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Trends in, and characteristics associated with, trouble accessing sterile needles and syringes among people who inject drugs in Sydney, New South Wales.

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Key findings:

- The percentage of New South Wales (NSW) IDRS participants reporting trouble accessing sterile needles and syringes in the last month fluctuated between 2011 and 2019, however has generally been declining (6% in 2019).
- In 2020, 15% of NSW IDRS participants reported trouble accessing sterile needles and syringes since the beginning of March 2020, with the main reason being that vending machines were out of stock.
- PWID who reported having trouble accessing sterile needles since the beginning of March 2020 were more likely to report difficulty accessing services for mental health and other alcohol and drug reasons, compared to those who did not report trouble accessing sterile needles.

Introduction

The World Health Organisation (WHO) recognises providing access to sterile needles and syringes to be a 'fundamental component of any comprehensive and effective public health program' to reduce the transmission of HIV amongst people who inject drugs (PWID) (1). Similarly, Australia's national and jurisdictional blood borne virus (BBV) strategies highlight promoting the use of and ensuring access to sterile needles and syringes as a primary intervention in retaining the virtual elimination of HIV amongst PWID (2-3) and reducing hepatitis B (4) and C transmission (5). These strategies aim to guide Australia's response to meeting its commitments in reducing BBVs amongst priority populations. While Australia routinely exceeds the UNAIDS definition of high syringe coverage, receptive needle sharing practices continue to occur and is reported to be associated with sub-populations within the PWID community, such as women (6) and younger people (7). Increased access to sterile needles is emphasized for these sub-populations.

Internationally, the introduction of COVID-19 restrictions resulted in a drastic reduction in the distribution of sterile needles (9-10). In New South Wales (NSW), COVID-19 restrictions forced services providing needle and syringe programs (NSP) to adapt their modes of operation to comply with restrictions and protect the wellbeing of their staff, volunteers, and service users. Changes to services included reduced opening hours, limiting the number of staff and clients allowed in physical spaces to maintain social distancing requirements, and implementing

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contact tracing systems (11). While NSP services rapidly implemented strategies to ensure they continued to provide essential harm reduction services and information to their clients, there were concerns that changes to services and disruptions to supply chains could result in reduced NSP coverage (12).

With this in mind, this bulletin aims to examine the following amongst a sample of people who regularly inject drugs in Sydney, NSW:

1. The percentage of participants who reported trouble accessing sterile needles in the past month, from 2011-2019.
2. The percentage of participants in 2020 who reported trouble accessing sterile needles since the introduction of COVID-19 restrictions (i.e., since the beginning of March 2020).
3. The demographic, drug use and drug-related behavioural characteristics of those who reported difficulty accessing sterile needles in 2020, and whether they experienced difficulty accessing other services.

Method

The Illicit Drug Reporting System (IDRS) is a national illicit drug surveillance system which includes annual cross-sectional interviews with people who regularly inject drugs. In NSW, approximately 150 PWID are recruited each year via Sydney NSPs, treatment services and peer-referral. One-hour, face to face interviews are conducted with participants who meet the eligibility criteria (18 years or older, at least monthly injection in the past six months, and residence in Sydney for at least 10 of the past 12 months). Participants who complete the interview are reimbursed $40 cash for their time.

In 2020, the IDRS interviews were adapted to comply with NSW COVID-19 restrictions and to protect the health and wellbeing of participants and interviewers. Specifically, interviews were conducted over the phone rather than face-to-face and participants were reimbursed $40 electronically instead of being provided with cash.

While the IDRS survey remains relatively consistent each year, it is updated with new questions associated with emerging trends. In 2020, additional questions about the impact of the COVID-19 pandemic and associated restrictions were included. This bulletin will utilise questions covering the demographic profile of participants, including gender, age, grade of school completed, homelessness, changes to accommodation, and main drug injected in the last month. We will also report on questions regarding difficultly accessing needles and syringes, reasons for trouble accessing needles, difficultly accessing other services, and mental health and drug related harms.

In 2020, a total of 155 participants were interviewed in Sydney, NSW. A detailed summary of our methodology, including the number of participants recruited in each year, can be found in the *IDRS 2020: Background and Method* report.

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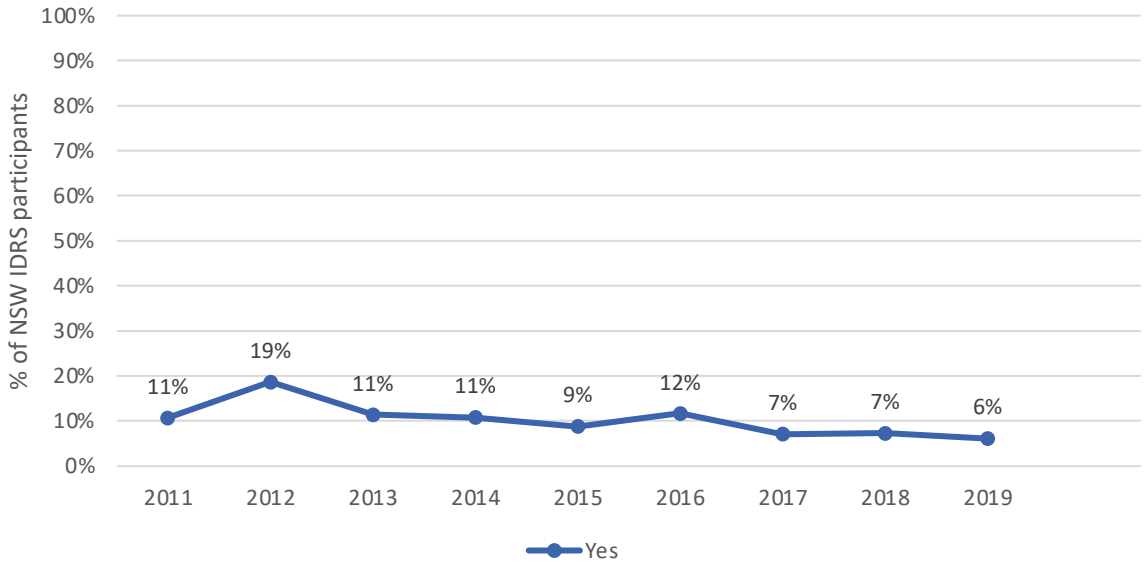
Descriptive analyses were used to examine the percentage of the NSW IDRS sample who reported trouble accessing sterile needles and syringes in the last month, from 2011-2019. Due to small numbers, descriptive analyses were also used to examine the characteristics of the 2020 sample that reported they had trouble accessing sterile needles and syringes since the beginning of March 2020 (i.e. since COVID-19 restrictions were introduced). Given that the 2020 IDRS interviews largely took place between June and August, 'trouble accessing sterile needles and syringes since the beginning of March' would cover a period of approximately three to five months (compared to the past month in 2011-2019). These differing timeframes mean that figures from 2011 to 2019 should not be compared to 2020 figures.

Results

Percentage of PWID who reported having trouble accessing sterile needles and syringes in the last month, from 2011 to 2019.

Our analysis found that the percentage of the sample reporting trouble accessing sterile needles and syringes in the last month has fluctuated over time, ranging from 19% and 6%. However, while the percentage of PWID reporting they had trouble accessing sterile needles and syringes increased in 2012 (19%), the percentages have been largely in a gradual decline. Notably, only 6% of PWID reported they had trouble accessing new sterile needles and syringes in the last month in 2019 (Figure 1).

Figure 1: Trouble accessing new sterile needles and syringes in last month, NSW IDRS sample, 2011-2019



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Percentage of PWID who reported having trouble accessing sterile needles and syringes since the beginning of March 2020.

In 2020, 15% of PWID reported they had trouble getting new needles and syringes since the beginning of March 2020 (i.e., since the introduction of COVID-19 restrictions). Among those who reported trouble accessing sterile needles (n=23), the most common reasons for not being able to access sterile needles were the vending machines being out of stock (52%; n=12) and the NSP being closed or not taking clients (48%; n=11). Almost equal percentages reported that difficultly accessing sterile needles did not result in any changes to their typical injecting practices (39%; n=9) or that it resulted in them reusing their own needles more than they normally would (35%; n=8).

In response to the question “have you changed how you access sterile injecting equipment?”, most reported no changes (57%; n=13), while others reported going to a new NSP provider (35%; n=8). Other changes included more use of vending machines and delivery of equipment (n≤5).

Characteristics of PWID who reported having trouble accessing sterile needles and syringes since the beginning of March 2020.

While no statistical analyses were undertaken (due to small numbers), it appears that PWID who had trouble accessing sterile needles since the beginning of March 2020 were more likely to report heroin as the drug injected most often in the past month (70% compared to 54% of those who reported no trouble accessing sterile needles).

Over three-quarters (78%) of PWID who reported having trouble accessing sterile needles did not report having difficultly accessing other services for alcohol and other drugs (AOD) reasons. Additionally, 50% of PWID who reported having trouble accessing sterile needles did not report having trouble accessing mental health services. Comparatively, of PWID who did not have trouble accessing sterile needles, 92% reported having no trouble accessing other services for AOD reasons and 83% reported having no trouble accessing mental health services.

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Figure 1: Characteristics of PWID who reported having trouble accessing sterile needles and syringes since the beginning of March 2020

		Trouble accessing sterile needles and syringes since the beginning of March 2020	
	Whole sample (N=155) % (n)	**No (N=132) % (n)**	**Yes (N=23) % (n)**
Demographic and drug use characteristics			
Gender identity [a]			
Female	39 (59)	38 (49)	44 (10)
Male	61 (94)	62 (81)	57 (13)
Age (median years; IQR)	44 (39-50)	44 (38-50)	43 (39-53)
Grade at school completed (median years; IQR)	10 (9-11)	10 (9-11)	10 (10-12)
Homeless at time of interview [b]			
No	85 (132)	85 (112)	87 (20)
Yes	15 (23)	15 (20)	-
Change in accommodation since beginning of March			
No	71 (110)	71 (94)	70 (16)
Yes	29 (45)	29 (38)	30 (7)
Main drug injected (past month)			
Heroin	57 (86)	54 (70)	70 (16)
Methamphetamine	35 (53)	37 (48)	-
Other	9 (13)	9 (11)	-
Difficulty accessing other services (since beginning of March)			
Other services for AOD reasons			
No	90 (139)	92 (121)	78 (18)
Yes	10 (16)	8 (11)	-
Drug treatment [c]			
No	81 (55)	81 (47)	80 (8)
Yes	19 (13)	19 (11)	-
Mental health services [d]			
No	78 (56)	83 (50)	50 (6)
Yes	22 (16)	17 (10)	50 (6)
Mental health and drug-related harms			
Mental health problem (past six months)			
No	53 (81)	54 (70)	48 (11)
Yes	47 (72)	46 (60)	52 (12)
Overdose (past year) [e]			
No	79 (122)	78 (103)	83 (19)
Yes	21 (33)	22 (29)	-
Injection injuries (past month)			
No	68 (106)	69 (91)	65 (15)
Yes	32 (49)	31 (41)	35 (8)

[a] Due to small numbers, participants identifying as a gender other than male or female were excluded from analyses; [b] Defined as living in a shelter/refuge, couch surfing or rough sleeping/squatting; [c] only asked of those not currently in drug treatment; [d] only asked of those who reported a mental health problem in past six months; [e] overdose defined as symptoms outside the participant's normal drug experience or professional assistance would have been helpful. IQR=interquartile range. - Value suppressed due to small numbers (n≤5 but not 0).

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Discussion

We found that, overall, the percentage of PWID reporting they had trouble accessing sterile needles and syringes in the past month had declined slightly over time (11% in 2011 vs. 6% in 2019). This is consistent with needle and syringe surveillance projects that regularly report high syringe coverage in Australia, such as the Needle Syringe Program National Minimum Data Collection project. Despite the challenges brought by COVID-19 and its associated restrictions, the relatively low numbers of PWID reporting trouble accessing sterile needles and syringes since the beginning of March 2020 (n=23) provides support for the effectiveness, adaptability, and resilience of Australia's needle and syringe system. Comparatively in England, the COVID-19 pandemic and restrictions led to NSPs halving their coverage and it was speculated that this would result in 'the rise in the re-use of injecting equipment' (9). It is important to note, however, that NSW IDRS participants were recruited through NSP and drug treatment services in Sydney, as well as peer referral, and cannot be considered representative of all PWID in NSW (e.g., disruption to sterile needle and syringe access may be more pronounced in regional and/or rural NSW).

Among those who reported trouble accessing sterile needles and syringes since the beginning of March 2020, the main reason given was vending machines being out of stock (52%). The reduction in NSP service opening hours and client intake to minimise face-to-face contact was nationally offset by a 10% increase in vending machines to dispense sterile needles (12). PWID were also encouraged to stockpile injecting equipment to reduce the frequency of service visits (12). Our findings suggest that a greater increase in vending machines may be needed to adequately cover the needle and syringe requirements of PWID while COVID-19 and associated restrictions continue to impact the normal operation of NSP providers.

The second most reported reason for trouble accessing sterile needles was due to NSP's being closed or not taking clients (48%), although this may have been offset by participants going to a new NSP provider (35% of those who reported trouble accessing sterile needles, n=8). Indeed, in the last year, some NSP providers broadened their NSP outreach strategy to ensure they maintained their coverage while reducing operating hours and client intake. For example, Kirketon Road Centre (KRC) worked with Wayside Chapel, a community organisation that traditionally did not deliver NSP services, to deliver NSP outreach services to the local PWID community. Significant changes to NSP delivery such as these were advertised to the community using digital and physical distribution strategies, such as social media, posters and other promotional material distributed through services, as well as word of mouth. Nevertheless, it is possible that at the time of data collection, some PWID were unaware of the new ways services were ensuring the distribution of sterile needles, and a greater investment in accessible and targeted campaigns to swiftly inform PWID about changes to services may be beneficial.

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It is important to preface discussion of the characteristics of PWID who had trouble accessing sterile needles since the beginning of March 2020 with an acknowledgement of the small sample size (n=23). Indeed, our analyses found few demographic differences between those who reported having trouble accessing sterile needles since the beginning of March 2020 and those who did not. While previous studies have found that the needle sharing and re-use behaviours of women who inject drugs may be associated with reduced access to harm reduction services and, as a result, exposure to sterile equipment (6), our results did not appear to show an association between gender and trouble accessing sterile needles.

However, our findings did suggest a possible association between trouble accessing NSPs and trouble accessing other health services. Specifically, difficulty accessing mental health services and other services for alcohol and other drug reasons was substantially higher among PWID who reported trouble accessing sterile needles and syringes than among those who did not. This suggests that NSPs are a primary point of contact for PWID to access information and referrals to other health and welfare services. Indeed, the reduction in face-to-face NSP services likely resulted in reduced opportunities to provide brief interventions and referrals to other services. While outreach services were expanded to fill this gap, our findings suggest that if future disruptions to NSP provision were to occur further investment in outreach services may be warranted.

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