

# Syringe Access Programs

## Executive Summary

From 2001 to 2015, the number of opioid-related hospitalizations and emergency room visits in Missouri more than doubled, indicating that the use of injection drugs such as heroin and fentanyl has risen drastically.<sup>1</sup> This development has put individuals who use injection drugs at increased risk of contracting blood borne infections, such as HIV or hepatitis C, through the use of contaminated syringes. While surveillance of injection drug-related infectious diseases is difficult, the Centers for Disease Control and Prevention has designated Missouri as a state with significant risk of outbreaks of hepatitis C or HIV due to injection drug use. As such, they have issued a determination of need for syringe access programs in the state.<sup>2</sup> [SB 690](#) and [HB 1844](#), filed in 2022, would allow syringe access programs to operate in Missouri. These programs must register with the Department of Health and Senior Services in order to avoid violating laws prohibiting the manufacture, distribution, delivery, or sale of drug paraphernalia. New exchanges would be prohibited from operating within 500 feet of a school building.<sup>3</sup>

## Science Highlights

- Syringe access programs (**SAPs**) **provide sterile syringes** to people who use injection drugs.
- These programs have been shown to **decrease the spread of blood borne infections, such as HIV and hepatitis C**, and reduce unsafe disposal of contaminated syringes.
- Because syringe access programs may remove barriers to using injection drugs, the programs are **more effective at reducing morbidity and mortality when implemented in conjunction with other interventions**, such as providing counseling and redirection to treatment programs.
- Access to SAPs may **increase entry into drug cessation programs**, which have been shown to increase the likelihood of ending drug use.

## Limitations

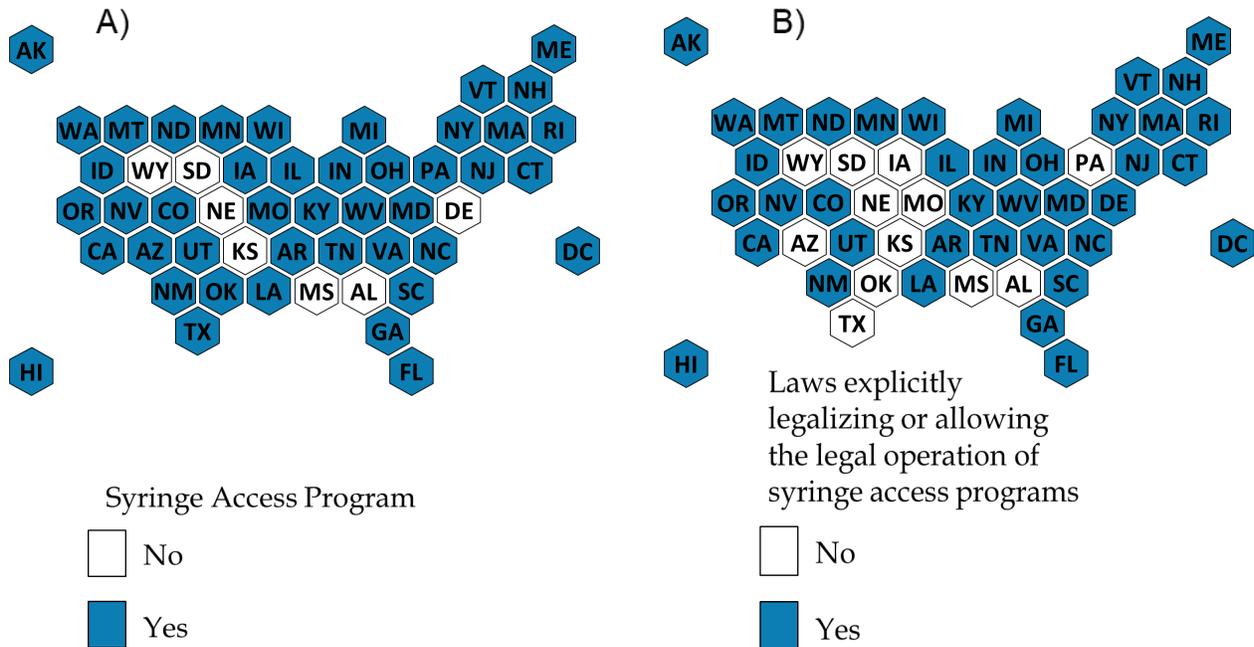
- There are relatively few studies of SAPs in nonurban areas, so the impacts of these programs may vary by location.
- To date, studies on SAPs rely on relatively small sample populations, so more research is needed to understand their comprehensive effects.
- Many studies rely on self-report or tests of non-representative populations (for example, arrestees) to establish the effects of SAPs, so the results of implementing these programs are often difficult to determine.

# Research Background

## Syringe Access Programs

Syringe access programs (SAPs) are public health interventions designed to decrease transmission rates of blood borne infections between people who use injection drugs. Through these programs, people who use injection drugs may legally and safely dispose of their used syringes and also receive unused, sterile syringes. Since syringes are classified as drug paraphernalia in Missouri, they can be difficult to obtain, leading to re-use or sharing of contaminated syringes (i.e., needles that have been used to inject drugs). As such, SAPs are intended to take contaminated syringes out of circulation in order to decrease the spread of infectious diseases associated with their use.

Some SAPs may provide comprehensive services, such as counseling, infection testing, and referral to substance abuse programs or other health services. As of January 2022, SAPs were operating in 43 states as well as Washington, D.C and Puerto Rico (Figure 1).<sup>4</sup> However, only 38 states have officially legalized or allow SAP operation consistent with existing law.<sup>5</sup> Though program design varies between localities, SAPs have consistently been shown to decrease transmission of blood borne infections and reduce the incidence of other public health risks, such as improper disposal of used syringes.<sup>6</sup>



**Figure 1. States with a Syringe Access Program (SAP).** A) Map of states (represented as hexagons) with colors related to whether a state has a syringe access program (blue) or are prohibited (white). B) Map illustrating whether a state has laws legalizing (blue) or left SAPs unaddressed (white). Map made with PresentationGo.com with data from the Kaiser Family Foundation.<sup>4,5</sup>

## **Public Health Benefits of SAPs**

Approximately 13,400 Missourians are living with HIV, with about 500 new infections reported each year.<sup>7</sup> About 80,000 Missourians are estimated to be living with chronic hepatitis C viral infection, which can cause liver damage and death.<sup>8</sup> Due to the difficulty of infectious disease surveillance, these numbers may actually be underestimates. A 2020 estimate determined that several Missouri counties (including Bates, Cedar, St. Francois, Hickory, Wayne, Ozark, Wright, Iron, Madison, Reynold, Ripley, Crawford, and Washington) were among the 220 U.S. counties most at-risk for an outbreak of either HIV or hepatitis C given the combined high prevalence of disease and injection drug-use.<sup>9</sup> Each of these diseases disproportionately affect particular populations, pointing to wider health disparities in the state. Specifically, Black and Hispanic Missourians are newly diagnosed with HIV at rates that are ~9x and ~3.5x the rate of White populations, respectively. Males are also diagnosed at a rate that is ~4x the rate for females. Geographically, new HIV diagnoses are concentrated disproportionately in St. Louis and Kansas City.<sup>7</sup> Data regarding populations living with hepatitis are less complete, but the most recent estimate of infection rates indicates that Black Missourians are ~2x as likely to contract hepatitis than White individuals, with new cases concentrated among younger males.<sup>8</sup>

Additionally, during the COVID-19 pandemic, injection drug users who did not have access to integrated treatment-syringe exchange facilities have reported higher syringe reuse, higher risky injection behavior, lower access to buprenorphine treatment, and greater reductions in access to syringe-service programs.<sup>10</sup> For additional information on the effects of COVID-19 on substance use, please see the Science Note : [COVID-19, Mental Health, & Substance Abuse](#).

To mitigate further spread of these infections, state governments across the country have authorized SAPs to operate as legal suppliers of clean syringes. There is a wide scientific literature indicating that the creation of SAPs consistently results in decreased transmission of blood borne infectious diseases, with HIV transmission being reduced most significantly (national data suggest a decrease of 10-20% in new HIV diagnoses after SAP implementation).<sup>6,11</sup> This research indicates that, when SAPs are present, injection drug users decrease syringe-sharing behavior by 5-10% within the first six months of the program implementation and do not increase their drug injection frequency, leading to decreased infection transmission.<sup>12</sup>

Beyond reducing the spread of blood borne infections, SAPs have been associated with other community health benefits. In particular, there is evidence that SAPs lead to a decrease in improper syringe disposal (i.e., leaving loose contaminated needles in public spaces rather than in a designated disposal receptacle) in urban areas.<sup>13</sup> As a result, proponents argue that these programs reduce the likelihood of law enforcement needle-stick injuries from contaminated syringes.

## **Considerations Surrounding SAPs**

Researchers studying opioid use patterns have found that since SAPs remove barriers to syringe acquisition for injection drug users, these programs may be associated with higher opioid

mortality rates, particularly in rural and high poverty areas.<sup>6</sup> However, these unintended effects are mitigated when SAPs are implemented as comprehensive programs that provide additional resources such as counseling and redirection to treatment programs. Importantly, while SAPs alone have not been proven to increase the likelihood for cessation of drug use, use of SAPs may lead to increased participation in accompanying drug cessation programs, which are associated with ending drug use.<sup>14,15</sup> To date, nonurban SAPs are understudied, so there may be some variation in the effectiveness of SAPs depending on their geographic context.<sup>16</sup>

SAPs have also been shown to be cost effective in reducing health care costs by preventing HIV, viral hepatitis, and other infections; the estimated lifetime cost of treating one person living with HIV is more than \$450,000. SAPs have also been shown to reduce overdoses and deaths by training people, including community members, to recognize, and reverse opioid overdoses—many distribute “overdose rescue kits” for this purpose.<sup>17</sup> Under the Consolidated Appropriation Act of 2016, federal law permits use of funds from the Department of Health and Human Services to support syringe service programs, so long as health departments have demonstrated evidence that their jurisdiction is experiencing or at risk for significant increases in hepatitis infections or an HIV outbreak due to injection drug use.<sup>2</sup>

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