Opioids are a class of drugs that include prescription pain pills, morphine, heroin, and fentanyl. While pain pills can be and are used appropriately, they and other opioids can be addictive. According to the CDC, drug overdoses killed 70,237 Americans in 2017; of these, 47,600 (67.8%) involved opioids. Deaths from opioid overdoses have increased yearly for well over a decade. Unfortunately, there are other risks associated to opioid use in addition to overdose.

A high number of those addicted to opioids will at some point turn to injecting their drug of choice, whether it is prescription pain pills or heroin. In addition, many that initially become addicted to pain pills switch to heroin as it is much cheaper to purchase on the street and relatively easy to find in nearly all areas of Michigan.

Clean and safe injection supplies are usually not available, leading to the reuse of injection supplies. When injection supplies such as needles, syringes, cotton, filters, cookers, even tourniquets, are reused or shared, individuals struggling with addiction are at risk for many types of infections and place others at risk as well. It has been found that younger people who inject drugs (PWID) are more likely to share syringes, unfortunately putting this group at more risk for infections. Injection drug use has been increasing in rural areas faster than in urban areas. It has been found that people living in rural areas are more likely to share needles and syringes partly due to limited access to clean 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 germs, or pathogens, such as HIV, hepatitis B, and hepatitis C are also easily passed during injection drug use.

Approximately 16% of all new HIV diagnoses occur in people using injection drugs. HIV diagnoses had been declining for several years, however this trend ended in rural areas in 2010 and the number of new diagnoses stabilized. This is a frightening change. Hepatitis B and C are viruses that often lead to long-lasting, or chronic, infection of the liver. They can cause the liver to stop functioning and increase the risk for liver cancer. It is estimated that 40% to 90% of injection drug users in the United States are infected with hepatitis C and Injection drug use is the cause for 48% to 70% of all new hepatitis C infection in the United States. In young adults, which includes those ages 18 to 29, 84% with newly diagnosed hepatitis C admitted to past or current recreational drug use and 77% said they had injected drugs at some point. 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.
Used syringes are a risk to the community as well. When compared to a large city that has syringe exchange programs that provide clean syringes to those who inject drugs and dispose of used syringes, injection drug users in a large city without access to syringe exchange are 34 times more likely to discard their used syringes in public places like sidewalks, gutters, parks, alleys and parking lots. Law enforcement officers are often stuck by syringes while doing their job, putting them and their families as risk for diseases such as HIV, hepatitis C, and hepatitis B. Needle sticks to officers were found to decrease by two-thirds after syringe exchange programs enter a community.

One of the best strategies available for reducing the spread of HIV, hepatitis C, and hepatitis B, as well as other infections among PWID is syringe service programs (SSP) also called syringe exchange programs or syringe access programs. There is a lot of scientific evidence proving the usefulness of SSP in disease prevention. The United States has one of the lowest rates of needle access availability in the developed world and recent evaluation and research by the Centers for Disease Control and Prevention (CDC) showed 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 amount of drug use. Communities with SSP do not experience increased drug networks or increased crime rates. By providing a safe place for needle disposal, SSPs help to decrease dangerous 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. Medications for hepatitis C are extremely costly, and prevention of new hepatitis C infections is a good investment as well.

Preventing infections and other harms is important to maintaining the physical health of PWID until they are ready and able to quit drug use. SSPs 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 a SSP were more likely to reduce or stop injecting drugs than those who did not. In fact, one study found that new SSP participants were five times more likely to enter drug treatment compared to those that were not SSP participants.

Outbreaks of HIV and hepatitis C have already occurred in the United States. From November 2014 to October 2015, 181 individuals in Scott County, Indiana, were newly diagnosed with HIV and 92% of them were found to also be infected with hepatitis C. This outbreak was linked to the sharing of injection supplies to inject a prescription opioid. Syringe access was credited as a major tool used to stop this outbreak. A study done in 2016 identified the top 220 counties in the country at risk for a similar HIV and hepatitis C outbreak. Eleven Northern Michigan counties were among these high-risk Counties. These counties are all located in the northern Lower Peninsula: Clare, Roscommon, Lake, Crawford, Kalkaska, Ogemaw, Alcona, Oscoda, Montmorency, Presque Isle, and Cheboygan.

SSPs are legal in Michigan if supplies 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 be used to support SSP efforts as it has been recognized it is important to prevent infection and disease as well as a part of drug treatment.

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Green areas = Counties at High Vulnerability of HIV or Hepatitis C Infections among PWID

<table>
<thead>
<tr>
<th>County</th>
<th>Ranking out of 220</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clare</td>
<td>87</td>
</tr>
<tr>
<td>Roscommon</td>
<td>192</td>
</tr>
<tr>
<td>Lake</td>
<td>137</td>
</tr>
<tr>
<td>Crawford</td>
<td>197</td>
</tr>
<tr>
<td>Kalkaska</td>
<td>207</td>
</tr>
<tr>
<td>Ogemaw</td>
<td>86</td>
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<tr>
<td>Alcona</td>
<td>184</td>
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<tr>
<td>Oscoda</td>
<td>88</td>
</tr>
<tr>
<td>Montmorency</td>
<td>91</td>
</tr>
<tr>
<td>Presque Isle</td>
<td>174</td>
</tr>
<tr>
<td>Cheboygan</td>
<td>215</td>
</tr>
</tbody>
</table>

Programs labeled with 🟢 are NOT confirmed locations; these jurisdictions are in the process of developing SSP and final location has yet to be determined.

**Recommendations:**
1. Recognize the effects of injection drug use on the transmission of infectious diseases.
2. Appreciate the science behind the efficacy of syringe service programs, as well as the cost-effectiveness and other benefits
3. Understand the unique 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.
Resources:

- CDC Syringe Service Programs: [https://www.cdc.gov/hiv/risk/ssps.html](https://www.cdc.gov/hiv/risk/ssps.html)
- Injection Drug Users Health Alliance: [http://iduha.org/](http://iduha.org/)
- North American Syringe Exchange Network: [https://nasen.org/](https://nasen.org/)
- Hepatitis information, State of Michigan: [https://www.michigan.gov/hepatitis](https://www.michigan.gov/hepatitis)
- Hepatitis information, CDC: [https://www.cdc.gov/hepatitis](https://www.cdc.gov/hepatitis)
- HIV information, State of Michigan: [www.michigan.gov/hivstd](http://www.michigan.gov/hivstd)
- HIV information, CDC: [https://www.cdc.gov/hiv/](https://www.cdc.gov/hiv/)

Sources