

**Addressing the Opioid Epidemic and
Preventing the Spread of Infectious Disease
Through the Provision of Syringe Services Programs**



South Carolina Institute of
Medicine & Public Health

South Carolina, like many other states, is experiencing three co-occurring public health epidemics. The growing opioid crisis has significantly increased unsafe injection drug use, thereby increasing the prevalence of human immunodeficiency virus (HIV) and hepatitis C virus (HCV) through the sharing of contaminated syringes and needles. These synergistic epidemics not only are occurring at the same time, but have biological interactions among them that, together, exacerbate the prognosis and burden of the diseases.

The opioid crisis is threatening recent state and national progress made in HIV prevention.^{1,2}

South Carolina has the nation's eighth-highest rate of new HIV diagnoses.³

An estimated 19,749 South Carolina residents have HIV/AIDS.⁴

The number of people in the state living with HIV/AIDS increased 30% from 2008 to 2017.⁵

South Carolina is considered one of seven "hotspot" states in the current administration's plan to end the HIV epidemic.⁶

In South Carolina, the average lifetime cost for treating one person living with HIV is \$478,000 (in 2017 dollars).⁷

There has been a significant increase in the cost of hospital-based treatment for HIV in South Carolina from \$101.4 million in 2009 to more than \$148 million in 2018.⁸

Private insurance covered only 17% of the cost of hospital-based treatment for HIV in 2018. The balance was covered by Medicare (39.5%), Medicaid (27.8%) or billed to indigent/self-pay patients (15.7%).⁹

The state paid an additional estimated \$51,013,059 for HIV prevention and care in 2016. Funding came from the Ryan White program and other state and federal sources.¹⁰

People who inject drugs are the highest-risk group for acquiring HCV, and each individual with HCV who injects drugs infects an average of 20 other people.¹¹

Reported HCV cases constitute a significant undercount due to the asymptomatic nature of HCV. Because many people are unaware that they have HCV, they unknowingly infect others.¹²

It is estimated that there were 44,300 new acute HCV cases in 2017 nationally,¹³ but only 3,186 of those cases were reported.¹⁴

It is also estimated that an additional 2.4 million people in the U.S. developed chronic HCV in 2017.¹⁵

The high cost of medication to treat or cure HCV makes it unavailable to many. The lowest cost treatment option is currently \$26,400 per year, but can be as much as \$189,000 per year.^{16,17,18}

There has been a significant increase in the cost of hospital-based treatment for HCV in South Carolina from \$198.5 million in 2009 to almost \$347 million in 2018.¹⁹

Private insurance covered only 11.6% of the cost of hospital-based treatment for HCV in 2018. The balance was covered by Medicare (37.8%), Medicaid (24.7%) or billed to indigent/self-pay patients (26%).²⁰

The scientific literature contains extensive evidence that

reduce the transmission of HIV and HCV by providing sterile injection equipment and by linking users to multiple treatment and risk-reduction services.^{21,22,23,24}

The CDC and HHS encourage states to submit HIV and HCV incidence and prevalence data profiles to them for review to determine if the need exists for SSPs to be established in their state. Upon demonstration of need, states are permitted to use federal funding for SSP staff, operations³¹ and supplies (though federal funds cannot be used to purchase syringes and needles).³² The CDC and HHS offer recommendations in their review regarding determination and consultation to states in implementing SSPs.³³

³⁴ This CDC response not only emphasizes the need that exists in South Carolina to fund SSPs, but also provides recommendations for implementing this effective public health intervention to address these co-occurring epidemics.

[Article 7, Sections 44-53-391 and 44-53-930 South Carolina Code of Laws].³⁵ Section 44-53-391 makes it unlawful to “manufacture, possess, sell, or deliver...paraphernalia,” including hypodermic needles and syringes. It is further unlawful to provide “instructions, oral or written, with the [paraphernalia] concerning its use” or any other “descriptive materials accompanying the [paraphernalia] which explain or depict its use.” Section 44-53-930 requires hypodermic needles and syringes to be sold only by “registered pharmacists or registered assistant pharmacists through a permitted pharmacy” or by “persons lawfully selling veterinary medicines

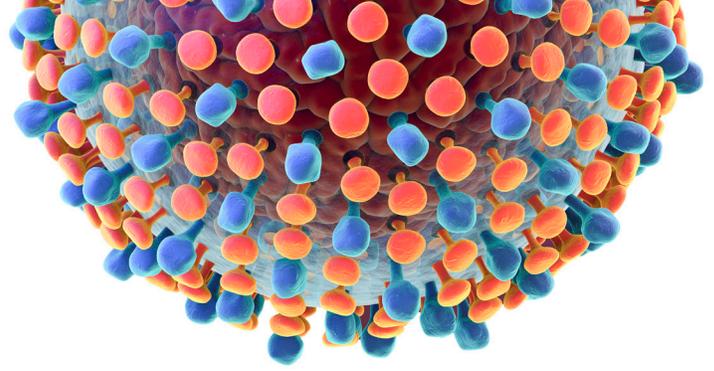
! The U.S. Department of Health and Human Services (HHS),²⁵ the Centers for Disease Control and Prevention (CDC),²⁶ and other national public health leaders²⁷ view SSPs as a key component of a comprehensive strategy for combatting the nation’s opioid crisis and reducing the transmission of infectious disease, thereby saving lives and money.

SSPs are safe, effective, cost-saving, do not increase illegal drug use or crime²⁸ and are frequently supported by law enforcement officials and emergency workers.²⁹

There is an estimated return on investment of \$7.58 for every \$1 spent for SSPs.³⁰

Should state law be amended, agencies including DHEC and the South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS) are poised to respond by accessing federal dollars for the creation of comprehensive community-based interventions that include SSPs.

Background



Amid the nationwide opioid epidemic, states have seen a resulting and dramatic spike in cases of human immunodeficiency virus (HIV) and hepatitis C virus (HCV).³⁶ This spike is linked directly to virus transmissions among persons who inject drugs via shared contaminated syringes, needles and other drug use equipment. In fact, injection drug use accounts for about one in 10 HIV diagnoses in the United States³⁷ and over 53% of new cases of HCV.^{38,39}

HCV and HIV are highly contagious blood-borne pathogens for which there are no available vaccines. Even microscopic amounts of blood remaining on any equipment used to inject drugs can harbor these highly contagious pathogens for extended periods of time. Depending on temperature and other factors, **HIV can survive in a used syringe for up to 42 days**, and an HIV-negative person has a one in 160 chance of contracting HIV every time they use a needle that has been used by someone with HIV.⁴⁰ The hepatitis C virus is even more stable in the environment than HIV and is subsequently more efficiently transmitted via injection drug use. Depending on the temperature within a syringe, syringe volume and type of syringe (low dead space vs. high dead space which retains 1000 times more blood), **HCV can remain viable in a used syringe for up to 63 days.**⁴¹

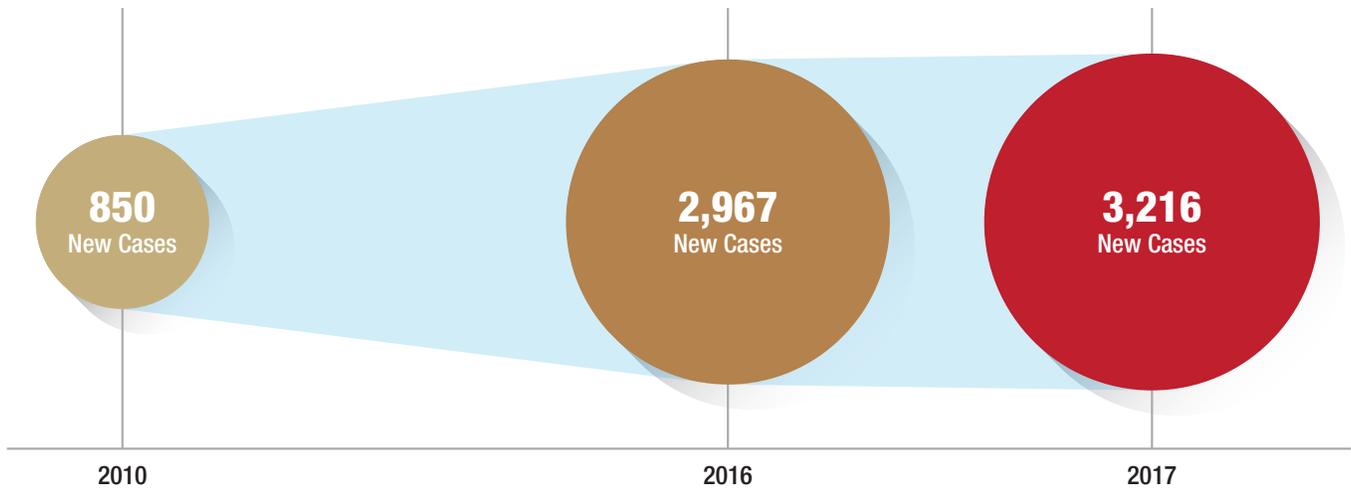
The opioid epidemic has vastly increased the number of people who inject drugs, thereby increasing the risk of transmission of HIV and HCV. This convergence of public health epidemics is resulting in substantial human suffering and public cost.

The opioid crisis is responsible for tens of thousands of HCV infections annually,⁴² with a rapid increase in incidence since 2010.⁴³ People who inject drugs are the highest-risk group for acquiring HCV, and each individual with HCV who injects drugs is likely to infect 20 other people.⁴⁴ Hepatitis C virus infects the liver, causing a short-term illness for approximately 15-25% of those infected. Most people infected with HCV, however, develop a chronic infection. Frequently, people with HCV remain stable and asymptomatic for many years and may unknowingly infect others. Approximately 5-20% of persons with chronic HCV will go on to develop cirrhosis and serious illness over a period of 20-30 years, and 1-5% will develop liver cancer and need a liver transplant or die.⁴⁵ Although there is no vaccine to prevent HCV, there is very effective medication that can cure the virus in as little as eight weeks.⁴⁶

Recently released data from the CDC show continuing national increases in new acute HCV infections, even though there is ongoing progress in reducing hepatitis deaths. From 2010 to 2016, acute HCV diagnoses increased 3.5-fold nationwide—from 850 new cases in 2010 to 2,967 new cases in 2016—in tandem with the increases in heroin and fentanyl use.⁴⁷ By 2017, there were 3,216 new acute cases diagnosed, and the CDC issued a press release in May 2017 alerting the public that new HCV infections had reached a 15-year high.⁴⁸

Notably, these reported cases constitute a significant undercount due to the asymptomatic nature of HCV. A more accurate national estimate for 2017 is that there were 44,300 new HCV cases and an additional 2.4 million chronic HCV cases.⁴⁹

FIGURE 1: New Acute HCV Cases in the U.S.



Data Source: Centers for Disease Control and Prevention

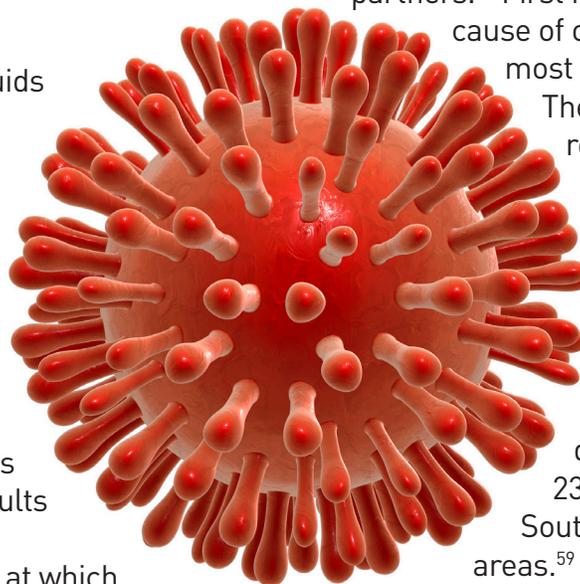
In 2017, there were 6,724 newly reported cases of confirmed or probable chronic HCV in South Carolina,^{50,51,52} meaning patients met the CDC case definition of confirmed or probable cases. This is likely an undercount since HCV is often asymptomatic, and relatively few people seek testing within the first six months of being infected. SSPs provide critical access points for HCV testing and follow-up care, as well as important prevention education to reduce the risk of HCV transmission through injection drug use.

HIV is spread through bodily fluids and attacks cells that help the body fight infection, making a person more vulnerable to other infections and diseases. If left untreated, HIV can lead to acquired immunodeficiency syndrome (AIDS). Without HIV medicine, people with AIDS survive an average of three years, unless the patient's weakened immune system results in a secondary illness such as tuberculosis or toxoplasmosis, at which

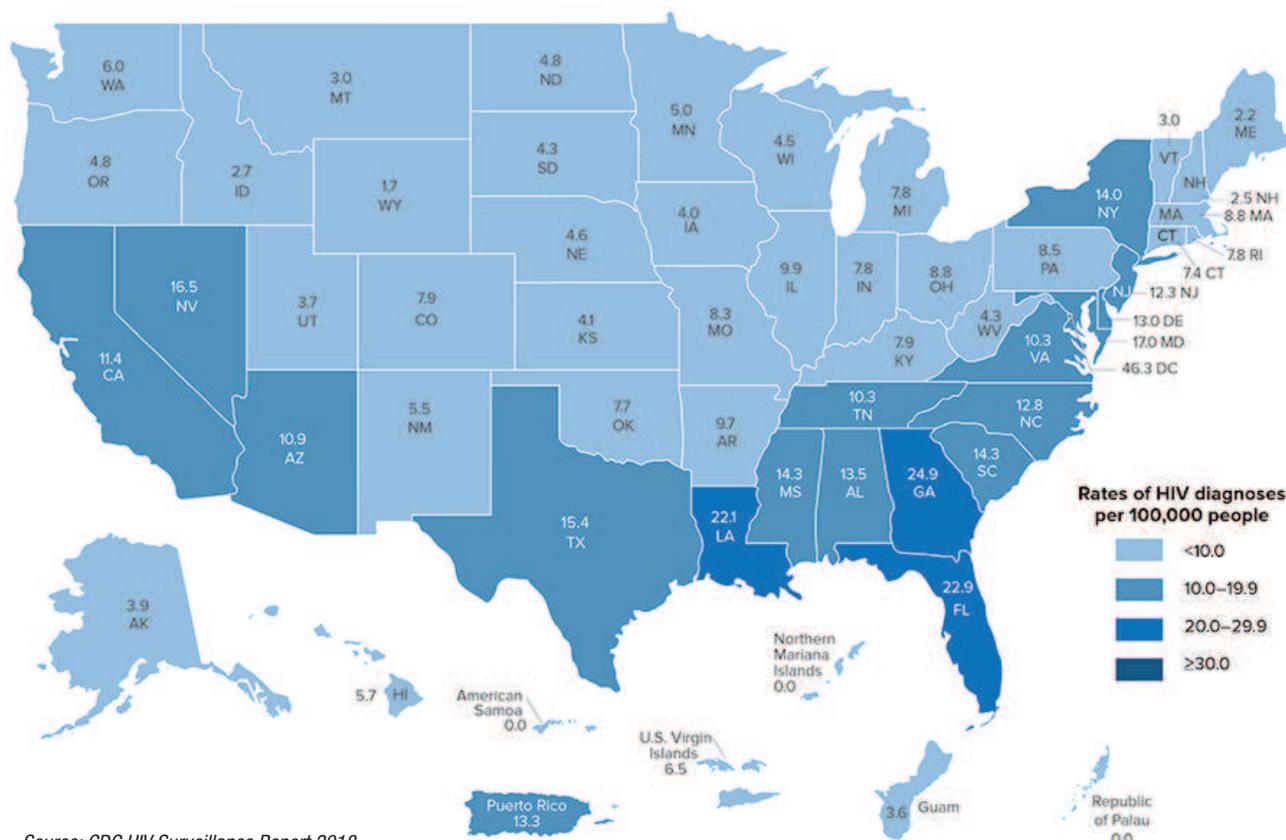
point life expectancy without treatment falls to about one year.⁵³ People living with HIV are at a significant risk of developing other medical conditions. Neurocognitive disorders affect 50% of people who are HIV positive; they are four times more likely to develop diabetes and twice as likely to develop heart disease. Additionally, HIV/HCV coinfection is very common (62-80%) among HIV infected drug users.⁵⁴ Although there is no cure for HIV, antiretroviral medications allow HIV-positive individuals to live healthy lives and prevent transmitting HIV to their sexual partners.⁵⁵ First identified in 1981, HIV is the cause of one of humanity's deadliest and most persistent epidemics.⁵⁶

The opioid crisis is threatening recent national progress made in HIV prevention.^{57,58}

The latest HIV surveillance data show that HIV diagnoses are not evenly distributed geographically, with southern states accounting for more than half of the 38,739 new HIV diagnoses in 2017. Moreover, 23% of new HIV diagnoses in the South are in suburban and rural areas.⁵⁹



MAP 1: Rates of HIV Diagnoses in the U.S., 2017



Source: CDC HIV Surveillance Report 2018

For the past five years in South Carolina, the number of newly diagnosed HIV cases has averaged 761 per year, although many more people are infected but have not been tested.⁶⁰ The incidence rate in South Carolina for 2017 was 15.8 per 100,000 population, constituting the nation’s eighth-highest rate of new HIV diagnoses. In 2017, there were an estimated 19,749 South Carolina residents living with a diagnosed HIV infection (including AIDS).⁶¹ While antiretroviral drugs and strengthened care services have contributed to a decline in overall AIDS deaths, the number of people living with HIV/AIDS at the end of each year has increased 30% from 2008 to 2017.⁶²

According to surveillance from the South Carolina Department of Health and Environmental Control (DHEC), over the past 10

years, the number of new HIV/AIDS diagnoses with a reported risk of injecting drug use had been declining in the state; however, the trend reversed in 2015 and 2016. Between 2013 and 2017, an average of 21 newly diagnosed cases of HIV per year in South Carolina were attributable to injecting drug use.⁶³ Nine percent of people living with HIV/AIDS reported injecting drug use, and 4% of people recently diagnosed with HIV/AIDS reported injecting drug use, as well.⁶⁴ Given the increasing number of injecting drug users in South Carolina, DHEC advises that the incidence of HIV should be closely monitored. Increased opioid use and the spread of HIV will add additional burdens to already stretched public health, social services and health care systems, especially in rural parts of the state.

Case in Point: Addressing Outbreaks

In January 2015, health officials in Indiana began an ongoing investigation of an outbreak of HIV in Scott County, Indiana, centered around the small town of Austin.⁶⁵ At that time, there were 11 newly confirmed HIV cases in Scott County, where historically fewer than five cases of HIV had been reported annually.⁶⁶ The outbreak was traced to drug users who were infected by sharing used syringes while injecting the opioid painkiller Opana (oxymorphone).

On March 27, 2015, then-Governor Mike Pence declared a state of public health emergency after confirmation of 81 new HIV cases in Scott County.⁶⁷ In April, the number had grown to 135 cases, constituting a significant portion of the town's 4,200 residents. By November, the number had risen to 181 new cases, with 92% being coinfecting with HCV.⁶⁸

⁶⁹ In May 2016, the public health emergency was extended, citing 191 confirmed new HIV cases in the county among injecting drug users.^{70,71}

Then-Governor Pence allowed a temporary partial lift on the needle exchange ban, and the outbreak was stemmed at 191 cases.⁷² The county then began a new community-wide approach to address local underlying causes of drug use such as lack of jobs, affordable housing and public transportation.⁷³ The Indiana HIV outbreak set the stage for implementation of effective public health interventions, in the form of comprehensive SSPs, to quickly address outbreaks.

In addition to the concerning increases in HCV and HIV rates, the Centers for Disease Control and Prevention (CDC) has also identified additional emerging infectious and bacterial disease risks related to injecting drug use. Sharing contaminated needles and syringes is spreading methicillin-resistant *Staphylococcus*

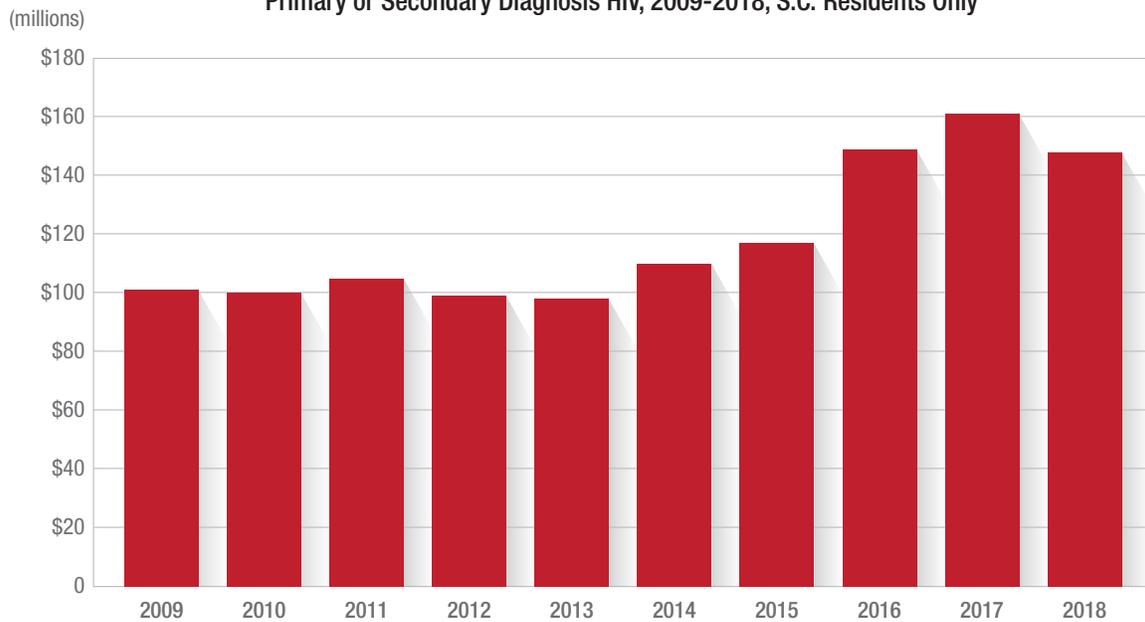
aureus (MRSA), which increased 124% between 2011 and 2016 among people who inject drugs. In fact, people who inject drugs are 16 times more likely than other people to develop invasive MRSA infections. Needle and syringe sharing is also linked to increased rates of endocarditis, a life-threatening infection of the heart valves.^{74,75} Lack of access to SSPs can also contribute to soft skin tissue infections (SSTIs) which are the most common cause for hospital admission among people who inject drugs.⁷⁶

The estimated lifetime cost of treating one person living with HIV in the United States is \$450,000.⁷⁷ In South Carolina, the average lifetime cost is \$478,000 (in 2017 dollars).⁷⁸ The cost of medication to treat and cure HCV is extremely high. Direct-acting antiviral medications that cure HCV have been available since 2014, although there is no generic form available today. Costs in 2018 ranged from \$84,000 to \$189,000 for a 12-to-24-week course of medication, with single pills costing from \$790 to \$1,125 each.⁷⁹ However, Mavyret, a new and lower-cost treatment approved by the FDA in August 2017, is the first eight-week curative treatment at a much lower cost of \$26,400.⁸⁰

Although there are federal funds available to offset the cost of HIV treatment,⁸¹ the high cost of HCV medication makes it unavailable to many. In a recent study of 9,025 HCV patients across the country, 35.5% were denied medication treatment.⁸² Denial was more common among patients covered by commercial insurance (52.4%) than Medicaid (34.5%) or Medicare (14.7%).⁸³ The incidence of denials increased across the year-long duration of the study. As HCV becomes more common, states are beginning to restrict access to medication for Medicaid beneficiaries and people in jails and other public institutions, and it is anticipated that class action lawsuits will result.⁸⁴

The cost of hospital-based (emergency department and inpatient) treatment for HIV has increased significantly over the past 10 years in South Carolina, as demonstrated in **Graph 1**. The cost exceeded \$148 million in 2018 for residents with a primary or related secondary diagnosis of HIV.⁸⁵

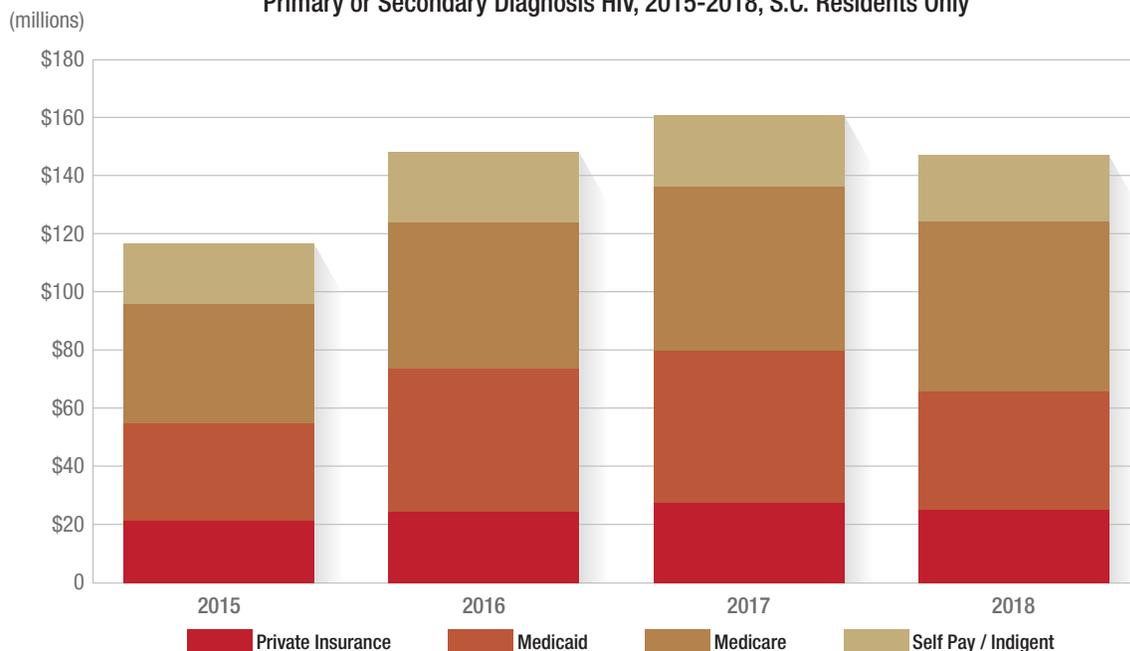
GRAPH 1:
South Carolina Inpatient and Emergency Department Charges,
Primary or Secondary Diagnosis HIV, 2009-2018, S.C. Residents Only



Data Source: South Carolina Revenue and Fiscal Affairs

Only a small percentage of the cost of hospital-based treatment for HIV is covered by private insurance, as demonstrated in **Graph 2**. In 2018, private insurance covered only 17% of costs for hospital-based HIV primary or secondary treatment in South Carolina.⁸⁶ The balance was borne by Medicare (39.5%), Medicaid (27.8%) or billed to indigent/self-pay patients (15.7%).⁸⁷

GRAPH 2:
South Carolina Inpatient and Emergency Department Charges by Payer Source,
Primary or Secondary Diagnosis HIV, 2015-2018, S.C. Residents Only



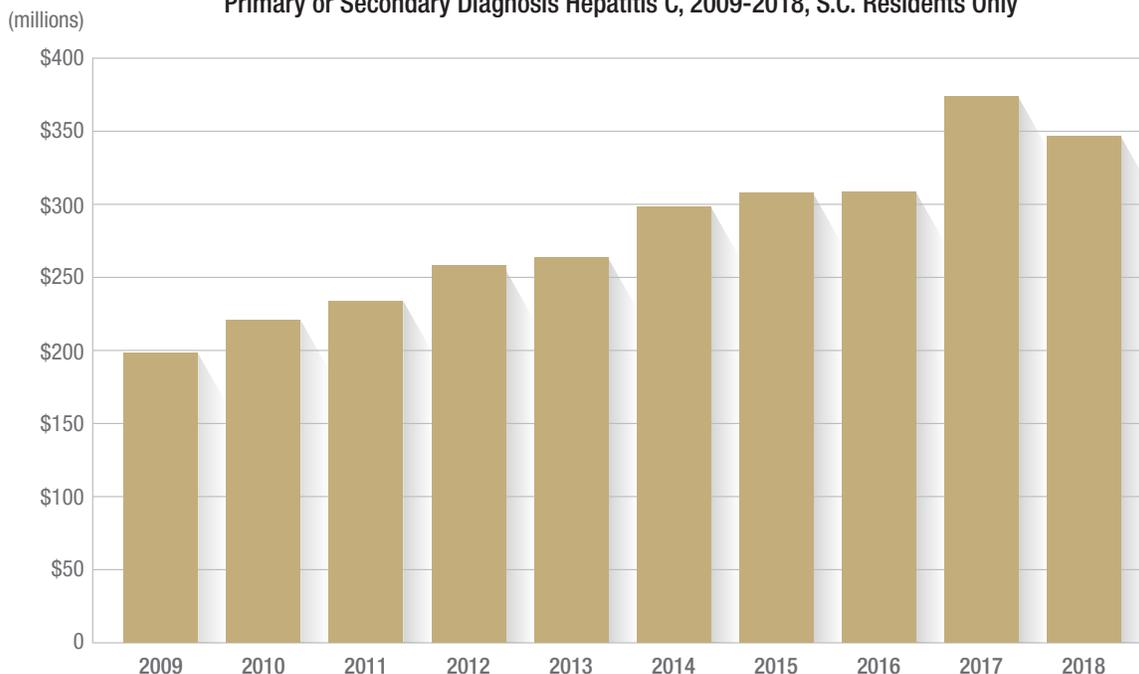
Data Source: South Carolina Revenue and Fiscal Affairs

The state paid an additional estimated \$51,013,059 for HIV prevention and care in 2016 through the Ryan White program and other state and federal sources.⁸⁸ These funds covered core medical services (outpatient and ambulatory health services, pharmaceutical assistance, oral health care, health insurance premium and cost-sharing assistance, home health care, medical nutrition therapy, mental health services, substance use disorder outpatient care and medical case management) and support services (non-medical case management services, emergency financial assistance, food bank/home-delivered meals, health education/risk reduction, housing services, linguistic services, medical transportation services, outreach services,

psychosocial support services, referral for health/care/supportive services, rehabilitation services, residential substance abuse services and treatment adherence counseling). The state's Ryan White Part B Program served a total of 8,816 clients in 2015, including 820 new clients. These clients received life-sustaining HIV medical care through 13 Ryan White Part B Regional Service Providers. In addition, South Carolina's AIDS Drug Assistance Program (ADAP) provided Direct Dispensing services to 3,656 clients, Insurance Assistance Program services to 2,851 clients and Medicare Assistance Program services to 337 clients, for 2015. Despite all of these services and these funding levels, unmet challenges remain for South Carolina residents living with HIV/AIDS.⁸⁹

In the United States, the estimated cost of providing health care services for people living with chronic HCV infection is \$15 billion annually.⁹⁰ As with HIV, there has been a significant increase in the cost of hospital-based (emergency department and inpatient) treatment for primary or secondary HCV over the past 10 years in South Carolina (**Graph 3**). In 2018, that cost was almost \$347 million.⁹¹

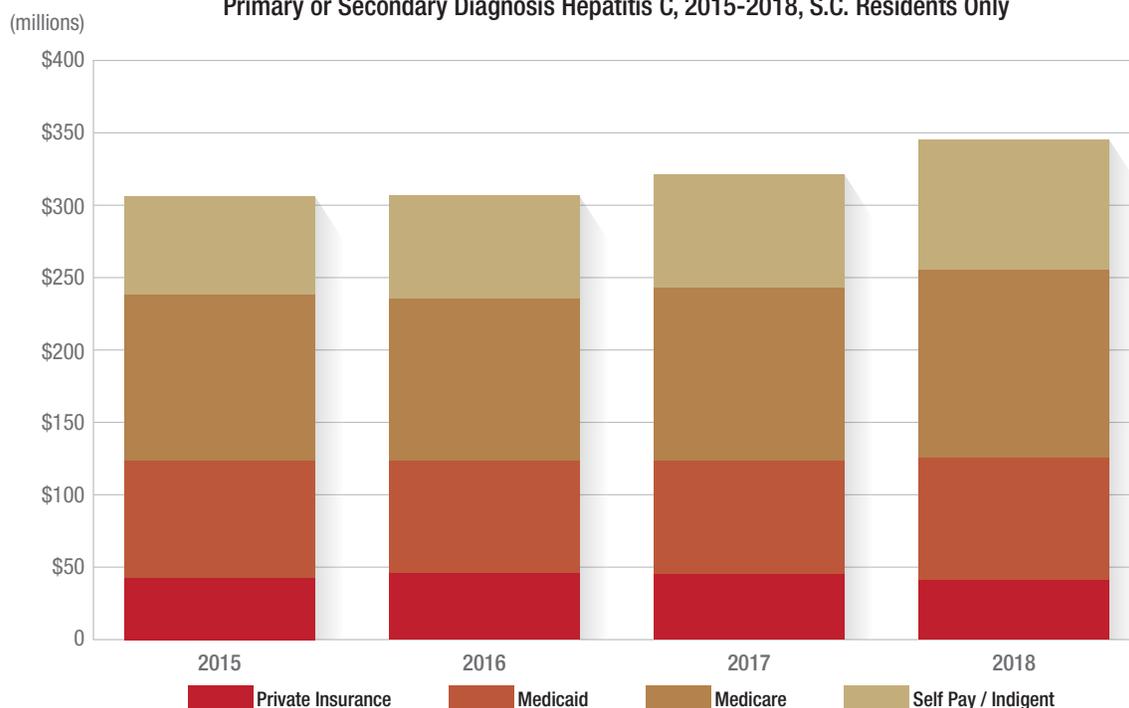
GRAPH 3:
South Carolina Inpatient and Emergency Department Charges,
Primary or Secondary Diagnosis Hepatitis C, 2009-2018, S.C. Residents Only



Data Source: South Carolina Revenue and Fiscal Affairs

As with HIV, only a small portion of the cost of hospital-based treatment for HCV is billed to private insurance, 11.6% in 2018.⁹² (Graph 4) The balance of costs is borne by Medicare (37.8% in 2018) and Medicaid (24.7% in 2018) or billed to indigent or self-pay patients (26% in 2018).⁹

GRAPH 4:
South Carolina Inpatient and Emergency Department Charges by Payer Source,
Primary or Secondary Diagnosis Hepatitis C, 2015-2018, S.C. Residents Only



Data Source: South Carolina Revenue and Fiscal Affairs

Notably, these are only costs for hospital-based treatment. They do not include costs for routine and ongoing care for residents of the state who are HIV positive or have acute or chronic HCV. Moreover, these costs do not account for collateral expenditures for disability payments and other related public support, lost work time and decreased productivity and the costs to families that care for loved ones with HIV

and HCV. Additionally, although these costs do encompass primary and secondary diagnoses of HIV and HCV, total hospital costs associated with unsafe injection drug use are certainly not captured here. For example, treatment costs associated with endocarditis, soft skin tissue infections, overdose or caring for infants born with HCV are frequently not captured under HIV and HCV diagnostic codes.⁹⁴

“Despite advances in healthcare, too many Americans will continue to needlessly fall ill unless we change the conditions that contribute to poor health.”

Trust for America’s Health

The best way to avoid the spread of bloodborne pathogens among injecting drug users is to refrain from sharing needles, syringes and other equipment. However, education alone is generally a poor predictor of behavior change for persons with a substance use disorder. According to the CDC,

In addition to reducing infections by providing sterile injection equipment, SSPs link users to HIV and HCV testing; vaccinations to prevent other illnesses; substance use disorder treatment; social, mental health and other medical services; naloxone for overdose reversal and other needed services.

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In their February 2019 Issue Report, *Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change*,⁹⁷ Trust for America’s Health identified the most effective and efficient strategies for improved overall community health and reduced health care costs. The report pinpoints evidence-based policies and provides state leaders with information on how to best promote healthy lifestyles and control costs. The second of its six strategies for improving community health is to provide SSPs as harm reduction strategies to prevent substance misuse deaths and related diseases.

According to CDC data, nearly 30 years of research has shown that comprehensive SSPs are safe, effective, cost-saving, do not increase illegal drug use or crime and play an important role in reducing the transmission of HCV, HIV and other infections.⁹⁸ SSPs are associated with an approximately 50% reduction in HIV and HCV incidence, and when combined with medications that treat opioid use disorder (known as medication-assisted treatment), HIV and HCV transmission is reduced by more than two-thirds.^{99,100} At least one study has demonstrated that injecting drug users who had been needle exchange users were more likely than those who had never used an exchange program to report a substantial reduction in injection drug use or to stop injecting altogether, and to remain in drug treatment. In New York City, following the legalization of syringe-exchange programs, between 1990 and 2002, the HIV prevalence among injecting drug users decreased from 50% to 17%, and between 1990 and 2001, the prevalence of HCV among people who inject drugs fell from 80% to 59%.¹⁰¹ Following the District of Columbia’s lift of the congressional ban on syringe-exchange programs, which allowed the D.C. Department of Health to initiate an exchange program, there was a 70% decrease in new HIV cases among injection drug users, and a total of 120 HIV cases were averted in two years.¹⁰²

Kentucky was the first southern state to establish SSPs, which have become a central element in addressing the opioid epidemic, improving health outcomes and preventing the spread of HIV and HCV.¹⁰³ Kentucky also mandates HCV testing among pregnant women which, along with SSPs, are interventions aimed at decreasing mother-to-child-transmission (MTCT) of HCV. SSPs have shown so much success that the state is considering ways to expand their reach to areas of the state that have limited access to them. The administration views SSPs as a cornerstone of comprehensive harm reduction and an evidence-based approach to prevention, treatment and recovery.¹⁰⁴

Rather than increasing crime or drug use, SSPs improve public safety by facilitating treatment and by taking contaminated syringes and needles off the streets.¹⁰⁵ Needle-stick injuries are among the most concerning and stressful events experienced by law enforcement officers and have been ranked as equivalent to a knife or gunshot wound.¹⁰⁶ A study of police officers in San Diego found that nearly 30% had been stuck by a needle at some point in their careers, with more than 27% experiencing two or more needle-stick injuries.¹⁰⁷ A study of Connecticut police officers found that needle-stick injuries were reduced by two-thirds after implementing SSPs.¹⁰⁸ The availability of SSPs reduces improper disposal of used needles and syringes, making streets, parks and other public spaces safer for adults and children.



SSPs can yield cost savings within one year of implementation,¹⁰⁹ primarily through cost avoidance, since access to SSPs prevents new cases of HIV and HCV and their attendant costs. New York City demonstrated a one-year baseline savings to the city and state of \$1,300 to \$3,000 per client, reduced HIV treatment costs by \$325,000 per case of HIV averted and prevented four to seven HIV infections per 1,000 SSP clients.¹¹⁰

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The most recently released study on savings related to SSPs¹¹² showed that in Philadelphia, 10,592 cases of HIV were avoided between 1993 and 2002 because of access to sterile syringes. That equated to a cost savings of \$2.4 billion over the 10 years, or \$240 million annually.¹¹³ Even after accounting for the estimated programming costs, the return on investment was \$182.5 million per year in Philadelphia.¹¹⁴

What are Syringe Services Programs (SSPs)?

Syringe Services Programs, often called SSPs, are community-based prevention programs. SSPs provide a range of health services, and they provide a lifeline to those struggling with substance abuse. Comprehensive SSPs offer patients vaccinations and testing for diseases, referrals to treatment for substance use disorder and other diseases (such as viral hepatitis and HIV), and sterile injection equipment to prevent the transmission of infectious diseases.

Scientists, including those at the Centers for Disease Control and Prevention (CDC), have studied SSPs for more than 30 years and found that comprehensive SSPs benefit communities.



SSPs **save lives** by lowering the likelihood of deaths from overdoses.



Providing testing, counseling, and sterile injection supplies helps prevent outbreaks of other diseases. For example, SSPs are associated with a **50% decline** in the risk of HIV transmission.



Users of SSPs were **three times more likely** to stop injecting drugs.



Law enforcement benefits from reduced risk of needlesticks, **no increase in crime**, and the ability to save lives by preventing overdoses.



When two similar cities were compared, the one with an SSP had **86% fewer syringes** in places like parks and sidewalks.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS300156-D March 22, 2019

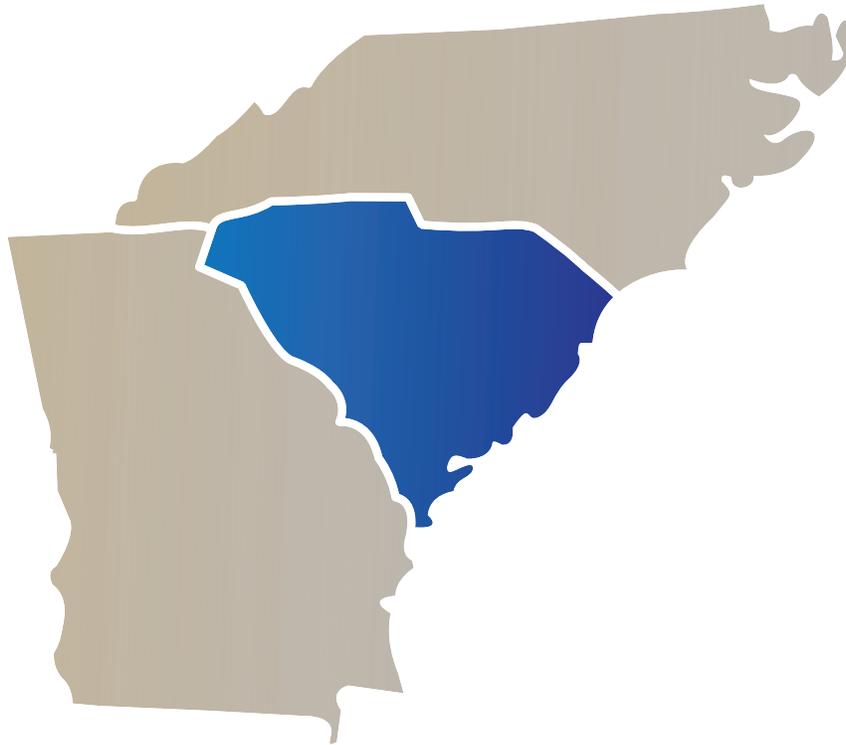
Source: https://www.cdc.gov/ssp/docs/Syringe-Services-Program-Infographic_508.pdf



Although it was already legal to operate an SSP, a 1988 amendment to the Public Health and Welfare Act prohibited the use of federal funds for SSP operations, limiting the availability of services. In 2016, the federal Consolidated Appropriations Act modified restrictions in order to permit limited use of funds from HHS to support SSPs, where need is demonstrated. Federal funds, however, cannot be used to purchase needles or syringes.¹¹⁵ The Act does allow state, local, tribal or territorial health departments, after consultation with the CDC and demonstration of need, to use federal funds for SSP staff, supplies, syringe disposal services and provision of naloxone, as well as for communication, outreach, planning and evaluation activities.¹¹⁶ The CDC offers guidance and consultation to states on determining need, based on significant increases (or risk of increases) in HIV or HCV due to unsafe injecting drug use.

Upon verification of need by the CDC, decisions regarding the function and use of SSPs are made on the state and local level, although the CDC and HHS offer guidance¹¹⁷ on establishing SSPs and facilitating evidence-based practices and co-located services. Generally, this comprises a comprehensive approach to addressing opioid use that includes provision of sterile needles and syringes, education and counseling; HCV, HIV and Sexually Transmitted Disease screening; provision of naloxone to reverse overdoses, treatment referrals, medical care and mental health services; vaccination services and provision of pre-exposure and post-exposure prophylaxes (PrEP and PEP). Guidance is also provided on the use of funding, coalition building and partnerships with law enforcement agencies.

Trust for America's Health also provides guidance on evidence-based design and implementation to states,¹¹⁸ including changing laws to explicitly allow SSPs statewide, providing programmatic guidance depending on organization type running them, ensuring anonymous participation and confidentiality and implementing data collection procedures that do not cause an undue burden on program staff or participants.



Syringe services programs became legal in North Carolina in 2016, and both governments and non-governmental entities may establish SSPs to “(1) Reduce the spread of HIV, AIDS, viral hepatitis, and other bloodborne diseases in this State. (2) Reduce needle stick injuries to law enforcement officers and other emergency personnel. (3) Encourage individuals who inject drugs to enroll in evidence-based treatment.”¹¹⁹ Currently, North Carolina has 33 official SSPs serving multiple counties through fixed locations and mobile units.¹²⁰ The North Carolina Department of Health and Human Services provides guidance on their website about accessing, starting and operating SSPs in the state.¹²¹ Collectively, North Carolina’s SSPs more than doubled their number of participants from just under 4,000 people in 2016-2017 to more than 9,600 in 2018-2019, and the number of sterile syringes that were distributed grew from 1.15 million to 3.3 million.¹²²

In April 2019, Georgia legalized SSPs for the specific purpose of preventing the spread of HIV and other infectious diseases, making it the 28th state (along with Washington, D.C.) to legalize syringe and needle exchange programs.¹²³ At least one SSP has operated in Georgia since 2016 when the Fulton County Board of Commissioners issued a resolution to support an SSP in Atlanta. At that point, SSPs became publicly recognized as a legitimate medical intervention for the prevention of blood-borne diseases.¹²⁴ This paved the way for the Fulton County Health Department to apply for federal funds to support SSPs. Senator Kay Kirkpatrick, a Republican from Marietta and the Senate sponsor of HB217, legalizing SSPs in Georgia, stated, “Although getting control of this epidemic is going to need more than one solution, this is a fiscally conservative step towards improving the public health of our state.”¹²⁵ Florida, Missouri, Iowa and Arizona have introduced bills in the 2018 and 2019 legislative sessions that would allow SSPs in their states.¹²⁶

In February 2019, the Trump administration announced a 10-year plan to reduce new HIV infections in the United States by 75% in five years and by 90% by 2030.¹²⁷ *Ending the HIV Epidemic: A Plan for America* targets 48 U.S. counties with the highest infection rates and seven states—including South Carolina—with a substantial rural HIV burden. These “hotspot” states are defined by having 10% or more of HIV diagnoses in rural areas, with at least 75 cases. Under the Plan, DHEC was recently awarded a \$375,000 planning grant to develop a coordination plan for ending the HIV epidemic in the state. Because DHEC recognizes that the HIV epidemic is also an HCV epidemic and a substance use disorder epidemic, SSPs will be a component of the state plan. Upon completion of the planning grant activities, DHEC is poised to apply for an implementation grant to respond to the local planning recommendations.¹²⁸ In fact, the prevention toolkit included in the national plan calls for increased investments in SSPs and acknowledges that injection opioid use is the most significant threat to progress in stemming HIV outbreaks.

In a collaborative effort to identify risk in South Carolina, DHEC and DAODAS requested a determination of need from CDC. This request was verified by CDC in January 2019,¹²⁹ confirming that South Carolina is at high risk for HIV and HCV outbreaks due to increased opioid use and associated drug injection activities in the state. This determination will allow South Carolina to access federal funds to address its opioid epidemic and to prevent significant numbers of HIV and HCV infections. However, because SSPs are prohibited by state law,¹³⁰ federal funding cannot be obtained without legislative change. Historically, DHEC has not proposed or funded SSPs in their grants or other activities, although the agency acknowledges that the possibility of legislative change presents additional opportunity to enhance local and statewide efforts toward combating co-occurring community health epidemics following national best practice guidelines.¹³¹ Should the state legislature amend the current law to favor SSPs, the next step would be for DHEC or another designated agency to work with project officers at the CDC to pursue funding. At this point, the amount of potential federal funding is unclear.¹³²

Conclusion

South Carolina continues to experience an opioid epidemic, which has led to an increasing number of reported cases of HIV and HCV infections due to unsafe injecting drug practices. Changes would need to be made to our current state law to allow the formation of Syringe Services Programs (SSPs) to reduce the transmission of HIV and HCV and to prevent the potential occurrence of an infectious disease outbreak. SSPs not only provide access to sterile drug use equipment and safe disposal but also substantially reduce the transmission of these bloodborne pathogens. In addition, SSPs are vital access points for the provision of life-saving Naloxone, HIV/HCV/STD testing and vaccinations as well as social, mental health and other medical services. SSPs have been proven to stem the exploding public cost of HCV and HIV treatment, improve public health and reduce needle-stick risk to the public, law enforcement and first responder personnel. *Because need in South Carolina has been verified by the CDC, state agencies would be able to seek federal funding to implement SSPs in short course upon legislative action.*

- 1 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>
- 2 "Syringe Services Programs." U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/policies-issues/syringe-services-programs>
- 3 "HIV in the United States by Region." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hiv/statistics/overview/geographicdistribution.html>
- 4 *ibid.*
- 5 "An Epidemiologic Profile of HIV and AIDS in South Carolina 2018." South Carolina Department of Health and Environmental Control. Accessed October 25, 2019. <https://www.dhec.sc.gov/sites/default/files/media/document/2018%20Epi%20Profile.pdf>
- 6 "What is 'Ending the HIV Epidemic: A Plan for America'?" U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>
- 7 "HIV in the United States by Region." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hiv/statistics/overview/geographicdistribution.html>
- 8 South Carolina Revenue and Fiscal Affairs Office, Health and Demographics Division, email message to the author, October 22, 2019.
- 9 *ibid.*
- 10 "South Carolina HIV/AIDS Strategy 2017-2021." SC DHEC. September, 2016. https://scdhec.gov/sites/default/files/docs/Health/docs/stdhiv/SC%20HIVAIDS%20Strategy_2017-2021_FINAL_091916.pdf
- 11 "Surveillance for Viral Hepatitis." Centers for Disease Control and Prevention. Accessed October 5, 2019. <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>
- 12 *ibid.*
- 13 *ibid.*
- 14 Centers for Disease Control and Prevention, "New Hepatitis C Infections Nearly Tripled over Five Years," News release, (May 11, 2017). <https://www.cdc.gov/nchhstp/newsroom/2017/Hepatitis-Surveillance-Press-Release.html>
- 15 "Surveillance for Viral Hepatitis." Centers for Disease Control and Prevention. Accessed October 5, 2019. <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>
- 16 U.S. Food and Drug Administration, "FDA Approves Mavyret for Hepatitis C," News release, (August 3, 2017). <https://www.fda.gov/news-events/press-announcements/fda-approves-mavyret-hepatitis-c>
- 17 Charitha Gowda, Stephen Lott, Matthew Grigorian, Dena M. Carbonari, M. Elle Saine, Stacey Trooskin, Jason A. Roy, Jay R. Kostman, Paul Urlick, and Vincent Lo Re, III. "Absolute Insurer Denial of Direct-Acting Antiviral Therapy for Hepatitis C: A National Specialty Pharmacy Cohort Study." *Open Forum Infectious Diseases*, Volume 5, Issue 6, (June 2018). <https://academic.oup.com/ofid/article/5/6/ofy076/4969901>
- 18 Nail, Rachel. "How Much Does Hepatitis C Treatment Cost?" *Medical News Today Newsletter*. November 21, 2018. <https://www.medicalnewstoday.com/articles/323767.php>
- 19 South Carolina Revenue and Fiscal Affairs Office, Health and Demographics Division, email message to the author, October 22, 2019.

20 *ibid.*

21 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

22 "Syringe Services Programs." U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/policies-issues/syringe-services-programs>

23 H. Hagan, J.P. McGough, H. Thiede, S. Hopkins, J. Duchin, E.R. Alexander. "Reduced Injection Frequency and Increased Entry and Retention in Drug Treatment Associated With Needle-Exchange Participation in Seattle Drug Injectors." *Journal of Substance Abuse Treatment*, 19, no 3 (2000, October):247-252. <https://www.ncbi.nlm.nih.gov/pubmed/?term=11027894>

24 Lustig, A. and Cabrera, M. *Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change*. Washington, D.C.: Trust for America's Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf

25 "Syringe Services Programs." U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/policies-issues/syringe-services-programs>

26 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

27 Lustig, A. and Cabrera, M. *Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change*. Washington, D.C.: Trust for America's Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf

28 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

29 Lustig, A. and Cabrera, M. *Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change*. Washington, D.C.: Trust for America's Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf

30 *ibid.*

31 "Managing HIV and Hepatitis C Outbreaks Among People Who Inject Drugs: A Guide for State and Local Health Departments." Centers for Disease Control and Prevention. Last modified March 2018. <https://www.cdc.gov/hiv/pdf/programresources/guidance/cluster-outbreak/cdc-hiv-hcv-pwid-guide.pdf>

32 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

33 "Department of Health and Human Services Implementation Guidance to Support Certain Components of Syringe Services Programs, 2016." U.S. Department of Health and Human Services. Last modified March 29, 2016. <https://www.hiv.gov/sites/default/files/hhs-ssp-guidance.pdf>

34 Sara Goldsby, email message to the author, October 7, 2019.

35 S.C. Code of Laws Ann. Section 44-53-930. <https://www.scstatehouse.gov/code/t44c053.php>

36 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

37 "HIV in the United States by Region." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hiv/statistics/overview/geographicdistribution.html>

38 "Surveillance for Viral Hepatitis – United States 2017." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>

- 39 "Hepatitis C Questions and Answers for Health Professionals." Centers for Disease Control and Prevention. Accessed October 5, 2019. <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#b2>
- 40 "HIV in the United States by Region." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hiv/statistics/overview/geographicdistribution.html>
- 41 Elijah Paintsil, Huijie He, Christopher Peters, Brett D. Lindenbach, Robert Heimer. "Survival of Hepatitis C Virus in Syringes: Implication for Transmission Among Injection Drug Users." *Journal of Infectious Disease*, 202, no 7(2010, October 1):984-990. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2932767/>
- 42 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>
- 43 "Surveillance for Viral Hepatitis – United States 2017." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>
- 44 "Surveillance for Viral Hepatitis." Centers for Disease Control and Prevention. Accessed October 5, 2019. <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>
- 45 *ibid.*
- 46 U.S. Food and Drug Administration, "FDA Approves Mavyret for Hepatitis C," News release, (August 3, 2017). <https://www.fda.gov/news-events/press-announcements/fda-approves-mavyret-hepatitis-c>
- 47 "Surveillance for Viral Hepatitis." Centers for Disease Control and Prevention. Accessed October 5, 2019. <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>
- 48 Centers for Disease Control and Prevention, "New Hepatitis C Infections Nearly Tripled over Five Years," News release, (May 11, 2017). <https://www.cdc.gov/nchhstp/newsroom/2017/Hepatitis-Surveillance-Press-Release.html>
- 49 "Surveillance for Viral Hepatitis." Centers for Disease Control and Prevention. Accessed October 5, 2019. <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>
- 50 *ibid.*
- 51 Linda Brown, personal communication with the author, November 20, 2019.
- 52 Centers for Disease Control and Prevention, "New Hepatitis C Infections Nearly Tripled over Five Years," News release, (May 11, 2017). <https://www.cdc.gov/nchhstp/newsroom/2017/Hepatitis-Surveillance-Press-Release.html>
- 53 "What are HIV and AIDS?" U.S. Department of Health and Human Services, HIV.Gov. Accessed October 12, 2019. <https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/what-are-hiv-and-aids>
- 54 "Epidemiology and Prevention of HIV and Viral Hepatitis Co-infections." Centers for Disease Control and Prevention. Accessed December 5, 2019. <https://www.cdc.gov/hepatitis/populations/hiv.htm>
- 55 "Be Wise.HIV." Merck Sharp & Dohme Corp. Accessed October 30, 2019. <https://www.bewise.hiv/>
- 56 "What are HIV and AIDS?" U.S. Department of Health and Human Services, HIV.Gov. Accessed October 12, 2019. <https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/what-are-hiv-and-aids>
- 57 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>
- 58 "Syringe Services Programs." U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/policies-issues/syringe-services-programs>
- 59 "HIV in the United States by Region." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hiv/statistics/overview/geographicdistribution.html>

60 "An Epidemiologic Profile of HIV and AIDS in South Carolina 2018." South Carolina Department of Health and Environmental Control. Accessed October 25, 2019. <https://www.dhec.sc.gov/sites/default/files/media/document/2018%20Epi%20Profile.pdf>

61 "HIV in the United States by Region." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hiv/statistics/overview/geographicdistribution.html>

62 *ibid.*

63 "An Epidemiologic Profile of HIV and AIDS in South Carolina 2018." South Carolina Department of Health and Environmental Control. Accessed October 25, 2019. <https://www.dhec.sc.gov/sites/default/files/media/document/2018%20Epi%20Profile.pdf>

64 *ibid.*

65 Indiana State Department of Health, "Scott County Public Health Emergency Declaration Extended," News release (May 2, 2016). https://www.in.gov/isdh/files/May_2_2016_SCOTT_COUNTY_PUBLIC_HEALTH_EMERGENCY_DECLARATION_EXTENDED.pdf

66 "Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015." Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, 64, no 16 [2015, May 1]:443-444. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6416a4.htm>

67 "Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015." Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, 64, no 16 [2015, May 1]:443-444. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6416a4.htm>

68 Indiana State Department of Health, "Scott County Public Health Emergency Declaration Extended," News release (May 2, 2016). https://www.in.gov/isdh/files/May_2_2016_SCOTT_COUNTY_PUBLIC_HEALTH_EMERGENCY_DECLARATION_EXTENDED.pdf

69 Robeznieks, Andis. "CDC: Indiana HIV Outbreak is 'Tip of the Iceberg' of a National Drug Abuse Problem." Modern Health-care. April 24, 2015. <https://www.modernhealthcare.com/article/20150424/NEWS/150429940/cdc-indiana-hiv-outbreak-is-tip-of-the-iceberg-of-a-national-drug-abuse-problem>

70 "Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015." Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, 64, no 16 [2015, May 1]:443-444. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6416a4.htm>

71 Indiana State Department of Health, "Scott County Public Health Emergency Declaration Extended," News release (May 2, 2016). https://www.in.gov/isdh/files/May_2_2016_SCOTT_COUNTY_PUBLIC_HEALTH_EMERGENCY_DECLARATION_EXTENDED.pdf

72 Robeznieks, Andis. "CDC: Indiana HIV Outbreak is 'Tip of the Iceberg' of a National Drug Abuse Problem." Modern Health-care. April 24, 2015. <https://www.modernhealthcare.com/article/20150424/NEWS/150429940/cdc-indiana-hiv-outbreak-is-tip-of-the-iceberg-of-a-national-drug-abuse-problem>

73 Rudavsky, Shari. "An Indiana town recovering from 190 HIV cases." IndyStar. April 11, 2016. <https://www.indystar.com/story/news/2016/04/08/year-after-hiv-outbreak-austin-still-community-recovery/82133598/>

74 "Managing HIV and Hepatitis C Outbreaks Among People Who Inject Drugs: A Guide for State and Local Health Departments." Centers for Disease Control and Prevention. Last modified March 2018. <https://www.cdc.gov/hiv/pdf/programresources/guidance/cluster-outbreak/cdc-hiv-hcv-pwid-guide.pdf>

75 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

76 J.R. Ebright, B. Pieper. "Skin and Soft Tissue Infections in Injection Drug Users." Infectious Disease Clinics of North America, 16, no 3 (2002, September):697-712 <https://www.ncbi.nlm.nih.gov/pubmed/12371123>

77 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

78 "HIV in the United States by Region." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/hiv/statistics/overview/geographicdistribution.html>

98 Nail, Rachel. "How Much Does Hepatitis C Treatment Cost?" Medical News Today Newsletter. November 21, 2018. <https://www.medicalnewstoday.com/articles/323767.php>

80 U.S. Food and Drug Administration, "FDA Approves Mavyret for Hepatitis C," News release, (August 3, 2017). <https://www.fda.gov/news-events/press-announcements/fda-approves-mavyret-hepatitis-c>

81 "Federal Funding for HIV/AIDS." U.S. Department of Health and Human Services, HIV.Gov. Accessed November 3, 2019. <https://www.hiv.gov/federal-response/funding/federal-funding>

82 Charitha Gowda, Stephen Lott, Matthew Grigorian, Dena M. Carbonari, M. Elle Saine, Stacey Trooskin, Jason A. Roy, Jay R. Kostman, Paul Urick, and Vincent Lo Re, III. "Absolute Insurer Denial of Direct-Acting Antiviral Therapy for Hepatitis C: A National Specialty Pharmacy Cohort Study." *Open Forum Infectious Diseases*, Volume 5, Issue 6, (June 2018). <https://academic.oup.com/ofid/article/5/6/ofy076/4969901>

83 *ibid.*

84 Andrews, Michelle. "FDA's Approval of A Cheaper Drug For Hepatitis C Will Likely Expand Treatment." National Public Radio, October 4, 2017. <https://www.npr.org/sections/health-shots/2017/10/04/555156577/fdas-approval-of-a-cheaper-drug-for-hepatitis-c-will-likely-expand-treatment>

85 South Carolina Revenue and Fiscal Affairs Office, Health and Demographics Division, email message to the author, October 22, 2019.

86 *ibid.*

87 *ibid.*

88 "South Carolina HIV/AIDS Strategy 2017-2021." SC DHEC. September, 2016. https://scdhec.gov/sites/default/files/docs/Health/docs/stdhiv/SC%20HIVAIDS%20Strategy_2017-2021_FINAL_091916.pdf

89 *ibid.*

90 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

91 South Carolina Revenue and Fiscal Affairs Office, Health and Demographics Division, email message to the author, October 22, 2019.

92 *ibid.*

93 *ibid.*

94 Linda Brown, personal communication with the author, November 20, 2019.

95 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

96 "Syringe Services Programs." U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/policies-issues/syringe-services-programs>

97 Lustig, A. and Cabrera, M. Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change. Washington, D.C.: Trust for America's Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf

- 98 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>
- 99 *ibid.*
- 100 "Syringe Services Programs." U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/policies-issues/syringe-services-programs>
- 101 Lustig, A. and Cabrera, M. Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change. Washington, D.C.: Trust for America's Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf
- 102 *ibid.*
- 103 "Addressing the Rise of Infectious Disease Related to Injection Drug Use: Lessons Learned from Kentucky." National Governors Association. May, 2019. <https://www.nga.org/wp-content/uploads/2019/04/NGA-Brief-Lessons-Learned-From-Kentucky-May-2019.pdf>
- 104 *ibid.*
- 105 "Factsheet: Public Safety, Law Enforcement and Syringe Exchange, March 2013." Foundation for AIDS Research. Accessed October 18, 2019. https://www.amfar.org/uploadedFiles/_amfarorg/Articles/On_The_Hill/2013/fact%20sheet%20Syringe%20Exchange%20031413.pdf
- 106 "Infectious Disease Consequences of the Opioid Crisis Explored at 3rd Plenary Session at CDC's National HIV Prevention Conference featuring Assistant Secretary for Health." U.S. Department of Health and Human Services, HIV.Gov. March 22, 2019. <https://www.hiv.gov/blog/infectious-disease-consequences-opioid-crisis-explored-3rd-plenary-session-cdc-s-national-hiv>
- 107 John Lorentz, Linda Hill, Behzad Samimi. "Occupational Needlestick Injuries in a Metropolitan Police Force." American Journal of Preventive Medicine, 18, no 2 (2000, February):146-150. <https://www.sciencedirect.com/science/article/abs/pii/S0749379799001373>
- 108 S.L. Groseclose, B. Weinstein, T.S. Jones, L.A. Valleroy, L.J. Fehrs, W.J. Kassler. "Impact of Increased Legal Access to Needles and Syringes on Practices of Injecting- Drug Users and Police Officers—Connecticut, 1992-1993." Journal of Acquired Immune Deficiency Syndromes & Human Retrovirology, 10, no 1(1995):82-89. Ovid: <https://insights.ovid.com/jaid/199509000/00042560-199509000-00012>
- 109 Lustig, A. and Cabrera, M. Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change. Washington, D.C.: Trust for America's Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf
- 110 Andrews, Michelle. "FDA's Approval of A Cheaper Drug For Hepatitis C Will Likely Expand Treatment." National Public Radio, October 4, 2017. <https://www.npr.org/sections/health-shots/2017/10/04/555156577/fdas-approval-of-a-cheaper-drug-for-hepatitis-c-will-likely-expand-treatment>
- 111 Lustig, A. and Cabrera, M. Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change. Washington, D.C.: Trust for America's Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf
- 112 Feldman, Nina. "Syringe Exchange Saved Billions in HIV-Related Costs in Philadelphia, Study Finds." Philadelphia Tribune. October 30, 2019. https://www.phillytrib.com/news/health/syringe-exchange-saved-billions-in-hiv-related-costs-in-philadelphia/article_c5fe55b3-de19-51be-9e0e-29269af2638b.html
- 113 *ibid.*
- 114 *ibid.*
- 115 "Summary of Information on the Safety and Effectiveness of Syringe Services Programs (SSPS)." Centers for Disease Control and Prevention. Accessed October 3, 2019. <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>

- 116 “Managing HIV and Hepatitis C Outbreaks Among People Who Inject Drugs: A Guide for State and Local Health Departments.” Centers for Disease Control and Prevention. Last modified March 2018. <https://www.cdc.gov/hiv/pdf/programresources/guidance/cluster-outbreak/cdc-hiv-hcv-pwid-guide.pdf>
- 117 “Department of Health and Human Services Implementation Guidance to Support Certain Components of Syringe Services Programs, 2016.” U.S. Department of Health and Human Services. Last modified March 29, 2016. <https://www.hiv.gov/sites/default/files/hhs-ssp-guidance.pdf>
- 118 Lustig, A. and Cabrera, M. Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change. Washington, D.C.: Trust for America’s Health, February 2019. https://www.tfah.org/wp-content/uploads/2019/02/2019-PHACCS-Report_FINAL.pdf
- 119 “Rural Syringe Services.” Harm Reduction Coalition. Accessed October 10, 2019. <https://harmreduction.org/ruralsyringe/state-laws/>
- 120 “Syringe Exchange Programs in North Carolina.” North Carolina Department of Health and Human Services. Accessed October 20, 2019. <https://www.ncdhhs.gov/divisions/public-health/north-carolina-safer-syringe-initiative/syringe-exchange-programs-north>
- 121 “Syringe Exchange FAQs.” North Carolina Department of Health and Human Services. Accessed October 20, 2019. <https://www.ncdhhs.gov/divisions/public-health/north-carolina-safer-syringe-initiative/syringe-exchange-faqs>
- 122 Engel-Smith, Liora. “N.C. Needle Exchange Programs Expand Their Reach Despite the Odds.” North Carolina Health News. August 29, 2019. <https://www.northcarolinahealthnews.org/2019/08/29/nc-needle-exchange-programs-succeed-despite-odds/>
- 123 Mansoor, Sanya. “Amid HIV Concerns, Georgia Legalizes Needle Exchanges.” Associated Press. April 5, 2019. <https://www.walb.com/2019/04/05/amid-hiv-concerns-georgia-legalizes-needle-exchanges/>
- 124 Landman, Karen. “Injectable Drugs Can Kill, But Clean Syringes Can Save Lives.” Georgia Health News. January 24, 2017. <http://www.georgiahealthnews.com/2017/01/injectable-drugs-kill-clean-syringes-save-lives/>
- 125 Saunders, Patrick. “Georgia Legislature Passes Needle Exchange Bill to Combat HIV.” Project Atlanta / Q Magazine. March 25, 2019. https://www.projectq.us/atlanta/Georgia_legislature_passes_needle_exchange_bill_to_combat_HIV
- 126 Knight, Victoria. “Needle Exchanges Find New Champions Among Republicans.” Kaiser Health News. May 8, 2019. <https://www.usatoday.com/story/news/nation/2019/05/08/needle-exchange-programs-more-accepted-republican-states/1139672001/>
- 127 “Syringe Services Programs.” U.S. Department of Health and Human Services, HIV.Gov. Accessed October 11, 2019. <https://www.hiv.gov/federal-response/policies-issues/syringe-services-programs>
- 128 Linda Brown, personal communication with the author, November 20, 2019.
- 129 Sara Goldsby, email message to the author, October 7, 2019.
- 130 S.C. Code of Laws Ann. Section 44-53-930. <https://www.scstatehouse.gov/code/t44c053.php>
- 131 Sara Goldsby. Personal communication with the Institute of Medicine and Public Health (Maya Pack), October 7, 2019.
- 132 “Federal Funding for Syringe Services Programs.” Centers for Disease Control and Prevention. Accessed November 3, 2019. <https://www.cdc.gov/ssp/ssp-funding.html#regarding-funding>

The South Carolina Institute of Medicine & Public Health (IMPH) is a nonpartisan, non-profit organization working to collectively inform policy to improve health and health care in South Carolina. In conducting its work, IMPH takes a comprehensive approach to advancing health issues through data analysis and translation and collaborative engagement. The work of IMPH is supported by a diverse array of public and private sources. This policy brief was produced at the request of the South Carolina Department of Alcohol and Other Drug Abuse Services. Please direct any questions to info@imph.org.



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