

The Case for Supervised Consumption Services

In the United States, people who use drugs (PWUD) continue to be at elevated risk for HIV, according to the Centers for Disease Control and Prevention.¹ At the same time, a surging epidemic of overdoses from heroin and prescription painkillers (i.e., opioids) claimed nearly 50,000 lives in 2014 alone.² To save lives, there is a pronounced need to implement scientifically validated harm reduction programs, which reduce the risks associated with drug use and facilitate access to addiction treatment and medical care. Among the newest and most innovative interventions to reduce overdoses are supervised consumption services.

What are supervised consumption services?

Supervised consumption services (SCS)* are a public health intervention that provide a hygienic space for people to use illicit drugs under the supervision of trained staff. SCS are designed to reduce the risk of HIV/hepatitis C virus (HCV) transmission, prevent overdose fatalities, and connect PWUD with addiction treatment and other social services. SCS may also decrease drug use in public places, reduce improperly discarded syringes, and diminish crime sometimes associated with open-air drug scenes.

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Other well-established harm reduction interventions include opioid substitution treatment (OST) and syringe services programs (SSPs), which, along with clean injecting equipment, generally provide outreach, peer education, and health promotion services. SCS evolved primarily as one of several

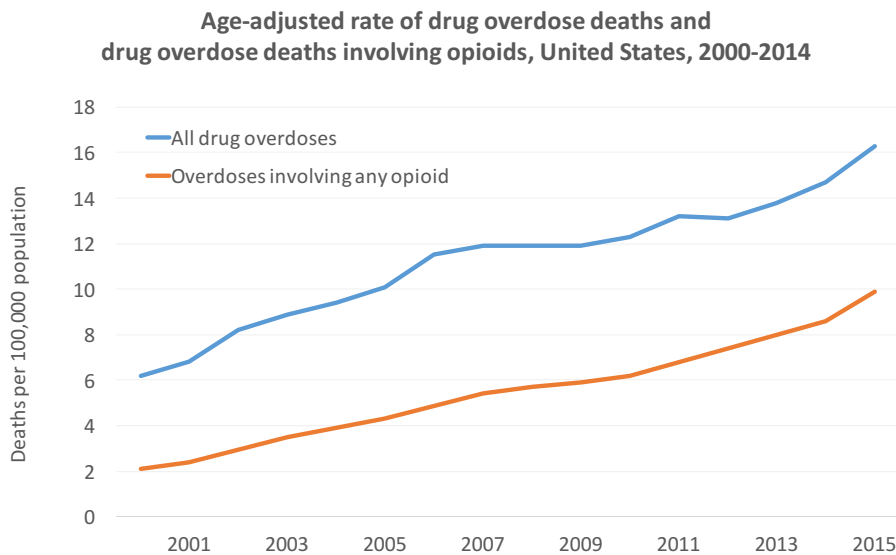
responses designed to address health and public order concerns associated with public drug use. The first SCS facility was established in Switzerland in 1986, and currently almost 100 are operating in Europe, Australia, and Canada.

IN THIS ISSUE BRIEF

- Drug overdose fatalities have reached epidemic proportions in the U.S., the majority associated with opioids, particularly prescription painkillers and heroin.
- In addition, people who inject drugs account for 11% of all men and 23% of all women living with HIV, but many lack access to sterile injection equipment to keep them from acquiring HIV. The vast majority of Hepatitis C (HCV) cases in the U.S. are also associated with injection drug use.
- The absence of private, secure, and hygienic spaces often drives people who inject drugs to do so in public, with discarded syringes posing a health hazard, and overdose fatalities increasingly occur in bathrooms in fast food restaurants, hospitals, public libraries, and churches.
- Supervised consumption services (SCS) provide a hygienic space for people to use illicit drugs under the supervision of trained staff. SCS are designed to reduce the risk of HIV/HCV transmission, prevent overdose fatalities, and connect people who use drugs with addiction treatment and other social services.
- Research has shown that SCS are associated with greater access to medical and social services and reduced public drug use. Moreover, there are no persuasive data to suggest that SCS increase drug use or the frequency of injecting, or that they result in higher rates of local drug-related crimes.

*Over the past three decades, a variety of terms have been used to describe SCS, including safe(r) injection facilities (SIF), drug consumption rooms (DCR), and others. The term SCS acknowledges both evolving drug use patterns and the prevalence of polydrug use.

Opioid overdoses driving increase in drug overdoses overall



SOURCE: Centers for Disease Control and Prevention. Increases in Drug and Opioid Overdose Deaths – United States, 2000 to 2014. MMWR 2015.

www.cdc.gov/drugoverdose



Most SCS target people who are homeless or in insecure housing, such as shelters, and have limited options for hygienic injecting without the risk of disease transmission or overdosing. Each functioning SCS typically provides staff as well as sterile injection equipment, counseling services, referrals to medical, addiction treatment, or social services, and emergency care in the event of overdose. Most restrict access to registered users who meet certain requirements, such as minimum age and local residency. The vast majority are integrated into low-threshold facilities that offer other services, such as food, showers, and clothing, along with harm reduction materials including ‘sharps’ containers and condoms. While most SCS target drug injectors, an increasing number also accommodate users who smoke or inhale drugs.

Making the case: The need for SCS in the United States

People who use drugs continue to be at high risk for HIV infection, but have low access to sterile syringes.

While the rate of new HIV transmissions associated with injection drug use decreased from 2010 to 2014, people who inject drugs (PWID) account for 11% of all men and 23% of all women living with HIV. Moreover, survival is lower among people diagnosed with HIV whose infection is attributed to injection drug use, compared to all other transmission categories.³ But many PWID lack access to sterile injection equipment to keep them

from acquiring HIV. For example, in the U.S., SSP coverage (the capacity to provide one sterile syringe per injection) is estimated to be minimal (only 3%).⁴

The vast majority of Hepatitis C (HCV) cases in the U.S. are associated with injection drug use.

Cases of acute HCV infection increased 2.5 times between 2010 and 2014, predominantly among young persons who are white, live in non-urban areas (particularly in Eastern and Midwestern states), have a history of injection drug use, and previously used opioid agonists such as oxycodone. Mortality among HCV-infected persons is increasing, and in 2007, the number of HCV-related deaths exceeded the number of HIV-related deaths for the first time.⁵

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There is an epidemic of overdose fatalities among people who use drugs.

Overdose fatalities have reached epidemic proportions in the U.S. There were nearly 500,000 in the U.S. between 2000 and 2014—the majority (61%) associated with opioids, including prescription painkillers and heroin. During that time, drug overdose deaths

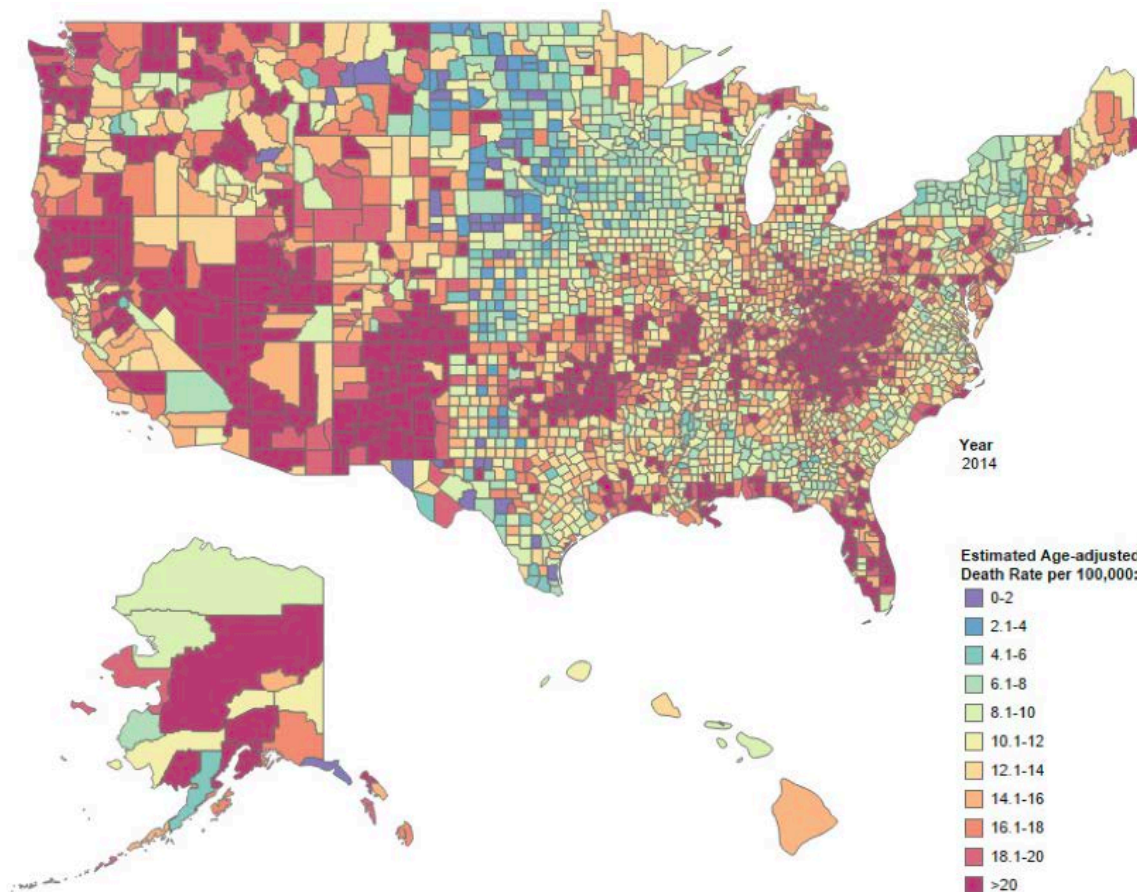
Drug Poisoning Mortality†: United States, 1999-2014

U.S. Trends: 1999-2014

State Trends: 1999-2014

County Estimates: 1999-2014

Estimated Age-adjusted Death Rates§ for Drug Poisoning by County, United States: 2014



Designed by L. Rossen, B. Bastian & Y. Chong. SOURCE: CDC/NCHS, National Vital Statistics System.

tripled, with 47,055 in 2014 alone, more than any previous year on record. The rise in overdose fatalities is driven by two distinct but interrelated trends: a 15-year increase associated with prescription opioids and a more recent surge driven largely by heroin.⁶

The large increase in heroin use across the country is closely related to prescription opioid misuse and dependence. In fact, past misuse of prescription opioids is the strongest risk factor for heroin initiation and use.⁷ The increased availability of high-purity heroin, combined with its far lower price (compared to diverted prescription painkillers), appears to be driving the

trend.⁸ An influx of illicit fentanyl, a synthetic opioid that is often mixed with or sold as heroin, has further exacerbated the drug overdose fatality rate; deaths associated with synthetic opioids doubled from 2013 to 2014.⁹

Overdose fatalities represent only the worst possible outcome of a much larger problem—non-fatal overdoses may occur 20–30 times more frequently than fatal ones^{10,11} and result in significant drug-related morbidities.¹²

Injection of drugs in public spaces is commonplace. Public injection has been associated with a greater risk of

LOCAL COMMUNITIES CAN BE AT PRONOUNCED RISK

Recently, HIV and overdose outbreaks among PWUD have raised public awareness of the need for interventions. In 2015, Indiana health officials diagnosed HIV infection among 135 people in a community of 4,200, the majority associated with the injection of oxycodone, a powerful opioid painkiller.¹³ Immediately following the outbreak, Indiana permitted the implementation of SSPs for the first time—and the chain of HIV transmission ceased.

The increase in drug overdoses, in particular, is dramatically illustrated by local outbreaks. For example, in June 2016, there were 16 overdoses in a single night in New Haven, CT; at least two were fatal.¹⁴ In August 2016, Huntington, WV, police responded to 26 heroin overdose cases in a span of four hours.¹⁵ That same month, Cincinnati health officials reported 174 overdoses associated with adulterated heroin in six days.¹⁶ In September 2016, local authorities recorded 21 overdoses in a single Friday night in Akron, Ohio, one day after four people in the city died from overdoses.¹⁷

overdose and HIV transmission. Many PWUD are homeless or in insecure housing and are forced to inject in public settings, such as streets, parks, or mass transit, or in semi-public spaces, such as bathrooms, abandoned buildings, methadone clinics, or hospitals. Furthermore, the lack of privacy compromises the health, well-being, and safety of the injection drug user and the surrounding community.¹⁸ For example, the absence of private, secure, and hygienic spaces often drives PWUD to inject in public, with discarded syringes posing a health hazard, and overdose fatalities increasingly occur in bathrooms in fast food restaurants, hospitals, public libraries, and churches.¹⁹ In a survey conducted by the Injection Drug Users Health Alliance, among 447 SSP participants in New York City who reported injection drug use in the past three months, nearly half (49.9%) reported injecting in a public bathroom and more than a third (35.6%) reported injecting in a street or park. For 13.6% of participants, a public bathroom was their most frequent location for injecting.²⁰

Are SCS effective? What does the research say?

The most thoroughly studied programs, as well as systematic reviews of programs, have shown that the implementation of SCS is associated with safer and more hygienic drug use among regular clients, greater access to medical and social services, and reduced public drug use. Moreover, there are no persuasive data to suggest that SCS increase drug use or the frequency of injecting, or that they result in higher rates of local drug-related crimes.^{21,22,23} A wealth of credible scientific research has been generated from SCS programs that have been operating for a decade and a half in Sydney, Australia (the Uniting Medically Supervised Injecting Centre [MSIC], established in 2001), and Vancouver, Canada (Insite, established in 2003). Both were initially implemented as pilot projects and have incorporated numerous modifications based on extensive evaluations.

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SCS are effective at reducing overdose fatalities.

During an 18-month study at Insite in 2004–2005, there were 336 overdoses—none fatal.²⁴ In an examination of all overdose deaths in Vancouver between 2001 and 2005, 89 occurred within 500 meters of Insite; after Insite opened, fatal overdoses within this area decreased by 30%, compared to 9% in the rest of Vancouver.²⁵ In another study in Sydney, fewer overdoses were reported to emergency response services at times when the MSIC was open.²⁶ Most often, SCS are implemented in settings with significant numbers of PWUD who are at high risk for overdoses.

SCS contribute to lower rates of syringe sharing, sharply reducing the risk of HIV/HCV transmission.^{27,28}

SCS reduce syringe sharing and thus HIV/HCV transmission by providing sterile injection equipment and promoting safer injection techniques. For example, among 431 Insite participants, use of the facility was independently associated with a decline in needle sharing.²⁹ Because the reduction of HIV and HCV transmission among SSP participants has been well documented,^{30,31,32,33,34} it is likely to hold true for SCS, which also attract populations at elevated risk for HIV or HCV. For example, among 904 Insite participants who were tested for HCV, 88% were HCV positive. Among other factors, those participants with a previous history of borrowing syringes were more likely to have acquired the hepatitis C virus.³⁵

SCS are an effective strategy to reach people at greatest risk of overdose or blood-borne infections,³⁶ and may improve access to HIV care.

In the Vancouver Injection Drug User Study, participants who were at elevated risk of HIV infection, including younger daily cocaine users, or those at increased risk because of unstable housing, frequent heroin injection, non-fatal overdose, or public drug injection, were significantly more likely to use SCS.³⁷ In qualitative interviews, participants and staff reported that the program enhanced access to HIV care by building open and trusting relationships and facilitated delivery of treatment.³⁸

SCS promote safer and hygienic drug use, thus preventing adverse health outcomes, such as abscesses and infections.³⁹

At Insite, consistent participants were more likely to make positive changes in injecting practices, including less reuse of syringes, increased use of sterile water, swabbing injection sites with alcohol, cooking/filtering drugs prior to injection, and less rushed injecting, all of which may reduce the risk of infection and/or overdose.⁴⁰

SCS help to reduce public injecting and the inappropriate discarding of syringes.⁴¹

For example, there were significant reductions in public order problems (public drug use, discarded syringes, and injection-related litter) following the opening of Insite, independent of law enforcement activities and changes in rainfall patterns.⁴²

SCS provide an effective referral mechanism to detoxification and addiction treatment.⁴³

Among a cohort of 1,031 PWID in Vancouver, there was a 30% increase in the use of detoxification services following Insite's opening, compared to the previous year, after controlling for age, gender, years injecting, and prior year injection drug use. Detoxification service use was also associated with increased use of methadone and reduced injecting.⁴⁴ Among Sydney MSIC participants, those who used the facility frequently were more likely to be referred to drug treatment than non-regular clients.⁴⁵ In a subsequent analysis of Insite participants, regular SCS use and having contact with a counselor were associated with treatment enrollment, which was positively correlated with injection cessation.⁴⁶

Do SCS promote drug use or increase drug-related crime?

Like SSPs, since SCS were first proposed as a harm reduction intervention more than 30 years ago, critics have argued that they will inadvertently increase drug use among current users, initiate new users, and increase drug-related crime in the areas in which they operate.

There is no evidence that SCS encourage increased drug use or initiate new users.⁴⁷

Most Insite participants, for example, are longtime injection drug users. In a study conducted among 1,065 participants, the median number of years of injection drug use was 15.9, higher than among non-participants from a community cohort. Furthermore, there was no evidence to suggest that the SCS facility prompted drug use in the community.⁴⁸ Another study conducted before and after the opening of Insite found no substantial increase in the rate of relapse among those who had stopped injection drug use.⁴⁹

There is no evidence that operation of SCS leads to an increase in drug-related crimes.⁵⁰

The opening of the MSIC in Sydney was not associated with an increase in the proportion of drug use or supply offenses.⁵¹ In a follow-up study five years later, there was no evidence that robbery, property crime, or drug offenses had increased in the immediate vicinity.⁵² Similarly, in the year following the opening of Insite, no increases in drug trafficking, assault, or robbery were detected, while vehicle break-ins decreased compared to the previous year.⁵³

What does public opinion say about SCS?

As the rate of overdose fatalities has escalated in the U.S., local communities have been increasingly open to new interventions. In Ithaca, NY, Mayor Svante Myrick proposed implementing SCS in the context of *The Ithaca Plan: A Public Health and Safety Approach to Drugs and Drug Policy*,⁵⁴ which was extensively covered by CNN's *Fareed Zakaria GPS*.⁵⁵ Similarly, in Seattle, the mayor's Heroin and Opioid Task Force recently included SCS among its recommendations to confront a heroin and opioid epidemic,⁵⁶ and a pilot SCS is underway.⁵⁷ In New York, State

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Assemblymember Linda B. Rosenthal, Chair of the Committee on Alcoholism and Drug Abuse, recently endorsed SCS, the first state-level official to do so, and announced her plans to draft legislation to permit the services in the state.⁵⁸ Soon after, the New York City Council approved the study of SCS,⁵⁹ and a proposal is underway to establish a SCS site in Buffalo.⁶⁰ And on June 2, 2017, the California State Assembly became the first state body to pass a bill approving the establishment of SCS in the state.⁶¹

In-depth articles exploring the implementation of SCS to address overdose fatalities have appeared prominently in *The Washington Post*⁶² and *The New York Times*,⁶³ while the editorial boards of *The Boston Globe*⁶⁴ and *The Seattle Times*⁶⁵ have endorsed the approach. In 2016, *The Baltimore Sun* urged the Maryland General Assembly to thoroughly examine a bill to legalize SCS.⁶⁶ (The bill was subsequently defeated.)

Many HIV organizations have endorsed SCS. For example, the AIDS United Public Policy Committee recently called for the local implementation of SCS as part of a comprehensive public health approach to reducing overdose deaths, preventing the transmission of HIV and HCV, and improving quality of life among PWID.⁶⁷

What are the policy implications of SCS?

In the U.S., there is increasing recognition of the need for a non-punitive, comprehensive approach to drug use and misuse to save lives. Following the 2015 Indiana outbreak, Congress reversed the longstanding prohibition on states and local communities from using federal funds to support SSPs, though still under fairly limited circumstances.

Based on public health imperatives, states and some municipalities have the authority to sanction the operation of SCS to address the risks posed by injection drug use. A similar rationale has underpinned authorizations of SSPs since the 1980s. However, the federal government could impede the implementation of SCS by enforcing provisions of the Controlled Substances Act.⁶⁸ Ultimately, state legislation authorizing SCS would be desirable, but it is not required. Still, implementing SCS anywhere in the U.S. will require at least tacit acceptance from the federal government.

Aside from the legal issues regarding SCS, support among stakeholders is critical. The 30-year success of SCS in Europe, Canada, and Australia has been dependent on local support and cooperation among key stakeholders, including health workers, law enforcement, businesses and commercial interests, and advocates. In most cases, champions from academia, medicine, and sometimes government played a key role.⁶⁹

In Sydney, local residents and business operators have perceived significant improvements in public nuisance indicators (e.g., reduced publicly discarded injecting equipment and fewer reports of public injecting) since the opening of the MSIC and are cognizant of both the public health and public order benefits.⁷⁰ In a survey conducted among neighborhood residents and business owners, the proportion who agreed with

the establishment of the King's Cross MSIC increased steadily from 2000 (before the MSIC opened) to 2010, from 68% to 78% and 58% to 70%, respectively.⁷¹

Are SCS cost-effective?

While the efficacy of SCS in improving health outcomes among participants and reducing public order nuisances has been well demonstrated, the savings associated with averted HIV and other drug-related medical costs must still be sufficient to offset operating costs. In the case of Insite, a number of studies have shown that the benefits far exceed the costs, even using conservative estimates of efficacy.^{72,73} A 2010 study concluded that benefits surpass \$6 million per year, after accounting for

The evidence is clear that supervised consumption services are a remarkably effective and cost-effective approach to improving the lives of people who use drugs and the health and security of the communities in which they live.

program costs.⁷⁴ It is important to note that because all of these studies measure only a limited number of variables, usually HIV infection and overdose fatalities, they do not account for other outcomes that are harder to judge monetarily, including reductions in public drug use, improvements in public order, or increased uptake into detox or opioid substitution treatment.⁷⁵

Conclusion: The time for SCS is now

With the capacity to reach and maintain contact with PWUD, reduce and prevent adverse health outcomes including overdose fatalities, facilitate entry into addiction treatment or medical care, and diminish the consequences of public drug use, supervised consumption services are an important component of a comprehensive harm reduction strategy. Local and state governments should actively explore the implementation of SCS to complement existing drug prevention and treatment interventions, in consultation with stakeholders, including PWUD, affected communities and businesses, healthcare and addiction treatment professionals, and law enforcement. The evidence is clear that supervised consumption services are a remarkably effective and cost-effective approach to improving the lives of people who use drugs and the health and security of the communities in which they live.

This brief was prepared by Derek Hodel.

REFERENCES

1. CDC. HIV Surveillance Report, 2014 (vol 26). Available at: <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html> (accessed October 13, 2016).
2. Rudd RA, Aleshire N, Zibbell JE, Gladden RM. Increases in drug and opioid overdose deaths – United States, 2000-2014. *MMWR Morb Mortal Wkly Rep*, 2016;64/50:1378-82.
3. CDC. HIV Surveillance Report, 2014 (vol 26). Available at: <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html> (accessed October 13, 2016).
4. Nguyen TQ, Weir BW, Pinkerton SD, Holtgrave D. (July 23, 2012). Syringe exchange in the United States: a national level economic evaluation of hypothetical increases in investment. *AIDS Behav*, 2014;18/11:2144-55.
5. CDC. Surveillance for Viral Hepatitis – United States, 2014 (revised Sep 2016). Available at: <http://www.cdc.gov/hepatitis/statistics/2014surveillance/index.htm> (accessed October 13, 2016).
6. Rudd RA, Aleshire N, Zibbell JE, Gladden RM. Increases in drug and opioid overdose deaths – United States, 2000-2014. *MMWR Morb Mortal Wkly Rep*, 2016;64/50:1378-82.
7. Jones CM, Logan J, Galdden RM Bohm MK. Vital signs: demographic and substance use trends among heroin users – United States, 2002-2013. *MMWR Morb Mortal Wkly Rep*, 2015;64:719-25.
8. Cicero TJ, Ellis MS, Surratt HL, Kurtz SP. The changing face of heroin use in the United States: a restrospective analysis of the past fifty years. *JAMA Psychiatry*, 2014;71:821-6.
9. Rudd RA, Aleshire N, Zibbell JE, Gladden RM. Increases in drug and opioid overdose deaths – United States, 2000-2014. *MMWR Morb Mortal Wkly Rep*, 2016;64/50:1378-82.
10. Kinner S, Milloy MJ, Wood E, Qi J, Zhang R, Kerr T. Incidence and risk factors for non-fatal overdose among a cohort of recently incarcerated illicit drug users. *Addictive Behaviors*, 2012; 37/6: 691-696.
11. Darke S, Mattick RP, Degenhardt L. The ratio of non-fatal to fatal heroin overdose. *Addiction*, 2003; 98:1169-1171.
12. Warner-Smith M, Darke S, Day C. Morbidity associated with non-fatal heroin overdose. *Addiction*, 2002; 97:963-967.
13. Conrad C, Bradley HM, Broz D et al. Community outbreak of HIV infection linked to injection drug use of oxymorphone – Indiana, 2015. *MMWR Morb Mortal Wkly Rep*, 2015;64/16:443-444.
14. Yaffe-Bellany D, Bass D. 16 overdoses, two dead in six hours in New Haven. *The Connecticut Mirror* [website], June 24, 2016. Available at: <http://ctmirror.org/2016/06/24/16-overdoses-two-dead-in-six-hours-in-new-haven/> (accessed October 11, 2016).
15. Ingraham C. The latest overdose outbreak shows just how dangerous the heroin epidemic has gotten. *The Washington Post* [website], August 17, 2016. Available at: <https://www.washingtonpost.com/news/wonk/wp/2016/08/17/the-latest-overdose-outbreak-shows-just-how-dangerous-the-heroin-epidemic-has-gotten/> (accessed October 11, 2016).
16. Mettler K. 'This is unprecedented': 174 heroin overdoses in 6 days in Cincinnati. *The Washington Post* [website], August 29, 2016. Available at: <https://www.washingtonpost.com/news/morning-mix/wp/2016/08/29/this-is-unprecedented-174-heroin-overdoses-in-6-days-in-cincinnati/> (accessed October 11, 2016).
17. Karimi F. 21 heroin overdoses reported in Ohio in a day as state battles epidemic. CNN [website], September 12, 2016. Available at: <http://www.cnn.com/2016/09/11/health/akron-ohio-overdose-deaths/> (accessed October 11, 2016).
18. Alternatives to public injecting. *Harm Reduction Coalition*, 2016. Available at: <http://harmreduction.org/wp-content/uploads/2016/05/Alternatives-to-Public-Injection-report.pdf> (accessed October 14, 2016).
19. Seelye KQ. "Heroin epidemic increasingly seeps into public view." *The New York Times*, March 6, 2016. Available at: <http://www.nytimes.com/2016/03/07/us/heroin-epidemic-increasingly-seeps-into-public-view.html> (accessed November 18, 2016).
20. Research on supervised injection facilities: a review of the literature. *Supervised Injection Facilities for a Safer NYC (SIFNYC)*, 2016. Available at: <http://sifnyc.org/wp-content/uploads/2015/09/SIF-NYC-Research-Brief.pdf> (accessed October 13, 2016).
21. Potier C et al. Supervised injection services: what has been demonstrated? A systematic literature review. *Drug Alcohol Depend*, 2014; 145:48-68.
22. British Columbia Centre for Excellence in HIV/AIDS. Findings from the evaluation of Vancouver's pilot medically supervised safer injection facility – Insite, revised June 2009. Available at: <http://www.cfenet.ubc.ca/publications/findings-evaluation-vancouver-pilot-medically-supervised-safer-injection-facility> (accessed October 11, 2016).
23. Hedrich D. European report on drug consumption rooms. *European Monitoring Center for Drugs and Drug Addiction*, 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption_rooms_report.pdf (accessed October 13, 2016).
24. Kerr T, Tyndall MW, Lai C, Montaner JSG, Wood E. Drug related overdoses within a medically supervised safer injection facility. *Int'l J Drug Policy*, 2006; 17/5:436-41.
25. Marshall BD, Milloy MJ, Wood E, Mantaner JS, Kerr T. Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study. *Lancet*, 2011; 377/9775: 1429-37.
26. 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;105:676-83.
27. Milloy MJ, Wood E. Emerging role of supervised injecting facilities in human immunodeficiency virus prevention. *Addiction*, 2009;104/4: 620-1.
28. Hagan H, Pouget ER, Des Jarlais DC. A systematic review and meta-analysis of interventions to prevent hepatitis C virus infection in people who inject drugs. *J Infect Dis*, 2011; 204/1: 74-83.
29. Kerr T, Tyndall M, Li K, Montaner J, Wood E. Safer injection facility use and syringe sharing in injection drug users (letter). *Lancet*, 2005; 366:316-18.
30. World Health Organization. (2004). Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among injecting drug users. Available at: <http://www.unodc.org/documents/balticstates/Library/NSP/EffectivenessNSP.pdf> (accessed November 3, 2016).
31. Des Jarlais DC, Marmor M, Paone D et al. HIV incidence among inject–ing drug users in New York City syringe exchange programs. *Lancet*, 1996;348:987-91.
32. Gibson DR, Flynn NM, Perales D. Effectiveness of syringe exchange programs in reducing HIV risk behavior and HIV seroconversion among injecting drug users. *AIDS*, 2001;15:1329-1341.
33. Des Jarlais DC, Perlis T, Arasteh K, Torian LV et al. Reductions in hepatitis C virus and HIV infections among injecting drug users in New York City, 1990-2001. *AIDS*, 2005;19 (suppl 3):S20-S25.
34. Des Jarlais DC, Hagan H, Friedman SR et al. Maintaining low HIV seroprevalence in populations of injecting drug users. *JAMA*, 1995;274:12726-1231.
35. Wood E, Kerr T, Stoltz J et al. Prevalence and correlates of hepatitis C infection among users of North America's first medically supervised safer injection facility. *Public Health*, 2005;119: 1111-1115.
36. Hedrich D. European report on drug consumption rooms. *European Monitoring Center for Drugs and Drug Addiction*, 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption_rooms_report.pdf (accessed October 13, 2016).
37. Wood E, Tyndall MW, Li K et al. Do supervised injecting facilities attract higher-risk injection drug users? *Am J Prev Med*, 2005; 29/2:126-30.
38. Krüsi A, Small W, Wood E, Kerr T. An integrated supervised injection program within a care facility for HIV-positive individuals: a qualitative evaluation. *AIDS Care*, 2009; 21/5: 638-44.
39. Hedrich D. European report on drug consumption rooms. *European Monitoring Center for Drugs and Drug Addiction*, 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption_rooms_report.pdf (accessed October 13, 2016).

40. Stoltz JA, Wood E, Small W et al. Changes in injecting practices associated with the use of a medically supervised safer injection facility. *Journal of Public Health (Oxford)*, 2007; 29/1: 35-9.
41. Hedrich D. European report on drug consumption rooms. *European Monitoring Center for Drugs and Drug Addiction*, 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption_rooms_report.pdf (accessed October 13, 2016).
42. Wood E, Kerr T, Small W et al. Changes in public order after the opening of a medically supervised safer injecting facility for illicit injection drug users. *Can Med Assoc J*, 2004; 171/7:731-4.
43. Hedrich D. European report on drug consumption rooms. *European Monitoring Center for Drugs and Drug Addiction*, 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption_rooms_report.pdf (accessed October 13, 2016).
44. 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*, 2006; 102/6:916-19.
45. 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; 27/6:602-612.
46. DeBeck K, Kerr T, Bird L et al. Injection drug use cessation and use of North America's first medically supervised safe injecting facility. *Drug Alcohol Depen*, 2011; 113: 172-6.
47. Hedrich D. European report on drug consumption rooms. *European Monitoring Center for Drugs and Drug Addiction*, 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption_rooms_report.pdf (accessed October 13, 2016).
48. Kerr T, Tyndall MW, Zhang R, Lai C, Montaner JSG, Wood E. Circumstances of first injection among illicit drug users accessing a medically supervised safer injection facility. *Am J Public Health*, 2007;97/7:1228-1230.
49. Kerr T, Stoltz J, Tyndall M et al. Impact of a medically supervised safer injection facility on community drug use patterns: a before and after study. *BMJ*, 2006; 332:220.
50. Hedrich D. European report on drug consumption rooms. *European Monitoring Center for Drugs and Drug Addiction*, 2004. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption_rooms_report.pdf (accessed October 13, 2016).
51. Freeman I, Jones CG, Weatherburn DJ et al. The impact of the Sydney Medically Supervised Injecting Centre (MSIC) on crime. *Drug Alcohol Rev*, 2005;24: 173-84.
52. Fitzgerald J, Burgess M, Snowball L. Trends in property and illicit drug crime around the medically supervised injecting centre in Kings Cross: an update. *Crime and Justice Statistics: NSW, Bureau Brief*, 2010; 51:1-5. Available at: <http://www.bocsar.nsw.gov.au/Documents/BB/bb51.pdf> (accessed Oct 10, 2016).
53. Wood E, Tyndall MW, Lai C, Montaner JSG, 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; 4:1-4.
54. City of Ithaca, New York. The Ithaca Plan: A Public Health and Safety Approach to Drugs and Drug Policy. Available at: <http://www.cityofithaca.org/documentcenter/view/4224> (accessed November 8, 2016).
55. "What in the World. You want 'New York Values' Ted Cruz? [video]" *Fareed Zakaria GPS*, CNN, April 17, 2016. Available at: https://archive.org/details/CNNW_20160417_140000_Fareed_Zakaria_GPS#start/1680/end/1740 (accessed November 8, 2016).
56. "Heroin and opioid task force recommends strategy that focuses on prevention and increasing access to treatment [press release]," *King County Executive Dow Constantine*, September 15, 2016. Available at: <http://www.kingcounty.gov/elected/executive/constantine/News/release/2016/September/15-heroin-opioid-task-force-report.aspx> (accessed November 8, 2016).
57. Guttman, D. "Safe heroin injection sites get OK from King County health board." *The Seattle Times* [website], January 19, 2017. Available at: <http://www.seattletimes.com/seattle-news/health/safe-injection-sites-get-ok-from-king-county-health-board/> (accessed June 5, 2017).
58. "Assemblymember Linda B. Rosenthal Throws Support Behind Supervised Injection Facilities in New York: Rosenthal is working on legislation to establish SIFs [press release]," March 10, 2016. Available at: <http://assembly.state.ny.us/mem/Linda-B-Rosenthal/story/68860/> (accessed November 8, 2016).
59. Goldberg D, Pazmino G. "Council, de Blasio administration to study supervised injection facilities." *Politico* [website], September 28, 2016. Available at: <http://www.politico.com/states/new-york/city-hall/story/2016/09/council-de-blasio-administration-to-study-supervised-injection-facilities-105869> (accessed June 5, 2017).
60. Becker M. "A call for a safe place for addicts to inject themselves." *The Buffalo News* [website], May 4, 2017. Available at: <http://buffalonews.com/2017/05/04/call-safe-place-addicts-inject/> (accessed June 5, 2017).
61. "Groundbreaking supervised consumption services bill passes the California Assembly [press release]," June 2, 2017. Available at: <http://www.drugpolicy.org/news/2017/06/groundbreaking-supervised-consumption-services-bill-passes-california-assembly> (accessed June 5, 2017).
62. McCoy T. "Heroin kills thousands of people every year. Here's a controversial solution that could change that." *The Washington Post*, March 8, 2016. Available at: <https://www.washingtonpost.com/news/inspired-life/wp/2016/03/08/in-the-heart-of-americas-heroin-epidemic-a-surprising-solution-that-could-save-hundreds-of-lives/> (accessed November 8, 2016).
63. Foderaro LW. "Ithaca's Anti-Heroin Plan: Open a Site to Shoot Heroin." *The New York Times*, March 22, 2016. Available at: <http://www.nytimes.com/2016/03/23/nyregion/fighting-heroin-ithaca-looks-to-injection-centers.html> (accessed November 8, 2016).
64. "Massachusetts needs safe injection sites [editorial]." *The Boston Globe*, December 27, 2015. Available at: <https://www.bostonglobe.com/opinion/editorials/2015/12/27/safe-drug-injection-sites-needed-massachusetts/a4NYUT3jvNiPKQ2TIHwSKK/story.html> (accessed November 8, 2016).
65. "Bring heroin injection sites indoors, off the streets [editorial]." *The Seattle Times*, September 23, 2016. Available at: <http://www.seattletimes.com/opinion/editorials/bring-heroin-injection-sites-indoors-off-the-streets/> (accessed November 8, 2016).
66. "A safe place to inject drugs [editorial]." *The Baltimore Sun*, March 9, 2016. Available at: <http://www.baltimoresun.com/news/opinion/editorial/bs-ed-drugs-20160309-story.html> (accessed November 8, 2016).
67. AIDS United, June 6, 2016. "AIDS United statement on supervised injection facilities." Available at: <http://www.aidsunited.org/News/Default.aspx?id=1131> (accessed November 8, 2016).
68. Beletsky L, Davis CS, Anderson E, Burrell S. The law (and politics) of safe injection facilities in the United States. *Am J Public Health*, 2008;98/2:231-237.
69. Alternatives to public injecting. *Harm Reduction Coalition*, 2016. Available at: <http://harmreduction.org/wp-content/uploads/2016/05/Alternatives-to-Public-Injection-report.pdf> (accessed October 14, 2016).
70. Salmon AM, Thein HH, Kimber 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.
71. KPMG. NSW Health: Further evaluation of the medically supervised injecting centre during its extended trial period (2007-2011). Available at: <http://www.health.nsw.gov.au/mentalhealth/Documents/msic-fr.pdf> (accessed October 14, 2016).
72. Bayoumi AM, Zaric GS. The cost-effectiveness of Vancouver's supervised injection facility. *CMAJ*, 2008;179/11:1143-51.
73. Pinkerton SD. Is Vancouver Canada's supervised injection facility cost-saving? *Addiction*, 2010; 105/8:1429-36.
74. Anderson MA, Boyd N. A cost-benefit and cost-effectiveness analysis of Vancouver's supervised injection facility. *Int J Drug Policy*, 2010; 21:70-76.
75. Fairbairn N, Wood E. Commentary on Enns et al. (2016): supervised injection facilities as a cost-effective intervention. *Addiction*, 2016; 111:490-491.

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