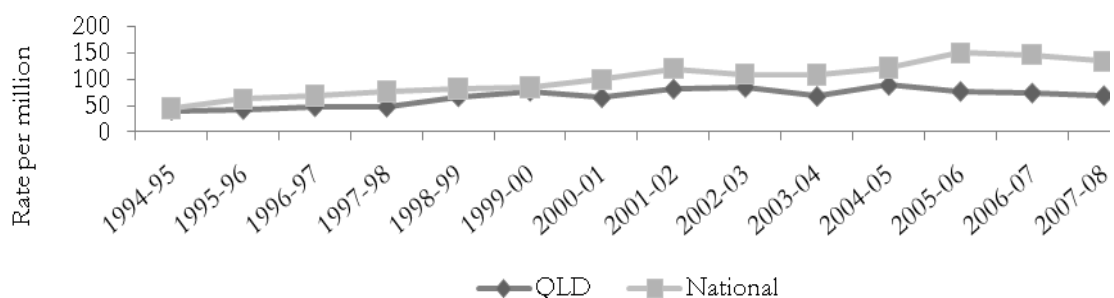


Source: National Hospital Morbidity Database; Roxburgh & Burns (in press)

6.3.4 Cannabis

Figure 36 illustrates the rate of hospital admissions per million persons aged 15 to 54 years, where cannabis was the principal diagnosis, from 1994–1995 to 2007–2008 (both in Queensland and nationally). In Queensland, the rate peaked in 2004–2005 at 89 per million persons. In 2007–2008, the rate in Queensland was 69 per million and nationally it was 134 per million.

Figure 36: Rate of inpatient hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years, Queensland and nationally, 1994-1995 to 2009-2010



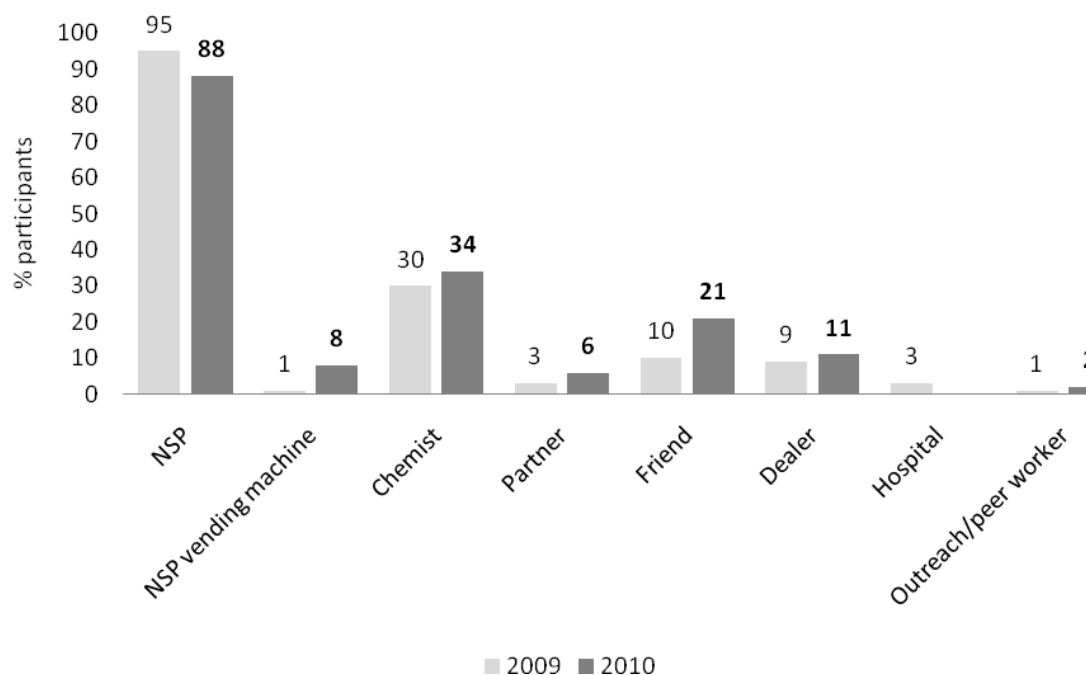
Source: National Hospital Morbidity Database; Roxburgh & Burns (in press)

6.4 Injecting risk behaviour

6.4.1 Access to needles and syringes

Needle and syringe programs (NSP) continued to be by far the most common source of needles and syringes (Figure 37). About a third of participants had recently sourced needles and syringes from chemists.

Figure 37: Main sources of needles and syringes in preceding six months, 2009 and 2010



Source: Queensland IDRS participant interviews, 2009 and 2010

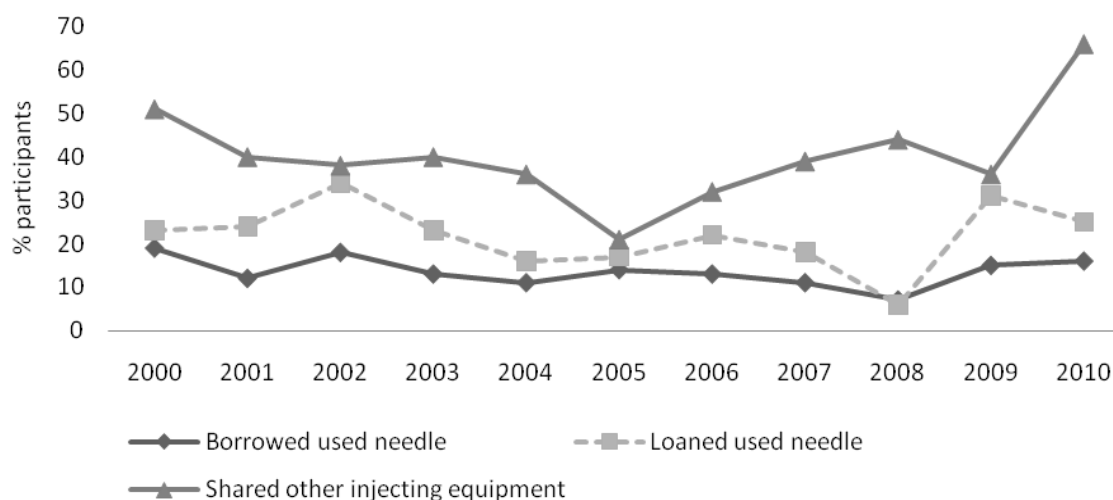
Note: Multiple responses allowed

The total number of needles and syringes distributed to needle and syringe programs throughout Queensland by the Queensland Needle and Syringe Program (QNSP) was 6,151,560 and this is in keeping with previous years (5,973,560 in 2009).

6.4.2 Sharing of injecting equipment

Sharing of injecting equipment continues to be a matter of concern. Over the decade 2000-2010, the proportion of participants reporting borrowing of used needles has been relatively stable (mean = 15%, range = 7%-19%) with 16% borrowing used needles in 2010 (Figure 38). The lending of needles and the sharing of other injecting equipment has been more variable. In 2010, the proportion of participants who reported sharing equipment other than needles (e.g. spoons or mixing containers, filters, tourniquets, water, swabs) rose significantly to a high of 66% from 36% in 2009 ($p = 0.000$). The proportion lending used needles was 25% (31% in 2009).

Figure 38: Proportion of participants who used someone else's injecting equipment in the previous month, 2000-2010



Source: Queensland IDRS participant interviews, 2000-2010

Fifty-six per cent of participants re-used own needle compared to 73% in 2009. Table 26 details other equipment re-used, whether a participant's own equipment or someone else's.

Table 26: Other equipment re-used in the previous month, 2010

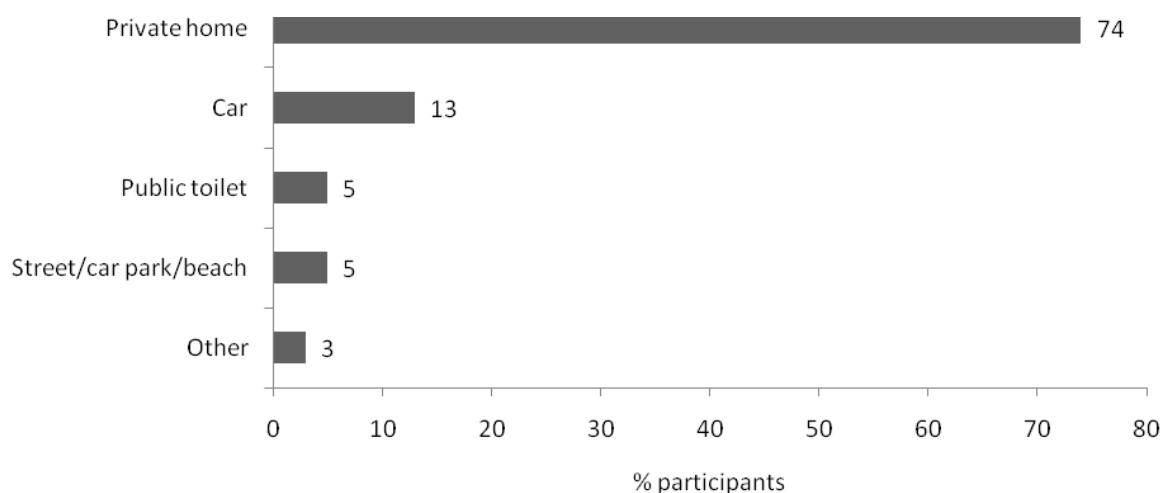
Other equipment	Other equipment re-used	
	Own (n = 73) %	Another person's (n = 66) %
Spoons/mixing containers	74	62
Filters	18	24
Tourniquets	32	15
Water	18	29
Swabs	7	3
Other	4	2

Source: Queensland IDRS participant interviews, 2010

By far the most common site of most recent injection was the arm (84%), followed by hand (11%), groin (2%), leg (1%), foot (1%), and thumb (1%).

In keeping with previous years, almost three-quarters of participants had their most recent injection in a private home (Figure 39).

Figure 39: Location where participant last injected, 2010



Source: Queensland IDRS participant interviews, 2010

6.4.3 Injection-related issues

Fifty-two per cent of participants reported some type of injection-related issues in the past month. Except for overdose, percentages for each issue were lower than in 2009 (Table 27).

Table 27: Injection-related issues experienced in the preceding month, 2002-2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	%	%	%	%	%	%	%	%	%
Overdose	6	7	3	3	4	4	3	1	2
Dirty hit	18	19	16	14	25	31	20	31	11
Abscess/infection	14	16	11	5	8	6	8	15	8
Scarring/bruising	51	37	48	37	55	57	46	64	41
Difficulty injecting	43	35	40	31	38	41	38	38	30
Thrombosis	11	7	8	7	9	<1	4	9	4

Source: Queensland IDRS participant interviews, 2002–2010

6.5 Mental health problems and psychological distress

The proportion of participants reporting mental health problems was similar to 2009 (Table 28). There were, however, shifts in the type of problems most commonly reported; for example, fewer participants reported depression or drug-induced psychosis but more reported panic and schizophrenia. Prescriptions received by participants who had attended a mental health professional followed a similar pattern to that of 2009.

Table 28: Mental health in preceding six months, 2009 and 2010

	2009 N = 80 %	2010 N = 100 %
Self-reported mental health problem	41	43
Problems reported	(n = 33)	(n = 42)
Depression	64	50
Anxiety	46	41
Panic	6	24
Schizophrenia	9	19
Manic-depression/bipolar	18	10
Paranoia	12	5
Drug induced psychosis	12	2
Attended mental health professional	58	71
Drug type prescribed**	(n = 19)	(n = 29)
No medication	5	7
Benzodiazepine	70	63
Anti-depressant	64	61
Anti-psychotic	58	45

Source: Queensland IDRS participant interviews, 2010

* by respondents who self-reported a mental health problem in the preceding six months

** for respondents who attended a mental health professional in the preceding six months

The Kessler Scale of Psychological Distress (K10)

The Kessler Scale of Psychological Distress (K10) was administered using a 10-item standardised measure that has been found to have good psychometric properties and to identify clinical levels of psychological distress as measured by the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV)/the Structured Clinical Interview for DSM disorders (SCID) (Andrews & Slade, 2001; Kessler et al., 2002).

K10 scores reflecting ‘risk’ are often categorised as follows: ‘low’ – the person is likely to be well (scores 10-15); ‘moderate’ – the person may have a mild mental disorder (scores 16-20); ‘high’ – the person is likely to have a moderate mental disorder (scores 22-29); and ‘very high’ – the person is likely to have a severe mental disorder (scores 30-50). The 2007 National Drug Strategy Household Survey (NDSHS) (Australian Institute of Health and Welfare, 2009) provided the most recent Australian population norms for the K10.

As shown in Table 29, participants in both 2009 and 2010 were vastly more likely to score high distress or very high distress (almost two-thirds of participants in both years) than the general population in the NDSHS. The median total score in 2010 was 25 (range 10-50).

Table 29: K10 scores, 2009 and 2010

K10 score	Level of psychological distress	2009	2010	2007 NDSHS %
		N = 80 %	N = 100 %	
10-15	No/low distress	13	16	69
16-21	Moderate distress	26	21	21
22-29	High distress	34	30	8
30-50	Very high distress	28	34	2

Source: Queensland IDRS participant interviews, 2009 and 2010

6.6 Driving risk behaviour

Just over half of participants reported having driven in the past six months and information about their driving after drug use is presented in Table 30.

Table 30: Driving after licit and illicit drug use in preceding six months, 2007-2010

	2007 N = 119 %	2008 N = 104 %	2009 N = 80 %	2010 N = 100 %
Driven in the past 6 months	47	57	65	57
				n = 56
Driven under the influence of alcohol*	28	20	20	13
Driven whilst over the legal limit[^]	N/A	N/A	50	43
Driven soon after taking an illicit drug[†]	87	90	89	88
Drugs taken past time participant drug drove				n = 49
Heroin	47	42	59	61
Cannabis	43	30	48	51
Speed powder	21	8	30	22
Base methamphetamine	9	4	30	18
Morphine	15	11	33	14
Crystal/ice methamphetamine	6	8	22	12
Oxycodone	0	2	11	11
Buprenorphine-naloxone	4	6	7	8
Buprenorphine	2	4	11	10
Benzodiazepines	9	4	20	8
Methadone	7	9	7	4
Cocaine	2	2	4	4
Ecstasy	0	0	4	2
Other opiates	0	2	0	0

	2007 N = 119 %	2008 N = 104 %	2009 N = 80 %	2010 N = 100 %
Impact of illicit drug on driving ability				n = 48
Quite impaired	6	2	13	2
Slightly impaired	21	32	13	25
No impact	57	66	57	67
Slightly improved	13	0	9	4
Quite improved	2	0	7	2
Tested positive on police roadside drug-driving test in past 6 months	n = 4	n = 0	n = 3	n = 1

Source: Queensland IDRS participant interviews, 2007-2010

* among those who had driven a vehicle in the six months preceding interview (n = 56)

^ among those who had driven under the influence in the six months preceding interview (first asked in 2009)

† among those who had driven soon after taking a drug in six months preceding interview

7 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

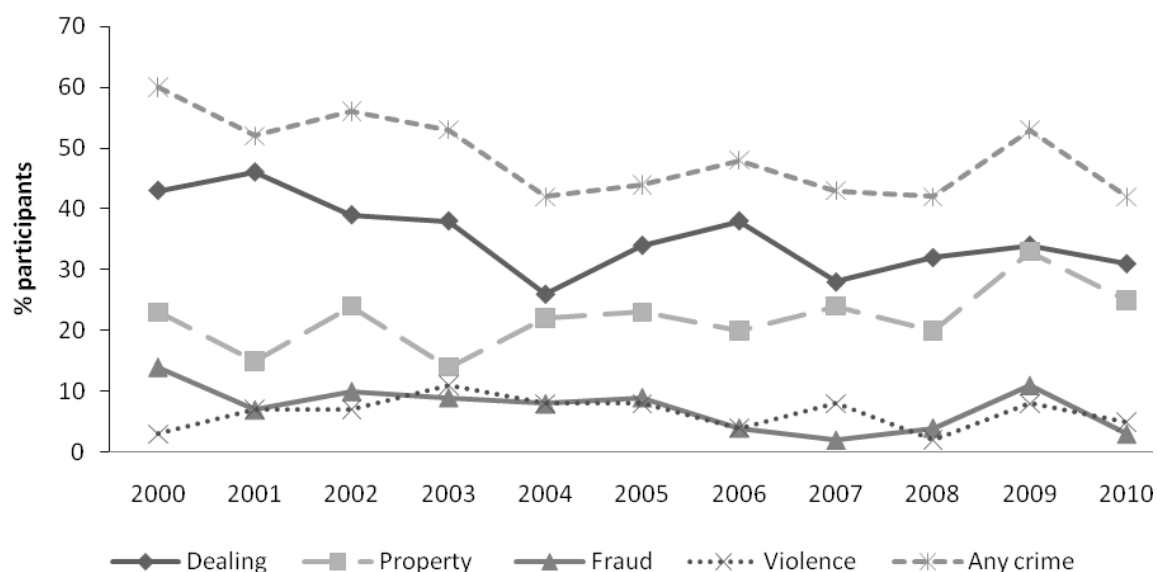
Key points

- Dealing and property crime were the most commonly reported criminal activity.
- Forty-four per cent reported being arrested in the preceding 12 months with the most common reasons being property crime and use and possession of drugs.

7.1 Reports of criminal activity

Self-reported criminal activity in the preceding month, for the period 2000 to 2010, is presented in Figure 40. As in previous years, in 2010 dealing and property crime were most commonly reported (31% and 25% respectively) with only a small proportion of participants reporting fraud and violence (3% and 5%).

Figure 40: Prevalence of criminal involvement in previous month, 2000-2010

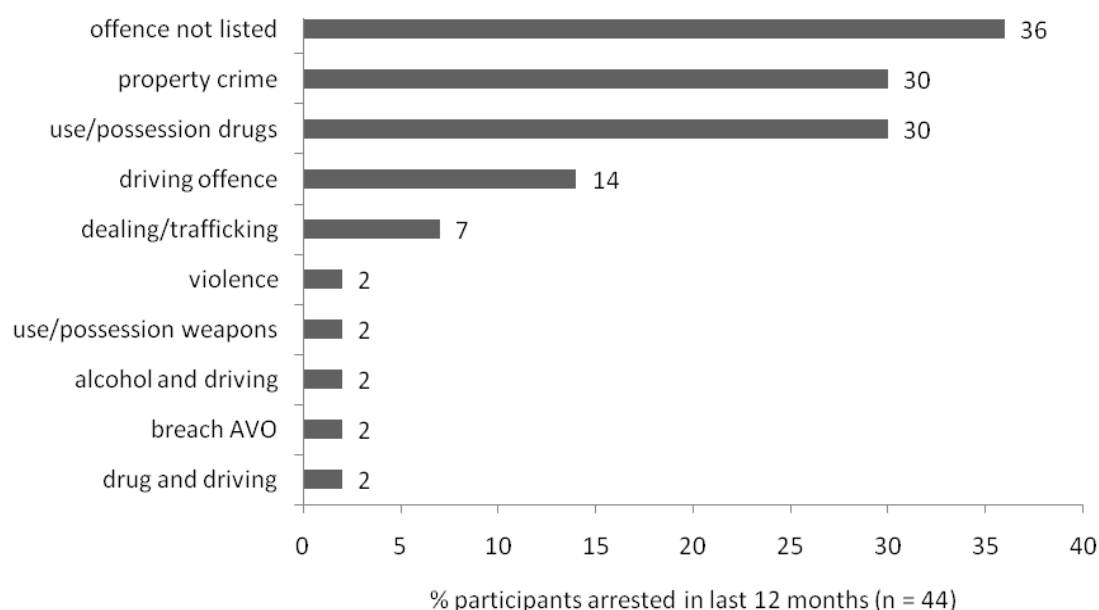


Source: Queensland IDRS participant interviews, 2000-2010

7.2 Arrests

Forty-four per cent of participants reported having been arrested in the 12 months preceding interview. This proportion was in keeping with previous years (i.e. 45% in 2009, 40% in 2008). Figure 41 shows the main reasons given for being arrested.

Figure 41: Main reasons for arrest in preceding 12 months, 2010



Source: Queensland IDRS participant interviews, 2010

Note: Multiple responses allowed

Queensland Police Service data on specific drug-related arrests is not yet available for the financial year 2009-2010. In the 2008-2009 financial year, 23,929 drug-related arrests were made. As can be seen from Table 31, the majority of these arrests were of consumers (i.e. use, possession or administering for their own use). By far the most arrests related to cannabis, followed by methamphetamine-type stimulants. Only 1% of arrests related to heroin.

Table 31: Drug-related arrests by drug type, Queensland, 2008-2009

	Consumer	Provider	All
Cannabis	14,714	1,874	16,588
Amphetamine type stimulants	3,579	651	4,230
Other and unknown	1,815	638	2,453
Heroin	208	41	249
Cocaine	116	38	154
Steroids	103	29	132
Hallucinogens	106	17	123
Total	20,641	3,288	23,929

Source: Queensland Police Service

* consumers = use, possession or administering for their own use

* providers = importation, trafficking, selling, cultivation and manufacture

Table 32 shows seizures by drug type with cannabis being undoubtedly the most seized drug.

Table 32: Seizures by drug type, Queensland, 2008-2009

	Police Force	No. of seizures	Weight (gms)
Amphetamine-type stimulant	QPS	2,679	49,140
	AFP	22	1,868
Cannabis	QPS	17,005	628,215
	AFP	77	104
Heroin	QPS	225	533
	AFP	7	6 180
Other opioids	QPS	8	8
	AFP	0	0
Cocaine	QPS	142	2,725
	AFP	19	295
Steroids	QPS	13	411
	AFP	0	0
Hallucinogens	QPS	10	86
	AFP	0	0
Other and unknown drugs	QPS	550	23,104
	AFP	26	21,915

Source: Queensland Police Service

Note: QPS – Queensland Police Service; AFP – Australian Federal Police

Clandestine labs

As in previous years, law enforcement key experts continued to note that methamphetamine production in Queensland is typified by a large number of small-yield, clandestine laboratories. These laboratories are sometimes referred to as ‘addiction labs’ because they are set up for personal use or perhaps for a small group. During the financial year 2009-2010, 297 clandestine labs were seized in Queensland, the highest number nationally (Figure 42) and the highest number over the past decade (Figure 43). Law enforcement key experts point out that the high seizure rate is in part due to education of police staff as to the signs of clandestine labs, and increased community awareness and willingness to report. The latter has been heightened by community education targeted at groups such as real estate agents, and community organisations like Rotary.

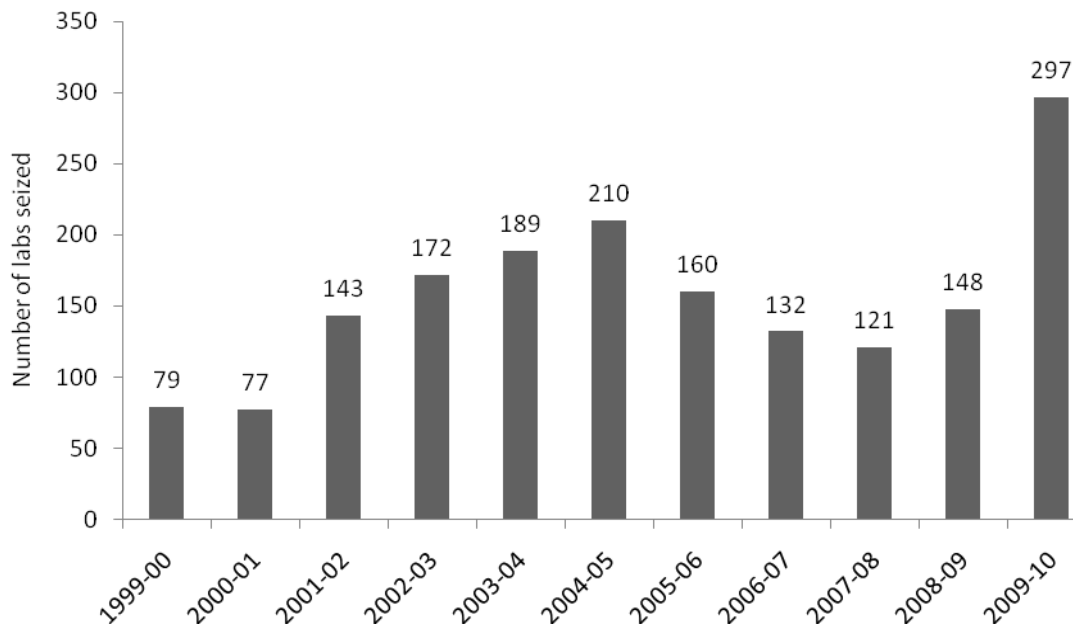
Law enforcement key experts also point out that recipes are readily available on the net – ‘*similar to looking for a chocolate cake recipe*’ and that it is difficult to know whether labs proliferate because of this or because there is reduced availability.

Figure 42: Clandestine labs seized according to state/territory during 2009-2010



Source: Queensland Police Service

Figure 43: Clandestine labs seized in Queensland from 1999-2000 to 2009-2010



Source: Queensland Police Service

7.3 Expenditure on illicit drugs

Over the past decade, the mean amount of money spent on illicit drugs on the day preceding interview has ranged from \$108 to \$164 (Figure 44), with the mean for the decade being \$130.

Figure 44: Mean amount of money spent on illicit drugs on previous day*, 2001-2010



Source: Queensland IDRS participant interviews, 2001-2010

* by those who spent money on drugs the day preceding interview

Table 33 shows that although the median expenditure was \$100 there is considerable variation in the amount spent.

Table 33: Expenditure on illicit drugs on previous day, 2009-2010

Expenditure	2009 n = 70 %	2010 n = 99 %
Nothing	26	44
Less than \$20	7	0
\$20 to \$49	14	8
\$50 to \$99	13	14
\$100 to \$199	20	16
\$200 to \$399	17	10
\$400 or more	0	7
Median expenditure (\$)	100	100

Source: Queensland IDRS participant interviews, 2001-2010

8 SPECIAL TOPICS OF INTEREST

Key points

- Scores on the Personal Wellbeing Index (PWI) were well below general population scores except for safety.
- Slightly over half of participants were tested for a sexually transmitted infection (STI) in the past two years.
- Less than half the female participants reported having a pap smear in the past two years.
- Both gender groups had a higher proportion of participants who were in the underweight category and a smaller proportion in the obese category than in the general population.
- The majority of participants were in regular contact with family and friends, although 9% reported they were never in contact with family and 13% reported no friends.
- Of those who had recently used a stimulant, 43% received a score indicating dependence.
- Of those who had recently used an opioid, 81% received a score indicating dependence.
- Nearly all participants had visited a general practitioner (GP) in the past 12 months, and the median number of visits was six.
- Of those who had visited a GP, 40% had visited a GP for mental health problems.
- Mean age first visited a GP for mental health problems was 23 years (range = 3-46).

8.1 Personal Wellbeing Index

The Personal Wellbeing Index (PWI) was first included in the IDRS questionnaire in 2009. Table 34 shows that the pattern of responses in 2010 was similar to 2009 with the mean scores generally well below the general population scores of between 70-80 points (Cummins et al., 2007). In 2010, 'safety' was the only factor that fell within this normal range but the mean score of 73% for participants was below the general population score of 80%.

Table 34: Personal Wellbeing Index (PWI) mean scores, 2009-2010

PWI factors	Mean score		Mean score general population 2007
	2009 (n = 63)	2010 (n = 90)	
Standard of living	50	51	77.25
Health	49	54	73.71
Achieve in life	44	41	72.4
Personal relationships	54	55	79.6
Safety	69	73	80.25
Part of community	45	48	70.99
Future security	50	49	69.78
Life as a whole	50	54	77.02
Total PWI	51	53	74.88

Source: Queensland IDRS participant interviews, 2009-2010

8.2 Sexual health

Table 35 shows that slightly over half of participants were tested for a sexually transmitted infection in the past two years with varied reasons given for being tested. About two-thirds were tested by a GP. Most pap smears were also carried out at a GP's and these were mainly routine tests. Less than half the women said that they had had a pap smear in the past two years. The most common reason for having the test was 'due for a test', but there was little consensus about reasons for not having the test.

Table 35: Sexual health, 2010

	N = 100
	%
Tested for a sexually transmitted infection (STI) in past two years	
No, don't think about it	33
No, I didn't want to be tested	3
No, another reason	12
Yes, I was tested by means of a blood test, urine sample or swab	52
Reason for test*	n = 50
Clear of infection after relationship	14
Clear of infection before starting relationship	8
Unprotected sex	16
Symptoms of infection	8
Health provider suggested	14
Friend suggested	0
Partner suggested	4
Partner had symptoms	0
Ex-partner told me to get tested	2
Clinic access was easy	6
Other^	38
Place last tested for STI*	n = 49
Sexual health clinic	22
GP	65
Hospital	6
Other	6
Had a pap smear test past two years†	n = 30
	43
Reasons for no pap smear test‡	n = 17
Wasn't sexually active	6
No symptoms	12
Don't like them	24
Didn't think of it	24
Embarrassed/uncomfortable	12
Financial cost	0
Other†	41
Reasons for having a pap smear test#	n = 13
Symptoms	8
Reminder letters	8
Health provider suggested	0
Friend suggested	0
Due for a test	62
Family history of cervical cancer	8
Other^^	23
Place last tested for pap smear#	n = 13
Sexual health clinic	23
GP	69
Hospital	8
Other	0

Source: Queensland IDRS participant interviews, 2010

* among those who were tested for a sexually transmitted infection in the past two years

† among females only; ‡ among those who had not had a pap smear test in the past two years

among those who had a pap smear test in the past two years; ^ 'other' – most reported for a 'general check-up'

^^ 'other' – most reported for 'did not want to have the procedure', 'forgot', 'hysterectomy' and 'pregnant'

8.3 Body Mass Index

Eating disorders and drug use disorders are significant public health problems. However, epidemiologic research examining their associations yields ambiguous results. Evidence on a relationship between obesity and alcohol use is found in some studies (Wannamethee, Shaper, & Whincup, 2005). As to the relationships between overweight/obesity and nicotine dependence, some studies have found overweight and obese men, but not women, were more likely to be former daily smokers than non-smokers (John, Meyer, Rumpf, Hapke, & Schumann, 2006; Zimlichman et al., 2005). In a nationally representative sample, overweight, obesity and extreme obesity were associated with lower risk for past-year nicotine dependence in men but not in women (Pickering, Grant, Chou, & Compton, 2007).

Relationships between Body Mass Index (BMI) and illicit drug use disorders is also unclear. For instance, cannabis can stimulate appetite; whereas cocaine is a stimulant and appetite suppressant. Moreover, one study found similar prevalence of overweight in individuals with illicit drug use disorders as that found in the general population (Rajas et al., 2004) and another study found both positive and negative associations of BMI with various substance use disorders, and significant gender differences in those relationships (Barry & Petry, 2009). Finally, BMI and drug use are both associated with mental health problems (Kemp et al., 2009).

In 2010, respondents were asked to voluntarily report their height and weight. The BMI was then calculated with the following formula:

$$\text{BMI} = \frac{\text{weight (kg)}}{\text{height (m)}^2}$$

Both gender groups had a higher proportion of participants who were in the underweight category and a smaller proportion in the obese category than in the general population (Table 36).

Table 36: BMI categories, 2010

BMI categories	Female n = 29 %	Male n = 65 %	Total N = 94 %	ABS 2007-2008 %
underweight	10	3	5	1
healthy	59	54	55	36
overweight	21	35	31	40
obese	10	8	9	23

Source: Queensland IDRS participant interviews, 2010

8.4 Social networks

In 2010, participants were asked about their social networks and these are presented in Table 37. The majority of participants were in regular contact with family and friends, although 9% reported they were never in contact with family and 13% reported no friends.

Table 37: Participants' social networks, 2010

	%
How often are you in contact with any family members	n = 96
Nearly every day	40
3-4 days a week	3
1-2 days a week	16
1-3 days a month	10
Once a month	20
Never	9
No family	2
How many family members can you rely on?*	n = 62
1-2 family members	50
3-4 family members	29
5 or more family members	19
How often are you in contact with any of your friends?	n = 97
Nearly every day	49
3-4 days a week	12
1-2 days a week	17
1-3 days a month	4
Once a month	3
Never	2
No friends	13
How many friends can you rely on? **	n = 65
1-2 friends	55
3-4 friends	23
5 or more friends	22
How much can you rely on your spouse/partner for help (for a serious problem)?	
A lot	33
Some	8
A little	2
Not at all	5
Don't know	1
Currently single	50

Source: National and Queensland IDRS participant interviews, 2010

* among those in contact with a family member

** among those in contact with friends

8.5 Stimulant and opioid dependence

Understanding whether participants are dependent on a drug is an important predictor of harm, and typically demonstrates stronger relationships than simple frequency of use measures. Stimulant and opioid dependency was measured using the five-item Severity of Dependence Scale (SDS) (Dawe, Loxton, Hides, Kavanagh, & Mattick, 2002).

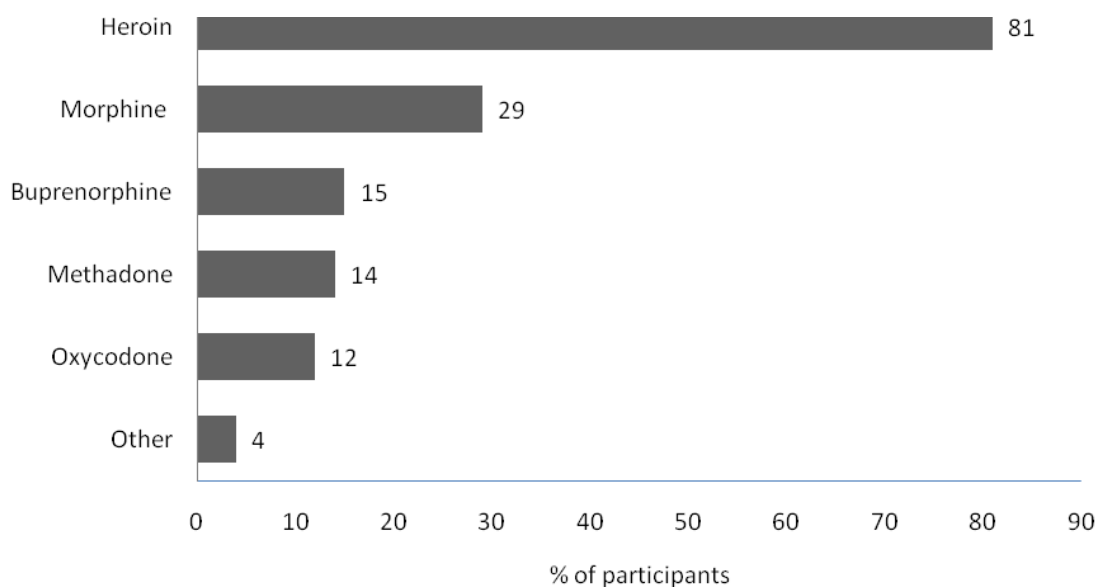
Stimulant dependency

Of the 49 participants who had used stimulants in the past six months and answered questions about dependency, 43% (n = 21) had scores of four or more indicating dependency on a stimulant; and this was primarily methamphetamine. There was no significant difference between males and females (females 44%, males 42%).

Opioid dependency

Of the 86 participants who had used any opioid (heroin, morphine, methadone, oxycodone, buprenorphine, etc.), 81% (n = 70) had scores in the dependency range (five or more) for one or more types of opioid (Figure 45). There was no significant gender difference. The most common opioid of dependency was heroin.

Figure 45: Opioid drug type on which participants are dependent*, 2010



Source: Queensland IDRS participant interviews, 2010

* participants may be dependent on more than one opioid type drug

8.6 General medical practitioner service use

The literature has shown that the population of people who regularly inject drugs experience a variety of physical and mental health problems. However, due to the marginalised status and concealed nature of this group, it can be difficult to ensure that they obtain the public health care access they require and that targeted health care strategies reach them. This group also experience barriers to treatment due to a lack of knowledge regarding available services, long wait times and limited operating hours (Neale, Sheard, & Tompkins, 2007). Also due to the nature of the addiction, the time spent obtaining and consuming drugs may cause delays in

seeking treatment (Drumm, McBride, Metsch, Neufeld, & Sawatsky, 2005; McCoy, Metsch, Chitwood, & Miles, 2001) which often lead to over-dependence on acute crisis and emergency interventions (Kerr, Wood, Grafstein, & Al, 2004). This issue of access to services along with service use was investigated in the 2010 survey.

Nearly all participants had visited a GP in the past 12 months and the pattern of their service use is presented in Table 38.

Table 38: General Practitioner (GP) visits, 2010

	N = 100
Visited a GP past 12 months (%)	91
	n = 89
Median number of visits to GP in past 12 months* (%)	6
Visited GP at home (%)	2
GP visits in hospital outpatients or emergency (%)	36
GP visits for mental health problems (%)	40
	n = 34
Visited the same GP for mental health consultations** (%)	88
Referred to GP from another GP for mental health problems (%)	17
	n = 33
Mean age first visited GP for mental health problems	23, range = 3-46

Source: Queensland IDRS participant interviews, 2010

* among those who had visited a GP in the past 12 months

** among those who visited a GP for mental health

9 CONCLUSION

Overall, there were no dramatic changes in drug use patterns and markets between 2009 and 2010; rather, there was a firming of some trends and indications of emerging issues. The trend towards older survey participants continued. Heroin use continued to follow an upward trend and methamphetamine use continued to follow a downward trend. The proportion of participants using over the counter codeine increased but the median number of days used in the preceding six months fell.

Price, purity and availability of the drugs investigated generally remained stable.

Injecting risk behaviours remain an area of concern with a substantial minority borrowing and/or lending used needles, and a significant increase in sharing of equipment other than needles. Participants continued to report high levels of psychological distress and mental health problems, and poor personal wellbeing. Driving after recently consuming illicit drugs continued to be common with about two-thirds of these drivers considering that there was no impact on their driving ability. These areas all have implications for policy making and implementation of policies.

REFERENCES

- Andrews, G., & Slade, T. (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health, 25*, 494-497.
- Australian Institute of Health and Welfare. (2009). National opioid pharmacotherapy statistics annual data collection: 2009 report *Bulletin no. 79. Cat no. AUS 125*. Canberra: AIHW.
- Barry, D., & Petry, N. M. (2009). Associations between body mass index and substance use disorders differ by gender: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Addictive Behaviours, 34*, 51-60.
- Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT Alcohol Consumption Questions (AUDIT-C). *ARCH INTERN MED, 158*, 1789-1795.
- Coffin, P. O., Tracy, M., Bucciarelli, A., Ompad, D. C., Vlahov, D., & Galea, S. (2007). Identifying Injection Drug Users at Risk of Nonfatal Overdose. *Academic Emergency Medicine, 14*(7), 616-623.
- Cummins, R. A., Woerner, J., Gibson, A., Lai, L., Weinberg, M., & Collard, J. (2007). Part A: The report. The wellbeing of Australians - money, debt and loneliness. *Australian Unity Wellbeing Index Survey 20* (Vol. Report 20.0 October 2008). Melbourne: The School of Psychology, Deakin University, Australian Centre on Quality of Life.
- Darke, S., Duflou, J., & Kaye, S. (2007). Comparative toxicology of fatal heroin overdose cases and morphine positive homicide victims. *Addiction, 102*, 1793-1797.
- Darke, S., Ross, J., & Hall, W. (1996). Overdose among heroin users in Sydney, Australia: I. Prevalence and correlates of non-fatal overdose. *Addiction, 91*(3), 405-411.
- Dawe, S., Loxton, N. J., Hides, L., Kavanagh, D. J., & Mattick, R. P. (2002). *Review of diagnostic screening instruments for alcohol and other drug use and other psychiatric disorders*. Canberra.
- Dawson, D. A., Grant, B. F., Stinson, F. S., & Shouy, Y. (2005). Effectiveness of the Derived Alcohol Use Disorders Identification Test (AUDIT-C) in Screening for Alcohol Use Disorders and Risk Drinking in the US General Population. *Alcoholism: Clinical and Experimental Research, 29*, 844-854.
- Drumm, R. D., McBride, D. C., Metsch, L., Neufeld, M., & Sawatsky, A. (2005). 'I'm a health nut!': street users' accounts of self-care strategies. *Journal of Drug Issues, 35*, 607-629.
- Haber, P., Lintzeris, N., Proude, E., & Lopatko, O. (2009). *Guidelines for the Treatment of Alcohol Problems*. Canberra.

- John, U., Meyer, C., Rumpf, H. R., Hapke, U., & Schumann, A. (2006). Predictors of increased body mass index following cessation of smoking. *American Journal on Addictions, 15*, 192-197.
- Kemp, D. E., Gao, K. M., Ganocy, S. J., Caldes, E., Feldman, K., Chan, P. K., & al., E. (2009). Medical and substance use comorbidity in bipolar disorder. *Journal of Affective Disorders, 116*(1-2), 64-69.
- Kerr, T., Wood, E., Grafstein, E., & Al, E. (2004). High rates of primary care and emergency department use among injection drug users in Vancouver. *Journal of Public Health, 62*-66.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. T., . . . Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*, 959-976.
- McCoy, C. B., Metsch, L., Chitwood, D. D., & Miles, C. (2001). Drug use and barriers to use of health care services. *Substance Use Misuse*.
- National Centre in HIV Epidemiology and Clinical Research. (2007). Australian NSP survey national data report 2001-2006. Sydney, New South Wales: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.
- Neale, J., Sheard, L., & Tompkins, C. (2007). Factors that help injecting drug users access and benefit from services: a qualitative study. *Substance Abuse Treatment, Prevention and Policy, 31*.
- Pickering, R. P., Grant, B. F., Chou, S. P., & Compton, W. M. (2007). Are overweight, obesity, and extreme obesity associated with psychopathology? Results from the national epidemiologic survey on alcohol and related conditions. *Journal of Clinical Psychiatry, 68*, 998-1009.
- Rajas, J., Petersson, A., Thiblin, I., Olsson-Mortlock, C., Fredriksson, A., & Eksborg, S. (2004). Nutritional status of deceased illicit drug addicts in Stockholm, Sweden - a longitudinal medicolegal study. *Journal of Forensic Science, 49*, 320-329.
- Schiff, E. R., & Ozden, N. (2004). *Hepatitis C and Alcohol Publications*. Bethesda: National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health.
- Wannamethee, S. G., Shaper, A. G., & Whincup, P. H. (2005). Alcohol and adiposity: effects of quantity and type of drink and time relation with meals. *International Journal of Obesity, 29*, 1436-1444.
- Zimlichman, E., Kochba, I., Mimouni, F. B., Shochat, T., Grott, I., Kreiss, Y., & Mandel, D. (2005). Smoking habits and obesity in young adults. *Addiction, 100*, 1021-1025.