



## Injecting risk behaviours, self-reported mental health and crime: a comparison of recent heroin and non-heroin use from the 2012 IDRS.

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### KEY FINDINGS

- Participants were divided into two groups based on recent heroin use: heroin versus non-heroin.
- Both groups were aged around 40yrs, mainly male, single and unemployed.
- Recent ice/crystal was significantly higher in the heroin group. While recent speed and base use was significantly higher in the non-heroin group.
- One-fifth of the heroin group and one-tenth of the non-heroin group reported the recent use of cocaine.
- Cannabis use was common among both groups on a near-daily basis.
- The heroin group reported a significantly higher use of benzodiazepines, methadone, buprenorphine, buprenorphine-naloxone and oxycodone in the last six months. The non-heroin group reported a significantly higher recent use of morphine.
- The heroin group were significantly more likely to report borrowing and lending a needle and re-using their own needle in the last month.
- Around two-thirds of both groups had experienced an injection-related health problem in the month preceding interview.
- Nearly half of both groups self-reported a mental health problem in the last six months, mainly depression and anxiety.
- Of those who reported recently driving, one-fifth in both groups drove while under the influence of alcohol. While nearly all reported driving while under the influence of an illicit drug, mainly cannabis.
- The heroin group were significantly more likely to report a criminal activity in the last month, mainly drug dealing and property crime.
- Over one-third of both groups had been arrested in the last 12 months, mainly for property crime and use/possession of drugs.

### INTRODUCTION

The Illicit Drug Reporting System (IDRS) monitors emerging trends in the use, price, purity and availability of heroin, methamphetamine, cocaine and cannabis. In addition to a survey of people who inject drugs (PWID), the annual data collection also includes a survey of key experts (KE) who are professionals in the field of illicit drugs and the analysis of existing indicator data on drug-related issues.

For the purpose of this bulletin PWID participants were divided into two groups: recent heroin use versus non-heroin use. The bulletin explores differences between these groups in relation to drug use, injecting risk behaviours, self-reported mental health, driving and crime. The participants recruited are a sentinel group able to provide information on a range of illicit drug trends and related issues. Therefore the information from the survey is not representative of illicit drug use in the general population, and is not representative of other illicit drug users (e.g. in other geographical areas, occasional users, etc), but it is indicative of emerging trends that may warrant further monitoring and/or investigation.

#### Notes on interpretation:

'Recent' refers to the six months preceding interview

'Frequency' data refers to the number of days on which those participants had recently used the drug (maximum days = 180)

'Heroin group' refers to heroin use in the last six months

'Non-heroin group' refers to participants that did not use heroin in the last six months.

### NATIONAL OVERVIEW

#### Demographics

In 2012, a total of 924 participants were interviewed for the IDRS survey. However, two participants were excluded from this bulletin due to missing data. The mean age of the heroin group was 40 years (range 19-71 years) and the non-heroin

group 38 years (range 17-65 years). Around two-thirds of both groups were male (67% heroin and 64% non-heroin) and single (57% heroin and 59% non-heroin). The majority of both groups were unemployed (89% heroin and 90% non-heroin). Participants in the heroin group were significantly more likely to have a prison history (58% versus 51%) and report been in current treatment (51% versus 34%) compared to the non-heroin group ( $p < 0.05$ ). While the non-heroin group were significantly more likely to speak English than the non-heroin group (99% versus 95%,  $p < 0.05$ ; Table 1).

**Table 1: Demographic characteristics of the national group by recent heroin use, 2012**

	Heroin (N=548)	Non-heroin (N=374)
Mean age (years)	40	38
Male (%)	67	64
English speaking* (%)	95	99
ATSI (%)	15	19
Single (%)	57	59
Heterosexual (%)	89	90
Unemployed (%)	84	83
Prison history* (%)	58	51
Currently in drug treatment* (%)	51	34

Source: IDRS participant interviews

\* significantly different ( $p < 0.05$ )

## Drug use patterns

Among the heroin group the mean age of first injecting was 19 years compared to 21 years in the non-heroin group. The main drug of choice and drug injected most often in the last month in the heroin group was heroin (which is expected) followed by methamphetamines. While the main drug of choice and drug injected most often in the last month in the non-heroin group was any methamphetamine followed by heroin (Table 2).

**Table 2: Drug use patterns by recent heroin use, 2012**

	Heroin (N=548)	Non-heroin (N=374)
Mean age first injected* (years)	19	21
Drug of choice (%)		
Heroin	79	17
Speed	3	27
Base	1	2
Ice/crystal	4	11
Any methamphetamine#	8	40
Morphine	4	20
Oxycodone	1	3
Methadone	1	3
Cocaine	2	4
Cannabis	3	8
Drug injected most often in the last month (%)		
Heroin	71	0
Speed	2	32
Base	1	2
Ice/crystal	8	15
Any methamphetamine#	11	49
Morphine	8	29
Oxycodone	3	6
Methadone	3	8
Cocaine	1	1

Source: IDRS participant interviews

# includes speed powder, base, ice/crystal and liquid methamphetamine

\* significantly different ( $p < 0.05$ )

## RECENT DRUG USE AND FREQUENCY OF USE

### Methamphetamine

The use of ice/crystal in the last six months was significantly higher in the heroin group (56% versus 50%;  $p < 0.05$ ), while the use of speed and base recently was significantly higher in the non-heroin group (30% versus 53% and 13% versus 25% respectively,  $p < 0.05$ ). The non-heroin group also reported a significantly higher frequency of use (days of use) of speed and base compared to the heroin group (14 days versus 33 days and 11 days versus 30 days respectively,  $p < 0.05$ ; Figure 1 and Table 3). No other significant differences were found between the recent heroin and non-heroin groups.

### Cocaine

Eighteen percent of the heroin group reported the recent use of cocaine on a mean of 19 days. While the non-heroin group reported 10% recent cocaine use on a mean of nine days. No significant differences were found between the groups (Figure 1 and Table 3).

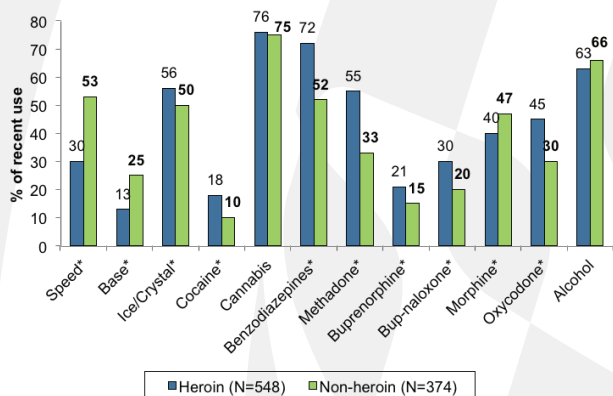
### Cannabis

Cannabis use was common among the recent heroin and non-heroin groups (Figure 1 and Table 3). Frequency of cannabis use tended to be near-daily in both groups. No significant differences were found between the groups for recent cannabis use or frequency of use. Cannabis remained readily available.

### Other drugs

Other differences were found between the two groups. With the heroin group reporting a significantly higher use of benzodiazepines (72% versus 52%), methadone (55% versus 33%), buprenorphine (21% versus 15%), buprenorphine-naloxone (30% versus 20%) and oxycodone (45% versus 30%) in the last six months compared to the non-heroin group ( $p < 0.05$ ). While the non-heroin group reported a significantly higher recent use (47% versus 40%) and frequency of use of morphine (87 days versus 50 days,  $p < 0.05$ ; Figure 1 and Table 3). No other significant differences were found between the groups.

**Figure 1: Recent use of drugs by recent heroin use, 2012**



Source: IDRS participant interviews  
\* significantly different (p<0.05)

**Table 3: Mean days of use by recent heroin use, 2012**

	Heroin (N=548)	Non-heroin (N=374)
<b>Mean days of use<sup>A</sup></b>		
Speed*	14	33
Base*	11	30
Ice	32	32
Cocaine	19	9
Morphine*	50	87
Oxycodone	30	37
Methadone	109	104
Benzodiazepines	101	93
Cannabis	109	114
Alcohol	55	60
Tobacco	174	176

Source: IDRS participant interviews  
# includes speed powder, base, ice/crystal and liquid methamphetamine  
^ among those who had used; maximum number of days, i.e. daily use = 180  
\* significantly different (p<0.05)

## INJECTING RISK BEHAVIOURS AND PROBLEMS

The heroin group were significantly more likely to report borrowing and lending a needle in the last month compared to the non-heroin group (10% versus 3% and 19% versus 8% respectively, p<0.05).

Similar proportions reported sharing other injecting equipment (excluding needles) in the last month (27% heroin and 23% non-heroin). Among those who reported sharing other injecting equipment, the main equipment shared was spoons followed by tourniquets. The heroin group was significantly more likely than the non-heroin group to share spoons in the last month (84% versus 70%, p<0.05; Table 4).

Around half of the recent heroin group reported re-using their own needle in the last month which was significantly higher than the non-heroin group (52% versus 41%, p<0.05). The proportion of participants

re-using their own injecting equipment (excluding needles) in the last month was also significantly higher in the recent heroin group (71% versus 53%, p<0.05). Among those who re-used their own injecting equipment the majority reported re-using spoons, followed by tourniquets. The recent heroin group were significantly more likely than the non-heroin group to have re-used their own spoons (92% versus 79%, p<0.05), filters (12% versus 7%, p<0.05) and water (17% versus 5%, p<0.05). However, the non-heroin group were significantly more likely to re-use their own tourniquets compared to the heroin group (52% versus 39%, p<0.05; Table 4).

Around two-thirds of the heroin (63%) and non-heroin (62%) groups had experienced an injection-related health problem in the month preceding interview. Of those who had experienced an injection-related problem the most common problems experienced were scarring/bruising and difficulty injecting. Most likely indicating poor vascular health among a proportion in these groups. The non-heroin group was significantly more likely to report a dirty hit in the last month compared to the heroin group (40% versus 30%, p<0.05; Table 4). The majority of participants reported the arm as the last site of injection (77% heroin and 78% non-heroin; Table 4).

**Table 4: Injecting risk behaviour in the last month by recent heroin use, 2012**

	Heroin (N=548)	Non-heroin (N=374)
<b>Borrowed a needle* (%)</b>	10	3
<b>Lent a needle* (%)</b>	19	8
<b>Shared other injecting equipment* (%)</b>	27	23
<b>Equipment shared (%)</b>	N=147	N=84
Spoons*	84	70
Filters	18	10
Tourniquets	33	44
Water	22	17
Swabs	5	4
Other	1	1
<b>Re-used own needle* (%)</b>	52	41
<b>Re-used own injecting equipment** (%)</b>	71	53
<b>Injecting equipment re-used (%)</b>	N=378	N=195
Spoons*	92	79
Filters*	12	7
Tourniquets*	39	52
Water*	17	5
Swabs	4	3
Other	1	0
<b>Self-reported injecting problems (%)</b>	63	62
<b>Injecting problem (%)</b>	N=322	N=222
Overdose	8	10
Dirty hit*	30	40
Abscess/infections	14	15
Scarring/bruising	68	63
Difficulty injecting	59	59
Thrombosis	9	8
<b>Last site of injection (%)</b>	N=548	N=374
Arm	77	78
Leg	3	4
Hand	12	10
Foot	2	3
Groin	2	2
Neck	3	2
Other	1	1

Source: IDRS participant interviews  
# includes spoons, water, tourniquets and filters  
\* significantly different (p<0.05)

## SELF-REPORTED MENTAL HEALTH

Nearly half of the heroin (44%) and non-heroin (43%) groups self-reported a mental health problem in the last six months. The most common self-reported mental health problem was depression, followed by anxiety. The non-heroin group self-reported significantly higher levels of any personality disorder compared to the heroin group (9% versus 2%,  $p < 0.05$ ; Table 5).

Of those with a self-reported mental health problem, over half of the heroin and non-heroin groups reported attending a health professional for their mental health problem. No other significant differences were found between the heroin and non-heroin groups (Table 5).

**Table 5: Self-reported mental health problems experienced in the preceding six months by recent heroin use, 2012**

	Heroin (N=548)	Non-heroin (N=374)
Self reported mental health problem (%)	44	43
Problem <sup>#</sup> (%)	N=238	N=161
Depression	74	65
Anxiety	54	49
Manic-depression/Bipolar	11	14
Schizophrenia	12	9
Panic	11	15
Paranoia	10	9
Drug induced psychosis	6	9
Any personality disorder*	2	9
Attended health professional for mental health problem <sup>#</sup>	59	56

Source: IDRS participant interviews  
# among those who reported a mental health issue  
\* significantly different ( $p < 0.05$ )

## DRIVING RISK BEHAVIOURS

Participants in the non-heroin group were significantly more likely than the heroin group to report driving a vehicle in the last six months (49% versus 42%,  $p < 0.05$ ). Of those who reported recently driving, 18% of the heroin group and 23% of the non-heroin group drove while under the influence of alcohol. While 83% of the heroin group and 72% of the non-heroin group reported driving while under the influence of an illicit drug. This result was significant ( $p < 0.05$ ). The main drug reported (excluding heroin) was cannabis. Participants in the non-heroin group reported a significantly higher level of morphine (35% versus 16%), speed (40% versus 8%), base (17% versus 3%), ice/crystal (22% versus 12%) and cannabis (53% versus 36%) use while driving than the heroin group ( $p < 0.05$ ). However, the heroin group reported significantly higher levels of driving while under the influence of heroin (74% versus 0%,  $p < 0.05$ ; Table 6).

**Table 6: Driving risk behaviours in the last six months by recent heroin use, 2012**

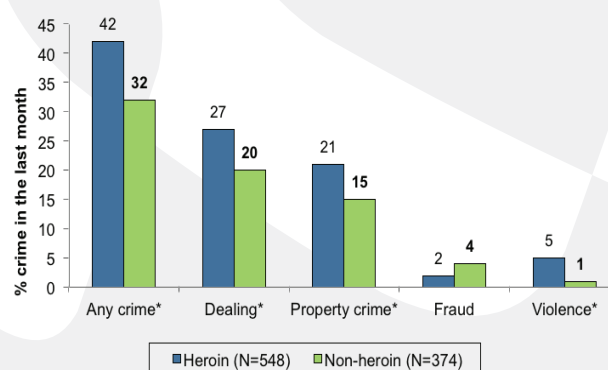
	Heroin (N=548)	Non-heroin (N=374)
Arrested last 12 months (%)	35	31
Main reasons for arrest (%)	N=190	N=113
Use/possession of drugs	22	16
Use/possession of weapons	4	3
Dealing	7	6
Property crime	45	34
Fraud	2	0
Violence	12	14
Driving offence	10	16
Mean amount spent on drugs the day before interview*(\$)	\$158	\$114

Source: IDRS participant interviews  
# Of those who had driven a vehicle in the last six months  
^ Of those that had driven after taking an illicit drug  
\* significantly different ( $p < 0.05$ )

## CRIMINAL ACTIVITY AND ARRESTS

Forty-two per cent of the heroin group and 32% of the non-heroin group reported a criminal activity in the last month. This result was significant ( $p < 0.05$ ). The most common criminal activities reported were drug dealing and property crime. Participants in the heroin group reported significantly higher levels of dealing (27% versus 20%), property crime (21% versus 15%) and violence (5% versus 1%) compared to the non-heroin group ( $p < 0.05$ ).

**Figure 2: Crime in the last month by recent heroin use, 2012**



Source: IDRS participant interviews  
\* significantly different ( $p < 0.05$ )

Over one-third of the heroin and non-heroin groups had been arrested in the last 12 months (35% and 31% respectively). The main reasons for the arrest were property crime and use/possession of drugs. No significant differences were found between the groups for the main reason arrested (Table 7).

The heroin group spent more on drugs the day before the interview compared to the non-heroin group (\$158 versus \$114). This difference was significant ( $p < 0.05$ ; Table 7).

**Table 7: Criminal activity by recent heroin use, 2012**

	Heroin (N=548)	Non-heroin (N=374)
Arrested last 12 months (%)	35	31
Main reasons for arrest (%)	N=190	N=113
Use/possession of drugs	22	16
Use/possession of weapons	4	3
Dealing	7	6
Property crime	45	34
Fraud	2	0
Violence	12	14
Driving offence	10	16
Mean amount spent on drugs the day before interview*(\$)	\$158	\$114

Source: IDRS participant interviews

\* significantly different (p<0.05)

## CONCLUSION

Participants for the purpose of this bulletin were divided into recent heroin use verses non-heroin use. Both groups were aged around 40yrs, mainly male, single and unemployed. Those in the heroin group were more likely to report a prison history and be in current drug treatment.

Both groups were polydrug users. The heroin group were more likely to report the recent use of ice/crystal, benzodiazepines, methadone, buprenorphine, buprenorphine-naloxone and oxycodone. However, the non-heroin group reported more recent use of speed, base and morphine.

The heroin group reported a higher level of borrowing and lending a needle, sharing spoons and were more likely to re-use their own needle and injecting equipment in the last month. Among those who re-used their own injecting equipment the majority reported re-using spoons and tourniquets.

Nearly half of both groups self-reported a mental health problem in the last six months, mainly depression and anxiety.

Of those who reported recently driving, one-fifth of both groups drove while under the influence of alcohol. While nearly all reported driving while under the influence of an illicit drug, mainly cannabis.

The heroin group were significantly more likely than the non-heroin group to report a criminal activity in the last month. The most common criminal activities reported were drug dealing and property crime. Over one-third of both groups had been arrested in the last 12 months, mainly for property crime and use/possession of drugs.

For more detailed information on the IDRS please refer to the national and jurisdictional IDRS Drug Trends annual reports, which are available through the NDARC website, [www.ndarc.med.unsw.edu.au](http://www.ndarc.med.unsw.edu.au) (click on 'Drug Trends').

## SUGGESTED CITATION

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