

### **CREIDU Evidence Brief: Supervised Injecting Facilities**

### Prepared by Ashleigh Stewart<sup>1</sup>, Rowan Ogeil<sup>2</sup>, Jessica Killian<sup>2</sup> & Paul Dietze<sup>1</sup>

This document presents international and national evidence supporting the effectiveness of Supervised Injecting Facilities (SIFs). It is an update of a previous policy brief on evidence around SIFs produced by the Centre for Research Excellence into Injecting Drug Use (CREIDU).<sup>1</sup>

Injection drug use is a chronic relapsing behaviour associated with substantial health and social harms, such as overdose, infectious disease, and imprisonment.<sup>2, 3</sup>

Supervised Injecting Facilities (also referred to as overdose prevention sites or drug consumption rooms) are designed to reduce drug-related harms. In these facilities individuals can inject drugs under the supervision of trained healthcare professionals.

The primary aim of SIFs is to reduce the harms associated with injecting drug use by providing an emergency response to overdose and connecting clients to primary care and social services. In 2022, sanctioned drug consumption rooms were legal and operating within 16 countries, globally.<sup>4</sup>

In Australia, the Sydney Medically Supervised Injecting Centre (MSIC) was established in 2001, the first in the English-speaking world<sup>5</sup> — 17 years later in 2018, the Melbourne Medically Supervised Injecting Room (MSIR) was established in North Richmond.

The Melbourne MSIR was initially established on a trial status, operating in a temporary facility with low capacity until a purpose-built facility opened in 2019. Following two service reviews over a five-year trial period, the North Richmond MSIR has recently been made an ongoing service and recommendations have been made to open another SIF in the Central Business District (CBD).<sup>6</sup>

The international and national evidence presented is aligned with the primary objectives of SIFs in reducing overdose and drug-related harms, including reducing the spread of blood borne viruses, and improving health outcomes for clients and public amenity. It concludes that SIFs meet these aims in reducing drug related harms and demonstrates a clear need for a new facility in the CBD.

Recommended Citation: Stewart, A., Ogeil, R., Killian, J., & Dietze, P. (2023). Evidence Brief: Supervised Injecting Facilities. Centre for Research Into Injecting Drug Use (CREIDU) Policy Brief. Melbourne, CREIDU.

<sup>&</sup>lt;sup>1</sup> Burnet Institute

<sup>&</sup>lt;sup>2</sup> Turning Point Eastern Health & Monash University



### International/Interstate evidence

The accumulated global evidence suggests that SIFs can play a significant role in preventing drug-related deaths and associated harm. Further, evidence shows how SIFs can address health and social challenges associated with drug dependence, benefiting both individuals and communities at large.

- 1) Overdose prevention and response. SIFs reduce the likelihood of fatal and non-fatal overdose. To date no overdose fatality has been recorded in any SIF, worldwide.<sup>7</sup>
  - Illicit drug overdoses and deaths have declined in areas surrounding SIFs. In Vancouver, Canada, overdose deaths reduced by 26% in areas immediately surrounding the SIF.<sup>8</sup>
  - A study assessing all-cause mortality among people who inject drugs in Vancouver found SIF use was associated with a 54% reduction in risk of death.<sup>9</sup>
  - Assessment of non-fatal overdoses occurring within Vancouver's SIF across a four year period showed that, had these overdoses occurred outside the SIF, there could have been an additional 8–51 deaths.<sup>10</sup>
  - In Australia, following the opening of the Sydney MSIC, monthly ambulance attendances declined by 68% during MSIC operating hours. The greatest decline was seen in the area immediately surrounding the service.<sup>11</sup>
- 2) Healthcare access and referrals. SIFs help clients access healthcare services such as wound care, HIV and hepatitis testing and treatment, vaccinations, and counselling. Services also typically offer referrals to drug treatment services and social support services, including housing, financial, and legal support.
  - Frequent (everyday) attendees of SIFs in Spain were more likely to report past sixmonth access to primary healthcare services (54%), compared to medium (>50% of their injection days) attendees (46%) and low (<50% of their injecting days) attendees (35%). Past six-month access to drug dependence services was more common among frequent SIF attendees (82%), compared to medium (66%) and low attendees (55%). In adjusted analysis frequent attendees were twice as likely to have past six-month drug treatment services access. 12
  - In Vancouver, Canada, there was a 30% increase of uptake in detoxification services within the year following the opening of the SIF.<sup>13</sup> Regularly using the SIF and engaging with onsite SIF counsellors was associated with entry into drug treatment; and enrolment in drug treatment was associated with injecting cessation.<sup>14</sup>
  - In Sydney, Australia, frequent (>=12 visits) MSIC attendance was associated with receiving a drug treatment referral.<sup>15</sup> One quarter of these drug treatment referrals had confirmed referral uptake.



- **3)** Reduced risk of infections. *SIFs provide a clean, safe environment with sterile injecting equipment, reducing the risk of blood borne virus transmission.* 
  - Use of SIFs has been independently associated with a 70% reduction in the odds
    of syringe sharing among a cohort of people who inject drugs in Canada. Among
    HIV-negative clients, exclusive use of the SIF was associated with an 86%
    reduction in the odds of past six-month syringe sharing. Further, modelling
    evidence suggests the Vancouver SIF prevents approximately 5–6 newly acquired
    HIV infections per year. HIV
  - In Catalonia, Spain, the prevalence of sharing needles and syringes was 18% lower among people frequently using the SIFs compared to low attendees and 10% lower compared to medium attendees.<sup>12</sup> In adjusted analysis, frequent SIF attendees had a 41% reduction in odds of sharing used injecting equipment, compared to medium and low attendees.<sup>12</sup>
  - Attendees of SIFs in Barcelona and Madrid were three times more likely to report not borrowing a used syringe.<sup>19</sup>
- **4)** Improving public amenity. By providing a designated space for people to safely inject drugs, SIFs reduce injecting in public spaces and prevent inappropriately discarded syringes in the community.
  - In Catalonia, Spain, frequent SIF attendees were almost six times more likely to safely dispose injecting equipment, compared to medium and low SIF attendees.<sup>12</sup>
     Frequent SIF attendees were 73% less likely to report public injecting compared to medium or low attendees.<sup>12</sup>
  - In Vancouver, Canada, clients consistently using SIFs were more than twice as likely to report safer disposal of their used injecting equipment. <sup>20</sup> Significant reductions in public injecting, inappropriately discarded syringes and injecting litter were evident following the opening of the SIF. <sup>21</sup> Crime rates in the district surrounding the SIF also decreased following the service opening, <sup>22</sup> including decreases in vehicle-related crimes. <sup>23</sup>
  - In Sydney, following the opening of the MSIC, business operators and residents reported less frequently witnessing public injecting and inappropriately discarded injecting equipment in the past month.<sup>24</sup>
- 5) Improve injecting practices. People who use SIFs are more likely to engage in safer injecting practices. Staff can provide clients with information on safer injecting, including vein finding, which can prevent injecting related injuries and diseases.
  - In Vancouver, Canada, 60% of SIF clients who received care for injecting related injuries were referred to hospital and subsequently sought treatment.<sup>25</sup> Clients consistently using the SIF were twice as likely to report reusing syringes less often, three times more likely to be less rushed during injections, and injecting outdoors less. Clients consistently using the SIF were more likely to use clean water for injections, use a torniquet, and inject in a clean place.<sup>20</sup>



### Benefits to the community and cost saving

Evidence suggests SIFs are also effective in attracting those at greatest risk of harm – the most marginalised and vulnerable people who inject drugs. These groups, often considered 'hidden' and 'hard-to-reach' by mainstream health services, are offered a range of harm reduction services and referral to other health and social services.

In Vancouver, Canada, people reporting daily use of heroin and people reporting sex work were more likely to report consistent SIF use.<sup>20</sup> Clients of a SIF in Spain were also more socially vulnerable (almost half reported unstable housing and their main source of income from illegal or marginal sources), reported higher-risk drug-use patterns, and a higher anti-HCV prevalence than people not using the SIF.<sup>19</sup> Further, the Sydney MSIC found that daily injectors and people reporting sex work were more likely to present to drug treatment services via the MSIC referral model.<sup>15</sup>

Research has also shown that SIFs can reduce costs to the community by reducing the burden on emergency medical services, hospitalizations, and other healthcare resources associated with drug-related emergencies.

Clients referred to hospital for injecting related injuries and diseases by SIF staff had a significantly shorter length of stay in hospital (4 days), compared to those not referred by SIF staff (12 days). Cost saving based on fully allocated hospital costs per day means a hospital referral from SIF staff saved CAD\$5,696 (IQR: CAD\$2, 136 – CAD\$18, 512).<sup>25</sup> Further, a modelling study of annual incident HIV infections prevented by the Vancouver SIF, estimated the SIF was responsible for saving more than CAD\$1 million in future HIV-related medical care costs.<sup>18</sup>



### The Melbourne MSIR

In the first 18 months of operation, approximately 4000 clients registered to use the MSIR and there were more than 119,000 visits. Following the opening of the purpose-built facility in 2019, the MSIR averaged 300 visits per day, making the North Richmond MSIR one of the busiest, globally.<sup>26</sup> Importantly, research showed that the MSIR attracted the most socially vulnerable (e.g., experiencing homelessness) people into the service.<sup>27</sup>

A review of the MSIR across its first 18 months of operation found that the MSIR had achieved most of the legislated objectives:

### 1. Advancing a reduction in the number of avoidable deaths and the harm caused by overdoses of drugs of dependence

- No overdose death occurred, despite responding to 271 serious overdose events requiring the use of naloxone.
- In total 2,657 overdoses were responded to within the MSIR, 2,651 were managed with oxygen and other measures.
- Based on international modelling approaches, at least 21–27 deaths were avoided.
   This estimate does not include the prevention of permanent disability by responding promptly to overdoses.

# 2. Advancing delivery of more effective health services for clients of the MSIR by providing a gateway to health and social assistance

- The MSIR provided and referred 10,540 health and social services to clients.
- The shift to the purpose-built facility allowed for additional services to be provided from other organisations from within the MSIR and from external services.
- Services included health promotion, wound dressing, medication provision and first aid.

## 3. Reduce attendance by ambulance services, paramedic services and emergency services and attendances at hospitals due to overdoses

- Overdose-related ambulance attendances involving naloxone decreased by 25% within one kilometre of the MSIR. This decline was as high as 36% during MSIR operating hours.
- 4. Reduce the number of discarded needles and syringes in public places and the incidence of injecting of drugs of dependence in public places in the vicinity
  - There was a 4% reduction in reports of public injecting, among residents, 24 to 20%, and 5% reduction reported among business owners, 27 to 22%.
  - Residents reported no change to seeing inappropriately discarded injecting equipment.

# 5. Assist in reducing the spread of blood-borne diseases in respect of clients of the licensed medically supervised injecting centre, including, but not limited to, HIV and hepatitis C

- The MSIR had provided testing and treatment initiation of blood-borne viruses.
- More than a third of people screened for hepatitis C tested positive and a quarter had begun treatment.



Following this review, the Victorian Government extended the MSIR trial operating license for three years. A subsequent review<sup>28</sup> found largely similar effects meaning that, in 2023, after five years of operation, the North Richmond MSIR was announced as an ongoing service.<sup>6</sup>

#### **Future Directions in Melbourne**

Based on the high service demand of the North Richmond MSIR, combined with international and national evidence, the initial MSIR Review Panel recommended that an additional MSIR in the City of Melbourne central business district (CBD) should be established.<sup>26</sup>

One key question that remains in relation to the CBD SIF is the question of location. One of the few sources of acute drug-related harm data available at a local area level is data on ambulance attendances at events involving drugs such as overdoses. Figure 1, based on data extracted from Turning Point's National Ambulance Surveillance System (NASS), show ambulances attend events related to heroin and/or meth/amphetamine frequently in postcodes of the Melbourne Local Government Area (see appendix for area boundary map). They highlight large increases, mostly concentrated in the 'Eastern CBD' area (see Map), including postcode 3000. These data demonstrate clear need for the CBD MSIR to be within in the Melbourne LGA, that harms have been increasing over time and support locating the new SIF in the 3000 area postcode.

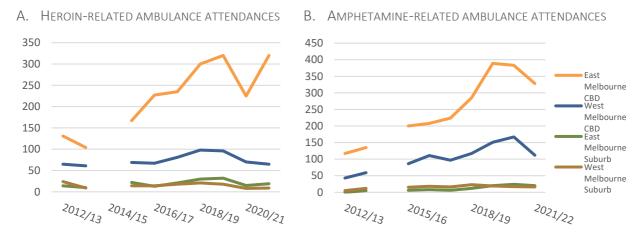


FIGURE 1. HEROIN AND AMPHETAMINE (AMPHETAMINE OR METHAMPHETAMINE) RELATED AMBULANCE ATTENDANCES FOR FOUR AREAS OF THE CITY OF MELBOURNE, 2014/15–2021/2022.

It is likely that a CBD MSIR will reduce the prevalence of public injecting and drug related harms such as ambulance attendances. People who use the North Richmond MSIR frequently were less likely to be attended by ambulance for an opioid overdose. <sup>26</sup> Further, new analysis using data collected from Australia's national drug surveillance system, the Illicit Drug Reporting System (IDRS), demonstrates that the prevalence of recent public injecting reported by participants from Richmond was increasing until the MSIR opened and then declined to match the rest of Melbourne thereafter. <sup>29</sup>

There are currently community concerns around the public safety and local amenity impacts connected to homelessness and associated issues, including public injecting drug use, in the



CBD.<sup>30</sup> The above evidence suggests that one way to address public injecting and some of its consequences is by establishing a CBD MSIR. This will likely lead to reductions in public injecting and ambulance attendances for drug-related events.

Ongoing community consultation and engagement is a high priority to increase local safety and achieve improvements in public amenity in areas surrounding the SIFs. To achieve improvements in public amenity in the CBD and North Richmond, reviewing eligibility barriers, including ensuring people on court orders are allowed to use the facility and permitting peer/partner injecting,<sup>28</sup> would likely further reduce public injecting and discarded injecting equipment.



#### **APPENDIX**

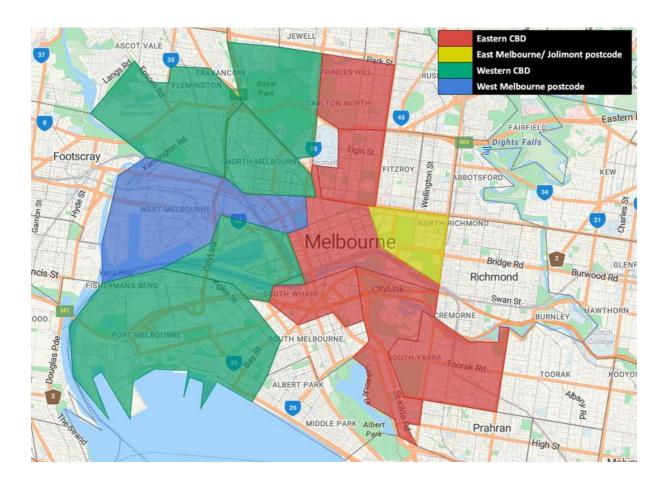
### A. <u>Eastern Melbourne CBD includes following suburbs/postcodes:</u>

South Yarra 3141, East Melbourne 3002, Southbank 3006, Melbourne 3000 & 3004, Carlton 3052, Carlton North 3054 (see map – right of orange line)

### B. Western Melbourne CBD includes following suburbs/postcodes:

Port Melbourne 3207, Docklands 3008, South Wharf 3005, West Melbourne 3003, North Melbourne 3051, Kensington 3031, Flemington 3031, Parkville 3052 (see map – left of orange line)

- C. West Melbourne postcode includes Wet Melbourne postcode only
- D. East Melbourne postcode includes East Melbourne and Jolimont postcodes only





#### References

- 1. Power R. Safe injecting facilities: reducing harm and improving public safety and amenity. Melbourne; 2011.
- 2. Larney S, Peacock A, Leung J, Colledge S, Hickman M, Vickerman P, et al. Global, regional, and country-level coverage of interventions to prevent and manage HIV and hepatitis C among people who inject drugs: a systematic review. Lancet Glob Health. 2017;5(12):e1208-e20.
- 3. Mathers BM, Degenhardt L, Bucello C, Lemon J, Wiessing L, Hickman M. Mortality among people who inject drugs: a systematic review and meta-analysis. Bull World Health Organ. 2013;91(2):102-23.
- 4. Harm Reduction International. The global state of harm reduction 2022. London, UK: HRI; 2023.
- 5. MSIC Evaluation Committee. Final Report on the Evaluation of the Sydney Medically Supervised Injecting Centre. Syndey; 2003.
- 6. Strengthening MSIR To Keep Saving Lives [press release]. Melbourne: State Government of Victoria2023.
- 7. Potier C, Laprévote V, Dubois-Arber F, Cottencin O, Rolland B. Supervised injection services: what has been demonstrated? A systematic literature review. Drug Alcohol Depend. 2014;145:48-68.
- 8. Marshall BDL, Milloy MJ, Wood E, Montaner JSG, Kerr T. Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study. The Lancet. 2011;377(9775):1429-37.
- 9. Kennedy MC, Hayashi K, Milloy MJ, Wood E, Kerr T. Supervised injection facility use and all-cause mortality among people who inject drugs in Vancouver, Canada: A cohort study. PLoS Med. 2019;16(11):e1002964.
- 10. Milloy MJS, Kerr T, Tyndall M, Montaner J, Wood E. Estimated Drug Overdose Deaths Averted by North America's First Medically-Supervised Safer Injection Facility. PLOS ONE. 2008;3(10):e3351.
- 11. Salmon AM, van Beek I, Amin J, Kaldor J, Maher L. The impact of a supervised injecting facility on ambulance call-outs in Sydney, Australia. Addiction. 2010;105(4):676-83.
- 12. Folch C, Lorente N, Majó X, Parés-Badell O, Roca X, Brugal T, et al. Drug consumption rooms in Catalonia: A comprehensive evaluation of social, health and harm reduction benefits. Int J Drug Policy. 2018;62:24-9.
- 13. Wood E, Tyndall MW, Zhang R, Montaner JS, Kerr T. Rate of detoxification service use and its impact among a cohort of supervised injecting facility users. Addiction. 2007;102(6):916-9.
- 14. DeBeck K, Kerr T, Bird L, Zhang R, Marsh D, Tyndall M, et al. Injection drug use cessation and use of North America's first medically supervised safer injecting facility. Drug Alcohol Depend. 2011;113(2-3):172-6.
- 15. Kimber J, Mattick RP, Kaldor J, van Beek I, Gilmour S, Rance JA. Process and predictors of drug treatment referral and referral uptake at the Sydney Medically Supervised Injecting Centre. Drug Alcohol Rev. 2008;27(6):602-12.
- 16. Kerr T, Tyndall M, Li K, Montaner J, Wood E. Safer injection facility use and syringe sharing in injection drug users. Lancet. 2005;366(9482):316-8.
- 17. Wood E, Tyndall MW, Stoltz J-A, Small W, Lloyd-Smith E, Zhang R, et al. Factors Associated with Syringe Sharing Among Users of a Medically Supervised Safer Injecting Facility. American Journal of Infectious Diseases. 2005;1(1).
- 18. Pinkerton SD. How many HIV infections are prevented by Vancouver Canada's supervised injection facility? Int J Drug Policy. 2011;22(3):179-83.
- 19. Bravo MJ, Royuela L, De la Fuente L, Brugal MT, Barrio G, Domingo-Salvany A. Use of supervised injection facilities and injection risk behaviours among young drug injectors. Addiction. 2009;104(4):614-9.
- 20. Stoltz JA, Wood E, Small W, Li K, Tyndall M, Montaner J, et al. Changes in injecting practices associated with the use of a medically supervised safer injection facility. Journal of public health (Oxford, England). 2007;29(1):35-9.
- 21. Wood E, Kerr T, Small W, Li K, Marsh DC, Montaner JSG, et al. Changes in public order after the opening of a medically supervised safer injecting facility for illicit injection drug users. CMAJ. 2004;171(7):731-4.
- 22. Myer AJ, Belisle L. Highs and Lows: An Interrupted Time-Series Evaluation of the Impact of North America's Only Supervised Injection Facility on Crime. Journal of Drug Issues. 2017;48(1):36-49.
- 23. Wood E, Tyndall MW, Lai C, Montaner JS, Kerr T. Impact of a medically supervised safer injecting facility on drug dealing and other drug-related crime. Substance abuse treatment, prevention, and policy. 2006;1:13.
- 24. Salmon AM, Thein HH, Kimber J, Kaldor JM, Maher L. Five years on: what are the community perceptions of drug-related public amenity following the establishment of the Sydney Medically Supervised Injecting Centre? Int J Drug Policy. 2007;18(1):46-53.
- 25. Lloyd-Smith E, Wood E, Zhang R, Tyndall MW, Sheps S, Montaner JSG, et al. Determinants of hospitalization for a cutaneous injection-related infection among injection drug users: a cohort study. BMC Public Health. 2010;10(1):327.
- 26. MSIR Review Panel. Review of the MSIR. Melbourne. Victoria: State Government of Victoria; 2020.
- 27. Van Den Boom W, del Mar Quiroga M, Fetene DM, Agius PA, Higgs PG, Maher L, et al. The Melbourne Safe Injecting Room Attracted People Most in Need of Its Service. Am J Prev Med. 2021;61(2):217-24.
- 28. MSIR Review Panel. Review of the Medically Supervised Injecting Room. Melbourne; 2023.



29. Wilson J, Dietze P. Prevalence and correlates of public injecting among a group of people who inject drugs in Australia. Melbourne; 2023.

30. Willingham R. Salvation Army building near Parliament House could house second supervised injecting room. ABC News. 2023.