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## Key Points

- Male IDU were significantly more likely to be older and have a prison history than females
- Males were significantly more likely to report the lifetime use of heroin than females; however, similar proportions reported the use of heroin in the last six months
- Males were significantly more likely to have ever used, ever injected and recently injected a greater number of drug types compared to females
- There were no gender differences in terms of first drug injected, drug of choice or drug injected most in the last month, with heroin or methamphetamine being the most commonly nominated by both males and females for all three variables
- Although similar proportions of males and females reported use of methamphetamine (any form), larger proportions of males identified crystal as a form of methamphetamine that they had ever used, used in the last six months and injected in the last six months compared to females
- Males were significantly more likely than females to have ever used, to have recently used and to have recently injected buprenorphine
- Males were significantly less likely to report that they had lent others their needles and were less likely to report sharing other injecting equipment than females

## Examining gender differences among regular injecting drug users (IDU) in Australia

### Introduction

Participants of the 2005 Illicit Drug Reporting System (IDRS) survey were regular injecting drug users (IDU) recruited in the capital city of each state and territory. All participants in the survey were recruited using the same eligibility criteria. The IDRS is designed to detect emerging trends that warrant further monitoring, deliberately targeting IDU who are actively engaged in illicit drug markets. Consequently, the information acquired from the IDRS survey is not representative of IDU in the general population nor is the information representative of all IDU. For more detail on the IDRS project and the 2005 national and jurisdictional results refer to the NDARC website (<http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/page/Drug%20Trends>). This bulletin provides a closer look at IDU survey results, focusing on differences between male and female IDU. A similar analysis was conducted on the regular ecstasy users in the Party Drugs Initiative study and was reported in the 2005 June Party Drug Trends Bulletin. (<http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/page/EDRSBulletins>).

### Demographics

A total of 943 IDU were interviewed for the 2005 IDRS; 606 males and 337 females. An analysis of demographic data revealed some differences between the two groups (Table 1). Males were significantly older (35 yrs vs. 32 yrs) and were more likely to have a previous prison history (56% vs. 37%) than females.

**Table 1: Demographics, by gender**

	Males n=606	Females n=337	OR ( <i>t</i> test)	95% CI
Mean age (range)*	35 (16-63)	32 (16-58)	(-4.5)	-3.8, -1.5
% Employed full-time	8	5	ns	ns
% Full-time student	2	4	ns	ns
% Tertiary education#	47	46	ns	ns
% Currently in treatment	46	51	ns	ns
% prison history*	56	37	2.2	1.7, 2.9

\* significant at  $p < 0.05$  ns = not significant

# includes completed trade/technical or university/college qualifications

## Drug use history

Table 2 presents data on drug use history. Overall males were significantly more likely to report the lifetime use (i.e. to have used at least once in their lifetime) of a greater number of drugs (12 vs. 11.4), lifetime injection of a greater number of drugs (6.2 vs. 5.2) and also recent injection (i.e. in the last six months) of a greater number of drugs (3.3 vs. 2.7) compared to females. While both males and females tended to have first injected heroin or methamphetamine, the majority nominated heroin as their drug of choice and the drug they had injected most in the last month. Considerably smaller proportions reported drugs other than heroin or methamphetamine as the first drug injected, their drug of choice and the drug injected most in the last month. However, no significant differences were found between genders in relation to age first injected, the drug first injected, drug of choice or drug injected most in the last month.

**Table 2: Drug use history, by gender**

	Males n=606	Females n=337	OR (f test)	95% CI
Mean age first injected (range)	19.0 (9-53)	19.3 (9-39)	ns	ns
Drug first injected				
% heroin	42	45	ns	ns
% methamphetamine	48	47	ns	ns
% morphine	5	3	ns	ns
% cocaine	2	2	ns	ns
Drug of choice				
% heroin	55	59	ns	ns
% methamphetamine	21	22	ns	ns
% morphine	5	5	ns	ns
% cannabis	7	6	ns	ns
% cocaine	5	4	ns	ns
Drug injected most in last month				
% heroin	42	46	ns	ns
% methamphetamine	31	30	ns	ns
% morphine	13	12	ns	ns
% cocaine	3	3	ns	ns
Mean no. of drugs ever used*	12.0	11.4	(-2.7)	-1.0, -0.2
Mean no. of drugs used recently	7.4	7	ns	ns
Mean no. of drugs ever injected*	6.2	5.2	(-5.2)	-1.3, -0.6
Mean no. of drugs injected recently*3.3	2.7	2.7	(-4.4)	-0.8, -0.3

\* significant at  $p < 0.05$  ns = not significant

The majority of males and females reported the lifetime use of heroin; however, males were significantly more likely to have ever used heroin than females (92% vs. 88%; Table 3). The recent use of heroin (i.e. in the past six months) was similar among males and females.

No significant difference was found between males and females in speed or base use. Larger proportions of the males identified having ever used the crystal form of methamphetamine (also known as 'ice'; 72% vs. 65%). They were also more likely to report having recently used crystal (45% vs. 38%) and to have injected it in the last six months (42% vs. 35%) compared to females.

Similar proportions of males and females reported the lifetime use, recent use and the recent injection of cocaine.

There were some differences in the use of pharmaceuticals among males and females. Males were significantly more likely to have ever used illicit buprenorphine (32% vs. 21%), to have recently used (21% vs. 12%) and to have recently injected illicit buprenorphine (17% vs. 8%) than females. Illicit use includes buying on the street or using a friend's/family member's prescribed medication.

Frequency of use was remarkably similar across genders for all drug types with no significant differences found between males and females.

**Table 3: Patterns of recent drug use among IDU, by gender**

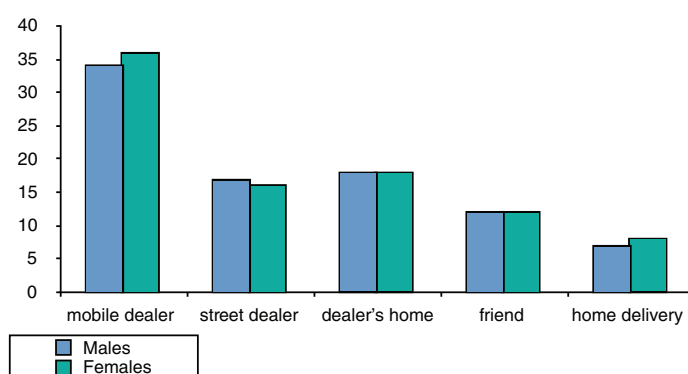
	Males n=606	Females n=337	OR	95% CI
<b>Heroin</b>				
% ever used*	92	88	1.6	1.01, 2.44
% used last 6 months	67	65	ns	ns
% injected last 6 months	66	65	ns	ns
Median days used	56.7	62.8	ns	ns
<b>Speed</b>				
% ever used	91	89	ns	ns
% used last 6 months	62	57	ns	ns
% injected last 6 months	60	55	ns	ns
Median days used	18.0	16.7	ns	ns
<b>Base</b>				
% ever used	56	50	ns	ns
% used last 6 months	40	37	ns	ns
% injected last 6 months	39	35	ns	ns
Median days used	13.0	11.8	ns	ns
<b>Crystal</b>				
% ever used*	72	65	1.4	1.04, 1.84
% used last 6 months*	45	38	1.4	1.03, 1.78
% injected last 6 months*	42	35	1.4	1.03, 1.78
Median days used	10.2	10.5	ns	ns
<b>Cocaine</b>				
% ever used	66	64	ns	ns
% used last 6 months	22	21	ns	ns
% injected last 6 months	19	18	ns	ns
Median days used	7.1	7.5	ns	ns
<b>Cannabis</b>				
% ever used	96	93	ns	ns
% used last 6 months	84	79	ns	ns
Median days used	91.3	99.9	ns	ns
<b>Benzodiazepines</b>				
% ever used	82	85	ns	ns
% used last 6 months	64	69	ns	ns
% injected last 6 months	8	7	ns	ns
Median days used	46.8	52.7	ns	ns
<b>Illicit Methadone Syrup</b>				
% ever used	50	46	ns	ns
% used last 6 months	24	23	ns	ns
% injected last 6 months	17	14	ns	ns
Median days used	4.3	3.9	ns	ns
<b>Illicit Buprenorphine</b>				
% ever used*	32	21	1.8	1.29, 2.43
% used last 6 months*	21	12	2.0	1.34, 2.86
% injected last 6 months*	17	8	2.5	1.60, 4.01
Median days used	5.7	3.6	ns	ns

\* significant at  $p < 0.05$  ns = not significant

The vast majority of IDU had used illicit drugs and/or alcohol the day prior to interview (94% of males and 93% of females). There was no significant difference in the amount that males and females had spent on drugs the day prior to interview. On average males spent \$60 and females spent \$69.

Similar proportions of males and females reported sourcing heroin from mobile dealers, street dealers, and a dealer's home (Figure 1).

**Figure 1: Usual heroin source, by gender**



## Self reported harms

Participants were asked about a range of risk activities in the 2005 IDRS, including injecting risk behaviours, overdose and crime.

An analysis of problems associated with injecting drug use suggests that males were significantly less likely to report that they had lent others their needles (15% vs. 20%, Table 4) and were less likely to report sharing other injecting equipment (not including needles) than females (35% vs. 42%). There were no gender differences in other injecting related problems.

Similar proportions of males and females reported committing a crime (usually property crime) in the past month and had been arrested in the year preceding interview.

## Mental Health Service Utilisation

Females were significantly more likely than males to report experiencing a mental health problem in the six months preceding interview (50% vs. 39%; Table 4). Participants were also asked whether they had attended a health professional for a mental health problem (other than drug dependence) in the last six months. A significant gender difference was found, with a greater proportion of females having visited a health professional for a mental health issue(s) than males (38% vs. 29%).

**Table 4: Self reported problems among IDU, by gender**

	Males n=606	Females n=337	OR	95% CI
Problems in the past month:				
% overdosed	1	3	ns	ns
% borrowed needles	9	12	ns	ns
% lent needles*	15	20	0.7	0.49, 0.99
% shared equipment*	35	42	0.7	0.57, 0.98
% reporting injection related problems#	61	66	ns	ns
% any crime	45	44	ns	ns
% arrested in past year	40	38	ns	ns
% mental health problem other than drug dependence in the last six months*	39	50	0.65	0.50, 0.85
% attended a health professional for a mental health problem in the last six months*	29	38	0.68	0.51, 0.90

\* significant at  $p < 0.05$  # Includes overdose, abscesses/infections, prominent scarring/bruising, difficulty injecting, thrombosis/blood clots ns = not significant

## Conclusions

There were differences and similarities identified in the 2005 National IDRS sample between males and females. Males were more likely to be older and to have a previous prison history than females.

Both groups were polydrug users, reporting recent use of a number of drug types. Similar proportions of males and females reported heroin and methamphetamine as the drug that they had first injected, as their drug of choice and as the drug they had injected most in the last month. Males reported having used and injected a significantly greater number of drugs in their lifetime, and had also injected more drug types in the last six months than females.

Males were more likely to report having ever tried heroin than females, although similar proportions reported using heroin in the last six months.

Males were also significantly more likely to report lifetime use, recent use and recent injection of the crystal form of methamphetamine.

Frequency of use was remarkably similar between the groups for all drug types. In addition, males and females reported spending similar amounts of money on drugs on the day before interview. However, there is some indication that females engage in more risky behaviours and report more harm associated with their drug use than males. Females were more likely to report lending needles and sharing equipment in the past month. In addition, they were also more likely to report experiencing a mental health problem and attending a health professional for a mental health problem in the last six months compared to males.

## Implications

The provision of sterile injecting equipment and education regarding safer injecting practices remains essential. Strategies to reduce sharing of equipment might target women in particular, who demonstrate higher rates of sharing than their male counterparts. Gender differences in sharing behaviours have also been found in previous research (e.g. Darke et al., 1995; Bennett et al., 2000; Breen et al., 2005). Successful strategies need to account for the environmental and social contexts in which injecting occurs, for example partners vs. strangers (e.g. Maher, 1998; Sherman et al., 2001; Southgate et al., 2003).

Given the rates of polydrug use among this sample, particularly males, harm reduction strategies appear well targeted to addressing the associated risks and how they may be addressed/minimised, e.g. heightened risk of overdose through use of multiple depressant drugs such as opioids, benzodiazepines and alcohol. Should reported differences in drug use extend to differing patterns of risk and harm, service providers may usefully consider such gender differences in adapting their harm reduction and treatment approaches to their clients.

These findings may also inform treatment services in terms of issues clients may be experiencing related to their drug use and mental health. Investigation into the extent to which these gender differences are also reflected in other groups of drug users, e.g. in rural and other metropolitan areas and communities, may further inform treatment approaches across Australia.

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