Agenda Item Number:

ORANGE COUNTY BOARD OF HEALTH
AGENDA ITEM SUMMARY

Meeting Date: June 24, 2015

Agenda Item Subject: Syringe Exchange Programs

Attachment(s): 1) AMFAR Syringe Service Program Policy Brief
2) Syringe Exchange Programs in North Carolina

Staff or Board Member Reporting: Tessie Castillo, North Carolina Harm Reduction Coalition

Purpose: ___ Action
_X_Information only
___ Information with possible action

Summary Information: Tessie Castillo* will provide an overview of Syringe Exchange Programs (SEPs) as an evidence-based practice to reduce the spread of communicable diseases such as HIV and hepatitis C. The overview will include an overview of the necessary components of an SEP, the benefits/risks of an SEP, and current national and state efforts and challenges to establishing SEPs.

Two information items are included with this abstract as briefing materials before the meeting. They are a fact sheet and policy on syringe exchange both nationally in in North Carolina.

*Advocacy and Communications Coordinator from the North Carolina Harm Reduction Coalition

Background: In the 2014-2016 BOH Strategic Plan, the Substance Abuse & Mental Health subcommittee included researching methods to reduce infections passed through drug misuse and abuse as an action step. This presentation is an educational session for the full board on the topic before the subcommittee begins more in-depth work on the topic.

Recommended Action: ___Approve
___Approve & forward to Board of Commissioners for action
___Approve & forward to _____
___Accept as information
___Revise & schedule for future action
_X_Other (detail): Receive the information and provide general comments to help guide the BOH SAMH subcommittee in their consideration of this topic.

amfAR
MAKING AIDS HISTORY
The Foundation for AIDS Research

January 2013
ISSUE BRIEF

Federal Funding for Syringe Services Programs: Saving Money, Promoting Public Safety, and Improving Public Health

Key Points

- Syringe services programs (SSPs) save public resources, serve as vital "bridges" to treatment and prevention services, promote public safety, and reduce health disparities.
- The ban on federal funding for SSPs undermines local control and decision-making.
- SSPs enjoy broad public and professional support.

HIV/AIDS remains one of the country's most serious health challenges. According to an overwhelming body of evidence, needle and syringe exchange programs not only reduce the spread of HIV, but also save money, encourage the safe disposal of syringes, minimize the risk of needlestick injuries to law enforcement officials, and help link chemically dependent individuals to vital drug treatment services. In difficult budgetary times, investments in syringe exchange are a wise use of tax dollars.

Injection drug-related HIV and hepatitis C infections remain serious health crises in the United States

Each year, 50,000 Americans are newly infected with HIV.[1] Injection drug use remains a driving force in the national epidemic, accounting for 14 percent of new HIV infections among women and 7-11 percent of new HIV infections among men in the United States in 2010.[2] Reaching the federal goal of an "AIDS-Free Generation"[3] requires effective, sustained efforts to prevent new infections among injection drug users (IDUs). Approximately 3.2 million Americans are living with hepatitis C (HCV), and deaths related to HCV have increased substantially over the last decade.[4]

The evidence is clear: Syringe services programs prevent HIV transmission

Sharing contaminated injecting equipment is one of the most efficient means of HIV transmission.[5] Scores of studies have conclusively demonstrated that SSPs help prevent infection by reducing the re-use and circulation of injecting equipment without increasing drug use or resulting in other negative

How SSPs work

SSPs provide free sterile syringes, an approach that reduces the likelihood that users will share injecting equipment.[6] Although the provision of sterile syringes is the core service provided by SSPs, these programs also safely dispose of used syringes, and have much broader health benefits.[7] Many offer a range of health and supportive services, including on-site medical care; screening and counseling for HIV, hepatitis C, and sexually transmitted infections; distribution of condoms, food, and clothing; and referrals to substance abuse treatment.[8] In addition, many SSPs help save lives by providing medications to prevent overdose and support drug treatment.[9] SSPs offer tailored services drug users need to keep themselves and others safer and healthier. As a result, drug users often view SSPs as more respectful and less discriminatory than traditional healthcare providers; this makes SSPs better able to connect drug users to health and supportive services they would otherwise not have accessed.[10, 11, 12]

New York Harm Reduction Educators operates mobile syringe exchange sites that provide lifesaving services in communities throughout New York City.

consequences.[13, 14, 15] SSPs have helped New York City—where 50 percent of all IDUs were living with HIV in the early 1980s—approach the elimination of new drug-related transmissions, saving federal and state taxpayers millions of dollars in treatment costs averted.[16, 17, 18] SSPs make neighborhoods safer (for police, sanitation workers, and the general public) by supporting the safe disposal of potentially infectious needles and syringes.[19, 20] SSPs also facilitate recovery from drug abuse by linking drug users to treatment services.[21]

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Federal funds currently cannot be used to support syringe services programs

In 2009, Congress removed a 21-year prohibition on the use of federal funds to support SSPs.[22] Two years later, however, Congress re-imposed the ban on federal funding for SSPs.[23] In 2013, even as injection drug use continues to contribute substantially to the spread of HIV, federal public health funds are unavailable for syringe exchange.

SSPs are not illegal throughout most of the country, and more than 200 SSPs are currently operating in 34 states, the District of Columbia, and the Commonwealth of Puerto Rico.[24]

However, without federal funding, these SSPs are only able to provide sterile syringes for fewer than 3 percent of all injections estimated to occur each year.[25] SSPs that receive state or local government funding distribute more sterile syringes and offer HIV tests more often than those that do not receive government funding.[26] Federal support could amplify this increase in service capacity.

In short, the federal funding ban on SSPs undermines national efforts to prevent new HIV infections. If the country is to realize the goal of an AIDS-Free Generation, coverage for these highly effective programs will need to increase.

SSPs save lives and money, protect law enforcement and local communities, and support national efforts to reduce substance abuse

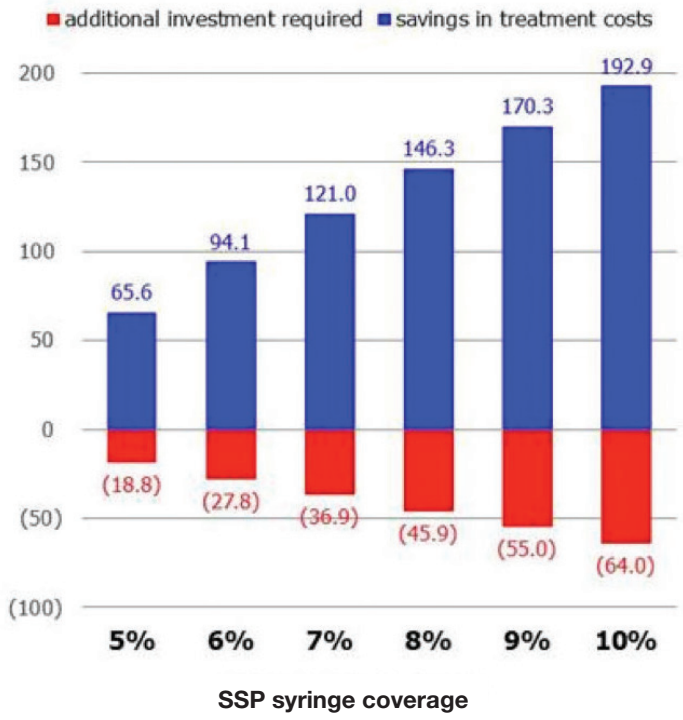
Banning federal support for cost-effective needle exchange programs is contrary to the public interest. Although such programs were controversial when they first emerged in the 1980s, nearly three decades of experience has generated substantial support for the approach from local governments, public health officials, and scientific organizations. The public health benefits of SSPs have been well documented, but these programs generate other benefits that may be less familiar.

1. SSPs save public resources

The lifetime cost of treating an HIV-positive person is estimated to be between $385,200 and $618,900.[27] As HIV-positive IDUs are often uninsured or reliant on public sector programs (such as Medicaid, Medicare, and Ryan White) for their care, taxpayers bear the lion's share of treatment costs associated with new infections related to injection drug use.[28, 29]

HIV is not the only costly infection associated with injection drug use. HCV costs hundreds of millions of dollars annually to treat.[30] Needle sharing during injection drug use is the primary driver of hepatitis C infection in the U.S., with an estimated 50–80 percent of drug users becoming infected with HCV within five years of their first drug injection.[31] A study of IDUs in New York City found that from 1990-2001, as SSPs grew substantially, HCV prevalence declined from 90 to 63 percent.[32]

With individual needles and syringes costing less than 50 cents,[33] it is far cheaper to prevent a new case of HIV than to assume many years of treatment costs. According to a recent analysis, expanding SSP coverage to 10 percent of all



Source: Nguyen, T.Q., Weir, B.W., Pinkerton, S.D., Des Jarlais, D.C., & Holtgrave, D. (July 23, 2012). Increasing investment in syringe exchange is cost-saving HIV prevention: modeling hypothetical syringe coverage levels in the United States (MOAE0204 - Oral Abstract). Presented at the XIX International AIDS Conference, Washington D.C. Abstract available online at http://pag.aids2012.org/Abstracts.aspx?SID=198&AID=17268. (date last accessed: December 11, 2012)

injections (from the current level of 2.9 percent) would avert nearly 500 new HIV infections each year.[34] Such an expansion in service coverage would cost an estimated $64 million—less than one-third the projected lifetime costs (an estimated $193 million) of treating these 500 cases.[35] In other words, every dollar spent expanding service coverage to such a level would save at least an estimated three dollars in treatment costs averted.[36] Further service expansion would save American taxpayers hundreds of millions of dollars.

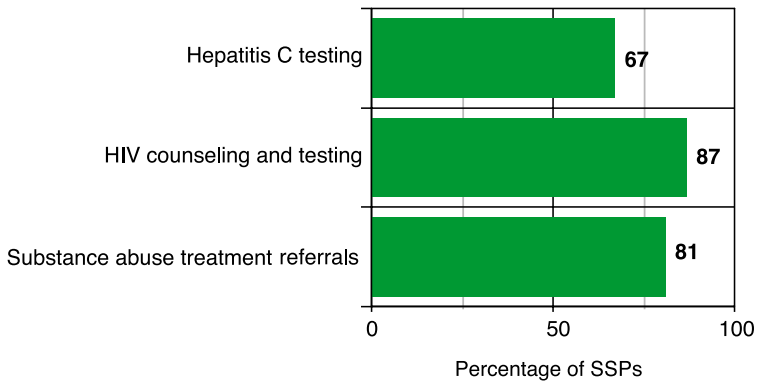
2. SSPs serve as vital bridges to treatment and prevention services

Supporting recovery and breaking the cycle of drug use are key principles of the National Drug Control Strategy.[37] SSPs support these aims. They serve as critical entry points for drug users, and link individuals to comprehensive treatment and care, such as in New Jersey, where more than 22 percent (998 individuals) of the 4,482 people served by New Jersey's five SSPs from 2007 to 2009 entered a drug treatment program.[38]

Every dollar spent expanding service coverage to such a level would save at least an estimated three dollars in treatment costs averted.

By facilitating recovery from drug addiction, SSPs help individuals struggling with chemical dependence to repair their lives and become productive members of society. In one study, employment increased 44.8 percent within six months among clients of SSPs who received certain federal funding while the funding ban was removed.[39] Clients of these SSPs were 25 percent more likely than non-SSP clients to have been successfully referred to mental health treatment and prescribed medication.[40]

As bridges to comprehensive treatment, prevention, and social services, SSPs improve individual and public health. SSPs also help clients infected with HIV or hepatitis C learn their status: in 2010, 67 percent of SSPs surveyed nationally offered hepatitis C testing, and 87 percent offered HIV testing and counseling.[41] SSP clients who test HIV positive can be connected to life-saving and cost-effective treatment, while those who test HIV negative receive HIV prevention counseling and access to condoms, helping interrupt the cycle of HIV transmission.



Source: 2010 Beth Israel Survey Results Summary

3. The federal funding ban undermines local control and decision-making

The federal government is by far the largest funder of HIV prevention services. Federal prevention funding adheres to recognized principles of federalism, providing essential health assistance while leaving it to states and localities to use limited federal dollars to address needs and priorities that are locally determined. While the federal ban was lifted, federal dollars were used to support SSPs in California, Connecticut, Delaware, Illinois, Massachusetts, Minnesota, New Jersey, New Mexico, New York, Puerto Rico, Vermont, and Washington.[42] SSPs operate in 186 cities and a quarter of those surveyed in 2011 were run by state or local health departments.[43, 44] Authorities in jurisdictions across the country have demonstrated that they believe SSPs promote public health and other local objectives. However, under current law, they are not allowed to decide for themselves whether federal funds they receive should be used to meet these objectives.

> SSPs operate in 186 cities. Authorities in jurisdictions across the country have demonstrated they believe SSPs promote public health.

While research consistently has found SSPs to be a cost-effective, evidence-based intervention, the federal funding ban continues to force localities facing difficult budgetary times to make a tough choice: if they wish to use limited state and local dollars to fund SSPs, they must do so at the expense of other important, public health programs dependent on local and state financing. In the brief two-year period during which federal funding became available for SSPs, the majority of programs that received federal support used those funds just to maintain or expand existing services; only 14 percent of programs that received federal SSP funding in 2011 were able to use that funding to add new services.[45]

> "In the cities that have adopted needle exchange programs, there is a dramatic reduction in needle sticks to firefighters who crawl on their hands and knees through smoke-filled rooms to search for victims."
>
> —Charles Aughenbaugh, Jr., President, New Jersey Deputy Fire Chiefs Association, Retired Deputy Fire Chief, March 2011

> "Clearly needle exchange programs work. There is no doubt about that."
>
> —Anthony Fauci, M.D., Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health. Testimony before the U.S. House of Representatives Committee on Oversight and Reform, September 16, 2008

4. SSPs promote public safety

SSPs reduce circulation of contaminated syringes, collecting used syringes in puncture-proof containers. By discarding used syringes according to hazardous waste disposal procedures, SSPs keep contaminated injection equipment off the streets, protecting the public from potential exposure to infectious needles.

SSPs actively encourage participants to return as many used syringes as possible.[46] Research indicates that the majority of syringes distributed by SSPs are in fact returned.[47, 48] In Baltimore, SSPs helped reduce the number of improperly discarded syringes by almost 50 percent.[49] In Portland, Oregon, the number of improperly discarded syringes dropped by almost two-thirds after the implementation of an SSP.[50] In 2008-2009, in Miami—where there are no syringe exchange programs—eight times more syringes were disposed of improperly than in San Francisco, where syringe exchanges are available.[51] Safe disposal was much greater in San Francisco, even though the estimated number of injection drug users in San Francisco is more than twice the number in Miami.

Keeping contaminated equipment off the streets improves public safety. SSPs reduce the risk that people—including children playing in parks, people putting trash in public trash cans, and medical personnel responding to emergencies—will accidentally come into contact with used and potentially dangerous needles and syringes.

Law enforcement and public-safety personnel, who are often exposed to needlesticks on the job, are perhaps the most notable public safety beneficiaries of SSPs. In San Diego, nearly 30 percent of police officers surveyed had been stuck by a needle at least once, with more than 27

percent of those injured experiencing two or more needlestick injuries.[52] Syringe services programs have been found to reduce needlestick injuries among police officers.[53]

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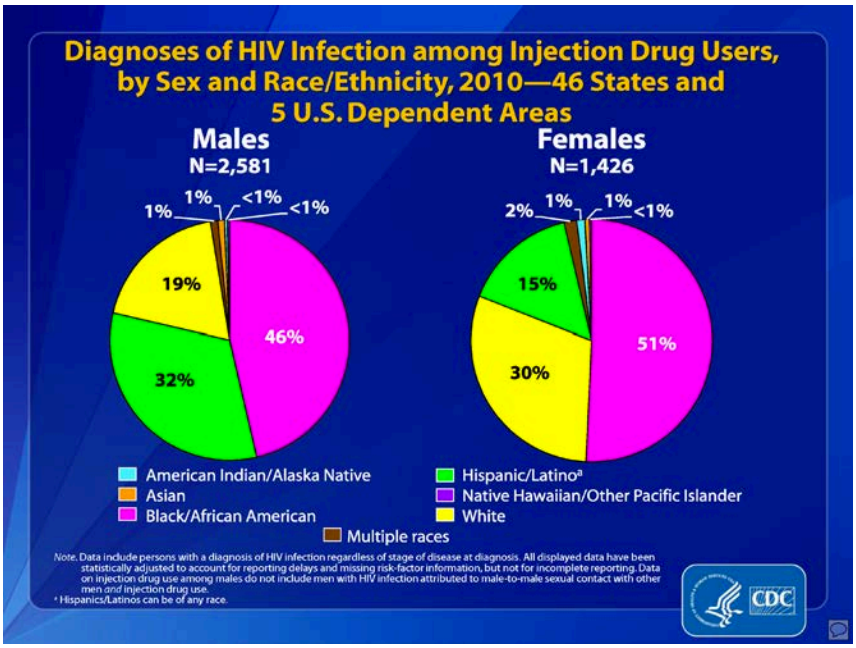
5. SSPs can help reduce health disparities

Communities of color are at far greater risk for HIV than Americans overall. In 2010, 14 percent of the U.S. population was African American, but that year, 44 percent of all new HIV diagnoses in the U.S. were among African Americans—more than any other racial or ethnic group.[54] In states surveyed from 2007 to 2010, the rate of new HIV infections was eight times higher among African Americans than whites, and three times higher among Latinos than whites.[55] In 2010, people of color were overrepresented among both male and female injection drug users newly infected with HIV.[56] While AIDS-related deaths for the broader U.S. population have sharply declined over the last 15–20 years, AIDS remains the ninth leading cause of death among African Americans overall and the third leading cause of death for African Americans aged 35–44.[57] In light of the disproportionate risk of HIV infection and number of AIDS-related deaths among African Americans and other people of color, the National HIV/AIDS Strategy prioritizes intensified efforts to reduce racial and ethnic disparities in HIV-related health outcomes.[58] Given the role of injection drug use in contributing to the outsize HIV risks experienced by communities of color, SSPs represent a critical tool for minimizing HIV risks and addressing health disparities.



Source: CDC. (2012). HIV surveillance in injection drug users (through 2010). Available online at http://www.cdc.gov/hiv/idu/resources/slides/. (date last accessed: December 11, 2012)

6. SSPs enjoy broad public and professional support

As a result of their considerable public health, public safety, and fiscal benefits, SSPs enjoy robust support across the political spectrum, ranging from law enforcement officials to advocates seeking the reform of drug laws. Numerous national medical and public health organizations support SSPs, including the American Medical Association,[59] the American Public Health Association,[60] the National Academy of Sciences,[61] and the American Academy of Pediatrics.[62] So too do leading global bodies such as the World Health Organization (WHO),[63] the World Bank,[64] and the International Red Cross-Red Crescent Society.[65] The American Bar Association strongly supports SSPs,[66] as does the U.S. Conference of Mayors.[67]

In summary

The evidence is clear and conclusive. SSPs prevent new HIV infections without leading to increased drug use. SSPs also promote broader health aims, save taxpayers money, promote public safety, and enjoy broad public support. Federal support for SSPs should be restored—not only to advance these important public policy aims, but also to provide the means for states and local communities to determine the best strategies to address their own health needs.

"[SSPs] are widely considered to be an effective way of reducing HIV transmission among individuals who inject illicit drugs and there is ample evidence that [SSPs] also promote entry and retention into treatment."

—U.S. Surgeon General Dr. Regina Benjamin, *Federal Register,* February 2011

"Early in 1998 … I assembled the published studies ... and was convinced that there were strong data favoring reduced transmission of lethal viruses by needle-exchange programs...."

—Harold Varmus, M.D., Nobel Laureate, Co-Chair, President's Council of Advisors on Science and Technology, and former Director, National Institutes of Health. From *The Art and Politics of Science* (2009), by Harold Varmus

"I understand there will be questions, but [syringe exchange] is common sense."

—Sister Maureen Joyce, CEO of Catholic Charities. In *Achieve: A quarterly journal on HIV prevention, treatment, and politics* (Winter 2010)

"Needle exchange offered us a way to say that drug addicts are people and they have an illness that merits concern and love. Needle exchange was a reality. Until we get people in [drug] treatment then this is a way to take care of them."

—Father Errol Harvey, formerly of Manhattan's St. Augustine Church. In *Achieve: A quarterly journal on HIV prevention, treatment, and politics* (Winter 2010)

"[S]yringe exchange has helped protect law enforcement and first responders from injuries caused by syringes during body searches or rescue operations. We are particularly impressed that our local syringe exchanges have built a network of support for families and that they have provided a bridge to addiction treatment."

—Roseanne M. Sizer, Chief of Police, Portland, Oregon, July 2009

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Justification for a Needle Exchange Program as a HCV and HIV Prevention Strategy

The cost of drug therapy for treating the Hepatitis C virus (HCV) and HIV/AIDS significantly impacts the North Carolina Medicaid budget, and continues to grow due to increased incidence of both diseases and cost of new drugs being introduced to the market.

Drug therapy cost for HCV and HIV/AIDS represents the top two specialty drug classes by per member per year (PMPY) spend in 2014 for North Carolina Medicaid as well as all other state Medicaid programs. Because both are preventable diseases, prevention must be a strategy used to mitigate the budgetary impact of these drug therapies.

Hepatitis C Medications		
Medicaid	**2013**	**2014**
Paid Amount	$8,068,113	$50,840,276
HIV/AIDS Medications		
Medicaid	**2013**	**2014**
Paid Amount	$65,612,098	$70,016,283
AIDS Drug Assistance Program (ADAP)	**2013**	**2014**
Paid Amount	$40,454,317	$47,059,921

An estimated 3.2 million Americans are chronically infected with HCV and deaths attributed to HCV far exceed those due to HIV/AIDS. Because the majority of HCV infections are asymptomatic, 65-75% of infected individuals are unaware of their status and more likely to spread the infection to others. Furthermore, between 15-20% of untreated persons with chronic HCV infections will develop chronic liver disease, including liver cirrhosis and hepatocellular carcinoma.

In North Carolina, acute HCV is reportable and there has been an increase in the number of acute HCV cases throughout the state during the last five years (**Figure 1**). According to the Centers for Disease Control, Viral Hepatitis Surveillance Report End-of-year 2014 report, in 2014 North Carolina's acute HCV rate exceeded that of the US (**Figure 2**). Injection drug use was by far the greatest risk factor for HCV acquisition. Data released by the North Carolina Injury and Violence Prevention Branch observed a 402% increase in heroin deaths in the state since 2010 (**Figure 3**).

At this time, chronic HCV infection is not reportable in North Carolina. Therefore, the true burden of this epidemic on the state remains unknown. However, using a conservative national HCV prevalence estimate of 1.6%, an estimated 160,000 North Carolinians have been infected with HCV with at least 120,000 of those individuals representing chronic infections. This estimate is more than four times higher than the number of persons living with HIV/AIDS in the state.

Due to significant morbidity associated with blood borne pathogens (such as HCV, HIV and HBV) as well as the exorbitant cost of treating these chronic diseases, preventing infection should be a public health priority. In addition to risk reduction counseling, referral to mental health and substance abuse services; needle and syringe exchange programs have proven to be effective in decreasing the transmission of HCV, HIV and HBV.

The common practice of sharing syringe, and drug preparation equipment (such as cookers, cotton filters and water used to rinse the syringes) contributes greatly to disease transmission. Therefore, a

successful needle and syringe exchange program must also ensure that sterile ancillary equipment is available, in addition to immediate referral to substance abuse programs.

Needle and syringe exchange programs are associated with a decrease in risky injection practices (such as sharing and reuse of drug paraphernalia) and have not been associated with an increase in the likelihood or frequency of illicit substance use. Furthermore, the safe removal of contaminated needles from circulation increases the safety of citizens, as well as law enforcement who risk accidentally coming into contact with improperly disposed needles.

In summary, needle and syringe exchange programs are an important public health tool that can lead to significant reductions in the transmission of blood borne pathogens by providing sterile injection equipment and an opportunity to link individuals struggling with addiction to critical services, such as substance cessation programs.

Benefits of a Needle Exchange Program

- Needle exchange reduces blood-borne diseases without increasing drug use. Several studies have shown compelling evidence that needle exchange programs decrease HIV and HVC transmission without increasing the use of injectable drugs.[1]
- Preventing HVC and HIV infection in people who inject drugs also prevents infections in women and newborn children. Many women are at risk for HVC and HIV because of their own injectable drug use or because they are sexual partners of injectable drug users.
- By working with people who inject drugs, we can help get them into drug treatment and if infected with HVC or HIV, into primary care for the treatment and/or cure of their disease.
- All contaminated syringes turned into the exchange are safely disposed of. The goal is to get used syringes out of circulation as quickly as possible. The longer a syringe remains in circulation, the more opportunities there are for that syringe to pass on a blood-borne disease.

Are Needle Exchange Programs Effective?

YES. HIV infection among injectable drug users has been shown to increase 6% per year on average in cities that do not have needle exchange. In contrast, HIV infection declined 6% per year among injectable drug users in cities that have exchange programs.[2] New data released by The Foundation for AIDS Research observed significant decreases in HIV incidence in states with publicly funded needle exchange programs.[3] An Australian survey found that HIV prevalence declined 19% per year in cites with needle exchange compared to an 8% increase in cities that did not have exchange programs.[3]

Figure 1: Reported Number of Acute HCV infections in North Carolina, 2010-2014

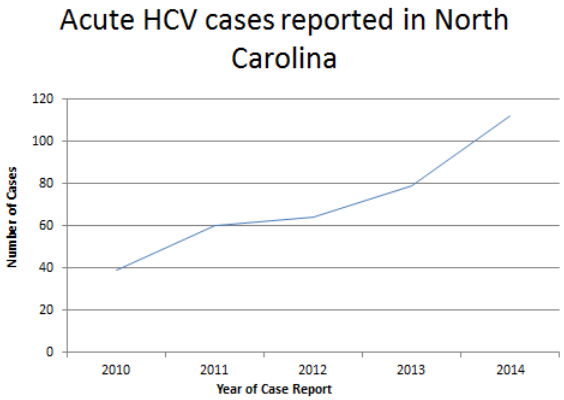


Figure 2. Acute Hepatitis C rates in 2014: North Carolina versus the US

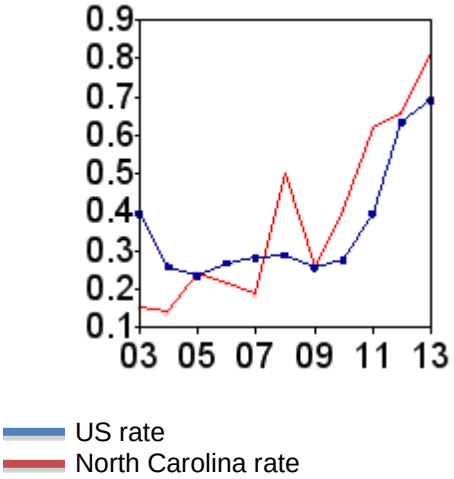
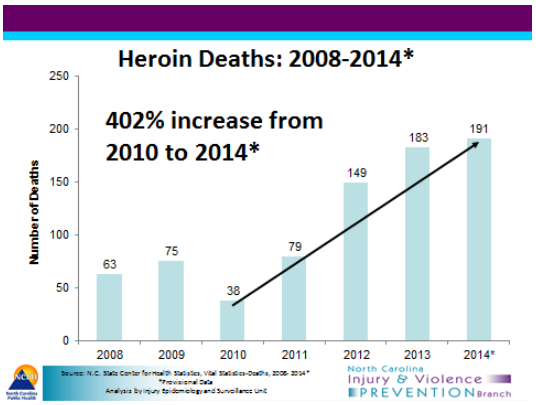


Figure 3. Increase in the number of Heroin deaths in North Carolina, 2008-2014



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