



Authors: Jennifer Stafford and Lucy Burns, National Drug and Alcohol Research Centre, University of New South Wales

Suggested citation: Stafford, J and Burns, L. (2011). Exploring gender differences among people who inject drugs in Australia, 2010. Drug Trends Bulletin, July 2011. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Funded by the Australian Government Department of Health & Ageing

Medicine

National Drug and Alcohol Research Centre

Key findings

Demographics

- Males were significantly more likely than females to be older, heterosexual, single and to have a previous prison history

Drug use

- Males were significantly more likely than females to report the recent use of speed, ice/crystal, illicit buprenorphine and illicit buprenorphine-naloxone
- Males reported a significantly higher frequency of speed use, while females reported a significantly higher frequency of illicit benzodiazepines and illicit methadone use
- Males were significantly more likely than females to have recently injected speed, ice/crystal, illicit buprenorphine and illicit buprenorphine-naloxone

Risk behaviours, health and social networks

- Females were significantly more likely to report lending needles, and report problems associated with injecting, while males were more likely to report re-using their own needle
- A greater proportion of females self-reported a mental health problem compared to males
- Females were significantly more likely to fall into the 'very high' levels of distress on the K10 compared to males
- Females were significantly more likely than males to drive while under the influence of benzodiazepines, while males were significantly more likely than females to have recently driven while under the influence of speed
- Females were significantly more likely than males to have been tested for a STI in the last two years
- Females were significantly more likely to have near daily contact with family and were able to rely on their spouse/partners for help with a serious problem than males

Criminal activity

- Males were significantly more likely to commit a crime involving drug dealing or violence and reported been arrested in the last 12 months than females

Exploring gender differences among people who inject drugs in Australia, 2010

Introduction

Participants in the 2010 Illicit Drug Reporting System (IDRS) survey were people who injected drugs regularly (PWID) residing 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 and deliberately targets PWID who are actively engaged in illicit drug markets. The information gathered from the IDRS survey is not representative of PWID in the general population nor is the information representative of all PWID. For more detail on the IDRS project and the 2010 national and jurisdictional results refer to the NDARC website (<http://ndarc.med.unsw.edu.au/NDARCWeb.nsf> and click on 'Drug Trends'). This bulletin provides a closer look at PWID survey results, focusing on differences between males and females in 2010. A similar analysis was conducted in the 2005 IDRS and was reported in the 2006 June Drug Trends Bulletin. ([http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/Bulletins_2006/\\$file/IDRS+BULLETIN+JUNE+2006.pdf](http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/Bulletins_2006/$file/IDRS+BULLETIN+JUNE+2006.pdf)).

Demographics

A total of 902 PWID were interviewed for the 2010 IDRS: 589 males, 309 females and 4 transgender. For the purposes of this bulletin the analysis will only focus on males and females (total N=898). An analysis of demographic data found some differences between the two groups (Table 1). Males were significantly more likely than females to be older (39 yrs vs. 36 yrs; $t_{893}=-4.2$; 95% CI -4.0, -1.4), heterosexual (93% vs. 78%; OR 3.6; 95%CI 2.4, 5.5), single (63% vs. 39%; OR 2.6; 95%CI 2.0, 3.5) and to have a previous prison history (59% vs. 39%; OR 2.3; 95%CI 1.7, 3.1) (Table 1). Females were significantly more likely to identify as Aboriginal and/or Torres Strait Islander (21% vs. 10%; OR 0.4; 95%CI 0.3, 0.6). No other demographic differences were found between males and females.

Table 1: Demographics, by gender, 2010

	Males n=589	Females n=309
Mean age (years)*	39	36
English speaking background (%)	98	99
Aboriginal/or Torres Strait Islander* (%)	10	21
Heterosexual* (%)	93	78
Single* (%)	63	39
Completed trade/tech qualification (%)	38	34
Unemployed (%)	82	77
Currently in drug treatment (%)	45	51
Prison history* (%)	59	39

Source: IDRS participant interviews

*significant at $p < 0.05$

Drug use

Table 2 presents data on recent drug use, recent injection and mean number of days recently used.

Recent use

Overall males were significantly more likely than females to report the recent use of speed (45% vs. 34%; OR 1.6, 95%CI 1.19, 2.11), ice/crystal (42% vs. 34%; OR 1.4, 95%CI 1.05, 1.86), illicit buprenorphine (18% vs. 12%; OR 1.7, 95%CI 1.10, 2.47) and illicit buprenorphine-naloxone (16% vs. 8%; OR 2.0, 95%CI 1.27, 3.19) (Table 2). No other gender differences were found for the recent use of other drug forms.

Frequency of use

The Frequency of use for all types of drugs was remarkably similar with few significant differences found between males and females. Males significantly reported a higher frequency of speed (28 days vs. 21 days; $t_{368} = -1.7$, $p = 0.012$) than females. While, females significantly reported a higher frequency of illicit benzodiazepines (40 days vs. 30 days; $t_{351} = 1.89$, $p = 0.004$) and illicit methadone (28 days vs. 18 days; $t_{172} = 1.71$, $p = 0.073$) than males. The maximum number of days a participant was able to use in the last six months was 180 days.

Recent injecting

Males and females were compared for the recent injection of the different drug forms asked in the IDRS survey. Males were significantly more likely than females to have recently injected speed (44% vs. 35%; OR 1.48, 95%CI 1.11, 1.97), ice/crystal (40% vs. 32%; OR 1.4, 95%CI 1.04, 1.86), illicit buprenorphine (16% vs. 10%; OR 1.5, 95%CI 1.08, 2.53) and illicit buprenorphine-naloxone (12% vs. 6%; OR 2.06, 95%CI 1.22, 3.49) (Table 2). No other gender differences were found for injecting in the last six months for the other drug forms discussed.

Table 2: Patterns of recent drug use among PWID, by gender, 2010

	Males n=589	Females n=309
Heroin		
Used last 6 months (%)	63	65
Injected last 6 months (%)	63	65
Mean number of days used [#]	85	85
Speed		
Used last 6 months* (%)	45	34
Injected last 6 months* (%)	44	35
Mean number of days used ^{#**}	28	21
Base		
Used last 6 months (%)	23	20
Injected last 6 months (%)	23	19
Mean number of days used [#]	40	38
Crystal		
Used last 6 months (%)*	42	34
Injected last 6 months (%)*	40	32
Mean number of days used [#]	38	33
Cocaine		
Used last 6 months (%)	17	19
Injected last 6 months (%)	14	17
Mean number of days used [#]	25	25
Cannabis		
Used last 6 months (%)	76	73
Injected last 6 months (%)	n.a.	n.a.
Mean number of days used [#]	115	111
Illicit Benzodiazepines		
Used last 6 months (%)	39	42
Injected last 6 months (%)	6	5
Mean number of days used ^{#**}	30	40
Illicit Methadone Syrup		
Used last 6 months (%)	19	21
Injected last 6 months (%)	14	15
Mean number of days used ^{#**}	18	28
Illicit Buprenorphine		
Used last 6 months* (%)	18	12
Injected last 6 months* (%)	16	10
Mean number of days used [#]	59	56
Illicit Buprenorphine-naloxone		
Used last 6 months* (%)	16	8
Injected last 6 months* (%)	12	6
Mean number of days used [#]	37	40

Source: IDRS participant interviews

[#] Among recent users in the last six months (maximum 180 days)

*Significant at $p < 0.05$

Table 2: Patterns of recent drug use among PWID, by gender, 2010 (continued)

	Males n=589	Females n=309
Illicit Morphine		
Used last 6 months (%)	42	42
Injected last 6 months (%)	40	40
Mean number of days used [#]	48	53
Illicit Oxycodone		
Used last 6 months (%)	28	27
Injected last 6 months (%)	27	24
Mean number of days used [#]	29	32

Source: IDRS participant interviews

[#]Among recent users in the last six months (maximum 180 days)

*Significant at $p < 0.05$

Risk behaviours, health and social networks

Participants in the 2010 IDRS were asked about a range of health and risk behaviours; including injecting risk behaviours and problems, self-reported mental health and psychological distress, driving behaviours, sexual health and social networks. Below is a summary of the gender differences analysed.

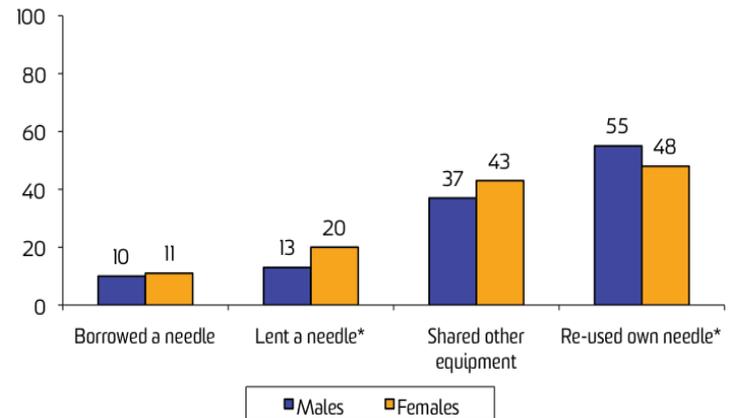
Injecting risk behaviours

An analysis of behaviours associated with injecting drug use suggests that females were significantly more likely to report that they had lent others their needles (20% vs. 13%; OR 0.6; 95%CI 0.41, 0.86), while males were more likely to report re-using their own needle (55% vs. 48%; OR 1.4; 95%CI 1.03, 1.79) (Figure 1).

Among those who shared other injecting equipment females were significantly more likely than males to use a tourniquet after somebody else (40% vs. 28%; 95%CI 0.37, 0.91).

Participants were also asked about injecting related problems in the last month. Results found that females were significantly more likely than males to report problems associated with injecting (67% vs. 48%; 95%CI 0.35, 0.63). In particular, abscesses and/or infections (13% vs. 7%; 95%CI 0.32, 0.81), scarring and/or bruising (50% vs. 30%; 95%CI 0.32, 0.58), difficulty injecting (42% vs. 25%; 95%CI 0.35, 0.64) and thrombosis (7% vs. 3%; 95%CI 0.25, 0.90). No other injecting risk behaviour significant differences were found between males and females.

Figure 1: Borrowing and lending of needles and sharing of injecting equipment in the month prior to interview, by gender, 2010



Source: IDRS participant interviews

*Significant at $p < 0.05$

Self-reported mental health problems and psychological distress

Participants were 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 self-reporting a mental health problem than males (55% vs. 46%; 95%CI 0.54, 0.94). The main problem reported was depression followed by anxiety. A significantly greater number of females reported depression compared to males (71% vs. 60%; 95%CI 0.40, 0.91) (Table 3). Similar proportions of males and females reported visiting a health professional for their mental health problem in the last six months. Males were significantly more likely than females to be prescribed an antipsychotic medication (46% vs. 27%; 95%CI 1.31, 4.1). No other significant differences were found for self-reported mental health problems.

In 2010, participants were asked the Kessler Psychological Distress Scale¹ (K10) to obtain a measure of psychological distress. The Australian population norms from the 2007 National Drug Strategy Household Survey (Australian Institute of Health and Welfare 2008) which used four categories to describe 'degree of distress' was compared to the IDRS survey. Analysis comparing gender with the K10 found that females were significantly more likely to fall into the 'very high' levels of distress category compared to males (30% vs. 24%; 95%CI 0.53, 0.99).

¹ The K10 is a 10-item standardised measure that has been found to have good psychometric properties and to identify clinical levels of psychological distress

Table 3: Self-reported mental health problems experiences in the preceding six months, by gender, 2010

	Males n=589	Females n=309
Self-reported mental health problem in the last six months* (%)	55	46
Problem# (%)		
Depression*	60	71
Anxiety	38	43
Manic-depression	11	15
Schizophrenia	16	11
Panic	9	13
Paranoid	8	5
Attended a health professional for mental health problem# (%)	79	74

Source: IDRS participant interviews

*Among those who self-reported a mental health problem

*Significant at $p < 0.05$

Driving risk behaviours

Nearly half of all males and females reported driving a vehicle in the last six months. No significant difference was found between gender and recently driving. Twenty-one percent of males and 19% of females reported driving while under the influence of alcohol in the last six months (Table 4), however this is not significant.

The majority of males (81%) and females (84%) reported recently driving while under the influence of illicit drugs. Females were significantly more likely than males to drive while under the influence of benzodiazepines (21% vs. 11%; 95%CI 0.25, 0.82) while males were significantly more likely than females to have recently driven while under the influence of speed (25% vs. 10%; 95%CI 1.51, 5.75) (Table 4). No other significant differences were found.

Sexual health

Participants in the 2010 survey were asked about testing for a sexually transmitted infection (STI) in the last two years. Results found that females were significantly more likely than males to have been tested for a STI in the last two years (65% vs. 54%; 95%CI 0.48, 0.85). The main reasons for testing were; health provider suggested test, unprotected sex and for a general check-up, however no significant differences were found for gender. Similar proportions reported visiting their General Practitioner (GP) for the STI test.

Table 4: Driving behaviour, by gender, 2010

	Males n=589	Females n=309
Driven in the last six months (%)	48	45
Driven under the influence of alcohol in the last six months# (%)	21	19
Driven soon after taking an illicit drug in the last six months# (%)	81	84
Drugs taken## (%)		
Heroin	42	45
Morphine	26	24
Speed*	25	10
Base	8	13
Ice/crystal	12	16
Benzodiazepines*	11	21
Cannabis	48	46

Source: IDRS participant interviews

*Among those who had driven in the last six months

** Among those who had driven soon after taking an illicit drug

*Significant at $p < 0.05$

Social networks

In 2010, participants in the IDRS survey were asked about contact with family and friends. Females were significantly more likely to have near daily contact with family than males (38% vs. 28%; 95%CI 0.46, 0.84). However, males were significantly more likely to confide in a family member (63% vs. 50%; 95%CI 1.24, 2.18) than females. Equal proportions were able to rely on a family member for a serious problem. The majority of males and females could rely or confide in one or two family members (Table 5).

Over half of both genders were in contact with friends nearly daily and no significant difference was found. Equal proportions for males and female were able to rely or confide in friends, mainly one or two friends (Table 5).

Analysis found that females were significantly more likely to be able to rely on their spouse/partners for help with a serious problem than males (41% vs. 27%; 95%CI 0.39, 0.69) (Table 5).

Criminal activity

Figure 2 presents data on criminal activity in the last month. Similar proportions of males and females reported committing a crime (usually property crime) in the past month. However, males were significantly more likely than females to commit a crime involving drug dealing (27% vs. 21%; 95%CI 1.05, 2.03) or violence (7% vs. 4%; 95%CI 1.03, 4.03).

In the last 12 months, males reported having been arrested significantly more than females (43% vs. 33%; 95%CI 1.13, 2.01). The main reasons for an arrest were property crime, use/possession of drugs, violent crime or driving. No significant gender differences were found for the arrest reason.

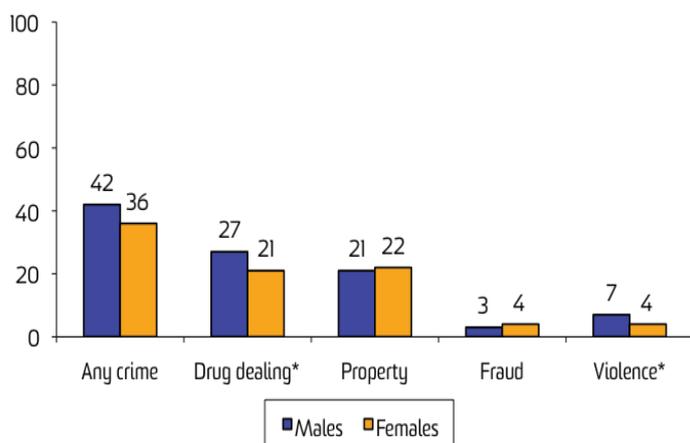
Table 5: Social networks, by gender, 2010

	Males n=589	Females n=309
Near daily contact with family*	28	38
Rely on family member for a serious problem	66	62
1 or 2 family members	62	60
Confide in a family member*	63	50
1 or 2 family members	73	74
Near daily contact with friends	59	53
Rely on friend for a serious problem	73	72
1 or 2 friends	59	62
Confide in a friend	77	76
1 or 2 friends	66	66
Rely on spouse/partner for a serious problem*	27	41

Source: IDRS participant interviews

*Significant at $p < 0.05$

Figure 2: Criminal activity in the last month, by gender, 2010



Source: IDRS participant interviews

*Significant at $p < 0.05$

Conclusions

There were differences and similarities identified in the 2010 National IDRS survey between males and females. Males were more likely to be older, heterosexual, single and to have a previous prison history compared to females.

Both groups were polydrug users, reporting recent use of a number of drug types. Males were more likely to report having recently used speed, ice/crystal, illicit buprenorphine and illicit buprenorphine-naloxone and report a higher frequency of use for speed than females. However, females were more likely to report a higher frequency of use for illicit benzodiazepines and illicit methadone.

Gender differences in sharing behaviours have also been found in previous research (e.g. Darke, Ross et al. 1995; Bennett, Velleman et al. 2000; Breen, Roxburgh et al. 2005). In the IDRS survey there is some indication that females engage in more risky behaviours (i.e. lending needles) and report more harm associated with their drug use than males, however males report re-using their own needle more so than females.

In addition, females were also more likely to self-report a mental health problem in particular depression and experience higher levels of distress, however males were more likely to be prescribed anti-psychotic medications compared to females. Females were also more likely to have been tested for an STI in the last two years.

Both genders reported driving while under the influence of drugs, females were more likely to report recently using benzodiazepines while males recently used speed.

Females reported more contact with family and could rely on their spouse/partner for help with a serious problem. While males were more likely to commit a crime involving violence and report having been arrested in the last 12 months.

References

Australian Institute of Health and Welfare (2008). 2007 National Drug Strategy Household Survey: detailed findings. *Drug statistics series no. 22. Cat. no. PHE 107*. Canberra, Australian Institute of Health and Welfare.

Bennett, G., R. Velleman, et al. (2000). "Gender differences in sharing injecting equipment by drug users in England." *AIDS Care* 12(1): 77-87.

Breen, C., A. Roxburgh, et al. (2005). "Gender differences among regular injecting drug users in Sydney, Australia." *Drug and Alcohol Review* 24(4): 353-358.

Darke, S., J. Ross, et al. (1995). "Injecting and sexual risk-taking behaviour among regular amphetamine users." *AIDS Care* 7(1): 19-26.