

Summary of the Evidence for Needs-Based Syringe Distributions

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SHaRP: SUPPORTING HARM REDUCTION PROGRAMS

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Purpose

The purpose of this document is to assist syringe services programs (SSPs) in using peer-reviewed evidence to support needs-based syringe distribution. In recognition that many SSPs operate in contexts where more restrictive models are mandated, our intent is for SSPs to use these findings to build support within their organization, their community, or their state. Structural change is complex, and research evidence is just one component of an effective strategy that SSPs and their supporters may need to employ. To support SSPs as they engage stakeholders in these conversations, we have included a section on tips for developing messaging about needs-based syringe distribution.

Overview

Needs-based syringe distribution to people who inject drugs is an evidence-based best practice. The CDC and World Health Organization recommend that people who inject drugs (PWID) have sufficient sterile syringes to use a new one for every injection attempt. Research has unequivocally shown that achieving this is not feasible with a model that requires the return of used syringes to receive new syringes, otherwise known as a syringe exchange model. While needs-based syringe distribution cannot guarantee that people who inject drugs will use a sterile syringe for every injection, a summary of the research underlying this best practice is outlined below. Extensive literature reviews have been conducted and published elsewhere, and links to these resources are provided at the end of this document.

Definitions

Our definition of “needs-based syringe distribution” is a policy by which an SSP provides participants with the number of syringes they request during a syringe encounter.

Our definition of “sufficient syringes for every injection” is having enough syringes to use a sterile syringe for every injection, even in the event of circumstances like:

- A missed shot, resulting in further injection attempts
- Having to replace syringes that are confiscated or lost
- Distributing syringes to other people who inject drugs who do not have their own.

Researchers have used a variety of definitions to measure “syringe coverage”, which is defined as the ratio of injections to syringes provided to a person who injects drugs during a given time period. Detailed guidance on how to define and calculate syringe coverage on an individual level is described in detail [here](#).



Summary of the evidence

Syringe sharing

Needs-based distribution of syringes limits the risk of acquiring bloodborne infections like HIV and hepatitis C by reducing the need for syringe sharing. With an insufficient number of syringes, people may be compelled either to use a syringe someone else has already used or to lend a syringe they have used to someone else. While rinsing syringes with water or a cleaning solution may reduce the transmission risk of HIV or viral hepatitis in laboratory settings, in real-world conditions cleaning syringes has not been shown to have a measurable effect. These lifelong diseases can cause significant morbidity or mortality if untreated, are costly to treat, and can be transmitted to others if left undiagnosed and/or untreated, which may lead to an outbreak.

Syringe reuse

Needs-based distribution can limit the risk of acquiring skin and soft tissue infections by reducing the need for syringe reuse. Needles are intended for one-time use, and become blunt and barbed after a single puncture, leading to larger injection sites with longer healing times and greater exposure to bacteria. Used syringes also create environments for bacteria to grow and may introduce bacteria upon reuse. This can lead to a variety of negative health outcomes, such as skin and soft tissue infections like abscesses and cellulitis. Untreated, these infections can lead to subsequent and often life-threatening infections, including endocarditis (an infection of the lining of the heart) or sepsis (a bacterial infection of the blood).

Reusing needles accelerates vein damage and collapse. Damaged or collapsed veins can make injection more difficult, and result in the need for injecting into different body parts that can be more dangerous, such as the neck or groin. If people have difficulty hitting veins, they may choose to inject into skin (known as “skin popping”) or muscle (known as “muscling”) instead, both of which are associated with increased likelihood of abscesses and other wounds.

Secondary syringe distribution

Needs-based syringe access can also support secondary syringe distribution efforts, meaning SSP participants obtain enough syringes that they are able to provide syringes to those in their social network who may not be willing or able to access the SSP themselves. Because people within social networks often use drugs together, having enough sterile syringes to provide others can increase syringe coverage within social groups, reducing supply-sharing. Secondary distributors often provide their networks with more than syringes, offering support, education, and resources as peers to others who inject drugs, which offers an additional benefit.



Legality

Needs-based distribution is a safety measure in jurisdictions where possession of used syringes and/or small amounts of drugs is criminalized. This is especially true for areas where there are high levels of police harassment and/or syringe confiscation for people who inject drugs. After use, drug residue will remain inside the barrel and “dead space” of a syringe, meaning that compliance with a mandated syringe return policy may increase the likelihood of arrest. Participants may be hesitant to carry used syringes or to seek harm reduction services due to fear of police.

SSPs that offer needs-based distribution can provide participants with large sharps containers to ensure safe storage and disposal of larger quantities of used syringes as well as education on safe storage and disposal. Public health authorities can champion harm reduction services by exploring avenues for policy change and discretionary enforcement.

Engagement

A needs-based distribution model supports participant engagement in SSPs and supplemental healthcare services. People who use drugs experience significant discrimination in healthcare environments; providers do not always listen to self-identified patient needs. Even when efforts are made to welcome participants, programs that operate with a one-for-one syringe exchange or limited distribution model may not be able to meet a participant’s self-identified needs, while programs that operate on a needs-based distribution model ensure their participants can receive the care they are seeking. Meeting participants’ self-identified needs improves rapport and the likelihood a participant will return for a subsequent visit.

Safe syringe disposal

Information about access to safe syringe disposal in various regions across the country is publicly available and can be found [here](#). However, people who obtain syringes from a safe source, such as an SSP or other harm reduction program, are more likely to safely dispose of used syringes. Research shows that communities with SSPs have relatively fewer improperly discarded syringes because they offer safe methods for disposal, including distribution of personal sharps containers.

Needlestick injury and prevention

Syringe litter is likely to occur in any community, regardless of the presence of a harm reduction program or SSP. This can be attributable to several factors, including criminalization of drug use, syringe source, and a lack of housing, as people living outdoors have limited storage options for their belongings, including their syringes.



Publicly discarded syringes may lead to community-acquired needlestick injury. Needlestick injury is defined as a puncture of the skin by a needle. Community-acquired needlestick injuries are distinct from occupational needlestick injuries. Community-acquired needlestick injuries usually result in minimal exposure to bloodborne infections. Residual blood in a syringe, if infectious, is often exposed to environmental conditions that may reduce the likelihood of efficient transmission. Further, community acquired needlestick injuries tend not engage the plunger of a syringe, thereby reducing the likelihood that the injured person would be exposed to blood.

Those who experience a needlestick injury of any sort should seek immediate medical care because they can be treated with hepatitis B vaccination if needed, as well as HIV post exposure prophylaxis (PEP). They can also be tested for HIV, hepatitis B, and hepatitis C after the potential exposure.

To date, there have been no documented HBV, HCV, or HIV infections due to a community-acquired needlestick injury.

Key messages

Talking about needs-based syringe distribution in an approachable way can be challenging because it may not be convincing for people who do not see the benefits of services for people who use drugs, and because it requires an understanding of complex structural factors that affect syringe litter.

Needs-based syringe distribution may come up most often with policy makers and funders, and less often with community members. For that reason, it may not be as important to use plain language when talking about needs-based distribution as some other topics, but it is always a good practice.

Regardless, it is important for supporters of syringe access to be familiar with evidence-based key messages and prepared to address concerns that may arise during these conversations. Some of the concerns about needs-based distribution overlap with commonly raised concerns about harm reduction which have been disproven, such as whether it will enable or encourage drug use, increase crime, or increase the presence of people who use drugs in a certain area. Numerous fact sheets support programs in thinking through their own overarching harm reduction talking points¹.

General tips

Use positive framing

Develop key messages using positive framing: rather than saying what needs-based syringe distribution will *not* do (“needs-based syringe distribution does not lead to increased syringe litter”), say what it *will* do (“needs-based syringe distribution helps to ensure participant needs are met while providing safe disposal education and sharps disposal boxes”). This avoids a defensive stance that can lead to conflict.

¹ Examples include fact sheets developed and released by [Save Lives Oregon](#), [Indiana Recovery Alliance](#), [AIDS United](#), and [Drug Policy Alliance](#).



Consider the framing of this statement: *“needs-based access to syringes ensures program participants don’t have to reuse or share syringes while still ensuring they can safely dispose of their used syringes.”* The statement is rooted in the evidence and does not assume there will be opposition.

Meet people where they are

The possibility of a needlestick injury is an emotional topic, which requires engagement on a less scientific level. When the topic of needlestick injury comes up, we recommend responding with empathy for the concern and utilizing active listening skills to align around shared values.

For example, if someone shares a fear that their child might be stuck by a needle at a local playground, try paraphrasing what they are saying and share that your program also has a goal of improving public safety, providing examples as applicable of how your program promotes syringe disposal (e.g. local cleanups, offering sharps boxes, etc.). At times, people may share that they do not know what to do if they encounter a publicly discarded syringe. While providing instructions for safe pickup and handling of discarded syringes similar to [these](#) may or may not be effective, offering resources is another important way to demonstrate investment in a solution.



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