



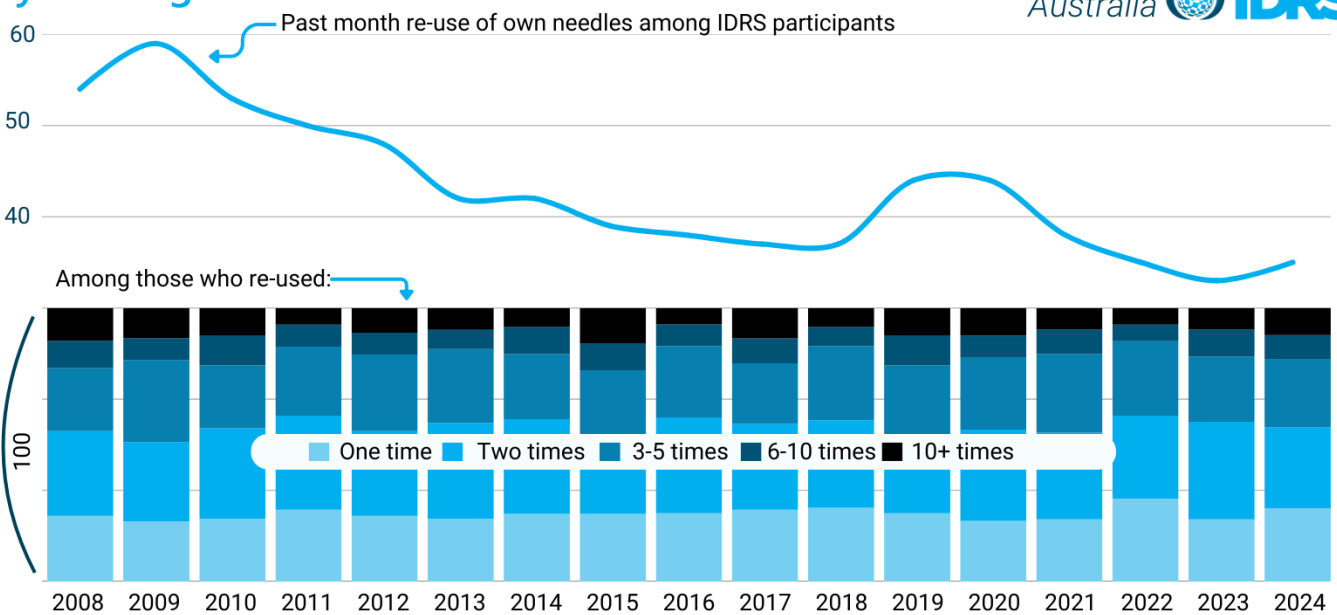
Patterns of re-using own needles among a sample of people who regularly injects illicit drugs in Australia, 2008-2024

Julia Uporova, Amy Peacock and Rachel Sutherland

This report was prepared by the National Drug and Alcohol Research Centre, UNSW Sydney
 For further information: drugtrends@unsw.edu.au

Key Findings

Australia **IDRS**



! The re-use of personal needles in the past month has declined over time but remains prominent. Of those re-using own needles, most reported to have done this on more than one occasion in the past month.

2024:

Own needle re-use among those that:

Mainly injected:

- Heroin: 42%
- Methamphetamine: 32%

Injected (in past month):

- Daily or more: 41%
- Less than daily: 31%

Introduction

Needle-syringe programs (NSPs) are key interventions to prevent bloodborne virus transmission, injection-related injuries and overdose among people who inject drugs. In 2024, Australia had 4,708 NSPs in operation nationally (1), contributing to some of the lowest global estimates of receptive needle and syringe sharing (2). In contrast, re-use of own needles appears to be relatively common among people who inject drugs (3), yet remains comparatively understudied. Research suggests that own needle re-use is linked to an increased likelihood of injecting-related injuries and diseases, including abscesses, endocarditis, and vascular complications, with more frequent re-use correlating with more severe health outcomes (4). Studies indicate that while some individuals re-use needles due to limited access to sterile equipment, stigma, or economic constraints, others may underestimate the associated health risks (5,6). Furthermore, global evidence suggests that needle re-use is influenced by factors including injecting duration, injecting frequency, and broader temporal trends in drug use (7).

The aim of this bulletin is to examine trends in own needle re-use over time among a sentinel sample of people who regularly inject drugs. Given their documented association with injecting risk behaviours more broadly, findings will be stratified by gender, main drug injected, and injecting frequency (7,8).

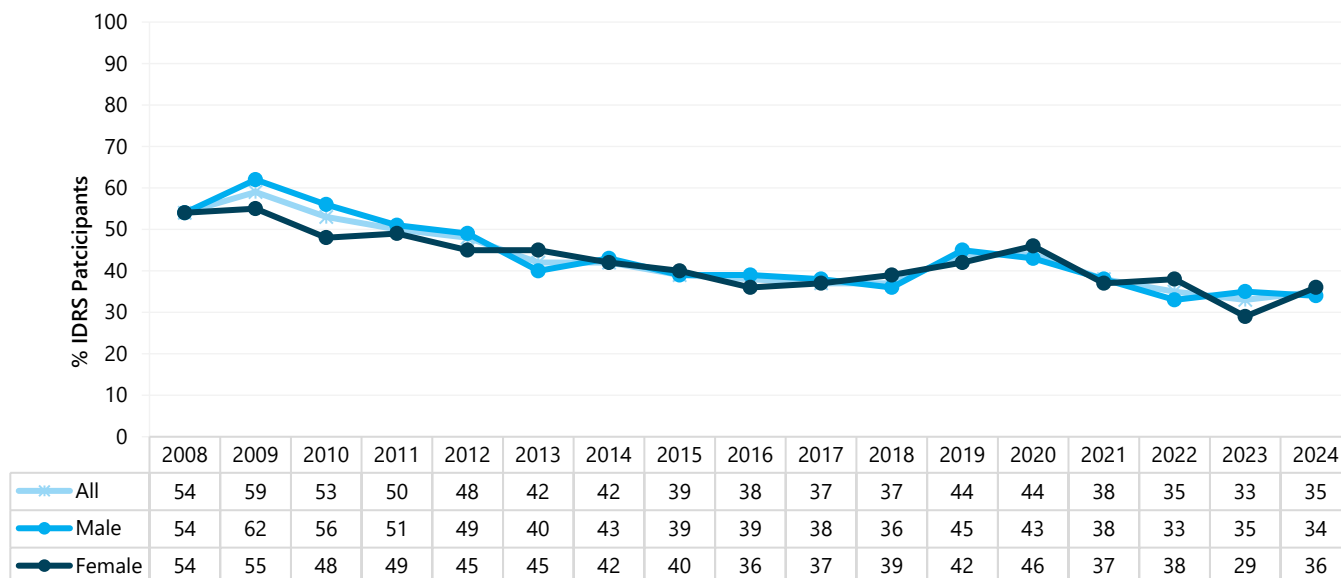
Methods

Data was collected through the Illicit Drug Reporting System (IDRS), which involved annual interviews with individuals aged 18 or older, residing in capital cities across Australia. Participants were required to have injected illicit drugs on a monthly or more frequent basis to be eligible for the study. Each year, approximately 850 interviews were conducted, primarily through face-to-face surveys, with some conducted via telephone. For more detailed information, please refer to the 2024 [IDRS Background and Methods document](#). For information about the characteristics of the IDRS sample, please refer to the [2024 National IDRS report](#). Since 2008, participants were asked about their injecting practices, including re-use of needles, frequency of injection and main drug injected in the month preceding interview. Descriptive statistics were applied to examine trends in past month needle re-use over time, including variations by gender, drug type and injection frequency.

Results

In 2008, when monitoring of own needle re-use first commenced, 54% of participants reported re-using their own needles in the month preceding interview. This has gradually declined over time, with approximately two fifths reporting re-use between 2013 and 2021, and approximately one third reporting re-use from 2022 onwards (35% in 2024) (Figure 1). This trend was comparable across genders (due to low numbers, re-use among non-binary participants was not examined).

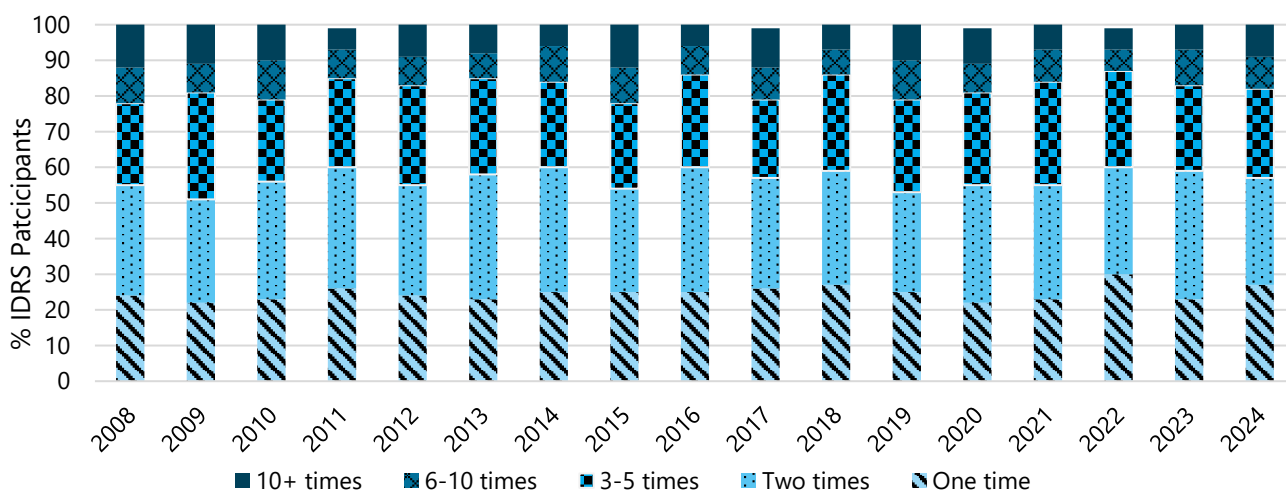
Figure 1. Past month re-use of own needles among IDRS participants and by gender, 2008-2024



Note. The response 'Don't know' was excluded from analysis. Those that responded 'other' as gender identity are excluded due to low numbers (n≤5).

Frequency of own needle re-use has remained relatively stable over time (Figure 2). Among those who reported re-using their own needles, approximately one quarter have consistently reported doing this on one occasion in the past month, while approximately one tenth have consistently reported engaging in this behaviour on 10 or more occasions.

Figure 2. Frequency of re-using own needles, among IDRS participants who reported re-use, 2008-2024

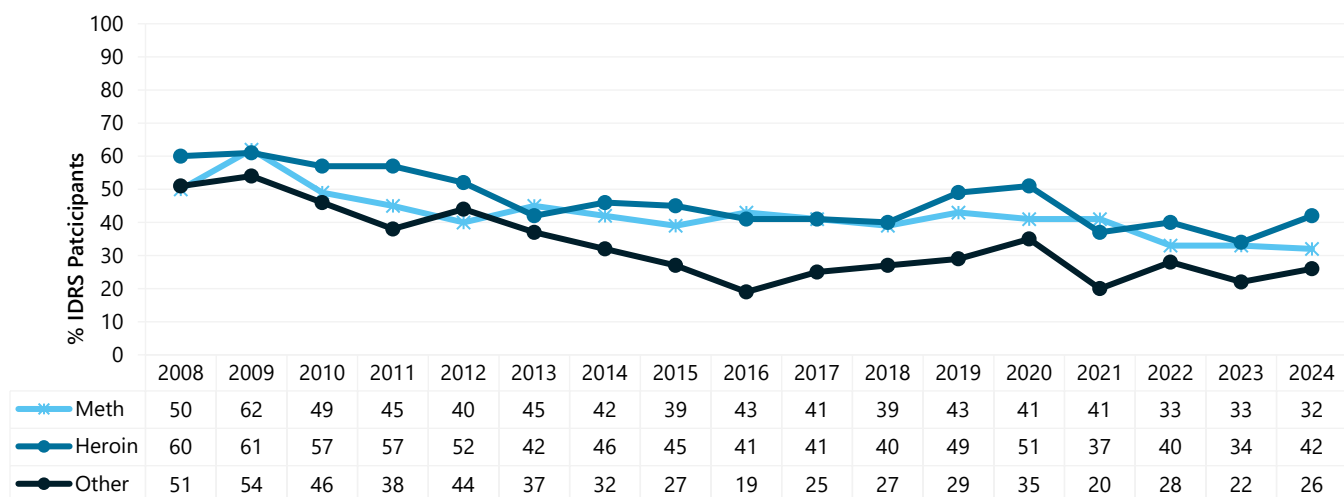


Note. The response 'Don't know' was excluded from analysis.

Re-use of own needles, stratified by main drug injected and injecting frequency

Re-use of own needles was generally comparable among participants who reported that heroin was the drug they had injected most often in the past month and those that reported methamphetamine was the main drug injected (Figure 3). From approximately 2013 onwards, slightly lower percentages of participants who primarily injected 'other' drugs reported re-using their own needles.

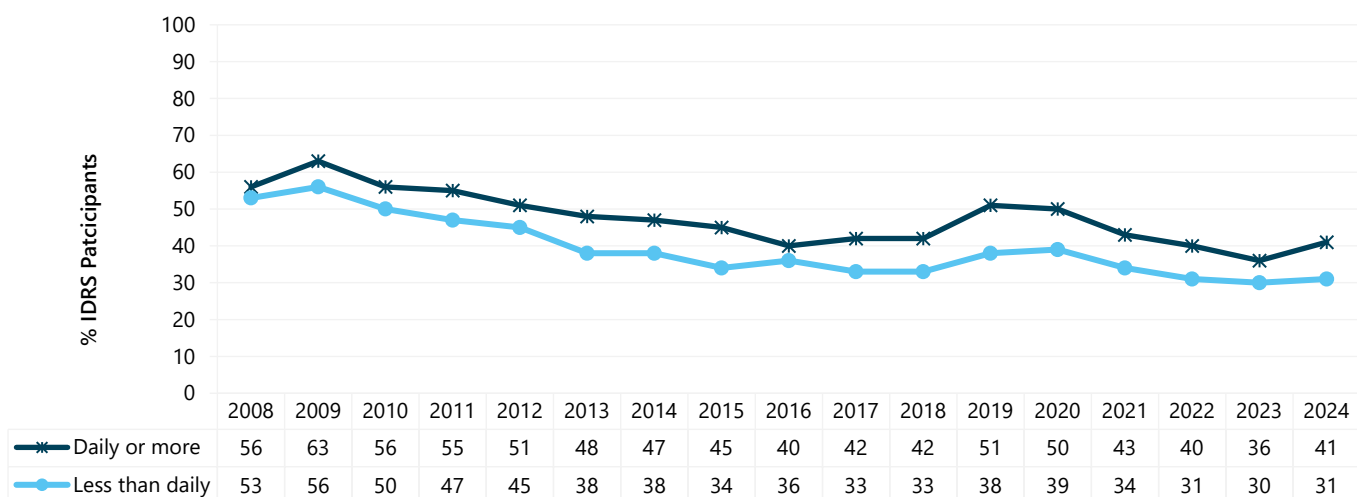
Figure 3. Past month re-use of own needles among IDRS participants by main drug injected, 2008-2024



Note. The response 'Don't know' was excluded from analysis.

In each year between 2008 and 2024, re-use of own needles was slightly lower among participants who reported less than daily injection in the month preceding interview, although, overall, the percentages have remained generally comparable to those reporting daily or more frequent injection (Figure 4).

Figure 4. Past month re-use of own needles among IDRS participants by frequency of injection, 2008-2024



Note. The response 'Don't know' was excluded from analysis.

Discussion

Our results show a gradual decline in the re-use of own needles, from 54% in 2008 to 35% in 2024. While this suggests some improvements in harm reduction practices over time, it also shows that needle re-use remains a relatively common practice. This is somewhat surprising given Australia's extensive NSP coverage, with data from the 2024 NSP National Minimum Data Collection reporting that coverage in Australia exceeded the WHO/UNAIDS definition of high syringe coverage by more than threefold (1).

Re-use of own needles appeared largely comparable across main drug injected, injecting frequency, and gender. These findings suggest that education on the importance of using a clean needle for each injection should be targeted at people who inject drugs more broadly, rather than being targeted at specific subpopulations. However, no statistical analyses were undertaken in the current bulletin and future research would benefit from examining the factors associated with needle re-use, and the reasons for own needle re-use despite widespread NSP availability. Understanding these underlying drivers could inform further harm reduction efforts to minimise risks associated with needle re-use and improve access to sterile injecting equipment where needed.

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