



## What's happening with heroin?

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### KEY FINDINGS

- Heroin remains drug of choice for half of IDRS sample, with 60% having used heroin in the previous six months. Use varies across jurisdictions with highest use in New South Wales and Victoria and lowest use in the Northern Territory and Tasmania.
- Those who had recently used heroin were significantly more likely than those who had not to be male, to have begun injecting earlier, to have a longer injecting history, to be in treatment, to have a prison history, to inject at least daily in the previous month, to have very high psychological distress levels, and to have riskier injecting practices.
- Sixty eight participants had overdosed on heroin in the past 12 months and most had experienced previous multiple overdoses.
- Although heroin use may be declining (AIHW 2014), risk factors associated with use may have a high negative impact. These findings highlight the need for maintaining focused harm minimisation measures.

### INTRODUCTION

In contrast to crystal methamphetamine and newer psychoactive drugs, the use of heroin in Australia is rarely discussed in the general media or at illicit drug forums. Indeed the National Drug Household Survey (NDHS) undertaken in 2013 showed that heroin use had decreased from 0.2% in 2010 to 0.1% of their national sample (AIHW, 2014).

In our 2014 survey of regular injecting drug users, however, heroin remained the most common drug of choice (50%), the drug injected most often in the last month (41%), and three out of five participants (60%) reported having used heroin in the preceding six months.

There are severe health outcomes associated with heroin use; further, heroin overdose can lead to serious health problems and may result in death (Darke and Hall, 2013). Treatment has been shown to be beneficial but the process is long-term and often complicated by co-occurring physical and mental health conditions (Teeson et al., 2014).

The Australian heroin market is mainly supplied from South-East Asia (ACC, 2014:78). The supply chain is complex but production has been at record levels in Afghanistan and Myanmar. The number and weight of national heroin detection seizures has been at a record high, due to a small number of large seizures and a large number of small postal seizures (ACC, 2014:74).

In this bulletin, we discuss self-reported use of heroin and related health outcomes among a sample of people who regularly inject drugs (PWID).

### METHOD

The Illicit Drug Reporting System (IDRS) is a national monitoring system that gathers information from a purposive sample of PWID across all states and territories annually. In mid-2014, 898 PWID were interviewed. The selection criteria were: (1) being 17 years or older; (2) injecting an illicit drug at least six times in the last six months; and (3) having lived in the jurisdiction for the previous 12 months. PWID

were predominantly recruited at needle and syringe programs (NPS), by peer referral, and advertising. Further details are available from the NDARC website: <http://ndarc.med.unsw.edu.au/group/drug-trends>

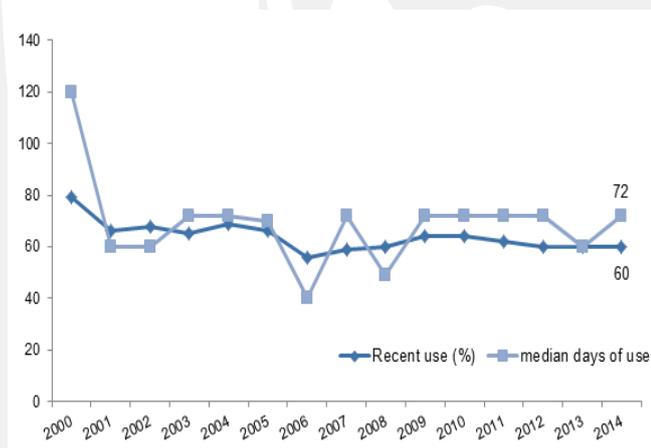
Analysis was mainly descriptive using IBM SPSS Statistics, Version 22. Comparisons were tested using either t-tests for differences in means or the Excel spreadsheet available at <http://www.cebm.net/index.aspx?o=1023> (Tandberg).

## RESULTS

### Use patterns

Heroin use patterns have been stable in recent years, with the majority of survey participants continuing to use heroin (Figure 1).

**Figure 1: Recent use of heroin and median days of heroin use, nationally, 2000–2014**



Source: IDRS participant interviews

The proportions reporting recent use of heroin varied across states, with very small numbers using heroin in the Northern Territory (7%) and Tasmania (13%). The highest proportions of recent use were in New South Wales (85%), Victoria (83%) and Western Australia (79%). The median days of use in the previous six months was 72, equating to three times a week. Once again there was variability across states with the highest being a median of 120 days of use in NSW and lower median days (48) in Victoria and Queensland.

Recent users of heroin (N = 536) reported mostly using white powder or rock (70%), brown powder or rock 25% and other colour or homebake 5%. When asked about the preparation of their last heroin injection, 29% reported heating and 3% had used acid. Reports about the heroin market were predominantly from six of the eight jurisdictions due to low use in Northern Territory and Tasmania. Participants who commented (N ≈ 515

with slight variation due to missing data) reported that heroin was readily available and stable with 50% considering it very easy to obtain and 39% easy. Purity was mainly considered to be low (46%) or medium (30%). Price was stable at \$50 per cap and \$320 per gram. Prices per gram were highest in Western Australia (\$600) and lowest in Victoria (\$250)

Heroin was commonly sourced from a known dealer (40%) or friends (36%). The location was generally a private home (53%) or an agreed public location (33%).

### Characteristics of those who had recently used heroin

There is a high degree of polydrug use among the survey participants with use of both stimulant and depressant drugs. Moreover, other opioids such as morphine and methadone are used as a supplement or alternative to heroin. Nevertheless, there are significant differences between those who have recently used heroin and those who have not (Table 1). Those who had recently used heroin were significantly more likely than those who had not to be male, to have begun injecting earlier, to have a longer injecting history, to be in treatment, to have a prison history, to inject at least daily in the previous month, to have very high psychological distress levels, and to have riskier injecting practices.

### Overdosed on heroin

Nearly half of those who had ever used heroin (48%) had overdosed at least once on heroin with two-thirds reporting multiple overdoses.

Sixty eight participants (8% of the entire sample) reported having overdosed on heroin in the previous 12 months. At their most recent overdose, most had received some immediate treatment which was most likely to be Narcan followed by an ambulance attending (Figure 2).

Participants were also asked who they sought treatment and/or information from as a result of their overdose. Only 22% had sought treatment and/or information, most commonly from a drug health service.

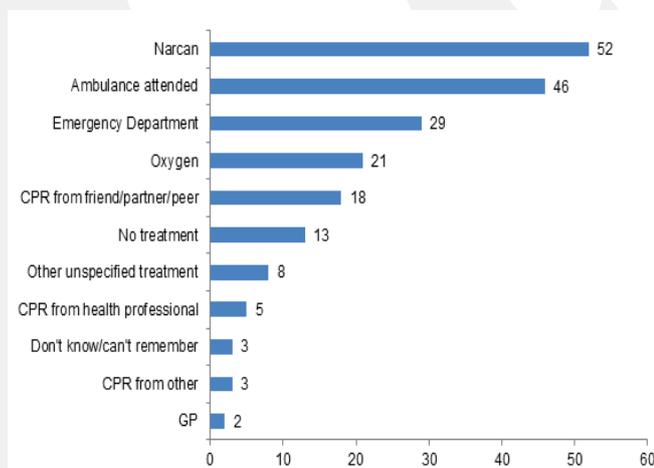
Of the sixty eight participants, who had overdosed on heroin in the previous 12 months, nearly three-quarters (72%) had previously overdosed a median of three times (mean 5, range 1–50).

In a later section on injection-related problems, all participants were asked if they had overdosed on any drug in the last month. Of the 27 who had overdosed, 63% specified heroin as the main drug with another 26% specifying heroin as being used at the time of their overdose but not the main drug.

**Table 1 Comparison of those who had recently used heroin and those who had not**

	Used heroin in previous 6 months		p-value
	No (n ≈ 362)	Yes (n ≈ 536)	
<b>Demographics</b>			
Mean age	40 years (range 18–65)	42 years (range 19–67)	0.06
Male (%)	65	72	<b>0.03</b>
Unemployed (%)	80	85	0.09
In treatment (%)	44	66	<b>0.00</b>
Prison history (%)	49	62	<b>0.00</b>
<b>Injecting drug use</b>			
Age first injected	21 years	19 years	<b>0.00</b>
Injecting history	20 years	22 years	<b>0.00</b>
Injected daily or more last month (%)	39	48	<b>0.01</b>
<b>Health status</b>			
Self-reported general health as poor	11%	15%	0.09
K10 -very high distress	23%	30%	<b>0.04</b>
<b>Injecting risks</b>			
Reused own needle (%)	35	45	<b>0.01</b>
Lent needle (%)	9	15	<b>0.01</b>
Borrowed needle (%)	4	8	<b>0.03</b>
<b>Crime</b>			
Self-reported crime last month (%)	38	39	0.76
Arrested in last 12 months (%)	32	36	0.27

Note: Bold indicates significant difference at  $p < 0.05$

**Figure 2 Immediate post overdose treatment received (% , n = 63)**


Note: Multiple responses

## Treatment

Those who had recently used heroin and were in treatment (n = 300), had been in their current treatment a mean of nearly 5 years (59 months). Most (91%) were on substitution therapy, predominantly methadone/bidone syrup.

## DISCUSSION

Although heroin use may be declining in the general population, those who are using heroin face serious health risks. They are an ageing population and typically have lengthy injecting histories. Of concern is a longer injecting history, a higher level of psychological distress, a greater likelihood of reporting risky injecting practices and a history of incarceration. The higher likelihood of risky injecting practices may relate to the high frequency of heroin use (median three times a week), but nevertheless is of concern

Non-fatal heroin overdoses can negatively impact on health (Warner-Smith et al., 2001) and are a strong risk factor for fatal overdoses (Coffin et al., 2007; Stooze et al., 2009). In this analysis we found that over half of those who had recently overdosed on heroin reported receiving Narcan, typically used to mitigate the life-threatening effects of heroin overdose.

Although those who use heroin report that it is readily available this may be related in some part to the nature of heroin use. Unlike drugs that are used more sporadically, the high frequency of heroin use is conducive to forming relatively stable arrangements with a dealer or dealers. The low use of heroin in the Northern Territory and Tasmania appears to be related to supply.

Our data suggests that heroin may not appeal as much to younger illicit drug users than in previous decades. Heroin consumers tend to be older, with established habits. Treatment may have a beneficial effect on their lives, but harm minimisation strategies need to be firmly in place, particularly in regard to injecting equipment and mental health.

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### Suggested citation

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