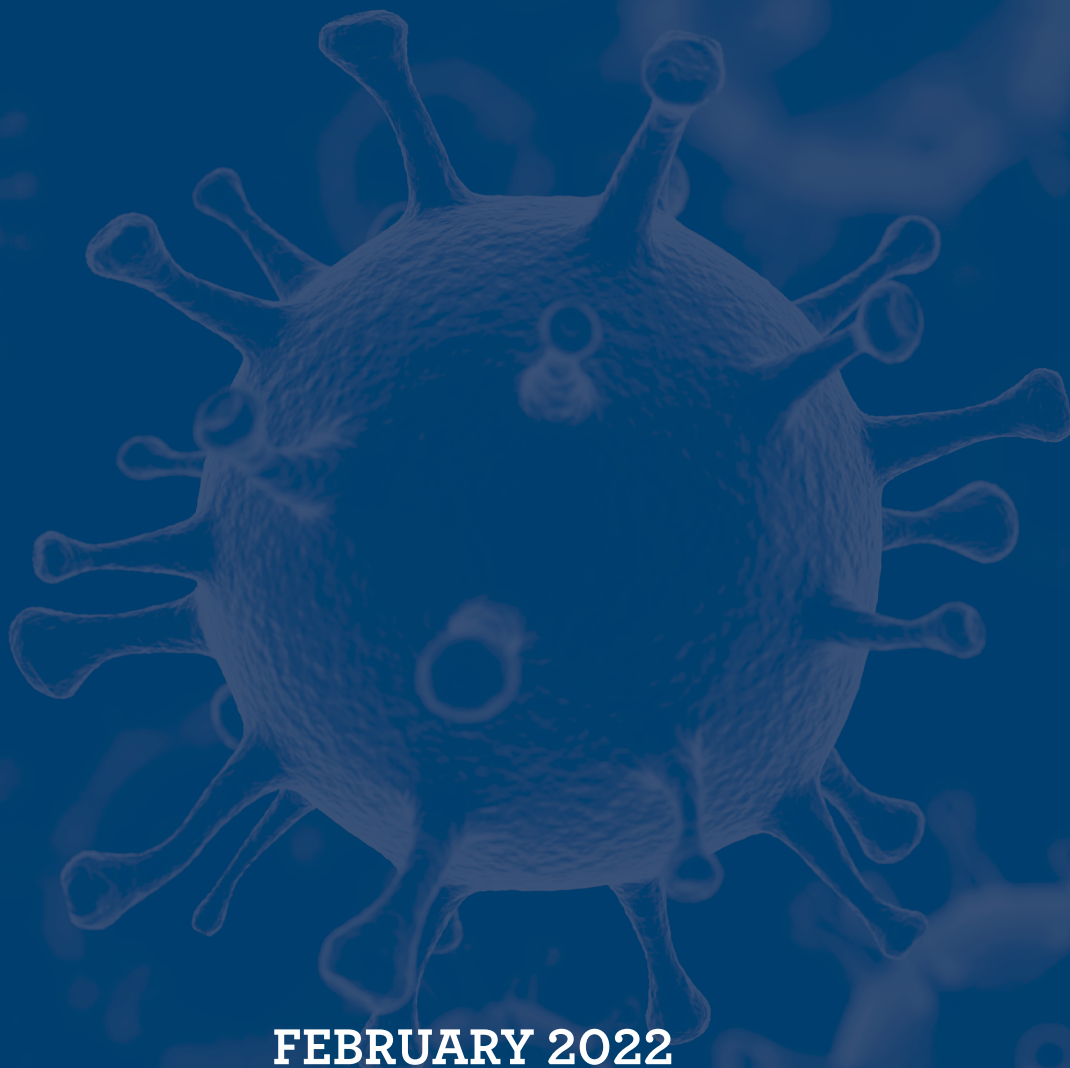


# **Viral Hepatitis in North Carolina: Comprehensive Response Recommendations**



**FEBRUARY 2022**

# Key

**AASLD** – American Association for the Study of Liver Diseases

**BC** – Bridge Counselor

**CHAMP** – Carolina Hepatitis Academic Mentorship Program

**CDC** – Centers for Disease Control

**CDB** – Communicable Disease Branch

**CBO** – Community-Based Organization

**CHC** – Community Health Center

**CCWNC** – Community Care of Western North Carolina

**DPS** – Department of Public Safety

**DSS** – Department of Social Services

**DIS** – Disease Intervention Specialist

**DVH** – Division of Viral Hepatitis

**DAA** – Direct-Acting Antivirals

**EHR** – Electronic Health Record

**ED** – Emergency Department

**EMS** – Emergency Medical Services

**FQHC** – Federally-Qualified Health Center

**FOCUS** – Frontlines of Communities in the United States

**HAV** – Hepatitis A

**HBV** – Hepatitis B

**HCV** – Hepatitis C

**HIV** – Human Immunodeficiency Virus

**IDSA** – Infectious Disease Society of America

**IVPB** – Injury and Violence Prevention Branch

**LFT** – Liver Function Test

**MAT** – Medication-Assisted Treatment

**MSM** – Men who have sex with men

**MAHEC** – Mountain Area Health Education Center

**NASTAD** – National Alliance of State and Territorial Health Directors

**NCHRC** – North Carolina Harm Reduction Coalition

**OBGYN** – Obstetrics and Gynecology

**OD** – Overdose

**PWUD** – People who use drugs

**PAP** – Prescription Assistance Program

**PCP** – Primary Care Provider

**QCNE** – Queen City Needle Exchange

**RNA** – Ribonucleic Acid

**SAMS** – Secure Access Management Services

**STD** – Sexually-Transmitted Disease

**SLPH** – State Lab of Public Health

**SSP** – Syringe Service Program

**USPSTF** – United States Preventative Services Task Force

**UNC** – University of North Carolina

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# North Carolina Viral Hepatitis Task Force Members:

This document is the culmination of two years of work, and the collective voices of over 100 Viral Hepatitis Task Force Members. The North Carolina Viral Hepatitis Task Force is a collection of individuals who represent key stakeholders in viral hepatitis in North Carolina. The continued engagement in this work, even during difficult and unprecedented times, highlights the dedication and care that this task force provides. Thank you all.

“As a clinician, it is poignant every time I care for a patient who learns of their diagnosis of viral hepatitis when admitted to our ICU with a life-threatening complication of cirrhosis or advanced liver cancer. I know that if I met this patient earlier, we could have treated the hepatitis and prevented this from happening. I look at their families and know that this did not have to happen. Viral hepatitis is so quiet until the advanced stages. If we wait until they feel unwell, we have waited way too long. We now have the treatments available to reduce the death and suffering from these diseases. If we had better screening and access to care, we would save many lives.”

– Dr. Andrew Muir, Duke

# Executive Summary

The burden of viral hepatitis caused by infection with hepatitis A, B and C has increased throughout North Carolina. Infection with these viruses can cause inflammation of the liver and may result in liver fibrosis, hepatocellular carcinoma, need for liver transplant, or death. Beginning in 2009, North Carolina observed a marked increase in acute hepatitis C cases followed by increases in acute hepatitis B beginning in 2012 and then a prolonged outbreak of hepatitis A beginning in 2018 among men who have sex with men (MSM), people who use drugs (PWUD) and people experiencing homelessness. These increases correlate closely with reported increases in unintentional poisonings and overdose related deaths during the same timeline.

Beginning in November 2019, the North Carolina viral hepatitis task force convened to identify barriers to viral hepatitis care and determine existing resources in North Carolina. Through a series of day-long, quarterly meetings, a group of stakeholders in viral hepatitis addressed viral hepatitis progress, existing barriers, resources, and access updates.

Each meeting included approximately 100 participants ranging from treatment providers, community members, state team members, community-based organizations, to health care systems. Ten priorities (below) were identified that are imperative to address viral hepatitis in North Carolina. It is necessary to address these priorities in order to build infrastructure, increase treatment access, and lower transmission of viral hepatitis in North Carolina. Task force meetings and discussions were driven by a 15-person planning committee comprised of existing task force members and the NC viral hepatitis team. This group met monthly to help drive the discussion and planning for each task force meeting. Each task force meeting served as a discussion and fact-finding excursion to shape North Carolina Viral Hepatitis Recommendations.

The aim of the state hepatitis plan is to address methods and issue recommendations to reduce hepatitis A, B, and C incidence and prevalence in North Carolina, and increase access to care and treatment through leveraging of existing infrastructure and partnerships. The plan addresses these priorities in terms of barriers, resources, and recommendations necessary to address viral hepatitis in North Carolina. Each priority is valuable independently, but only understanding and addressing how they all intersect can result in a comprehensive response to viral hepatitis in North Carolina, and better health outcomes for patients.

## North Carolina Viral Hepatitis State Plan

### Viral Hepatitis Task Force

Quarterly comprehensive meetings discussing barriers, resources, and ways to address viral hepatitis in NC

### Hepatitis Planning Body

Internal body of 15 individuals who plan and run Task Force meetings

### Viral Hepatitis State Plan

A comprehensive written plan aiming to lower Hepatitis A, B, and C and increase access to care and treatment through leverage of existing infrastructure and partnerships

The following **10** goals were identified as central to the ongoing progress toward elimination of viral hepatitis in North Carolina:

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- 1. Expand Medicaid**
- 2. Let community and people with lived experience drive response from program planning to implementation, evaluation, and advocacy.**
- 3. Test and treat all individuals in the criminal justice system**
- 4. Fund Bridge Counselors and/or Peer Linkage to Care Specialists**
- 5. Develop low-barrier comprehensive treatment programs in the field that include:**
  - a. Syringe Service Programs**
  - b. Human Immunodeficiency Virus (HIV)/Hepatitis C (HCV)/Hepatitis B (HBV) testing**
  - c. Viral Hepatitis Bridge Counselors and/or Peer Support**
  - d. Hepatitis A (HAV)/HBV Vaccination**
  - e. HCV Disease Staging**
  - f. Medication-Assisted Treatment (MAT) provider access**
  - g. Field HCV treatment**
- 6. Prioritize Viral Hepatitis in residency programs, and in community-led programs**
- 7. Strengthen harm reduction and hepatitis advocacy**
- 8. Adopt universal testing recommendations and standards**
- 9. Center equity throughout this work**
- 10. Improve data completeness to drive action**

# Viral Hepatitis: Epidemiology

In North Carolina, hepatitis A; acute, chronic, and perinatal hepatitis B; and acute hepatitis C are reportable by law to the North Carolina Department of Health and Human Services (North Carolina DHHS). Beginning in October of 2016, positive hepatitis C lab results became reportable via electronic lab reporting (ELR). Paper lab results that are received are entered by the local or state public health teams, in an effort to increase accuracy of chronic hepatitis C case counts in the state.

Clinically, acute HBV infection ranges from asymptomatic or mild disease to — rarely — fulminant hepatitis. Some acute HBV infections will resolve on their own, but some will develop into chronic infection. Most people with chronic HBV infection are asymptomatic and have no evidence of liver disease. However, some people may develop chronic hepatitis (elevation of aspartate aminotransferase [AST]/alanine aminotransferase [ALT]), cirrhosis, or hepatocellular carcinoma (a type of liver cancer). The younger a person is when infected with hepatitis B virus, the greater the chance of developing a chronic infection. Approximately 90% of infected infants will develop chronic infection; the risk goes down as a child gets older. One-quarter to one-half of children infected from ages one to five years old will develop chronic hepatitis B. From 15% to 25% of people with chronic HBV will develop chronic liver disease, including cirrhosis, liver failure, or liver cancer.<sup>1</sup> Around 25% of people with chronic HBV infected in childhood and 15% of people infected with chronic HBV after childhood die prematurely from cirrhosis or liver cancer. In surveillance, Acute HBV is provider reported and requires elevated ALT, presence of a symptom, and/or jaundice.

Clinically, HCV can be classified as acute (mild illness lasting a few weeks and up to 6 months) or chronic (life-long). Most people who get infected with HCV develop chronic HCV. Around 75%-85% of people who get infected with HCV develop a chronic infection. From 5%-20% of people who develop chronic HCV develop cirrhosis, and 1%-5% will die from either cirrhosis or liver cancer. In surveillance, like HBV, acute HCV is provider reported and defined by a positive HCV RNA lab value, and elevated liver enzymes, and also symptoms (or jaundice).

Because surveillance case definitions for acute HBV and acute HCV are restrictive, reported cases are not a true measure of transmission rate in the community, but rather a proxy to allow for monitoring of trends from year to year. It is very likely that cases of acute HBV and HCV reported by surveillance are underestimations of true transmission in the community.

Hepatitis A only exists as an acute case, and is self-limiting, resulting in natural immunity.

Statewide surveillance information is collected by the local health departments and sent to the North Carolina Division of Public Health. Hepatitis A surveillance/outbreaks are managed by the Medical Consultation Unit, and hepatitis B and C surveillance/outbreaks are managed by the HIV/STD/Viral Hepatitis Surveillance Unit; both are within the Communicable Disease Branch (CDB) in the North Carolina Division of Public Health. More information and data about hepatitis A can be found: <https://epi.dph.ncdhhs.gov/cd/figures.html#vpd>, while hepatitis B and C data and other program information can be found: <https://epi.dph.ncdhhs.gov/cd/stds/figures.html>.

**“We see the problem, we see the cure, but we don’t support you.  
Here’s your prognosis. Connection is the opposite of addiction.”**

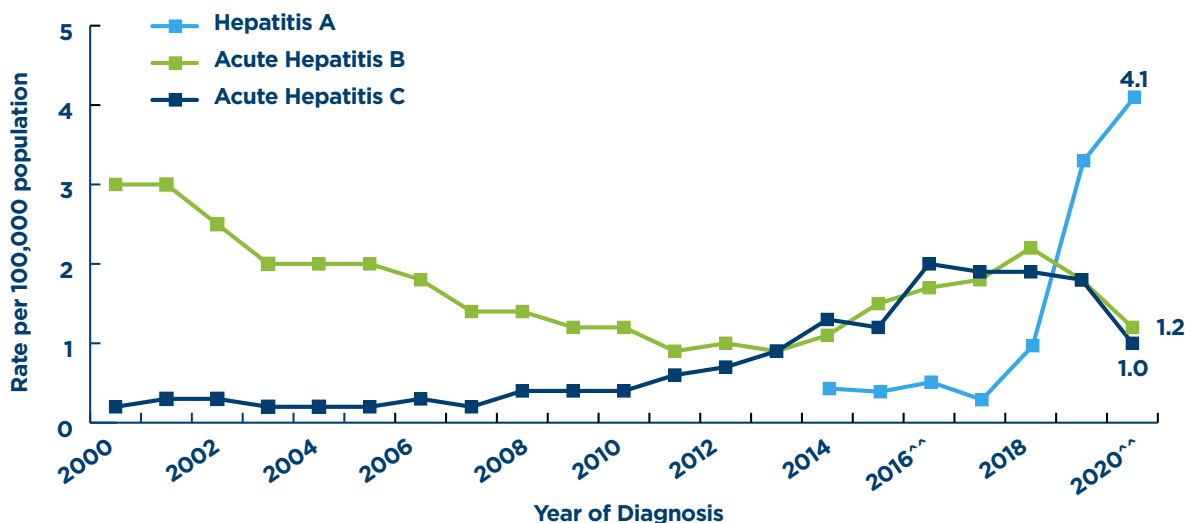
**– Alicia Brunelli, NCHRC**

# Hepatitis A Epidemiology in North Carolina

Beginning in 2016, a large outbreak of hepatitis A associated with person-to-person transmission was identified in several states. Cases have occurred primarily among three risk groups: (1) people who use injection or non-injection drugs; (2) people who are experiencing homelessness; and (3) men who have sex with men. This outbreak is characterized by high hospitalization rates and mortality, and elevated rates of comorbidity with HIV, hepatitis B, and hepatitis C. As of December 3, 2021 there have been 43,084 cases associated nationally, with 26,290 (61%) requiring hospitalization, and 402 deaths.

Since April 2018, NC has observed 1,118 cases of hepatitis A connected to the outbreak, with 63% requiring hospitalization and 20 (1.8%) deaths. The high mortality rate relative to recent experience with hepatitis A may be due to the higher prevalence of comorbidities in outbreak-associated cases. Forty-four percent of cases were also living with hepatitis C, 11 percent with history of hepatitis B, and three percent were people living with HIV (PLWH). Over two thirds of cases self-reported drug use, while 18% reported unstable housing.

**HEPATITIS A, ACUTE HBV, AND ACUTE HCV RATES IN NORTH CAROLINA, 2000-2020\***



Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.

\*North Carolina has had an active outbreak of hepatitis A since April 2018.

\*\*Case definition for HCV changed in 2016 and again in 2020.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 1, 2021).



# Hepatitis B Epidemiology in North Carolina

The number of people diagnosed with acute hepatitis B in North Carolina in 2020 was 131, a rate of 1.2 per 100,000 population. This is higher than the national average rate of acute hepatitis B, at 1.0 per 100,000 (based on [2019 CDC hepatitis surveillance report](#)). The highest rates of acute hepatitis B occurred among the 30- to 54-year-old age group. This group comprised 84% of the total acute hepatitis B cases. White/Caucasian men and women had the highest acute hepatitis B rates (2.0 and 1.1 per 100,000, respectively) and comprised 79% of the total acute hepatitis B cases. The exposure most frequently reported by people with acute hepatitis B was heterosexual contact (42%), followed by injection drug use (IDU) (31%). Exposure is based on self-reported data. People may report more than one risk, and the source of exposure is difficult to determine for many cases. These data likely reflect under-reporting of higher risk exposures, such as injection drug use.

The number of people diagnosed with chronic hepatitis B in North Carolina in 2020 was 768 (7.2 per 100,000). The majority of cases were among men (rate of 9.2 per 100,000), the 40-44 age group (rate of 14.4 per 100,000), and Asian/Pacific Islander (rate of 38.8 per 100,000). Risk was not reported for over 60% of cases. As of December 31, 2020, 26,299 people had been diagnosed with chronic hepatitis B and were currently living in North Carolina.

“Treating those with Opioid Use Disorder, regardless of their use status, is important both for reducing the risk to the individual as well as reducing the risk to the community. I have had numerous patients tell me they tried to get treated but because they were still using, they could not yet receive treatment. I tell them as long as they are stable enough to come to the office when they should and take their medicine every day, then they can be treated, and they are so relieved!”

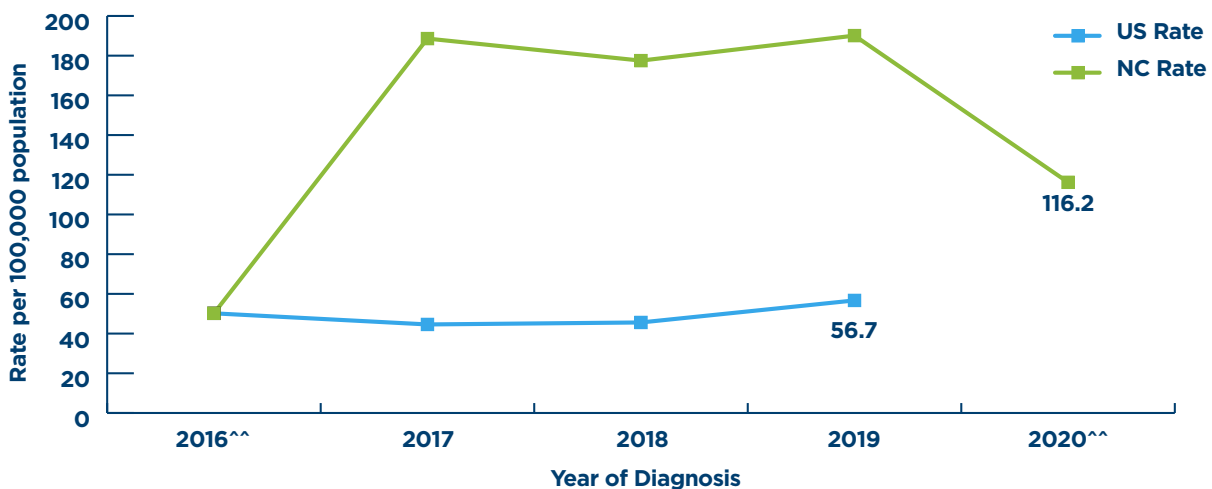
– Shauna Guthrie, Medical  
Director Granville-Vance

# Hepatitis C Epidemiology in North Carolina

The number of people diagnosed with acute hepatitis C in North Carolina in 2020 was 100, a rate of 0.9 per 100,000 population. The highest rates of acute hepatitis C occurred among the 25- to 39-year-old age group. This group comprised 70% of the total acute hepatitis C cases. In 2020, American Indian/Alaska Native men had the highest acute hepatitis C rates (1.6 per 100,000 respectively), but only made up 2% of the acute hepatitis C cases. The majority of cases (89%) were White/Caucasian men and women, with rates of 1.5 and 1.2 per 100,000, respectively. In 2020, the most frequently reported risk factor by people with acute hepatitis C was IDU (54%), followed by sexual contact (12%). Sexual contact poses minimal (but not zero) risk for viral hepatitis transmission, barring exposure to blood from an infectious person. Because exposure is based on self-reported data, people may report more than one risk, and the source of exposure is difficult to determine for many cases. These data likely reflect under-reporting of higher-risk exposures, such as IDU.

As of December 31, 2020, there were 72,552 people reported with chronic hepatitis C currently living in North Carolina since 2016. In 2020, 12,313 chronic hepatitis C cases were reported to the state. The majority of cases were among men (61%). The age groups 25-34 (24%) and 50-65 and older (37%) had the highest proportion of people with chronic hepatitis C. For the majority of cases, race/ethnicity is unknown (63%). Risk information is not collected for chronic hepatitis C cases at this time.





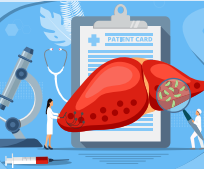






**CHRONIC HCV RATES IN NORTH CAROLINA AND UNITED STATES, 2016^^-2020\***



“For a number of my patients who found themselves caught up in the opioid epidemic, curing their hepatitis C is the first positive thing that has happened in a while. It has been so encouraging to see them experience success and feel more hopeful for the future.”

– NCVHTF Member

## Viral Hepatitis

Virus	Transmission Routes	Vaccine	Cure	Incubation	Symptoms of A, B & C
<b>A</b>	 Fecal/Oral	 Yes	 Recovery from illness results in lifelong immunity	 15 to 50 days	 Loss of Appetite Nausea/vomiting Fever Joint Pain Dark urine/ clay colored stool Jaundice Right upper quadrant pain
<b>B</b>	 Blood to blood & sexual contact	 Yes	<b>X</b> No cure (treatment available)	 1 to 4 months incubation Most adult patients clear infection (~90%)	
<b>C</b>	 Blood to blood	<b>X</b> No	 Curable (8-12 week treatment)	 2 weeks to 6 months incubation	

## Risk of Transmission



# History of Viral Hepatitis

## 1942-1950

Experiments conducted confirming transmissibility of two distinct forms of viral hepatitis (Hepatitis A and B)

## 1963

Major Hepatitis B protein identified that allows for testing of the blood supply

## Mid 1970s

Discovery of Non-A, Non-B Hepatitis as cause for acute hepatitis after transfusion

## 1982 Hepatitis B vaccine becomes available, recommended for at-risk groups

### Current Guidelines for HBV vaccination

- Universal HBV vaccination starting within 24 hours of birth
- Vaccination of children < 19 years old who have not received vaccine prior
- People at risk by sexual exposure
  - Partners of individuals who are HBsAg positive, more than one sexual partner in six months, People seeking evaluation or treatment for STI, men who have sex with men
- People at risk by percutaneous or mucosal exposure
  - Current or recent IDU, household contacts of individuals who are HBsAg positive, residents/staff of facilities for mentally disabled People, health care and public safety personnel, hemodialysis patients, People 19-59 with diabetes
- People with HIV or Hepatitis C
- International travelers to areas with HBsAg prevalence  $\geq$  2%
- People with chronic liver disease
- Incarcerated People
- Anyone seeking protection from Hepatitis B

## 1984

Treatment trials using interferon-based therapies used to treat Non-A, Non-B Hepatitis

## 1989

Identification of Hepatitis C

## 1990

Routine screening of blood supply for HCV begins (more accurate screening implemented in 1992)

## 1991

- Interferon-based therapy for HBV and HCV approved by FDA
- Anti-HBV activity of Lamivudine discovered
- CDC recommends universal childhood vaccination against HBV

## 1995-1996 Approval of first vaccines against Hepatitis A, recommended for higher-risk individuals

### Current Guidelines for HAV vaccination

- All children starting at age 12 months
- International travelers or anticipated close contact with international adoptee
- Men who have sex with men
- People who use drugs
- Occupational risk for exposure
- People living with HIV (PLWH)
- People with chronic liver disease (including HBV and HCV)
- People experiencing homelessness
- Anyone requesting protection from HAV

# 1998

CDC recommends HCV screening for at-risk populations; Lamivudine is first nucleoside analogue approved for HBV treatment; anti-HBV activity of Entecavir discovered

## 1998 HCV screening recommendations for the following at-risk groups

- Injection Drug Use
- Blood/blood product recipients or organ transplantation prior to July 1992
- Non-sterile tattoos/piercings
- Hemodialysis patients
- HIV or HBV infection
- Children born to mothers with HCV
- Occupational exposure
- Persistently abnormal ALT levels
- Any person requesting HCV testing

# 2001

Twinrix vaccination approved for use

## Current guidelines for Twinrix vaccination

- Adults 18+ who have not received documented full series vaccine.
- Full series available at no cost through DPH in NC for any 18+ who have no documented series of hepatitis B vaccine.

# 2005

Entecavir approved for treatment of HBV

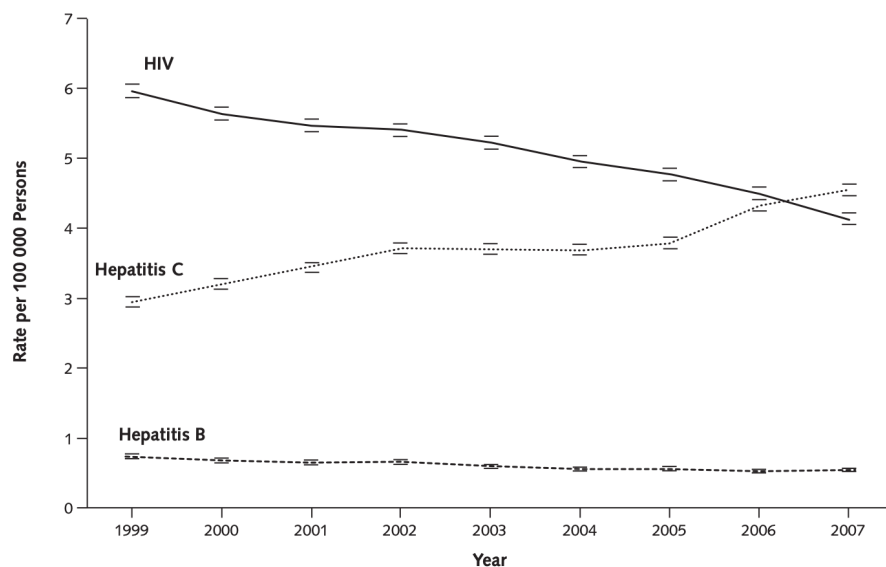
# 2006

CDC recommends expansion of Hepatitis A vaccination to all children

# 2007

Deaths due to HCV surpass HIV-related deaths in US

*Figure.* Annual age-adjusted mortality rates from hepatitis B and hepatitis C virus and HIV infections listed as causes of death in the United States between 1999 and 2007.



Because a decedent can have multiple causes of death, a record listing more than 1 type of infection was counted for each type of infection.

# History of Viral Hepatitis (continued)

**2008**

Tenofovir approved for treatment of HBV

**2012**

CDC recommends expanding Hepatitis C screening to baby boomer cohort (1945-1965)

**2013**

Beginning of Direct Acting Antiviral (DAA) era in HCV treatment

**2014**

First all-oral HCV DAA regimen approved

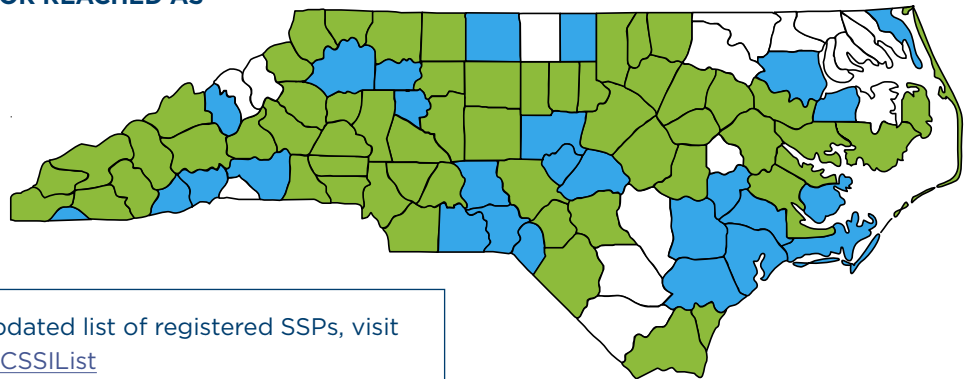
**2016**

First pan-genotypic regimens available for HCV treatment; syringe exchange programs made legal in North Carolina

- **NC State Laboratory of Public Health (SLPH)** HCV risk-based testing begins in NCALHD Regions 1, 2, 3, 8 following vulnerability index identifying counties at highest risk for HCV outbreak
- **SSPs in NC:** [www.ncdhhs.gov/divisions/public-health/north-carolina-safer-syringe-initiative/syringe-services-program-north](http://www.ncdhhs.gov/divisions/public-health/north-carolina-safer-syringe-initiative/syringe-services-program-north)

**NC COUNTIES SERVED OR REACHED AS OF JUNE 30, 2021**

- Directly served
- Additional counties reached



For a continuously updated list of registered SSPs, visit <https://tinyurl.com/NCSSIList>

**2017**

- North Carolina Medicaid removes fibrosis restriction for Hepatitis C treatment approval
- Initiation of the Carolina Hepatitis Academic Mentorship Program (CHAMP)
- Viral Hepatitis Bridge Counselor Program begins

# 2018 SLPH risk-based HBV and HCV testing available to all 85 local health departments in NC;

## Hepatitis B virus testing:

- People and their sexual partners who currently use drugs not as prescribed
- People with a history of drug use
- People who are HIV positive
- Men who have sex with men
- People who have Hepatitis C

## Hepatitis C virus Testing:

- People and their sexual partners who currently use drugs not as prescribed
- People with a history of drug use
- People who are HIV positive
- People with a history of incarceration
- People born between the years of 1945 and 1965

## Hepatitis A outbreak prevention response begins

### Hepatitis A Outbreak Related Vaccine Eligibility

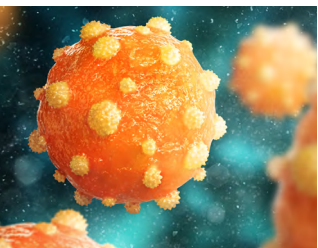
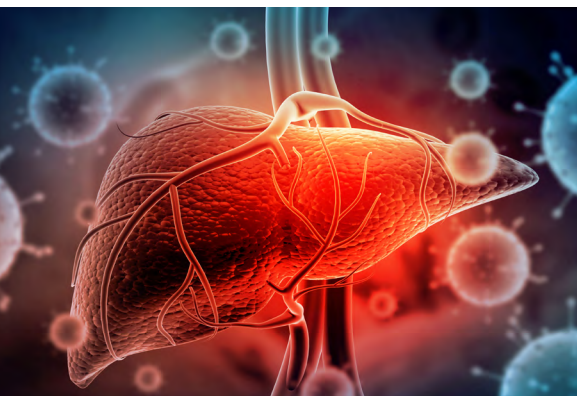
- Individuals in the below at-risk groups may receive one no cost dose of HAV at any North Carolina Immunizations Branch provider site
  - Men who have sex with men (MSM)
  - People who inject drugs (PWID)
- People experiencing homelessness or housing instability

## 2019

- First DAA regimens approved for children and adolescents
- HCV linkage program begins for incarcerated individuals
- Drug User Health Resource Guide created
- First State Viral Task Force begins

## 2020

North Carolina Medicaid lifts substance use restrictions for HCV treatment approval



# History of Viral Hepatitis (continued)

**2020** CDC recommends expanding HCV screening to all adults 18 and older and to pregnant women during each pregnancy



## Universal hepatitis C screening:

- Hepatitis C screening at least once in a lifetime for all adults aged 18 years and older, except in settings where the prevalence of HCV infection (HCV RNA positivity) is less than 0.1%\*
- Hepatitis C screening for all pregnant women during each pregnancy, except in settings where the prevalence of HCV infection (HCV RNA positivity) is less than 0.1%\*

## Hepatitis C testing regardless of age or setting among people with recognized conditions or exposures:

- People living with HIV (PLWH)
- People who ever injected drugs and shared needles, syringes, or other drug preparation equipment
- People with selected medical conditions, including:
  - people who ever received maintenance hemodialysis
  - people with persistently abnormal ALT levels
- Prior recipients of transfusions or organ transplants, including:
  - people who received clotting factor concentrates produced before 1987
  - people who received a transfusion of blood or blood components before July 1992
  - people who received an organ transplant before July 1992
  - people who were notified that they received blood from a donor who later tested positive for HCV infection
- [Healthcare, emergency medical, and public safety personnel after needle sticks, sharps, or mucosal exposures to HCV positive blood \(pdf\)](#)
- Children born to mothers with HCV infection

## Routine periodic testing for people with ongoing risk factors, while risk factors persist:

- People who currently inject drugs and share needles, syringes, or other drug preparation equipment
- People with selected medical conditions, including:
  - people who ever received maintenance hemodialysis

**Any person who requests hepatitis C testing should receive it, regardless of disclosure of risk, because many People may be reluctant to disclose stigmatizing risks**

**2021**

- HCV testing adopted in NC SLPH perinatal panels; Perinatal HCV linkage project kickoff
- Quantitative HCV screening





# The Financial Cost of Viral Hepatitis

This document highlights the social and medical consequences associated with viral hepatitis. Untreated hepatitis C is both common and costly. It is estimated that at least 50% of people living with hepatitis C are unaware of their infection. This proportion increases in marginalized populations that often observe barriers to care, such as justice-involved individuals and people who use drugs. Chronic hepatitis C (75-80% of HCV+ patients) is estimated to cost \$21,516 per person per year (PPPY). In patients with cirrhosis (5-10%), that cost increases to \$39,816 PPPY. End Stage Liver Disease (4-5%), in addition to being detrimental to the patient's health, averages \$71,580 PPPY. If a liver transplant is needed, this may cost over \$812,000 PPPY. On average, up to 74% of people living with chronic HCV will develop at least one extrahepatic manifestation such as cardiovascular disease, chronic kidney disease, or Type 2 Diabetes. Cost of care for patients with EHM increases approximately \$12,000 PPPY. If patients are tested and treated earlier, there is an estimated cost savings of \$26,200 PPPY. In addition to this, with increased early HCV treatment, patients experience better health outcomes, quality of life, and gains in liver-related and all-cause mortality. A majority of people living with HCV are uninsured or underinsured. One of the largest barriers highlighted below, is limited care due to financial cost of testing, treatment, and medical care. The overall financial cost of untreated hepatitis C for health systems and government programs far exceeds the one-time cost of hepatitis C treatment for an uninsured individual.

Hepatitis A is a vaccine preventable disease. One dose of a two-dose series provides at least 90% seroprotection for the immunized individual for 10 years. A full two-dose series provides lifetime immunity. The average cost of mono-valent hepatitis A vaccine in the private sector is \$73.75 per dose, or \$146.50 for a full series. Average costs per hepatitis-A related hospitalization are estimated to be \$16,232 (SD \$602; 95% CI \$15,052–\$17,411). While traditionally hepatitis A is a mild illness, recent outbreaks are characterized by high hospitalization rates (63%) resulting in high associated cost. A majority of patients involved in these outbreaks are uninsured, unhoused individuals. North Carolina has observed 486 patients hospitalized during this outbreak. Utilizing CDC's estimation, this accounts for \$7,888,752 in hospital related cost, compared to the maximum cost of \$71,199 for preventative vaccine costs.

Hepatitis B is also a vaccine preventable illness. Unlike hepatitis C, hepatitis B is naturally cleared from an adult patient in over 90% of cases. However, those who go on to exhibit chronic infection may require lifelong maintenance therapies for hepatitis B infection. While lifetime costs are difficult to determine in hepatitis B maintenance therapies (not every patient requires this), the annual cost of entecavir and tenofovir exceed \$25,000. The cost for a full hepatitis B vaccine series ranges from \$185.58 to \$242.50. The cost for a full series of combination hepatitis A and B vaccine is \$337.05.

# PRIORITIES

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**This plan is organized around the following 10 key priorities below and highlights identified barriers and resources in existence around each:**

- 1. Funding**
- 2. Stigma**
- 3. Transportation**
- 4. Access to care**
- 5. Testing**
- 6. Harm reduction**
- 7. Linkage to care**
- 8. Incarcerated populations**
- 9. Education**
- 10. Advocacy**

# 1. FUNDING

Historically, viral hepatitis is underfunded and requires the leveraging of resources from other closely related partners. Often, funding dedicated to HIV is leveraged for viral hepatitis programs, and health resources are drawn from a similar mechanism. Hepatitis C treatment is costly. Even with medications provided at no cost through pharmacy assistance programs for those who qualify, treatment is often not initiated due to the costs associated. Successes in viral hepatitis access can often occur at a pilot level but then, due to lack of necessary funding, are not expanded more broadly. If given dedicated funding, with long-term funding options, these programs may flourish and expand statewide.

It is imperative that viral hepatitis programs, patients and health resources receive dedicated funding consistent with the total estimated prevalence of its diseases in the state. Funding is direly needed for local and state programs to properly address the viral hepatitis care cascade and to reduce transmission and active infections.



## **BARRIERS:**

- North Carolina has not yet expanded Medicaid. NC Medicaid eligibility is restrictive and often does not cover those individuals at highest risk for viral hepatitis infection.
- Not all entities have access or the ability to offer 340B pricing or have a system partner to reduce cost.
- Restrictions on funding result in resource limitations and siloes i.e., coverage of only risk-based testing, HIV funding sources, limited ability to fund syringe service program supplies etc.
- Infectious disease education, prevention, vaccination, linkage to care, and treatment is often not prioritized in opioid response funding despite the prevalence of viral hepatitis among people who use drugs. Addressing infectious disease is critical to comprehensive drug user health.
- Prescription/Patient Assistance Programs (PAPs) will often cover the price of direct acting antivirals (DAAs) for patients; however, lab/diagnostic screenings are expensive. Patients cannot receive HCV treatment without “pre-treatment” or “staging” diagnostic tests, and the out-of-pocket cost, even with a sliding fee scale, ranges from \$50 to over \$1,000. Patients often find the process of applying for PAPs difficult to navigate. Low-barrier treatment options, especially for those without insurance, is geographically dependent and often not readily available.
- PAPs are not available during incarceration. Jail-based HCV screening programs often observe a 17%-20% positivity among those testing (many jails in NC have an >30% positivity). However, PAPs, a tool often used to provide no- or low-cost care for patients, are not available to justice-involved individuals.
- Hepatitis B treatment efforts are also impacted by a lack of funding. Care for people with Hepatitis B is often provided through specialist offices that can have high out of pocket costs. A broad safety net system for access to care for those living with Hepatitis B is not available, which has an impact on the capacity for groups with acute and chronic illness to receive recommended treatment and follow-up.



## RESOURCES:

- Leveraging HIV funding and private grants for HCV labs at some facilities allows for participants to receive HCV testing
- Dedicated viral hepatitis funding from Centers for Disease Control (CDC) Division of Viral Hepatitis (DVH) - restrictive and minimal
- Leveraging Sexually-Transmitted Disease (STD) grant funds
- Prescription Assistance Programs (PAPs) provide free HCV medication for those who are eligible
- HepConnect grant (or similar private partnership sources) allows for no out-of-pocket costs for Syringe Service Program (SSP) participants, and full-time staff/part-time staff that are salaried positions
- FOCUS Program: FOCUS is a public health initiative of Gilead Sciences, Inc. that enables partners to develop and share best practices in routine blood-borne virus (HIV, HCV, HBV) screening, diagnosis, and linkage to care in accordance with screening guidelines promulgated by the U.S. Centers for Disease Control and Prevention (CDC), the U.S. Preventive Services Task Force (USPSTF), and state and local public health departments
- The State of North Carolina budget includes funding to support risk-based viral hepatitis testing at NC SLPH. All local health departments can submit risk-based HCV and HBV testing to the SLPH
- The NC HIV Program offers no-cost rapid HCV testing
- University of North Carolina (UNC) Charity Care is available for uninsured patients who meet income criteria, other financial assistance programs
- Federal CDC Division of Viral Hepatitis funding provides minimal pre-treatment lab funding to piloted programs in Cherokee, Catawba and Carteret counties, and Foothills Health District (Rutherford and McDowell counties). This funding is limited and contingent on availability year-to-year
- 340B Drug Pricing Program allows for low medication cost and high financial return in institutions
- Comprehensive Care referrals created at community-based organizations minimize office visits and co-pays



## INITIAL STEPS:

- Increase access to pharmaceutical companies and patient assistance programs
- Engage pharmaceutical companies for special projects (i.e., HepConnect)
- Work with HIV programs to leverage HIV funding for viral hepatitis
- Work with Ryan White programs for those individuals who are coinfecting with HCV and HIV
- Partner with well-funded programs, avoid duplication of services
- Identify provider advocates for health systems to help expand funding when available
- Form hepatitis coalitions consisting of community members and viral hepatitis stakeholders



## LONG -TERM GOALS:

- Establish a “Ryan White-like” Program for viral hepatitis nationally
- Expand Medicaid to increase access to viral hepatitis treatment and care
- Partner with Community Health Centers (CHC) and Federally Qualified Health Centers (FQHCs) to streamline referrals and visits. Utilize indigent care programs if available for sliding fee scales
- Leverage advocacy on topics that are intersectional with viral hepatitis (e.g., HIV, harm reduction, homelessness, reproductive justice)

## 2. STIGMA

People who are at risk for viral hepatitis often experience stigmatization on both personal and systemic levels. This discrimination causes barriers to care that are both real and perceived, and can come from peers, medical professionals, insurance companies, and society at large. Stigmatization of medical conditions is known to have a negative effect on those who are affected by it, and can prevent them from accessing necessary healthcare, and in many cases prevent them from seeking healthcare in the first place.

Viral hepatitis in particular is intensely stigmatized in our culture due to its close association with people who use drugs. Many individuals and organizations hold outdated beliefs that access to quality healthcare is not a universal human right, and rather a decision made based on their personal opinions of a patient’s choices or circumstance. Patients often report mistreatment and discrimination in healthcare settings, ranging from verbal mistreatment to antiquated sobriety requirements which prevent them from receiving medication. These individual experiences are shared with peers as a means of protecting their own community from further mistreatment. This contributes to a commonly held belief by people at risk for viral hepatitis that healthcare institutions are not a safe environment for them and are to be avoided.

A 2020 North Carolina study suggests that access to treatment for viral hepatitis and curative treatment for HCV serve to improve quality of life, lower perceived stigma, increase intimacy and social interactions. Only by addressing the deeply entrenched stigmatization of people who use drugs, engage in sex work, or are justice-involved, can we hope to adequately treat cases of viral hepatitis and subsequently prevent further transmission.



## BARRIERS:

### PATIENT-RELATED BARRIERS:

- Patients are afraid to disclose viral hepatitis status for fear of mistreatment within the health care system
- Patient experience in health care is guided by racism, transphobia, homophobia, and judgment over drug use
- Stigma, discrimination, and criminalization of drug use is deeply ingrained at the individual, community, and systems levels.

*Hurt, C. B., Carpenter, D. M., Evon, D. M., Hennessy, C. M., Rhea, S. K., & Zule, W. A. (2020). Mitigating the risk of infectious diseases among rural drug users in Western North Carolina: results of the Southern Appalachia Test, Link, Care (SA-TLC) Health Care Provider Survey. The Journal of Rural Health, 36(2), 208-216.*

- Lack of widespread cultural sensitivity and humility
- Focus on opioid epidemic and not on broader polysubstance use
- Provider experiences guide patient feelings about health care and seeking health care
- Lack of personal or health care advocates prevents patients from seeking care for fear of negative treatment
- Few people with lived experience are involved in care
- Viral Hepatitis training is not standardized across medicine

#### **HEALTH/PUBLIC HEALTH/HEALTHCARE PROVIDER-RELATED BARRIERS:**

- Sobriety requirements for viral hepatitis treatment not grounded in science
- Minimal education on the use of language/culture in practice
- Lack of collaboration between providers results in disjointed referral process and repeat judgment about drug use
- Providers not offering HCV treatment to people who use drugs because of the belief that “they will get re-infected anyway”

#### **WIDESPREAD USE OF OUTDATED AND HARMFUL LANGUAGE:**

- Front office staff, assistants, nurses, and staff who use stigmatizing words during the care seeking experience

#### **COMMUNITY-LEVEL BARRIERS:**

- Media representations of the opioid crisis focus on young white individuals. This is not the true vision of all PWUD and all people living with viral hepatitis
- Opioid crisis versus polysubstance use
- Minimal and inconsistent education about who’s at risk for viral hepatitis (not just PWUD)
- Inequitable messaging for HCV testing prior to CDC testing guidelines



#### **RESOURCES:**

- Harm reduction organizations and advocates that provide cultural humility trainings
- Provider Advocates
- Individually driven comprehensive care clinics and health hubs (see: low barrier care project in Gastonia)
- Health Care for the Homeless at Lincoln Community Health Center
- Oak City Cares homeless health program
- Peer Support Specialists
- SSPs and other community-based organizations that advocate for viral hepatitis testing and linkage, and approach people with cultural humility and care
- Individuals with lived experience advocating for patients
- HIV and HCV Bridge Counselors



## INITIAL STEPS:

- Create materials and programs under the guidance of those with lived experience
- Create positive social media campaigns to create conversations around treatment, including those who have completed it
- Utilize low-barrier methods of testing (ex. testing parties, outreach testing) to reduce stigma and expand availability into non-clinical setting
- Offer confirmatory HBV/HCV testing at SSPs and Community-Based Organizations (CBOs)
- Implement widespread non-stigmatizing language and cultural humility trainings for providers and clinical staff
- Use person-first language (ex. person who uses drugs vs. addict/user, person in recovery vs. former addict)
- Provide clear counseling on viral hepatitis risk, prevention, testing, treatment and care when engaging with a patient
- Train providers in whole person care
- Hire peer support specialists
- Center people with lived experience and include people who currently use drugs (e.g., not solely individuals in recovery)



## LONG-TERM GOALS:

- Implement widespread non-stigmatizing language trainings for all workers in health care and front-line work required during training/at hire
- Promote comprehensive care programs (HCV, MAT, Harm Reduction, Primary Care, Obstetrics and Gynecology (OBGYN))
- Develop low barrier field testing to treatment programs (bring the medicine to them) and other comprehensive care programs
- Create campaigns and materials highlighting people with lived experience, change the image of people with HCV to encompass all individuals
- Address the bias toward less inclusive depictions of individuals with HCV in advertising (ex. including only Baby Boomers)
- Provide widespread public and healthcare trainings on viral hepatitis testing and treatment
- Incorporate detailed viral hepatitis training and harm reduction training in nursing, medical school and residency
- Integrate viral hepatitis screening as standard of care for all eligible patients with an opt-out approach

“So many of my patients report they have received hurtful comments related to viral hepatitis from family, friends and healthcare providers. They feel ashamed. We have a lot of work to do to help people understand viral hepatitis and addiction. These patients need our compassion and not more.”

– NCVHTF Member

## 3. TRANSPORTATION

Transportation in North Carolina can be a large barrier to care for individuals seeking viral hepatitis testing and/or treatment. North Carolina has diverse geography resulting in inconsistent access to transportation and high risk of geographic barriers to care.

Transportation issues are key reasons given for why individuals miss their first and/or second medical appointment, or in many cases don't begin the process of beginning medical care. Often, individuals rely on public transportation or health care accessible transport, resources that often have inconsistent schedules or long distances between access locations. In areas without public transportation, individuals may rely on friends or family for access to appointments. To successfully attend their medical appointments, they must either have access to reliable transportation or be offered it at no charge by their treatment provider.

It is important that viral hepatitis programs and patient-centered health resources consider how transportation drives access to viral hepatitis resources. Resources available at no cost may be inaccessible depending on location. The complications associated with transportation need to be addressed to create comprehensive resources and to reduce the viral hepatitis burden in North Carolina.



### **BARRIERS:**

- Lack of financial means to afford public transport, or personal transport
- Institutional and systemic restrictions that prevent field-based treatment
- Limited field-based and/or mobile clinics or programs
- Limited provider pool in rural areas and large geographic spread from resource to resource
- Difficulty following up with patients with limited transportation
- Reliance on family or support structure for transportation
- Inconsistent access to public transportation. Both rural inaccessibility and public transport inconsistent times
- Lack of bus routes and frequent bus stops (timing is sparse and may require large blocks of time)
- Limited access to and resources for ride sharing apps in rural areas
- Overbooked or unreliable ride resources
- Second appointments are not prioritized for patients after prescription occurs



### **RESOURCES:**

- Ryan White programs and FQHCs may have access to transportation vouchers
- Bridge Counselors, Disease Intervention Specialists (DIS), and peer support specialists often can drive patients to care appointments
- Medicaid transportation - Medicaid expansion would expand this resource broadly, providing wider access to transportation.



- Models for mobile clinics/boots on the ground mentality, health hubs
- Syringe Service Programs (e.g., Olive Branch Ministry; North Carolina Harm Reduction Coalition (NCHRC) Wilmington; Queen City Needle Exchange)
- Telehealth services for HCV treatment have increased during COVID
- Department of Public Safety (DPS) telehealth is working well, and Macon County delivers medication for medical adherence



### INITIAL STEPS:

- Provide transportation support through bridge counselors and peer support workers
- Expand bridge counselors who can visit individuals to drop off medicine and encourage medication adherence
- Provide vouchers for public and private transportation
- Engage with the faith community to provide transportation without requirement for faith conversations
  - Have conversations and reach out to faith leaders
  - Train people about language and stigma
- Engage peers to advocate for transportation resources
- Engage CBOs and SSPs to bring prescriptions and treatment to the field
- Give individuals the option to choose between telehealth vs. clinical treatment options
- Leverage Emergency Medical Services (EMS) assistance
- Utilize Community Health Worker (CHW) workforce
- Foster continued development of workforce of community health workers



### LONG-TERM GOALS:

- Develop and maintain established door-to-door transportation for eligible patients
- Provide bundled prescriptions for HCV care (ex. prescription given in full instead of four-week increments)
- Increase access to ride sharing apps, and incentives for patients utilizing ride sharing
- Increase public transportation infrastructure
- Expand telehealth services for patients in conjunction with field testing and staging
- Expand bridge counselor and peer support programs to allow for guaranteed patient support and advocacy
- Provide widespread access to mobile services (e.g., MAT; SSPs; HCV treatment)

## 4.

## ACCESS TO CARE

Access to necessary care for HCV requires availability of treating providers in a variety of clinical settings. Developing systems that do not require specialty referrals is a chief priority in context of this high prevalence disease. Through expansion of HCV training into primary care settings in both rural and urban environments, HCV treatment can be provided that is lower cost, easier to access, and able to more broadly address the size of the epidemic and the many lives it impacts.



### BARRIERS:

- Clinical access
- Difficult to follow-up with patients
- Stigma and judgment from provider staff + fear of judgment in general
- Lack of provider and patient education around treatment
- Requirements or assumptions of abstinence for hepatitis treatment to begin
- Provider hesitance and lack of trust of healthcare providers
- Negative health care experiences
- Lack of centralized referral processes, lack of resource lists
- Costly Staging Labs that result in delayed access to care
- Paperwork illiteracy for both patient and provider
- Lack of widespread patient support
- Lack of Medicaid expansion, restrictive Medicaid eligibility criteria set by the legislature
- Requirements for additional intervals of testing for certain medications covered through Medicaid
- No widespread adoption of testing criteria for hepatitis B or C
- Difficulty navigating care: no clear referral path for all health systems
- Fear of negative repercussions (Department of Social Services involvement, child removed from home) if patient is parent or pregnant
- Limited time and sessions for patient engagement. Appointments are short, timeframe of treatment is short
- Losing health care or Medicaid if a child is removed, or after 60 days postpartum
- Disruptions of treatment; lapse if renewal form not submitted in time
- Funding restrictions
- Insufficient bridge counselors for HCV to cover the linkage needs of individuals in the state
- Liver transplant criteria requiring six months of drug/alcohol treatment for those with a history of drug/alcohol use prior to transplant eligibility



## RESOURCES:

- Removal of Medicaid sobriety restriction and fibrosis restrictions
- DPS treats all prioritized patients
- Any prescribing provider can treat for hepatitis C
- North Carolina Hepatitis Academic Mentorship Program (CHAMP) trains primary care providers to treat HCV regularly
- Department of Public Safety will treat all patients who are screened and are retained in Prison for greater than 6 months (no widespread testing program)
- Viral Hepatitis Bridge Counselor Program
- FOCUS Bridge Counselors
- Peer Support Specialist Programs (UNC)
- Duke low barrier care pilot
- Olive Branch and High Country Community Health low barrier treatment program, which offers field based services from testing through treatment for HCV, HIV and MAT
- Perinatal HCV program for mother and baby support and follow up
- No cost Twinrix and outbreak-based hepatitis A vaccine



## INITIAL STEPS:

- Map out individual system requirements for referral
- Utilize and engage bridge counselors and peer support specialists to help patients engage in care (patient advocates)
- Train clinic staff in prescription assistance programs and indigent care paperwork
- Enroll in bulk ordering for on-site access to medications
- Remove sobriety restrictions as individual practice protocols
- Train providers and clinic staff in drug user health cultural humility and non-stigmatizing language
- Offer field-based vaccine and testing events
- Treat people who use drugs



## LONG-TERM GOALS:

- Expand Medicaid
- Test and treat individuals in jail
- Offer hepatitis A/B vaccine in jails and prisons
- Adopt opt-out testing at intake and annually in DPS and treat all patients with more than 12 weeks left on sentence
- Develop a viral hepatitis case manager program for justice involved patients
- Build and strengthen models for comprehensive drug user health
- Treat people living with HCV

- Treat all patients who are identified
- Vaccinate all viral hepatitis patients for hepatitis A and B
- Refer all active hepatitis B cases for monitoring
- Develop subscription model for statewide affordable medication (ex. Washington State’s plan)
- Get health insurance and pharmaceutical companies to increase investment in HCV elimination
- Establish viral hepatitis database for testing and treatment tracking
- Establish a Ryan White-like program for viral hepatitis
- Crosstrain MAT providers in CHAMP

## 5. TESTING

On April 10, 2020, the US Centers for Disease Control and Prevention (CDC) released Vital Signs, summarizing the landscape of hepatitis C in the US, and highlighting the shift in demographics from the “Baby Boomer” birth cohort (born 1945-1965) to younger adults and individuals of child-bearing age. Additionally, the CDC released changes in recommendations for hepatitis C testing, with the most significant change being the recommendation for universal hepatitis C screening. Prior to this recommended change, hepatitis C testing was largely Baby Boomer, and risk-based. Hepatitis B testing remains risk-based.

The risk-based approach to viral hepatitis aimed to identify those individuals who were at highest risk for contracting and transmitting viral hepatitis infections. The discrepancy between “Baby Boomer” testing and risk-based testing is access to testing. Often, those individuals who are at highest risk (versus “Baby Boomers”) for new viral hepatitis infections have limited access to health care and thus limited access to testing. Disclosure of risk by nature introduces biases and upholds stigma that are often severe barriers to care.

Testing is the first step in a comprehensive care cascade because it is critical to diagnosis of infection and connecting the individual to care. The geographic, social and financial availability of viral hepatitis testing, reflex testing and pre-treatment labs in North Carolina varies; as a result, care cascades are often not able to begin in those patients who need that support the most.



### **BARRIERS:**

#### **SCREENING:**

- Testing availability beyond health departments is limited
- Provider education on lab ordering, and interpretation is variable
- For uninsured patients unable to disclose risk or travel to established sites, out of pocket cost of screening can be high
- For institutions with minimal funding, out of pocket cost for labs is high
- Not all labs incorporate reflex to ribonucleic acid (RNA) testing when HCV Antibody test is positive

- Cultural barriers between provider and patient: patient accessibility
- Screening hours are not always convenient for patients
- Duplication of testing in some areas, while testing deserts exist in others. It is difficult to spread out resources evenly
- Lack of adoption of new hepatitis C testing recommendations to test all adults and pregnant women
- Inconsistent testing practices in patients with elevated liver enzymes or overdose admissions (no comprehensive panels)
- Long wait time for results in some settings
- Limited availability of jail testing
- Limited availability of prison testing
- Patients may be unwilling to test if they perceive treatment as unachievable should they test positive
- Not all SSPs are offering and/or referring to HCV testing because of limited infrastructure

#### **TREATMENT LABS:**

- Cost of pre-treatment labs is out of reach for many individuals
- Cost of follow up labs can be high in uninsured patients
- Repeat visits may be affected by transportation barriers
- PAP requirements for IDs , lack of accommodations for changing shelters/ homes, raise barriers to access to indigent care
- Patients may move and referral processes vary depending on location

#### **LONG-TERM MONITORING:**

- SVR-12 lab cost for uninsured patients perceived too high to return
- Cirrhosis/medical complications result in costly specialist visits
- Patient education (harm reduction approach) is not always complete in traditional health care



#### **RESOURCES:**

- Risk-based viral hepatitis (HBV/HCV) reflex testing is available through the NC State Lab of Public Health (SLPH) at all local health departments in North Carolina
- Outreach phlebotomy and testing for HIV, Syphilis, HBV, HCV available at any SSP that requests testing
- Outreach HIV/HCV testing available at all HIV prevention partnering agencies
- Jail HIV/HCV testing with partnering counties (29 counties) and linkage to care through jail and prison linkage programs
- Prison viral hepatitis linkage at release program
- Perinatal HCV linkage to care program

- Viral Hepatitis Bridge Counselor program
- Hepatitis B and C testing and treatment algorithm
- Pretreatment lab patient support in Cherokee, Catawba and Carteret counties, and Foothills Health District (Rutherford and McDowell counties)
- HIV/HCV rapid testing program through the North Carolina HIV Prevention Program
- The FOCUS Program



### INITIAL STEPS:

- Increase field-based testing with bridge counselors on site
- Increase drug user health integrated field events that include vaccine, testing, linkage, and comprehensive social and health resources
- Train and offer more testing at syringe service programs
- Integrate testing in primary care



### LONG-TERM GOALS:

- Build testing algorithms at emergency departments (EDs) and in electronic health records (EHRs) to reflex to viral hepatitis panels if visit for overdose (OD), abnormal liver function tests (LFTs), or jaundice are observed
- Implement EHR prompts for universal testing of hepatitis C and risk-based testing for hepatitis B. Include vaccine prompts for people at risk
- Offer Emergency Department opt-out testing
- Include hepatitis C in all prenatal panels
- Offer confirmatory testing at all SSPs
- Remove risk criteria for testing programs
- Offer universal opt-out testing for hepatitis B and C at DPS
- Establish 340B pricing programs in partnerships with jails
- Develop an EHR that ensures a continuum of care and a closed loop for a covered entity
- Fund Viral Hepatitis Bridge Counselors and peer support specialists to allow for one per county at a minimum
- Establish peer patient advocates in all major health care settings
- Develop field-based disease staging programs

## 6. HARM REDUCTION

Harm reduction prioritizes the health, respect, and wellbeing of people who use drugs in two distinct ways: 1. It is a social justice movement focused on the rights of people who use drugs, and, 2. It is the application of strategic interventions which reduce negative health outcomes associated with drug use. This practice of offering individuals methods for protecting themselves from blood-borne disease, infections, overdose, and law enforcement is rooted in several social movements in the United States from the 1960s through the 1980s. These movements were primarily created and sustained by people of color and other historically marginalized groups. Without their continued leadership harm reduction would not exist today as we know it.

A leading risk factor for transmission of viral hepatitis is drug use, which is why harm reduction practices are invaluable for successfully reducing the spread of viral hepatitis. Hepatitis B and C are both very closely associated with drug use, both injection and non-injection, because they are transmitted via blood-to-blood contact which can occur with the sharing of many different tools people may share when using drugs. While harm reduction is a ‘big picture’ movement for social change; in its most immediate form, it is providing people who use drugs with sterile equipment for safer drug use. Hepatitis A is not transmitted by blood-to-blood contact, but current outbreaks in the United States are impacting people who are experiencing homelessness and people who use drugs due to lack of access to hygiene materials.

Viral hepatitis prevention cannot happen without the utilization of harm reduction principles; it is intrinsically dependent upon organizations practicing and encouraging harm reduction for people at highest risk of viral hepatitis.



### BARRIERS:

- Minimal funding and resources
- Lack of co-location of MAT and HCV treatment
- Biases from providers who do not support/implement harm reduction
- Funding restrictions for syringes: federal funding ban for syringes
- Lack of acceptance/general knowledge regarding harm reduction
- Political beliefs drive funding
- Less heavy focus on PWUD not just people who inject drugs (PWID) (opioid focus versus polysubstance use)
- No standardization of how to use resources
- The limited immunity of the syringe exchange law does not include non-injection equipment such as safer snorting and smoking supplies
- Balancing outreach and person-centered care with funding needs for data and reporting
- Small pool of funding pits SSPs and harm reduction groups against each other instead of encouraging connections and collaborations.
- Capacity is directly determined by funding
- Lack of consistent inclusion of harm reduction in continuum of care
- Volunteer and SSP staff burnout

- Reporting barriers: Secure Access Management Services (SAMS) system ID requirements, etc.
- No standardized data collection systems that are low barrier for volunteers and staff



### RESOURCES:

- Syringe Services Programs in NC
- Find an Exchange Tool
- National Community Based Naloxone Finder
- NC Naloxone Finder
- NC Naloxone Distribution Toolkit
- National Alliance of State and Territorial Health Directors (NASTAD) Hepatitis Technical Assistance Center
- Harm Reduction Coalition Online Training Institute
- World Hepatitis Alliance
- Drug User Health Resource Guide
- Peer Support Specialists for patient advocacy
- Peer Support and Support Groups
- Supply distribution from Injury and Violence Prevention Branch (IVPB) and Communicable Disease Branch (CDB)
- HepConnect
- [National Harm Reduction Coalition](#)
- [Elton John AIDS Foundation](#)
- [Comer Family Grant](#)



### INITIAL STEPS:

- Increase education on the importance of harm reduction and address the stigma that exist
- Foster more sustainable funding and opportunities for SSPs
- Develop more field-based testing and treatment options
- Integrate harm reduction services into the entire disciplinary team for treatment.
- Integrate with broader care into SSPs (ex. primary care, mental health)
- Encourage peer support and include peer support or bridge counselors in all referrals
- Establish mentorship programs with harm reduction agencies and start ups
- Encourage partnerships with local public health and syringe service programs
- Incorporate overdose prevention education and naloxone distribution into hepatitis and broader healthcare services





## LONG-TERM GOALS:

- Offer on-site treatment at syringe service and harm reduction programs
  - Harm reduction and follow-up (connect throughout linkage to care) as they access HCV treatment and general medical care
  - Offer at fixed sites or in outreach settings
- Expand the NC syringe exchange law to include limited immunity for safer use supplies beyond syringes and other injection equipment
- Address syringe purchase ban in federal funding
- Fund harm reduction as medical care, and integrate as such in referrals

## 7. LINKAGE TO CARE

Beginning in 2011 North Carolina created an HIV bridge counselor program with the knowledge that disenfranchised and hard to reach patients may require additional patient support to stay in care. Prior to 2016 these resources did not exist for viral hepatitis services, despite an overlap in population and similar stigma associated with viral hepatitis. The North Carolina viral hepatitis bridge counselor program was initiated in 2017 modeled after the HIV bridge counselor program, but with a few nuances. (1) The level funding available in HIV was and is not available to viral hepatitis, resulting in a smaller scale roll out of the program, (2) because cure is attainable for hepatitis C, and treatment is manageable for hepatitis B, patients are able to be supported through cure, and (3) with no Ryan White style program for viral hepatitis, there is a need for alternative mechanisms to provide comprehensive resources and patient support services.

Three years into this program, and with similar separate programs in place in some local health departments, one thing is clear: patient support for viral hepatitis works. Linkage to care and supportive patient resources help to engage patients, increase patient advocacy, establish positive health care experiences, and increase access to often hard to navigate resources and referrals.



## BARRIERS:

- Limited funding available for bridge counselor (BC) or bridge counselor-like programs
- The number of state bridge counselors is insufficient to manage the needs of individuals with HCV
- Varying bridge counselor referral processes for non-state bridge counselors (not all BCs are alike)
- Disjointed referral systems with limited “warm handoff” capabilities
- Hard to navigate healthcare systems
- Difficult to navigate prescription assistance programs for those without income, exiting the justice system, experiencing housing instability
- Financial barriers during referrals, and no standardized referrals to comprehensive resources

- Not enough trained viral hepatitis providers, causing treatment deserts
- Providers treating only substance abstinent individuals contrary to the American Association for the Study of Liver Diseases (AASLD)/Infectious Disease Society of America (IDSA) treatment guidance
- Limited funding for linkage to care, pre-treatment labs
- Lack of cost support services for pre-treatment labs, and costly sliding fee scales
- Referrals from providers to other sites for labs
- Limited number of peer support specialists and patient advocates
- Perceived and real stigma around substance use and health care
- Limited Medicaid or health insurance access results in higher cost and paperwork barriers



### RESOURCES:

- NC Bridge Counselors: Comprehensive linkage to care support specialists who provide patient support and resource referrals for people living with hepatitis C
- FOCUS Bridge Counselors: Bridge counselors associated with the Gilead funded HIV/HCV testing initiative
- DPS and jail linkage at release program refers all people living with HCV who will be released from DPS within six-months to a bridge counselor for linkage to care at release.
- UNC Peer Support program
- Duke low barrier pilot aims to integrate medical care within SSP services.
- CHAMP Providers pledge to treat PWUD and uninsured individuals
- HCV care referral sites in Western NC: Mountain Area Health Education Center, serving 16 counties, and Community Care of Western North Carolina, Cherokee County
- COVID-19 restrictions have driven an increase in telehealth visits allowing for easier care retention in some patients
- Ryan White programs, case managers, bridge counselors for HIV/HCV, HIV/ HBV coinfecting patients
- Drug User Health Resource Guide



### INITIAL STEPS:

- Train more providers (FQHCs, HDs) to provide Hepatitis C treatment in low-resource regions
- Increase training among primary care providers, OBGYN, family medicine, and MAT providers
- Provide CHAMP-like training for case managers, peer support specialists and bridge counselors
- Increase the number of bridge counselors available, and BC service areas
- Link bridge counselors to providers, and help establish BC-Provider relationships

- Expand support within clinics (such as a case management), and increase the cultural humility and drug user health training among administrative and front desk staff
- Provide bridge counseling at testing events to introduce linkage to patients at or prior to diagnosis
- Fund more bridge counselors in areas throughout the regions of the state



### LONG-TERM GOALS:

- Place bridge counselors in facilities where people get tested, or cross-train bridge counselors to test
- Establish linkage to care and pre-treatment or staging lab support at testing sites/SSPs
- Have a bridge counselor for every region or county
- Develop a justice-based specific telehealth bridge counselor program
- Establish hepatitis pre-treatment lab funding
- Expand Medicaid to allow for greater ease of referrals

## 8. INCARCERATED POPULATIONS

The justice-involved population is a term used to describe people who engage with the legal justice system at various points, including arrest, court hearings, incarceration, re-entry, and community supervision. Justice-involved individuals are often members of other historically marginalized groups. Blacks, Hispanics, people who use drugs, people who are unhoused, and people who are uninsured/underinsured are arrested, jailed, and convicted at higher rates. State-run prisons and county or municipal-run jails have become prime settings to address the healthcare needs of those who may have limited access to treatment and care in the community.

Incarcerated or formerly incarcerated individuals bear a disproportionate burden of HCV, with current estimates putting the prevalence in jails and prisons from 12 to 35 percent, nationally. In North Carolina, it is conservatively estimated that the prevalence of HCV in correctional settings is 10% or one in 10. About 24% of people in prisons and jails have a history of injection drug use.

Without meaningful interventions, justice systems can drive cycles of poor health outcomes for underserved communities. That's because more than 95% of people who are incarcerated complete their sentences and return to their communities. Treatment as prevention is vital to the efforts to address HCV in the state and nationally. This approach is as important as how we connect justice-involved individuals to HCV treatment and care and social supports, in and outside of prisons and jails. Screening and testing for HCV during incarceration can decrease the incidence of future transmissions once an individual is released, and decrease the disease burden in the communities they return to. To implement these strategies, correctional administrators must be recognized as key stakeholders in our state's plan to address viral hepatitis.



## **BARRIERS:**

### **TESTING:**

- Limited and inconsistent testing in jails
- Incarceration often means removal of funding for testing
- Jail administrators don't allow testing due to perception of treatment obligation and funding
- Limited routine testing/risk-based testing in jail and prison
- Communication channels during the transition from jail to prison and the community are disjointed. Patients who were tested in jail may not be able to transfer that result to prison and be eligible for treatment
- Lack of testing at release for prison and jail
- Inconsistent HCV testing (across counties, across time)

### **TREATMENT:**

- Minimal jail treatment available for HCV
- Bottlenecks in prison treatment referrals
- Cost/Co-pays: patients are not eligible for primary care providers (PCPs) during incarceration
- Follow up and linkage: limited number of linkage programs, limited opportunity to meet patient prior to release, reliance on old contact information for linkage to care
- Re-infection possibility in jail/prison setting. Patients who are treated must also receive prevention and harm reduction counseling
- Problems finding funds and a provider willing to treat individuals while they are in a detention center
- Facilities have limited provider resources
- Patients may be transferred from facility to facility: not there long enough to be given treatment, or interrupted care
- Committee must approve treatment, prioritize greater levels of liver damage
- Liability fear at jails
- Lack of bridge counselors (one with special focus on justice involved individuals)
- Limited access to HAV/HBV vaccine in jail, low uptake for vaccine events
- Upon release patients don't have necessary paperwork (tax return, paystubs, disability, etc.) to qualify for patient assistance programs at clinics

**“All of us working together can make a difference in the lives of anyone with Viral Hepatitis, as kindness and support have no barriers.”**

**– NCVHTF Member**



## RESOURCES:

- HIV/HCV testing at 29 jails statewide
- Testing available if requested in DPS
- DPS required to treat all eligible patients for HCV
- DPS vaccinates at first appointment Twinrix (combined Hepatitis A/B vaccine)
- DPS Providers have been trained through CHAMP
- Justice Involved Bridge Counselor Program for DPS and two jail sites
- 340B pharmacy in Prison (DPS)
- [National Hepatitis Corrections Network provides viral hepatitis resources for people engaged in the carceral system](#)
- [The Marshall Project](#) (criminal justice journalism)
- NC DHHS IVPB funds 10 local health departments to support justice involved populations (e.g., naloxone upon release; linkage to care)



## INITIAL STEPS:

- Provide CHAMP training for all DPS and Jail Health Providers
- Partner with FQHCs for jail treatment that reduces cost
- Partner jails with Local Health Departments on hepatitis A/B vaccine initiatives
- Promote to local jails regarding FQHCs services (after release, can be referred there for further treatment)
- Link individuals who are released to providers and local FQHCs
- Provide Naloxone kit distribution upon release from incarceration



## LONG TERM GOALS:

- Provide opt-out viral hepatitis testing at intake, annually and at release in DPS
- Provide opt-out viral hepatitis testing at intake and/or release in jails
- Treat HCV in jail setting, through partnership with local PCP
- Treat all HCV patients in DPS (no priority system)
- Establish telehealth linkage program in jails and prisons to establish linkage prior to release
- Incorporate harm reduction and viral hepatitis prevention in facility messaging
- Remove PAP restrictions around incarceration
- Provide peer-based hepatitis education program within prisons (modeled after [NMPEPE](#))

## 9. EDUCATION

Chronic viral hepatitis is largely asymptomatic, carrying with it a certain amount of stigma, and disproportionately affecting people who use drugs, people experiencing homelessness, and individuals born from 1945 through 1965. Because diagnosis and surveillance of these diseases are dependent largely on testing, morbidity and mortality are likely grossly underestimated. Many people with chronic hepatitis C are unaware of their infection. Conversely, many providers are unaware of the current recommendations for hepatitis C (and B) testing, vaccine recommendations, and treatment availability. One of the most common “barriers” to treatment described by providers concerning hepatitis C is medication cost, a barrier that, while nuanced, is not entirely accurate. Among individuals in the birth cohort, a common reason for not testing is an absence of disclosed risk factors. Many individuals within the birth cohort deny testing due to the stigma around hepatitis C. This lack of public knowledge around viral hepatitis care, ingrained stigma, and hesitancy to test all point to an increased need for viral hepatitis education for the general public, prescribing providers, linkage to care specialists, and any other healthcare workers.

Education about viral hepatitis natural history, transmission, prevention, testing, treatment, and care are clear necessities in order to lower transmission and increase the number of individuals who are treated. Physician education is arguably as important as it is for those at risk. Physicians in all settings should be educated on how to properly communicate, when to test, how to test and how to interpret those tests. Lack of comprehensive education incorporating infectious disease, harm reduction, and linkage is a missed opportunity to address viral hepatitis in the patient community. Many individuals with HCV are lost to follow-up care or drop out of care in part due to the lack of appropriate counseling and guidance they receive. Providing compassionate care, while also bringing crucial up-to-date knowledge to the table is important for minimizing the impact of viral hepatitis.



### **BARRIERS:**

- Education materials are often developed above 7th grade education level, or developed without health literacy in mind.
- Difficult to disseminate information to hard-to-reach populations; virtual versus paper resources
- Information overload
- Stigmatizing language and information
- Funding: organizations often do not have the funding to develop their own materials
- Misinformation in the community and among providers about viral hepatitis
- Providers are not up-to-date on the latest testing and treatment recommendations: Won't test if they can't treat, require sobriety, etc.
- No widespread method to share information



## RESOURCES:

- [CDC](#) prevention materials
- [Harm Reduction Coalition](#) Education Materials
- [NC Harm Reduction Agencies](#) for harm reduction materials
- [NC Viral Hepatitis Program](#) for trainings, and counseling training
- [Whetstone Training](#) for Counseling, Testing, Referral Training
- Southeast AIDS Education and Training Center (AETC)



## INITIAL STEPS:

- Promote awareness of HCV testing, HAV/HBV vaccines
- Offer in-person trainings or Q&A sessions for participants
- Integrate peer health educators and storytelling to center lived experience in hepatitis education
- Provide support group discussions debunking myths
- Train more front line, field staff in viral hepatitis
- Train more providers in viral hepatitis transmission, prevention, testing and care
- Train providers in harm reduction



## LONG-TERM GOALS:

- Provide telemedicine training models for viral hepatitis prevention and care counseling
- Develop patient empowerment programs that certify peer counseling
- Increase peer-to-peer education
- Foster social medical campaigns designed by the community members
- Partner with health insurance companies to create an educational social media campaign to incentivize engagement in care
- Engage health systems executive and insurance company leaders to promote viral hepatitis education system-wide
- Provide hepatitis A/B vaccine, and hepatitis B/C testing prompts in Electronic Health Records
- Include MAT, Harm Reduction, and Viral Hepatitis testing and treatment in all primary care, and advanced practice provider residency training programs

“The way societies respond to issues that disproportionately affect its marginalized populations will ultimately come to define them. Through the work being done through this task force, we are building the foundation to make a better way forward in addressing the impact of Hepatitis C throughout the state of North Carolina.”

– Dr. Rick Moore, Viral Hepatitis Medical Director

## 10. ADVOCACY

Hepatitis C is the most common bloodborne pathogen in the United States. Hepatitis B and C combined account for an estimated over five million individuals in the US, compared to 1.2 million individuals living with HIV. Hepatitis C and viral hepatitis responses as a whole have long been folded into HIV prevention programs and leverage off those funding streams. In North Carolina, there are at least 150,000 people living with hepatitis C, yet federal funding dedicated for both hepatitis B and C traditionally does not exceed \$500,000 in grants. This is just over \$3 per hepatitis C patient, and less if you consider those undiagnosed, or those at risk. This raises the question: Why does a group of diseases with such high burden receive historically so little dedicated funding? One could argue that viral hepatitis is a long-term illness with minimal immediate complications, and as such the level of urgency is not present. Another explanation could be that those individuals affected by viral hepatitis are those who experience multiple sources of stigma, have less access to care, and seek care less often. Fundamentally however, the true missing piece around funding and policy for viral hepatitis is the lack of an organized advocacy community. While advocacy does exist in the viral hepatitis world (with great passion and care), it is often in the form of individual advocates or smaller groups, and not present in the same magnitude as the HIV community. This may explain the disparity in funding and resources available between the two groups.



### BARRIERS:

- Diverse community of drug users (by type of drug and method of use), leading to conflict/bias with separate groups
- Limited immunity does not protect all forms of harm reduction (ex. lack of protection for paraphernalia used to smoke vs. inject drugs)
- Stigma and fear of repercussions
- Lack of education or resources to interpret data
- No unifying force or leader
- Perception that law makers do not care about people with viral hepatitis
- Hepatitis C is now curable which presents many opportunities, but because it does not have to be a lifelong illness many people go through treatment and want to move on rather than get involved in advocacy
- Belief that streaming money to opioid response will trickle down to viral hepatitis or infectious disease
- Not a high-profile disease
- Restrictive funding streams often do not allow for funding for mono-infected individuals

“Patients are so appreciative to receive friendly and stigma free care it makes everything we do to get them there worth it. If I could pay my bills in grateful patient hugs I would.”

– Rachel Potter Madison County Health Department





## RESOURCES:

- [North Carolina AIDS Action Network \(NCAAN\)](#) developed a hepatitis C advocacy and peer program to provide much needed advocacy in conjunction with HIV advocacy
- Syringe Exchanges or harm reduction groups
- Provider champions are key to driving clinic and organizational change
- CHAMP
- Viral Hepatitis Program
- Community Based Organizations
- [American Liver Foundation](#) provide national and local advocacy for folks living with viral hepatitis
- Faith-based organizations
- Hepatitis Education Project Patient Advocacy Group



## INITIAL STEPS:

- Modify advertising about hepatitis to represent all individuals who may have viral hepatitis
- Change the image of what HCV looks like and make it diverse and centered not solely on Baby Boomers and the opioid epidemic
- Leverage funding where possible to get pilot projects and capture efficacy data
- Center lived experience in advocacy efforts

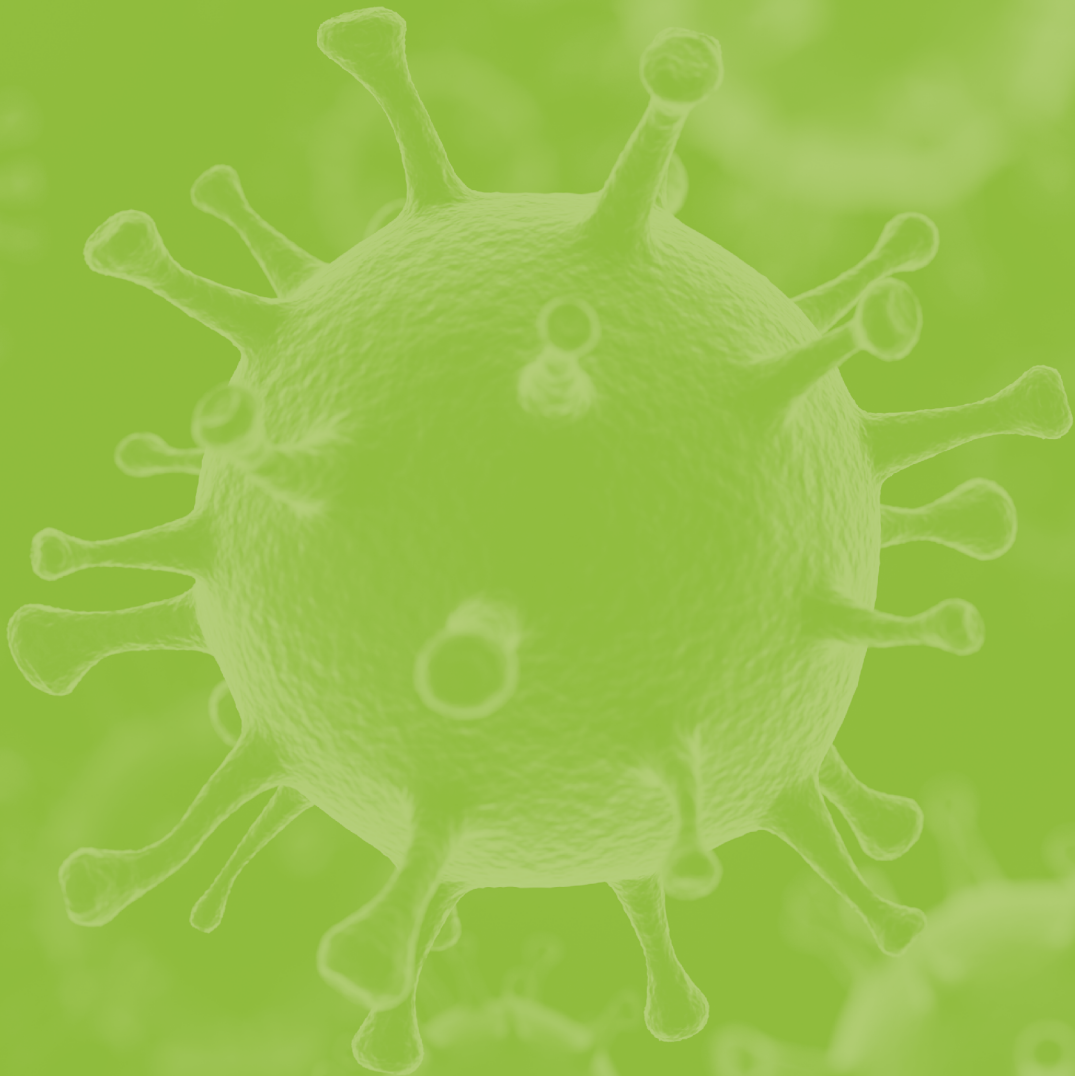


## LONG-TERM GOALS:

- Develop multi-disciplinary groups that include phlebotomists, mental health service providers, Medicaid providers, social workers, case managers, and health care providers to advocate system-wide for patients.
- Create fact-supported policies that address HCV-related health disparities and methods for reducing and eliminating those disparities
- Support laws to expand access for viral hepatitis treatment and cure
- Create a community-led and lived experience centered advocacy group and/or coalition to provide funding and policy recommendations. Work closely with medical advocacy
- Expand naloxone access
- Remove legislative barriers/gatekeepers to accessing HCV treatment
- Focus advocacy on HCV being curable regardless of substance use and other conditions
- Address limited immunity laws in NC
- Raise awareness about innovative evidence-based harm reduction programs
- Create comprehensive drug user health pilot programs to use as models for expanding future work in the state.
- Identify and support provider advocates within systems

# APPENDIX

1. **State Resources: The North Carolina Viral Hepatitis Program**
2. **Harm Reduction in North Carolina: Laws and State Programs**



# State Resources: The North Carolina Viral Hepatitis Program

## NORTH CAROLINA VIRAL HEPATITIS PROGRAM (NCVHP)

The NCVHP operates within the Communicable Disease Branch (CDB) of the Division of Public Health, North Carolina Department of Health and Human Services. The hepatitis program aims to develop a statewide comprehensive care continuum focusing on prevention, harm reduction, surveillance, linkage-to-care, and treatment of viral hepatitis.

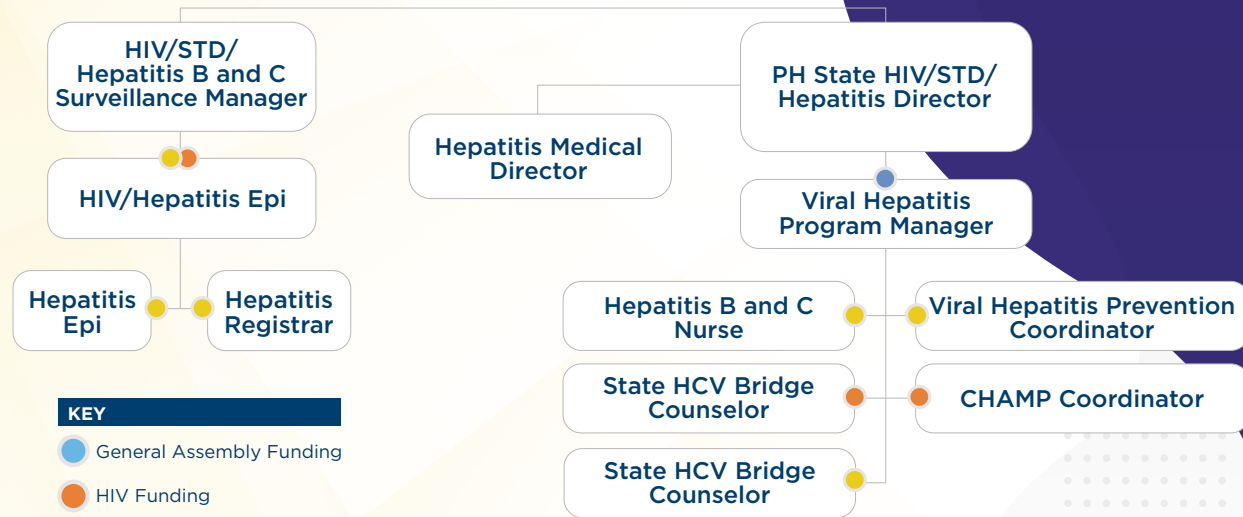
### State of North Carolina Communicable Disease Branch Viral Hepatitis Organization Chart



NC DEPARTMENT OF  
HEALTH AND  
HUMAN SERVICES



Communicable Disease Branch Head



- KEY**
- General Assembly Funding
  - HIV Funding
  - Hepatitis Dedicated Funding
  - Local Funding
  - New Funding

\* Recently lost funding, picked up at local level

LOCAL		BRIDGE COUNSELORS			
● NC HRC Outreach	● Buncombe County	● Albemarle County	● Cabarrus County	● Carteret County	● Guilford County
		● Cumberland County	● Granville-Vance County	● Guilford County	● Yadkin County
		● Jackson County	● New Hanover County		

## COLLABORATION



Case Management/PT Support

**PREVENTION:** The NCVHP manages several prevention projects, including a perinatal HCV pilot and a testing and outreach partnership with the North Carolina Harm Reduction Coalition (NCHRC). The NCHRC program funds HIV, STD, HBV, and HCV testing in syringe service programs (SSPs) and outreach settings, while also providing harm reduction supplies to SSPs and community-based organizations to prevent the transmission of hepatitis, HIV, and soft tissue and skin infections. A comprehensive, publicly accessible, statewide, drug user health resource guide is also maintained by the program.

The NCVHP and Vaccine Preventable Disease Program work closely with the North Carolina Immunizations Branch (NCIB) to ensure that all individuals at risk for viral hepatitis have access to hepatitis A and B vaccine. For hepatitis A and B, access to vaccinations is a crucial first line of prevention for disease. Individuals who are immunized for hepatitis A and B are at a lower risk for complication to hepatitis C and fulminant hepatitis. Twinrix, hepatitis A and B combination vaccine is available for free at all local health departments and NCIB partner sites for individuals who do not have a full documented series of hepatitis B vaccine. Hepatitis A monovalent (single virus) vaccine is available at no cost at these same sites, for patients who fall into outbreak risk groups.

**SURVEILLANCE:** Hepatitis surveillance is a key component of the program, as it informs the team’s decisions on where and how to provide support and resources throughout the state. All cases of HBV and HCV are reviewed and managed in the North Carolina Electronic Disease Surveillance System (NC EDSS), and checked quarterly for data completeness. Clusters and outbreaks are identified through our quarterly time-space analysis and examining data trends across the state. The HIV/STD/Viral Hepatitis Surveillance Unit, in conjunction with the NCVHP, works with local health departments (LHDs) to investigate identified outbreaks and provide resources and linkage to care when possible.

**TESTING:** Many clinical, state and local public health, commercial and reference laboratories perform viral hepatitis testing for North Carolina residents. North Carolina State Public Health Administrative Code requires all clinical laboratories to report positive cases of these diseases and conditions as defined in the Administrative Code to the local or state public health authority. These reporting requirements include positive test results from the following: Hepatitis A virus, Hepatitis B virus or any component thereof such as hepatitis B surface antigen, Hepatitis C virus antibody tests (including the test specific signal to cut-off (s/c) ratio), Hepatitis C nucleic acid tests, Hepatitis C antigen(s) tests, and Hepatitis C genotypic tests. These laboratory reports comprise a portion of the data that is used in public health disease surveillance that allows public health to monitor and respond to the changing health status of communities.

Beginning in 2016, select identified “vulnerable counties” in NCALHD Regions 1, 2, 3 and 8 were able to offer risk-based HCV screening for uninsured individuals through the NC State Laboratory of Public Health (NC SLPH). This program now offers expanded risk-based hepatitis B and C testing for uninsured and underinsured individuals in all North Carolina counties.

Program teammates are also trained to provide field testing in the event that it is requested.

When available, the team provides funding for pretreatment lab work for uninsured and underinsured patients. Medication assistance programs do not cover these lab costs, which causes them to be a significant barrier for patients to access treatment.

**HEPATITIS C TESTING AT THE NC SLPH**

Year	Total RNA	Total Positive	Positivity
2016	18,677	2,250	12.0%
2017	21,437	4,337	20.7%
2018	23,580	3,997	17.0%
2019	26,477	4,292	16.0%
2020	18,166	2,422	13.0%

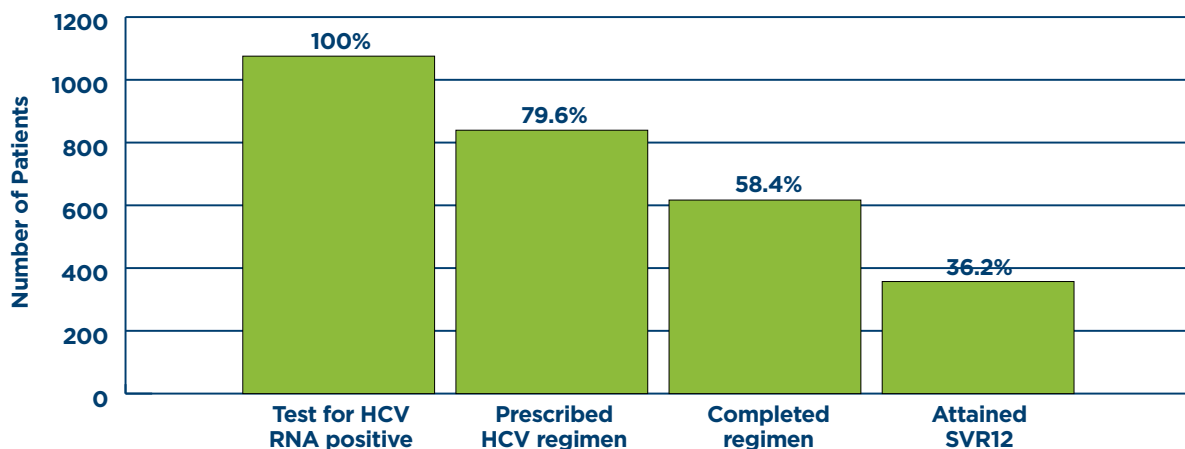
**LINKAGE TO CARE:** The NCVHP manages a statewide bridge counselor program to promote linkage to care for patients with viral hepatitis. Bridge counselors are a vital component of successfully engaging people in care as they offer support and guidance to those who may

otherwise have difficulty accessing both medical treatment and social services. The NCVHP provides assistance when recently diagnosed patients cannot be contacted for follow-up by their local health department or CBO in areas without a designated local bridge counselor. In 2018 this program expanded to include two program-based bridge counselors. These bridge counselors focus on statewide support, and linkage to care for those being released from the criminal justice system. The justice-involved linkage programs are based on linkage to care at release, with hopes to expand contact with patients via telehealth in 2022.

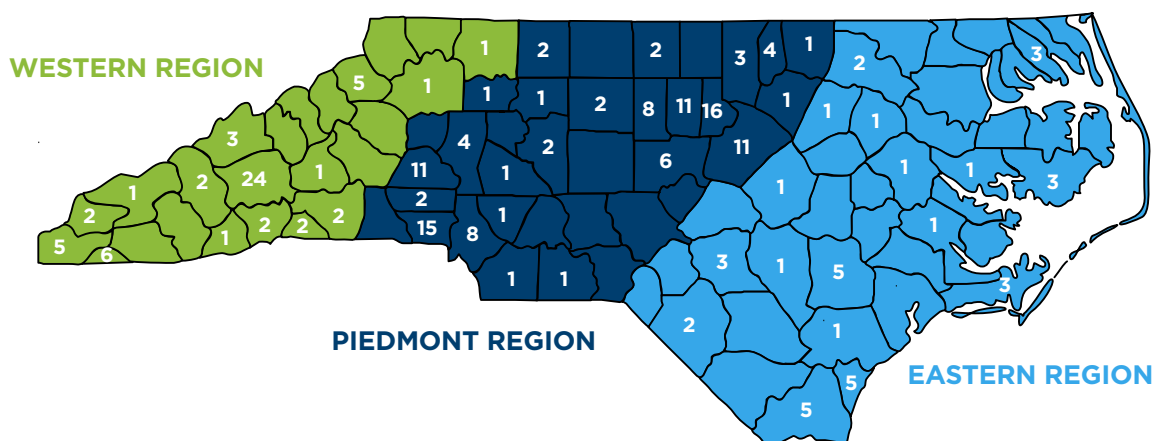
The NCVHP develops protocols for HBV and HCV field investigations and collects and monitors field testing data. In the event of outbreak or identified surveillance clusters, the NCVHP, in conjunction with the surveillance team, offers investigational and outreach support for LHDs, and linkage to care options for newly identified patients.

**TREATMENT:** The NCVHP, in collaboration with Duke University and University of North Carolina-Chapel Hill, developed a partnership to address limited resources for hepatitis C treatment. The Carolina Hepatitis Academic Mentorship Program (CHAMP) is a telemedicine program designed to increase access to hepatitis C treatment in North Carolina. CHAMP offers health care providers the opportunity to participate in a one-day “boot camp,” an intensive course on successfully treating patients with viral hepatitis. In addition to the boot camp, CHAMPions attend bi-weekly conference calls with CHAMP mentors, which serve as a time for discussion of cases and continued education on effective treatment options. Since its initiation, this program has trained over 200 providers to treat hepatitis C, who in turn have engaged over 1,000 patients into hepatitis C treatment.

**CHAMP CASCADE 2017-2020**



**PROVIDERS TRAINED THROUGH CHAMP 2017-2020**



# Harm Reduction in North Carolina

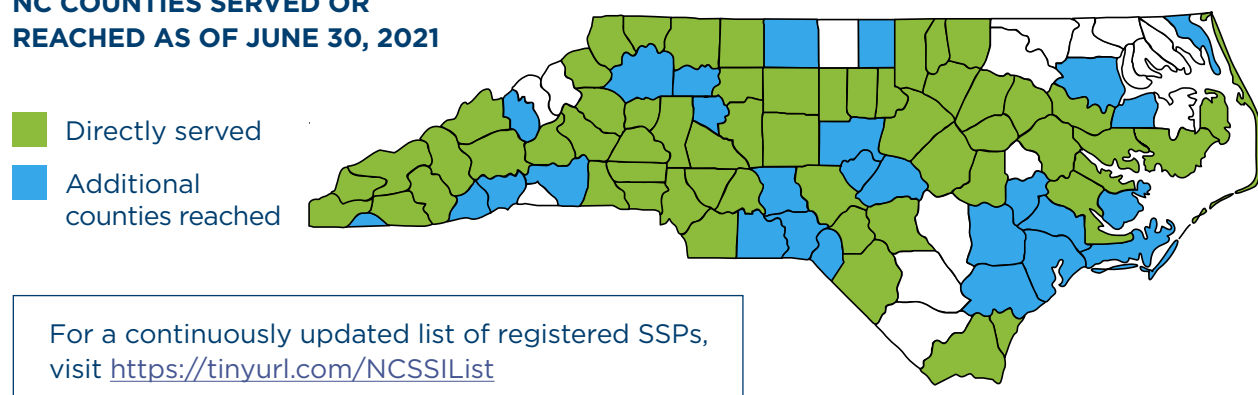
## OPIOID ACTION PLAN

North Carolina established an Opioid Action Plan in 2017 that guides the work happening across the state to respond to the overdose crisis. The Opioid Action Plan includes harm reduction as a key strategy and identifies expanding access to community-based naloxone and syringe services programs as critical components of North Carolina's response to the overdose crisis. Connection to care is another important strategy included in the Opioid Action Plan, and Syringe Services Programs (SSPs) are a critical touch point in their communities to connect people who use drugs to non-judgmental and culturally competent care. An important part of the Opioid Action Plan was the creation of an SSP Advisory Group that is made up of people with lived experience with substance use and/or who work or volunteer at SSPs in the state. This group informs the priorities of work across DHHS and is an opportunity for the department to receive input from people in the field.

## SYRINGE SERVICES PROGRAMS (SSPS)

Syringe service programs were legalized in North Carolina in 2016. The law established the North Carolina Safer Syringe Initiative. Programs are required to register with the state and meet key components such as being able to distribute and securely dispose of syringes, directly distribute or refer to a provider or pharmacy for naloxone, provide overdose prevention and other relevant education such as infectious disease prevention, and link participants to substance use treatment and mental health services as needed. Programs report annually on key metrics such as the number of syringes and naloxone kits distributed, participants served, and referrals made. Technical assistance is also provided to new and existing programs in a variety of ways such as an SSP Learning Collaborative (in partnership with NCHRC), an interactive SSP Training Academy, the creation of tools and resources, and peer learning calls. Because of the flexibility established in the law, SSPs have been developed in a variety of settings. Programs are led by directly impacted people, community-based organizations, local health departments, faith-based organizations, health systems, substance use treatment providers, AIDS service organizations, and first responders such as EMS and fire. By the end of the 2019-2020 reporting period (June 30, 2020), there were 38 registered SSPs serving 55 counties and one federally recognized tribe in North Carolina. These programs distributed 5.3 million sterile syringes and over 53,000 naloxone kits. SSPs are also key partners in hepatitis testing and linkage to care. Sixty-one percent of all registered SSPs offer HIV and HCV testing to their program participants. Some programs are expanding their services and starting low barrier HCV treatment on site at the SSP.

### NC COUNTIES SERVED OR REACHED AS OF JUNE 30, 2021



## NALOXONE LAWS

North Carolina has passed laws to expand access to naloxone, also known by the brand name Narcan®, a life-saving medication used to reverse an opioid overdose.

Under [G.S. 90-12.7](#), a health care provider may write a standing order to allow the dispensing of naloxone to persons at risk for an overdose and to those in a position to help others at risk of an overdose (3rd-party prescribing). A standing order is a medical order that authorizes the dispensing of a medication, like naloxone or the flu vaccine, to any person who meets criteria designated by the prescriber. The statute provides criminal and civil liability protection to health care providers who prescribe naloxone and to those who administer naloxone to persons experiencing an overdose.

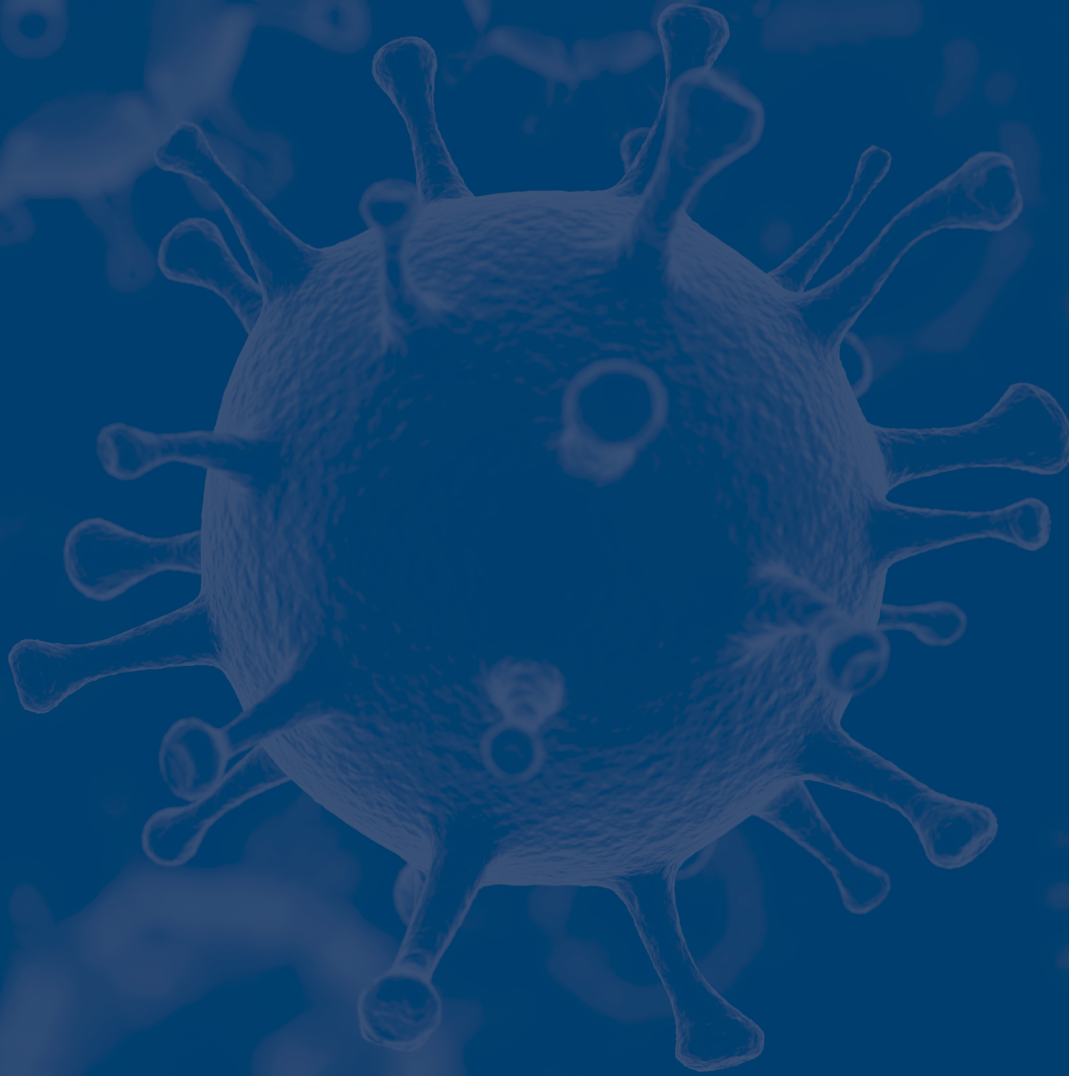
G.S. 90-12.7 also establishes the authority of the State Health Director to issue a statewide standing order to allow pharmacists to dispense naloxone to persons without a separate prescription from a health care provider. North Carolina's statewide standing order has been in effect since June 2016. Naloxone is available, without a patient-specific prescription, at the majority of retail pharmacies in North Carolina. You may find a list of pharmacies in North Carolina that have indicated they are dispensing naloxone under the standing order on [naloxonesaves.org](http://naloxonesaves.org). Naloxone dispensed under the statewide standing order is covered by Medicaid and by some commercial insurers.

To address increasing rates of overdose deaths involving heroin, fentanyl, and other narcotics, the North Carolina legislature added a provision in 2017 allowing health care providers to write standing orders to allow organizations, including local health departments, to distribute naloxone in the community. By promoting community distribution, this state law increases access to naloxone for North Carolinians who are at highest risk for overdose and who may be unable to get a naloxone prescription or are unlikely to visit a pharmacy to get naloxone.

For more information about naloxone distribution, see the [NC Naloxone Distribution Toolkit](#).

“Working with this inclusive taskforce offers connection and information that would otherwise not be shared across our great state or within harm reduction and syringe service program settings. It is refreshing to be part of a team that will increase access to care for PWUD and other marginalized groups we are dedicated to serving.”

– Queen City Harm Reduction



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