

Missouri Hepatitis C Elimination Plan 2022-26

Show Me the Cure



MO HEP C
Show Me the Cure

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Our Vision

Increase access to hepatitis C prevention, testing and treatment for all Missouri residents.

Our Mission

Create a plan to eliminate hepatitis C in Missouri by ensuring universal testing, improving health care outcomes for people living with hepatitis C and preventing new infections.

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OVERVIEW

Hepatitis means inflammation of the liver. There are many reasons that inflammation can occur, but when a virus causes hepatitis, it is referenced with a letter at the end. There are three common hepatitis viruses in the United States: A, B and C. Each of these viruses is very

different in how they are transmitted and whether there is a vaccine or cure. Below is a table outlining each of the different viruses. For this elimination plan, the focus is on the hepatitis C virus (HCV), but it is essential to keep these viruses in mind.

AT A GLANCE			
VIRAL HEPATITIS			
	A	B	C
Transmission	Feces (fecal to oral)	Blood and Body Fluids (Semen and Vaginal Fluids)	Blood to Blood
Symptoms of Acute Infection (if any): Fever - Fatigue - Loss of Appetite - Nausea - Vomiting - Abdominal Pain - Grey-Colored Stools - Joint Pain - Jaundice			
Potential for Chronic Infection:	None	Approx. 15% of infections	75% - 85% of infections
Vaccine:	Yes	Yes	No
Treatment:	None, it goes away on its own within six months.	Yes, but not always successful.	Yes, with direct-acting medications, it may be cured.
Prevention:	<ul style="list-style-type: none"> - Vaccination - Wash hands after using the restroom - Effectively clean surfaces that may be contaminated with feces 	<ul style="list-style-type: none"> - Vaccination - Clean up blood spills correctly - Do not share needles of any kind, razors, or toothbrushes - Practice safe sex 	<ul style="list-style-type: none"> - Do not share needles of any kind or other drug equipment. - Do not share razors or toothbrushes - Do not share equipment used for tattooing (including ink) or body piercings - Clean up blood spills correctly - Practice safe sex
Other Notes:		The virus can live and be infectious in dried blood for extended periods of time.	

The hepatitis C virus is one of the most significant health problems affecting the liver. An estimated 2.4 million Americans are living with HCV¹. The HCV infection causes an inflammation of the liver called chronic hepatitis. This condition can progress to liver scarring, called fibrosis, or more advanced scarring, called cirrhosis. Some individuals with cirrhosis develop liver failure or complications of cirrhosis, including liver cancer.

More than half of the individuals diagnosed with HCV will develop chronic infection, while the other half may experience spontaneous clearance after an acute infection. Approximately 5 - 25% of every 100 people will develop cirrhosis within 10-15 years. For individuals with cirrhosis, the rate of development of Hepatocellular carcinoma (liver cancer) might be as high as 1 - 4% per year¹.

Transmission

Hepatitis C is a bloodborne pathogen, which is transmitted through blood-to-blood contact. Possible exposures include¹:

- Injection-drug use (currently the most common mode of HCV transmission in the United States).
- Birth to an HCV-infected mother.

Although less frequent, HCV can also be spread through¹:

- Sex with an HCV-infected person (an inefficient means of transmission, although HIV-infected men who have sex with men [MSM] have an increased risk of sexual transmission).
- Sharing personal items contaminated with infectious blood, such as razors or toothbrushes.
- Other health-care procedures that involve invasive procedures, such as injections (usually recognized in the context of outbreaks).
- Unregulated tattooing.
- Receipt of donated blood, blood products, and organs (rare in the United States since blood screening became available in 1992).
- Needle stick injuries in health care settings.

Testing Recommendations

The Centers for Disease Control and Prevention (CDC) recommends one-time HCV testing of all adults (18 years and older) and all pregnant women during every pregnancy. CDC continues to recommend people with risk factors, including people who inject drugs, be tested regularly.

Signs and Symptoms

People with newly acquired HCV infection are usually asymptomatic or have mild symptoms that are unlikely to prompt a visit to a healthcare professional. When symptoms do occur, they can include¹:

- Fever
- Fatigue
- Dark urine
- Clay-colored stool
- Abdominal pain
- Loss of appetite
- Nausea
- Vomiting
- Joint pain
- Jaundice

Many remain asymptomatic even when their HCV infection progresses to a chronic condition.

Prevention

Hepatitis C can be prevented by not sharing items that come in contact with blood. The HCV can live for days or months outside of the body, even if the blood is dry. HCV does not have a vaccine.

Prevention includes the following:

- Do not share needles of any kind or other drug equipment.
- Do not share razors, toothbrushes, nail trimmers, or other items that could come in contact with blood.
- Do not share equipment used for tattooing (including ink) or body piercings.
- Clean up blood spills correctly.
- Practice safe sex.

Hepatitis C Testing

Antibody Test

A blood test, called a Hepatitis C Antibody test (sometimes called the Anti-HCV test), is used to determine if someone has ever been infected with HCV. The Anti-HCV test looks for antibodies to the hepatitis C virus. New rapid tests are now available in some settings, and the results of these tests are available in 20 minutes.

- Non-Reactive or Negative Hepatitis C Antibody test

A non-reactive or negative antibody test means that the person has not been exposed to the hepatitis C virus. However, if the person may have been exposed in the last six months, they will need to be tested again as it can take the body a little longer to produce the antibodies.

- Reactive or Positive Hepatitis C Antibody test

A reactive or positive antibody test means that the person has been infected with the hepatitis C virus at some point in time. Once infected, these antibodies will be present in their blood for the rest of their life, even if they clear the virus or become cured. A reactive antibody test does not necessarily mean that the person is currently infected. A follow-up test looking for the virus in the blood (viral load) is needed.

Confirmatory Testing - Diagnosing Hepatitis C

If the antibody test is reactive (positive), the individual will need an additional test to confirm that they currently have a HCV infection. Looking for viral load, this test is called an HCV RNA test. If the follow-up test is:

- Negative (or undetected) – this means they were infected with HCV, but the virus is not now present in their blood.
- Positive – this means they currently have the virus in their blood and will need to be evaluated for treatment.

Treatment

Treatment is curative and easy to tolerate in 90% of patients. Treatment typically lasts 8-12 weeks and has very few side effects¹.

Before 2014, HCV treatments were ineffective and caused severe side effects. Given that HCV treatment has been simplified, many types of providers can effectively manage HCV-infected patients, including internal medicine and family practice physicians, nurse practitioners, physician assistants, and pharmacists. Specialists (e.g., infectious-disease physicians, gastroenterologists, pediatricians and hepatologists) may be more appropriate when managing children with HCV and patients who have certain HCV-related sequelae or advanced disease, including those requiring a liver transplant¹. With the new medications and access to education resources, primary care providers can now treat HCV. This has opened an opportunity to make plans for hepatitis elimination.





MISSOURI BACKGROUND

The Missouri Department of Health and Senior Services (DHSS), Bureau of HIV, STD, and Hepatitis (BHSH), Viral Hepatitis Prevention Program's (VHPP) focus is to educate and collaborate with providers, local public health agencies (LPHAs), substance use disorder treatment centers, and community-based organizations to increase efforts related to testing, treatment and care of people that are most at risk for hepatitis C. Funding is provided through a grant from the CDC titled *Integrated Viral Hepatitis Surveillance and Prevention Funding for Health Departments*.

The VHPP has been in the department for many years and modifies program priorities based on recommendations from the CDC and evolving changes in HCV treatment and populations at risk. Hepatitis A and hepatitis B (HBV) programs are located in different bureaus within DHSS. However, VHPP does provide education, training and resources on hepatitis A and B as needed.

Missouri has many strengths regarding hepatitis efforts and improvements.

Strengths:

- The Missouri Viral Hepatitis Stakeholder (MVHS) workgroup was established in 2018. It comprises representatives from across the state, including LPHAs, federally qualified health centers, community-based organizations, hospitals and other state agencies. This workgroup serves as an opportunity to share resources and collaborate on projects.
- Hep C Alliance provides education, resources, and access to discounted testing to patients and providers throughout Missouri.
- In August 2020, Missourians voted to expand Medicaid; therefore, Medicaid beneficiaries will no longer be limited by age or by pregnancy/parenting status and access to testing and linkage to care will significantly improve.
- In July 2021, MO HealthNet launched Project Hep Cure. This initiative is to jump start the elimination of HCV by making prescription MAVYRET® available to all MO HealthNet participants at no cost. Anyone who has MO HealthNet coverage and has tested positive for HCV is eligible for treatment².

- University of Missouri, Missouri Telehealth Network has a Show Me ECHO dedicated to HCV treatment. "The Hepatitis C ECHO empowers and supports primary care providers to effectively and confidently treat patients suffering from liver diseases."³
- Patient assistance programs are available for HCV direct-acting viral medication.
- VHPP has strong partnerships with stakeholders throughout the state.

While these programs are valuable, there is still progress needed to eliminate HCV in Missouri.

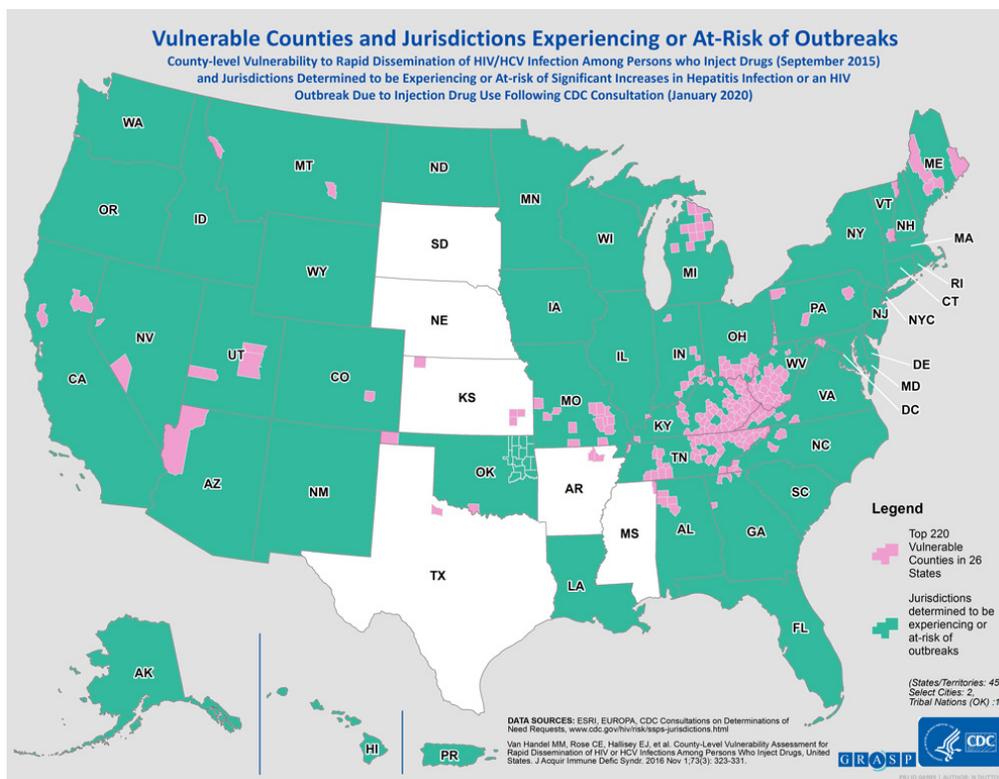
Barriers:

- Funding for viral hepatitis testing, treatment, or linkage to care is limited. The program does leverage several different programs and grants to increase the importance of hepatitis testing and treatment through education, awareness, and technical assistance.
- The VHPP is currently unable to support HCV testing at the Missouri State Public Health Laboratory (MSPHL). The ability to conduct testing through the MSPHL will create reasonable testing costs, especially for underinsured or uninsured people.
- In the rural high burden areas, there is limited access to treatment providers due to resources, physician availability, and transportation issues. Many patients are lost to care and follow-up due to the lack of navigation services. This is a concern as the VHPP attempts to reduce new HCV infections.
- Stigma contributes to hesitations to get tested and seek treatment.
- While patient assistance programs exist for the cost of medications, there are minimal resources for the cost of office visits and labs associated with treatment for individuals that are underinsured or uninsured.
- People that were previously diagnosed with HCV are often lost to care due to misinformation regarding treatment availability, restrictions and cost.

Previously, HCV was highest amongst those born between 1945 and 1965. Many efforts and campaigns were created to increase testing and treatment among this cohort. It is also recommended that people within this cohort receive at least one-time testing. However, individuals with high-risk behaviors are encouraged to receive regular testing.

Currently, younger people, ages 20-39, are contracting the virus at higher rates. This is mainly related to the opioid epidemic and increased injection drug use (IDU). This population is often hard to reach for medical interventions and is underinsured or uninsured. Stigma is also a factor for those that are seeking treatments.

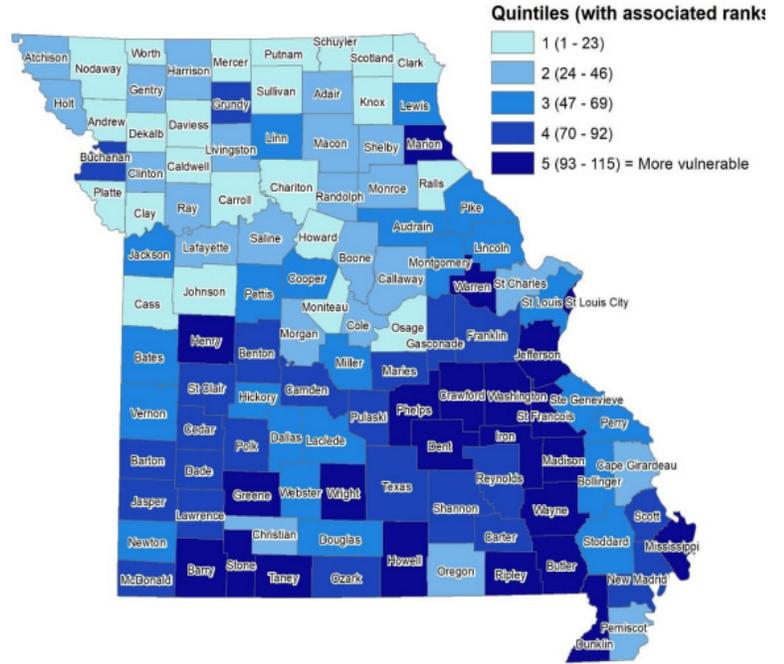
In 2016, the CDC identified 13 vulnerable counties in Missouri for an HIV/HCV outbreak among People Who Use Drugs (PWUD). Most counties are located in the state's southern region, specifically the southeast. These areas are more rural and typically have fewer resources or access to care. HIV and hepatitis co-infection are a concern for Missouri, and the VHPP collaborates with HIV programs to address HIV and hepatitis testing and linkage to care. According to the CDC, about 25% of people with HIV in the U.S. are co-infected with HCV, and about 10% are co-infected with HBV. Nearly 75% of people with HIV who inject drugs also are infected with HCV⁵.



“Stigma related to hepatitis C is incredibly pervasive in our communities, particularly when you consider it’s association with injection drug use. This stigma often results in people delaying or completely avoiding testing or treatment for HCV—primarily out of fear of judgement.” - Nicole Massey, AIDS Project of the Ozarks

The VHPP collaborated with the DHSS, Section of Epidemiology for Public Health Practice on the Cooperative Agreement for Emergency Response: Public Health Crisis Response, CDC-RFA-TP18-1802 grant, and provided assistance in the creation of the Missouri Vulnerability Assessment for opioid overdose and bloodborne infections. Twenty-three counties were identified as vulnerable. Many of the counties identified as vulnerable are located in the southern region of Missouri. This also provided a clear link between drug use and HCV, as most counties at risk for opioid overdose outbreaks were also at risk for bloodborne infections outbreaks. Many of the same counties in the CDC assessment were in the Missouri assessment as well.

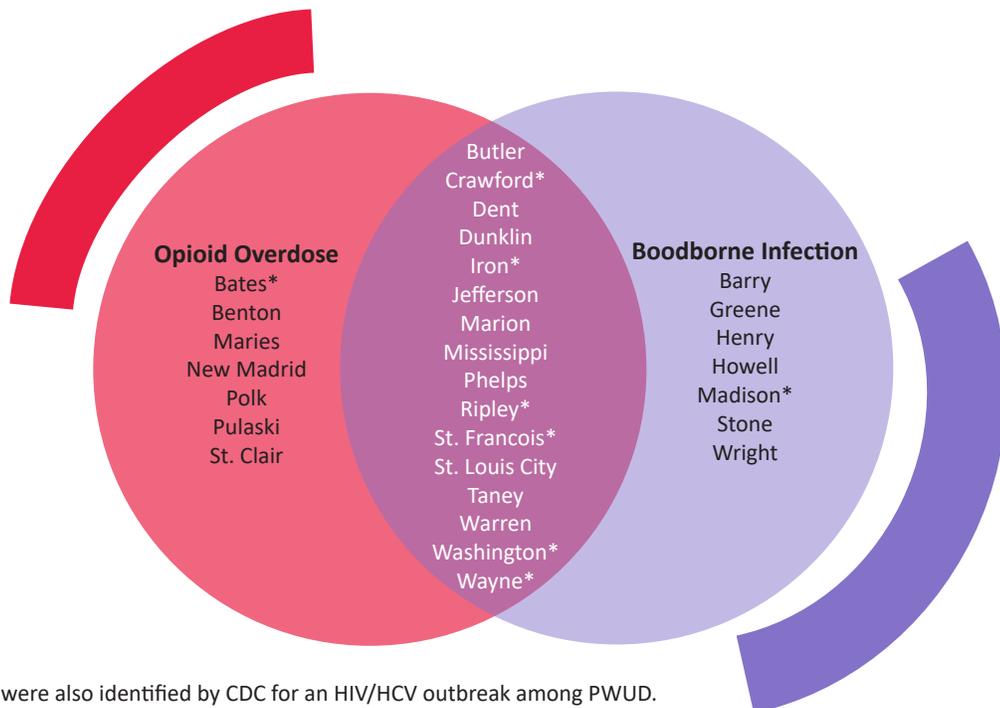
Missouri Bloodborne Infection Vulnerability Assessment



The opioid overdose and bloodborne infection assessments were calculated separately, but several counties were identified as more vulnerable in both

assessments⁶. The complete assessment can be accessed at <https://health.mo.gov/data/opioids/pdf/vulnerability-assessments-full-report-2020.pdf>.

Comparison of the Opioid Overdose and Bloodborne Infection Vulnerability Assessments



* indicates counties that were also identified by CDC for an HIV/HCV outbreak among PWUD.

Missouri Statistics and Data

Missouri's communicable disease reporting rule, 19 CSR 20-20.020, requires reporting acute and chronic hepatitis B and C cases, perinatal hepatitis B and prenatal hepatitis B, within three days, to the local health authority or DHSS. Demographic information, viral status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. A Viral Hepatitis Associate Epidemiologist with the Office of Epidemiology manages the hepatitis surveillance data stored in the Missouri Health Surveillance Information Systems (WebSurv). Age-adjusted prevalence rates for Missouri are based on mid-year 2020 estimates from the United States Census Bureau. Limitations to data collection do exist. Limitations of the data include incomplete race/ethnicity information and underreporting.

Until 2021, Missouri did not receive specific funding for viral hepatitis surveillance. Since receiving this funding, DHSS has been working on reviewing and designing an epidemiologic profile specifically for Hepatitis C.

The 2019 Epidemiologic Profiles of HIV, STDs and Hepatitis can be found at <https://health.mo.gov/data/hivstdaids/data.php>.

- There were 4,890 (to include 1,631 of those who are incarcerated) hepatitis C cases reported in Missouri in 2020, which represented an increase of 79 cases from the number of hepatitis C cases reported in 2019.
- In 2020, Jackson County had the greatest number of reported hepatitis C cases with 398 cases, to include six of the vulnerable population of those incarcerated. St. Louis (excluding St. Louis City) was a close second with 351 cases of hepatitis C to include 30 incarcerated individuals.

- The St. Louis region had the highest rate of reported hepatitis C cases* (43.99 per 100,000)*.
- Among males, the largest numbers of reported hepatitis C cases were between the ages of 30-39 (512)*.
- Among females, the largest numbers of reported hepatitis C cases were between the ages of 30-39 (318)*.
- The second largest number of reported hepatitis C cases, in males, was between the ages of 50-59*, and in females, was those between the ages of 20-29*.

*Incarcerated individuals have been excluded.

Rapid HCV test kits are provided by BSHS and is conducted by 13 contracted HIV testing and prevention organizations. From 2019 to 2021, these organizations conducted 6,596 rapid antibody HCV tests with a positivity rate of 8%. These tests are conducted through outreach events, walk-ins, or educational presentations in various settings including substance use disorder treatment facilities. Of the 6,596 tests conducted, 1,715 indicated injection drug use as a risk factor. Individuals who indicated injection drug use had a positivity rate of 23%. It should be noted that due to COVID-19, there was a decrease in the number of tests conducted in 2020 and 2021. However, even with the decrease in the number of tests conducted positivity rates remained consistent.

HCV risk can differ among different groups of people in terms of race, geographic location and age. It is thought that the opioid epidemic has shifted the distribution of HCV over time, as injection drug use and its associated medical and social problems have increased in Missouri and across the U.S. Currently, risk information is rarely reported for HCV, but demographic differences can be used to help target public health program activities to diagnose cases and ensure linkage to health care.

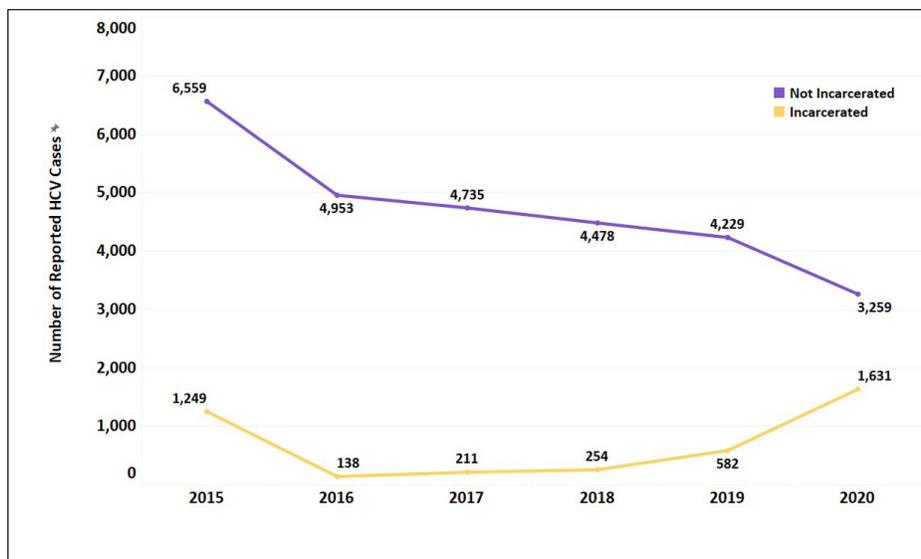
Statewide Hepatitis C Disease Burden Trends

Disease trends are best understood within the context of historical events and take into account any public health case definition alterations that change over time. In 2016, the CDC revised the case definitions for hepatitis C virus, both chronic and acute, which may have impacted reported HCV case numbers for 2016. Furthermore, the 2020 case data visualizations provided in this section should be interpreted within the context of the COVID-19

pandemic. Public health and health care testing for many programs was greatly reduced in order to prioritize COVID-19 response efforts. For this reason it's likely that a smaller than usual proportion of HCV cases was identified during 2020 than within the 2015-2019 timeframe.

The following chart shows a decrease in the number of reported HCV acute and chronic cases from 2015 to 2016 among unincarcerated Missourians, a plateau in the number of reported cases from 2016 to 2019, followed by a drop in cases to below that plateau in 2020. Also shown is a decrease in the number of reported HCV cases among incarcerated Missourians from 2015 to 2016, a short plateau from 2016 to 2018, followed by an increase in cases during 2020.

The Number of Reported HCV Acute and Chronic Cases Per Year (2015-2020)



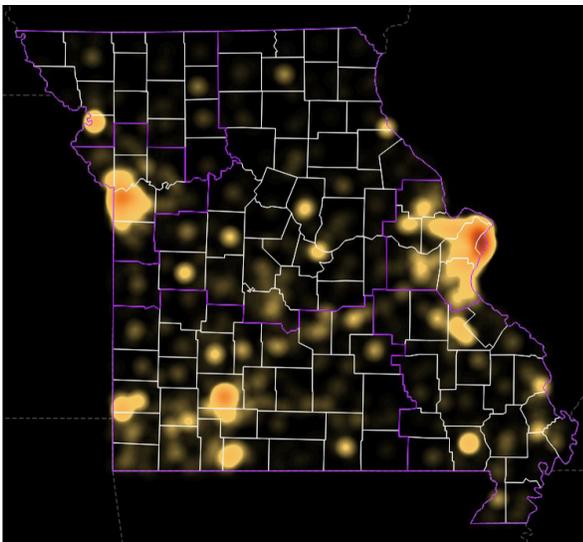
Note: In 2016, the CDC revised the case definitions for hepatitis C virus, both chronic and acute, which may have impacted reported HCV case numbers for 2016.

Changes in Geographic Distribution

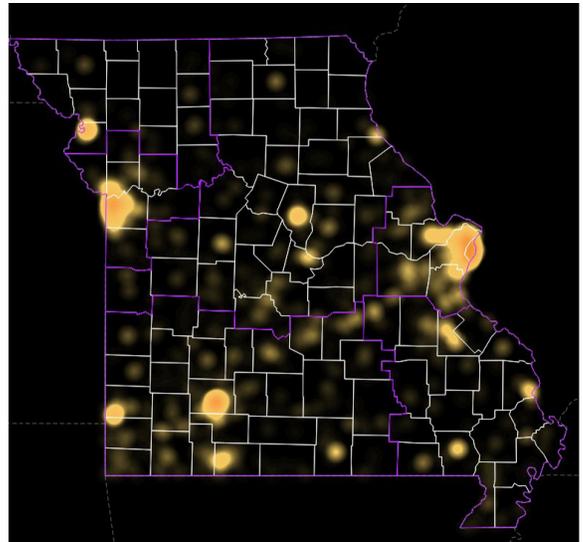
From 2015 through 2020, the geographic distribution of reported HCV cases changed in Missouri. Over time, cases became more evenly distributed among the program service regions. These changes are visualized in the following heat maps and chart.

Shown in the heat maps below is a comparison of the population density of reported HCV cases among unincarcerated Missourians in 2015 with those reported in 2020. Of note are the differences in geographic distribution of reported HCV cases in 2015 compared to 2020. In 2020 the population of reported HCV cases shifted away from metropolitan areas. Instead, the population of reported HCV cases became more diffuse across Missouri.

Total Reported HCV Acute and Chronic Cases by Region, 2015

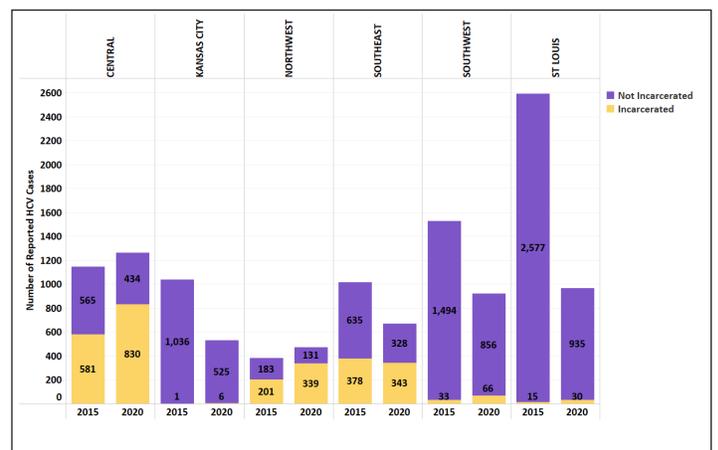


Total Reported HCV Acute and Chronic Cases by Region, 2020



These changes in geographic distribution of HCV cases can also be seen in the corresponding bar chart below comparing 2015 reported cases to 2020 reported cases. The proportion of cases represented by incarcerated individuals saw some changes within regions, but there was no overall trend statewide. It is possible that changes in testing availability may have affected case report distribution across service regions, either from a decrease in metro areas due to COVID-19 service disruptions or an increase in testing in rural areas.

Total Reported HCV Acute and Chronic Cases by Region, (2015 and 2020)

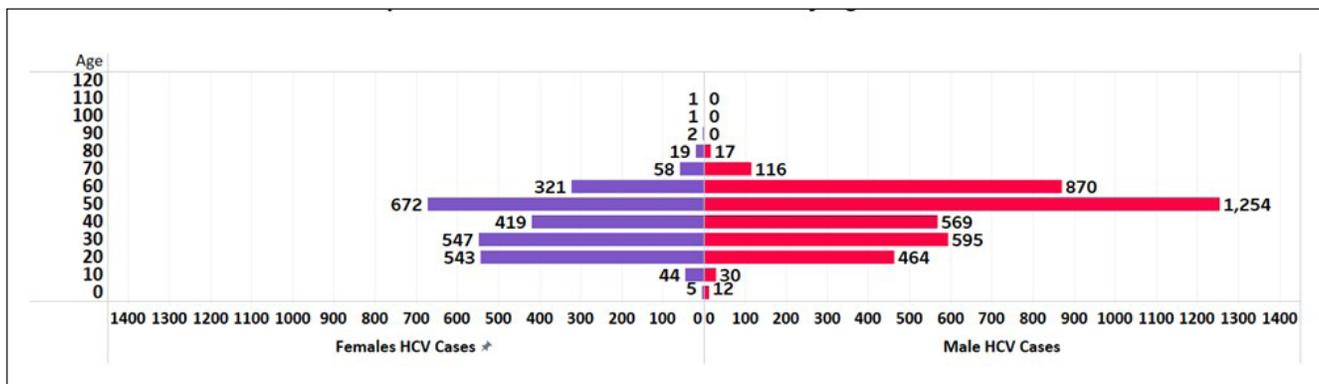


Changes in Case Demographics

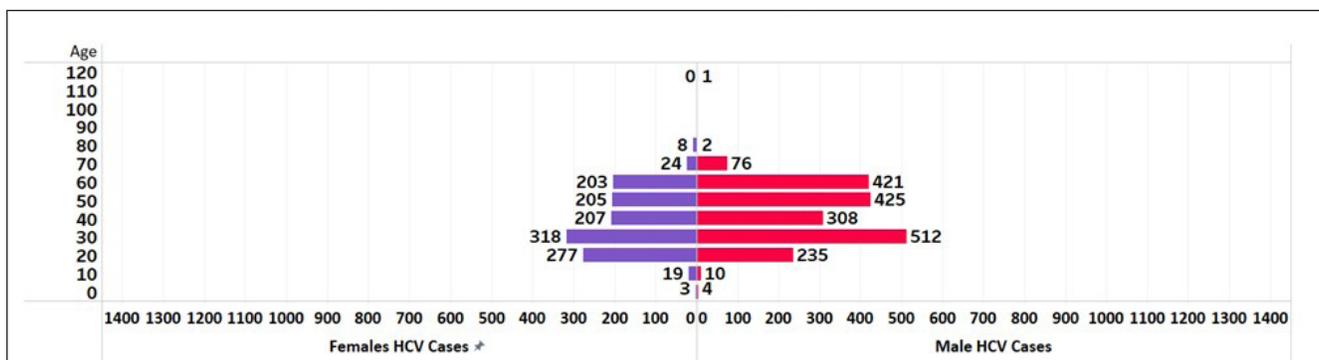
From 2015 through 2020, the ages of reported HCV cases among unincarcerated individuals changed in Missouri. Over time, cases became more evenly distributed among age groups, especially for male cases. Examined in the charts below are the age and sex distributions for unincarcerated Missourians reported to have HCV infection during 2015 and 2020. As illustrated by the data, there was a decrease in the number of reported HCV cases from 2015 to cases reported in 2020, especially in Missourians age 50 to 59 and 60 to 69, corresponding to the 1945 to 1965 HCV age cohort that has been shown to be at higher risk for HCV diagnosis. This is because hepatitis C was not discovered until 1989, so many medical procedures like blood transfusions did not screen for hepatitis C or ensure adequate infection prevention measures until after that time.

In 2020, reported HCV cases were still higher in male Missourians compared to female Missourians, although amongst a younger age cohort. The proportion of cases reported among younger Missourians is a shift in the demographic profile of a typical person diagnosed with HCV. Comparing 2015 to 2020, the median age of females diagnosed with HCV virus decreased from 52 to 48, while the median age of males diagnosed with HCV virus decreased from 47.5 to 47. Though these are not statistically significant changes, it's estimated that millennials will encompass the majority of new case diagnoses in the next few years due to the opioid crisis and the associated increase in HCV in this age group.¹

Total Reported HCV Acute and Chronic Cases by Age and Sex, 2015



Total Reported HCV Acute and Chronic Cases by Age and Sex, 2020



¹Rose, Michelle et al. "293. Hepatitis C is now a Millennial Disease in Response to the Opioid Crisis: A Demographic Shift in Hepatitis C Infection." Open Forum Infectious Diseases vol. 6, Suppl 2 S159. 23 Oct. 2019, doi:10.1093/ofid/ofz360.368

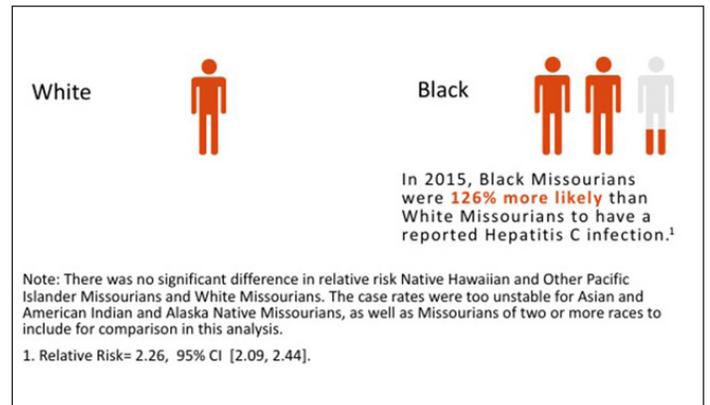
Changes in Risk Among Racial and Ethnic Groups

Racial and ethnic disparities among HCV reported in unincarcerated Missourians during 2015 and 2020 are presented below. In 2015, Black Missourians were significantly more likely to have a reported HCV infection in comparison to white Missourians. Case rates for HCV infection among other reported race groups were unstable and excluded from the analysis. Hispanic Missourians were 53% less likely to have a reported HCV infection than non-Hispanic Missourians.

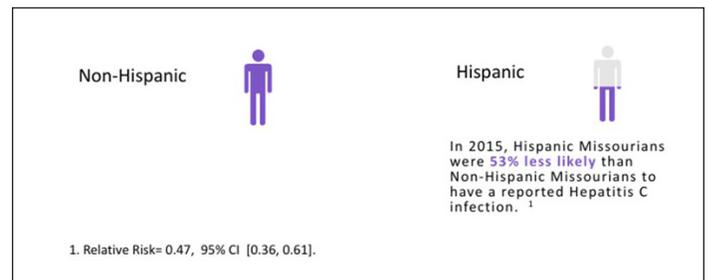
In 2020, the risk profile among racial and ethnic groups in Missouri changed in comparison to 2015. As was seen in 2015, in 2020 Black Missourians were still significantly more likely to have a reported HCV infection compared to white Missourians. However, the difference in HCV risk between the two race groups decreased by 69%. HCV case rates in 2020 among other reported race groups were unstable and excluded from the analysis. When ethnicity differences were examined, there was also no longer a significant difference in HCV risk between Hispanic and non-Hispanic Missourians, meaning that the difference in HCV risk between these two groups seen in 2015 disappeared by 2020.

While the opioid crisis may explain some of the changes seen in this analysis, it's possible that HCV testing access may have become more or less equitable from 2015-2020. These changes, along with age and geographic distribution of HCV cases, will be closely monitored in the coming years to help inform testing and treatment policy changes that will end the HCV epidemic.¹

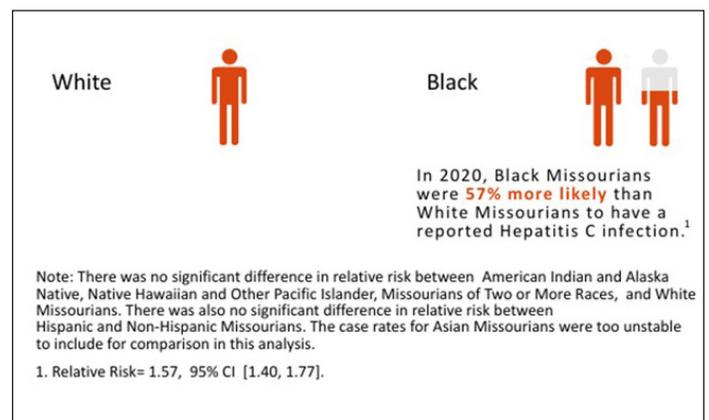
Racial Disparities in HCV Infection Risk, 2015



Ethnic Disparities in HCV Infection Risk, 2015



Racial Disparities in HCV Infection Risk, 2020



The Missouri Viral Hepatitis Stakeholder (MVHS) workgroup was established in 2018. It is comprised of representatives from across the state, including LPHAs, FQHCs, community-based organizations, hospitals and other state agencies.

Before establishing the Missouri Hepatitis C Elimination Planning Committee (MO HEPC), DHSS surveyed current MVHS members to identify expertise and to measure interest in participating in the planning committee. It was vital to have committed members because of the aggressive timeframe for completion. From that survey, 28 members were identified and agreed to volunteer their time and expertise.

The first meeting was held in August 2021. During the first meeting, the mission and vision were established, and Strengths, Weaknesses, Opportunities and Threats

(SWOT) assessment was completed. This allowed members to identify what Missouri needed to focus on for this plan. The committee identified five pillars of importance. The five pillars are Access to Services; Provider Development; Education, Collaboration and Awareness; Surveillance; and Policy and Advocacy. Based on expertise indicated in the survey, members were assigned to a pillar subgroup. Each subgroup met in between meetings to identify each pillar's goals, objectives and activities.

An in-person meeting was held in November 2021 for each subgroup to present the draft on their specific pillar and gain input from all members. In January 2022, the core of the plan was finalized, after review from DHSS. The work that members contributed to this plan is invaluable and would not be possible without their commitment and determination.

Missouri Hepatitis C Elimination Planning Committee



Pillar 1



Pillar 2



Pillar 3



Pillar 4



Pillar 5



Access to Services

Goal –

Improve access to equitable hepatitis C testing and patient-centered treatment services for Missouri residents.

Pillar 1

Access to Services

Objective 1:

To increase the proportion of people who are tested and aware of their hepatitis C status.

Rationale:

To eliminate HCV, improvement to access to services is crucial. Nearly 40% of people are unaware of their HCV status⁷. Because HCV often has no symptoms, the only way to know is to get tested. Currently, there are not adequate resources available for testing and linkage to care. It is recommended that non-traditional settings make efforts to provide routine testing. These settings could include; substance use treatment, harm reduction organizations, homeless programs, street outreach events or other community services organizations. Meeting people where they are will be a great approach to increase testing among those most at risk. Focusing on relationships with partners, laboratories, the MSPHL and patient assistance programs will increase testing resources and awareness.

Activities:

- 1.1.1 - Distribute HCV rapid test kits to local public health agencies and federally qualified health centers.
- 1.1.2 - Increase screening events for at-risk populations within health departments, drug testing centers, medication-assisted treatment clinics, etc.
- 1.1.3 - Promote testing during hepatitis awareness month.
- 1.1.4 - Create partnerships with laboratories and identify patient assistant programs to reduce cost or identify free HCV confirmatory testing.
- 1.1.5 - Identify and create a list of patient assistance programs.



“Missouri’s hepatitis C plan provides a roadmap for the state to use to eliminate hepatitis C. This plan was developed in collaboration with diverse partners from across the state, which was essential for ensuring that the needs of Missourians were addressed in the plan.” - Alicia Jenkins, Bureau of HIV, STD, and Hepatitis

Access to Services continued

Goal –

Improve access to equitable hepatitis C testing and patient-centered treatment services for Missouri residents.

Objective 2:

Develop linkage to care for confirmatory testing and treatment.

Rationale:

When a person tests positive for HCV, referrals are needed to link them to confirmatory testing, care, and treatment. Because many are under or uninsured, this can be difficult. Federally qualified health centers can be an asset if they have providers that treat HCV. Navigation services can increase linkage to care, but HCV-specific navigation is currently nonexistent or limited.

Patient assistance programs are essential in linking positive patients to treatment and care, prevention, and follow-up treatment. The MO HEPC will identify models and seek resources to improve patient assistance and navigation service.

Activities:

- 1.2.1 - Identify and research navigation programs.
- 1.2.2 - Develop an HCV navigation model.
- 1.2.3 - Create a linkage to care program and hire navigators.
- 1.2.4 - Provide resources for linkage to care to HCV-positive offenders upon release from the Department of Corrections.
- 1.2.5 - Create a linkage to care stakeholder subcommittee within the Missouri Viral Hepatitis Stakeholder workgroup.
- 1.2.6 - Promote Project Hep Cure to the public to increase treatment among individuals on Medicaid.



Provider Development

Goal –

Provide education and tools for providers to treat hepatitis C and expand provider capacity within Missouri.

Objective 1:

Increase the number of healthcare providers who are trained to identify, diagnose, and treat people with hepatitis C.

Rationale:

According to CDC, many types of providers can effectively manage HCV-infected patients, including internal medicine and family practice physicians, nurse practitioners, physician assistants and pharmacists¹.

More providers are needed in Missouri to treat hepatitis. In many areas of the state, travel to specialists may be miles away or have limited availability. Referral to a specialist is only necessary for those that are managing children with HCV and patients who have certain HCV-related sequelae or advanced disease, including those requiring a liver transplant¹. A patient is more likely to pursue treatment if it is easy to access services. To increase providers that are treating HCV, additional promotion and education are needed. Through this objective, there will be a promotion of existing resources and tools (Show Me ECHO and Project Hep Cure) and new resources made available so that learning about HCV treatment is easily accessible.

Activities:

- 2.1.1 - Develop and distribute guides and resource tools for health care providers.
- 2.1.2 - Train providers to implement HCV services in an effort to promote testing and treatment.
- 2.1.3 - Engage medical, nurse practitioner, physician assistant schools, and residency. (e.g., trainings, webpage, online toolkit, curriculum development assistance, etc.)
- 2.1.4 - Educate the Missouri Department of Corrections on treatment and linkage to care.
- 2.1.5 - Develop an online application tool that includes resources for providers. (i.e., pocket guide, calculators, guides)
- 2.1.6 - Support and promote HCV Show Me ECHO.
- 2.1.7 - Promote Project Hep Cure to providers to increase treatment among individuals on Medicaid.

“Provider knowledge of hepatitis C is crucial. It is the health care provider’s role to understand hepatitis C and the importance of testing in order to provide the best, quality care for their patients.” - Rachel Melson, DNP, FNP-C, Swope Health

Pillar 2

Provider
Development

Education, Collaboration and Awareness

Goal –

Empower and educate Missourians about hepatitis C transmission, testing and linkage to treatment.

Pillar 3

Education,
Collaboration
and
Awareness

Objective 1:

Increase awareness of testing and treatment for people living with hepatitis C.

Rationale:

Knowledge is power. Many people do not know about the risks associated with HCV, and it is often confused with other hepatitis viruses. People must be aware of the testing and treatment that is available. Through social and digital platforms and distributing educational material, more people will become aware of the importance of testing and treatment.

Activities:

- 3.1.1 - Create fliers, magnets and materials for distribution and digital displays.
- 3.1.2 - Coordinate a statewide social and digital media public health campaign.
- 3.1.3 - Create a state-wide HCV listserv.
- 3.1.4 - Annually review and update the statewide resource directory and ensure that is available to the public and providers.

Objective 2:

Educate Missourians on health equity, stigma and cultural humility regarding hepatitis C.

Rationale:

Health inequity and stigma are huge barriers to people pursuing testing and treatment. HCV does not discriminate and can happen to anyone. Education about stigma is important to ensure that people feel safe and protected to initiate testing and treatment. Providers play a crucial role in reducing stigma and barriers for their patients. Effective strategies need to be identified to implement stigma, health inequity and cultural education information into existing trainings.

Activities:

- 3.2. - Incorporate health equity, stigma, and cultural competency education into existing trainings (i.e., HCV, HIV, harm reduction)
- 3.2.2 - Identify effective strategies related to reducing stigma.



“Hep C is preventable and curable, it only takes a test and to know your status.”
- Johnny Gonzalez, KC Care Health Center

Surveillance

Goal—

To create a robust hepatitis C surveillance system that allows data to drive awareness, education, testing and linkage to care.

Pillar 4

Surveillance

Objective 1:

Evaluate the current hepatitis C surveillance system.

Rationale:

Until 2021, Missouri did not receive surveillance funding specifically for HCV. HCV is a reportable disease in Missouri, and there is data available. In 2016, the first epidemiological profile was created. As explained in the data portion of this document, the current surveillance system cannot easily track HCV cases that have achieved sero virologic response. This objective will focus on updating the epidemiological profile on a more regular basis and identify database needs to begin analysis of HCV cures.

Activities:

- 4.1.1 - Create geospatial maps that show HCV data.
- 4.1.2 - Every year, ensure that the Viral Hepatitis Epidemiological Profile is updated and made available to the public.
- 4.1.3 - Identify surveillance systems needs to better track cured HCV cases.

Objective 2:

Improve the quality and completeness of hepatitis C data, including improved demographics and risk factor data reporting.

Rationale:

Current HCV data lacks crucial demographic information that is needed to assist with more targeted testing. Evaluating the barriers in disease case reporting will provide a more robust system that will help guide project development.

Activities:

- 4.2.1 - Work with providers to improve demographics and risk factor reporting.
- 4.2.2 - Evaluate barriers to electronic data collection for providers.
- 4.2.3 – Work with the State's Information Technology Services Division and providers to address barriers to electronic data collection.
- 4.2.4 - Ensure that health equity data is incorporated into analysis and program improvement.
- 4.2.5 - Utilize Rapid Hepatitis C testing data to identify increased need for testing and linkage.

Surveillance continued

Goal –

Increase hepatitis C prevention, testing, and treatment services through policy development and advocacy efforts.

Objective 3:

Routinely analyze, disseminate findings, and utilize hepatitis C data to develop and improve testing and linkage to care programs.

Rationale:

Data analysis is imperative in decision-making and strategic planning to address HCV. Additional data tools can help guide programs on where to focus efforts and resources. The creation of an HCV dashboard will be a valuable tool to generate need-based analysis for program development and justifications for areas of focus.

Activities:

- 4.3.1 - Describe and disseminate best practices for data collection, analysis and use of data.
- 4.3.2 - Conduct and publish epidemiological review with hepatitis C data.
- 4.3.3 - Develop HCV interventions based on reviews and data analysis findings.
- 4.3.4 - Develop and maintain an HCV dashboard.
- 4.2.5 - Utilize Rapid Hepatitis C testing data to identify increased need for testing and linkage.

Objective 4:

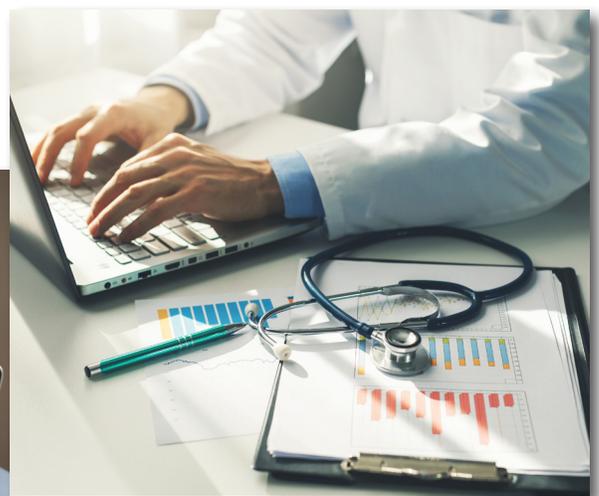
Identify data resources and collaborate with other organizations to compile information regarding HCV populations.

Rationale:

DHSS tracks HCV data as a reportable disease, but many other agencies are collecting HCV-related data as well. Identifying HCV data resources and creating data sharing agreements will strengthen Missouri's ability to prevent and respond strategically to hepatitis C.

Activities:

- 4.4.1 - Identify organizations that collect HCV data.
- 4.4.2 - Establish HCV data sharing agreements with various organizations.



Policy and Advocacy

Goal –

Increase hepatitis C prevention, testing and treatment services through policy development and advocacy efforts.

Objective 1:

Increase awareness of services for patients and increase opportunities for advocacy.

Rationale:

The Missouri Viral Hepatitis Stakeholder workgroup, MO HEPC, and regional workgroups across the state have a vested interest in hepatitis elimination, policy change, patient care and resource development to assist Missouri residents better. This objective helps establish a platform for organizations to share resources, promote education, reduce barriers, provide technical assistance and build system capacity.

Activities:

- 5.1.1 - Develop a website with resources for testing centers, treating physicians and educational opportunities.
- 5.1.2 - Identify a sustainable method to maintain educational materials and website.
- 5.1.3 - Develop an interactive forum for advocates to share information and resources at the community level (ex. Hep C Alliance).

Pillar 5

Policy and
Advocacy



“Most patients don’t know they have HCV. Universal testing is the only way to eliminate HCV.” - Josh Moore, MO HealthNet

Policy and Advocacy continued

Goal –

Improve access to equitable hepatitis C testing and patient-centered treatment services for Missouri residents.

Objective 2:

Increase awareness regarding policies and laws that create hepatitis C testing and treatment barriers.

Rationale:

The CDC currently recommends testing for HCV during pregnancy. In Missouri, hepatitis B testing is in state statute (Mo. Rev. Stat. § 210.030), and ensures that all pregnant women are screened during prenatal care, but HCV is not. Education and statute changes are needed to ensure universal screening for all pregnant women.

Missouri only receives funding from the CDC for HCV prevention efforts. VHPP will continue to identify and leverage additional funding and in-kind opportunities for hepatitis programs. Partnerships with MO HealthNet, Department of Corrections, Department of Mental Health, HIV organizations and programs that support people who use drugs and people with substance use disorder are essential to hepatitis programs. This objective will also encourage increased education to key stakeholders and officials.

Activities:

- 5.2.1 - Update and promote perinatal HCV screening guidelines.
- 5.2.2 - Utilize HCV fact sheets to educate key stakeholders.
- 5.2.3 - Identify and leverage opportunities for additional funding for hepatitis programs.

Objective 3:

Encourage and promote hepatitis C universal screening in primary care and other settings that provide services to those at highest risk.

Rationale:

Universal screening and opt-out testing are key strategies to increase testing and ensure that those most at risk are getting tested regularly and linked to care, if needed. Encouraging providers and organizations to adopt these standards is a priority.

Activities:

- 5.3.1 - Develop an HCV toolkit for organizations that provide services to people who use drugs.
- 5.3.2 - Identify providers that are currently doing HCV opt-out testing.



1. "Hepatitis C Questions and Answers for Health Professionals" Centers for Disease Control and Prevention. Accessed on 09 March 2022. <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#c3>
2. "Provider Information" Department of Social Services. Accessed on 09 March 2022. <https://dss.mo.gov/mhd/hepc/provider-info.htm>
3. "Show Me ECHO, Hepatitis C" University of Missouri, Missouri Telehealth Network. Accessed 18 March 2022. <https://showmeecho.org/wp-content/uploads/2021/10/HEPC2021flyer.pdf>
4. "HIV and Viral Hepatitis" Centers for Disease Control and Prevention. Accessed on 16 March 2022.
5. <https://dhhr.wv.gov/BBH/DocumentSearch/MAT/OBMAT%20Policy%20Templates/CDC%20HIV%20HEP%20C%20Information.pdf>
6. "Vulnerable Counties and Jurisdictions Experiencing or At-Risk of Outbreaks" Centers for Disease Control and Prevention. Accessed 16 March 2022. <https://www.cdc.gov/pwid/vulnerable-counties-data.html>
7. "Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments 2020". Missouri Department of Health and Senior Services Accessed 16 March 2022 <https://health.mo.gov/data/opioids/pdf/vulnerability-assessments-full-report-2020.pdf>
8. "Hepatitis C Basic Information" U.S. Department of Health and Human Service. Accessed 16 March 2022. <https://www.hhs.gov/hepatitis/learn-about-viral-hepatitis/hepatitis-c-basics/index.html#:~:text=About%2040%25%20of%20people%20with,through%20a%20simple%20blood%20test>

Show Me the Cure!





Missouri Hepatitis C Elimination Plan

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES

Bureau of HIV, STD and Hepatitis
P.O. Box 570 ● Jefferson City, MO 65102

Access the plan at health.mo.gov/MOHEPC



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Sincerest thank you to the members of the MO HEP C, MVHS, National Alliance of State and Territorial AIDs Directors, CDC, Bureau of HIV, STD and Hepatitis, DHSS Office of Public Information and Office of Epidemiology for their support and contribution to the elimination plan.

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