

2021 North Carolina Hepatitis B/C Surveillance Report

**HIV/STD/Hepatitis Surveillance Unit
Division of Public Health
North Carolina Department of Health and Human Services
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Please direct any comments or questions to:

HIV/STD/Hepatitis Surveillance Unit
North Carolina Communicable Disease Branch
1902 Mail Service Center
Raleigh, North Carolina 27699-1902
919-733-7301

<https://epi.publichealth.nc.gov/cd/stds/figures.html>

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**North Carolina
Department of Health and Human Services
Division of Public Health
Epidemiology Section**

Communicable Disease Branch

Olivia Williams, MPH, Epidemiologist

Peyton Pretsch, MPH, Epidemiologist

Brian Gravlin, RN, Hepatitis Surveillance Nurse

Richard Moore II, MD, AAHIVS, Hepatitis Medical Director

Erika Samoff, PhD, MPH, HIV/STD/Hepatitis Surveillance Manager

Jacquelyn Clymore, MS, State HIV/STD/Hepatitis Director

Evelyn Foust, MPH, CPM, Branch Head

State of North Carolina
Department of Health and Human Services
Division of Public Health
Epidemiology Section • Communicable Disease Branch

<https://www.ncdhhs.gov/> • <https://www.ncdhhs.gov/divisions/dph>

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Summary

Rates of reported acute and chronic hepatitis B and C decreased in 2021. This may reflect decreased access to testing during the COVID-19 pandemic as well as disease trends.

- **There were 142 people diagnosed with acute hepatitis B in North Carolina in 2021** (rate: 1.3 cases per 100,000 population). The statewide rate is higher than the national average rate of acute hepatitis B (0.7 cases per 100,000 pop.) reported in the Centers for Disease Control and Prevention (CDC) [2020 Viral Hepatitis Surveillance Report](#).
- **There were 100 people diagnosed with acute hepatitis C in North Carolina in 2021** (rate: 0.9 cases per 100,000 pop.). The statewide rate is lower than the national average rate of acute hepatitis C (rate: 1.5 cases per 100,000 pop.) reported in the CDC's [2020 surveillance report](#).
- The majority of acute hepatitis B cases were diagnosed among middle-aged persons ages 35- to 54-years-old (65%; 88 cases). Persons aged 25- to 39-years-old accounted for 60% of acute hepatitis C cases (60 cases) diagnosed in 2021.
- Non-Hispanic White men and women comprised 73% of people with acute hepatitis B (111 cases) and 79% of people with acute hepatitis C (78 cases) diagnosed in 2021.
- **As of December 31, 2021, 27,312 people with chronic hepatitis B and 80,707 people with chronic hepatitis C were known to be living in North Carolina.**

Note for 2020 data in North Carolina Hepatitis B/C Surveillance Report

The 2020 data should be treated with caution due to reduced availability of testing and, in some settings, hepatitis care caused by the COVID-19 pandemic. For this reason, the 2020 data will be italicized on all of our surveillance tables throughout this report.

HEPATITIS B AND C IN NORTH CAROLINA

Hepatitis B and C Reporting in North Carolina

In North Carolina, laboratory results and symptoms diagnostic of acute, chronic, and perinatal hepatitis B and acute hepatitis C are reportable by law to the North Carolina Department of Health and Human Services (NC DHHS). Statewide surveillance information is collected by the local health departments and sent to the North Carolina Division of Public Health. The acute classification for hepatitis B and C is based solely on provider reporting. Most of North Carolina's disease reporting, including chronic hepatitis B and C, is performed via electronic reporting from laboratories. Therefore, acute hepatitis B and C are very likely to be underreported; an additional contributor to underreporting is misclassification of asymptomatic acute cases as chronic.

Hepatitis B and C in North Carolina are required to be reported to the local health department following the schedule below*:

Within 24 Hours	Within 7 Days
Acute Hepatitis B	Chronic Hepatitis B
Perinatal Hepatitis B	Acute Hepatitis C

*Note reporting of chronic hepatitis C is not required for providers in North Carolina; it is primarily reported in North Carolina by electronic lab reporting (ELR). Therefore, chronic hepatitis C does not have a provider timeframe for reporting to North Carolina Division of Public Health

Hepatitis B

Hepatitis B is a vaccine-preventable, mild-to-severe liver infection, caused by the hepatitis B virus (HBV), which can advance from acute to chronic. The Centers for Disease Control and Prevention (CDC) estimates that there are 862,000 people living with HBV, with about 22,600 new infections a year in the United States.¹ Nationally, the rate of acute HBV has remained stable over the past 10 years, with a slight increase in 2017.² HBV is a leading cause of liver cancer.

Acute versus Chronic Hepatitis B

Acute infection ranges from asymptomatic or mild disease to — rarely — fulminant hepatitis. Some acute HBV infections will resolve on their own, while others will develop into chronic infection. Most people with chronic HBV infection have no outward symptoms of liver disease. However, some people may develop liver inflammation (elevation of aspartate aminotransferase [AST]/alanine aminotransferase [ALT]), cirrhosis, or hepatocellular carcinoma (a type of liver cancer).² Between 15% and 25% of people with chronic HBV will develop chronic liver disease, including cirrhosis, liver failure,

¹Centers for Disease Control and Prevention (CDC) (2020). *What is Viral Hepatitis?* Updated July 28, 2020. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/abc/index.htm>.

²Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis B Questions and Answers for Health Professionals*. Updated March 30, 2022. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview>.

or liver cancer.¹ Around 25% of people infected with chronic HBV in childhood and 15% of people infected with chronic HBV after childhood die prematurely from cirrhosis or liver cancer.²

Transmission of Hepatitis B

HBV can survive outside the body for at least seven days and still cause infection.² HBV can be transmitted through sex with an infected person, sharing drug use equipment, sharing personal items (such as toothbrushes and razors), and breaches in infection control resulting in outbreaks in health care facilities. Vertical transmission can also occur between an infected mother and her infant (perinatal HBV).¹ The majority of infections due to perinatal transmission diagnosed in North Carolina are found in people born in countries with moderate to high rates of endemicity (primarily Asian and African countries) who are now North Carolina residents.

People at risk for HBV include:

- Infants born to HBV-infected mothers;
- Sexual partners of HBV-infected people;
- Men who report sex with men;
- People who inject drugs;
- Household contacts of HBV-infected people;
- Health care and public safety workers at risk for occupational exposure; and
- Hemodialysis patients.²

Symptoms of Hepatitis B

Newly acquired HBV infections only cause symptoms in certain cases, and symptoms vary by age. Most children under the age of five are asymptomatic, while 30-50% of people older than five years of age have symptoms. People who are immunocompromised are also generally asymptomatic.² Symptoms for acute HBV include fever, fatigue, nausea, vomiting, abdominal pain, jaundice, and dark urine. If symptoms do occur, they begin on average 90 days after HBV exposure. Symptoms can typically last for several weeks but can persist up to six months.¹ Since acute infections can be asymptomatic and diagnostic criteria for chronic infections are relatively non-specific, a portion of the reported chronic cases may in fact be acute.³

Screening for Hepatitis B

Screening for HBV should be done for individuals born in countries where HBV prevalence is $\geq 2\%$, men who have sex with men, people who are HIV positive, household/sexual and needle sharing partners of HBV positive people, people who require immunosuppressive therapies, people undergoing hemodialysis, blood and tissue donors, pregnant women, infants born to HBV-infected mothers, chronic

¹Centers for Disease Control and Prevention (CDC) (2020). *What is Viral Hepatitis?* Updated July 28, 2020. Accessed November 6, 2020. Retrieved from <https://www.cdc.gov/hepatitis/abc/index.htm>.

²Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis B Questions and Answers for Health Professionals*. Updated March 30, 2022. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview>.

³Centers for Disease Control and Prevention. (2012). Chapter 9: Hepatitis B - epidemiology and prevention of vaccine-preventable diseases. In W. Atkinson, S. Wolfe, & J. Hamborsky (Eds.). *The Pink Book: Course Textbook*, 12th edition, 2nd print (pp. 115-138). Washington DC: Public Health Foundation. Retrieved from <http://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html>.

liver disease, end-stage renal disease, and people with elevated alanine aminotransferase levels.² All 85 local health departments in North Carolina are able to offer risk-based HBV screening to under and uninsured individuals through the North Carolina State Laboratory of Public Health (NC SLPH).

Treatment for Hepatitis B

Treatment is generally not required for acute HBV, as the majority of acute disease will self-clear 90-95% of the time. The decision to treat chronic HBV is based on serologic measurements and degree of liver inflammation. Several antiviral medications are available to treat HBV and are aimed at suppressing and decreasing the pathogenicity of the virus.¹ There is no cure for HBV at this time.

Vaccination for Hepatitis B

The first HBV vaccine became commercially available in the United States in 1982. There are three single-antigen and three combination vaccines available for HBV in the United States. The vaccination schedule most often used for children and adults is three intramuscular injections, the second and third doses administered at one and six months, respectively, after the first dose at birth.¹ It is recommended that all children from birth to 18 years of age receive the vaccine, and all other adults receive it as soon as possible.

The Advisory Committee on Immunization Practices (ACIP) recommends vaccinations to the following people:

- All infants;
- Unvaccinated children under the age of 19;
- People at risk for infection by sexual exposure;
- People who inject drugs;
- Household contacts of HBV-infected people;
- Health care and public safety workers at risk for occupational exposure;
- Hemodialysis patients;
- People with diabetes;
- International travelers to countries with high or intermediate levels of endemic HBV;
- People who are infected with hepatitis C;
- People with HIV;
- People with chronic liver disease;
- People who are incarcerated; and
- People seeking protection from HBV.²

¹Centers for Disease Control and Prevention (CDC) (2020). *What is Viral Hepatitis?* Updated July 28, 2020. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/abc/index.htm>.

²Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis B Questions and Answers for Health Professionals*. Updated March 30, 2022. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview>.

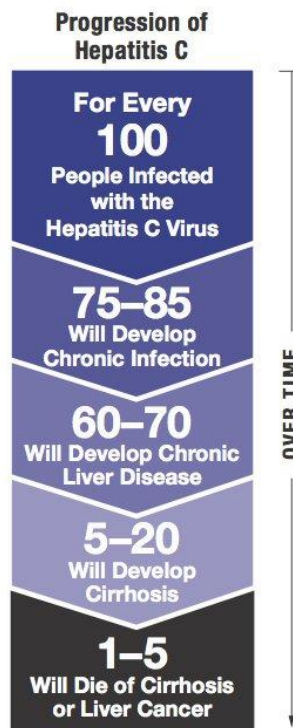
Hepatitis C

Hepatitis C is a liver infection caused by the hepatitis C virus (HCV), which can advance from acute to chronic. The CDC estimates that over 2.4 million people are living with HCV, and that there are around 50,000 new infections annually in the United States. HCV is a common reason for liver transplants in the United States.¹ In North Carolina, we estimate that at least 200,000 people are living with chronic HCV.

Acute versus Chronic Hepatitis C

HCV can be classified as acute (mild illness lasting a few weeks and up to six months) or chronic (greater than six months). Approximately 75-85% of those infected with HCV develop a chronic infection.⁴ Between 5% and 20% of people who develop chronic HCV will develop cirrhosis, and 1-5% will die from either cirrhosis or liver cancer (Figure 1).^{4,5}

Figure 1. Progression of Hepatitis C⁵



¹Centers for Disease Control and Prevention (CDC) (2020). *What is Viral Hepatitis?* Updated July 28, 2020. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/abc/index.htm>.

⁴Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis C Questions and Answers for Health Professionals*. Updated August 7, 2020. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section2>.

⁵Image from Hepatitis Foundation International. Accessed on June 18, 2019. <https://hepatitisfoundation.org/HEPATITIS/Hepatitis-C.html>.

Transmission of Hepatitis C

HCV transmission occurs primarily through infected blood. The most common way HCV is transmitted in the United States is through injection drug use (IDU). HCV can also be transmitted through the receipt of blood (including blood products and organs), needlestick injuries in health care settings, and vertical transmission (HCV-infected mother-to-child). While infrequent, HCV can also be spread through sexual contact with an HCV-infected person, sharing personal items contaminated with infectious blood (such as toothbrushes and razors), unregulated tattooing, and other health care procedures that involve invasive procedures.⁴

People at increased risk for HCV include:

- People who inject drugs;
- Recipients of clotting factor concentrates made before 1987;
- Recipients of blood transfusions or solid organ transplants prior to July 1992;
- Children born to HCV-infected mothers;
- People with HIV;
- Health care workers with known exposure to HCV;
- Recipients of blood or organs from a donor who tested positive for HCV; and
- Hemodialysis patients.⁴

Symptoms of Hepatitis C

The majority of people who newly acquire HCV are asymptomatic or have mild symptoms. Symptoms include fever, fatigue, nausea, vomiting, abdominal pain, joint pain, jaundice, dark urine, and clay-colored stool. If symptoms do occur, they begin on average two to 12 weeks after HCV exposure.⁴ The acute form of the infection is a short-term illness that occurs within the first six months after someone is exposed to the virus. Most people infected with chronic HCV are asymptomatic or have non-specific symptoms (like fatigue and depression).⁴ Progression of chronic liver disease is generally gradual, though can progress more quickly in certain subgroups (i.e. HIV coinfection). Most HCV infection is not recognized in asymptomatic people until they are screened for either blood donations, if routine screening is performed, or if elevated liver enzyme levels are detected during routine examinations.⁴

Screening for Hepatitis C

The CDC updated screening guidance for HCV in Spring 2020. The CDC recommends a one-time HCV testing in all adults (18 years and older), except in settings where the prevalence of HCV is less than 0.1%, and in all pregnant women during every pregnancy.⁵ The following guidance was also updated for screening for HCV⁵:

- **One-time hepatitis C testing regardless of age or setting prevalence among people with recognized conditions or exposures:**

¹Centers for Disease Control and Prevention (CDC) (2020). *What is Viral Hepatitis?* Updated July 28, 2020. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/abc/index.htm>.

⁴Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis C Questions and Answers for Health Professionals*. Updated Aug 7, 2020. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section1>.

⁵Schillie S, Wester C, Osborne M, Wesolowski L, Ryerson AB (2020). *CDC Recommendations for Hepatitis C Screening Among Adults-United States, 2020*. MMWR Recomm Rep 3030;69(NO. RR-2): 1-17. Retrieved from: <https://www.cdc.gov/mmwr/volumes/69/rr/rr6902a1.htm>.

- People with HIV;
- People who ever injected drugs and shared needles, syringes, or other drug preparation equipment, including those who injected once or a few times many years ago;
- People with selected medical conditions, including:
 - people who ever received maintenance hemodialysis; and
 - 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; and
 - people who were notified that they received blood from a donor who later tested positive for HCV infection.
- Health care, emergency medical, and public safety personnel after needle sticks, sharps, or mucosal exposures to HCV-positive blood; and
- 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; and
 - 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

Like with HBV, all local health departments are able to offer risk-based HCV screening to under and uninsured individuals through the NC SLPH. In 2021, a total of 33,247 anti-HCV tests (8% positivity) and 2,699 RNA tests (51% positivity) were conducted at the NC SLPH.

Treatment for Hepatitis C

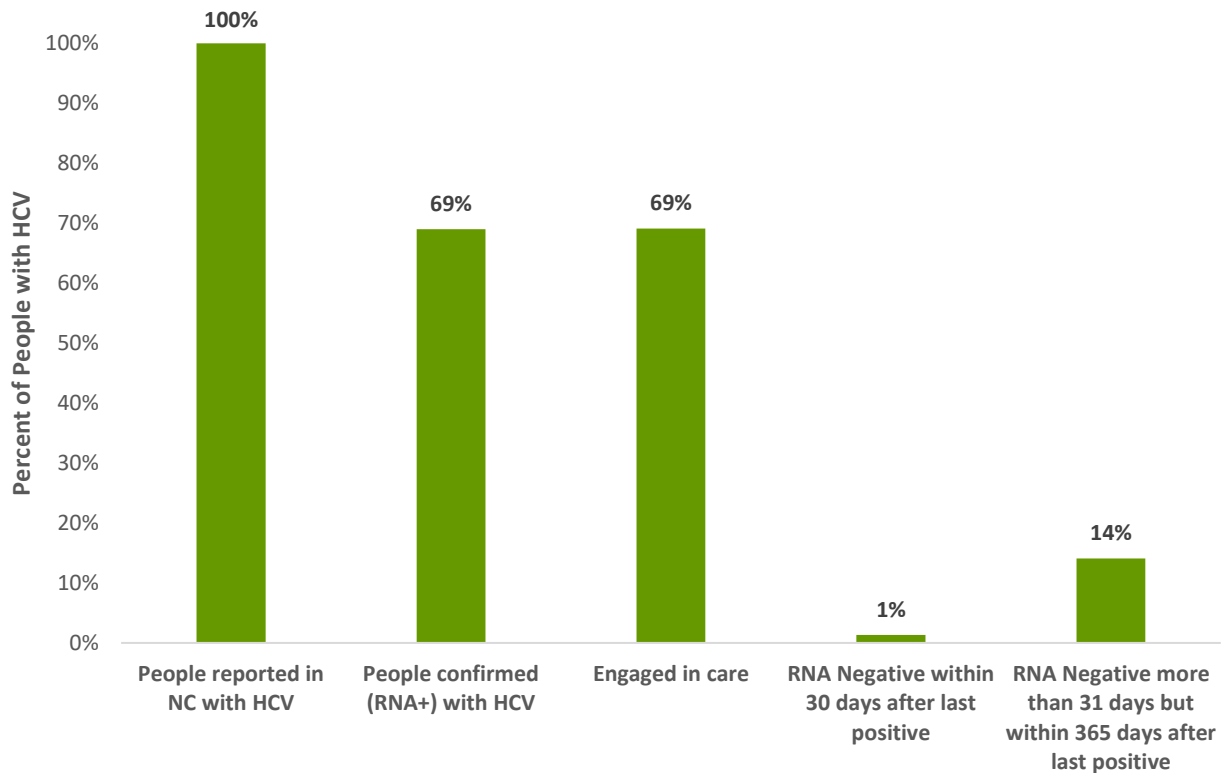
Treatment was not recommended for acute HCV until 2020. In 2013, direct acting antiviral therapies to treat chronic HCV became available that are associated with high cure rates (>95%), low likelihood of side effects, and lower risk of drug-drug interactions. Over 90% of HCV-infected people can be cured of HCV within eight to 12 weeks of oral therapy.⁴

Figure 2 represents the North Carolina surveillance-based treatment cascade for cases from 2017 through 2021. Our treatment cascade includes any individual reported with acute or chronic HCV over the age of 3 in 2021 and living at the end of 2021. It is based on surveillance labs only, and negative lab reporting is not required by law in North Carolina. However, the state database does receive negative HCV viral tests when an HCV record matches to an individual in our surveillance system. Our surveillance-based HCV treatment cascade includes the proportion of HCV cases confirmed (RNA-positive), the proportion of confirmed cases engaged in care, the proportion of confirmed cases with a

⁴Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis C Questions and Answers for Health Professionals*. Updated Aug 7, 2020. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section1>.

negative RNA HCV within 30 days after the last RNA-positive lab (potential indicator of natural clearance), and the proportion of confirmed cases with a negative RNA more than 31 days but within 365 days after the last positive (Figure 2). We use the last parameter as a proxy for sustained virologic response (SVR), as our data on SVR are incomplete. Since negative tests may not match to existing surveillance records, and people in treatment may not get a final RNA test, this is a minimum estimate of treatment and cure.

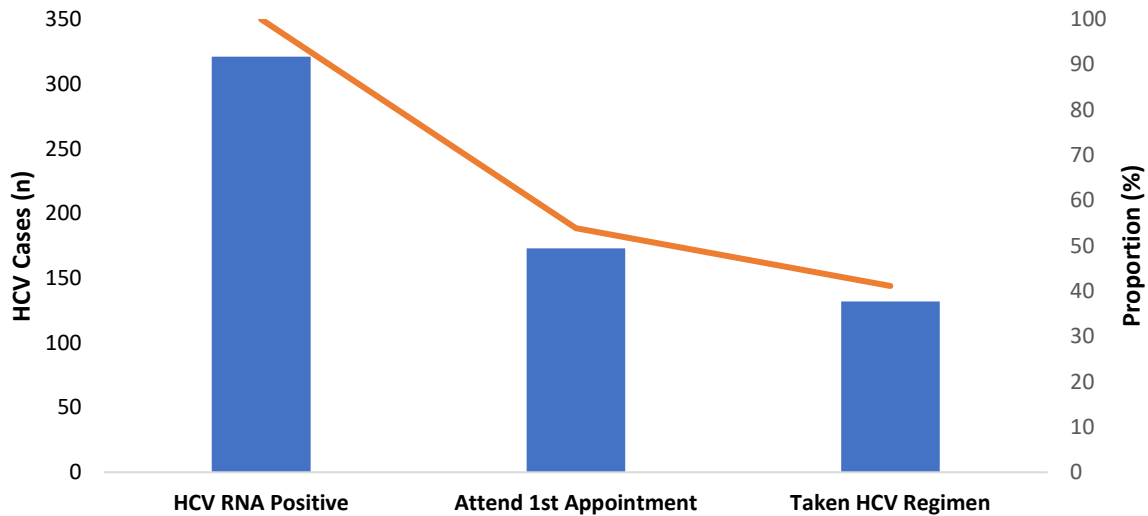
Figure 2. North Carolina Surveillance-Based Hepatitis C Treatment Cascade, 2017-2021



[^]Engaged in care is defined as having an additional RNA after their initial date of report to public health.
^{^^}RNA-negative less than 30 days of positive is a potential indicator of natural clearance, and therefore is its own parameter. Negative RNA results are reported into the surveillance system only if an HCV record matches to a subsequent negative test. Case definition for hepatitis C changed in 2016 and then again in 2020. Includes people reported with acute hepatitis C starting in 2020.
 Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

The North Carolina Viral Hepatitis Program (NCVHP) maintains a statewide bridge counselor program that aims to establish and promote linkage to care activities for HCV positive patients. In 2021, there were five HCV bridge counselors in North Carolina; two located in the western part of the state, two centrally located, and one in the southeastern part of the state. Only two HCV bridge counselors are state funded. The HCV bridge counselors offer support and guidance to those who may otherwise have difficulty accessing both medical treatment and social services. Figure 3 shows the bridge counselor-based HCV treatment cascade for clients for Region 1 (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, and Transylvania counties).

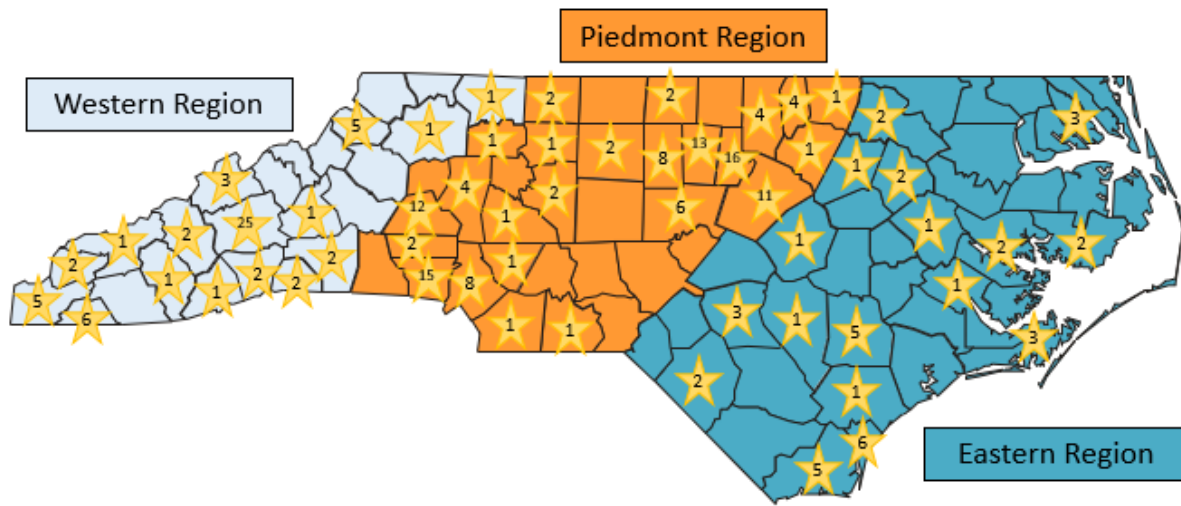
Figure 3. North Carolina State Bridge Counselor-Based Hepatitis C Treatment Cascade, 2017-2021



Data Source: Region 1 Bridge Counselor data, as of October 9, 2022.

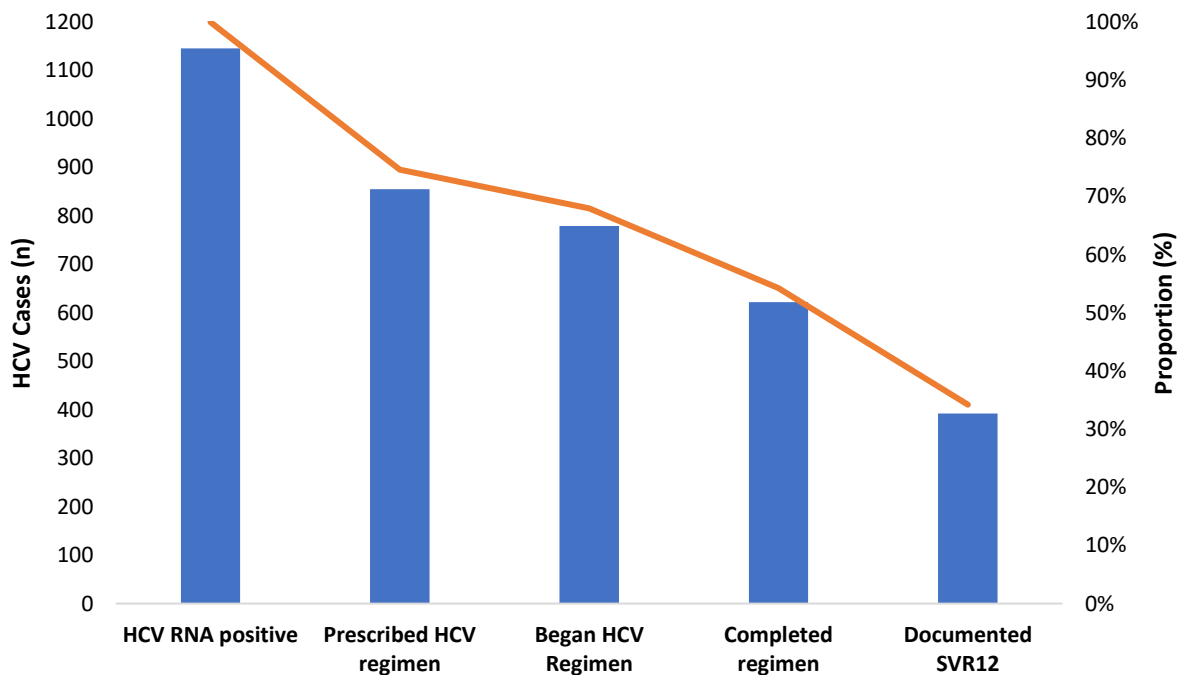
NCVHP, in collaboration with Duke University and the University of North Carolina-Chapel Hill, has developed a partnership to address limited resources for HCV treatment. Carolina Hepatitis C Academic Mentorship Program (CHAMP) is a telemedicine program designed to increase access to HCV treatment in North Carolina. CHAMP offers health care providers the opportunity to participate in a one-day boot camp, an intensive course on evaluation and treatment of patients with HCV. In addition to the boot camp, providers have biweekly conference calls with CHAMP mentors, which includes time for discussion of cases and continued education on effective treatment options. The CHAMP program also provides education and guidance around program development and linkage to resources for uninsured and underinsured patients. For more information about CHAMP, visit: https://epi.dph.ncdhhs.gov/cd/hepatitis/CHAMP-Brochure_FINAL-WEB.pdf.

Figure 4. Number of CHAMP Providers since 2017 in North Carolina by County and Region



Along with the bridge counselor HCV treatment cascade, the NCVHP produces a CHAMP provider-based treatment cascade. Figure 5 shows all people seen by CHAMP providers from March 2017 (when the program started) until December 2021. During this time, 19,136 people were reported as screened for HCV by a CHAMP provider, with 1,146 people being HCV RNA positive. Of the 1,146 people confirmed with HCV, over 34% attained SVR12 (Figure 5).

Figure 5. North Carolina CHAMP Provider-Based Hepatitis C Treatment Cascade, 2017-2021



Data source: North Carolina CHAMP Provider data (as of July 7, 2022)

Prevention of Hepatitis C

There is no vaccine for HCV, but people infected with HCV should be vaccinated against hepatitis B and hepatitis A.

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 provides harm reduction materials to syringe access programs and community-based organizations to prevent the transmission of hepatitis, HIV, and other STDs. For more information about NCHRC, visit: <http://www.nchrc.org/>.

The Injury and Violence Prevention Branch oversees the North Carolina Safer Syringe Initiative. The initiative provides information about existing syringe access programs in the state, resources for health care providers and law enforcement agencies, testing and treatment programs, information about the syringe exchange law, and information for health departments, community-based organizations, and other agencies interested in starting their own access program. For more information, visit: <https://www.ncdhhs.gov/divisions/public-health/north-carolina-safer-syringe-initiative>.

NCVHP has also created a regional drug user health resource guide. This guide contains regional specific information on low cost/free clinics, housing, food pantry and community means, hepatitis treatment providers, and syringe access programs. It also includes information on gastroenterologists, medication assisted treatment, behavioral health, and narcotics anonymous chapters. This resource guide is available online: https://testyourwell.nc.gov/cd/hepatitis/DrugUserHealthResourceGuide_08102021.pdf.

Perinatal Hepatitis C

Rates of HCV nearly doubled during 2009-2014 among people with live births. From 2011 - 2014, the CDC estimates that 29,000 HCV-infected people gave birth each year. HCV can be transmitted from an infected birthing parent to the child during both pregnancy and childbirth. The CDC estimates that vertical transmission occurs in about 5.8% of all pregnancies.⁶ Perinatal HCV infection is confirmed if an infant between 2 and 36 months of age has a positive HCV RNA, HCV genotype, or HCV antigen.⁷ Perinatal HCV is not a reportable condition in all reporting jurisdictions, but the CDC reported 165 infants with HCV in 2020.⁸

⁶Centers for Disease Control and Prevention (2021). Test for Hepatitis C during every pregnancy. Updated May 27, 2021. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/knowmorehepatitis/hcp/Test-For-HepC-During-Pregnancy.htm>.

⁷Centers for Disease Control and Prevention (2021). Hepatitis C, perinatal infection 2018 case definition. Updated April 16, 2021. Accessed October 5, 2022. Retrieved from <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-perinatal-infection-2018/>.

⁸Centers for Disease Control and Prevention (2022). 2020 Hepatitis Surveillance Report: Table 3.4. Number of newly reported cases of perinatal hepatitis C virus infection, by state or jurisdiction-United States, 2020. Updated August 17, 2022. Accessed October 5, 2022. Retrieved from <https://www.cdc.gov/hepatitis/statistics/2020surveillance/hepatitis-c/table-3.4.htm>.

Perinatal hepatitis C is not a reportable condition in North Carolina, so data on this condition are incomplete. Below are the results of an analysis where HCV cases reported during 2016-2019 were matched to birth records from the State Center for Health Statistics from 2016-2019.

- 32,648 women diagnosed with HCV and reported to NC during 2016-2019
 - 17,116 total women of childbearing age (14-44 years of age)
 - 753 were indicated as pregnant at the time of report to Public Health
- 485,628 live births in NC from Jan 2016 to Dec 2019 (from birth records)
 - 2,261 births had maternal HCV infection documented on birth certificate
- 1,463/2,261 women in NC EDSS with HCV matched to birth records (65% of the cases identified on birth certificates)
 - 1,063 had confirmed HCV status (RNA-positive)
 - Using 5-7% vertical transmission rate, we expect to see between 53 and 74 perinatal HCV cases in NC
- 64 confirmed cases of perinatal HCV cases were reported during 2016-2019, which is within the expected range

In July 2021, the NCVHP started a perinatal HCV referral process available to all LHDs and providers across the state. The NC SLPH has authorized free HCV testing for all pregnant persons, aged 18 years and older. Screening during pregnancy is recommended per CDC, unless the prevalence is <0.1%. In North Carolina, HCV prevalence for people younger than 18 was <0.1% in 2021.

NCVHP has a Perinatal HCV nurse, in charge of following the pregnant persons throughout their pregnancy, and the infant once they are born. The nurse supports postpartum birthing persons to be referred to treatment and care, while the infant will be followed to ensure testing occurs at the recommended time to determine HCV status.

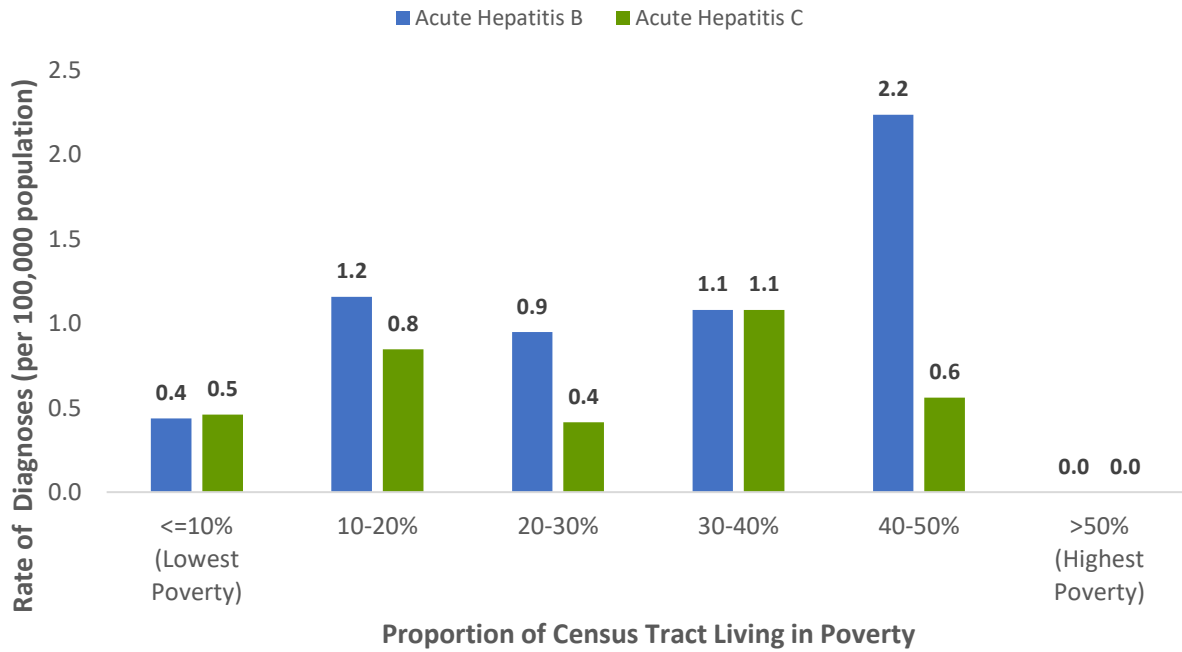
Poverty and Hepatitis

While the North Carolina surveillance data shows higher hepatitis rates in some racial and ethnic groups, factors such as poverty and large gaps in wealth distribution may be driving these differences.⁹ People who cannot afford basic needs may also have trouble accessing quality health services, and may have had negative experiences with health systems that have discouraged them from accessing testing and care programs.⁹ For each person diagnosed with acute HBV or HCV in North Carolina in 2021, we calculated the proportion of the population living below the poverty line in their census tract of residence at the time of their diagnosis using five-year (2016-2020) estimates from the American Community Survey. This calculation estimated the neighborhood poverty level experienced for people newly diagnosed with acute HBV or HCV in North Carolina. Figure 6 shows the rate of newly diagnosed acute HBV and HCV by census tract poverty rate. This figure demonstrates that although people living at

⁹Centers for Disease Control and Prevention. (2017). STD health equity. Updated February 15, 2017. Accessed July 19, 2017. Retrieved from <https://www.cdc.gov/std/health-disparities/default.htm#ftn5>.

all levels of poverty get acute HBV and HCV, those living in census tracts with a higher proportion of residents residing below the federal poverty line are more likely to be diagnosed with HCV.

Figure 6. People Diagnosed with Acute Hepatitis B and C in North Carolina by Poverty Indicator[^], 2021

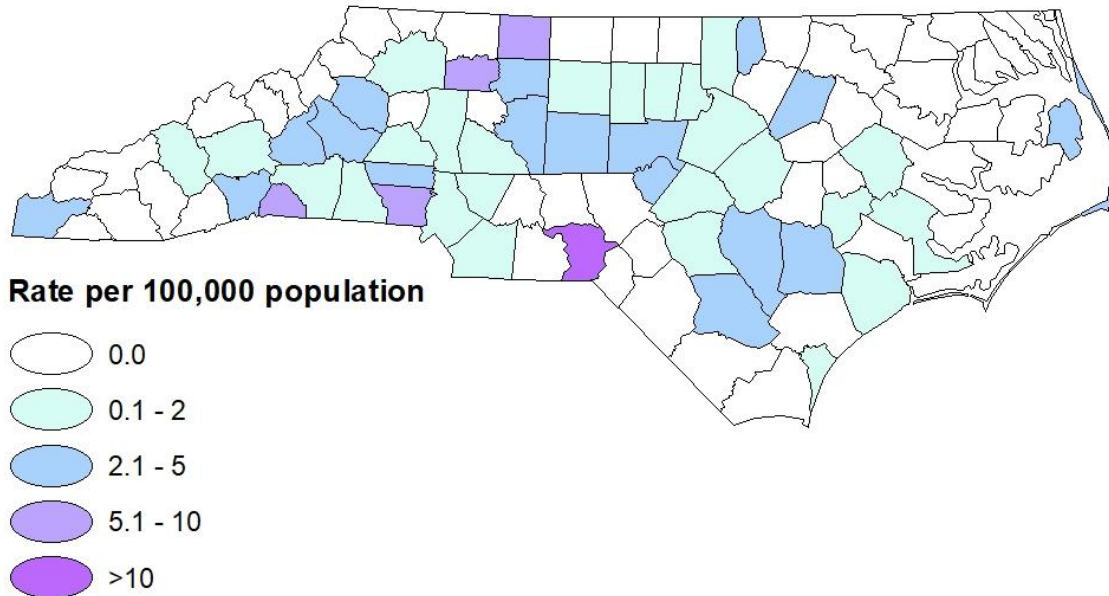


[^]Estimates of people living below the poverty line within a census tract and all population estimates obtained from the American Community Survey, 2016-2020, five-year estimate.

Data Sources: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022), and 2016-2020 American Community Survey (ACS) five-year estimates (accessed from <https://www.data.census.gov>).

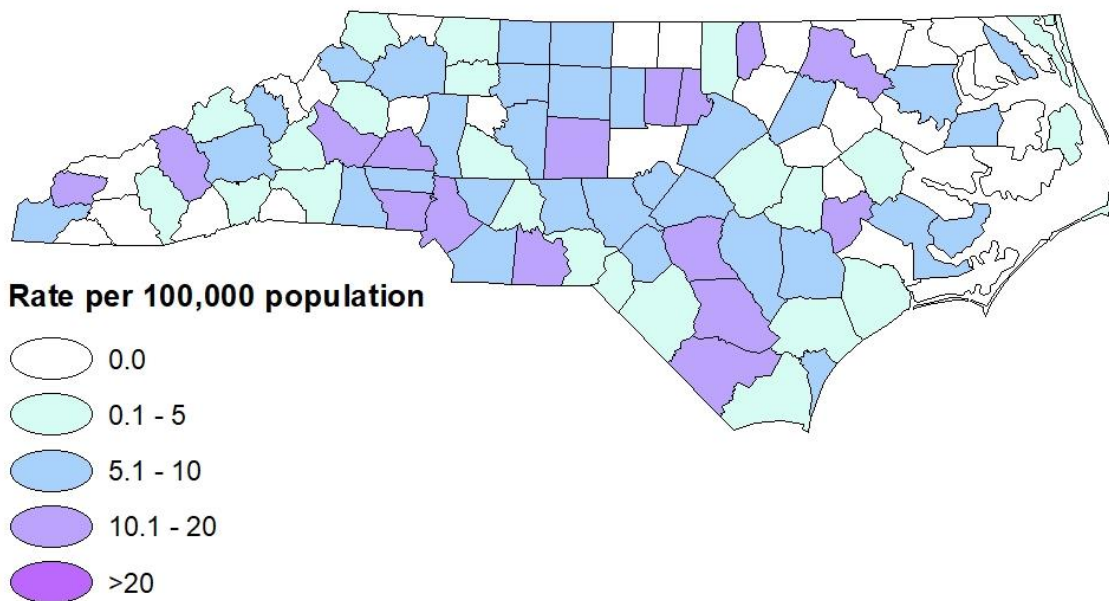
Hepatitis B and C Rate Maps by County of Residence at Diagnosis, 2021

Figure 7. Acute Hepatitis B Rates in North Carolina by County of Residence at Diagnosis, 2021



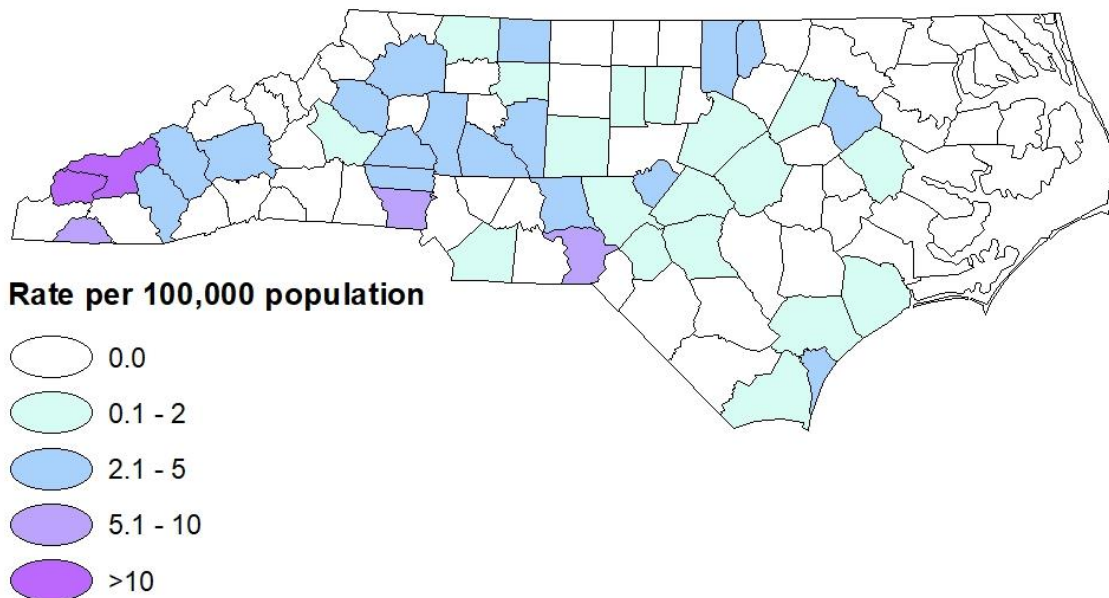
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Figure 8. Diagnosed Chronic Hepatitis B Rates in North Carolina by County of Residence at Diagnosis, 2021



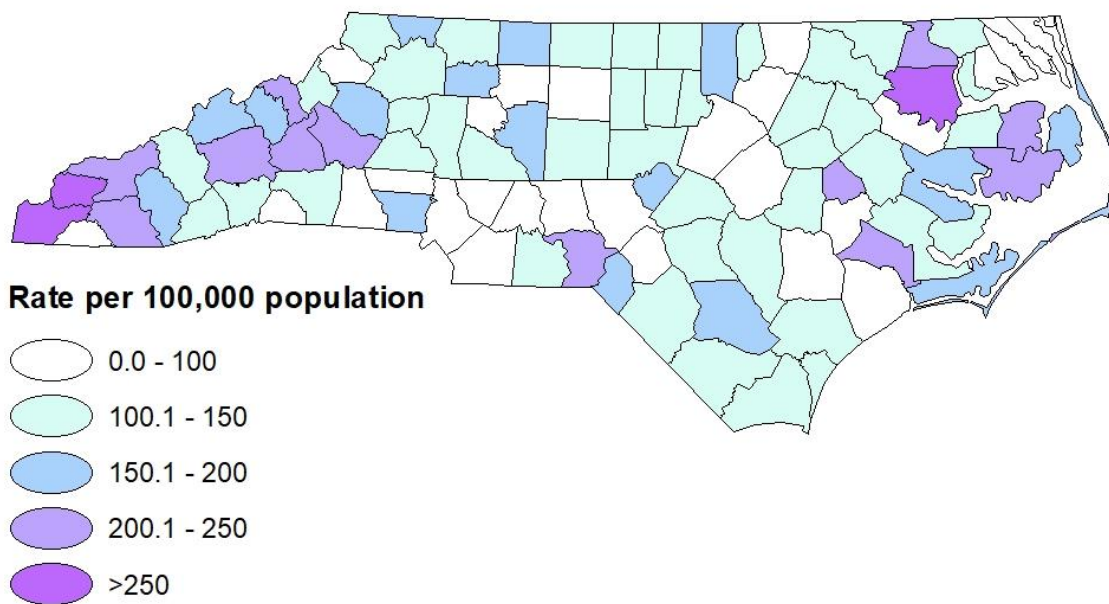
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Figure 9. Acute Hepatitis C Rates in North Carolina by County of Residence at Diagnosis, 2021



Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Figure 10. Diagnosed Chronic Hepatitis C Rates in North Carolina by County of Residence at Diagnosis, 2021



Note: Concentrations in some counties may be due to increased availability to testing.

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

County Totals and Rates for Hepatitis B and C, 2021

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Table 6. Diagnosed Chronic Hepatitis C Annual Rates in North Carolina by County of Report and Year of Report, 2017-2021 13

Table 1. Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020*		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Alamance	0	0.0	1	0.6	0	0.0	<i>0</i>	<i>0.0</i>	3	1.7
Alexander	1	2.7	2	5.4	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Alleghany	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Anson	4	16.1	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Ashe	0	0.0	3	11.1	1	3.7	<i>1</i>	<i>3.8</i>	0	0.0
Avery	0	0.0	0	0.0	0	0.0	<i>1</i>	<i>5.6</i>	0	0.0
Beaufort	1	2.1	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Bertie	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Bladen	0	0.0	1	3.0	0	0.0	<i>0</i>	<i>0.0</i>	1	3.4
Brunswick	7	5.3	5	3.6	3	2.1	<i>4</i>	<i>2.9</i>	0	0.0
Buncombe	4	1.6	2	0.8	2	0.8	<i>4</i>	<i>1.5</i>	2	0.7
Burke	6	6.7	8	8.9	2	2.2	<i>3</i>	<i>3.4</i>	4	4.6
Cabarrus	3	1.4	5	2.4	5	2.3	<i>3</i>	<i>1.3</i>	2	0.9
Caldwell	7	8.5	7	8.5	3	3.6	<i>3</i>	<i>3.7</i>	4	5.0
Camden	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Carteret	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Caswell	0	0.0	2	8.8	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Catawba	7	4.4	9	5.7	3	1.9	<i>4</i>	<i>2.5</i>	3	1.9
Chatham	0	0.0	2	2.7	0	0.0	<i>0</i>	<i>0.0</i>	2	2.6
Cherokee	3	10.7	1	3.5	2	7.0	<i>2</i>	<i>7.0</i>	1	3.4
Chowan	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Clay	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Cleveland	2	2.1	4	4.1	4	4.1	<i>3</i>	<i>3.0</i>	1	1.0
Columbus	1	1.8	1	1.8	3	5.4	<i>1</i>	<i>2.0</i>	0	0.0
Craven	1	1.0	2	1.9	1	1.0	<i>2</i>	<i>2.0</i>	2	2.0
Cumberland	6	1.8	4	1.2	1	0.3	<i>5</i>	<i>1.5</i>	6	1.8
Currituck	0	0.0	0	0.0	1	3.6	<i>0</i>	<i>0.0</i>	0	0.0
Dare	1	2.8	0	0.0	1	2.7	<i>2</i>	<i>5.4</i>	1	2.6
Davidson	7	4.2	2	1.2	4	2.4	<i>9</i>	<i>5.3</i>	4	2.3
Davie	0	0.0	1	2.4	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Duplin	1	1.7	0	0.0	1	1.7	<i>0</i>	<i>0.0</i>	2	4.1
Durham	6	1.9	3	0.9	3	0.9	<i>1</i>	<i>0.3</i>	3	0.9
Edgecombe	0	0.0	0	0.0	1	1.9	<i>0</i>	<i>0.0</i>	0	0.0
Forsyth	8	2.1	12	3.2	9	2.4	<i>4</i>	<i>1.0</i>	8	2.1
Franklin	1	1.5	1	1.5	1	1.4	<i>1</i>	<i>1.5</i>	0	0.0
Gaston	12	5.5	27	12.1	16	7.1	<i>11</i>	<i>4.8</i>	23	10.0
Gates	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Graham	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Granville	0	0.0	2	3.3	0	0.0	<i>0</i>	<i>0.0</i>	1	1.6
Greene	1	4.8	2	9.5	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Guilford	13	2.5	13	2.4	16	3.0	<i>6</i>	<i>1.1</i>	5	0.9

Continued

*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.

^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 1 (Continued). Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020*		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	<i>Cases</i>	<i>Rate^a</i>	Cases	Rate ^a
Halifax	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Harnett	6	4.5	1	0.7	3	2.2	<i>3</i>	<i>2.2</i>	1	0.7
Haywood	0	0.0	3	4.8	0	0.0	<i>0</i>	<i>0.0</i>	1	1.6
Henderson	1	0.9	0	0.0	0	0.0	<i>2</i>	<i>1.7</i>	3	2.6
Hertford	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Hoke	0	0.0	1	1.8	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Hyde	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Iredell	4	2.3	2	1.1	6	3.3	<i>5</i>	<i>2.7</i>	2	1.0
Jackson	3	6.9	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Johnston	0	0.0	1	0.5	1	0.5	<i>1</i>	<i>0.5</i>	1	0.4
Jones	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Lee	7	11.6	5	8.2	3	4.9	<i>0</i>	<i>0.0</i>	3	4.7
Lenoir	1	1.8	1	1.8	0	0.0	<i>1</i>	<i>1.8</i>	1	1.8
Lincoln	2	2.4	4	4.7	5	5.8	<i>2</i>	<i>2.3</i>	2	2.2
Macon	1	2.9	0	0.0	0	0.0	<i>1</i>	<i>2.7</i>	0	0.0
Madison	1	4.6	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Martin	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
McDowell	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	1	2.2
Mecklenburg	11	1.0	13	1.2	10	0.9	<i>13</i>	<i>1.2</i>	6	0.5
Mitchell	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Montgomery	0	0.0	0	0.0	0	0.0	<i>2</i>	<i>7.8</i>	0	0.0
Moore	2	2.1	1	1.0	0	0.0	<i>3</i>	<i>3.0</i>	0	0.0
Nash	0	0.0	0	0.0	2	2.1	<i>1</i>	<i>1.1</i>	2	2.1
New Hanover	4	1.7	1	0.4	2	0.9	<i>2</i>	<i>0.9</i>	1	0.4
Northampton	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Onslow	0	0.0	1	0.5	2	1.0	<i>1</i>	<i>0.5</i>	1	0.5
Orange	2	1.4	1	0.7	5	3.4	<i>0</i>	<i>0.0</i>	2	1.3
Pamlico	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Pasquotank	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Pender	0	0.0	1	1.6	3	4.8	<i>0</i>	<i>0.0</i>	0	0.0
Perquimans	0	0.0	1	7.4	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Person	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Pitt	0	0.0	1	0.6	0	0.0	<i>3</i>	<i>1.8</i>	1	0.6
Polk	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	1	5.1
Randolph	7	4.9	22	15.4	17	11.8	<i>9</i>	<i>6.2</i>	4	2.8
Richmond	0	0.0	1	2.2	1	2.2	<i>0</i>	<i>0.0</i>	11	25.7
Robeson	1	0.8	1	0.8	1	0.8	<i>2</i>	<i>1.7</i>	0	0.0
Rockingham	2	2.2	2	2.2	0	0.0	<i>1</i>	<i>1.1</i>	0	0.0
Rowan	4	2.9	13	9.2	8	5.6	<i>4</i>	<i>2.7</i>	2	1.3
Rutherford	1	1.5	1	1.5	1	1.5	<i>1</i>	<i>1.6</i>	1	1.5

Continued

*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.

^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 1 (Continued). Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Sampson	0	0.0	0	0.0	1	1.6	<i>0</i>	<i>0.0</i>	2	3.4
Scotland	0	0.0	0	0.0	1	2.9	<i>0</i>	<i>0.0</i>	0	0.0
Stanly	1	1.6	2	3.2	1	1.6	<i>0</i>	<i>0.0</i>	0	0.0
Stokes	3	6.6	2	4.4	1	2.2	<i>1</i>	<i>2.2</i>	3	6.7
Surry	0	0.0	0	0.0	4	5.6	<i>5</i>	<i>7.0</i>	0	0.0
Swain	1	7.0	1	7.0	1	7.0	<i>0</i>	<i>0.0</i>	0	0.0
Transylvania	0	0.0	0	0.0	2	5.8	<i>0</i>	<i>0.0</i>	0	0.0
Tyrrell	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Union	0	0.0	1	0.4	1	0.4	<i>2</i>	<i>0.8</i>	3	1.2
Vance	4	9.0	4	8.9	8	17.9	<i>2</i>	<i>4.7</i>	1	2.4
Wake	4	0.4	3	0.3	6	0.5	<i>0</i>	<i>0.0</i>	4	0.3
Warren	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Washington	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Watauga	2	3.6	1	1.8	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Wayne	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Wilkes	3	4.4	4	5.8	2	2.9	<i>1</i>	<i>1.5</i>	1	1.5
Wilson	1	1.2	1	1.2	1	1.2	<i>0</i>	<i>0.0</i>	0	0.0
Yadkin	1	2.7	2	5.3	1	2.7	<i>1</i>	<i>2.7</i>	2	5.4
Yancey	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Unassigned ^b	4	---	6	---	5	---	<i>3</i>	<i>---</i>	1	---
North Carolina	187	1.8	227	2.2	188	1.8	142	1.4	142	1.3

*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.

^aRates are expressed per 100,000 population.

^bUnassigned includes cases with unknown county of residence at diagnosis or cases that were diagnosed at long-term residence facilities, including prisons; rates are not available due to the lack of overall population data in the unassigned area.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 2. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina by Most Recently Known County^a of Residence as of 12/31/2021

County	Cases	County	Cases	County	Cases
Alamance	206	Gaston	557	Pitt	324
Alexander	43	Gates	12	Polk	10
Alleghany	3	Graham	13	Randolph	254
Anson	52	Granville	134	Richmond	99
Ashe	18	Greene	32	Robeson	226
Avery	19	Guilford	2,137	Rockingham	115
Beaufort	70	Halifax	85	Rowan	259
Bertie	42	Harnett	175	Rutherford	82
Bladen	37	Haywood	74	Sampson	66
Brunswick	179	Henderson	143	Scotland	82
Buncombe	510	Hertford	62	Stanly	90
Burke	355	Hoke	119	Stokes	44
Cabarrus	317	Hyde	2	Surry	82
Caldwell	131	Iredell	273	Swain	25
Camden	10	Jackson	38	Transylvania	20
Carteret	90	Johnston	170	Tyrrell	8
Caswell	21	Jones	14	Union	301
Catawba	591	Lee	134	Vance	135
Chatham	66	Lenoir	139	Wake	3,059
Cherokee	40	Lincoln	77	Warren	26
Chowan	14	Macon	37	Washington	19
Clay	15	Madison	16	Watauga	62
Cleveland	195	Martin	25	Wayne	211
Columbus	90	McDowell	52	Wilkes	155
Craven	401	Mecklenburg	4,749	Wilson	168
Cumberland	1,267	Mitchell	13	Yadkin	47
Currituck	21	Montgomery	39	Yancey	16
Dare	28	Moore	148	Unassigned ^b	2,423
Davidson	321	Nash	203	North Carolina	27,312
Davie	60	New Hanover	496		
Duplin	77	Northampton	29		
Durham	1,169	Onslow	315		
Edgecombe	124	Orange	472		
Forsyth	1,039	Pamlico	18		
Franklin	70	Pasquotank	84		
		Pender	90		
		Perquimans	9		
		Person	28		

^aBased on most recent known address from North Carolina Electronic Disease Surveillance System (NC EDSS) as of October 1, 2022.

^bUnassigned includes cases diagnosed at long-term residence facilities, including prisons.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 3. Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020*		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Alamance	10	6.1	11	6.6	8	4.7	12	7.0	15	8.6
Alexander	0	0.0	2	5.4	0	0.0	1	2.7	0	0.0
Alleghany	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anson	1	4.0	2	8.2	3	12.7	2	9.1	3	13.6
Ashe	1	3.7	1	3.7	0	0.0	1	3.8	1	3.7
Avery	2	11.4	0	0.0	4	22.9	0	0.0	0	0.0
Beaufort	6	12.7	3	6.4	1	2.1	2	4.5	0	0.0
Bertie	0	0.0	1	5.2	1	5.3	2	11.2	1	5.7
Bladen	4	12.0	2	6.0	1	3.0	1	3.4	3	10.2
Brunswick	9	6.9	12	8.8	13	9.1	8	5.9	6	4.2
Buncombe	26	10.1	25	9.6	21	8.0	14	5.2	20	7.4
Burke	16	17.7	19	21.0	10	11.1	15	17.1	15	17.1
Cabarrus	19	9.2	15	7.1	21	9.7	17	7.5	12	5.2
Caldwell	12	14.6	20	24.4	9	10.9	7	8.7	3	3.7
Camden	1	9.5	0	0.0	0	0.0	0	0.0	0	0.0
Carteret	6	8.7	2	2.9	3	4.3	0	0.0	0	0.0
Caswell	0	0.0	0	0.0	2	8.9	0	0.0	0	0.0
Catawba	19	12.0	13	8.2	22	13.8	17	10.6	26	16.1
Chatham	7	9.8	8	10.9	5	6.7	5	6.6	0	0.0
Cherokee	5	17.9	2	7.0	3	10.5	1	3.5	2	6.9
Chowan	0	0.0	0	0.0	3	21.6	0	0.0	0	0.0
Clay	0	0.0	1	9.0	2	17.7	0	0.0	0	0.0
Cleveland	5	5.1	6	6.1	11	11.2	6	6.0	10	10.0
Columbus	5	8.9	5	9.0	4	7.2	5	9.9	7	14.0
Craven	11	10.7	27	26.3	19	18.6	9	8.9	6	6.0
Cumberland	50	15.1	45	13.5	59	17.5	35	10.5	43	12.8
Currituck	2	7.6	0	0.0	1	3.6	1	3.6	1	3.4
Dare	2	5.5	2	5.4	1	2.7	2	5.4	1	2.6
Davidson	26	15.7	17	10.2	32	19.0	25	14.8	16	9.4
Davie	8	18.9	2	4.7	3	7.0	4	9.4	0	0.0
Duplin	6	10.2	3	5.1	1	1.7	4	8.2	3	6.2
Durham	59	18.9	54	17.0	51	15.8	39	12.0	53	16.3
Edgecombe	3	5.7	1	1.9	6	11.7	5	10.2	0	0.0
Forsyth	38	10.1	45	11.9	33	8.6	31	8.1	28	7.3
Franklin	3	4.5	4	5.9	3	4.3	1	1.5	0	0.0
Gaston	45	20.5	33	14.8	22	9.8	38	16.7	31	13.4
Gates	2	17.4	1	8.7	0	0.0	1	9.5	0	0.0
Graham	0	0.0	1	11.8	2	23.6	1	12.5	1	12.4
Granville	5	8.4	5	8.3	9	14.9	4	6.6	3	4.8
Greene	3	14.3	3	14.3	1	4.8	0	0.0	0	0.0
Guilford	74	14.0	74	13.9	85	15.8	51	9.4	48	8.8

Continued

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^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 3 (Continued). Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020*		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Halifax	4	7.8	2	3.9	1	2.0	2	4.1	5	10.4
Harnett	20	15.1	12	8.9	6	4.4	12	9.0	11	8.1
Haywood	1	1.6	6	9.7	3	4.8	4	6.4	7	11.2
Henderson	8	6.9	6	5.1	10	8.5	6	5.2	4	3.4
Hertford	3	12.5	1	4.2	6	25.4	1	4.6	0	0.0
Hoke	5	9.2	8	14.6	8	14.5	4	7.7	5	9.4
Hyde	1	19.1	0	0.0	0	0.0	0	0.0	0	0.0
Iredell	10	5.7	11	6.2	15	8.2	12	6.4	16	8.3
Jackson	4	9.3	4	9.2	3	6.9	2	4.6	2	4.6
Johnston	9	4.6	14	6.9	9	4.3	5	2.3	8	3.5
Jones	1	10.5	1	10.5	2	21.4	0	0.0	0	0.0
Lee	5	8.3	8	13.1	5	8.1	8	12.6	5	7.8
Lenoir	5	8.8	4	7.1	7	12.5	2	3.6	7	12.8
Lincoln	2	2.4	3	3.6	5	5.8	3	3.5	7	7.8
Macon	2	5.8	3	8.5	0	0.0	2	5.4	0	0.0
Madison	1	4.6	0	0.0	0	0.0	0	0.0	1	4.7
Martin	2	8.8	0	0.0	1	4.5	0	0.0	0	0.0
McDowell	0	0.0	4	8.8	5	10.9	6	13.5	1	2.2
Mecklenburg	151	14.0	137	12.5	148	13.3	122	10.9	124	11.0
Mitchell	2	13.3	0	0.0	1	6.7	1	6.7	0	0.0
Montgomery	3	11.0	1	3.7	2	7.4	2	7.8	2	7.8
Moore	5	5.1	11	11.1	10	9.9	7	7.0	10	9.7
Nash	8	8.5	9	9.6	9	9.5	3	3.2	8	8.4
New Hanover	16	7.0	14	6.0	26	11.1	19	8.4	19	8.3
Northampton	1	5.0	2	10.1	0	0.0	0	0.0	0	0.0
Onslow	16	8.2	14	7.1	14	6.9	2	1.0	9	4.4
Orange	22	15.3	20	13.5	20	13.5	18	12.1	20	13.4
Pamlico	2	15.8	1	7.9	6	47.4	2	16.3	1	8.1
Pasquotank	5	12.7	7	17.6	5	12.5	6	14.8	4	9.8
Pender	6	9.9	1	1.6	2	3.2	2	3.3	1	1.6
Perquimans	0	0.0	1	7.4	1	7.4	2	15.4	0	0.0
Person	0	0.0	2	5.1	0	0.0	0	0.0	0	0.0
Pitt	11	6.2	12	6.7	10	5.5	13	7.6	5	2.9
Polk	1	4.9	1	4.8	0	0.0	1	5.2	0	0.0
Randolph	9	6.3	21	14.7	15	10.5	12	8.3	18	12.4
Richmond	5	11.2	8	17.8	7	15.6	5	11.6	1	2.3
Robeson	15	11.3	7	5.3	10	7.7	14	12.0	3	2.6
Rockingham	7	7.7	12	13.2	3	3.3	3	3.3	8	8.8
Rowan	12	8.6	17	12.1	18	12.7	14	9.5	7	4.7
Rutherford	2	3.0	0	0.0	4	6.0	0	0.0	2	3.1

Continued

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^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 3(Continued). Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020*		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Sampson	3	4.7	4	6.3	5	7.9	<i>1</i>	<i>1.7</i>	4	6.8
Scotland	5	14.2	2	5.8	1	2.9	<i>1</i>	<i>2.9</i>	1	2.9
Stanly	2	3.3	3	4.8	3	4.8	<i>2</i>	<i>3.2</i>	3	4.7
Stokes	5	10.9	1	2.2	5	11.0	<i>2</i>	<i>4.5</i>	4	9.0
Surry	2	2.8	4	5.6	5	7.0	<i>6</i>	<i>8.4</i>	3	4.2
Swain	6	42.1	1	7.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Transylvania	3	8.9	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Tyrrell	1	24.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Union	16	6.9	14	5.9	12	5.0	<i>12</i>	<i>5.0</i>	18	7.4
Vance	13	29.3	7	15.6	6	13.4	<i>7</i>	<i>16.4</i>	7	16.6
Wake	169	15.8	161	14.7	158	14.2	<i>90</i>	<i>8.0</i>	97	8.4
Warren	2	10.1	1	5.0	1	5.1	<i>1</i>	<i>5.4</i>	0	0.0
Washington	1	8.4	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	1	9.2
Watauga	3	5.4	2	3.6	3	5.3	<i>2</i>	<i>3.7</i>	4	7.4
Wayne	11	8.9	6	4.9	13	10.5	<i>10</i>	<i>8.5</i>	2	1.7
Wilkes	21	30.7	16	23.4	7	10.2	<i>12</i>	<i>18.2</i>	4	6.1
Wilson	4	4.9	8	9.8	10	12.2	<i>4</i>	<i>5.1</i>	0	0.0
Yadkin	1	2.7	3	8.0	6	16.0	<i>2</i>	<i>5.4</i>	1	2.7
Yancey	1	5.6	0	0.0	1	5.5	<i>1</i>	<i>5.4</i>	1	5.3
Unassigned ^b	36	---	43	---	49	---	<i>53</i>	<i>---</i>	35	---
North Carolina	1,178	11.5	1,128	10.9	1,157	11.0	<i>890</i>	<i>8.5</i>	864	8.2

*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.

^aRate is expressed per 100,000 population.

^bUnassigned includes cases diagnosed at long-term residence facilities, including prisons.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 4. Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020 ^{^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Alamance	3	1.8	3	1.8	2	1.2	0	0.0	2	1.2
Alexander	1	2.7	0	0.0	0	0.0	1	2.7	0	0.0
Alleghany	1	9.1	0	0.0	0	0.0	0	0.0	0	0.0
Anson	0	0.0	0	0.0	2	8.5	0	0.0	0	0.0
Ashe	0	0.0	3	11.1	0	0.0	0	0.0	0	0.0
Avery	0	0.0	0	0.0	0	0.0	1	5.6	0	0.0
Beaufort	0	0.0	3	6.4	0	0.0	0	0.0	0	0.0
Bertie	0	0.0	0	0.0	1	5.3	0	0.0	0	0.0
Bladen	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brunswick	10	7.6	2	1.5	3	2.1	1	0.7	1	0.7
Buncombe	3	1.2	5	1.9	3	1.1	9	3.3	8	2.9
Burke	3	3.3	6	6.6	0	0.0	2	2.3	1	1.1
Cabarrus	1	0.5	1	0.5	2	0.9	1	0.4	0	0.0
Caldwell	10	12.2	5	6.1	7	8.5	3	3.7	2	2.5
Camden	0	0.0	0	0.0	1	9.3	1	9.7	0	0.0
Carteret	0	0.0	1	1.4	0	0.0	0	0.0	0	0.0
Caswell	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Catawba	4	2.5	1	0.6	3	1.9	3	1.9	4	2.5
Chatham	1	1.4	0	0.0	0	0.0	1	1.3	0	0.0
Cherokee	5	17.9	0	0.0	1	3.5	1	3.5	0	0.0
Chowan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clay	0	0.0	1	9.0	0	0.0	1	9.0	1	8.8
Cleveland	2	2.1	3	3.1	2	2.0	1	1.0	0	0.0
Columbus	1	1.8	0	0.0	0	0.0	1	2.0	0	0.0
Craven	1	1.0	3	2.9	2	2.0	1	1.0	0	0.0
Cumberland	4	1.2	2	0.6	4	1.2	3	0.9	2	0.6
Currituck	2	7.6	0	0.0	0	0.0	0	0.0	0	0.0
Dare	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Davidson	2	1.2	6	3.6	8	4.8	4	2.4	4	2.3
Davie	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Duplin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Durham	1	0.3	5	1.6	4	1.2	3	0.9	0	0.0
Edgecombe	3	5.7	1	1.9	0	0.0	0	0.0	1	2.1
Forsyth	6	1.6	7	1.8	10	2.6	1	0.3	1	0.3
Franklin	2	3.0	1	1.5	1	1.4	0	0.0	0	0.0
Gaston	7	3.2	11	4.9	6	2.7	11	4.8	14	6.1
Gates	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Graham	1	11.7	0	0.0	0	0.0	0	0.0	2	24.9
Granville	0	0.0	4	6.7	0	0.0	0	0.0	2	3.2
Greene	2	9.5	0	0.0	1	4.8	0	0.0	0	0.0
Guilford	6	1.1	7	1.3	7	1.3	3	0.6	0	0.0

Continued

[^]Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.^{*}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.^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 4 (Continued). Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020 ^{^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	<i>Cases</i>	<i>Rate^a</i>	Cases	Rate ^a
Halifax	0	0.0	1	2.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Harnett	4	3.0	0	0.0	1	0.7	<i>0</i>	<i>0.0</i>	1	0.7
Haywood	1	1.6	1	1.6	2	3.2	<i>0</i>	<i>0.0</i>	2	3.2
Henderson	1	0.9	1	0.9	1	0.9	<i>0</i>	<i>0.0</i>	0	0.0
Hertford	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Hoke	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	1	1.9
Hyde	0	0.0	1	20.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Iredell	7	4.0	5	2.8	8	4.4	<i>2</i>	<i>1.1</i>	4	2.1
Jackson	6	13.9	5	11.5	1	2.3	<i>3</i>	<i>7.0</i>	1	2.3
Johnston	2	1.0	1	0.5	5	2.4	<i>4</i>	<i>1.9</i>	2	0.9
Jones	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Lee	1	1.7	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	2	3.1
Lenoir	3	5.3	0	0.0	2	3.6	<i>0</i>	<i>0.0</i>	0	0.0
Lincoln	4	4.8	3	3.6	2	2.3	<i>0</i>	<i>0.0</i>	2	2.2
Macon	1	2.9	0	0.0	0	0.0	<i>1</i>	<i>2.7</i>	0	0.0
Madison	1	4.6	3	13.9	2	9.2	<i>0</i>	<i>0.0</i>	0	0.0
Martin	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
McDowell	2	4.4	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Mecklenburg	2	0.2	4	0.4	3	0.3	<i>4</i>	<i>0.4</i>	0	0.0
Mitchell	0	0.0	1	6.7	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Montgomery	2	7.3	1	3.7	0	0.0	<i>0</i>	<i>0.0</i>	1	3.9
Moore	1	1.0	1	1.0	0	0.0	<i>1</i>	<i>1.0</i>	2	1.9
Nash	2	2.1	1	1.1	5	5.3	<i>1</i>	<i>1.1</i>	1	1.1
New Hanover	5	2.2	7	3.0	6	2.6	<i>1</i>	<i>0.4</i>	5	2.2
Northampton	0	0.0	1	5.1	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Onslow	6	3.1	1	0.5	3	1.5	<i>0</i>	<i>0.0</i>	2	1.0
Orange	3	2.1	1	0.7	4	2.7	<i>0</i>	<i>0.0</i>	1	0.7
Pamlico	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Pasquotank	0	0.0	1	2.5	0	0.0	<i>1</i>	<i>2.5</i>	0	0.0
Pender	0	0.0	1	1.6	1	1.6	<i>0</i>	<i>0.0</i>	1	1.6
Perquimans	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Person	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Pitt	2	1.1	5	2.8	3	1.7	<i>1</i>	<i>0.6</i>	1	0.6
Polk	2	9.7	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Randolph	13	9.1	16	11.2	8	5.6	<i>3</i>	<i>2.1</i>	2	1.4
Richmond	0	0.0	0	0.0	1	2.2	<i>1</i>	<i>2.3</i>	3	7.0
Robeson	1	0.8	1	0.8	2	1.5	<i>0</i>	<i>0.0</i>	0	0.0
Rockingham	3	3.3	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Rowan	0	0.0	4	2.8	5	3.5	<i>2</i>	<i>1.4</i>	4	2.7
Rutherford	3	4.5	1	1.5	2	3.0	<i>0</i>	<i>0.0</i>	0	0.0

Continued

[^]Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.^{*}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.^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 4 (Continued). Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2017-2021

County	2017		2018		2019		2020 ^{^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	<i>Cases</i>	<i>Rate^a</i>	Cases	Rate ^a
Sampson	2	3.2	0	0.0	1	1.6	<i>0</i>	<i>0.0</i>	0	0.0
Scotland	0	0.0	1	2.9	3	8.6	<i>1</i>	<i>2.9</i>	0	0.0
Stanly	1	1.6	3	4.8	1	1.6	<i>0</i>	<i>0.0</i>	0	0.0
Stokes	1	2.2	2	4.4	2	4.4	<i>1</i>	<i>2.2</i>	1	2.2
Surry	3	4.2	6	8.3	4	5.6	<i>5</i>	<i>7.0</i>	1	1.4
Swain	2	14.0	5	35.1	1	7.0	<i>1</i>	<i>7.1</i>	2	14.1
Transylvania	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Tyrrell	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Union	3	1.3	4	1.7	5	2.1	<i>2</i>	<i>0.8</i>	2	0.8
Vance	1	2.3	1	2.2	0	0.0	<i>0</i>	<i>0.0</i>	1	2.4
Wake	7	0.7	11	1.0	11	1.0	<i>2</i>	<i>0.2</i>	3	0.3
Warren	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Washington	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Watauga	2	3.6	3	5.3	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Wayne	0	0.0	0	0.0	1	0.8	<i>0</i>	<i>0.0</i>	0	0.0
Wilkes	0	0.0	0	0.0	0	0.0	<i>3</i>	<i>4.5</i>	2	3.0
Wilson	1	1.2	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Yadkin	1	2.7	0	0.0	1	2.7	<i>3</i>	<i>8.1</i>	0	0.0
Yancey	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
Unassigned ^b	8	---	18	---	23	---	<i>13</i>	---	5	---
North Carolina	192	1.9	203	2.0	190	1.8	<i>109</i>	<i>1.0</i>	100	0.9

[^]Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

^{*}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.

^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 5. Number of People Diagnosed with Chronic Hepatitis C^a, Presumed Alive, and Residing in North Carolina as of 12/31/2021 by County of Residence when Reported to the State

County	Cases
Alamance	1,062
Alexander	258
Alleghany	94
Anson	116
Ashe	139
Avery	133
Beaufort	383
Bertie	153
Bladen	212
Brunswick	1,026
Buncombe	3,467
Burke	949
Cabarrus	685
Caldwell	791
Camden	36
Carteret	586
Caswell	148
Catawba	1,076
Chatham	376
Cherokee	457
Chowan	100
Clay	80
Cleveland	466
Columbus	380
Craven	1,143
Cumberland	2,124
Currituck	146
Dare	294
Davidson	1,595
Davie	242
Duplin	209
Durham	2,489
Edgecombe	533
Forsyth	1,804
Franklin	342

County	Cases
Gaston	1,700
Gates	62
Graham	140
Granville	573
Greene	347
Guilford	2,749
Halifax	343
Harnett	766
Haywood	719
Henderson	852
Hertford	179
Hoke	216
Hyde	53
Iredell	975
Jackson	479
Johnston	943
Jones	74
Lee	498
Lenoir	384
Lincoln	366
Macon	393
Madison	304
Martin	203
McDowell	589
Mecklenburg	3,678
Mitchell	189
Montgomery	166
Moore	476
Nash	793
New Hanover	1,550
Northampton	133
Onslow	903
Orange	891
Pamlico	120
Pasquotank	228
Pender	373

County	Cases
Perquimans	82
Person	238
Pitt	3,353
Polk	116
Randolph	1,114
Richmond	383
Robeson	835
Rockingham	567
Rowan	1,233
Rutherford	502
Sampson	343
Scotland	249
Stanly	258
Stokes	314
Surry	495
Swain	283
Transylvania	327
Tyrrell	40
Union	520
Vance	377
Wake	4,951
Warren	84
Washington	65
Watauga	210
Wayne	772
Wilkes	658
Wilson	747
Yadkin	312
Yancey	223
Unassigned ^b	13,555
North Carolina	80,707

^aChronic hepatitis C became reportable in North Carolina in October 2016. Labs are only reportable by electronic lab reporting. These numbers are likely an underestimation. Newly diagnosed chronic hepatitis C is also not available at this time. This does not take into account those that have either self-cleared or have received treatment for hepatitis C.

^bUnassigned includes cases diagnosed at long-term residence facilities, including prisons. Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 6. Diagnosed Chronic Hepatitis C Annual Rates[^] in North Carolina by County of Report and Year of Report, 2017-2021

County	2017		2018		2019		2020 ^{^^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Alamance	245	150.0	277	166.4	205	121.2	<i>175</i>	<i>102.1</i>	186	107.0
Alexander	67	180.6	80	214.6	50	133.6	<i>31</i>	<i>85.1</i>	40	109.2
Alleghany	20	181.8	22	197.0	15	134.7	<i>18</i>	<i>165.3</i>	21	190.1
Anson	30	120.7	20	81.7	23	97.7	<i>20</i>	<i>90.7</i>	27	122.4
Ashe	33	123.2	23	84.8	30	110.2	<i>28</i>	<i>105.4</i>	31	116.1
Avery	40	228.3	35	199.9	22	125.7	<i>18</i>	<i>101.1</i>	23	128.8
Beaufort	57	121.0	49	104.0	163	346.1	<i>51</i>	<i>114.2</i>	69	155.2
Bertie	18	93.5	19	99.6	44	232.0	<i>22</i>	<i>122.7</i>	52	297.1
Bladen	33	98.7	48	144.7	47	143.0	<i>44</i>	<i>148.6</i>	45	152.4
Brunswick	297	226.7	218	159.0	208	145.5	<i>161</i>	<i>117.8</i>	174	120.7
Buncombe	948	368.3	836	321.9	668	254.9	<i>502</i>	<i>186.3</i>	581	214.0
Burke	270	299.5	167	184.9	189	209.0	<i>157</i>	<i>179.3</i>	197	224.9
Cabarrus	206	99.5	136	64.3	140	64.7	<i>115</i>	<i>50.9</i>	104	45.0
Caldwell	199	242.8	182	221.6	145	176.2	<i>134</i>	<i>166.1</i>	149	185.2
Camden	4	38.0	7	66.0	9	83.6	<i>10</i>	<i>96.6</i>	7	64.6
Carteret	130	188.4	113	162.5	139	200.0	<i>104</i>	<i>153.7</i>	110	160.5
Caswell	30	132.6	36	158.7	30	132.8	<i>28</i>	<i>123.2</i>	26	114.5
Catawba	249	157.8	243	153.3	200	125.5	<i>209</i>	<i>130.1</i>	204	126.1
Chatham	57	80.0	112	153.1	83	111.5	<i>45</i>	<i>59.0</i>	80	102.7
Cherokee	129	460.7	89	313.1	89	310.0	<i>77</i>	<i>267.6</i>	85	291.4
Chowan	8	57.1	29	206.9	29	208.4	<i>18</i>	<i>131.3</i>	17	123.9
Clay	28	253.8	22	197.3	12	106.4	<i>11</i>	<i>99.2</i>	10	88.4
Cleveland	114	117.3	120	123.0	98	100.0	<i>70</i>	<i>70.3</i>	82	81.7
Columbus	103	183.9	105	188.3	68	122.6	<i>47</i>	<i>92.8</i>	67	133.8
Craven	333	324.1	285	277.6	269	263.6	<i>159</i>	<i>157.9</i>	119	118.2
Cumberland	511	154.1	453	135.4	444	131.9	<i>391</i>	<i>116.8</i>	376	112.1
Currituck	35	132.9	33	121.8	30	107.5	<i>20</i>	<i>71.2</i>	29	97.8
Dare	70	193.1	62	168.9	62	167.2	<i>46</i>	<i>124.6</i>	68	179.8
Davidson	350	211.5	346	207.5	369	219.3	<i>298</i>	<i>176.4</i>	275	161.2
Davie	65	153.7	50	117.6	70	163.9	<i>27</i>	<i>63.2</i>	36	82.7
Duplin	42	71.3	48	81.4	57	96.9	<i>24</i>	<i>49.3</i>	40	82.4
Durham	779	249.3	589	185.5	488	151.1	<i>306</i>	<i>94.2</i>	352	107.9
Edgecombe	130	246.2	120	230.7	176	342.2	<i>62</i>	<i>126.8</i>	67	138.5
Forsyth	403	107.2	449	118.4	427	111.7	<i>274</i>	<i>71.6</i>	313	81.2
Franklin	76	114.8	99	146.4	74	106.1	<i>46</i>	<i>67.1</i>	54	75.3
Gaston	396	180.2	364	163.3	323	143.8	<i>308</i>	<i>135.1</i>	354	153.3
Gates	8	69.6	10	86.8	17	147.4	<i>12</i>	<i>114.5</i>	15	144.7

Continued

[^]Chronic hepatitis C surveillance started in North Carolina in October 2016 and is only reported from laboratories reporting electronically. These numbers are likely an underestimation. Since surveillance for chronic hepatitis C is relatively new in North Carolina and our case records are incomplete, we are unable to determine whether a positive lab test reflects a new diagnosis or a new reported test result for a person who was previously diagnosed. Note: Concentrations in some counties may be due to increased availability to testing.

^{^^}Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

*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.

^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 6 (Continued). Diagnosed Chronic Hepatitis C Annual Rates[^] in North Carolina by County of Report and Year of Report, 2017-2021

County	2017		2018		2019		2020 ^{^^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Graham	32	375.2	38	447.6	26	307.0	21	261.5	24	298.4
Granville	146	245.6	145	241.3	113	187.2	86	141.0	97	156.5
Greene	67	319.6	28	133.1	191	913.2	18	88.0	47	230.2
Guilford	564	106.7	711	133.3	654	121.6	407	75.2	463	85.4
Halifax	66	128.6	81	159.8	101	201.7	48	98.7	55	113.9
Harnett	172	129.7	191	141.9	144	105.7	132	98.8	151	111.1
Haywood	213	348.2	192	308.8	144	230.4	110	177.2	86	137.7
Henderson	197	170.7	209	179.3	174	148.3	152	130.7	132	113.0
Hertford	30	125.4	37	154.9	46	194.6	22	102.1	48	225.6
Hoke	60	110.7	50	91.5	47	85.2	32	61.4	35	65.9
Hyde	10	191.2	4	79.9	20	405.5	9	196.1	11	244.0
Iredell	223	126.9	212	118.9	223	122.6	146	78.2	200	104.2
Jackson	106	245.3	118	271.0	121	276.7	65	150.8	78	179.7
Johnston	159	80.9	259	127.6	220	104.9	178	82.4	147	64.9
Jones	17	178.0	9	94.2	19	203.4	12	130.8	19	205.3
Lee	97	160.5	123	200.9	98	158.6	83	131.2	105	163.7
Lenoir	74	130.6	65	116.0	172	306.7	42	76.2	47	85.9
Lincoln	105	127.1	61	72.3	73	84.3	72	82.9	68	75.8
Macon	102	294.7	69	195.9	84	235.1	66	178.3	78	207.6
Madison	102	472.2	75	346.3	49	226.5	43	202.9	37	172.1
Martin	22	96.6	28	123.4	122	543.4	13	59.0	20	91.9
McDowell	176	390.3	126	277.0	107	233.7	82	183.9	106	237.0
Mecklenburg	1,154	106.9	739	67.4	756	67.9	614	55.0	548	48.8
Mitchell	55	366.9	51	340.2	31	207.7	21	140.9	32	213.9
Montgomery	45	165.0	40	147.6	43	158.0	22	85.4	20	77.5
Moore	84	86.3	107	108.1	123	121.6	91	91.2	82	79.8
Nash	225	239.1	145	154.0	207	219.6	103	108.5	131	137.6
New Hanover	362	158.2	344	147.9	340	145.1	272	120.5	268	117.0
Northampton	29	145.7	31	157.0	36	184.6	16	91.6	22	128.4
Onslow	167	85.5	212	107.6	168	82.8	195	95.3	189	91.7
Orange	138	96.1	236	159.4	175	118.1	150	100.9	197	132.3
Pamlico	30	237.5	38	301.6	29	229.2	12	97.8	17	137.7
Pasquotank	42	106.5	57	143.6	60	150.1	39	96.1	32	78.4
Pender	109	179.3	75	120.7	61	96.8	63	104.6	73	116.2
Perquimans	14	104.0	18	134.1	26	191.5	15	115.3	10	76.2
Person	60	152.2	62	156.8	46	116.1	35	89.5	42	107.3

Continued

[^]Chronic hepatitis C surveillance started in North Carolina in October 2016 and is only reported from laboratories reporting electronically. These numbers are likely an underestimation. Since surveillance for chronic hepatitis C is relatively new in North Carolina and our case records are incomplete, we are unable to determine whether a positive lab test reflects a new diagnosis or a new reported test result for a person who was previously diagnosed. Note: Concentrations in some counties may be due to increased availability to testing.

^{^^}Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

*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.

^aRates are expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 6 (Continued). Diagnosed Chronic Hepatitis C Annual Rates[^] in North Carolina by County of Report and Year of Report, 2017-2021

County	2017		2018		2019		2020 ^{^^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Pitt	201	112.5	214	119.1	2,536	1399.1	<i>180</i>	<i>105.7</i>	235	136.5
Polk	26	126.4	30	145.1	29	139.9	<i>15</i>	<i>77.6</i>	16	81.4
Randolph	292	204.2	279	194.9	227	158.2	<i>166</i>	<i>115.1</i>	185	127.4
Richmond	46	102.7	100	222.8	102	227.9	<i>51</i>	<i>118.8</i>	93	217.7
Robeson	178	134.2	199	150.9	177	135.7	<i>149</i>	<i>127.9</i>	165	141.8
Rockingham	105	115.6	143	157.7	138	151.5	<i>96</i>	<i>105.4</i>	98	107.4
Rowan	348	248.1	264	187.4	259	182.6	<i>193</i>	<i>131.4</i>	214	144.4
Rutherford	138	207.3	104	155.9	91	135.8	<i>84</i>	<i>130.3</i>	94	145.5
Sampson	92	145.6	70	110.6	70	110.5	<i>53</i>	<i>89.8</i>	65	110.2
Scotland	60	170.6	57	164.3	54	155.3	<i>39</i>	<i>114.1</i>	52	151.9
Stanly	81	131.8	65	104.7	42	67.0	<i>38</i>	<i>60.8</i>	43	67.8
Stokes	70	153.1	73	160.6	65	142.4	<i>46</i>	<i>103.3</i>	67	150.4
Surry	125	173.3	109	151.5	80	111.5	<i>91</i>	<i>127.5</i>	99	139.1
Swain	56	392.5	58	406.8	96	670.8	<i>54</i>	<i>382.5</i>	31	219.3
Transylvania	88	260.3	73	213.6	67	195.5	<i>52</i>	<i>157.6</i>	49	147.7
Tyrrell	7	167.8	13	316.1	11	288.5	<i>3</i>	<i>92.4</i>	7	215.1
Union	131	56.6	111	47.0	134	55.8	<i>86</i>	<i>36.1</i>	79	32.4
Vance	91	205.0	102	228.0	75	167.9	<i>59</i>	<i>138.6</i>	57	135.1
Wake	1,259	117.4	1,215	111.2	1,001	90.0	<i>754</i>	<i>66.8</i>	805	70.0
Warren	25	126.1	20	100.9	17	86.3	<i>11</i>	<i>59.0</i>	13	69.3
Washington	7	58.6	7	59.4	27	232.1	<i>10</i>	<i>90.9</i>	15	137.7
Watauga	43	77.8	46	81.8	36	64.0	<i>41</i>	<i>75.8</i>	50	92.2
Wayne	127	103.1	167	135.2	256	206.6	<i>99</i>	<i>84.4</i>	146	125.0
Wilkes	196	286.3	140	204.4	142	207.9	<i>98</i>	<i>148.6</i>	96	145.9
Wilson	197	241.9	125	153.6	271	331.4	<i>78</i>	<i>99.0</i>	99	126.3
Yadkin	65	172.9	72	192.2	66	175.5	<i>51</i>	<i>137.0</i>	64	172.1
Yancey	55	310.6	54	301.8	49	271.3	<i>39</i>	<i>211.2</i>	30	159.9
Unassigned ^b	3,273	---	3,395	---	2,913	---	<i>1,954</i>	---	2,372	---
North Carolina	19,149	186.4	18,187	175.0	19,592	186.6	<i>12,145</i>	<i>116.3</i>	13,546	128.4

[^]Chronic hepatitis C surveillance started in North Carolina in October 2016 and is only reported from laboratories reporting electronically. These numbers are likely an underestimation. Since surveillance for chronic hepatitis C is relatively new in North Carolina and our case records are incomplete, we are unable to determine whether a positive lab test reflects a new diagnosis or a new reported test result for a person who was previously diagnosed. Note: Concentrations in some counties may be due to increased availability to testing.

^{^^}Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

*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.

^aRates are expressed per 100,000 population.

^bUnassigned includes cases diagnosed at long-term residence facilities, including prisons.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

North Carolina State Totals and Rates for Hepatitis B and C by Selected Demographics, 2021

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Table 7. Number of Infants Diagnosed with Hepatitis B (Perinatal Hepatitis B) in North Carolina by Year of Diagnosis, 2012-2021

2012	2013	2014	2015	2016	2017	2018	2019	2020*	2021
0	2	1	1	1	1	1	3	<i>0</i>	2

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

Data Source: Immunization Branch (data as of October 1, 2022).

Table 8. Acute Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2017-2021

Demographics	2017		2018		2019		2020*		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Gender										
Men	107	2.1	150	3.0	120	2.3	85	1.7	94	1.8
Women	80	1.5	77	1.4	68	1.3	57	1.1	48	0.9
Age at Diagnosis										
Less than 13	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
13-14	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
15-19	0	0.0	4	0.6	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
20-24	6	0.9	7	1.0	9	1.3	<i>2</i>	<i>0.3</i>	2	0.3
25-29	8	1.1	11	1.5	6	0.8	<i>7</i>	<i>1.0</i>	8	1.1
30-34	16	2.4	12	1.8	13	1.9	<i>8</i>	<i>1.2</i>	5	0.7
35-39	35	5.4	38	5.8	26	3.9	<i>22</i>	<i>3.3</i>	16	2.4
40-44	38	6.0	31	4.9	33	5.1	<i>28</i>	<i>4.3</i>	32	4.8
45-49	24	3.4	46	6.6	33	4.8	<i>27</i>	<i>4.0</i>	20	3.1
50-54	29	4.2	26	3.8	27	4.0	<i>18</i>	<i>2.7</i>	20	2.9
55-59	10	1.5	18	2.6	13	1.8	<i>15</i>	<i>2.1</i>	16	2.3
60-64	10	1.6	17	2.6	9	1.4	<i>3</i>	<i>0.5</i>	11	1.6
65 and older	11	0.7	17	1.0	18	1.0	<i>12</i>	<i>0.7</i>	12	0.7
Race/Ethnicity										
American Indian/Alaska Native ^b	2	1.7	0	0.0	1	0.9	<i>2</i>	<i>1.7</i>	2	1.7
Asian/Pacific Islander ^b	2	0.6	1	0.3	3	0.9	<i>1</i>	<i>0.3</i>	1	0.3
Black/African American ^b	28	1.3	41	1.8	36	1.6	<i>15</i>	<i>0.7</i>	19	0.8
Hispanic/LatinX	3	0.3	7	0.7	6	0.6	<i>6</i>	<i>0.6</i>	5	0.5
White/Caucasian ^b	138	2.1	152	2.3	139	2.1	<i>111</i>	<i>1.7</i>	104	1.6
Multiple Race	1	0.5	1	0.5	1	0.5	<i>1</i>	<i>0.5</i>	0	0.0
Unknown/Unspecified ^c	13	---	25	---	2	---	<i>6</i>	---	11	---
Exposure Category^d										
Heterosexual Contact ^e	95	---	123	---	92	---	<i>60</i>	---	65	---
IDU ^f	62	---	64	---	47	---	<i>44</i>	---	43	---
MSM ^f	4	---	3	---	11	---	<i>3</i>	---	4	---
Other Risk ^g	28	---	28	---	19	---	<i>10</i>	---	12	---
Unknown ^h	58	---	31	---	64	---	<i>63</i>	---	44	---
Total	187	1.8	227	2.2	188	1.8	142	1.4	142	1.3

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

^aRate is expressed per 100,000 population.

^bNon-Hispanic/LatinX.

^cRates are not available due to the lack of overall population data for the unknown/unspecified race/ethnicity group.

^dPeople may report more than one risk, so totals may not add up to the case total in bold. Rates are not presented due to the lack of population data for the exposure groups.

^eHeterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

^fIDU = injection drug use; MSM = men who report sex with men.

^gOther risk includes health care exposure or contact with a positive hepatitis B individual.

^hUnknown is defined as individuals who did not report any risks (includes missing) for acquiring hepatitis B.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 9. Acute Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020*			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	0	0.0	0.0	2	1.3	0.6	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	20-24	4	3.7	1.1	4	2.7	1.1	6	5.0	1.7	<i>1</i>	<i>1.2</i>	<i>0.3</i>	1	1.1	0.3
	25-29	5	4.7	1.4	8	5.3	2.2	4	3.3	1.1	<i>3</i>	<i>3.5</i>	<i>0.8</i>	3	3.2	0.9
	30-34	7	6.5	2.2	4	2.7	1.2	9	7.5	2.7	<i>5</i>	<i>5.9</i>	<i>1.5</i>	4	4.3	1.1
	35-39	23	21.5	7.2	19	12.7	5.9	16	13.3	4.9	<i>12</i>	<i>14.1</i>	<i>3.7</i>	11	11.7	3.3
	40-44	21	19.6	6.8	21	14.0	6.8	21	17.5	6.7	<i>15</i>	<i>17.6</i>	<i>4.7</i>	20	21.3	6.2
	45-49	11	10.3	3.2	36	24.0	10.6	23	19.2	6.9	<i>14</i>	<i>16.5</i>	<i>4.2</i>	14	14.9	4.4
	50-54	19	17.8	5.7	18	12.0	5.4	17	14.2	5.2	<i>12</i>	<i>14.1</i>	<i>3.6</i>	13	13.8	3.8
	55-59	4	3.7	1.2	13	8.7	3.9	5	4.2	1.5	<i>11</i>	<i>12.9</i>	<i>3.2</i>	11	11.7	3.2
	60-64	7	6.5	2.4	14	9.3	4.6	6	5.0	1.9	<i>3</i>	<i>3.5</i>	<i>1.0</i>	8	8.5	2.5
	65 and older	6	5.6	0.8	11	7.3	1.5	13	10.8	1.7	<i>9</i>	<i>10.6</i>	<i>1.2</i>	9	9.6	1.1
Total		107	100.0	2.1	150	100.0	3.0	120	100.0	2.3	<i>85</i>	<i>100.0</i>	<i>1.7</i>	94	100.0	1.8
Women	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	0	0.0	0.0	2	2.6	0.6	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	20-24	2	2.5	0.6	3	3.9	0.9	3	4.4	0.9	<i>1</i>	<i>1.8</i>	<i>0.3</i>	1	2.1	0.3
	25-29	3	3.8	0.8	3	3.9	0.8	2	2.9	0.5	<i>4</i>	<i>7.0</i>	<i>1.1</i>	5	10.4	1.4
	30-34	9	11.3	2.7	8	10.4	2.4	4	5.9	1.1	<i>3</i>	<i>5.3</i>	<i>0.9</i>	1	2.1	0.3
	35-39	12	15.0	3.6	19	24.7	5.6	10	14.7	2.9	<i>10</i>	<i>17.5</i>	<i>3.0</i>	5	10.4	1.5
	40-44	17	21.3	5.2	10	13.0	3.1	12	17.6	3.6	<i>13</i>	<i>22.8</i>	<i>3.9</i>	12	25.0	3.6
	45-49	13	16.3	3.7	10	13.0	2.8	11	16.2	3.1	<i>13</i>	<i>22.8</i>	<i>3.8</i>	6	12.5	1.8
	50-54	10	12.5	2.8	8	10.4	2.3	10	14.7	2.9	<i>6</i>	<i>10.5</i>	<i>1.7</i>	7	14.6	2.0
	55-59	6	7.5	1.7	5	6.5	1.4	8	11.8	2.2	<i>4</i>	<i>7.0</i>	<i>1.1</i>	5	10.4	1.4
	60-64	3	3.8	0.9	3	3.9	0.9	3	4.4	0.9	<i>0</i>	<i>0.0</i>	<i>0.0</i>	3	6.3	0.8
	65 and older	5	6.3	0.5	6	7.8	0.6	5	7.4	0.5	<i>3</i>	<i>5.3</i>	<i>0.3</i>	3	6.3	0.3
Total		80	100.0	1.5	77	100.0	1.4	68	100.0	1.3	<i>57</i>	<i>100.0</i>	<i>1.1</i>	48	100.0	0.9

Continued

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

^aRate is expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 9 (Continued). Acute Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020*			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Total	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	0	0.0	0.0	4	1.8	0.6	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	20-24	6	3.2	0.9	7	3.1	1.0	9	4.8	1.3	<i>2</i>	<i>1.4</i>	<i>0.3</i>	2	1.4	0.3
	25-29	8	4.3	1.1	11	4.8	1.5	6	3.2	0.8	<i>7</i>	<i>4.9</i>	<i>1.0</i>	8	5.6	1.1
	30-34	16	8.6	2.4	12	5.3	1.8	13	6.9	1.9	<i>8</i>	<i>5.6</i>	<i>1.2</i>	5	3.5	0.7
	35-39	35	18.7	5.4	38	16.7	5.8	26	13.8	3.9	<i>22</i>	<i>15.5</i>	<i>3.3</i>	16	11.3	2.4
	40-44	38	20.3	6.0	31	13.7	4.9	33	17.6	5.1	<i>28</i>	<i>19.7</i>	<i>4.3</i>	32	22.5	4.8
	45-49	24	12.8	3.4	46	20.3	6.6	34	18.1	4.9	<i>27</i>	<i>19.0</i>	<i>4.0</i>	20	14.1	3.1
	50-54	29	15.5	4.2	26	11.5	3.8	27	14.4	4.0	<i>18</i>	<i>12.7</i>	<i>2.7</i>	20	14.1	2.9
	55-59	10	5.3	1.5	18	7.9	2.6	13	6.9	1.8	<i>15</i>	<i>10.6</i>	<i>2.1</i>	16	11.3	2.3
	60-64	10	5.3	1.6	17	7.5	2.6	9	4.8	1.4	<i>3</i>	<i>2.1</i>	<i>0.5</i>	11	7.7	1.6
	65 and older	11	5.9	0.7	17	7.5	1.0	18	9.6	1.0	<i>12</i>	<i>8.5</i>	<i>0.7</i>	12	8.5	0.7
Total		187	100.0	1.8	227	100.0	2.2	188	100.0	1.8	<i>142</i>	<i>100.0</i>	<i>1.4</i>	142	100.0	1.3

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

^aRate is expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 10. Acute Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2017-2021

Gender	Race/Ethnicity	2017			2018			2019			2020*			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	American Indian/Alaska Native ^b	1	0.9	1.8	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	Asian/Pacific Islander ^b	1	0.9	0.7	0	0.0	0.0	2	1.7	1.2	<i>1</i>	<i>1.2</i>	<i>0.6</i>	0	0.0	0.0
	Black/African American ^b	12	11.2	1.2	30	20.0	2.9	26	21.7	2.5	<i>8</i>	<i>9.4</i>	<i>0.8</i>	12	12.8	1.1
	Hispanic/LatinX	3	2.8	0.6	5	3.3	1.0	6	5.0	1.1	<i>3</i>	<i>3.5</i>	<i>0.6</i>	5	5.3	0.9
	White/Caucasian ^b	80	74.8	2.5	96	64.0	3.0	84	70.0	2.6	<i>69</i>	<i>81.2</i>	<i>2.2</i>	72	76.6	2.2
	Multiple Races	1	0.9	1.1	0	0.0	0.0	1	0.8	1.0	<i>1</i>	<i>1.2</i>	<i>1.0</i>	0	0.0	<i>0.0</i>
	Unknown/Unspecified ^c	9	8.4	---	19	12.7	---	1	0.8	---	<i>3</i>	<i>3.5</i>	---	5	5.3	---
Total		107	100.0	2.1	150	100.0	3.0	120	100.0	2.3	<i>85</i>	<i>100.0</i>	<i>1.7</i>	94	100.0	1.8
Women	American Indian/Alaska Native ^b	1	1.3	1.7	0	0.0	0.0	1	1.5	1.7	<i>2</i>	<i>3.5</i>	<i>3.4</i>	2	4.2	3.3
	Asian/Pacific Islander ^b	1	1.3	0.6	1	1.3	0.6	1	1.5	0.6	<i>0</i>	<i>0.0</i>	<i>0.0</i>	1	2.1	0.6
	Black/African American ^b	16	20.0	1.4	11	14.3	0.9	10	14.7	0.8	<i>7</i>	<i>12.3</i>	<i>0.6</i>	7	14.6	0.6
	Hispanic/LatinX	0	0.0	0.0	2	2.6	0.4	0	0.0	0.0	<i>3</i>	<i>5.3</i>	<i>0.6</i>	0	0.0	0.0
	White/Caucasian ^b	58	72.5	1.7	56	72.7	1.7	55	80.9	1.6	<i>42</i>	<i>73.7</i>	<i>1.3</i>	32	66.7	1.0
	Multiple Races	0	0.0	0.0	1	1.3	1.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	Unknown/Unspecified ^c	4	5.0	---	6	7.8	---	1	1.5	---	<i>3</i>	<i>5.3</i>	---	6	12.5	---
Total		80	100.0	1.5	77	100.0	1.4	68	100.0	1.3	<i>57</i>	<i>100.0</i>	<i>1.1</i>	48	100.0	0.9
Total	American Indian/Alaska Native ^b	2	1.1	1.7	0	0.0	0.0	1	0.5	0.9	<i>2</i>	<i>1.4</i>	<i>1.7</i>	2	1.4	1.7
	Asian/Pacific Islander ^b	2	1.1	0.6	1	0.4	0.3	3	1.6	0.9	<i>1</i>	<i>0.7</i>	<i>0.3</i>	1	0.7	0.3
	Black/African American ^b	28	15.0	1.3	41	18.1	1.8	36	19.1	1.6	<i>15</i>	<i>10.6</i>	<i>0.7</i>	19	13.4	0.8
	Hispanic/LatinX	3	1.6	0.3	7	3.1	0.7	6	3.2	0.6	<i>6</i>	<i>4.2</i>	<i>0.6</i>	5	3.5	0.5
	White/Caucasian ^b	138	73.8	2.1	152	67.0	2.3	139	73.9	2.1	<i>111</i>	<i>78.2</i>	<i>1.7</i>	104	73.2	1.6
	Multiple Races	1	0.5	0.5	1	0.4	0.5	1	0.5	0.5	<i>1</i>	<i>0.7</i>	<i>0.5</i>	0	0.0	<i>0.0</i>
	Unknown/Unspecified ^c	13	7.0	---	25	11.0	---	2	1.1	---	<i>6</i>	<i>4.2</i>	---	11	7.7	---
Total		187	100.0	1.8	227	100.0	2.2	188	100.0	1.8	<i>142</i>	<i>100.0</i>	<i>1.4</i>	142	100.0	1.3

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

^aRate is expressed per 100,000 population.

^bNon-Hispanic/LatinX.

^cRates are not available due to the lack of overall population data for the unknown/unspecified race/ethnicity group.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 11. Acute Hepatitis B Cases in North Carolina by Gender, Risk of Exposure^a, and Year of Diagnosis, 2017-2021

Gender	Exposure Category	2017		2018		2019		2020*		2021	
		Cases	% ^a	Cases	% ^a	Cases	% ^a	Cases	% ^a	Cases	% ^a
Men	Heterosexual ^b	51	47.7	81	54.0	59	49.2	36	42.4	41	43.6
	IDU ^c	41	38.3	38	25.3	31	25.8	27	31.8	31	33.0
	MSM ^c	4	3.7	3	2.0	11	9.2	3	3.5	4	4.3
	Other Risks ^d	13	12.1	16	10.7	10	8.3	7	8.2	7	7.4
	Unknown ^e	34	31.8	45	30.0	39	32.5	28	32.9	29	30.9
Women	Heterosexual ^b	44	55.0	42	52.5	33	41.3	24	30.0	24	30.0
	IDU ^c	21	26.3	26	32.5	26	32.5	17	21.3	12	15.0
	Other Risks ^d	15	18.8	12	15.0	9	11.3	3	3.8	5	6.3
	Unknown ^e	24	30.0	19	23.8	24	30.0	25	31.3	15	18.8
Total	Heterosexual ^b	95	50.8	123	54.2	92	48.9	60	42.3	65	45.8
	IDU ^c	62	33.2	64	28.2	47	25.0	44	31.0	43	30.3
	MSM ^c	4	2.1	3	1.3	11	5.9	3	2.1	4	2.8
	Other Risks ^d	28	15.0	28	12.3	19	10.1	10	7.0	12	8.5
	Unknown ^e	58	31.0	64	28.2	63	33.5	53	37.3	44	31.0
Total^a		187	100.0	227	100.0	188	100.0	142	100.0	142	100.0

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

^aPeople may report more than one risk, so totals may not add up to the case or percentage total in bold. Rates are not presented due to the lack of population data for the exposure groups.

^bHeterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

^cIDU = injection drug use; MSM = men who report sex with men.

^dOther risk includes health care exposure or contact with a positive hepatitis B individual.

^eUnknown is defined as individuals who did not report any risks for acquiring hepatitis B.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 12. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina as of 12/31/2021

Demographics	Men			Women			Total ⁱ		
	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Current Age (Year)									
Less than 13	14	0.1	1.7	7	0.1	0.9	21	0.1	1.3
13-14	8	0.0	5.5	8	0.1	5.8	16	0.1	5.7
15-19	48	0.3	13.5	53	0.5	15.5	101	0.4	14.5
20-24	132	0.8	36.6	102	0.9	30.0	234	0.9	33.4
25-29	318	1.9	90.5	270	2.5	77.3	588	2.2	83.9
30-34	705	4.3	201.3	629	5.8	173.7	1,336	4.9	187.6
35-39	999	6.1	302.5	1,044	9.6	305.7	2,046	7.5	304.6
40-44	1,536	9.4	476.0	1,380	12.7	408.5	2,922	10.7	442.4
45-49	1,739	10.6	544.6	1,458	13.4	438.9	3,205	11.7	491.9
50-54	1,933	11.8	564.5	1,442	13.3	407.8	3,387	12.4	486.6
55-59	2,110	12.9	622.5	1,113	10.3	310.6	3,231	11.8	463.4
60-64	2,067	12.6	640.0	948	8.7	267.9	3,026	11.1	447.1
65 and older	4,771	29.1	599.6	2,398	22.1	240.4	7,191	26.3	401.0
Missing ^b	5	0.0	--	3	0.0	--	8	0.0	--
Race/Ethnicity									
American Indian/Alaska Native ^c	89	0.5	159.4	35	0.3	58.4	124	0.5	107.1
Asian/Pacific Islander ^c	3,697	22.6	2,138.5	3,868	35.6	2,137.6	7,583	27.8	2,143.1
Black/African American ^c	5,486	33.5	520.1	2,997	27.6	251.0	8,503	31.1	378.1
Hispanic/LatinX	356	2.2	64.2	419	3.9	80.0	776	2.8	72.0
White/Caucasian ^c	4,838	29.5	150.8	2,340	21.6	70.5	7,197	26.4	110.2
Multiple Race	263	1.6	239.5	236	2.2	203.6	499	1.8	221.1
Unknown/Unspecified ^b	1,656	10.1	--	960	8.8	--	2,630	9.6	--
Exposure Category^d									
Heterosexual Contact ^e	2,635	16.1	--	2,304	21.2	--	4,939	18.1	--
IDU ^f	425	2.6	--	184	1.7	--	609	2.2	--
MSM ^f	302	1.8	--	--	--	--	302	1.1	--
Other Risk ^g	178	1.1	--	129	1.2	--	307	1.1	--
Unknown ^h	13,232	80.8	--	8,446	77.8	--	21,750	79.6	--
Totalⁱ	16,385	100.0	317.8	10,855	100.0	201.2	27,312	100.0	258.9

^aRate is expressed per 100,000 population.

^bRates are not available due to the lack of overall population data for the missing age and unknown/unspecified race/ethnicity groups.

^cNon-Hispanic/LatinX.

^dPeople may report more than one risk, so totals and percentages may not add up to the case total in bold. Rates are not presented due to the lack of population data for the exposure groups.

^eHeterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

^fIDU = injection drug use; MSM = men who report sex with men.

^gOther risk includes health care exposure or contact with a positive hepatitis B individual.

^hUnknown is defined as individuals who did not report any risks for acquiring hepatitis B.

ⁱTotals includes cases with missing gender.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 13. Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2017-2021

Demographics	2017		2018		2019		2020*		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Gender										
Men	701	14.0	710	14.0	729	14.3	<i>538</i>	<i>10.5</i>	524	10.2
Women	477	9.0	418	7.8	428	7.9	<i>352</i>	<i>6.6</i>	338	6.3
Age at Diagnosis										
Less than 13	4	0.2	3	0.2	4	0.2	<i>1</i>	<i>0.1</i>	5	0.3
13-14	2	0.8	4	1.5	1	0.4	<i>0</i>	<i>0.0</i>	0	0.0
15-19	17	2.5	14	2.0	14	2.0	<i>3</i>	<i>0.4</i>	2	0.3
20-24	46	6.6	48	6.9	42	6.0	<i>31</i>	<i>4.5</i>	29	4.1
25-29	92	12.8	103	14.1	86	11.7	<i>60</i>	<i>8.5</i>	65	9.3
30-34	135	20.6	114	17.2	131	19.2	<i>93</i>	<i>13.5</i>	86	12.1
35-39	185	28.4	152	23.1	157	23.7	<i>102</i>	<i>15.4</i>	123	18.3
40-44	140	22.0	135	21.2	148	23.1	<i>109</i>	<i>16.9</i>	109	16.5
45-49	124	17.8	130	18.7	133	19.3	<i>99</i>	<i>14.6</i>	90	13.8
50-54	104	15.1	110	16.2	96	14.2	<i>110</i>	<i>16.2</i>	95	13.6
55-59	111	16.1	80	11.5	115	16.3	<i>90</i>	<i>12.8</i>	82	11.8
60-64	80	12.7	84	13.0	87	13.2	<i>67</i>	<i>10.1</i>	65	9.6
65 and older	138	8.5	151	8.9	143	8.2	<i>125</i>	<i>7.2</i>	113	6.3
Race/Ethnicity										
American Indian/Alaska Native ^b	12	10.4	2	1.7	2	1.7	<i>4</i>	<i>3.5</i>	6	5.2
Asian/Pacific Islander ^b	287	92.0	247	76.4	302	90.0	<i>161</i>	<i>47.1</i>	185	52.3
Black/African American ^b	337	15.3	291	13.1	331	14.8	<i>221</i>	<i>9.9</i>	212	9.4
Hispanic/LatinX	23	2.4	40	4.0	34	3.3	<i>32</i>	<i>3.1</i>	38	3.5
White/Caucasian ^b	317	4.9	334	5.1	381	5.8	<i>319</i>	<i>4.9</i>	274	4.2
Multiple Race	21	10.7	22	10.8	16	7.6	<i>15</i>	<i>6.9</i>	11	4.9
Unknown/Unspecified ^c	181	---	192	---	91	---	<i>138</i>	---	138	---
Exposure Category^d										
Heterosexual Contact ^e	408	---	440	---	400	---	<i>230</i>	---	240	---
IDU ^f	78	---	89	---	84	---	<i>85</i>	---	70	---
MSM ^f	25	---	17	---	24	---	<i>13</i>	---	18	---
Other Risk ^g	27	---	31	---	26	---	<i>14</i>	---	14	---
Unknown ^h	701	---	621	---	687	---	<i>593</i>	---	561	---
Totalⁱ	1,178	11.5	1,128	10.9	1,157	11.0	<i>890</i>	<i>8.5</i>	864	8.2

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

^aRate is expressed per 100,000 population.

^bNon-Hispanic/LatinX.

^cRates are not available due to the lack of overall population data for the unknown/unspecified race/ethnicity group.

^dPeople may report more than one risk, so totals may not add up to the case total in bold. Rates are not presented due to the lack of population data for the exposure groups.

^eHeterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

^fIDU = injection drug use; MSM = men who report sex with men.

^gOther risk includes health care exposure or contact with a positive hepatitis B individual.

^hUnknown is defined as individuals who did not report any risks for acquiring hepatitis B.

ⁱTotals may include cases with missing gender information.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 14. Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020*			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	Less than 13	2	0.3	0.2	3	0.4	0.4	2	0.3	0.2	<i>1</i>	<i>0.2</i>	<i>0.1</i>	2	0.4	0.2
	13-14	1	0.1	0.7	1	0.1	0.7	1	0.1	0.7	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	10	1.4	2.9	7	1.0	2.0	11	1.5	3.1	<i>2</i>	<i>0.4</i>	<i>0.6</i>	1	0.2	0.3
	20-24	20	2.9	5.5	24	3.4	6.6	19	2.6	5.2	<i>15</i>	<i>2.8</i>	<i>4.2</i>	15	2.9	4.2
	25-29	47	6.7	13.1	49	6.9	13.4	52	7.1	14.0	<i>28</i>	<i>5.2</i>	<i>7.9</i>	40	7.6	11.4
	30-34	71	10.1	22.1	60	8.5	18.4	72	9.9	21.4	<i>45</i>	<i>8.4</i>	<i>13.3</i>	55	10.5	15.7
	35-39	115	16.4	36.2	94	13.2	29.3	99	13.6	30.6	<i>68</i>	<i>12.6</i>	<i>20.8</i>	68	13.0	20.6
	40-44	91	13.0	29.3	104	14.6	33.6	97	13.3	31.2	<i>71</i>	<i>13.2</i>	<i>22.4</i>	74	14.1	22.9
	45-49	72	10.3	21.1	85	12.0	25.0	87	11.9	26.0	<i>66</i>	<i>12.3</i>	<i>19.8</i>	61	11.6	19.1
	50-54	73	10.4	21.9	75	10.6	22.6	62	8.5	18.8	<i>76</i>	<i>14.1</i>	<i>22.7</i>	62	11.8	18.1
	55-59	67	9.6	20.3	49	6.9	14.7	78	10.7	23.1	<i>61</i>	<i>11.3</i>	<i>17.9</i>	50	9.5	14.8
	60-64	50	7.1	16.9	60	8.5	19.8	62	8.5	20.1	<i>39</i>	<i>7.2</i>	<i>12.4</i>	38	7.3	11.8
	65 and older	82	11.7	11.5	99	13.9	13.4	87	11.9	11.3	<i>66</i>	<i>12.3</i>	<i>8.6</i>	58	11.1	7.3
	Total		701	100.0	14.0	710	100.0	14.0	729	100.0	14.3	<i>538</i>	<i>100.0</i>	<i>10.5</i>	524	100.0
Women	Less than 13	2	0.4	0.2	0	0.0	0.0	2	0.5	0.2	<i>0</i>	<i>0.0</i>	<i>0.0</i>	3	0.9	0.4
	13-14	1	0.2	0.8	3	0.7	2.3	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	7	1.5	2.1	7	1.7	2.1	3	0.7	0.9	<i>1</i>	<i>0.3</i>	<i>0.3</i>	1	0.3	0.3
	20-24	26	5.5	7.7	24	5.7	7.1	23	5.4	6.8	<i>16</i>	<i>4.5</i>	<i>4.8</i>	14	4.1	4.1
	25-29	45	9.4	12.6	54	12.9	14.9	34	7.9	9.3	<i>32</i>	<i>9.1</i>	<i>9.1</i>	25	7.4	7.2
	30-34	64	13.4	19.2	54	12.9	16.0	59	13.8	17.0	<i>48</i>	<i>13.6</i>	<i>13.7</i>	31	9.2	8.6
	35-39	70	14.7	21.0	58	13.9	17.2	58	13.6	17.1	<i>34</i>	<i>9.7</i>	<i>10.1</i>	55	16.3	16.1
	40-44	49	10.3	15.0	31	7.4	9.5	51	11.9	15.4	<i>38</i>	<i>10.8</i>	<i>11.5</i>	35	10.4	10.4
	45-49	52	10.9	14.6	45	10.8	12.6	46	10.7	13.0	<i>33</i>	<i>9.4</i>	<i>9.6</i>	29	8.6	8.7
	50-54	31	6.5	8.8	35	8.4	10.0	34	7.9	9.8	<i>34</i>	<i>9.7</i>	<i>9.9</i>	32	9.5	9.1
	55-59	44	9.2	12.2	31	7.4	8.5	37	8.6	10.1	<i>29</i>	<i>8.2</i>	<i>8.0</i>	32	9.5	8.9
	60-64	30	6.3	8.9	24	5.7	7.0	25	5.8	7.2	<i>28</i>	<i>8.0</i>	<i>8.1</i>	27	8.0	7.6
	65 and older	56	11.7	6.1	52	12.4	5.5	56	13.1	5.7	<i>59</i>	<i>16.8</i>	<i>6.1</i>	54	16.0	5.4
	Total		477	100.0	9.0	418	100.0	7.8	428	100.0	7.9	<i>352</i>	<i>100.0</i>	<i>6.6</i>	338	100.0

Continued

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

^aRate is expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 14 (Continued). Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020*			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Total ^b	Less than 13	4	0.3	0.2	3	0.3	0.2	4	0.3	0.2	<i>1</i>	<i>0.1</i>	<i>0.1</i>	5	0.6	0.3
	13-14	2	0.2	0.8	4	0.4	1.5	1	0.1	0.4	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	17	1.4	2.5	14	1.2	2.0	14	1.2	2.0	3	<i>0.3</i>	<i>0.4</i>	2	0.2	0.3
	20-24	46	3.9	6.6	48	4.3	6.9	42	3.6	6.0	31	<i>3.5</i>	<i>4.5</i>	29	3.4	4.1
	25-29	92	7.8	12.8	103	9.1	14.1	86	7.4	11.7	60	<i>6.7</i>	<i>8.5</i>	65	7.5	9.3
	30-34	135	11.5	20.6	114	10.1	17.2	131	11.3	19.2	93	<i>10.4</i>	<i>13.5</i>	86	10.0	12.1
	35-39	185	15.7	28.4	152	13.5	23.1	157	13.6	23.7	102	<i>11.5</i>	<i>15.4</i>	123	14.2	18.3
	40-44	140	11.9	22.0	135	12.0	21.2	148	12.8	23.1	109	<i>12.2</i>	<i>16.9</i>	109	12.6	16.5
	45-49	124	10.5	17.8	130	11.5	18.7	133	11.5	19.3	99	<i>11.1</i>	<i>14.6</i>	90	10.4	13.8
	50-54	104	8.8	15.1	110	9.8	16.2	96	8.3	14.2	110	<i>12.4</i>	<i>16.2</i>	95	11.0	13.6
	55-59	111	9.4	16.1	80	7.1	11.5	115	9.9	16.3	90	<i>10.1</i>	<i>12.8</i>	82	9.5	11.8
	60-64	80	6.8	12.7	84	7.4	13.0	87	7.5	13.2	67	<i>7.5</i>	<i>10.1</i>	65	7.5	9.6
65 and older	138	11.7	8.5	151	13.4	8.9	143	12.4	8.2	125	<i>14.0</i>	<i>7.2</i>	113	13.1	6.3	
Total		1,178	100.0	11.5	1,128	100.0	10.9	1,157	100.0	11.0	890	100.0	8.5	864	100.0	8.2

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

^aRate is expressed per 100,000 population.

^bTotals may include cases with missing gender information.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 15. Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2017-2021

Gender	Race/Ethnicity	2017			2018			2019			2020*			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	American Indian/Alaska Native ^b	10	1.4	18.0	1	0.1	1.8	2	0.3	3.6	<i>4</i>	<i>0.7</i>	<i>7.2</i>	3	0.6	5.4
	Asian/Pacific Islander ^b	139	19.8	91.9	131	18.5	83.6	167	22.9	102.5	<i>71</i>	<i>13.2</i>	<i>42.5</i>	92	17.6	53.2
	Black/African American ^b	211	30.1	20.5	207	29.2	20.0	221	30.3	21.1	<i>136</i>	<i>25.3</i>	<i>13.0</i>	144	27.5	13.7
	Hispanic/LatinX	14	2.0	2.8	27	3.8	5.3	19	2.6	3.6	<i>16</i>	<i>3.0</i>	<i>3.0</i>	22	4.2	4.0
	White/Caucasian ^b	197	28.1	6.2	209	29.4	6.5	254	34.8	7.9	<i>206</i>	<i>38.3</i>	<i>6.4</i>	178	34.0	5.5
	Multiple Races	14	2.0	14.6	11	1.5	11.1	11	1.5	10.7	<i>12</i>	<i>2.2</i>	<i>11.4</i>	5	1.0	4.6
	Unknown/Unspecified ^c	116	16.5	---	124	17.5	---	55	7.5	---	<i>93</i>	<i>17.3</i>	---	80	15.3	---
Total		701	100.0	14.0	710	100.0	14.0	729	100.0	14.3	<i>538</i>	<i>100.0</i>	<i>10.5</i>	524	100.0	10.2
Women	American Indian/Alaska Native ^b	2	0.4	3.4	1	0.2	1.7	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	3	0.9	5.0
	Asian/Pacific Islander ^b	148	31.0	92.2	116	27.8	69.7	135	31.5	78.1	<i>90</i>	<i>25.6</i>	<i>51.4</i>	93	27.5	51.4
	Black/African American ^b	126	26.4	10.8	84	20.1	7.1	110	25.7	9.2	<i>85</i>	<i>24.1</i>	<i>7.2</i>	67	19.8	5.6
	Hispanic/LatinX	9	1.9	1.9	13	3.1	2.7	15	3.5	3.0	<i>16</i>	<i>4.5</i>	<i>3.2</i>	16	4.7	3.1
	White/Caucasian ^b	120	25.2	3.6	125	29.9	3.7	127	29.7	3.8	<i>113</i>	<i>32.1</i>	<i>3.4</i>	95	28.1	2.9
	Multiple Races	7	1.5	6.9	11	2.6	10.5	5	1.2	4.6	<i>3</i>	<i>0.9</i>	<i>2.7</i>	6	1.8	5.2
	Unknown/Unspecified ^c	65	13.6	---	68	16.3	---	36	8.4	---	<i>45</i>	<i>12.8</i>	---	58	17.2	---
Total		477	100.0	9.0	418	100.0	7.8	428	100.0	7.9	<i>352</i>	<i>100.0</i>	<i>6.6</i>	338	100.0	6.3
Total^d	American Indian/Alaska Native ^b	12	1.0	10.4	2	0.2	1.7	2	0.2	1.7	<i>4</i>	<i>0.4</i>	<i>3.5</i>	6	0.7	5.2
	Asian/Pacific Islander ^b	287	24.4	92.0	247	21.9	76.4	302	26.1	90.0	<i>161</i>	<i>18.1</i>	<i>47.1</i>	185	21.4	52.3
	Black/African American ^b	337	28.6	15.3	291	25.8	13.1	331	28.6	14.8	<i>221</i>	<i>24.8</i>	<i>9.9</i>	212	24.5	9.4
	Hispanic/LatinX	23	2.0	2.4	40	3.5	4.0	34	2.9	3.3	<i>32</i>	<i>3.6</i>	<i>3.1</i>	38	4.4	3.5
	White/Caucasian ^b	317	26.9	4.9	334	29.6	5.1	381	32.9	5.8	<i>319</i>	<i>35.8</i>	<i>4.9</i>	274	31.7	4.2
	Multiple Races	21	1.8	10.7	22	2.0	10.8	16	1.4	7.6	<i>15</i>	<i>1.7</i>	<i>6.9</i>	11	1.3	4.9
	Unknown/Unspecified ^c	181	15.4	---	192	17.0	---	91	7.9	---	<i>138</i>	<i>15.5</i>	---	138	16.0	---
Total		1,178	100.0	11.5	1,128	100.0	10.9	1,157	100.0	11.0	<i>890</i>	<i>100.0</i>	<i>8.5</i>	864	100.0	8.2

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

^aRate is expressed per 100,000 population.

^bNon-Hispanic/LatinX.

^cRates are not available due to the lack of overall population data for the unknown/unspecified race/ethnicity group.

^dTotals may include cases with missing gender information.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 16. Diagnosed Chronic Hepatitis B Cases in North Carolina by Gender, Risk of Exposure^a, and Year of Diagnosis, 2017-2021

Gender	Exposure Category	2017		2018		2019		2020*		2021	
		Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
Men	Heterosexual ^b	225	32.1	258	36.3	230	31.6	<i>108</i>	<i>20.1</i>	118	22.5
	IDU ^c	58	8.3	61	8.6	55	7.5	<i>56</i>	<i>10.4</i>	50	9.5
	MSM ^c	25	3.6	17	2.4	24	3.3	<i>13</i>	<i>2.4</i>	18	3.4
	Other Risks ^d	21	3.0	20	2.8	13	1.8	<i>7</i>	<i>1.3</i>	8	1.5
	Unknown ^e	422	60.2	398	56.1	444	60.9	<i>381</i>	<i>70.8</i>	356	67.9
Women	Heterosexual ^b	183	38.4	182	43.5	170	39.7	<i>122</i>	<i>34.7</i>	122	36.1
	IDU ^c	20	4.2	28	6.7	29	6.8	<i>29</i>	<i>8.2</i>	20	5.9
	Other Risks ^d	6	1.3	11	2.6	13	3.0	<i>7</i>	<i>2.0</i>	6	1.8
	Unknown ^e	279	58.5	223	53.3	243	56.8	<i>212</i>	<i>60.2</i>	203	60.1
Total^f	Heterosexual ^b	408	34.6	440	39.0	400	34.6	<i>230</i>	<i>25.8</i>	240	27.8
	IDU ^c	78	6.6	89	7.9	84	7.3	<i>85</i>	<i>9.6</i>	70	8.1
	MSM ^c	25	2.1	17	1.5	24	2.1	<i>13</i>	<i>1.5</i>	18	2.1
	Other Risks ^d	27	2.3	27	2.4	31	2.7	<i>26</i>	<i>2.9</i>	12	1.4
	Unknown ^e	701	59.5	621	55.1	687	59.4	<i>593</i>	<i>66.6</i>	561	64.9
Total		1,178	100.0	1,128	100.0	1,157	100.0	890	100.0	864	100.0

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

^aPeople may report more than one risk, so totals may not add up to the case total in bold. Rates are not presented due to the lack of population data for the exposure groups.

^bHeterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

^cIDU = injection drug use; MSM = men who report sex with men.

^dOther risk includes health care exposure or contact with a positive hepatitis B individual.

^eUnknown is defined as individuals who did not report any risks for acquiring hepatitis B.

^fTotals may include cases with missing gender information.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 17. Acute Hepatitis C Annual Rates in North Carolina by Selected Demographics, 2017-2021

Demographics	2017		2018		2019		2020 ^{^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Gender										
Men	99	2.0	116	2.3	96	1.9	<i>60</i>	<i>1.2</i>	56	1.1
Women	93	1.8	87	1.6	94	1.7	<i>49</i>	<i>0.9</i>	43	0.8
Age at Diagnosis										
Less than 13	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
13-14	0	0.0	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	0	0.0
15-19	3	0.4	2	0.3	0	0.0	<i>1</i>	<i>0.1</i>	2	0.3
20-24	28	4.0	29	4.1	16	2.3	<i>5</i>	<i>0.7</i>	3	0.4
25-29	36	5.0	52	7.1	37	5.0	<i>19</i>	<i>2.7</i>	12	1.7
30-34	33	5.0	34	5.1	30	4.4	<i>27</i>	<i>3.9</i>	25	3.5
35-39	21	3.2	27	4.1	40	6.0	<i>28</i>	<i>4.2</i>	23	3.4
40-44	19	3.0	16	2.5	20	3.1	<i>12</i>	<i>1.9</i>	10	1.5
45-49	19	2.7	13	1.9	11	1.6	<i>7</i>	<i>1.0</i>	7	1.1
50-54	14	2.0	15	2.2	18	2.7	<i>4</i>	<i>0.6</i>	7	1.0
55-59	7	1.0	6	0.9	8	1.1	<i>2</i>	<i>0.3</i>	4	0.6
60-64	9	1.4	8	1.2	8	1.2	<i>2</i>	<i>0.3</i>	4	0.6
65 and older	3	0.2	1	0.1	2	0.1	<i>2</i>	<i>0.1</i>	3	0.2
Race/Ethnicity										
American Indian/Alaska Native ^b	9	7.8	12	10.4	8	6.9	<i>3</i>	<i>2.6</i>	2	1.7
Asian/Pacific Islander ^b	1	0.3	0	0.0	0	0.0	<i>0</i>	<i>0.0</i>	2	0.6
Black/African American ^b	13	0.6	12	0.5	17	0.8	<i>5</i>	<i>0.2</i>	6	0.3
Hispanic/Latino	4	0.4	2	0.2	5	0.5	<i>1</i>	<i>0.1</i>	1	0.1
White/Caucasian ^b	147	2.3	155	2.4	154	2.3	<i>94</i>	<i>1.4</i>	79	1.2
Multiple Race	1	0.5	2	1.0	1	0.5	<i>1</i>	<i>0.5</i>	0	0.0
Unknown/Unspecified ^c	17	---	20	---	5	---	<i>5</i>	<i>---</i>	10	---
Exposure Category^d										
Sexual Contact ^e	34	---	31	---	28	---	<i>12</i>	<i>---</i>	13	---
IDU ^f	88	---	97	---	89	---	<i>55</i>	<i>---</i>	53	---
Other Risk ^g	3	---	1	---	1	---	<i>0</i>	<i>---</i>	2	---
Unknown ^h	67	---	74	---	72	---	<i>42</i>	<i>---</i>	32	---
Totalⁱ	192	1.9	203	2.0	190	1.8	<i>109</i>	<i>1.0</i>	100	0.9

[^]Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

^{*}2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. 2020 data is italicized for this reason.

^aRate is expressed per 100,000 population.

^bNon-Hispanic/Latino.

^cRates are not available due to the lack of overall population data for the unknown/unspecified race/ethnicity group.

^dRisk is based on a hierarchical risk. Rates are not presented due to the lack of population data for the exposure groups. It is likely that sexual contact (heterosexual or MSM), while true for the patient, is not the transmission route for the virus. These data likely reflect under-reporting of higher-risk exposures such as injecting drug use.

^eSexual contact includes heterosexual and men who report sex with men.

^fIDU = injection drug use.

^gOther risk includes health care exposure or contact with a positive hepatitis B individual.

^hUnknown is defined as individuals who did not report any risks (including missing) for acquiring hepatitis C.

ⁱTotal may include cases with missing gender.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 18. Acute Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020 ^{^*}			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	1	1.0	0.3	2	1.7	0.6	0	0.0	0.0	<i>1</i>	<i>1.7</i>	<i>0.3</i>	1	1.8	0.3
	20-24	9	9.1	2.5	15	12.9	4.1	7	7.3	1.9	<i>3</i>	<i>5.0</i>	<i>0.8</i>	3	5.4	0.8
	25-29	18	18.2	5.0	33	28.4	9.0	21	21.9	5.7	<i>8</i>	<i>13.3</i>	<i>2.3</i>	5	8.9	1.4
	30-34	20	20.2	6.2	12	10.3	3.7	14	14.6	4.2	<i>15</i>	<i>25.0</i>	<i>4.4</i>	11	19.6	3.1
	35-39	14	14.1	4.4	17	14.7	5.3	16	16.7	4.9	<i>14</i>	<i>23.3</i>	<i>4.3</i>	13	23.2	3.9
	40-44	7	7.1	2.3	9	7.8	2.9	13	13.5	4.2	<i>8</i>	<i>13.3</i>	<i>2.5</i>	5	8.9	1.5
	45-49	10	10.1	2.9	7	6.0	2.1	4	4.2	1.2	<i>4</i>	<i>6.7</i>	<i>1.2</i>	6	10.7	1.9
	50-54	9	9.1	2.7	11	9.5	3.3	11	11.5	3.3	<i>3</i>	<i>5.0</i>	<i>0.9</i>	5	8.9	1.5
	55-59	2	2.0	0.6	4	3.4	1.2	5	5.2	1.5	<i>0</i>	<i>0.0</i>	<i>0.0</i>	1	1.8	0.3
	60-64	7	7.1	2.4	5	4.3	1.6	3	3.1	1.0	<i>2</i>	<i>3.3</i>	<i>0.6</i>	4	7.1	1.2
	65 and older	2	2.0	0.3	1	0.9	0.1	2	2.1	0.3	<i>2</i>	<i>3.3</i>	<i>0.3</i>	2	3.6	0.3
Total		99	100.0	2.0	116	100.0	2.3	96	100.0	1.9	<i>60</i>	<i>100.0</i>	<i>1.2</i>	56	100.0	1.1
Women	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	2	2.2	0.6	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	1	2.3	0.3
	20-24	19	20.4	5.6	14	16.1	4.1	9	9.6	2.7	<i>2</i>	<i>4.1</i>	<i>0.6</i>	0	0.0	0.0
	25-29	18	19.4	5.0	19	21.8	5.2	16	17.0	4.4	<i>11</i>	<i>22.4</i>	<i>3.1</i>	7	16.3	2.0
	30-34	13	14.0	3.9	22	25.3	6.5	16	17.0	4.6	<i>12</i>	<i>24.5</i>	<i>3.4</i>	13	30.2	3.6
	35-39	7	7.5	2.1	10	11.5	3.0	24	25.5	7.1	<i>14</i>	<i>28.6</i>	<i>4.1</i>	10	23.3	2.9
	40-44	12	12.9	3.7	7	8.0	2.1	7	7.4	2.1	<i>4</i>	<i>8.2</i>	<i>1.2</i>	5	11.6	1.5
	45-49	9	9.7	2.5	6	6.9	1.7	7	7.4	2.0	<i>3</i>	<i>6.1</i>	<i>0.9</i>	1	2.3	0.3
	50-54	5	5.4	1.4	4	4.6	1.1	7	7.4	2.0	<i>1</i>	<i>2.0</i>	<i>0.3</i>	2	4.7	0.6
	55-59	5	5.4	1.4	2	2.3	0.6	3	3.2	0.8	<i>2</i>	<i>4.1</i>	<i>0.6</i>	3	7.0	0.8
	60-64	2	2.2	0.6	3	3.4	0.9	5	5.3	1.4	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	65 and older	1	1.1	0.1	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	1	2.3	0.1
Total		93	100.0	1.8	87	100.0	1.6	94	100.0	1.7	<i>49</i>	<i>100.0</i>	<i>0.9</i>	43	100.0	0.8

Continued

[^]Case definition of hepatitis C changed in 2016 and 2020. Please see [Appendix A: Technical Notes](#) for information.

^{*}2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. 2020 data is italicized for this reason.

^aRate is expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 18 (Continued). Acute Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020 ^{^*}			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	<i>Cases</i>	<i>%</i>	<i>Rate^a</i>	Cases	%	Rate ^a
Total^b	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	<i>0</i>	<i>0.0</i>	<i>0.0</i>	0	0.0	0.0
	15-19	3	1.6	0.4	2	1.0	0.3	0	0.0	0.0	<i>1</i>	<i>0.9</i>	<i>0.1</i>	2	2.0	0.3
	20-24	28	14.6	4.0	29	14.3	4.1	16	8.4	2.3	<i>5</i>	<i>4.6</i>	<i>0.7</i>	3	3.0	0.4
	25-29	36	18.8	5.0	52	25.6	7.1	37	19.5	5.0	<i>19</i>	<i>17.4</i>	<i>2.7</i>	12	12.0	1.7
	30-34	33	17.2	5.0	34	16.7	5.1	30	15.8	4.4	<i>27</i>	<i>24.8</i>	<i>3.9</i>	25	25.0	3.5
	35-39	21	10.9	3.2	27	13.3	4.1	40	21.1	6.0	<i>28</i>	<i>25.7</i>	<i>4.2</i>	23	23.0	3.4
	40-44	19	9.9	3.0	16	7.9	2.5	20	10.5	3.1	<i>12</i>	<i>11.0</i>	<i>1.9</i>	10	10.0	1.5
	45-49	19	9.9	2.7	13	6.4	1.9	11	5.8	1.6	<i>7</i>	<i>6.4</i>	<i>1.0</i>	7	7.0	1.1
	50-54	14	7.3	2.0	15	7.4	2.2	18	9.5	2.7	<i>4</i>	<i>3.7</i>	<i>0.6</i>	7	7.0	1.0
	55-59	7	3.6	1.0	6	3.0	0.9	8	4.2	1.1	<i>2</i>	<i>1.8</i>	<i>0.3</i>	4	4.0	0.6
	60-64	9	4.7	1.4	8	3.9	1.2	8	4.2	1.2	<i>2</i>	<i>1.8</i>	<i>0.3</i>	4	4.0	0.6
	65 and older	3	1.6	0.2	1	0.5	0.1	2	1.1	0.1	<i>2</i>	<i>1.8</i>	<i>0.1</i>	3	3.0	0.2
Total^b		192	100.0	1.9	203	100.0	2.0	190	100.0	1.8	<i>109</i>	<i>100.0</i>	<i>1.0</i>	100	100.0	0.9

[^]Case definition of hepatitis C changed in 2016 and 2020. Please see [Appendix A: Technical Notes](#) for information.

^{*}2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. 2020 data is italicized for this reason.

^aRate is expressed per 100,000 population.

^bTotal may include cases with missing gender.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 19. Acute Hepatitis C Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2017-2021

Gender	Race/Ethnicity	2017			2018			2019			2020 ^{^*}			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	American Indian/Alaska Native ^b	5	5.1	9.0	6	5.2	10.8	4	4.2	7.2	2	3.3	3.6	1	1.8	1.8
	Asian/Pacific Islander ^b	1	1.0	0.7	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	1	1.8	0.6
	Black/African American ^b	9	9.1	0.9	6	5.2	0.6	12	12.5	1.1	4	6.7	0.4	4	7.1	0.4
	Hispanic/LatinX	3	3.0	0.6	2	1.7	0.4	3	3.1	0.6	1	1.7	0.2	1	1.8	0.2
	White/Caucasian ^b	71	71.7	2.2	86	74.1	2.7	75	78.1	2.3	49	81.7	1.5	42	75.0	1.3
	Multiple Races	0	0.0	0.0	1	0.9	1.0	0	0.0	0.0	1	1.7	1.0	0	0.0	0.0
	Unknown/Unspecified ^c	10	10.1	---	15	12.9	---	2	2.1	---	3	5.0	---	7	12.5	---
Total		99	100.0	2.0	116	100.0	2.3	96	100.0	1.9	60	100.0	1.2	56	100.0	1.1
Women	American Indian/Alaska Native ^b	4	4.3	6.7	6	6.9	10.0	4	4.3	6.6	1	2.0	1.7	1	2.3	1.7
	Asian/Pacific Islander ^b	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	1	2.3	0.6
	Black/African American ^b	4	4.3	0.3	6	6.9	0.5	5	5.3	0.4	1	2.0	0.1	2	4.7	0.2
	Hispanic/LatinX	1	1.1	0.2	0	0.0	0.0	2	2.1	0.4	0	0.0	0.0	0	0.0	0.0
	White/Caucasian ^b	76	81.7	2.3	69	79.3	2.1	79	84.0	2.4	45	91.8	1.4	36	83.7	1.1
	Multiple Races	1	1.1	1.0	1	1.1	1.0	1	1.1	0.9	0	0.0	0.0	0	0.0	0.0
	Unknown/Unspecified ^c	7	7.5	---	5	5.7	---	3	3.2	---	2	4.1	---	3	7.0	---
Total		93	100.0	1.8	87	100.0	1.6	94	100.0	1.7	49	100.0	0.9	43	100.0	0.8
Total^d	American Indian/Alaska Native ^b	9	4.7	7.8	12	5.9	10.4	8	4.2	6.9	3	2.8	2.6	2	2.0	1.7
	Asian/Pacific Islander ^b	1	0.5	0.3	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2	2.0	0.6
	Black/African American ^b	13	6.8	0.6	12	5.9	0.5	17	8.9	0.8	5	4.6	0.2	6	6.0	0.3
	Hispanic/LatinX	4	2.1	0.4	2	1.0	0.2	5	2.6	0.5	1	0.9	0.1	1	1.0	0.1
	White/Caucasian ^b	147	76.6	2.3	155	76.4	2.4	154	81.1	2.3	94	86.2	1.4	79	79.0	1.2
	Multiple Races	1	0.5	0.5	2	1.0	1.0	1	0.5	0.5	1	0.9	0.5	0	0.0	0.0
	Unknown/Unspecified ^c	17	8.9	---	20	9.9	---	5	2.6	---	5	4.6	---	10	10.0	---
Total^d		192	100.0	1.9	203	100.0	2.0	190	100.0	1.8	109	100.0	1.0	100	100.0	0.9

[^]Case definition of hepatitis C changed in 2016 and 2020. Please see [Appendix A: Technical Notes](#) for information.

^{*}2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. 2020 data is italicized for this reason.

^aRate is expressed per 100,000 population.

^bNon-Hispanic/LatinX.

^cRates are not available due to the lack of overall population data for the unknown/unspecified race/ethnicity group.

^dTotal may include cases with missing gender.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 20. Acute Hepatitis C Cases in North Carolina by Gender, Risk of Exposure^a, and Year of Diagnosis, 2017-2021

Gender	Exposure Category	2017		2018		2019		2020 ^{^*}		2021	
		Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
Men	Sexual ^b	15	15.2	11	9.5	15	15.6	<i>10</i>	<i>16.7</i>	8	14.3
	IDU ^c	45	45.5	57	49.1	42	43.8	26	43.3	28	50.0
	Other Risks ^d	0	0.0	0	0.0	1	1.0	0	0.0	1	1.8
	Unknown ^e	39	39.4	48	41.4	38	39.6	24	40.0	19	33.9
	Total	99	100.0	116	100.0	96	100.0	<i>60</i>	<i>100.0</i>	56	100.0
Women	Sexual ^b	19	20.4	20	23.0	13	13.8	2	4.1	5	11.6
	IDU ^c	43	46.2	40	46.0	47	50.0	29	59.2	24	55.8
	Other Risks ^d	3	3.2	1	1.1	0	0.0	0	0.0	1	2.3
	Unknown ^e	28	30.1	26	29.9	34	36.2	18	36.7	13	30.2
	Total	93	100.0	87	100.0	94	100.0	<i>49</i>	<i>100.0</i>	43	100.0
Total^f	Sexual ^b	34	17.7	31	15.3	28	14.7	12	11.0	13	13.0
	IDU ^c	88	45.8	97	47.8	89	46.8	55	50.5	53	53.0
	Other Risks ^d	3	1.6	1	0.5	1	0.5	0	0.0	2	2.0
	Unknown ^e	67	34.9	74	36.5	72	37.9	42	38.5	32	32.0
	Total^f	192	100.0	203	100.0	190	100.0	<i>109</i>	<i>100.0</i>	100	100.0

[^]Case definition of hepatitis C changed in 2016 and 2020. Please see [Appendix A: Technical Notes](#) for information.

^{*}2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. 2020 data is italicized for this reason.

^aRisk is based on a hierarchical risk. Rates are not presented due to the lack of population data for the exposure groups. It is likely that sexual contact (heterosexual or MSM), while true for the patient, is not the transmission route for the virus. These data likely reflect under-reporting of higher-risk exposures such as injecting drug use.

^bSexual contact includes heterosexual and men who report sex with men.

^cIDU = injection drug use.

^dOther risk includes health care exposure or contact with a positive hepatitis B individual.

^eUnknown is defined as individuals who did not report any risks (including missing) for acquiring hepatitis C.

^fTotal may include cases with missing gender, and race/ethnicity information.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 21. Number of People Diagnosed with Chronic Hepatitis C[^], Presumed Alive, and Residing in North Carolina by Selected Demographics, as of 12/31/2021

Demographics	Men			Women			Total ^d		
	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Age at Report (Year)									
Less than 13	72	0.1	8.8	98	0.3	12.4	171	0.2	10.6
13-14	7	0.0	4.9	9	0.0	6.5	16	0.0	5.7
15-19	288	0.6	81.0	497	1.5	145.3	786	1.0	112.6
20-24	1,901	4.0	526.9	2,345	7.2	688.6	4,250	5.3	606.0
25-29	4,871	10.1	1,386.0	4,410	13.5	1,262.3	9,290	11.5	1,325.6
30-34	5,369	11.2	1,533.2	4,355	13.4	1,202.6	9,733	12.1	1,366.4
35-39	4,690	9.8	1,420.4	3,206	9.8	938.7	7,910	9.8	1,177.6
40-44	3,532	7.4	1,094.6	2,407	7.4	712.5	5,944	7.4	899.9
45-49	3,328	6.9	1,042.3	2,189	6.7	658.9	5,520	6.8	847.2
50-54	4,697	9.8	1,371.6	2,906	8.9	821.9	7,608	9.4	1,093.1
55-59	6,664	13.9	1,966.1	3,626	11.1	1,012.0	10,294	12.8	1,476.3
60-64	6,442	13.4	1,994.6	3,168	9.7	895.4	9,615	11.9	1,420.6
65 and older	5,995	12.5	753.5	3,351	10.3	335.9	9,357	11.6	521.8
Unknown ^b	157	0.3	---	46	0.1	---	213	0.3	---
Race/Ethnicity									
American Indian/Alaska Native ^c	337	0.7	603.4	284	0.9	473.5	621	0.8	536.2
Asian/Pacific Islander ^c	120	0.2	69.4	123	0.4	68.0	243	0.3	68.7
Black/African American ^c	6,052	12.6	573.8	3,891	11.9	325.8	9,947	12.3	442.3
Hispanic/LatinX	481	1.0	86.7	360	1.1	68.8	842	1.0	78.1
White/Caucasian ^c	13,889	28.9	432.9	11,421	35.0	344.0	25,320	31.4	387.8
Multiple Race	523	1.1	476.3	343	1.1	295.9	866	1.1	383.6
Unknown/Unspecified ^b	26,610	55.4	---	16,191	49.6	---	42,867	53.1	---
Total^d	48,013	100.0	931.2	32,613	100.0	604.5	80,707	100.0	764.9

[^]Chronic hepatitis C became reportable in North Carolina in late-2016. Labs are only reportable by electronic lab reporting. These numbers are likely an underestimation. Risk of exposure data is not collected for chronic hepatitis C cases, as these cases are not investigated at this time. Newly diagnosed hepatitis C is also not available at this time. The case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

^aRate is expressed per 100,000 population.

^bRates are not available due to the lack of overall population data for the unknown age and unknown/unspecified race/ethnicity groups.

^cNon-Hispanic/LatinX.

^dTotal may include cases with missing gender.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 22. Diagnosed Chronic Hepatitis C[^] Annual Rates in North Carolina by Selected Demographics, 2017-2021

Demographics	2017		2018		2019		2020 ^{^^*}		2021	
	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a	Cases	Rate ^a
Gender										
Men	11,375	227.5	10,869	215.0	11,334	221.9	<i>7,404</i>	<i>145.0</i>	8,380	162.5
Women	7,766	147.2	7,285	136.5	8,234	152.7	<i>4,738</i>	<i>88.8</i>	5,151	95.5
Missing	8	--	33	--	24	--	3	--	25	--
Age at Diagnosis										
Less than 13	30	1.8	39	2.4	37	2.3	33	2.0	33	2.0
13-14	5	1.9	0	0.0	2	0.7	2	0.7	7	2.5
15-19	125	18.4	114	16.6	429	62.2	71	10.2	49	7.0
20-24	1,161	166.0	928	132.7	1,197	170.6	527	76.7	489	69.7
25-29	2,259	315.2	2,105	288.7	2,301	312.8	<i>1,333</i>	<i>188.9</i>	1,381	197.1
30-34	1,952	298.4	2,040	307.0	2,294	335.5	<i>1,618</i>	<i>235.1</i>	1,926	270.4
35-39	1,542	236.6	1,619	245.8	1,963	296.1	<i>1,265</i>	<i>190.5</i>	1,591	236.9
40-44	1,107	173.7	1,102	172.9	1,470	229.1	995	153.8	1,334	202.0
45-49	1,331	191.0	1,255	180.1	1,299	188.6	824	121.8	922	141.5
50-54	2,291	333.4	1,829	268.9	1,640	242.8	973	143.4	1,107	159.0
55-59	2,943	427.1	2,681	385.3	2,314	329.0	<i>1,403</i>	<i>199.6</i>	1,331	190.9
60-64	2,584	408.8	2,398	370.8	2,252	342.0	<i>1,388</i>	<i>209.6</i>	1,413	208.8
65 and older	1,795	110.2	2,021	119.6	2,325	132.7	<i>1,674</i>	<i>96.8</i>	1,902	106.1
Race/Ethnicity										
American Indian/Alaska Native ^b	100	86.9	143	123.7	223	191.7	99	85.9	87	75.1
Asian/Pacific Islander ^b	35	11.2	38	11.8	73	21.7	45	13.2	58	16.4
Black/African American ^b	2,083	94.8	2,172	97.8	3,764	167.9	<i>1,012</i>	<i>45.4</i>	1,019	45.3
Hispanic/LatinX	114	11.9	130	13.1	337	32.9	119	11.4	165	15.3
White/Caucasian ^b	5,521	85.0	6,205	94.9	6,880	104.7	<i>3,403</i>	<i>52.4</i>	3,476	53.2
Multiple Race	250	127.0	216	105.6	219	103.4	95	44.0	96	42.5
Unknown/Unspecified ^c	11,046	---	9,283	---	8,096	---	<i>7,372</i>	---	8,645	---
Total^d	19,149	186.4	18,187	175.0	19,592	186.6	12,145	116.3	13,546	128.4

[^]Chronic hepatitis C became reportable in North Carolina in late-2016. Labs are only reportable by electronic lab reporting. These numbers are likely an underestimation. Risk of exposure data is not collected for chronic hepatitis C cases, as these cases are not investigated at this time. Newly diagnosed hepatitis C is also not available at this time.

^{^^}Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

^{*}2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. 2020 data is italicized for this reason.

^aRate is expressed per 100,000 population.

^bRates are not available due to the lack of overall population data for the unknown age and unknown/unspecified race/ethnicity groups.

^cNon-Hispanic/LatinX.

^dTotal may include cases with missing gender.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 23. Diagnosed Chronic Hepatitis C^ Annual Rates in North Carolina by Gender, Age, and Year of Report, 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020 ^{^^*}			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	Less than 13	7	0.1	0.8	16	0.1	1.9	13	0.1	1.6	19	0.3	2.3	17	0.2	2.1
	13-14	2	0.0	1.5	0	0.0	0.0	1	0.0	0.7	1	0.0	0.7	3	0.0	2.1
	15-19	46	0.4	13.3	47	0.4	13.5	152	1.3	43.2	24	0.3	6.8	21	0.3	5.9
	20-24	492	4.3	135.4	427	3.9	118.0	534	4.7	147.0	250	3.4	70.5	226	2.7	62.6
	25-29	1,157	10.2	322.7	1,092	10.0	297.9	1,196	10.6	322.1	736	9.9	207.9	738	8.8	210.0
	30-34	1,071	9.4	333.1	1,057	9.7	323.5	1,267	11.2	377.3	918	12.4	271.5	1,124	13.4	321.0
	35-39	914	8.0	287.6	961	8.8	299.2	1,128	10.0	348.8	745	10.1	228.2	989	11.8	299.5
	40-44	664	5.8	213.7	633	5.8	204.3	839	7.4	269.5	601	8.1	190.0	836	10.0	259.1
	45-49	809	7.1	237.2	764	7.0	224.6	763	6.7	227.6	488	6.6	146.7	576	6.9	180.4
	50-54	1,416	12.4	423.9	1,166	10.7	351.9	972	8.6	295.2	612	8.3	183.0	684	8.2	199.7
	55-59	1,927	16.9	584.6	1,732	15.9	520.5	1,485	13.1	440.6	921	12.4	269.8	868	10.4	256.1
	60-64	1,736	15.3	586.5	1,627	15.0	536.3	1,464	12.9	473.5	958	12.9	303.5	983	11.7	304.4
	65 and older	1,120	9.8	157.4	1,306	12.0	176.6	1,478	13.0	192.6	1,103	14.9	143.9	1,263	15.1	158.7
	Missing	14	0.1	---	41	0.4	---	42	0.4	---	28	0.4	---	52	0.6	---
Total		11,375	100.0	227.5	10,869	100.0	215.0	11,334	100.0	221.9	7,404	100.0	145.0	8,380	100.0	162.5
Women	Less than 13	23	0.3	2.9	22	0.3	2.7	24	0.3	3.0	14	0.3	1.8	16	0.3	2.0
	13-14	3	0.0	2.3	0	0.0	0.0	1	0.0	0.8	1	0.0	0.7	4	0.1	2.9
	15-19	79	1.0	23.6	66	0.9	19.5	277	3.4	81.8	47	1.0	13.8	28	0.5	8.2
	20-24	668	8.6	198.6	500	6.9	148.1	663	8.1	195.8	277	5.8	83.2	261	5.1	76.6
	25-29	1,102	14.2	307.8	1,009	13.9	278.3	1,102	13.4	302.6	597	12.6	169.8	641	12.4	183.5
	30-34	881	11.3	264.8	977	13.4	289.2	1,024	12.4	294.2	700	14.8	199.9	802	15.6	221.5
	35-39	628	8.1	188.1	652	8.9	193.2	830	10.1	244.4	519	11.0	153.8	600	11.6	175.7
	40-44	442	5.7	135.3	467	6.4	142.6	631	7.7	191.0	394	8.3	119.2	496	9.6	146.8
	45-49	521	6.7	146.4	490	6.7	137.3	535	6.5	151.4	336	7.1	97.7	346	6.7	104.2
	50-54	874	11.3	247.6	662	9.1	189.7	667	8.1	192.6	361	7.6	104.9	421	8.2	119.1
	55-59	1,015	13.1	282.4	946	13.0	260.6	829	10.1	226.3	482	10.2	133.3	462	9.0	128.9
	60-64	848	10.9	252.4	768	10.5	223.7	787	9.6	225.3	430	9.1	124.1	428	8.3	121.0
	65 and older	675	8.7	73.6	715	9.8	75.3	845	10.3	85.8	571	12.1	59.3	638	12.4	64.0
	Missing	7	0.1	---	11	0.2	---	19	0.2	---	9	0.2	---	8	0.2	---
Total		7,766	100.0	147.2	7,285	100.0	136.5	8,234	100.0	152.7	4,738	100.0	88.8	5,151	100.0	95.5

Continued

[^]Chronic hepatitis C became reportable in North Carolina in late-2016. Labs are only reportable by electronic lab reporting. These numbers are likely an underestimation. Risk of exposure data is not collected for chronic hepatitis C cases, as these cases are not investigated at this time. Newly diagnosed hepatitis C is also not available at this time.

^{^^}Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

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

^aRate is expressed per 100,000 population.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers. / Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 23(Continued). Diagnosed Chronic Hepatitis C Annual Rates[^] in North Carolina by Gender, Age, and Year of Report 2017-2021

Gender	Age at Diagnosis (Year)	2017			2018			2019			2020 ^{^^*}			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Total^b	Less than 13	30	0.2	1.8	39	0.2	2.4	37	0.2	2.3	<i>33</i>	<i>0.3</i>	<i>2.0</i>	33	0.2	2.0
	13-14	5	0.0	1.9	0	0.0	0.0	2	0.0	0.7	<i>2</i>	<i>0.0</i>	<i>0.7</i>	7	0.1	2.5
	15-19	125	0.7	18.4	114	0.6	16.6	429	2.2	62.2	<i>71</i>	<i>0.6</i>	<i>10.2</i>	49	0.4	7.0
	20-24	1,161	6.1	166.0	928	5.1	132.7	1,197	6.1	170.6	<i>527</i>	<i>4.3</i>	<i>76.7</i>	489	3.6	69.7
	25-29	2,259	11.8	315.2	2,105	11.6	288.7	2,301	11.7	312.8	<i>1,333</i>	<i>11.0</i>	<i>188.9</i>	1,381	10.2	197.1
	30-34	1,952	10.2	298.4	2,040	11.2	307.0	2,294	11.7	335.5	<i>1,618</i>	<i>13.3</i>	<i>235.1</i>	1,926	14.2	270.4
	35-39	1,542	8.1	236.6	1,619	8.9	245.8	1,963	10.0	296.1	<i>1,265</i>	<i>10.4</i>	<i>190.5</i>	1,591	11.7	236.9
	40-44	1,107	5.8	173.7	1,102	6.1	172.9	1,470	7.5	229.1	<i>995</i>	<i>8.2</i>	<i>153.8</i>	1,334	9.8	202.0
	45-49	1,331	7.0	191.0	1,255	6.9	180.1	1,299	6.6	188.6	<i>824</i>	<i>6.8</i>	<i>121.8</i>	922	6.8	141.5
	50-54	2,291	12.0	333.4	1,829	10.1	268.9	1,640	8.4	242.8	<i>973</i>	<i>8.0</i>	<i>143.4</i>	1,107	8.2	159.0
	55-59	2,943	15.4	427.1	2,681	14.7	385.3	2,314	11.8	329.0	<i>1,403</i>	<i>11.6</i>	<i>199.6</i>	1,331	9.8	190.9
	60-64	2,584	13.5	408.8	2,398	13.2	370.8	2,252	11.5	342.0	<i>1,388</i>	<i>11.4</i>	<i>209.6</i>	1,413	10.4	208.8
	65 and older	1,795	9.4	110.2	2,021	11.1	119.6	2,325	11.9	132.7	<i>1,674</i>	<i>13.8</i>	<i>96.8</i>	1,902	14.0	106.1
	Missing	24	0.1	---	56	0.3	---	69	0.4	---	<i>39</i>	<i>0.3</i>	---	61	0.5	---
Total^b		19,149	100.0	186.4	18,187	100.0	175.0	19,592	100.0	186.6	12,145	100.0	116.3	13,546	100.0	128.4

[^]Chronic hepatitis C became reportable in North Carolina in late-2016. Labs are only reportable by electronic lab reporting. These numbers are likely an underestimation. Risk of exposure data is not collected for chronic hepatitis C cases, as these cases are not investigated at this time. Newly diagnosed hepatitis C is also not available at this time.

^{^^}Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

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

^aRate is expressed per 100,000 population.

^bTotal may include cases with missing gender.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

Table 24. Diagnosed Chronic Hepatitis C Annual Rates[^] in North Carolina by Gender, Race/Ethnicity, and Year of Report, 2017-2021

Gender	Race/Ethnicity	2017			2018			2019			2020 ^{^^*}			2021		
		Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a	Cases	%	Rate ^a
Men	American Indian/Alaska Native ^b	61	0.5	110.0	75	0.7	134.7	123	1.1	219.9	<i>50</i>	<i>0.7</i>	<i>89.7</i>	53	0.6	94.9
	Asian/Pacific Islander ^b	23	0.2	15.2	17	0.2	10.8	40	0.4	24.6	<i>17</i>	<i>0.2</i>	<i>10.2</i>	28	0.3	16.2
	Black/African American ^b	1,399	12.3	136.2	1,410	13.0	135.9	1,998	17.6	190.8	<i>656</i>	<i>8.9</i>	<i>62.7</i>	668	8.0	63.3
	Hispanic/LatinX	66	0.6	13.3	86	0.8	16.8	180	1.6	34.2	<i>72</i>	<i>1.0</i>	<i>13.4</i>	91	1.1	16.4
	White/Caucasian ^b	2,977	26.2	93.8	3,416	31.4	107.0	3,747	33.1	116.7	<i>1,882</i>	<i>25.4</i>	<i>58.9</i>	1,984	23.7	61.8
	Multiple Races	147	1.3	153.6	130	1.2	130.9	130	1.1	126.2	<i>62</i>	<i>0.8</i>	<i>59.0</i>	60	0.7	54.6
	Unknown/Unspecified ^c	6,702	58.9	---	5,735	52.8	---	5,116	45.1	---	<i>4,665</i>	<i>63.0</i>	---	5,496	65.6	---
Total		11,375	100.0	227.5	10,869	100.0	215.0	11,334	100.0	221.9	<i>7,404</i>	<i>100.0</i>	<i>145.0</i>	8,380	100.0	162.5
Women	American Indian/Alaska Native ^b	39	0.5	65.5	68	0.9	113.4	100	1.2	165.7	<i>49</i>	<i>1.0</i>	<i>82.2</i>	34	0.7	56.7
	Asian/Pacific Islander ^b	12	0.2	7.5	21	0.3	12.6	33	0.4	19.1	<i>28</i>	<i>0.6</i>	<i>16.0</i>	30	0.6	16.6
	Black/African American ^b	683	8.8	58.4	761	10.4	64.4	1,764	21.4	147.6	<i>356</i>	<i>7.5</i>	<i>30.1</i>	351	6.8	29.4
	Hispanic/LatinX	48	0.6	10.4	44	0.6	9.2	157	1.9	31.6	<i>46</i>	<i>1.0</i>	<i>9.1</i>	74	1.4	14.1
	White/Caucasian ^b	2,544	32.8	76.6	2,783	38.2	83.3	3,131	38.0	93.2	<i>1,521</i>	<i>32.1</i>	<i>46.1</i>	1,490	28.9	44.9
	Multiple Races	103	1.3	101.8	86	1.2	81.7	89	1.1	81.8	<i>33</i>	<i>0.7</i>	<i>29.7</i>	36	0.7	31.1
	Unknown/Unspecified ^c	4,337	55.8	---	3,522	48.3	---	2,960	35.9	---	<i>2,705</i>	<i>57.1</i>	---	3,136	60.9	---
Total		7,766	100.0	147.2	7,285	100.0	136.5	8,234	100.0	152.7	<i>4,738</i>	<i>100.0</i>	<i>88.8</i>	5,151	100.0	95.5
Total^d	American Indian/Alaska Native ^b	100	0.5	86.9	143	0.8	123.7	223	1.1	191.7	<i>99</i>	<i>0.8</i>	<i>85.9</i>	87	0.6	75.1
	Asian/Pacific Islander ^b	35	0.2	11.2	38	0.2	11.8	73	0.4	21.7	<i>45</i>	<i>0.4</i>	<i>13.2</i>	58	0.4	16.4
	Black/African American ^b	2,083	10.9	94.8	2,172	11.9	97.8	3,764	19.2	167.9	<i>1,012</i>	<i>8.3</i>	<i>45.4</i>	1,019	7.5	45.3
	Hispanic/LatinX	114	0.6	11.9	130	0.7	13.1	337	1.7	32.9	<i>119</i>	<i>1.0</i>	<i>11.4</i>	165	1.2	15.3
	White/Caucasian ^b	5,521	28.8	85.0	6,205	34.1	94.9	6,880	35.1	104.7	<i>3,403</i>	<i>28</i>	<i>52.4</i>	3,476	25.7	53.2
	Multiple Races	250	1.3	127.0	216	1.2	105.6	219	1.1	103.4	<i>95</i>	<i>0.8</i>	<i>44.0</i>	96	0.7	42.5
	Unknown/Unspecified ^c	11,046	57.7	---	9,283	51.0	---	8,096	41.3	---	<i>7,372</i>	<i>60.7</i>	---	8,645	63.8	---
Total^d		19,149	100.0	186.4	18,187	100.0	175.0	19,592	100	186.6	<i>12,145</i>	<i>100.0</i>	<i>116.3</i>	13,546	100.0	128.4

[^]Chronic hepatitis C became reportable in North Carolina in late-2016. Labs are only reportable by electronic lab reporting. These numbers are likely an underestimation. Risk of exposure data is not collected for chronic hepatitis C cases, as these cases are not investigated at this time. Newly diagnosed hepatitis C is also not available at this time.

^{^^}Case definition of hepatitis C changed in 2020. Please see [Appendix A: Technical Notes](#) for information.

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

^aRate is expressed per 100,000 population.

^bNon-Hispanic/Latino.

^cRates are not available due to the lack of overall population data for the unknown/unspecified race/ethnicity group.

^dTotal may include cases with missing gender, and race/ethnicity information.

Please use caution when interpreting reported numbers less than 10 and the corresponding rates based on these numbers.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of October 1, 2022).

APPENDIX A: Technical Notes

About the Authors

North Carolina law requires that diagnoses of certain communicable diseases, including STDs, be reported to local health departments that in turn report the information to the state. The HIV/STD/Hepatitis Surveillance Unit is the designated recipient for STD and viral hepatitis B (HBV) and hepatitis C (HCV) morbidity reports at the state level. From these reports, the HIV/STD/Hepatitis Surveillance Unit is responsible for aggregating these reports and providing county, regional, and statewide information about STDs and viral HBV and HCV to others, including the CDC. The HIV/STD/Hepatitis Surveillance Unit is part of the Communicable Disease Branch within the North Carolina Division of Public Health.

About the Content of This Report

This document, the *2021 North Carolina Hepatitis B and C Surveillance Report*, includes summary tables of surveillance reports and other information for HBV (acute, chronic, and perinatal), and HCV (acute and chronic). In some instances, total numbers of reports may not agree between separate cross-tabulations due to missing values for some variables.

Rates are presented by race/ethnicity, age group, and gender for each disease. For the combined race/ethnicity category, we classified all cases with reported Hispanic ethnicity as Hispanic/LatinX, regardless of their race. Cases with non-Hispanic or unknown ethnicity were classified according to their reported race. Cases with a reported race of “other” were included in the unknown race category. Rates are also presented for counties across the state and are expressed as cases per 100,000 population. Beginning this year, rate denominators were estimated using the Census demographic population estimates for 2017-2021 from the Census Bureau's Population Estimates Program (PEP). More information about Census Population and Housing Estimates is available at the website <https://www.census.gov/programs-surveys/popest/data/special-tab/content.html>. Use of these population denominators enabled calculation of rates for the multiple race category. Rates that are based on a small number of cases (generally fewer than 10) should be viewed with caution and are considered unreliable because these rates have large standard errors and can vary widely with small changes in case numbers. Data is suppressed in this document according to the North Carolina Division of Public Health Communicable Disease Branch data release guidelines. These data are suppressed for table cells with a population denominator less than 500.

Hepatitis B Surveillance Data

Acute HBV case reports are people who have a confirmed acute illness with discrete onset of symptoms, jaundice or elevated serum aminotransferase levels (>100 IU/L), and either a positive IgM antibody to HBV core antigen (anti-HBc) or HBV surface antigen (HBsAg).¹⁰ Chronic HBV case reports are people who do not have discrete onset of symptoms with either a single HBsAg, HBV DNA, or HBV e antigen (HBeAg) positive lab (probable) or negative anti-HBc and a positive HBsAg, HBeAg, or HBV DNA.¹¹ Perinatal HBV are classified as children born to HBV-infected mothers who are ≤24 months of age and have one or more of the following: positive HBsAg (only if at least four weeks after last dose of HBV vaccine), positive HBeAg, or detectable HBV DNA.^{12L}

Hepatitis C Surveillance Data

Acute HCV case reports are people who have a confirmed acute illness with discrete onset of symptoms, jaundice or elevated serum aminotransferase levels, and meet the laboratory criteria of: serum alanine aminotransferase levels greater than seven times the upper limit of normal and IgM anti-hepatitis A negative, and IgM anti-HBc negative or HBsAg negative, and antibody to hepatitis C (anti-HCV) positive by EIA, verified by an additional assay (like a nucleic acid test for HCV RNA) or anti-HCV positive with a signal cut-off ratio predictive of a true positive as determined for the particular assay.¹³

2016 Hepatitis C Case Definition

In 2016, the case definition for acute HCV was updated. Clinical criteria for acute HCV include a discrete onset of symptoms and jaundice or a peak elevated serum aminotransferase level >200 IU/L during the period of acute illness, and the laboratory criteria for diagnosis includes a positive test for antibodies for anti-HCV (probable) or a HCV detection test (nucleic acid test or positive test indicating the presence of hepatitis C viral antigen) (confirmed). Starting in 2016, both confirmed cases and probable cases are reported as acute HCV cases. A confirmed case meets the clinical criteria and positive hepatitis C detection test, or a documented negative HCV antibody, HCV antigen, or NAT laboratory test followed within 12 months by a positive result. A probable case meets the clinical criteria, has a positive anti-HCV test, but no reports of a positive HCV NAT or antigen test and does not have a test conversion within the past 12 months.¹³ Chronic HCV case reports are people who do not have discrete onset of symptoms

¹⁰ Centers for Disease Control and Prevention. (2015). Guidelines for viral hepatitis surveillance and case management. Updated May 31, 2015. Accessed July 13, 2017. Retrieved from <https://www.cdc.gov/hepatitis/statistics/surveillanceguidelines.htm>.

¹¹ Centers for Disease Control and Prevention (2012). National Notifiable Disease Surveillance System (NNDSS): Hepatitis B, chronic 2012 case definition. <https://ndc.services.cdc.gov/case-definitions/hepatitis-b-chronic-2012/>.

¹² Centers for Disease Control and Prevention (2017). National Notifiable Disease Surveillance System (NNDSS): Hepatitis B, perinatal infection 2017 case definition. <https://ndc.services.cdc.gov/case-definitions/hepatitis-b-perinatal-virus-infection-2017/>.

¹³ Centers for Disease Control and Prevention. (2017). National Notifiable Disease Surveillance System (NNDSS): Hepatitis C, Acute 2016 Case Definition. Retrieved from <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-acute-2016/>.

and are either positive anti-HCV (probable) or positive HCV RNA, HCV genotype, or have the presence of HCV antigen (confirmed).¹⁴

2020 Hepatitis C Case Definition

In 2020, the HCV case definition changed again, in order to account for asymptomatic cases. The new 2020 case definitions of acute and chronic HCV are outlined below.

Acute HCV

Clinical criteria should only include cases over the age of 36 months, and must have one of the following¹⁵:

- Jaundice; OR
- Peak elevated total bilirubin levels ≥ 3.0 mg/dL; OR
- Peak elevated serum alanin aminotransferase (ALT) levels >200 IU/L; AND
- The absence of a more likely diagnosis.

Laboratory criteria for acute HCV include¹⁵:

Confirmed

- Positive HCV virus detection: nucleic acid test (NAT) for HCV RNA (including qualitative, quantitative, or genotype); OR
- A positive test indicating presence of HCV viral antigens.

Probable

- A positive anti-HCV test (antibodies for HCV)

Chronic HCV

Clinical criteria is not available for chronic HCV. Only laboratory criteria is used to classify chronic HCV. Chronic HCV should only include cases over the age of 36 months, and must have one of the following laboratory criteria¹⁶:

Confirmed

- Positive HCV virus detection: nucleic acid test (NAT) for HCV RNA (including qualitative, quantitative, or genotype); OR
- A positive test indicating presence of HCV viral antigens.

Probable

- A positive anti-HCV test (antibodies for HCV)

¹⁴ Centers for Disease Control and Prevention. (2017). National Notifiable Disease Surveillance System (NNDSS): Hepatitis C, Chronic 2016 Case Definition. Retrieved from <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-chronic-2016/>.

¹⁵ Centers for Disease Control and Prevention. (2021). National Notifiable Disease Surveillance System (NNDSS): Hepatitis C, Acute 2020 Case Definition. Retrieved from <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-acute-2020/>.

¹⁶ Centers for Disease Control and Prevention. (2021). National Notifiable Disease Surveillance System (NNDSS): Hepatitis C, Chronic 2020 Case Definition. Retrieved from <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-chronic-2020/>.

Chronic HCV surveillance started in North Carolina in late 2016. These numbers are likely an underestimation, as chronic HCV is only reportable by electronic lab reporting. Risk of exposure data is not collected for chronic HCV cases, as these cases are not investigated at this time.