

# Paraphernalia Laws, Criminalizing Possession and Distribution of Items Used to Consume Illicit Drugs, and Injection-Related Harm

The United States remains in the grip of an unprecedented epidemic of drug-related harm. Infections of HIV, hepatitis C, and endocarditis related to lack of access to new syringes and subsequent syringe sharing among people who inject drugs have increased alongside a surge in opioid overdose deaths.

Overwhelming evidence shows that using a new syringe with every injection prevents injection-related blood-borne disease transmission. Additionally, there is promising research suggesting that the distribution of fentanyl test strips to people who inject drugs changes individuals' injection decisions, which enables safer drug use and reduces the risk of fatal overdose. However, laws prohibiting the possession of syringes and fentanyl test strips persist in nearly every state.

The full and immediate repeal of state paraphernalia laws is both warranted and needed to reduce opioid overdose death and related harms. Such repeal would improve the health of people who inject drugs and those with whom they interact, reducing the spread of blood-borne disease and fatal overdose associated with infiltration of illicitly manufactured fentanyl into the illicit drug supply. It would also free up scarce public resources that could be redirected toward evidence-based approaches to reducing drug-related harm. (*Am J Public Health*. 2019;109:1564–1567. doi:10.2105/AJPH.2019.305268)

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The United States remains in the grip of an unprecedented epidemic of drug-related harm. In 2017 more than 70 000 Americans were killed by drug overdose, surpassing the number lost in any year during the height of the HIV/AIDS crisis.<sup>1</sup> Alongside the surge in overdose deaths, infections related to lack of access to new syringes and subsequent syringe sharing among people who inject drugs (PWID) have increased, with Indiana, Kentucky, Massachusetts, and Ohio all experiencing recent injection-related HIV outbreaks.<sup>2–4</sup> Hepatitis C infections, which overwhelmingly result from use of shared syringes, have increased every year for nearly a decade.<sup>5</sup> Simultaneously, cases of injection-related endocarditis have been rising nationwide.<sup>6</sup>

Law can serve as both a barrier to and facilitator of evidence-based interventions. The United States has made substantial progress in recent years reducing barriers to the opioid overdose reversal medication naloxone and taken incremental steps to expand access to opioid agonist therapy with methadone and buprenorphine, actions that are helping to reduce the toll of preventable opioid-related death and disability.<sup>7,8</sup> However, despite continued rhetoric that the country cannot “arrest its way out of the problem” of drug-related harm, governmental attention continues to focus on criminal

justice-oriented approaches to the ongoing epidemic.

State paraphernalia laws, which criminalize the possession and distribution of items used to consume illicit drugs, are perhaps the most indefensible of these unnecessary and harmful legal barriers. Nearly all state paraphernalia laws are based on model legislation developed by the federal Drug Enforcement Administration in 1979, which defines drug paraphernalia as including any item used, intended for use, or designed for use in producing, testing, storing, or consuming controlled substances. These laws criminalize the distribution of syringes and other drug paraphernalia to PWID and subject PWID to arrest and prosecution for possessing these items.

Paraphernalia laws persist in nearly every state despite overwhelming evidence that using a new syringe with every injection prevents injection-related blood-borne disease transmission and qualitative research suggesting that the distribution of fentanyl test strips (FTSs) to PWID changes those individuals'

injection decisions, enabling safer drug use and potentially reducing the risk of fatal overdose.<sup>9–11</sup>

Repealing paraphernalia laws would improve the health of PWID and those with whom they interact, reducing the spread of blood-borne disease and decreasing overdose risk. Such action would also free up scarce public resources that could be redirected toward evidence-based approaches to reducing drug-related harm.

## STERILE SYRINGE ACCESS

Injection drug use is not, in and of itself, a risk factor for HIV, hepatitis C, infective endocarditis, or other blood-borne illness.<sup>5</sup> Rather, the increased risk of infection associated with injection drug use is almost wholly from the sharing of injection equipment between an individual with an active infection and an uninfected person.

Increased access to new syringes is extremely effective in reducing the spread of HIV and hepatitis C among PWID. Indeed, in 2000, then US surgeon

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general David Satcher released an extensive report concluding that syringe access programs (SAPs) reduce HIV incidence without encouraging the use of illegal drugs, a finding that numerous studies from the United States and other countries have since replicated.<sup>11–14</sup> Changes in laws allowing SAPs have had a measurable public health impact. In New York City, for example, passage of a law that permitted SAPs to operate legally was associated with a reduction in HIV prevalence from 54% to 13% and hepatitis C prevalence from 90% to 63% among PWID.<sup>15</sup>

Increased access to new syringes is also cost effective: every dollar spent improving syringe access can save more than seven dollars in avoided HIV treatment expenses alone.<sup>16</sup> Although less research exists on hepatitis C–related cost reductions, reduction in hepatitis C transmission from increased access to sterile syringes would almost certainly reduce hepatitis C treatment costs, which now exceed six billion dollars annually in the United States.<sup>14,17</sup>

The continued prioritization of criminal justice approaches over health promotion efforts increases the probability that PWID will share injection equipment and inject in unsanitary conditions because of lack of injection supplies and fear of police action.<sup>18,19</sup> Although approximately half the states have modified their paraphernalia laws to permit some form of non-pharmacy syringe access, typically in the form of SAPs (sometimes referred to as needle or syringe exchange programs), these changes are insufficient to ensure access to new injection equipment and often require SAPs to operate in a manner that dramatically and unnecessarily limits their reach and effectiveness.

For example, in Ohio, only a board of health may establish an SAP, and only after first consulting with local law enforcement, prosecutors, and elected representatives. Individuals obtaining sterile syringes receive protection from criminal prosecution for paraphernalia possession only if they remain within 1000 feet of the SAP facility and carry documentation verifying their participation. Kentucky authorizes health departments to operate an SAP only with the consent of the local board of health as well as the governing body of both the city and the county in which the exchange would operate, turning what should be a public health decision into a political one. In addition, state law provides that items exchanged are not illegal drug paraphernalia only while at the exchange location; individuals who receive syringes and other injection equipment are not provided any protection from arrest or prosecution once they leave the exchange site.

Indiana law imposes even more draconian restrictions, prohibiting an SAP from operating unless an injection-related epidemic of hepatitis C or HIV is already under way, a public hearing has been conducted, and either the local government approves the program or the state health commissioner declares a public health emergency (Table 1). A licensed physician, physician assistant, or registered nurse must oversee the program, which may not use state funds to pay for syringes. Although the law authorizing SAPs expires in 2021, a contemporaneously enacted law that upgrades unlawful possession of syringes from a misdemeanor to a felony is permanent. These variations in the laws authorizing SAPs reduce their efficacy. For example, a recent study showed that congressional action that

removed a prohibition on the use of government funds to distribute new syringes in Washington, DC, resulted in a 70% decrease in HIV cases compared with the number of projected cases without the legal change.<sup>20</sup>

These approaches, whereby access to sterile syringes is unnecessarily limited or an epidemic must already be under way before proven prevention measures may be implemented, do not reflect evidence-based practice. Two separate modeling studies demonstrated that an earlier and more robust response to the HIV outbreak in Scott County, Indiana, could have prevented at least 150 infections, reducing incidence by more than 90%.<sup>21,22</sup>

## FENTANYL TEST STRIPS

Much of the recent increase in opioid-related overdose results from the infiltration of illicitly manufactured fentanyl into the street drug market, which dramatically increases the risk of fatal and nonfatal overdose.<sup>23</sup> These fentanyl analogs are significantly more potent than heroin and are often indistinguishable from heroin and other drugs to the naked eye. To reduce fentanyl-associated overdose risk, a number of governmental and nongovernmental organizations—many operated by PWID—have begun distributing FTSs to PWID to increase their knowledge of the drugs that they use and enable informed decision-making to reduce overdose risk. These strips, similar to urine pregnancy or rapid strep test strips, quickly signify the presence of fentanyl and many fentanyl analogs.

Promising early evaluations of these programs demonstrate that

PWID are both willing and able to use knowledge gained from FTSs to reduce overdose risk.<sup>9</sup> A recent survey of PWID in North Carolina reported that more than four in five PWID who received FTSs used the strips to test their drugs before consumption. Furthermore, PWID who obtained a positive FTS test result were five times more likely to report changes in drug use behavior than were those with a negative result.<sup>9</sup> A Rhode Island survey revealed similar changes in risk-reduction activities. In that study, a positive FTS result was significantly associated with reporting a positive change in overdose risk behavior between baseline and follow-up, with approximately 45% of PWID reporting using a smaller amount of the drug and approximately 42% reporting using it more slowly.<sup>10,24</sup>

Paraphernalia laws in most jurisdictions, which prohibit the possession of equipment for testing illicit drugs, render the distribution of FTSs to PWID arguably illegal. Although jurisdictions generally do not enforce these laws for the possession or use of FTSs, the ever-present possibility of arrest and prosecution can discourage individuals from using this promising intervention to reduce overdose-related harm. The ambiguous legal status of FTSs may also affect the ability of governmental and nongovernmental organizations to use grant funds to purchase and distribute them to PWID.

## SOLUTION: REPEAL PARAPHERNALIA LAWS

Paraphernalia laws contribute to the spread of infectious diseases

**TABLE 1—Characteristics of Syringe Access Program Restrictions in Indiana, Kentucky, and Ohio: 2019**

State: Eligible Operators	Approval Requirements	Other Requirements and Limitations
Indiana: local health department, city or town, nonprofit organization	<p>A local health officer or executive director must declare</p> <p>A hepatitis C or HIV epidemic exists,</p> <p>The primary cause of transmission is intravenous drug use, and</p> <p>A syringe access program is a medically appropriate response.</p> <p>The relevant legislative or executive body must conduct a public hearing and either</p> <p>Approve the program or</p> <p>Request the state health commissioner declare a public health emergency and approve the program.</p>	<p>A physician, physician assistant, or registered nurse must provide oversight.</p> <p>State agencies may not provide funds to purchase or acquire syringes for distribution.</p> <p>A program may not operate for &gt; 2 y unless renewed by the local legislative body or state health commissioner.</p> <p>Legislation authorizing programs expires July 1, 2021.</p>
Kentucky: local health department	<p>Local health department must obtain approval from the board of health and legislative bodies in</p> <p>Any city in which the program would operate, and</p> <p>Any county in which the program would operate.</p>	<p>Immunity applies only while at the exchange location.</p>
Ohio: board of health	<p>Before starting syringe access programs, board of health must consult with</p> <p>Law enforcement representatives and prosecutors,</p> <p>Community addiction service providers,</p> <p>Persons recovering from substance use disorder,</p> <p>Relevant private nonprofit organizations,</p> <p>Residents,</p> <p>The applicable board of alcohol, drug addiction, and mental health services, and</p> <p>Representatives selected by the city, village, or township governing body.</p>	<p>Program location subject to local zoning restrictions.</p> <p>Protection from criminal prosecution for possession of syringes limited to participants who</p> <p>Are within 1000 feet of a program facility and</p> <p>Possess documentation from the program verifying the individual's participation.</p>

and prevent PWID from utilizing services to reduce risk of fatal and nonfatal overdose. These laws undermine the health and safety of affected communities, and, like most drug-related laws, their enforcement falls disproportionately on people of color.<sup>19</sup> Limited exceptions that permit the dispensing of syringes via SAPs do not increase access to other interventions such as fentanyl testing and, in many cases, do not affect the legality of distributing or possessing devices to prepare, smoke, or snort drugs, which are also potential sources of blood-borne disease transmission.<sup>25</sup> These limitations also contribute to legal uncertainty among both PWID and law enforcement officials, as the legal status of possessing or using a syringe varies based on where an individual acquired it. In many states with

SAP laws, an individual may lawfully possess or use a syringe obtained from an approved SAP but faces potential arrest and prosecution for possessing or using the exact same type of syringe obtained elsewhere.

It is unconscionable that, nearly two decades after the US surgeon general determined that improved access to syringes would benefit public health without negatively affecting public safety, preventable blood-borne infections are increasing because of restrictions on syringe access. The continued toll of opioid overdose deaths and related harms both warrants and necessitates the full and immediate repeal of state paraphernalia laws.

However, merely repealing state paraphernalia laws will not fully address their negative

consequences. States should take additional steps, including fully funding harm-reduction programs; prohibiting local restrictions on drug paraphernalia possession, use, and distribution; and preventing local governments from interfering with the operation of SAPs through discriminatory land use policies or nuisance laws, as recently occurred in Orange County, California. States should also automatically nullify past convictions for drug paraphernalia offenses, similar to actions taken in several jurisdictions to downgrade or expunge convictions for many cannabis-related offenses.

There are significant differences in substance use by age, gender, race, ethnicity, socioeconomic status, and type of drug use, which further compound the public health effects of

paraphernalia laws. Although increased access to harm-reduction services such as SAPs and FTSs remain critical to addressing the current epidemic, more expansive action is needed to address the many underlying social and environmental determinants of substance misuse, addiction, and access to care for PWID. These determinants include lack of stable housing and safe places to use drugs, childhood trauma, economic inequality, structural discrimination and racism, toxic stress, social isolation, and lack of access to quality education. Finally, states should remove criminal penalties associated with the possession of illicit drugs in favor of diversion to evidence-based treatment and the provision of health and social services, as appropriate.

Law enforcement and other governmental officials correctly state that we cannot arrest our way out of the current crisis of drug-related harm. Applying that maxim to the lowest-hanging fruit in the drug law tree—the repeal of paraphernalia laws—is long overdue. **AJPH**

## CONTRIBUTORS

C. S. Davis conceptualized the commentary and wrote the initial draft. D. H. Carr and E. A. Samuels substantially contributed intellectual and editorial content and contributed to subsequent revisions.

## CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

## REFERENCES

- Centers for Disease Control and Prevention. Drug and opioid-involved overdose deaths—United States, 2013–2017. *MMWR Morb Mortal Wkly Rep*. 2018;67(5152):1419–1427.
- Rich JD, Adashi EY. Ideological anachronism involving needle and syringe exchange programs: lessons from the Indiana HIV outbreak. *JAMA*. 2015;314(1):23–24.
- Centers for Disease Control and Prevention. Notes from the field: HIV diagnoses among persons who inject drugs—Northeastern Massachusetts, 2015–2018. *MMWR Morb Mortal Wkly Rep*. 2019;68(10):253–254.
- North Kentucky Tribune. Health Departments Share CDC Recommendations to Address HIV Among People Who Inject Drugs. 2019. Available at: <https://www.nkytribune.com/2019/01/Health-Departments-Share-Cdc-Recommendations-To-Address-Hiv-Among-People-Who-Inject-Drugs>. Accessed August 16, 2019.
- Zibbell JE, Asher AK, Patel RC, et al. Increases in acute hepatitis C virus infection related to a growing opioid epidemic and associated injection drug use, United States, 2004 to 2014. *Am J Public Health*. 2018;108(2):175–181.
- Wurcel AG, Anderson JE, Chui KK, et al. Increasing infectious endocarditis admissions among young people who inject drugs. *Open Forum Infect Dis*. 2016;3(3):ofw157.
- Burns RM, Pacula RL, Bauhoff S, et al. Policies related to opioid agonist therapy for opioid use disorders: the evolution of state policies from 2004 to 2013. *Subst Abuse*. 2016;37(1):63–69.
- McClellan C, Lambdin BH, Ali MM, et al. Opioid-overdose laws association with opioid use and overdose mortality. *Addict Behav*. 2018;86:90–95.
- Peiper NC, Clarke SD, Vincent LB, Ciccarone D, Kral AH, Zibbell JE. Fentanyl test strips as an opioid overdose prevention strategy: findings from a syringe services program in the Southeastern United States. *Int J Drug Policy*. 2019;63:122–128.
- Krieger MS, Goedel WC, Buxton JA, et al. Use of rapid fentanyl test strips among young adults who use drugs. *Int J Drug Policy*. 2018;61:52–58.
- Palmateer N, Kimber J, Hickman M, Hutchinson S, Rhodes T, Goldberg D. Evidence for the effectiveness of sterile injecting equipment provision in preventing hepatitis C and human immunodeficiency virus transmission among injecting drug users: a review of reviews. *Addiction*. 2010;105(5):844–859.
- Satcher D. Evidence-based findings on the efficacy of syringe exchange programs: an analysis of the scientific research completed since April 1998. 2000. Available at: <https://hamreduction.org/wp-content/uploads/2012/01/EvidenceBasedFindingsOnEfficacyofSEPs.pdf>. Accessed August 16, 2019.
- Aspinall EJ, Nambiar D, Goldberg DJ, 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. *Int J Epidemiol*. 2014;43(1):235–248.
- Platt L, Minozzi S, Reed J, et al. Needle and syringe programmes and opioid substitution therapy for preventing HCV transmission among people who inject drugs: findings from a Cochrane Review and meta-analysis. *Addiction*. 2018;113(3):545–563.
- Des Jarlais DC, Perlis T, Arasteh K, 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.
- Nguyen TQ, Weir BW, Des Jarlais DC, Pinkerton SD, Holtgrave DR. Syringe exchange in the United States: a national level economic evaluation of hypothetical increases in investment. *AIDS Behav*. 2014;18(11):2144–2155.
- Razavi H, Elkhoury AC, Elbasha E, et al. Chronic hepatitis C virus (HCV) disease burden and cost in the United States. *Hepatology*. 2013;57(6):2164–2170.
- Bluthenthal RN, Kral AH, Erringer EA, Edlin BR. Drug paraphernalia law and injection-related infectious disease risk among injectors. *J Drug Issues*. 1999;29(1):16.
- Davis CS, Burris S, Kraut-Becher J, Lynch KG, Metzger D. Effects of an intensive street-level police intervention on syringe exchange program use in Philadelphia, PA. *Am J Public Health*. 2005;95(2):233–236.
- Ruiz MS, O'Rourke A, Allen ST. Impact evaluation of a policy intervention for HIV prevention in Washington, DC. *AIDS Behav*. 2016;20(1):22–28.
- Gonsalves GS, Crawford FW. Dynamics of the HIV outbreak and response in Scott County, IN, USA, 2011–15: a modelling study. *Lancet HIV*. 2018;5(10):e569–e577.
- Goedel WC, King MRF, Lurie MN, et al. Implementation of syringe services programs to prevent rapid human immunodeficiency virus transmission in rural counties in the United States: a modeling study. *Clin Infect Dis*. 2019; Epub ahead of print.
- Centers for Disease Control and Prevention. Increases in drug and opioid-involved overdose deaths—United States, 2010–2015. *MMWR Morb Mortal Wkly Rep*. 2016;65(5051):1445–1452.
- Goldman JE, Wayne KM, Periera KA, Krieger MS, Yedinak JL, Marshall BDL. Perspectives on rapid fentanyl test strips as a harm reduction practice among young adults who use drugs: a qualitative study. *Harm Reduct J*. 2019;16(1):3.
- Teles SA, Gir E, Martins RMB, Dos Santos Carneiro MA, de Matos MA, Caetano KAA. Emergent predictors of hepatitis C infection among non-injection drug users. *J Infect Public Health*. 2018;11(4):526–529.