



District Health Department #10



Report to the Boards of Health

Jennifer Morse, M.D., Medical Director

Mid-Michigan District Health Department, Wednesday, October 25, 2017
Central Michigan District Health Department, Wednesday, October 25, 2017
District Health Department #10, Friday, October 27, 2017

Harm Reduction

It is no secret that the United States is struggling with an opioid epidemic. In 2015, opioids killed over 33,000 people in the United States, which is four times the number in 1999 and more than any other year on record. Opioid use has many other risks in addition to overdose. Many individuals addicted to opioids will at some point inject their drug of choice, whether it is prescription opioids or heroin. People also inject other drugs, such as cocaine, and methamphetamines. Clean and safe injection supplies are usually not available, leading to reuse of supplies and risk for infection. Younger people who inject drugs (PWID) are more likely to share syringes. There has also been a shift in the demographics of PWID toward more rural and white populations, and these populations are more likely to share needles and syringes partly due to limited access to supplies. Infections in the skin and soft tissue, as well as in the blood stream and heart valves, can occur from sharing injection supplies.

Blood borne pathogens such as HIV, hepatitis B, and hepatitis C are also easily transmitted during injection drug use. It is estimated that 67% of those that inject drugs around the world are infected with hepatitis C. **The main route of hepatitis C transmission in middle- and high-income countries at this time is injection drug use.** Over three times as many PWID are infected with hepatitis C as compared to HIV worldwide. Hepatitis C can be transmitted in very minute amounts of blood and can remain infectious in dried blood for as long as six weeks. In 2017, 9% of new HIV diagnoses were in PWID. **HIV diagnoses in PWID have been decreasing over the past decade but the decline has stopped over the past few years. This is a very worrisome trend.**

People Who Inject Drugs (PWID):

- 67% are infected with HepC
 - 9% of new HIV diagnoses in 2017
-

One of the best strategies available for reducing the spread of HIV, hepatitis C, and hepatitis B, as well as other infections, among drug users is syringe service programs (SSP; also referred to as syringe exchange programs or syringe access programs.) SSP is one component of harm reduction (*see definition in box.*)

Harm Reduction Definition

"a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use." – Harm Reduction Coalition

There is a great deal of scientific evidence proving the usefulness of SSP in disease prevention. Unfortunately, many believe that syringe service programs may cost too much money; or lead to increases in drug use, crime, and needle stick injuries. Some see needle exchange programs as a public endorsement of drug use. The United States has one of the lowest rates of needle access availability in the developed world. Recent evaluation and research by the Centers for Disease Control and Prevention (CDC) has shown that **rural areas are severely underserved by SSP, even though half of PWID in the United States are in rural areas.**

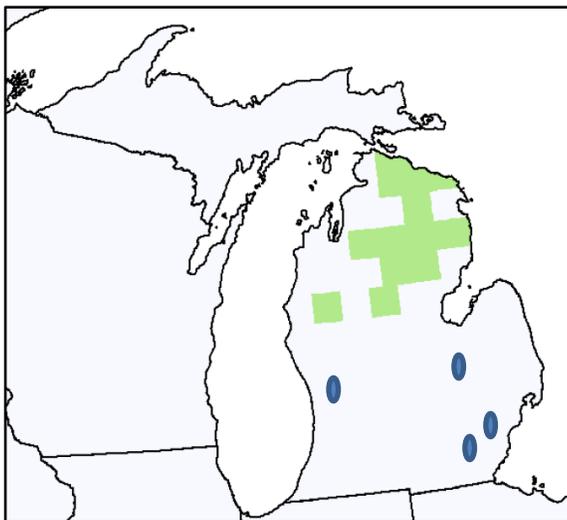
Numerous studies done both in the U.S. and abroad have shown that SSP do not lead to increased drug use. Studies also show that SSP do not encourage people to start using drugs, transition to injection drug use, or increase their frequency of drug use. Communities with SSP do not experience increased drug networks or increased crime rates. By providing a safe place for disposal, SSP help to decrease needle stick injuries in the community, including those experienced by law enforcement, EMS, firefighters, and other first responders. It is estimated that every dollar invested in SSP leads to a savings of \$3 to \$7 by preventing new HIV infections. New medications for hepatitis C

offer a cure to over 90% of those infected, however it comes with a cost of \$34,000; therefore, prevention of new hepatitis C infections is a good investment as well.

Individuals that inject opioids are typically addicted, and addiction has been shown to be a medical illness rather than a moral shortcoming. Individuals are rarely able to stop using opioids on their own. Treatment can be successful but is difficult and often fraught with relapse. Harm reduction is important to maintain the physical health of PWID until they are ready and able to quit their drug use. These syringe service programs are often the main connection PWID have to healthcare and to individuals that show them care, concern, and hope. Studies have found that PWID that have utilized SSP were more likely than those that have not to reduce or stop injecting and one study found that new SSP participants were five times more likely to enter drug treatment compared to those that did not.

Studies show that to be effective, SSP should have enough capacity to meet the needs of the community and be easily accessible by the target populations. At a minimum, SSP should provide sterile needles and syringes to PWID and collect and properly dispose of used needles and syringes. Ideally, SSP should also provide other paraphernalia such as alcohol swabs, sterile water, tourniquets, cookers, and cotton. The World Health Organization as well as most other organizations feels that programs are most effective if syringe service is part of a larger collection of health intervention targeted to the needs of PWID, such as: testing for HIV, hepatitis C and hepatitis B; referral for treatment of infectious diseases as needed; vaccination for hepatitis A and B, tetanus, influenza, and any others needed; referral for mental health services, social services, medical care, and substance use disorder treatment; overdose education and prevention, and; other infection prevention tools such as counselling, condom distribution and safe sex education, and PrEP (a medication to prevent HIV.)

Outbreaks of HIV and hepatitis C have already occurred in the United States. During November 2014 to October 2015, 181 individuals in Scott County, Indiana were newly diagnosed with HIV, and 92% of them were found to be co-infected with hepatitis C. This outbreak was found to be linked to unsterile injection of a prescription opioid. Syringe access was credited as a major tool used to stop this outbreak. This low-income, rural county shares many similar characteristics to Northern Michigan counties. A study done in 2016 found 11 Northern Michigan counties to be among 220 counties nationwide at risk for a HIV and/or hepatitis C outbreak similar to that faced by Scott County.



County	Ranking out of 220
Clare	87
Roscommon	192
Lake	137
Crawford	197
Kalkaska	207
Ogemaw	86
Alcona	184
Oscoda	88
Montmorency	91
Presque Isle	174
Cheboygan	215

Green areas = Counties at High Vulnerability of HIV or Hepatitis C Infections among PWID
 ● = cities with SSP (Detroit, Flint Grand Rapids, Ypsilanti)

Currently, Michigan does not have SSP where they are needed most based on this study. SSP are legal if they are given away by a state or local governmental agency or by a person specifically authorized by a state or local governmental agency to prevent the transmission of infectious agents. Federal funds may now be used to support SSP and the Michigan Department of Health and Human Services (MDHHS) has obtained federal funding to assist local jurisdictions in providing SSP in the hopes to decrease the transmission of infectious diseases in Michigan.

Resources:

- American Foundation For AIDS Research (amfAR) Harm Reduction Page: <http://www.amfar.org/endtheban/>
- CDC Syringe Service Programs <https://www.cdc.gov/hiv/risk/ssps.html>
- Injection Drug Users Health Alliance <http://iduha.org/>
- North American Syringe Exchange Network <https://nasen.org/>
- Hepatitis information, State of Michigan: <https://www.michigan.gov/hepatitis>
- Hepatitis information, CDC: <https://www.cdc.gov/hepatitis>
- HIV information, State of Michigan: www.michigan.gov/hivstd
- HIV information, CDC: <https://www.cdc.gov/hiv/>

Board of Health Healthy Living Recommendations:

1. *Recognize the effects of injection drug use on the transmission of infectious diseases.*
2. *Learn the science behind the efficacy of syringe service programs, as well as the cost-effectiveness and other benefits*
3. *Advocate to reduce risks faced by rural Northern Michigan, due to high rates of opioid addiction, lack of access to sterile injection supplies, and lack of access to drug treatment and medical care.*