CATO
POLICY
ANALYSIS

June 7, 2022 Number 929

Drug Paraphernalia Laws Undermine Harm Reduction

To Reduce Overdoses and Disease, States Should Emulate Alaska

By Jeffrey A. Singer and Sophia Heimowitz

EXECUTIVE SUMMARY

Every state except Alaska has laws that criminalize the possession and/or sale of paraphernalia for the consumption of illicit drugs. State-level drug paraphernalia laws prevent people who use those drugs from accessing the means to reduce the risk of infection or overdose. This makes nonmedical drug use even more dangerous because the laws often prevent access to clean needles and syringes along with products to test drugs for deadly contaminants.

These laws are meant to discourage illicit drug use. Instead, they produce avoidable disease and death. Drug prohibition puts peaceful, voluntary drug users at risk of losing their liberty and often their lives. Paraphernalia laws similarly increase the risk that users will lose their lives.

Some states have amended their laws to permit harm-reduction programs and tools. For example, many states allow syringe services programs (also called SSPs or "needle exchange programs") to operate within narrowly defined parameters.

The goal of drug paraphernalia policy should be to save lives by reducing the risks of overdose and disease. This means removing government barriers to obtaining and distributing clean syringes and drug testing equipment. Because Alaska leaves residents free to purchase syringes and other paraphernalia in any quantity, anyone can operate an SSP and implement other harm-reduction measures. States should follow Alaska's lead by repealing their drug paraphernalia laws so that programs aimed at reducing overdoses and disease can proliferate and succeed.

DR. JEFFREY A. SINGER practices general surgery in Phoenix, Arizona, and is a senior fellow at the Cato Institute.
SOPHIA HEIMOWITZ is a public health researcher with a BA in public health from the University of Michigan.

INTRODUCTION

State-level drug paraphernalia laws prevent individuals from protecting themselves against many of the risks of using drugs obtained on the black market. Some paraphernalia laws deny drug users access to fentanyl test strips, a vital means of screening drugs for contamination with the dangerous opioid responsible for the great majority of opioid-related overdose deaths.[1] Several studies have found that if nonmedical drug users have access to fentanyl test strips, they are likely to use them to alter their drug use behavior, "including discarding their drug supply, using with someone else, and keep[ing] [the opioid overdose antidote] naloxone nearby."[2] Also, some paraphernalia laws restrict people from purchasing or possessing clean needles and syringes, increasing the risk of infection from sharing and reusing those items.

> "State-level drug paraphernalia laws prevent individuals from protecting themselves against many of the risks of using drugs obtained on the black market."

Drug paraphernalia laws also threaten to punish nonusers involved in harm reduction. People risk incarceration if they give out or obtain clean needles and syringes, test strips to check for dangerous additives or contaminants in drugs obtained on the black market, or materials to clean drug use equipment. Paraphernalia laws prevent governmental and nongovernmental organizations from creating syringe services programs (SSPs), also known as needle exchange programs.[3] SSPs reduce the spread of HIV, hepatitis, other blood-borne infectious diseases, and soft tissue infections. More recently, they have proven helpful in reducing drug overdoses.[4]

Federal law does not interfere with states operating or permitting privately run SSPs. However, many state drug paraphernalia laws prohibit these services. Some states carve out exceptions for SSPs in their drug paraphernalia laws, yet these exceptions often include restrictions on the number of SSPs allowed, restrictions on the entities that may operate them, and onerous conditions they must meet.[5] These impede the development and proliferation of SSPs.

Lawmakers and policymakers from across the political spectrum are increasingly recognizing and embracing harm-reduction strategies to reduce death and disease from illicit substance use.[6] Yet drug paraphernalia laws stand in the way of harm reduction, including harms that drug prohibition itself causes.[7] This paper examines which states most allow drug users to take precautions to reduce the risks of drug use and drug prohibition.

DRUG PARAPHERNALIA LAWS AND HARM REDUCTION

Federal and state laws prohibit or severely restrict access to equipment that can help people use drugs more safely. Federal laws prohibit transporting drug paraphernalia across state lines, whereas state laws focus on intrastate trafficking. Federal and state statutes vary in how and what they define as paraphernalia. Both federal and state paraphernalia laws obstruct private harm-reduction organizations that seek to save lives, but state paraphernalia laws have a more direct and deleterious effect on harm reduction.

Drug Paraphernalia Laws

Under the federal drug paraphernalia statute of the Controlled Substances Act, it is illegal to sell, transport through the mail, import, export, or transport across state lines "any equipment, product or material of any kind which is primarily intended or designed for use in manufacturing, compounding, converting, concealing, producing, processing, preparing, injecting, ingesting, inhaling, or otherwise introducing into the human body a controlled substance." Examples include pill presses, drug testing kits, test strips, glass and metal pipes used to smoke crack cocaine and methamphetamine, specialized glass products, scales, cone-shaped marijuana/hash pipes called "chillums," and even miniature spoons.[8]

States vary in what they define as drug paraphernalia. For example, Arizona prohibits possession, "with intent to use, drug paraphernalia to plant, propagate, cultivate, grow, harvest, manufacture, compound, convert, produce, process, prepare, test, analyze, pack, repack, store, contain, conceal, inject, ingest, inhale or otherwise introduce into the

human body a drug in violation of this chapter."[9] Illinois law specifies as prohibited paraphernalia "testing equipment intended to be used unlawfully in a private home for identifying or in analyzing the strength, effectiveness, or purity of controlled substances."[10]

"Many states prohibit fentanyl test strips, resulting in overdose deaths because the ban prevents people from determining what would be a nonlethal dose."

Simple possession of drug paraphernalia is not a federal crime. However, some state laws prohibit owning or possessing these items. In some instances, local police may check a pipe, hookah, or bong for residue. If they determine the possessor uses it to ingest an illicit substance, they may press charges against that individual. If they determine it was acquired legally for a legal purpose (e.g., a syringe to inject insulin for diabetes), they will let them keep it. Unfortunately, many types of drug paraphernalia that states restrict or prohibit are also important harm-reduction tools.

Fentanyl Test Strips, Harm Reduction, and Paraphernalia Laws

Fentanyl test strips save lives by enabling drug users to detect the presence of this dangerous opioid in other drugs, such as heroin and cocaine.[11] Researchers claim the tests strips are highly accurate and can detect up to 10 analogs of fentanyl, such as 2-flourofentanyl and crotonylfentanyl.[12] Users who detect fentanyl typically discard the contaminated drugs, use smaller amounts, and/or take the drug more slowly, thereby reducing the risk of overdose.[13]

Many states prohibit fentanyl test strips as paraphernalia because individuals use them to test or analyze an illicit drug. As a result, people end up overdosing because the ban prevents them from determining what would be a nonlethal dose.

Some states are beginning to correct this deadly mistake. In May 2021, Arizona amended its drug paraphernalia law to exclude fentanyl test strips from its definition of paraphernalia.[14] Pennsylvania's attorney general and Philadelphia's district attorney announced that they will not prosecute people arrested for possessing fentanyl test strips, which are illegal in the state. Philadelphia Mayor Jim Kenney issued an executive order telling police to not arrest people who possess fentanyl test strips.[15]

SSPs, Harm Reduction, and Paraphernalia Laws

Decades of evidence on SSPs show that they reduce drug overdoses and the spread of HIV, hepatitis, and other bloodborne infectious diseases. They also promote and facilitate treatment and rehabilitation of participants who suffer from substance use disorder.[16] These programs distribute clean needles and syringes to intravenous (IV) drug users. Many programs also distribute fentanyl test strips along with bleach and other materials to clean syringes and needles. Some offer HIV and hepatitis blood tests and refer for treatment those who test positive.

The first such program arose in the Netherlands in the 1970s in response to an outbreak of hepatitis B. The idea gained acceptance in other countries with the advent of the AIDS pandemic. Congress banned federal funding of SSPs in 1988 in response to concerns that they encourage or enable IV drug use. In the hope that SSPs would mitigate the rise in HIV and hepatitis cases among IV drug users, Congress lifted the ban in 2015.[17] The oldest continuous SSP in the United States started operating in Tacoma, Washington, in 1988.[18] By the end of 2018, SSPs were operating in 39 states plus the District of Columbia and Puerto Rico.[19] In many states, SSPs are in community health clinics that also offer referral for addiction therapy and counseling. To increase outreach, some programs operate mobile vans or delivery services or have centers along pedestrian routes.[20] In recent years, SSPs have been distributing free kits of naloxone, the antidote to opioid overdose.[21]

Seven federally funded studies conducted between 1991 and 1997 found that SSPs reduce the risk of HIV infections among intravenous drug users and their partners.[22] A 2013 systematic review conducted by the U.S. Centers for Disease Control and Prevention (CDC) confirmed that SSPs decrease the prevalence of HIV and hepatitis C infections.[23] A 2014 systematic review and meta-analysis of 12 studies comprising 12,000

person-years found that SSPs coincided with a 34 percent reduction in the rate of HIV transmission, including a 58 percent reduction among the six studies that were rated "higher quality" on the Newcastle–Ottawa Scale.[24]

The CDC endorses and promotes SSPs with guidance and, in some cases, provides financial assistance for these facilities to local jurisdictions.[25] The World Health Organization, the American Medical Association, the American Public Health Association, the American Society of Addiction Medicine, and the American Psychiatric Association all support and encourage SSPs. The Substance Abuse and Mental Health Services Administration and the National Academies of Sciences, Engineering, and Medicine endorse SSPs. Former U.S. surgeon general Jerome Adams, who served during the Trump administration, gave many public presentations in support of SSPs.[26]

Local law enforcement community members increasingly recognize that these programs can decrease the spread of communicable and infectious disease as well as protect first responders from accidental injury from contaminated needles.[27] On December 7, 2021, the Substance Abuse and Mental Health Services Administration announced a new $30 million grant program to aid community-based harm-reduction programs, including SSPs.[28] With the announcement, the White House's Office of National Drug Control Policy released the Model Syringe Services Program Act to assist state lawmakers seeking to expand the availability of SSPs.[29] The model legislation would eliminate many state restrictions that reduce SSP efficacy.

Despite this broad support and convincing evidence, many states inhibit the private sector from creating SSPs.[30] In a 2009 national survey, a significant number of programs reported that police confiscate syringes and even arrest clients on their way to and from syringe services centers. Confiscation and arrests occurred more than four times more frequently in areas where SSP clients were predominantly people of color.[31]

While some SSPs receive government funding, many do not. The Grand Rapids Red Project (Michigan), Challenges Inc. (South Carolina), and Shot in the Dark (Arizona) are examples of successful and long-standing SSPs that operate solely with private funds.[32] Voluntary private funding has advantages over government. Many object to government funding on the grounds that their tax dollars might enable illicit substance use and for other reasons. Such groups use the political process to impose funding conditions that limit SSPs' effectiveness and to demand cuts that imperil their sustainability. After needle-sharing by IV drug users caused Scott County, Indiana, to suffer an HIV outbreak in 2015, for example, then governor Mike Pence authorized the state to create Indiana's first SSP as an emergency measure. Health officials credited the program with a dramatic drop in the number of HIV cases. In 2021, however, Scott County commissioners voted to end the program. According to one report, commissioners who voted to end the program "say they can't live with a program that makes it easier to abuse drugs."[33] By contrast, SSPs that receive only private funds have more stability and flexibility to develop innovative ways to protect drug users without imposing a cost on taxpayers.

"Syringe service programs can decrease the spread of communicable and infectious disease as well as protect first responders from accidental injury from contaminated needles."

Critics view SSPs as flouting the law, express discomfort with what they see as government sanctioning of intravenous drug use and other illegal activities, and argue that these sites do little to deter illegal drug use. They also claim that even if SSPs save lives, taxpayers should not finance them in a system of limited government—especially if private groups are willing to organize SSPs. (Presumably, these critics likewise oppose limited government prosecuting the operators of these private SSPs.) Supporters, on the other hand, claim SSPs not only save lives but also public funds by reducing the spread of communicable and infectious diseases.

The empirical evidence shows that SSPs save lives by reducing the spread of deadly and infectious diseases without increasing illicit drug use or crime.[34] Furthermore, SSPs reduce disease among intravenous drug users' intimate contacts who are not engaging in illicit drug use. SSPs also might possibly reduce disease spread to first responders. With the advent of state laws facilitating the wider distribution of fentanyl test strips and naloxone, studies suggest that SSPs might reduce overdose deaths as well.[35]

COMPARING STATE PARAPHERNALIA LAWS

The 50 states and the District of Columbia have diverse drug paraphernalia policies. They differ on how they define drug paraphernalia and what they ban. Some state paraphernalia laws are more detailed.

Alaska has no laws restricting drug paraphernalia, which leaves residents with maximum freedom to design syringe exchange programs and other harm-reduction initiatives. Of the other 49 states and the District of Columbia, 40 define drug paraphernalia to include syringes and 45 include testing materials. Thirty-five states and the District of Columbia limit both syringes and testing equipment. Four states limit syringes but not testing materials, whereas nine states limit purity testing equipment but not syringes. Only South Carolina excludes both syringes and testing materials from its definitions of drug paraphernalia, allowing SSPs to operate without restrictions. While South Carolinian law restricts the sale of needles and syringes, the law doesn't affect SSPs, which give needles and syringes away rather than sell them.[36] Montana prohibits both syringes and fentanyl test strips as illegal paraphernalia yet specifically exempts SSPs from the ban.[37] Virginia places even more obstacles in the way of harm reduction by barring syringes and fentanyl test strips as illegal paraphernalia. While the state exempts employees and clients of SSPs from the ban, the Virginia health commissioner must approve all SSP operators.[38] (See Appendix A.)

State Paraphernalia Laws

State definitions of paraphernalia commonly include kits to develop, grow, or otherwise manufacture controlled substances; blenders, bowls, and mixing devices that compound controlled substances; scales and balances that weigh or measure controlled substances; and various vaguely defined items that can potentially facilitate illicit drug use. Instructions on how to determine whether an item qualifies as drug paraphernalia often accompany these statutory definitions. These instructions become necessary because many of the listed items have legal uses. Some states, like Florida, include among the list of potential paraphernalia commonplace objects, such as two-liter soda bottles and duct tape.

States that explicitly authorize SSPs make exceptions to the definitions of paraphernalia to exclude syringes and other items if SSPs provide them. Other states remove syringes from the definition entirely, and still others specifically remove fentanyl test strips from the definition. These exceptions and workarounds can be confusing.

> "Drug paraphernalia laws often burden patients who need needles and syringes for medical use."

Figure 1 compares the 50 states and the District of Columbia with respect to drug paraphernalia laws and whether the definition of drug paraphernalia includes syringes and/or fentanyl test strips. Most states do not specifically cite fentanyl test strips but rather include as paraphernalia any materials that can test the purity of controlled substances. Appendix A provides more detail.

Public Access to Needles and Syringes

Needles and syringes are necessary to treat several routine medical conditions, such as injecting insulin to treat diabetes. People can legally obtain needles and syringes through pharmacies, though some states require prescriptions. Other states let people buy syringes only on a "behind the counter" basis (i.e., by asking a pharmacist or a pharmacist's assistant or technician, rather than off the shelf). State policies differ regarding public access to needles and syringes independent of their SSP policies. Figure 2 shows the states that require a prescription to purchase syringes. Appendix B compares how easy it is for people in the 50 states and the District of Columbia to purchase needles and syringes.

Drug paraphernalia laws often burden patients who need needles and syringes for medical use. Four states—Connecticut, Minnesota, New Jersey, and New York—require a medical prescription to purchase more than 10 syringes at a time. Tennessee and Virginia require consumers to provide pharmacists proof of medical need. Kentucky requires customers to offer a reason for the purchase and how they intend to use the syringes before a pharmacist may sell them. Such restrictions limiting the availability

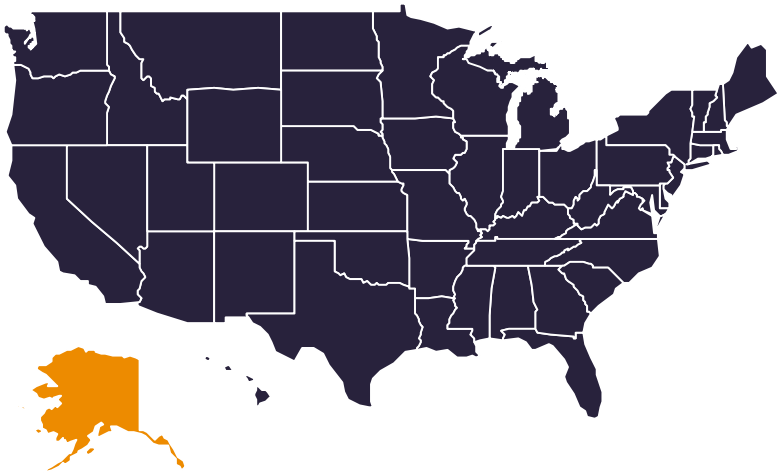
Figure 1

Some drug paraphernalia laws in the United States also include syringes and fentanyl test strips in their definitions, 2021

No drug paraphernalia laws

Has drug paraphernalia laws

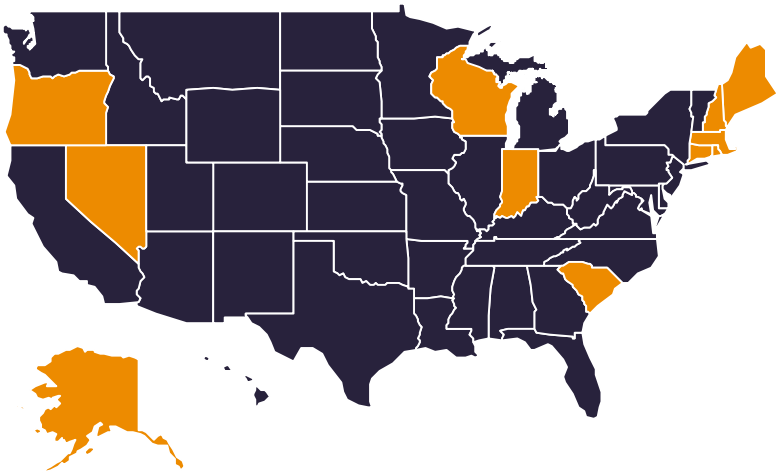
No	Yes
1	**49 (plus DC)**
AK	AL, AZ, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY



Paraphernalia definition excludes syringes

Paraphernalia definition includes syringes

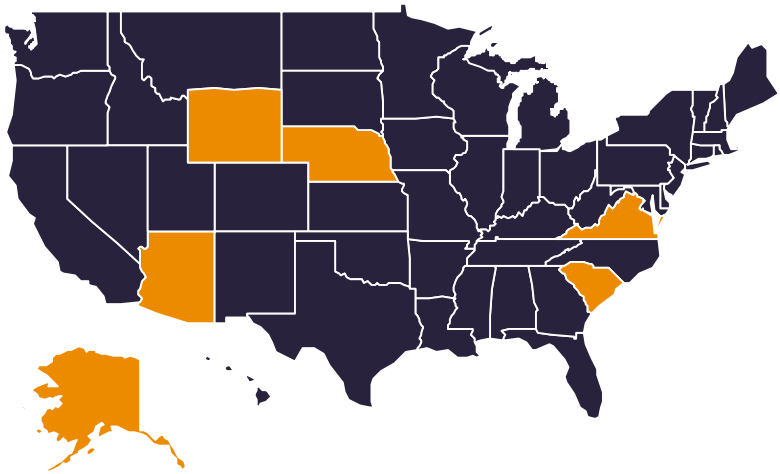
No	Yes
11	**39 (plus DC)**
AK, CT, IN, ME, MA, NV, NH, OR, RI, SC, WI	AL, AZ, AR, CA, CO, DE, DC, FL, GA, HI, IL, IN, IA, KS, KY, LA, MD, MI, MN, MS, MO, MT, NE, NJ, NM, NY, NC, ND, OH, OK, PA, SD, TN, TX, UT, VT, VA, WA, WV, WY



Paraphernalia definition excludes fentanyl test strips

Paraphernalia definition includes fentanyl test strips

No	Yes
6	**44 (plus DC)**
AK, AZ, NE, SC, VA, WY	AL, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SD, TN, TX, UT, VT, WA, WV, WI



Source: See Appendices A, B, and C.

of sterile syringes increase intravenous drug users' risk of blood-borne infectious diseases. When government blocks access to new (sterile) hypodermic needles and syringes, people end up reusing and sharing old needles and syringes. This practice leads to the transmission of HIV, hepatitis C, and other diseases.

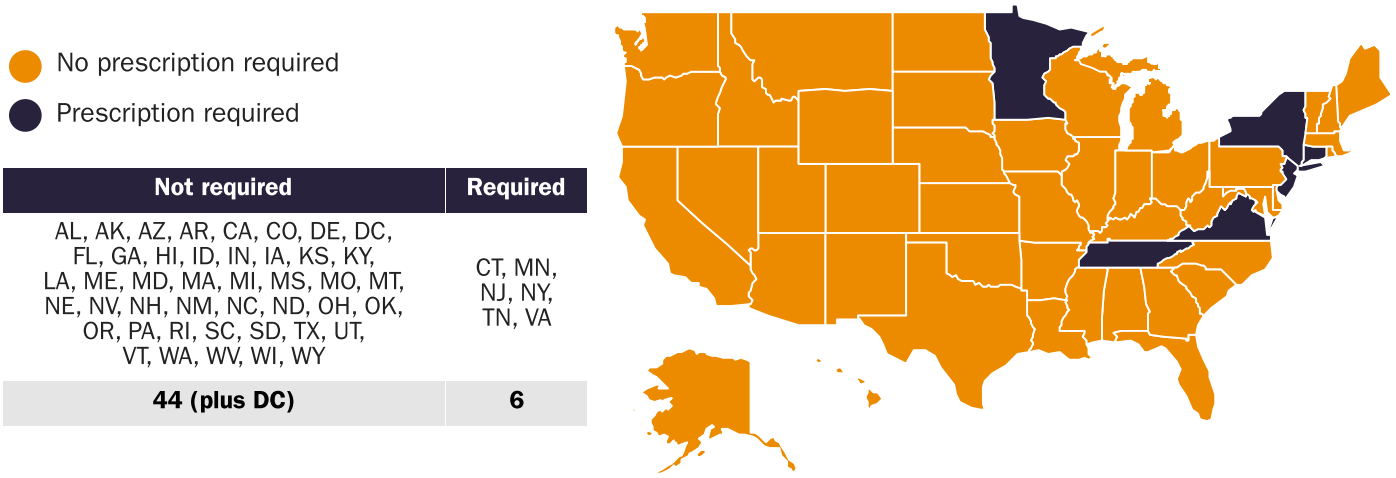
Syringe access restrictions also burden pharmacists. Georgia, Ohio, Oklahoma, and Washington threaten pharmacists with fines and/or misdemeanor charges unless they can establish that they had a "reasonable expectation" that purchasers will use syringes for legal purposes. Such laws discourage syringe sales.[39] One study found such regulations caused pharmacists to be less willing to sell syringes to people of color.[40]

SSP Legal Status

Privately funded SSPs exist in most states, including states where they are illegal. States adopt one of three approaches to SSPs: explicit authorization; tacit permission resulting from the absence of drug paraphernalia laws (as is the case in Alaska); and prohibition, often by strictly applying paraphernalia laws. Figure 3 illustrates which states prohibit SSPs, which states explicitly authorize them, and which states permit them without explicitly authorizing them. Figure 3 also shows the legal status of SSPs operating in each state and the different restrictions on how SSPs may operate. Appendix C provides more detail.

Figure 2

Some states in the United States require a prescription for syringes, 2021

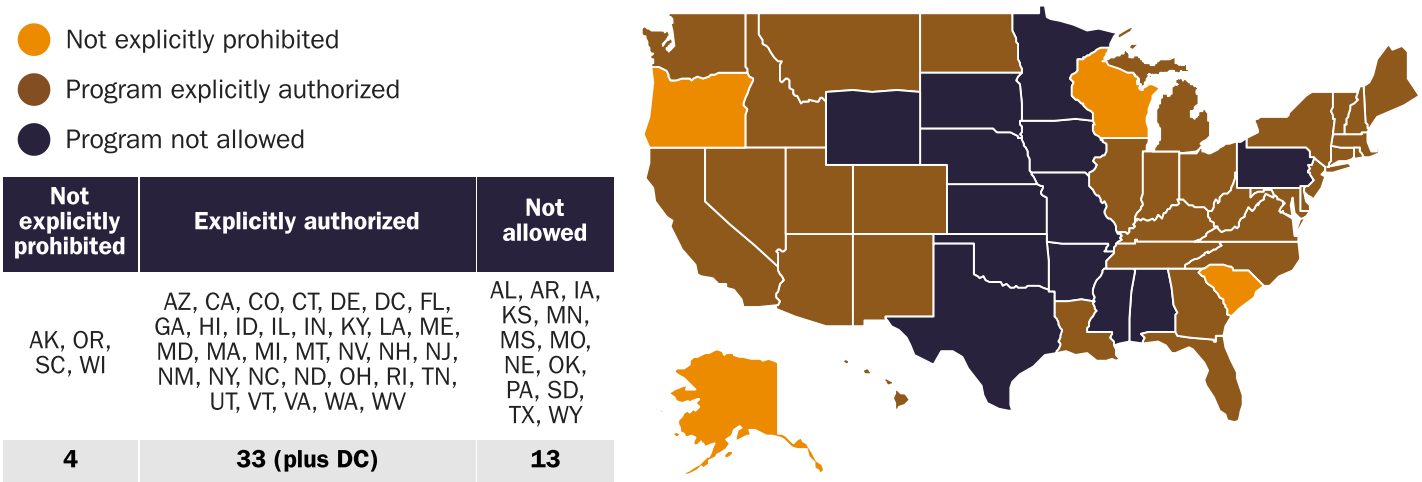


Not required	Required
AL, AK, AZ, AR, CA, CO, DE, DC, FL, GA, HI, ID, IN, IA, KS, KY, LA, ME, MD, MA, MI, MS, MO, MT, NE, NV, NH, NM, NC, ND, OH, OK, OR, PA, RI, SC, SD, TX, UT, VT, WA, WV, WI, WY	CT, MN, NJ, NY, TN, VA
44 (plus DC)	**6**

Source: See Appendices A, B, and C.

Figure 3

Some states in the United States offer syringe service programs, 2021



Not explicitly prohibited	Explicitly authorized	Not allowed
AK, OR, SC, WI	AZ, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, KY, LA, ME, MD, MA, MI, MT, NV, NH, NJ, NM, NY, NC, ND, OH, RI, TN, UT, VT, VA, WA, WV	AL, AR, IA, KS, MN, MS, MO, NE, OK, PA, SD, TX, WY
4	**33 (plus DC)**	**13**

Source: See Appendices A, B, and C.

States that legally authorize SSPs impose various restrictions on their structure and operation, as well as on state-level funding opportunities. Restrictions on how SSPs operate limit their scope, hamper their success, and work against the goal of reducing the spread of disease.[41] The North American Syringe Exchange Network compiles information on SSPs in most states, even states where they are illegal.[42] Generally, states that authorize syringe exchanges typically exclude syringes or testing materials that SSPs distribute from any limitations on such items. Authorizing SSPs through modifications to existing paraphernalia laws tends to result in burdensome conditions. For example, some states require a one-for-one syringe exchange with individual participants, where participants must return a used syringe to receive a new syringe. Other states require the total number of syringes distributed by an SSP to equal the total number received. It also puts the legal status of possessing a syringe in question, depending on where and how a person obtained it.[43] Police may assume that syringes they find on participants are illegal until the participant convinces the police the syringes were legally obtained.

"Restrictions on how syringe service programs operate limit their scope, hamper their success, and work against the goal of reducing the spread of disease."

States that authorize SSPs tend to place tight restrictions on how they operate or get their funding. Of the 34 states that explicitly authorize SSPs, 20 have regulations that reduce the scope, capacity, and effectiveness of SSPs. These regulations can take the form of one-for-one exchange requirements, either at the individual or program level. They can also require complicated program approval processes, have onerous data collection demands, and have narrow funding conditions.

Typically, a one-for-one requirement means the SSP must receive a used syringe from a client in exchange for every sterile syringe it gives out in the same transaction. Florida, Delaware, and Maine are among states that use this regulatory model. In New Mexico, a client may initially receive 30 syringes, after which all further transactions must be one-for-one exchanges. Arizona, Utah, and West Virginia all place similar restrictions on their SSPs. Distribution requirements limit the effectiveness of SSPs. Therefore, the CDC supports a need-based distribution method as opposed to strict exchanges.[44]

Arizona is the most recent state to authorize SSPs. The governor signed the bill into law in May 2021.[45] The legislative text states, "The number of needles and hypodermic syringes disposed of through a program shall be at least equivalent to the number of needles and hypodermic syringes distributed through the program." Commenting on the new law, Corey Davis, director of the Harm Reduction Legal Project at the Network for Public Health Law, said:

> The law doesn't require one-for-one at the level of the exchange, but it does require it at the level of the program. This would likely require SSPs to play games, like buying clean syringes and turning them in as used ones or trying to get nonclients (like diabetics) to bring their used syringes to the exchange. It [the legislation] also requires that a person [who police stop for syringe possession] claiming immunity verify that the syringe came from a program, which how the heck do you do that? But it's a step forward.[46]

Onerous regulatory approval procedures for SSPs are another way to limit the functions and scope of the programs. Eighteen states require SSPs to obtain direct approval from the state government. Six states limit those who can operate an SSP to a local health department or board of health and do not allow any private entities. Many states that allow nonprofits or other independent organizations to operate an SSP require extensive consultations with other government agencies before they grant approval. In Colorado and Ohio, the boards of health will not grant approval for a new SSP without consulting with law enforcement, district attorneys, substance use disorder treatment providers, people recovering from substance use disorder, nonprofit organizations, hepatitis C and HIV advocacy organizations, and members of the community. Other states also require consultation with local health departments and law enforcement.

Various regulations and restrictions limit the effectiveness of SSPs. Some states unnecessarily require SSPs

to collect personal information. California requires SSP participants to provide private information, such as "sexual behavior and history, including the participant's self-described sexual identity, number of sexual partners in the past 30 days or six months, number of sexual partners who were also intravenous drug users, frequency of condom use, and number of times sex was used in exchange for money or drugs." Though states promise to keep this information confidential, requiring SSPs to collect it further stigmatizes clients and may reduce participation. Some states prohibit SSPs to operate without government participation. Florida imposes a one-for-one syringe requirement that prohibits SSPs from issuing clean syringes to clients unless they surrender a used one.[47] Since many users no longer possess their used syringes, that regulation prevents SSPs from distributing many potentially life-saving clean syringes. Studies show that programs with one-for-one requirements are less effective in reducing HIV and hepatitis than those without the requirement.[48]

Policy Recommendations

Americans have long practiced harm reduction when it comes to other drugs, including drugs that once were illegal. With the end of alcohol prohibition in 1933, makers and sellers of alcohol in the legal market became accountable for the quality of their products. Labels on alcohol products inform consumers of the alcohol content and other ingredients. Consumers of alcohol can acquire and share information about safe ways to consume alcohol. Other harm-reduction strategies include taxicabs, ride-sharing services, or designated drivers to transport people who consume large amounts of alcohol.[49]

> "Alaska is the only state where nonmedical drug users can gain access to the tools they need to make drug use less harmful."

Because alcohol is legal and people generally view alcohol use disorder as a health issue rather than a crime, health care practitioners and the media are more comfortable informing drinkers about behaviors to avoid while consuming alcohol. Unlike policy regarding people with substance use disorders involving illicit drugs, public policy avoids stigmatizing people with alcohol use disorder. People with alcohol use disorder can anonymously seek help without fearing law enforcement and have access to myriad treatment programs. We can expect similar dynamics in a world without drug prohibition.[50]

As drug-related deaths and diseases continue to mount despite more than 100 years of drug prohibition, policymakers should consider proposals that shift from a zero-tolerance approach to a focus on harm reduction. Among these proposals:

- *End drug prohibition.* The most effective way to reduce the risks of nonmedical drug use would be for Congress and state governments to end drug prohibition. In a legal market for currently illicit drugs, drug makers and sellers would be accountable for contaminated, impure, or otherwise dangerous products. Liability laws would provide recourse to harmed consumers. Consumers would not need products to test their drugs for impurities or adulterants. Ending prohibition would reduce the risk of overdose and disease. It would allow organizations that promote harm reduction to function more effectively. With prohibition repealed, policymakers and public health officials should view substance use disorder as a health problem, not a crime problem.
- *Emulate Alaska.* Alaska is the only state where nonmedical drug users can gain access to the tools they need to make drug use less harmful. Alaskans can purchase syringes and obtain testing equipment without fear of prosecution. In Alaska, statewide drug paraphernalia restrictions do not impede private harm-reduction organizations. With no statewide drug paraphernalia laws on Alaska's books, charitable and other nongovernmental organizations can implement SSPs and other harm-reduction strategies. Until federal and state drug prohibition ends, the best way to reduce the risks of harm from using drugs obtained in the illegal market is for states to repeal their drug paraphernalia laws. Eliminating state drug paraphernalia laws will let SSPs and other evidence-based harm-reduction strategies work to their full potential and, more importantly, will allow drug users to reduce harm to themselves.

- *Legalize harm-reduction paraphernalia.* If state legislatures lack the appetite for full repeal of drug paraphernalia laws, they should legalize drug safety testing devices such as fentanyl test strips, explicitly legalize SSPs, and make it easier for people to obtain syringes.[51] The model act gives harm-reduction strategies more flexibility and freedom to innovate.

CONCLUSION

It has been more than 50 years since President Richard Nixon declared a war on drugs.[52] Yet, as University of Pittsburgh public health professor Hawre Jalal and coauthors reported in a 2018 *Science* article, "The U.S. drug overdose epidemic has been inexorably tracking along an exponential growth curve since at least 1979."[53] In November 2021, the CDC reported that annual U.S. drug overdose deaths reached a record 100,000.[54] Those deaths have led federal and state lawmakers to take a fresh look at harm-reduction strategies that have been working in much of the developed world to reduce death and disease.

Unfortunately, state drug paraphernalia laws stifle harm-reduction initiatives. Only 0.22 percent of the U.S. population lives in Alaska, the only state without drug paraphernalia laws. More than 99 percent of the population lives in jurisdictions that restrict or ban various forms of harm reduction. The other 49 states and the District of Columbia must fully lift their blockades on harm-reduction efforts and allow new harm-reduction strategies to develop. They should emulate Alaska and completely repeal their drug paraphernalia laws.

APPENDIX A

State	Percent of U.S. population (2021)	Drug paraphernalia laws	Definition includes syringes	Definition includes fentanyl test strips	Statute number	Notes
Alabama	1.52%	Yes	Yes	Yes	Ala. Code § 13A-12-260	
Alaska	0.22%	No	N/A	N/A		
Arizona	2.19%	Yes	Yes	No	Ariz. Rev. Stat. § 13–3415	Fentanyl test strips legalized May 18, 2021; not updated in online code as of June 6, 2021
Arkansas	0.91%	Yes	Yes	Yes	Ark. Code § 5-64-101	
California	11.82%	Yes	Yes	Yes	Cal. Health & Safety Code § 11364	
Colorado	1.75%	Yes	Yes	Yes	Colo. Rev. Stat. § 18-18-426	
Connecticut	1.09%	Yes	No	Yes	Conn. Gen. Stat. § 21a-240	Definition excludes injection equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body
Delaware	0.30%	Yes	Yes	Yes	Del. Code tit. 16 § 4771	
District of Columbia	0.20%	Yes	Yes	Yes	D.C. Code § 48-1101	
Florida	6.56%	Yes	Yes	Yes	Fla. Stat. § 893.145	

APPENDIX A (CONTINUED)

State	Percent of U.S. population (2021)	Drug paraphernalia laws	Definition includes syringes	Definition includes fentanyl test strips	Statute number	Notes
Georgia	3.25%	Yes	Yes	Yes	Ga. Code § 16-13-32	
Hawaii	0.43%	Yes	Yes	Yes	Haw. Rev. Stat. § 329-1	
Idaho	0.57%	Yes	Yes	Yes	Idaho Code § 37-2701	
Illinois	3.82%	Yes	Yes	Yes	720 Ill. Comp. Stat. 600	
Indiana	2.05%	Yes	No	Yes	Ind. Code § 35-48-4-8.5	Definition excludes injection equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body
Iowa	0.96%	Yes	Yes	Yes	Iowa Code § 124.414	
Kansas	0.88%	Yes	Yes	Yes	Kan. Stat. § 21-5701.	
Kentucky	1.36%	Yes	Yes	Yes	Ky. Rev. Stat. § 218A.500	
Louisiana	1.39%	Yes	Yes	Yes	La. Rev. Stat. § 1021	
Maine	0.41%	Yes	No	Yes	Me Rev. Stat. § 1111-A	Definition has a specific caveat that “drug paraphernalia does not include hypodermic apparatuses”
Maryland	1.86%	Yes	Yes	Yes	Md. Code, Crim. Law § 5-619	
Massachusetts	2.10%	Yes	No	Yes	Mass. Gen. Laws Ch. 94C, § 1	Definition excludes injection equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body
Michigan	3.03%	Yes	Yes	Yes	Mich. Comp. Laws § 333.7451	
Minnesota	1.72%	Yes	Yes	Yes	Minn. Stat. § 152.01	
Mississippi	0.89%	Yes	Yes	Yes	Miss. Code § 41-29-105	
Missouri	1.86%	Yes	Yes	Yes	Mo. Rev. Stat. § 195.010	
Montana	0.33%	Yes	Yes	Yes	Mont. Code § 45-10-101	

APPENDIX A (CONTINUED)

State	Percent of U.S. population (2021)	Drug paraphernalia laws	Definition includes syringes	Definition includes fentanyl test strips	Statute number	Notes
Nebraska	0.59%	Yes	Yes	No	Neb. Rev. Stat. § 28-439	Definition excludes testing equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body
Nevada	0.95%	Yes	No	Yes	Nev. Rev. Stat. § 453.554	Definition has a specific caveat that "the term does not include any type of hypodermic syringe, needle, instrument, device or implement intended or capable of being adapted for the purpose of administering drugs by subcutaneous, intramuscular or intravenous injection"
New Hampshire	0.42%	Yes	No	Yes	N.H. Rev. Stat. § 318-B:1	Definition excludes injection equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body
New Jersey	2.79%	Yes	Yes	Yes	N.J. Stat. § 2C:36-1	
New Mexico	0.64%	Yes	Yes	Yes	N.M. Stat. § 30-31-2	
New York	5.98%	Yes	Yes	Yes	N.Y. Gen. Bus. § 850	
North Carolina	3.18%	Yes	Yes	Yes	N.C. Gen. Stat. § 90-113.21	
North Dakota	0.23%	Yes	Yes	Yes	N.D. Cent. Code § 19-03.4-01	
Ohio	3.55%	Yes	Yes	Yes	Ohio Rev. Code § 2925.01	
Oklahoma	1.20%	Yes	Yes	Yes	Okla. Stat. tit. 63, §63-2-101	
Oregon	1.28%	Yes	No	Yes	Or. Rev. Stat. § 475.525	Definition has a specific caveat that "drug paraphernalia does not include hypodermic syringes or needles"
Pennsylvania	3.91%	Yes	Yes	Yes	Pa. Stat. § 780-102	
Rhode Island	0.33%	Yes	No	Yes	R.I. Gen. Laws § 21-28.5	Definition excludes injection equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body
South Carolina	1.56%	Yes	No	No	S.C. Code § 44-51-10	Definition excludes injection and testing equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body
South Dakota	0.27%	Yes	Yes	Yes	S.D. Codified Laws § 22-42A	

APPENDIX A (CONTINUED)

State	Percent of U.S. population (2021)	Drug paraphernalia laws	Definition includes syringes	Definition includes fentanyl test strips	Statute number	Notes
Tennessee	2.10%	Yes	Yes	Yes	Tenn. Code § 39-17-402	
Texas	8.90%	Yes	Yes	Yes	Tex. Health & Safety Code § 481.002	
Utah	1.01%	Yes	Yes	Yes	Utah Code § 58-37a-2	
Vermont	0.19%	Yes	Yes	Yes	Vt. Stat. tit. 18, § 4475	
Virginia	2.60%	Yes	Yes	No	Va. Code § 18.2-265.1	General testing equipment is prohibited "other than narcotic testing products used to determine whether a controlled substance contains fentanyl or a fentanyl analog"
Washington	2.33%	Yes	Yes	Yes	Wash. Rev. Code § 69.50.102	
West Virginia	0.54%	Yes	Yes	Yes	W. Va. Code § 47-19	
Wisconsin	1.78%	Yes	No	Yes	Wis. Stat. § 961.571	Definition specifically excludes "hypodermic syringes, needles and other objects used or intended for use in parenterally injecting substances into the human body"
Wyoming	0.17%	Yes	Yes	No	Wyo. Stat. § 35-7-1002	Definition excludes testing equipment when referring to equipment, products, or materials used to introduce prohibited controlled substances to the human body

Source: "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2021," U.S. Census Bureau, December 2021, https://www.census.gov/data/tables/time-series/demo/popest/2020s-national-total.html.

APPENDIX B

State	Rx required for syringe purchase	Notes	Source
Alabama	No		
Alaska	No		
Arizona	No		
Arkansas	No		
California	No		
Colorado	No		
Connecticut	Yes	Prescription required for purchase of > 10 syringes	Conn. Gen. Stat. § 21a-65
Delaware	No		
District of Columbia	No		
Florida	No	Some counties (including Miami-Dade) require a prescription. Sale to minors without prescription is unlawful.	Fla. Stat. § 893.147
Georgia	No	"No hypodermic needle or syringe shall be sold by a pharmacist or pharmacy intern/extern, acting under the direct supervision of a licensed pharmacist, if such person has reasonable cause to believe that it will be used for an unlawful purpose."	Ga.Code § 480-10-.01
Hawaii	No		
Idaho	No		
Illinois	No	Limit: 100	720 Ill. Comp. Stat. § 635/1
Indiana	No		
Iowa	No		
Kansas	No		
Kentucky	No	Records must be kept of all sales made and include information such as: "(a) the name of the purchaser; and (b) the address of the purchaser; and (c) the quantity of syringes or needles purchased; and (d) the date of the sale; and (e) planned use of such syringes or needles."	Ky. Rev. Stat. § 217.177
Louisiana	No		
Maine	No	Some sources indicate that there is a 10-needle limit, but the law does not reflect this.	Me. Rev Stat. tit. 32 § 13787-A
Maryland	No		
Massachusetts	No		
Michigan	No		
Minnesota	Yes	Prescription required for purchase of > 10 syringes	Minn. Stat. § 151.40
Mississippi	No		
Missouri	No		
Montana	No		
Nebraska	No		
Nevada	No		
New Hampshire	No		

APPENDIX B (CONTINUED)

State	Rx required for syringe purchase	Notes	Source
New Jersey	Yes	Prescription required for purchase of > 10 syringes	N.J. Stat. § 36-6.2
New Mexico	No		
New York	Yes	Prescription required for purchase of > 10 syringes	N.Y. Public Health Law § 3381
North Carolina	No		
North Dakota	No		
Ohio	No	"No person shall sell or furnish a hypodermic to another whom the person knows or has reasonable cause to believe is not authorized . . . to possess a hypodermic." Those authorized include insulin users and "a person whose use of a hypodermic is for lawful professional, mechanical, trade, or craft purposes."	Ohio Rev. Code § 3719.172
Oklahoma	No	A pharmacist can sell a syringe without a prescription if he/she believes that the purchaser has a "legitimate use." A pharmacist cannot sell them if he/she has reason to believe that the purchase of syringes would be for illicit unlawful drug use. If billing them to insurance, the pharmacist must have a prescription from a prescriber.	Newsletter, Oklahoma State Board of Pharmacy, April 2017, https://nabp.pharmacy/wp-content/uploads/2016/06/OK042017.pdf
Oregon	No		
Pennsylvania	No		
Rhode Island	No		
South Carolina	No		
South Dakota	No		
Tennessee	Yes	"Instruments and/or devices intended for the injection of any substance through the skin shall be stored in an area not accessible to the public and shall be sold only on proof of medical need by a pharmacist or a pharmacy intern or pharmacy technician under the direct supervision of a pharmacist."	Tenn. Comp. R. & Regs. 1140-03-.12
Texas	No		
Utah	No		
Vermont	No		
Virginia	Yes	"The pharmacist shall . . . require the person requesting such item, device or substance to furnish written legitimate purposes for which such item, device or substance is being purchased."	Va. Code § 54.1-3468
Washington	No	"On the sale at retail of any hypodermic syringe, hypodermic needle, or any device adapted for the use of drugs by injection, the retailer shall satisfy himself or herself that the device will be used for the legal use intended."	Wash. Rev. Code § 70.115.050
West Virginia	No		
Wisconsin	No		
Wyoming	No		

APPENDIX C

State	SSP status	Restrictions*	Who may start a program (when applicable)	Source
Alabama	Not allowed			Ala. Code § 13A-12-260
Alaska	Not explicitly prohibited			No paraphernalia laws
Arizona	Explicitly authorized	"The number of needles and hypodermic syringes disposed of through a program shall be at least equivalent to the number of needles and hypodermic syringes distributed through the program."	Local government (including local health department), nongovernmental organizations	Ariz. Rev. Stat. § 6–15
Arkansas	Not allowed			Ark. Code § 5-64-101 & 5-64-433
California	Explicitly authorized	"Authorization [for an SSP] shall be made after consultation with the local health officer and local law enforcement leadership, and after a period of public comment." AND Authorization is only made for a two-year period, with reauthorization options. Law regulates that SSPs provide housing services in addition to their other duties.	Any entity approved by a state or municipality	Cal. Health and Safety Code § 121349
Colorado	Explicitly authorized	In order to initiate an SSP, approval must be gained from a county or district board of health. The board, prior to granting approval, must consult with "local law enforcement agencies, district attorneys, substance use disorder treatment providers, persons with a substance use disorder in remission, nonprofit organizations, hepatitis C and HIV advocacy organizations, and members of the community." "A nonprofit organization with experience operating a clean syringe exchange program or a health facility licensed or certified by the state may operate a clean syringe exchange program without prior board approval."	County public health agency, health agency approved nonprofit organization	Colo. Rev. Stat. § 25-1-520(1)
Connecticut	Explicitly authorized		Department of Public Health	Conn. Gen. Stat. § 19a-124.
Delaware	Explicitly authorized	1-for-1 exchange	SSP program administrators must be approved by the director of the State Division of Public Health, and they may include private providers.	Del. Code tit. 29 § 7991
District of Columbia	Explicitly authorized	Participants must be interviewed, and information collected includes: "Sexual behavior and history, including the participant's self-described sexual identity, number of sexual partners in the past 30 days or 6 months, number of sexual partners who were also intravenous drug users, frequency of condom use, and number of times sex was used in exchange for money or drugs."	Department of Human Services	D.C. Code § 48-1103-01(a)

APPENDIX C (CONTINUED)

State	SSP status	Restrictions*	Who may start a program (when applicable)	Source
Florida	Explicitly authorized	"Before an exchange program may be established, a county commission must: . . . Enlist the local county health department to provide ongoing advice, consultation, and recommendations for the operation of the program." 1-for-1 exchange	County commission may authorize an SSP.	Fla. Stat. § 381.0038
Georgia	Explicitly authorized		Registration to operate an SSP must go through the Department of Public Health.	Ga. Code § 16-13-32
Hawaii	Explicitly authorized	1-for-1 exchange	Director of Health may authorize private providers.	Haw. Rev. Stat. § 325-112
Idaho	Explicitly authorized		No restrictions on program authorization	Idaho Code § 37-3404(1)(a)
Illinois	Explicitly authorized		Governmental or nongovernmental organization	40 Ill. Comp. Stat. 710/
Indiana	Explicitly authorized	Prior to approval of a program, the local health officer or executive director must declare that "(A) there is an epidemic of hepatitis C or HIV. (B) That the primary mode of transmission of hepatitis C or HIV in the county is through intravenous drug use. (C) That a syringe exchange program is medically appropriate as part of a comprehensive public health response."	Local health department, municipality, nonprofit organization	Ind. Code § 16-41-7.5
Iowa	Not allowed			Iowa Code § 124.414
Kansas	Not allowed			Kan. Stat. § 21-5709
Kentucky	Explicitly authorized	SSP approval is subject to approval from the local health department Board of Health, the city government legislative body, and the county government legislative body.	Local health department	"Syringe Exchange Programs," Kentucky Cabinet for Health and Family Services, https://chfs.ky.gov/agencies/dph/dehp/hab/Pages/kyseps.aspx
Louisiana	Explicitly authorized	SSP implementation subject to local governing authority		La. Rev. Stat. § 40:1024
Maine	Explicitly authorized	1-for-1 exchange	Any entity approved by the Department of Human Services	Me. Rev. Stat. tit. 22, § 1341
Maryland	Explicitly authorized		Local health department, community-based organization	Md. Code, Health-General § 24-802
Massachusetts	Explicitly authorized	"Prior to implementation of a needle exchange program, approval shall be obtained from the board of health in the hosting city or town."	Department of Public Health	Mass. Gen. Laws ch. 111, § 215

APPENDIX C (CONTINUED)

State	SSP status	Restrictions*	Who may start a program (when applicable)	Source
Michigan	Explicitly authorized		"State and local government agencies can conduct SSP programs without any specific authorization. Agencies that are not government need to get permission."	"Division of HIV & STD Programs Syringe Service Program Guidelines," Michigan Department of Health and Human Services, 2018.
Minnesota	Not allowed	SSPs have no legal protection, but the Minnesota Department of Health states that the drug paraphernalia statute is rarely used in relation to these organizations.		"Laws Affecting People Who Use Drugs," Minnesota Department of Health, November 18, 2019.
Mississippi	Not allowed			Miss. Code § 41-29-139
Missouri	Not allowed			Mo. Rev. Stat. § 579.074
Montana	Explicitly authorized			Mont. Code § 45-10-107
Nebraska	Not allowed			Neb. Rev. Stat. § 28-441
Nevada	Explicitly authorized		Government entity or nonprofit organization	Nev. Rev. Stat. § 439.987
New Hampshire	Explicitly authorized	SSPs must be "self-funded"	Federally qualified health centers, community health centers, public health networks, AIDS service organizations, substance misuse support or treatment organizations, community-based organizations	N.H. Rev. Stat. § 318-B:43 (I)(a)
New Jersey	Explicitly authorized		Municipality, approved entities	N.J. Stat. § 5C-27
New Mexico	Explicitly authorized	"Clients shall be offered 30 syringes plus the number of syringes that are brought for exchange at the time they complete the enrollment or re-enrollment survey. Subsequent interactions are intended to be an exchange which trades used syringes for sterile syringes."	Public health office, community agency, service provider, as approved by New Mexico Department of Health	N.M. Code § 7.4.6.10
New York	Explicitly authorized		Not-for-profit corporation or government entity	N.Y. Comp. Codes R & Regs. tit. 10, § 80.135
North Carolina	Explicitly authorized		Governmental or nongovernmental organization	N.C. Gen. Stat. § 90-113.27
North Dakota	Explicitly authorized	"A state agency may not provide general fund monies to a program to purchase or otherwise acquire hypodermic syringes, needles, or injection supplies."	Local health department, municipality, organization authorized by State Department of Health	N.D. Cent. Code § 23-01-44

APPENDIX C (CONTINUED)

State	SSP status	Restrictions*	Who may start a program (when applicable)	Source
Ohio	Explicitly authorized	Prior to establishing an SSP, the board of health must consult with "(i) law enforcement representatives; (ii) prosecutors . . . ; (iii) representatives of community addiction services providers; (iv) persons recovering from substance abuse; (v) relevant private, nonprofit organizations, including hepatitis C and HIV advocacy organizations; (vi) residents of the health district; (vii) the board of alcohol, drug addiction, and mental health services that serves the area in which the health district is located."	Board of health	Ohio Rev. Code § 3707.57
Oklahoma	Not allowed			Okla. Stat. tit. 63 § 2-405
Oregon	Not explicitly prohibited			Or. Rev. Stat. § 475.525
Pennsylvania	Not allowed			35 Pa. Stat. § 780-102
Rhode Island	Explicitly authorized		Department of health	R.I. Gen Laws § 23-11-19
South Carolina	Not explicitly prohibited			S.C. Code § 44-53-110
South Dakota	Not allowed			S.D. Codified Laws § 22-42A
Tennessee	Explicitly authorized	"Needle and hypodermic syringe exchange programs . . . shall be funded entirely by the county legislative body making petition to the county or district health department."	County/district health department, nongovernmental agency	Tenn. Code § 68-1-136
Texas	Not allowed			Tex. Health & Safety Code § 481.125
Utah	Explicitly authorized	Exchange of at least one syringe for one or more new syringes (1-for-1 plus)	Governmental or nongovernmental organization	Utah Code § 26-7-8
Vermont	Explicitly authorized		Any entity that is approved by the Commissioner of Health	Vt. Stat. tit. 18 § 4478
Virginia	Explicitly authorized	"Except in the case of a comprehensive harm reduction program established by the Commissioner, no state funds shall be used to purchase needles or hypodermic syringes distributed by a comprehensive harm reduction program established pursuant to this section."	Local health department, community-based organization	Va. Code § 32.1-45.4
Washington	Explicitly authorized		Local health department, independent organization	Wash. Rev. Code § 69.50.4121
West Virginia	Explicitly authorized	Distribution with the goal of a 1-to-1 model In order to receive approval, within an application an SSP must "provide a written statement of support from a majority of the members of the county commission and a majority of the members of a governing body of a municipality in which it is located or is proposing to locate."	License offered by the Office for Health Facility Licensure and Certification.	W. Va. Code §16 - 63 - 1

APPENDIX C (CONTINUED)

State	SSP status	Restrictions*	Who may start a program (when applicable)	Source
Wisconsin	Not explicitly prohibited			Wis. Stat. § 961.571
Wyoming	Not allowed			Wyo. Stat. § 35-7-1056

Notes: *Blank spaces connote that there are no notable restrictions on SSPs; SSP = syringe service program.

NOTES

1. Holly Hedegaard, Arialdi M. Miniño, and Margaret Warner, "Drug Overdose Deaths in the United States 1999–2019," NCHS Data Brief no. 394, National Center for Health Statistics, Centers for Disease Control and Prevention, December 2020.

2. Jacqueline Goldman et al., "Perspectives on Rapid Fentanyl Test Strips as a Harm Reduction Practice among Young Adults Who Use Drugs: A Qualitative Study," *Harm Reduction Journal* 16, no. 3 (January 2019); Nicholas Peiper et al., "Fentanyl Test Strips as an Opioid Overdose Prevention Strategy: Findings from a Syringe Services Program in the Southeastern United States," *International Journal on Drug Policy* 63 (January 2019): 122–128; and Ju Nyeong Park et al., "A Fentanyl Test Strip Intervention to Reduce Overdose Risk among Female Sex Workers Who Use Drugs in Baltimore: Results from a Pilot Study," *Addictive Behaviors* 110 (November 2020).

3. Harm-reduction proponents prefer to call them "syringe service programs" because they provide services beyond exchanging or distributing clean needles and syringes.

4. K. J. Bornstein et al., "Hospital Admissions among People Who Inject Opioids Following Syringe Services Program Implementation," *Harm Reduction Journal* 17, no. 30 (May 12, 2020): 30.

5. Marcelo H. Fernández-Viña et al., "State Laws Governing Syringe Services Programs and Participant Syringe Possession, 2014–2019," *Public Health Reports* 135, no. 1 (August 2020): 128S–137S.

6. Jeffrey A. Singer, "Harm Reduction: Shifting from a War on Drugs to a War on Drug-Related Deaths," Cato Institute Policy Analysis no. 858, December 13, 2018; and Abby Goodnough, "Helping Drug Users Survive, Not Abstain: 'Harm Reduction' Gains Federal Support," *New York Times*, June 27, 2021.

7. Corey S. Davis, Derek H. Carr, and Elizabeth A. Samuels, "Paraphernalia Laws, Criminalizing Possession and Distribution of Items Used to Consume Illicit Drugs, and Injection-Related Harm," *American Journal of Public Health* 109, no. 11 (November 1, 2019): 1564–67.

8. National Drug Intelligence Center, "Drug Paraphernalia Fast Facts," Department of Justice.

9. Ariz. Rev. Stat. § 13-3415.

10. Drug Paraphernalia Control Act, 720 Ill. Comp. Stat. 600/2.

11. Arian Campo-Flores, "Fentanyl's New Foe: A Quick Test Strip That Can Prevent Overdoses," *Wall Street Journal*, January 2, 2019; and Brown University, "Firsthand Accounts Indicate Fentanyl Test Strips Are Effective in Reducing Overdose Risk," *ScienceDaily*, January 19, 2019.

12. Marianne Bergh et al., "Selectivity and Sensitivity of Urine Fentanyl Test Strips to Detect Fentanyl Analogues in Illicit Drugs," *International Journal of Drug Policy* 90 (April 2021).

13. Giselle Appel, Brenna Farmer, and Jonathan Avery, "Fentanyl Test Strips Empower People and Save Lives—So Why Aren't They More Widespread?," *Health Affairs*, June 2, 2021.

14. Cameron Jenkins, "Arizona Legalizes Test Strips That Detect Fentanyl in Drugs," *The Hill*, May 19, 2021.

15. Brinna Ludwig, "Pennsylvania Lawmakers Restrict Access to Fentanyl Test Strips," *Regulatory Review*, October 19, 2021.

16. Singer, "Shifting from a War on Drugs to a War on Drug-Related Deaths."

17. Richard Weinmeyer, "Needle Exchange Programs' Status in US Politics," *Health Law* 18, no. 3 (March 2016): 252–7; and Laura Ungar, "Funding Ban on Needle Exchanges Effectively Lifted," *USA Today*, January 7, 2016.

18. "Drug & Alcohol Rehab in Tacoma, WA," *Drug Rehab* (blog), Advanced Recovery Systems, last modified March 28, 2018.

19. "Sterile Syringe Exchange Programs," State Health Facts, *Kaiser Family Foundation*.

20. Don C. Des Jarlais et al., "Doing Harm Reduction Better: Syringe Exchange in the United States," *Addiction* 104, no. 9 (September 2009): 1441–46.

21. WKYT News Staff, "Health Department Offering Free Naloxone Kits as Part of Needle Exchange Program," WKYT, October 18, 2017.

22. Doug McVay, ed., "Drug Policy Facts," Drug Policy Facts, Real Reporting Foundation, updated April 27, 2022.

23. Abu S. Abdul-Quader et al., "Effectiveness of Structural-Level Needle/Syringe Programs to Reduce HCV and HIV Infection among People Who Inject Drugs: A Systematic Review," *AIDS and Behavior* 17, no. 9 (November 2013): 2878–92.

24. Esther J. Aspinall et al., "Are Needle and Syringe Programmes Associated with a Reduction in HIV Transmission among People Who Inject Drugs: A Systematic Review and Meta-Analysis," *International Journal of Epidemiology* 43, no. 1 (February 2014): 235–48; and G. A. Wells et al., "The Newcastle-Ottawa Scale (NOS) for Assessing the Quality of Nonrandomised Studies in Meta-Analyses," Ottawa Hospital Research Institute, University of Ottawa.

25. "Syringe Services Programs (SSPs)," Centers for Disease Control and Prevention, page last reviewed May 23, 2019.

26. "Needle Exchange Programs: Benefits and Challenges," Cato Institute policy forum, January 15, 2020.

27. Christine Vestal, "Why Police Backing Is Key to Needle Exchanges," Pew Charitable Trusts, February 13, 2018; and "Public Safety, Law Enforcement, and Syringe Exchange," Foundation for AIDS Research fact sheet, May 2011.

28. "SAMHSA Announces Unprecedented $30 Million Harm Reduction Grant Funding Opportunity to Help Address the Nation's Substance Use and Overdose Epidemic," news release, Department of Health and Human Services, December 8, 2021.

29. "Model Syringe Services Program Act," Legislative Analysis and Public Policy Association, December 7, 2021.

30. "Syringe Distribution Laws," Policy Surveillance Program, Law Atlas, updated July 1, 2017.

31. Leo Beletsky et al., "The Roles of Law, Client Race and Program Visibility in Shaping Police Interference with the Operation of US Syringe Exchange Programs," *Addiction* 106, no. 2 (February 2011): 357–65.

32. "Syringe Access Services," Grand Rapids Red Project; "South Carolina Syringe Exchange," Challenges Inc.; and Shot in the Dark, https://sitdaz.org/.

33. Mitch Legan, "Indiana Needle Exchange That Helped Contain a Historic HIV Outbreak to Be Shut Down," *NPR*, June 3, 2021.

34. See, e.g., David P. Wilson et al., "The Cost-Effectiveness of Harm Reduction," *International Journal on Drug Policy* 26, no. S1 (February 2015): S5–11 ("not only did [syringe service programs (SSPs)] reduce the incidence of HIV by up to 74 percent over a 10-year period in Australia but they were cost-saving [to the government] and had a return on investment of between $1.3 and $5.5 for every $1 spent"); Hrishikesh K. Belani and Peter A. Muennig, "Cost-Effectiveness of Needle and Syringe Exchange for the Prevention of HIV in New York City," *Journal of HIV/AIDS & Social Services* 7, no. 3 (September 15, 2008): 229–40 (SSPs "reduced HIV treatment costs by $325,000 per HIV case averted, and averted 4–7 HIV infections per 1000 clients, producing a net cost savings"); Trang Q. Nguyen et al., "Syringe Exchange in the United States: A National Level Economic Evaluation of Hypothetical Increases in Investment," *AIDS and Behavior* 18, no. 11 (November 2014): 2144–55 ("With an annual $10 to $50 million [SSP] funding increase, 194–816 HIV infections would be averted (cost per infection averted $51,601–$61,302)"); Bureau for Public Health, "White Paper: The Need for Harm Reduction Programs in West Virginia," West Virginia Department of Health and Human Resources, November 6, 2017 (citing studies estimating that SSPs could avert 15 to 33 percent of HIV cases, with a cost savings of between $20,947 and $34,278 per HIV case averted); Stephen C. Ijioma et al., "Cost-Effectiveness of Syringe Service Programs, Medications for Opioid Use Disorder, and Combination Programs in Hepatitis C Harm Reduction among Opioid Injection Drug Users: A Public Payer Perspective Using a Decision Tree," *Journal of Managed Care & Specialty Pharmacy* 27, no. 2 (February 1, 2021): 137–46 (incremental cost savings of $363,821 per hepatitis C case averted by SSPs alone); and "Syringe Services Programs (SSPs)," Centers for Disease Control and Prevention.

35. Bornstein et al., "Hospital Admissions among People Who Inject Opioids," p. 30; and Office of the Assistant Secretary for Health, "Syringe Services Programs—A Critical Public Health Intervention," July 30, 2019.

36. S.C. Code § 44-51-10 and S.C. Code § 44-53-930.

37. Mont. Code § 45-10-107.

38. Va. Code § 32.1-45.4.

39. Diane Walker, "Diabetic Denied Syringes at Walmart Pharmacy Calls 12," NBC 12, February 7, 2017.

40. Elizabeth C. Costenbader, William A. Zule, and Curtis C. Coomes, "Racial Differences in Acquisition of Syringes from Pharmacies under Conditions of Legal but Restricted Sales," *International Journal of Drug Policy* 21, no. 5 (September 2010): 425–28.

41. Ricky N. Bluthenthal et al., "Sterile Syringe Access Conditions and Variations in HIV Risk among Drug Injectors in Three Cities," *Addiction* 99, no. 9 (2004): 1136–46.

42. "NASEN, North American Syringe Exchange Network," NASEN.

43. Davis, Carr, and Samuels, "Paraphernalia Laws," pp. 1564–67.

44. Centers for Disease Control and Prevention, "Needs-Based Distribution at Syringe Services Programs," Department of Health and Human Services, December 2020.

45. Emma Gibson, "Arizona Legalizes Clean Needle Exchange Sites," *Arizona Public Media*, May 27, 2021.

46. Personal communication with Jeffrey A. Singer.

47. Alexander Lekhtman, "Orlando, Florida, Gets Its First Syringe Program—with Strings Attached," *Filter*, June 17, 2021.

48. Prasanthi Persad, Fairouz Saad, and Joann Schulte, "Comparison between Needs-Based and One-for-One Models for Syringe Exchange Programs," Louisville Metro Department of Public Health and Wellness, 2017.

49. Christopher R. Conner et al., "Association of Rideshare Use with Alcohol-Associated Motor Vehicle Crash Trauma," *JAMA Surgery* 156, no. 8 (June 2021): 731–8.

50. Trevor Burrus, "Chapter 4: The War on Drugs," in *Visions of Liberty*, eds. Aaron R. Powell and Paul Matzko (Washington: Cato Institute, 2020), p. 55–78.

51. "Model Syringe Services Program Act," Legislative Analysis and Public Policy Association.

52. "Public Enemy Number One: A Pragmatic Approach to America's Drug Problem," Richard Nixon Foundation, June 29, 2016.

53. Hawre Jalal et al., "Changing Dynamics of the Drug Overdose Epidemic in the United States from 1979 through 2016," *Science*, September 21, 2018.

54. National Center for Health Statistics, "Drug Overdose Deaths in the U.S. Top 100,000 Annually," news release, Centers for Disease Control and Prevention, November 17, 2021.

RELATED STUDIES FROM THE CATO INSTITUTE

Drug Reformation: End Government's Power to Require Prescriptions by Jeffrey A. Singer and Michael F. Cannon, White Paper (October 20, 2021)

The Effect of State Marijuana Legalizations: 2021 Update by Angela Dills, Sietse Goffard, Jeffrey Miron, and Erin Partin, Policy Analysis no. 908 (February 2, 2021)

Kicking the Habit: The Opioid Crisis and America's Addiction to Prohibition by Josh Bowers and Daniel Abrahamson, Policy Analysis no. 894 (June 29, 2020)

How Legalizing Marijuana Is Securing the Border: The Border Wall, Drug Smuggling, and Lessons for Immigration Policy by David J. Bier, Policy Analysis no. 860 (December 19, 2018)

Harm Reduction: Shifting from a War on Drugs to War on Drug-Related Deaths by Jeffrey A. Singer, Policy Analysis no. 858 (December 13, 2018)

Abuse-Deterrent Opioids and the Law of Unintended Consequences by Jeffrey A. Singer, Policy Analysis no. 832 (February 6, 2018)

Four Decades and Counting: The Continued Failure of the War on Drugs by Christopher J. Coyne and Abigail R. Hall, Policy Analysis no. 811 (April 12, 2017)

RECENT STUDIES IN THE CATO INSTITUTE POLICY ANALYSIS SERIES

928. **End the Tax Exclusion for Employer-Sponsored Health Insurance: Return $1 Trillion to the Workers Who Earned It** by Michael F. Cannon (May 24, 2022)

927. **False Alarm over the Retreat of the Himalayan Glaciers** by Swaminathan S. Anklesaria Aiyar and Vijay K. Raina (May 3, 2022)

926. **Biden and Trade at Year One: The Reign of Polite Protectionism** by James Bacchus (April 26, 2022)

925. **The (Updated) Case for Free Trade** by Scott Lincicome and Alfredo Carrillo Obregon (April 19, 2022)

924. **Universal Preschool: Lawmakers Should Approach with Caution** by Colleen Hroncich (March 29, 2022)

923. **The National Flood Insurance Program: Solving Congress's Samaritan's Dilemma** by Peter Van Doren (March 2, 2022)

922. **Competition and Content Moderation: How Section 230 Enables Increased Tech Marketplace Entry** by Jennifer Huddleston (January 31, 2022)

921. **How Wealth Fuels Growth: The Role of Angel Investment** by Chris Edwards (September 29, 2021)

920. **Common-Sense Policy Reforms for California Housing** by Lee Ohanian (August 31, 2021)

919. **A Brief History of U.S. Immigration Policy from the Colonial Period to the Present Day** by Andrew M. Baxter and Alex Nowrasteh (August 3, 2021)

918. **Trade Is Good for Your Health: Freeing Trade in Medicines and Other Medical Goods during and beyond the COVID-19 Emergency** by James Bacchus (June 30, 2021)

917. **China: Rise or Demise?** by John Mueller (May 18, 2021)

916. **Entrepreneurs and Regulations: Removing State and Local Barriers to New Businesses** by Chris Edwards (May 5, 2021)

CITATION

Singer, Jeffrey A. and Sophia Heimowitz. "Drug Paraphernalia Laws Undermine Harm Reduction: To Reduce Overdoses and Disease, States Should Emulate Alaska," Policy Analysis no. 929, Cato Institute, Washington, DC, June 7, 2022.