



# 2019 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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## TABLE OF CONTENTS

<b>Summary</b> .....	<b>i</b>
<b>Hepatitis B and C in North Carolina</b> .....	<b>ii</b>
Hepatitis B and C Reporting in North Carolina .....	ii
Hepatitis B .....	ii
Acute versus Chronic Hepatitis B .....	ii
Transmission of Hepatitis B .....	iii
Symptoms of Hepatitis B .....	iii
Screening for Hepatitis B .....	iii
Treatment for Hepatitis B .....	iv
Vaccination for Hepatitis B .....	iv
Hepatitis C .....	v
Acute versus Chronic Hepatitis C .....	v
Figure 1. Progression of Hepatitis C .....	v
Transmission of Hepatitis C .....	v
Symptoms of Hepatitis C .....	vi
Screening for Hepatitis C .....	vi
Treatment for Hepatitis C .....	vii
Figure 2. North Carolina Surveillance-Based Hepatitis C Treatment Cascade, 2019 .....	vii
Figure 3. North Carolina State Bridge Counselor-Based Hepatitis C Treatment Cascade, 2017-2020 .....	viii
Figure 4. North Carolina CHAMP Provider-Based Hepatitis C Treatment Cascade, 2017-2020 .....	ix
Prevention of Hepatitis C .....	ix
<b>Poverty and Hepatitis</b> .....	<b>x</b>
Figure 5. People Diagnosed with Acute Hepatitis B and C in North Carolina by Poverty Indicator, 2019 .....	xi
<b>Hepatitis B and C Rate Maps by County of Residence at Diagnosis, 2019</b> .....	<b>xii</b>
Figure 6. Acute Hepatitis B Rates in North Carolina by County of Residence at Diagnosis, 2019 .....	xii
Figure 7. Newly Diagnosed Chronic Hepatitis B Rates in North Carolina by County of Residence at Diagnosis, 2019 .....	xii
Figure 8. Acute Hepatitis C Rates in North Carolina by County of Residence at Diagnosis, 2019 .....	xiii
Figure 9. Newly Reported Chronic Hepatitis C Rates in North Carolina by County of Residence at Diagnosis, 2019 .....	xiii
<b>County Totals and Rates for Hepatitis B and C, 2019</b> .....	<b>1</b>
Table 1. Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019 .....	2
Table 2. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina by Most Recently Known County <sup>a</sup> of Residence as of 12/31/2019 .....	5
Table 3. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019 .....	6
Table 4. Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019 .....	9

Table 5. Number of People Diagnosed with Chronic Hepatitis C in North Carolina as of 12/31/2019 by County of Residence when Reported to the State .....	12
Table 6. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by County of Report and Year of Report, 2016-2019 .....	13
<b>North Carolina State Totals and Rates for Hepatitis B and C by Selected Demographics, 2019 .....</b>	<b>16</b>
Table 7. Number of Infants Diagnosed with Hepatitis B (Perinatal Hepatitis B) in North Carolina by Year of Diagnosis, 2010-2019 .....	17
Table 8. Acute Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2015-2019 ....	18
Table 9. Acute Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019 .....	19
Table 10. Acute Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019.....	21
Table 11. Acute Hepatitis B Cases in North Carolina by Gender, Risk of Exposure, and Year of Diagnosis, 2015-2019.....	22
Table 12. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina as of 12/31/2019.....	23
Table 13. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2015-2019.....	24
Table 14. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019 .....	25
Table 15. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019.....	27
Table 16. Newly Diagnosed Chronic Hepatitis B Cases in North Carolina by Gender, Risk of Exposure, and Year of Diagnosis, 2015-2019 .....	28
Table 17. Acute Hepatitis C Annual Rates in North Carolina by Selected Demographics, 2015-2019.....	29
Table 18. Acute Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019.....	30
Table 19. Acute Hepatitis C Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019.....	32
Table 20. Acute Hepatitis C Cases in North Carolina by Gender, Risk of Exposure, and Year of Diagnosis, 2015-2019.....	33
Table 21. Newly Reported Chronic Hepatitis C in North Carolina by Selected Demographics, as of 12/31/2019 .....	34
Table 22. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Report, 2016-2019.....	35
Table 23. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Report, 2016-2019 .....	37

**APPENDIX A: Technical Notes**..... 38

    About the Authors..... 38

    About the Content of This Report..... 38

    Hepatitis B Surveillance Data ..... 39

    Hepatitis C Surveillance Data ..... 39

## Summary

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### Hepatitis B

- The number of people diagnosed with acute hepatitis B in North Carolina in 2019 was 185, a rate of 1.8 per 100,000 population, a slight decrease from 227 cases in 2018 (2.1 per 100,000 population).
- The highest rates of acute hepatitis B occurred among the 30 to 54-year-old age group. This age group comprised 60% of the total acute hepatitis B cases.
- In 2018, white/Caucasian men and women had the highest acute hepatitis B rates (2.6 and 1.6 per 100,000, respectively) and comprised 75% of the total acute hepatitis B cases.
- In 2019, the exposure most frequently reported by people with acute hepatitis B was heterosexual contact (49%), followed by injection drug use (IDU) (25%). Exposure is based on self-reported data. People may report more than one risk, and the source of exposure is difficult to determine for many cases. These data likely reflect under-reporting of higher risk exposures, such as IDU.
- The number of people diagnosed with chronic hepatitis B in North Carolina in 2018 was 1,067 (10.2 per 100,000). The majority of cases were among men (rate of 13.5 per 100,000), the 35-39 age group (rate of 29.7 per 100,000), and Asian/Pacific Islander (rate of 83.4 per 100,000). Risk was not reported for over 50% of cases.
- As of December 31, 2019, 25,463 people had been diagnosed with chronic hepatitis B in North Carolina.

### Hepatitis C

- The number of people diagnosed with acute hepatitis C in North Carolina in 2019 was 184, a rate of 1.8 per 100,000 population, which is slightly lower than the 197 cases diagnosed and reported in 2018 (1.9 per 100,000 population).
- The highest rates of acute hepatitis C occurred among the 25- to 39-year-old age group. This age group comprised 57% of the total acute hepatitis C cases.
- In 2019, American Indian/Alaska Native men and women had the highest acute hepatitis C rates (6.7 and 6.2 per 100,000 respectively), but only made up 4.3% of the acute hepatitis C cases. The majority of cases (82.6%) were white/Caucasian men and women, with rates of 2.3 and 2.3 per 100,000, respectively.
- In 2019, the most frequently reported risk factor by people with acute hepatitis C was IDU (46.7%), followed by sexual contact (14.7%). Exposure is based on self-reported data. People may report more than one risk, and the source of exposure is difficult to determine for many cases. These data likely reflect under-reporting of higher risk exposures, such as IDU.
- As of December 31, 2019, there have been 62,831 cases of chronic hepatitis C reported to North Carolina since 2016. In 2019, 19,934 chronic hepatitis C cases were reported to the state. The majority of cases were among men (57%). The age groups 25-34 (23%) and 50-64 (35%) had the highest proportion of people with chronic hepatitis C. For the majority of cases, race/ethnicity is unknown (46%). Risk information is not collected for chronic hepatitis C cases at this time.

## HEPATITIS B AND C IN NORTH CAROLINA

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### 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 (North Carolina DHHS). Statewide surveillance information is collected by the local health departments and sent to the North Carolina Division of Public Health. 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 seven days
Acute Hepatitis B	Chronic Hepatitis B
Perinatal Hepatitis B	Acute Hepatitis C

\*Note Chronic hepatitis C, which is primarily reported in North Carolina by electronic lab reporting (ELR), does not have a 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.<sup>1</sup> Nationally, the rate of acute HBV has remained stable over the past 10 years, with a slight increase in 2017.<sup>2</sup> 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, but some will develop into chronic infection. Most people with chronic HBV infection are asymptomatic and have no evidence of liver disease. However, some people may develop chronic hepatitis (elevation of aspartate aminotransferase [AST]/alanine aminotransferase [ALT]), cirrhosis, or hepatocellular carcinoma (a type of liver cancer).<sup>2</sup> The younger a person is when infected with hepatitis B virus, the greater the chance of developing a chronic infection. Approximately 90% of infected infants will develop chronic infection; the risk goes down as a child gets older. One-quarter to one-half of children infected between the ages of one and five years will develop chronic hepatitis B. From 15% to 25% of people with chronic HBV will develop chronic liver disease, including cirrhosis, liver failure, or liver cancer.<sup>1</sup> Around 25% of people with chronic HBV infected in

<sup>1</sup>Centers 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>.

<sup>2</sup>Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis B Questions and Answers for Health Professionals*. Updated July 28, 2020. Accessed November 7, 2020. Retrieved from <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview>.

childhood and 15% of people infected with chronic HBV after childhood die prematurely from cirrhosis or liver cancer.<sup>2</sup>

### Transmission of Hepatitis B

HBV can survive outside the body for at least seven days and still cause infection.<sup>2</sup> HBV can be transmitted through sex with an infected person, sharing contaminated 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).<sup>1</sup> The majority of infections due to perinatal transmission diagnosed in North Carolina are found in people born in other countries, 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.<sup>2</sup>

### 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.<sup>2</sup> 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.<sup>1</sup> 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.<sup>3</sup>

### Screening for Hepatitis B

Screening for HBV should be done for individuals born in countries with high HBV prevalence, 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, and people with

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<sup>1</sup>Centers 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>.

<sup>2</sup>Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis B Questions and Answers for Health Professionals*. Updated July 28, 2020. Accessed November 6, 2020. Retrieved from <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview>.

<sup>3</sup>Centers 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*, 12<sup>th</sup> edition, 2<sup>nd</sup> print (pp. 115-138). Washington DC: Public Health Foundation. Retrieved from <http://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html>.

elevated alanine aminotransferase levels.<sup>2</sup> All 85 local health departments 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**

There is no treatment for acute HBV as the majority of acute disease will self-clear 90 to 95% of the time. Chronic HBV is treated with several antiviral medications aimed at suppressing and decreasing the pathogenicity of the virus.<sup>1</sup> 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 3 intramuscular injections, the second and third doses administered at 1 and 6 months, respectively, after the first dose at birth.<sup>1</sup> 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.<sup>2</sup>

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<sup>1</sup>Centers 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>.

<sup>2</sup>Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis B Questions and Answers for Health Professionals*. Updated July 28, 2020. Accessed November 6, 2020. Retrieved from <https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm#overview>.

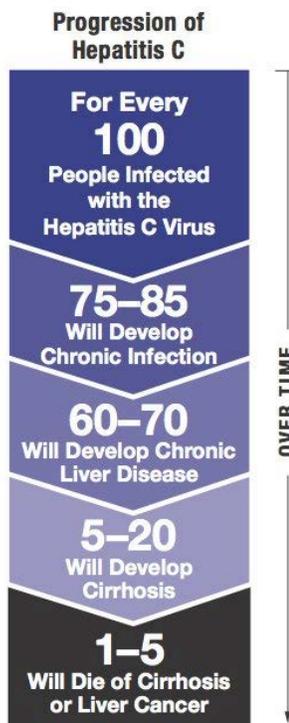
## Hepatitis C

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.<sup>1</sup> In North Carolina, we estimate that 150,000 people are infected with chronic HCV.

### Acute versus Chronic Hepatitis C

HCV can be classified as acute (mild illness lasting a few weeks and up to 6 months) or chronic (life-long). Most people who get infected with HCV develop chronic HCV.<sup>4</sup> Around 75%-85% of people who get infected with HCV develop a chronic infection. From 5%-20% of people who develop chronic HCV develop cirrhosis, and 1%-5% will die from either cirrhosis or liver cancer (Figure 1).<sup>4,5</sup>

**Figure 1. Progression of Hepatitis C<sup>5</sup>**



### 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. HCV can also be transmitted through the receipt of

<sup>1</sup>Centers for Disease Control and Prevention (CDC) (2020). *What is Viral Hepatitis?* Updated July 28,2020. Accessed November 7, 2020. Retrieved from <https://www.cdc.gov/hepatitis/abc/index.htm>.

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

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

blood (including blood products and organs), needlestick injuries in health care settings, and through 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.<sup>4</sup>

People at 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 HBV-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.<sup>4</sup>

### Symptoms of Hepatitis C

The majority of people who newly acquire HCV are usually asymptomatic or have mild symptoms. When symptoms do occur, they 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.<sup>4</sup> 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).<sup>4</sup> Progression of chronic liver disease is slow without any symptoms for a few decades. Most HCV infection is not recognized in asymptomatic people until they are screened for either blood donations or if elevated liver enzyme levels are detected during routine examinations.<sup>4</sup>

### Screening for Hepatitis C

Screening for HCV should be done for current or former drug users, everyone born from 1945-1965 (Baby Boomers), anyone who received clotting factor concentrates made before 1987, recipients of blood transfusions or organ transplants before 1992, long-term hemodialysis patients, people with known exposures to HCV, people with HIV, and children born to mothers with HCV. It is also recommended to test people in jails or prisons, people who use drugs, and people who get an unregulated tattoo.<sup>1</sup>

Like with HBV, all 85 local health departments are able to offer risk-based HCV screening to under and uninsured individuals through the NC SLPH. In 2019, a total of 26,477 RNA tests were conducted at the NC SLPH, with 4,292 positive tests for HCV (16.2% positivity rate).

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

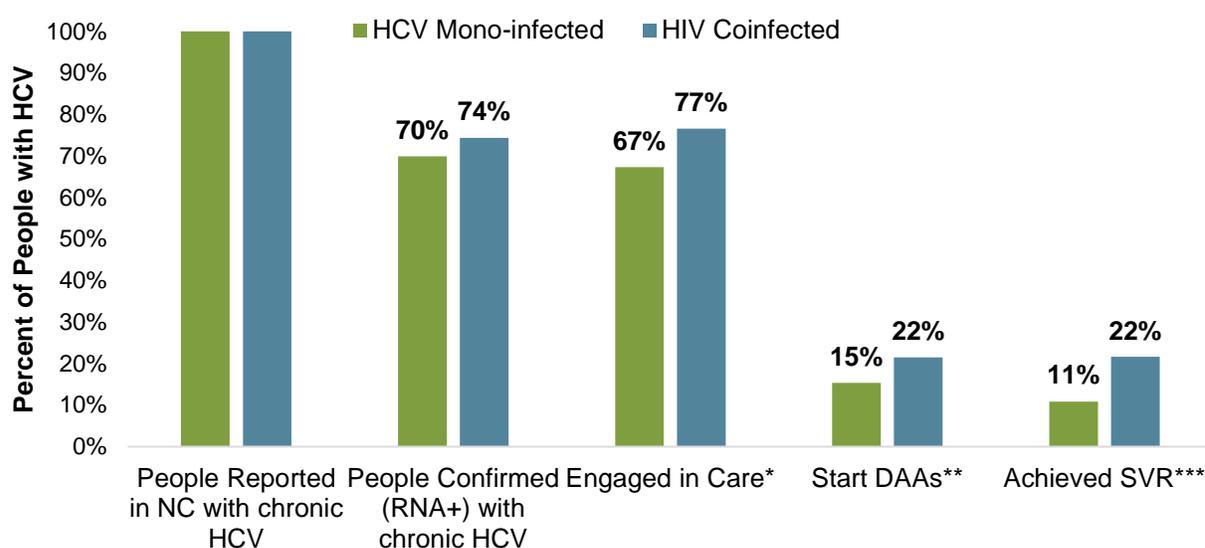
<sup>4</sup>Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis C Questions and Answers for Health Professionals*. Updated Aug 7, 2020. Accessed Nov 6, 2020. Retrieved from <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section1>.

## Treatment for Hepatitis C

Treatment was not recommended for acute HCV until 2020. In 2019, drug therapies to treat chronic HCV could achieve sustained virologic response (SVR) 12 weeks after completion of treatment; an SVR is indicative of a cure of HCV infection. Over 90% of HCV-infected people can be cured of HCV with eight to 12 weeks of oral therapy.<sup>4</sup>

Figure 2 represents the North Carolina surveillance-based treatment cascade for cases from 2016 through 2019. Our treatment cascade includes those mono-infected with HCV (green) and coinfecting with HIV and HCV (blue). It also includes the proportion of HCV cases confirmed (RNA-positive), the proportion engaged in care, the proportion started on direct-acting antivirals (DAAs), and the proportion achieved sustained virologic response (SVR). Our data on SVR are incomplete and should be considered a minimum estimate of people achieving SVR.

**Figure 2. North Carolina Surveillance-Based Hepatitis C Treatment Cascade, 2016-2019**



\*Engaged in care is defined as having an additional RNA after their initial date of report to public health.

\*\*Started direct-acting antivirals (DAA) is defined as an individual with a positive RNA followed by a negative RNA more than 30 days after last positive RNA.

\*\*\*Attained SVR is defined as an undetectable HCV RNA  $\geq 12$  weeks after last negative RNA.

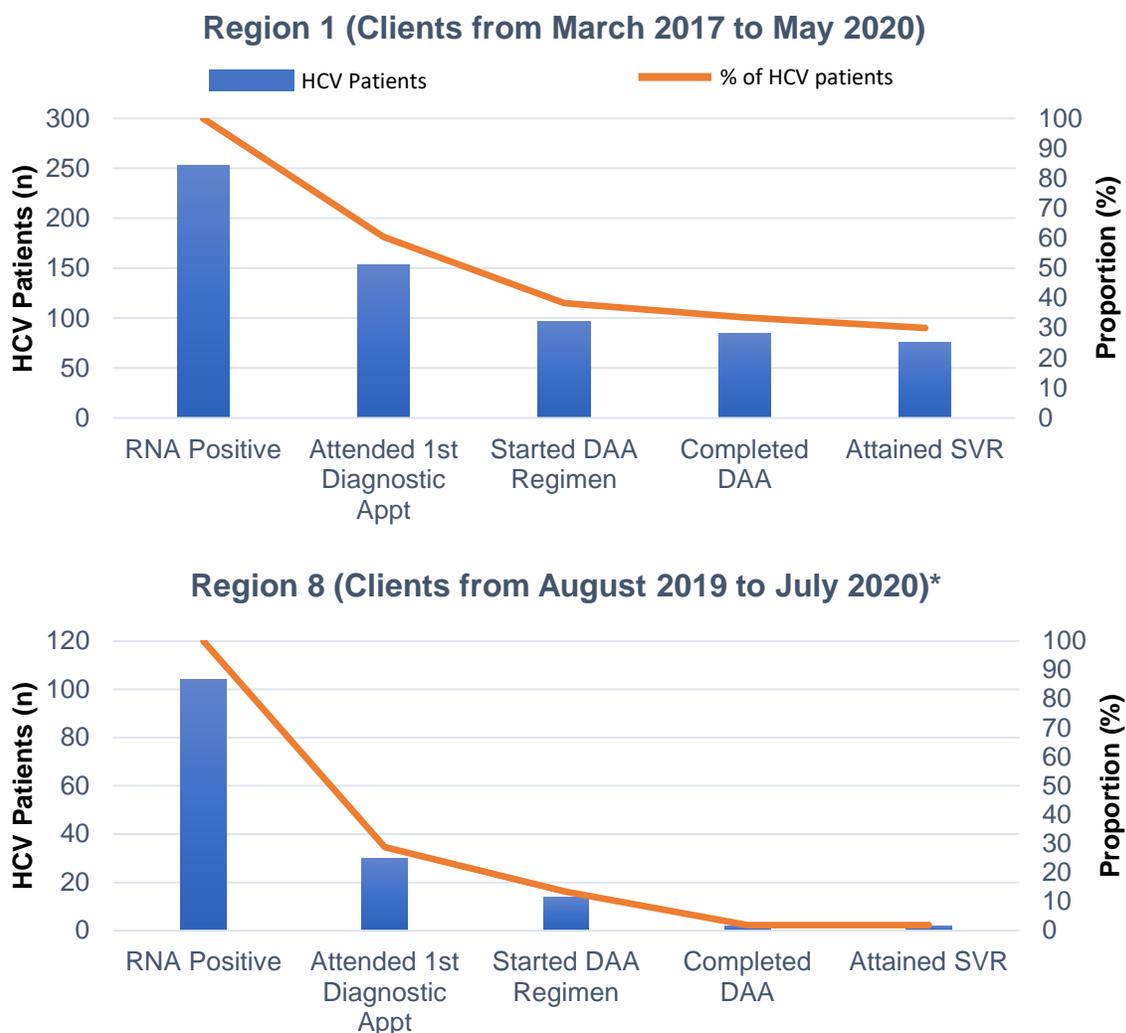
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 2, 2020) and enhanced HIV/AIDS Reporting System (eHARS) (data as of June 24, 2020).

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 2018, there were four HCV bridge counselors in North Carolina; two located in the western part of the state, one centrally located, and one in the southeastern part of the state. In 2019, NCVHP added one more HCV

<sup>4</sup>Centers for Disease Control and Prevention (CDC) (2020). *Hepatitis C Questions and Answers for Health Professionals*. Updated Aug 7, 2020. Accessed Nov 6, 2020. Retrieved from <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section1>.

bridge counselor to cover the northeast part of the state. 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 Regions 1 (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain, and Transylvania counties) and Region 8 (Bladen, Brunswick, Columbus, Duplin, New Hanover, Onslow, Pender, Robeson, and Sampson counties). These cascades differ from the surveillance-based one, as they include the proportion who completed their DAA regimen.

**Figure 3. North Carolina State Bridge Counselor-Based Hepatitis C Treatment Cascade, 2017-2020**



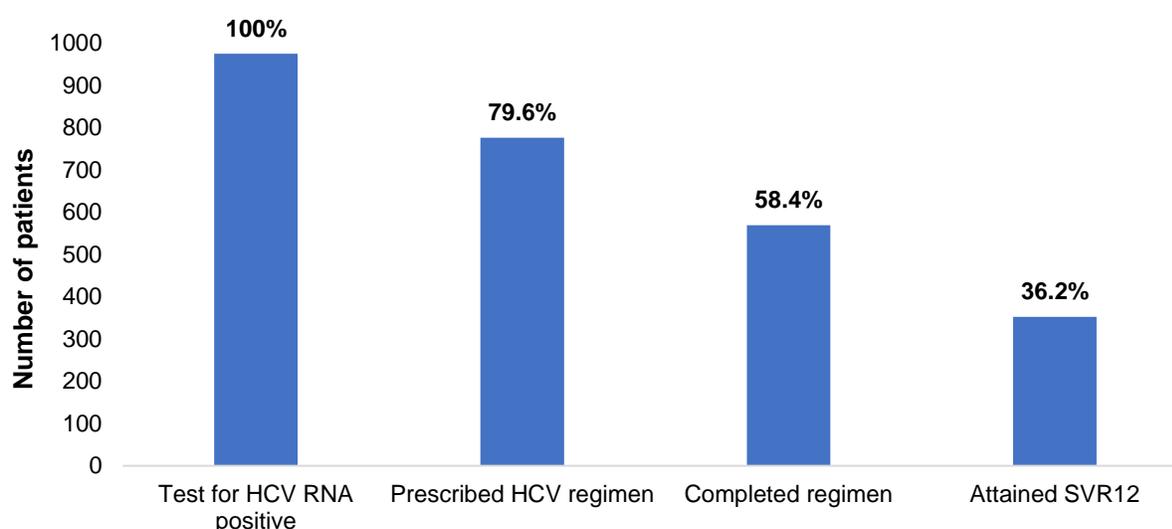
\*The Region 8 program started in August 2019. As expected, these data are during the start up period for this program, while it is being established in the region.

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 successfully treating patients with HCV. In addition to the boot camp, these providers have weekly conference calls with CHAMP mentors, which includes time for discussion of cases and continued education on effective treatment options. The team also provides funding for pretreatment lab work for uninsured and underinsured patients, as medication assistance programs do not cover lab costs, and can be a significant barrier for patients to access treatment. For more information about CHAMP, visit: [https://epi.dph.ncdhhs.gov/cd/hepatitis/CHAMP-Brochure\\_FINAL-WEB.pdf](https://epi.dph.ncdhhs.gov/cd/hepatitis/CHAMP-Brochure_FINAL-WEB.pdf).

Along with the bridge counselor HCV treatment cascade, the NCVHP produces a CHAMP provider-based treatment cascade. Figure 4 shows all clients seen by CHAMP providers from March 2017 (when the program started) until July 2020.

**Figure 4. North Carolina CHAMP Provider-Based Hepatitis C Treatment Cascade, 2017-2020**



### Prevention of Hepatitis C

There is no vaccine for HCV, but people infected with HCV should be vaccinated against HBV 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://epi.dph.ncdhhs.gov/cd/hepatitis/DrugUserHealthResourceGuide\\_10.14.20-WEB.pdf](https://epi.dph.ncdhhs.gov/cd/hepatitis/DrugUserHealthResourceGuide_10.14.20-WEB.pdf).

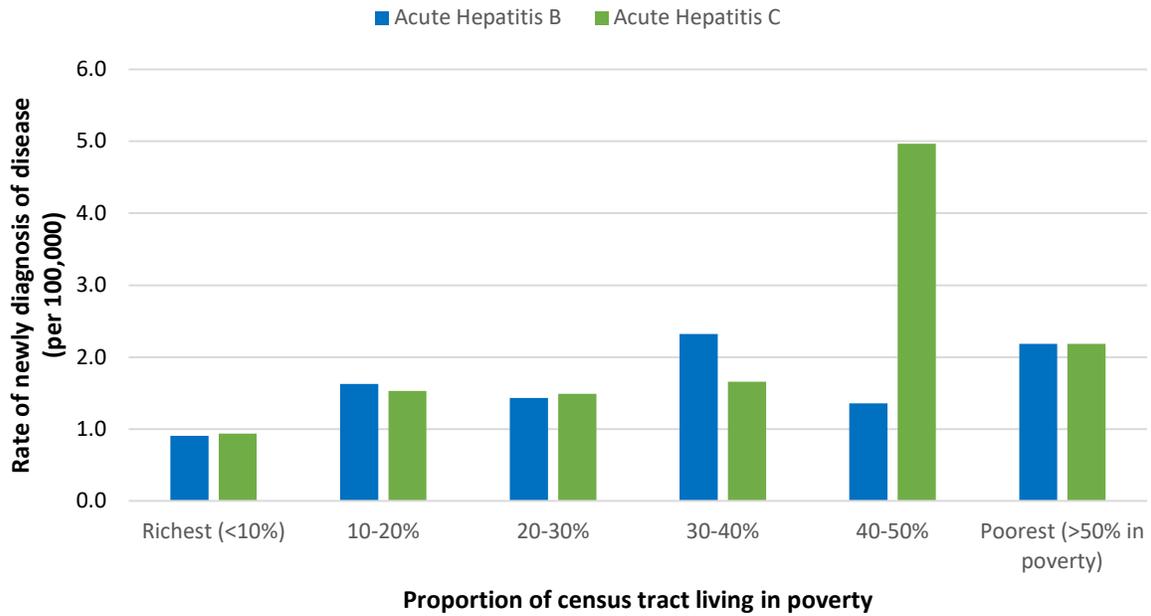
## Poverty and Hepatitis

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.<sup>16</sup> People who cannot afford basic needs may also have trouble accessing quality health services, and may have had experiences with the health system that discourage accessing of testing and care.<sup>16</sup> For each person diagnosed with acute HBV or HCV in North Carolina in 2019, 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 (2013-2017) 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 1 shows the rate of newly diagnosed acute HBV and HCV by census tract poverty rate. Figure 5 demonstrates that although people living at 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.

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<sup>16</sup> Centers 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>.

**Figure 5. People Diagnosed with Acute Hepatitis B and C in North Carolina by Poverty Indicator\*, 2019**

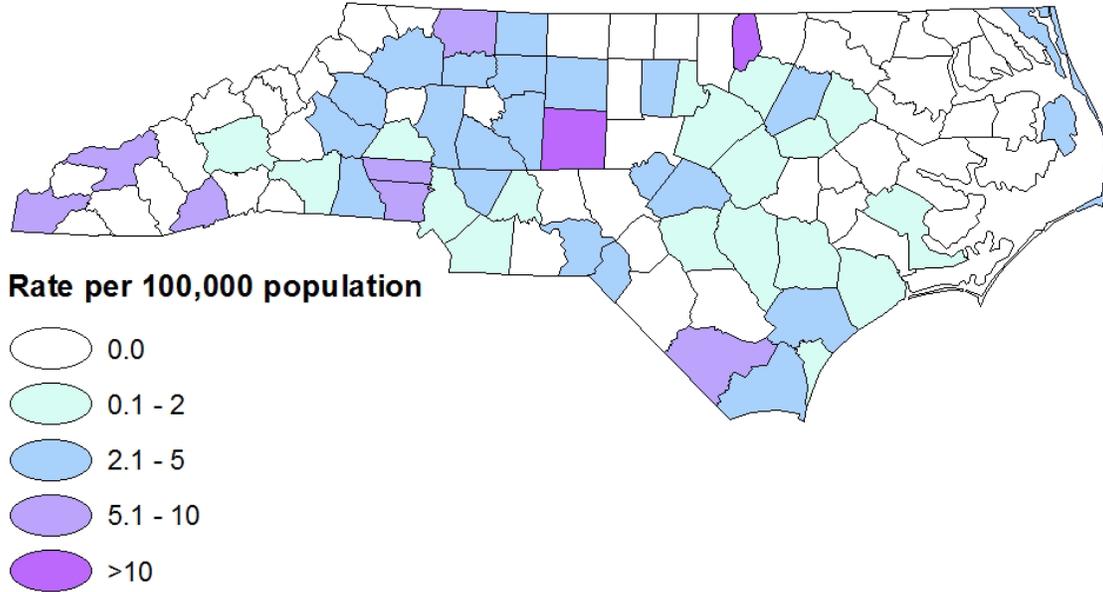


\*Estimates of people living below the poverty line within a census tract and all population estimates obtained from the American Community Survey, 2013-2017, five-year estimate.

Data Sources: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 2, 2020), and 2013-2017 American Community Survey (ACS) five-year estimates (accessed from <https://www.census.gov/programs-surveys/acs/>).

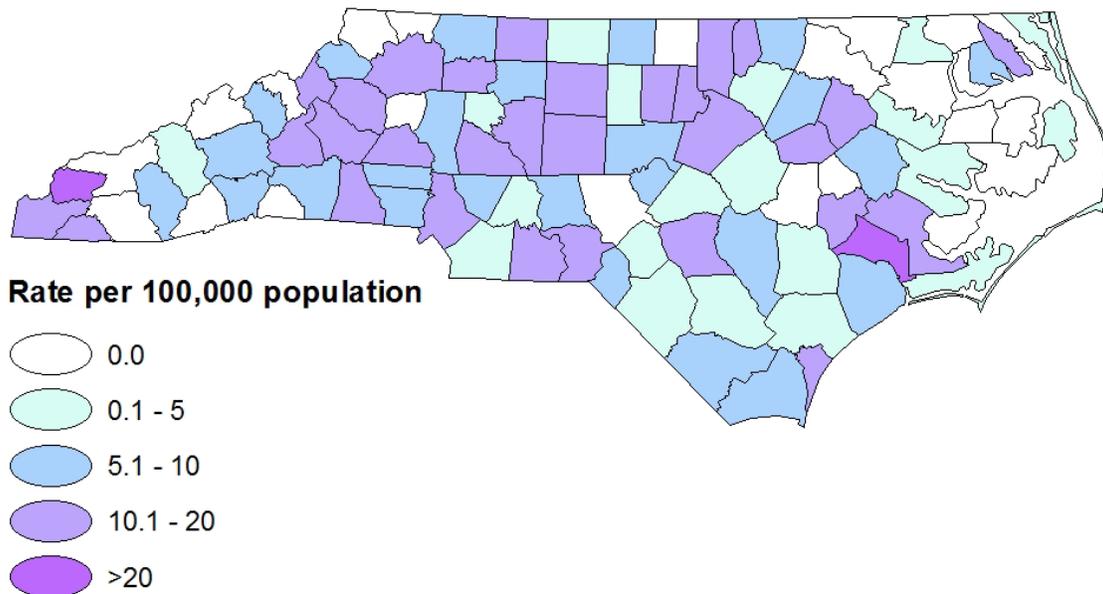
## Hepatitis B and C Rate Maps by County of Residence at Diagnosis, 2019

**Figure 6. Acute Hepatitis B Rates in North Carolina by County of Residence at Diagnosis, 2019**



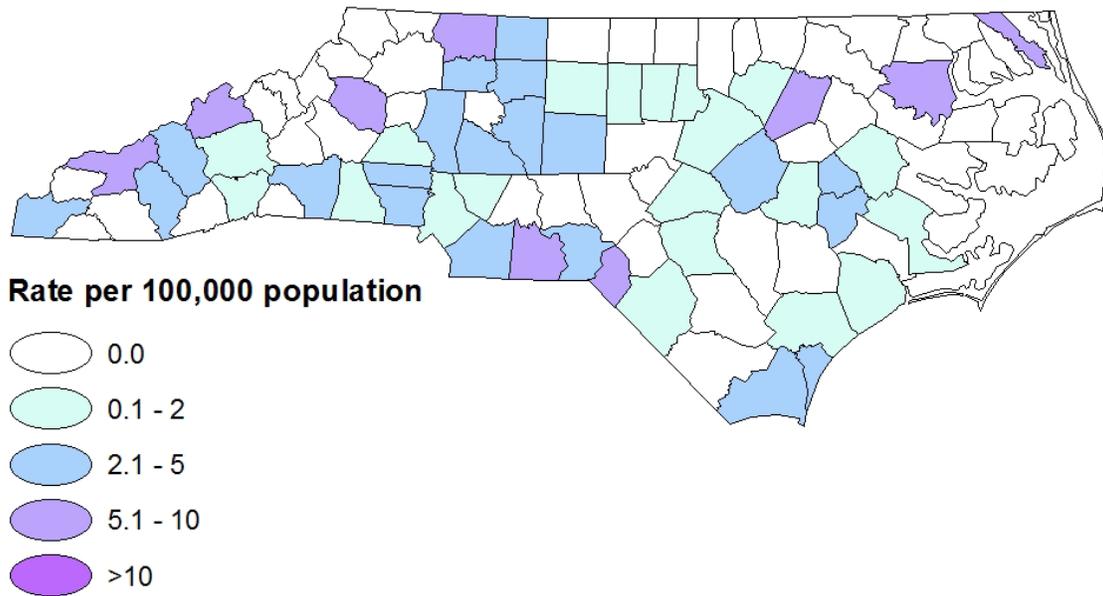
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 2, 2020).

**Figure 7. Newly Diagnosed Chronic Hepatitis B Rates in North Carolina by County of Residence at Diagnosis, 2019**



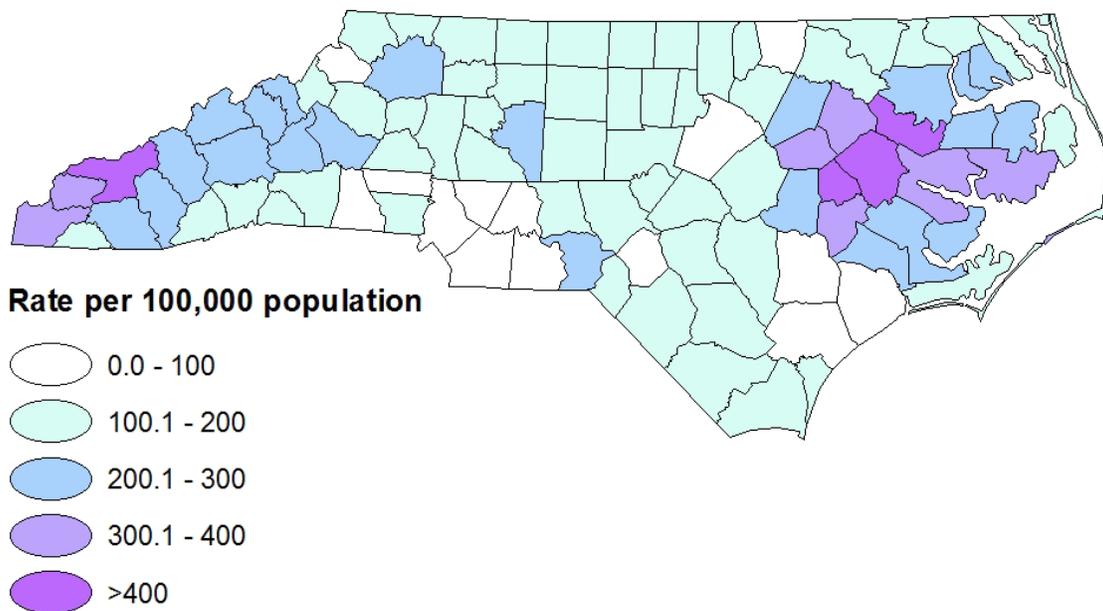
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 2, 2020).

**Figure 8. Acute Hepatitis C Rates in North Carolina by County of Residence at Diagnosis, 2019**



Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 2, 2020).

**Figure 9. Newly Reported Chronic Hepatitis C Rates in North Carolina by County of Residence at Diagnosis, 2019**



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 August 2, 2020).

## County Totals and Rates for Hepatitis B and C, 2019

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Table 1. Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019 ..... 2

Table 2. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina by Most Recently Known County of Residence as of 12/31/2019 ..... 5

Table 3. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019 ..... 6

Table 4. Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019 ..... 9

Table 5. Number of People Diagnosed with Chronic Hepatitis C in North Carolina as of 12/31/2019 by County of Residence when Reported to the State ..... 12

Table 6. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by County of Report and Year of Report, 2016-2019 ..... 13

**Table 1. Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019**

County	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
Alamance	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0
Alexander	1	2.7	0	0.0	1	2.7	2	5.4	0	0.0
Alleghany	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anson	0	0.0	1	4.0	4	16.1	0	0.0	0	0.0
Ashe	1	3.8	0	0.0	0	0.0	3	11.1	0	0.0
Avery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Beaufort	1	2.1	0	0.0	1	2.1	0	0.0	0	0.0
Bertie	1	5.0	0	0.0	0	0.0	0	0.0	0	0.0
Bladen	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0
Brunswick	2	1.6	4	3.2	7	5.3	5	3.7	3	2.1
Buncombe	6	2.4	3	1.2	4	1.6	2	0.8	2	0.8
Burke	3	3.4	5	5.6	6	6.7	8	8.8	2	2.2
Cabarrus	2	1.0	1	0.5	3	1.4	5	2.4	5	2.3
Caldwell	10	12.3	18	22.0	7	8.5	7	8.5	3	3.7
Camden	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Carteret	1	1.5	2	2.9	0	0.0	0	0.0	0	0.0
Caswell	0	0.0	0	0.0	0	0.0	2	8.8	0	0.0
Catawba	0	0.0	5	3.2	7	4.4	9	5.7	3	1.9
Chatham	1	1.5	1	1.4	0	0.0	2	2.7	0	0.0
Cherokee	5	18.4	6	21.6	3	10.7	1	3.5	2	7.0
Chowan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clay	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cleveland	2	2.1	2	2.1	2	2.1	4	4.1	4	4.1
Columbus	0	0.0	2	3.6	1	1.8	1	1.8	3	5.4
Craven	1	1.0	1	1.0	1	1.0	2	2.0	1	1.0
Cumberland	5	1.5	4	1.2	6	1.8	4	1.2	1	0.3
Currituck	0	0.0	1	3.9	0	0.0	0	0.0	1	3.6
Dare	0	0.0	0	0.0	1	2.8	0	0.0	1	2.7
Davidson	2	1.2	5	3.0	6	3.6	2	1.2	4	2.4
Davie	1	2.4	0	0.0	0	0.0	1	2.3	0	0.0
Duplin	2	3.4	0	0.0	1	1.7	0	0.0	1	1.7
Durham	7	2.3	3	1.0	6	1.9	3	0.9	3	0.9
Edgecombe	1	1.9	0	0.0	0	0.0	0	0.0	1	1.9
Forsyth	3	0.8	1	0.3	9	2.4	12	3.2	8	2.1
Franklin	3	4.7	2	3.1	1	1.5	1	1.5	1	1.4
Gaston	11	5.2	20	9.2	12	5.5	27	12.1	16	7.1
Gates	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Graham	1	11.6	3	35.2	0	0.0	0	0.0	0	0.0
Granville	0	0.0	1	1.7	0	0.0	2	3.3	0	0.0
Greene	0	0.0	0	0.0	1	4.8	2	9.5	0	0.0
Guilford	2	0.4	7	1.3	13	2.5	13	2.4	16	3.0

Continued

<sup>a</sup>Rates 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 August 2, 2020).

**Table 1 (Continued). Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019**

County	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
Halifax	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Harnett	5	3.9	3	2.3	6	4.5	1	0.7	3	2.2
Haywood	2	3.4	4	6.6	0	0.0	3	4.8	0	0.0
Henderson	0	0.0	0	0.0	1	0.9	0	0.0	0	0.0
Hertford	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hoke	1	1.9	0	0.0	0	0.0	1	1.8	0	0.0
Hyde	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Iredell	1	0.6	1	0.6	4	2.3	2	1.1	5	2.8
Jackson	3	7.3	3	7.0	3	6.9	0	0.0	0	0.0
Johnston	0	0.0	3	1.6	0	0.0	1	0.5	1	0.5
Jones	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lee	0	0.0	2	3.4	7	11.6	5	8.2	3	4.9
Lenoir	1	1.7	0	0.0	1	1.8	1	1.8	0	0.0
Lincoln	0	0.0	1	1.2	2	2.4	4	4.8	5	5.8
Macon	0	0.0	1	2.9	1	2.9	0	0.0	0	0.0
Madison	0	0.0	2	9.4	1	4.6	0	0.0	0	0.0
Martin	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
McDowell	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mecklenburg	10	1.0	9	0.9	10	0.9	14	1.3	10	0.9
Mitchell	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Montgomery	1	3.6	0	0.0	0	0.0	0	0.0	0	0.0
Moore	4	4.3	4	4.2	2	2.1	1	1.0	0	0.0
Nash	2	2.1	0	0.0	0	0.0	0	0.0	2	2.1
New Hanover	0	0.0	1	0.4	3	1.3	1	0.4	2	0.9
Northampton	1	4.9	0	0.0	0	0.0	0	0.0	0	0.0
Onslow	1	0.5	0	0.0	0	0.0	1	0.5	2	1.0
Orange	0	0.0	0	0.0	2	1.4	1	0.7	5	3.4
Pamlico	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pasquotank	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pender	0	0.0	1	1.7	0	0.0	1	1.6	3	4.8
Perquimans	0	0.0	0	0.0	0	0.0	1	7.5	0	0.0
Person	1	2.6	0	0.0	0	0.0	0	0.0	0	0.0
Pitt	1	0.6	0	0.0	0	0.0	1	0.6	0	0.0
Polk	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Randolph	1	0.7	3	2.1	7	4.9	22	15.4	17	11.8
Richmond	0	0.0	1	2.2	0	0.0	1	2.2	1	2.2
Robeson	2	1.5	3	2.2	1	0.8	1	0.8	0	0.0
Rockingham	3	3.3	1	1.1	2	2.2	2	2.2	0	0.0
Rowan	1	0.7	5	3.6	5	3.6	13	9.2	7	4.9
Rutherford	1	1.5	0	0.0	1	1.5	1	1.5	1	1.5

Continued

<sup>a</sup>Rates 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 August 2, 2020).

**Table 1 (Continued). Acute Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019**

County	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
Sampson	1	1.6	1	1.6	0	0.0	0	0.0	1	1.6
Scotland	1	2.8	0	0.0	0	0.0	0	0.0	1	2.9
Stanly	1	1.6	0	0.0	1	1.6	2	3.2	1	1.6
Stokes	0	0.0	2	4.4	3	6.6	2	4.4	1	2.2
Surry	0	0.0	1	1.4	0	0.0	0	0.0	4	5.6
Swain	5	34.9	0	0.0	1	7.0	1	7.0	1	7.0
Transylvania	0	0.0	1	3.0	0	0.0	0	0.0	2	5.8
Tyrrell	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Union	0	0.0	1	0.4	0	0.0	1	0.4	1	0.4
Vance	4	9.0	3	6.7	4	9.0	4	9.0	8	18.0
Wake	5	0.5	4	0.4	4	0.4	4	0.4	5	0.4
Warren	1	4.9	3	15.1	0	0.0	0	0.0	0	0.0
Washington	2	16.3	0	0.0	0	0.0	0	0.0	0	0.0
Watauga	1	1.9	0	0.0	2	3.6	1	1.8	0	0.0
Wayne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wilkes	6	8.8	2	2.9	3	4.4	4	5.8	2	2.9
Wilson	0	0.0	1	1.2	1	1.2	1	1.2	1	1.2
Yadkin	0	0.0	1	2.7	1	2.7	2	5.3	1	2.7
Yancey	1	5.7	0	0.0	0	0.0	0	0.0	0	0.0
Unassigned <sup>b</sup>	1	--	2	--	5	--	4	--	8	--
<b>North Carolina</b>	<b>146</b>	<b>1.5</b>	<b>169</b>	<b>1.7</b>	<b>187</b>	<b>1.8</b>	<b>227</b>	<b>2.2</b>	<b>185</b>	<b>1.8</b>

<sup>a</sup>Rates are expressed per 100,000 population.

<sup>b</sup>Unassigned 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 August 2, 2020).

**Table 2. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina by Most Recently Known County<sup>a</sup> of Residence as of 12/31/2019**

County	Cases	County	Cases	County	Cases
Alamance	175	Gaston	488	Pitt	304
Alexander	43	Gates	10	Polk	9
Alleghany	3	Graham	11	Randolph	227
Anson	48	Granville	120	Richmond	90
Ashe	16	Greene	29	Robeson	196
Avery	16	Guilford	2,035	Rockingham	103
Beaufort	67	Halifax	78	Rowan	234
Bertie	37	Harnett	151	Rutherford	80
Bladen	33	Haywood	64	Sampson	60
Brunswick	166	Henderson	132	Scotland	79
Buncombe	475	Hertford	50	Stanly	83
Burke	321	Hoke	98	Stokes	38
Cabarrus	291	Hyde	2	Surry	73
Caldwell	121	Iredell	246	Swain	25
Camden	10	Jackson	34	Transylvania	20
Carteret	89	Johnston	154	Tyrrell	7
Caswell	20	Jones	14	Union	271
Catawba	543	Lee	121	Vance	121
Chatham	62	Lenoir	131	Wake	2,865
Cherokee	37	Lincoln	66	Warren	25
Chowan	11	Macon	35	Washington	18
Clay	15	Madison	15	Watauga	55
Cleveland	178	Martin	25	Wayne	185
Columbus	79	McDowell	46	Wilkes	141
Craven	376	Mecklenburg	4,493	Wilson	161
Cumberland	1,189	Mitchell	11	Yadkin	44
Currituck	19	Montgomery	36	Yancey	14
Dare	25	Moore	112	Unassigned <sup>b</sup>	2,429
Davidson	275	Nash	190	<b>North Carolina</b>	<b>25,463</b>
Davie	52	New Hanover	459		
Duplin	69	Northampton	29		
Durham	1,073	Onslow	304		
Edgecombe	117	Orange	431		
Forsyth	965	Pamlico	9		
Franklin	68	Pasquotank	72		
		Pender	87		
		Perquimans	7		
		Person	27		

<sup>a</sup>Based on most recent known address from North Carolina Electronic Disease Surveillance System (NC EDSS) as of August 2, 2020.

<sup>b</sup>Unassigned includes cases diagnosed at long-term residence facilities, including prisons.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 2, 2020).

**Table 3. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019**

County	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
Alamance	13	8.3	12	7.5	10	6.1	11	6.6	7	4.1
Alexander	6	16.2	1	2.7	0	0.0	1	2.7	0	0.0
Alleghany	0	0.0	1	9.2	0	0.0	0	0.0	0	0.0
Anson	0	0.0	2	7.9	1	4.0	2	8.2	3	12.3
Ashe	1	3.8	2	7.5	1	3.7	1	3.7	0	0.0
Avery	1	5.7	1	5.7	1	5.7	0	0.0	3	17.1
Beaufort	2	4.2	3	6.3	6	12.8	3	6.4	1	2.1
Bertie	2	9.9	2	10.3	0	0.0	1	5.2	0	0.0
Bladen	1	2.9	3	8.9	4	12.0	2	6.0	1	3.1
Brunswick	7	5.7	9	7.1	9	6.9	12	8.8	13	9.1
Buncombe	29	11.5	16	6.3	27	10.5	25	9.6	20	7.7
Burke	22	24.6	14	15.7	16	17.7	19	21.0	10	11.1
Cabarrus	17	8.7	10	5.0	19	9.2	15	7.1	20	9.2
Caldwell	2	2.5	24	29.4	12	14.6	20	24.4	9	11.0
Camden	1	9.7	0	0.0	1	9.5	0	0.0	0	0.0
Carteret	3	4.4	2	2.9	6	8.7	2	2.9	2	2.9
Caswell	0	0.0	2	8.8	0	0.0	0	0.0	2	8.8
Catawba	19	12.2	15	9.6	19	12.0	13	8.2	21	13.2
Chatham	3	4.4	7	10.1	7	9.8	8	10.9	5	6.7
Cherokee	6	22.1	3	10.8	5	17.9	2	7.0	3	10.5
Chowan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clay	1	9.4	0	0.0	0	0.0	1	9.0	2	17.8
Cleveland	7	7.2	6	6.2	5	5.1	6	6.2	11	11.2
Columbus	8	14.1	5	8.9	5	8.9	5	9.0	5	9.0
Craven	13	12.6	17	16.6	11	10.7	24	23.5	18	17.6
Cumberland	43	13.0	52	15.6	50	15.1	45	13.5	58	17.3
Currituck	1	4.0	5	19.5	2	7.6	0	0.0	1	3.6
Dare	2	5.6	1	2.8	2	5.5	2	5.5	1	2.7
Davidson	14	8.6	9	5.5	26	15.7	17	10.2	30	17.9
Davie	4	9.6	3	7.2	8	18.9	0	0.0	1	2.3
Duplin	5	8.5	6	10.1	6	10.2	3	5.1	1	1.7
Durham	66	21.9	79	25.7	59	18.9	54	17.0	50	15.6
Edgecombe	3	5.6	4	7.5	3	5.7	1	1.9	6	11.7
Forsyth	49	13.3	48	12.9	37	9.8	45	11.9	21	5.5
Franklin	2	3.1	6	9.3	3	4.5	3	4.4	1	1.4
Gaston	51	24.0	25	11.5	45	20.5	33	14.8	22	9.8
Gates	1	8.7	0	0.0	2	17.4	1	8.6	0	0.0
Graham	2	23.3	2	23.4	0	0.0	1	11.8	2	23.7
Granville	18	30.9	7	11.9	5	8.4	4	6.7	7	11.6
Greene	1	4.8	1	4.7	4	19.1	3	14.2	0	0.0
Guilford	45	8.7	120	22.9	75	14.2	74	13.9	85	15.8

Continued

<sup>a</sup>Rates 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 August 2, 2020).

**Table 3 (Continued). Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019**

County	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
Halifax	9	17.2	7	13.5	4	7.8	2	3.9	0	0.0
Harnett	6	4.7	8	6.1	20	15.1	12	8.9	6	4.4
Haywood	2	3.4	7	11.6	1	1.6	6	9.7	3	4.8
Henderson	6	5.4	8	7.0	8	6.9	6	5.2	10	8.5
Hertford	9	36.9	1	4.1	1	4.2	1	4.2	1	4.2
Hoke	13	24.6	7	13.2	6	11.1	5	9.1	2	3.6
Hyde	0	0.0	0	0.0	1	19.1	0	0.0	0	0.0
Iredell	8	4.7	12	7.0	10	5.7	12	6.7	15	8.3
Jackson	6	14.5	2	4.7	4	9.3	4	9.2	3	6.8
Johnston	4	2.2	12	6.3	8	4.1	13	6.4	10	4.8
Jones	0	0.0	1	10.4	1	10.4	1	10.4	2	21.2
Lee	7	11.8	11	18.4	5	8.3	8	13.1	5	8.1
Lenoir	4	6.9	3	5.2	5	8.8	4	7.1	7	12.5
Lincoln	1	1.2	7	8.6	2	2.4	4	4.8	5	5.8
Macon	5	14.7	1	2.9	2	5.8	3	8.5	0	0.0
Madison	1	4.7	0	0.0	1	4.6	0	0.0	0	0.0
Martin	2	8.6	1	4.3	2	8.8	0	0.0	1	4.5
McDowell	3	6.7	2	4.5	0	0.0	4	8.8	5	10.9
Mecklenburg	171	16.5	169	16.0	152	14.1	137	12.5	146	13.1
Mitchell	1	6.6	0	0.0	2	13.3	0	0.0	0	0.0
Montgomery	3	10.9	4	14.7	3	11.0	2	7.4	2	7.4
Moore	13	13.8	9	9.4	5	5.1	6	6.1	0	0.0
Nash	9	9.6	7	7.5	8	8.5	9	9.6	8	8.5
New Hanover	23	10.5	22	9.8	16	7.0	13	5.6	27	11.5
Northampton	2	9.7	0	0.0	1	5.0	2	10.2	0	0.0
Onslow	14	7.2	14	7.3	16	8.2	14	7.1	14	7.1
Orange	14	9.9	33	23.1	22	15.3	20	13.5	20	13.5
Pamlico	0	0.0	1	7.8	2	15.8	0	0.0	0	0.0
Pasquotank	1	2.5	5	12.7	5	12.7	6	15.2	5	12.6
Pender	1	1.7	3	5.1	6	9.9	1	1.6	3	4.8
Perquimans	1	7.4	0	0.0	0	0.0	1	7.5	1	7.4
Person	1	2.6	2	5.1	0	0.0	2	5.1	0	0.0
Pitt	17	9.7	10	5.6	11	6.2	12	6.7	10	5.5
Polk	0	0.0	0	0.0	1	4.9	1	4.8	0	0.0
Randolph	11	7.7	12	8.4	10	7.0	21	14.7	15	10.4
Richmond	2	4.4	1	2.2	5	11.2	8	17.8	6	13.4
Robeson	12	8.9	7	5.2	15	11.3	3	2.3	2	1.5
Rockingham	6	6.5	5	5.5	8	8.8	12	13.2	2	2.2
Rowan	15	10.8	16	11.5	13	9.3	17	12.0	17	12.0
Rutherford	1	1.5	6	9.1	2	3.0	0	0.0	4	6.0

Continued

<sup>a</sup>Rates 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 August 2, 2020).

**Table 3(Continued). Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019**

County	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
Sampson	7	11.0	3	4.7	3	4.7	4	6.3	4	6.3
Scotland	2	5.7	1	2.8	5	14.2	2	5.8	2	5.7
Stanly	2	3.3	0	0.0	2	3.3	2	3.2	2	3.2
Stokes	3	6.5	2	4.4	5	10.9	1	2.2	5	11.0
Surry	3	4.2	1	1.4	2	2.8	4	5.6	5	7.0
Swain	2	14.0	3	21.1	5	35.1	2	14.0	0	0.0
Transylvania	1	3.0	1	3.0	3	8.9	0	0.0	0	0.0
Tyrrell	1	24.2	1	24.9	1	23.9	0	0.0	0	0.0
Union	22	9.9	8	3.5	16	6.9	15	6.4	11	4.6
Vance	9	20.2	6	13.5	13	29.4	7	15.7	6	13.5
Wake	102	10.0	344	32.8	169	15.8	161	14.8	154	13.9
Warren	3	14.8	0	0.0	2	10.1	1	5.0	1	5.1
Washington	1	8.2	0	0.0	1	8.4	0	0.0	0	0.0
Watauga	3	5.7	2	3.7	3	5.4	2	3.6	3	5.3
Wayne	15	12.1	11	8.9	11	8.9	6	4.9	0	0.0
Wilkes	17	24.9	14	20.4	21	30.7	16	23.3	7	10.2
Wilson	2	2.5	3	3.7	4	4.9	8	9.8	10	12.2
Yadkin	0	0.0	0	0.0	1	2.7	3	8.0	6	15.9
Yancey	0	0.0	3	17.0	1	5.7	0	0.0	1	5.5
Unassigned <sup>b</sup>	43	--	40	--	36	--	44	--	51	--
<b>North Carolina</b>	<b>1,113</b>	<b>11.1</b>	<b>1,384</b>	<b>13.6</b>	<b>1,180</b>	<b>11.5</b>	<b>1,109</b>	<b>10.7</b>	<b>1,067</b>	<b>10.2</b>

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Unassigned 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 August 2, 2020).

**Table 4. Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019<sup>^</sup>**

County	2015		2016 <sup>^</sup>		2017 <sup>^</sup>		2018 <sup>^</sup>		2019 <sup>^</sup>	
	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>
Alamance	0	0.0	1	0.6	3	1.8	3	1.8	2	1.2
Alexander	1	2.7	1	2.7	1	2.7	0	0.0	0	0.0
Alleghany	0	0.0	0	0.0	1	9.1	0	0.0	0	0.0
Anson	1	3.9	1	4.0	0	0.0	0	0.0	2	8.2
Ashe	0	0.0	1	3.8	0	0.0	2	7.4	0	0.0
Avery	0	0.0	1	5.7	0	0.0	0	0.0	0	0.0
Beaufort	1	2.1	0	0.0	0	0.0	3	6.4	0	0.0
Bertie	1	5.0	0	0.0	0	0.0	0	0.0	1	5.3
Bladen	2	5.9	1	3.0	0	0.0	0	0.0	0	0.0
Brunswick	6	4.9	13	10.3	11	8.4	2	1.5	3	2.1
Buncombe	0	0.0	1	0.4	3	1.2	5	1.9	2	0.8
Burke	2	2.2	4	4.5	3	3.3	5	5.5	0	0.0
Cabarrus	1	0.5	0	0.0	1	0.5	1	0.5	2	0.9
Caldwell	8	9.8	11	13.5	10	12.2	4	4.9	7	8.5
Camden	0	0.0	0	0.0	0	0.0	0	0.0	1	9.2
Carteret	1	1.5	0	0.0	0	0.0	1	1.4	0	0.0
Caswell	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Catawba	3	1.9	8	5.1	4	2.5	1	0.6	3	1.9
Chatham	0	0.0	1	1.4	1	1.4	0	0.0	0	0.0
Cherokee	3	11.1	2	7.2	4	14.3	0	0.0	1	3.5
Chowan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clay	0	0.0	2	18.6	0	0.0	1	9.0	0	0.0
Cleveland	2	2.1	0	0.0	2	2.1	3	3.1	2	2.0
Columbus	0	0.0	1	1.8	1	1.8	0	0.0	0	0.0
Craven	0	0.0	3	2.9	1	1.0	3	2.9	2	2.0
Cumberland	0	0.0	2	0.6	4	1.2	2	0.6	4	1.2
Currituck	1	4.0	1	3.9	2	7.6	0	0.0	0	0.0
Dare	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Davidson	0	0.0	0	0.0	2	1.2	6	3.6	7	4.2
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	0	0.0	0	0.0	1	0.3	5	1.6	3	0.9
Edgecombe	0	0.0	0	0.0	3	5.7	1	1.9	0	0.0
Forsyth	5	1.4	4	1.1	6	1.6	7	1.8	10	2.6
Franklin	0	0.0	0	0.0	2	3.0	1	1.5	1	1.4
Gaston	1	0.5	0	0.0	8	3.6	13	5.8	6	2.7
Gates	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Graham	2	23.3	5	58.6	1	11.7	0	0.0	0	0.0
Granville	0	0.0	0	0.0	0	0.0	4	6.7	0	0.0
Greene	0	0.0	0	0.0	2	9.5	0	0.0	1	4.7
Guilford	3	0.6	4	0.8	6	1.1	7	1.3	6	1.1

Continued

<sup>^</sup>Case definition of hepatitis C changed in 2016. Please see Appendix A: Technical notes for information.<sup>a</sup>Rates 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 August 2, 2020).

**Table 4 (Continued). Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019<sup>^</sup>**

County	2015		2016 <sup>^</sup>		2017 <sup>^</sup>		2018 <sup>^</sup>		2019 <sup>^</sup>	
	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>
Halifax	0	0.0	1	1.9	0	0.0	1	2.0	0	0.0
Harnett	1	0.8	6	4.6	4	3.0	0	0.0	1	0.7
Haywood	3	5.0	2	3.3	1	1.6	1	1.6	2	3.2
Henderson	0	0.0	0	0.0	1	0.9	1	0.9	1	0.9
Hertford	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hoke	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hyde	0	0.0	0	0.0	0	0.0	1	19.9	0	0.0
Iredell	2	1.2	6	3.5	7	4.0	5	2.8	7	3.9
Jackson	1	2.4	3	7.0	6	13.9	5	11.5	1	2.3
Johnston	0	0.0	5	2.6	3	1.5	1	0.5	5	2.4
Jones	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lee	2	3.4	0	0.0	1	1.7	0	0.0	0	0.0
Lenoir	2	3.4	1	1.7	3	5.3	0	0.0	2	3.6
Lincoln	1	1.2	1	1.2	4	4.8	3	3.6	3	3.5
Macon	0	0.0	3	8.8	1	2.9	0	0.0	0	0.0
Madison	0	0.0	1	4.7	1	4.6	3	13.8	2	9.2
Martin	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
McDowell	0	0.0	1	2.2	2	4.4	0	0.0	0	0.0
Mecklenburg	4	0.4	2	0.2	2	0.2	5	0.5	3	0.3
Mitchell	0	0.0	1	6.7	0	0.0	1	6.7	0	0.0
Montgomery	0	0.0	0	0.0	2	7.3	1	3.7	0	0.0
Moore	2	2.1	5	5.2	1	1.0	1	1.0	0	0.0
Nash	2	2.1	1	1.1	2	2.1	0	0.0	5	5.3
New Hanover	5	2.3	10	4.4	6	2.6	7	3.0	5	2.1
Northampton	0	0.0	0	0.0	0	0.0	1	5.1	0	0.0
Onslow	0	0.0	4	2.1	6	3.1	1	0.5	3	1.5
Orange	0	0.0	0	0.0	3	2.1	1	0.7	3	2.0
Pamlico	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pasquotank	0	0.0	3	7.6	0	0.0	1	2.5	0	0.0
Pender	2	3.5	0	0.0	0	0.0	1	1.6	1	1.6
Perquimans	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Person	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pitt	2	1.1	1	0.6	2	1.1	5	2.8	3	1.7
Polk	0	0.0	0	0.0	2	9.7	0	0.0	0	0.0
Randolph	8	5.6	13	9.1	13	9.1	16	11.2	7	4.9
Richmond	3	6.6	1	2.2	0	0.0	0	0.0	2	4.5
Robeson	1	0.7	1	0.7	1	0.8	1	0.8	2	1.5
Rockingham	2	2.2	4	4.4	3	3.3	0	0.0	0	0.0
Rowan	5	3.6	1	0.7	0	0.0	1	0.7	5	3.5
Rutherford	3	4.5	8	12.1	3	4.5	1	1.5	2	3.0

Continued

<sup>^</sup>Case definition of hepatitis C changed in 2016. Please see Appendix A: Technical notes for information.<sup>a</sup>Rates 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 August 2, 2020).

**Table 4 (Continued). Acute Hepatitis C Annual Rates in North Carolina by County of Diagnosis and Year of Diagnosis, 2015-2019<sup>^</sup>**

County	2015		2016 <sup>^</sup>		2017 <sup>^</sup>		2018 <sup>^</sup>		2019 <sup>^</sup>	
	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>
Sampson	0	0.0	1	1.6	2	3.2	0	0.0	0	0.0
Scotland	1	2.8	0	0.0	0	0.0	1	2.9	3	8.6
Stanly	0	0.0	0	0.0	4	6.5	3	4.8	0	0.0
Stokes	0	0.0	0	0.0	1	2.2	2	4.4	2	4.4
Surry	2	2.8	9	12.5	4	5.5	6	8.3	4	5.6
Swain	2	14.0	4	28.2	2	14.0	5	35.1	1	7.0
Transylvania	0	0.0	2	6.0	0	0.0	0	0.0	0	0.0
Tyrrell	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Union	0	0.0	3	1.3	3	1.3	4	1.7	5	2.1
Vance	0	0.0	0	0.0	1	2.3	1	2.2	0	0.0
Wake	5	0.5	1	0.1	7	0.7	9	0.8	10	0.9
Warren	1	4.9	0	0.0	0	0.0	0	0.0	0	0.0
Washington	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Watauga	1	1.9	8	14.8	1	1.8	3	5.4	0	0.0
Wayne	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
Wilkes	7	10.2	7	10.2	0	0.0	0	0.0	0	0.0
Wilson	1	1.2	1	1.2	1	1.2	0	0.0	0	0.0
Yadkin	0	0.0	1	2.7	1	2.7	0	0.0	1	2.7
Yancey	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unassigned <sup>b</sup>	5	---	12	---	2	---	18	---	26	---
<b>North Carolina</b>	<b>120</b>	<b>1.2</b>	<b>203</b>	<b>2.0</b>	<b>192</b>	<b>1.9</b>	<b>197</b>	<b>1.9</b>	<b>184</b>	<b>1.8</b>

<sup>^</sup>Case definition of hepatitis C changed in 2016. Please see Appendix A: Technical notes for information.

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Unassigned 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 August 2, 2020).

**Table 5. Number of People Diagnosed with Chronic Hepatitis C in North Carolina as of 12/31/2019 by County of Residence when Reported to the State**

County	Cases	County	Cases	County	Cases
Alamance	800	Gaston	1,132	Perquimans	59
Alexander	214	Gates	37	Person	184
Alleghany	67	Graham	106	Pitt	3,041
Anson	78	Granville	411	Polk	89
Ashe	93	Greene	292	Randolph	892
Avery	101	Guilford	2,007	Richmond	260
Beaufort	293	Halifax	257	Robeson	626
Bertie	85	Harnett	554	Rockingham	398
Bladen	129	Haywood	618	Rowan	931
Brunswick	808	Henderson	628	Rutherford	380
Buncombe	2,628	Hertford	113	Sampson	257
Burke	682	Hoke	172	Scotland	182
Cabarrus	546	Hyde	36	Stanly	207
Caldwell	569	Iredell	747	Stokes	226
Camden	20	Jackson	389	Surry	351
Carteret	432	Johnston	685	Swain	217
Caswell	107	Jones	51	Transylvania	241
Catawba	759	Lee	344	Tyrrell	32
Chatham	257	Lenoir	338	Union	441
Cherokee	339	Lincoln	286	Vance	251
Chowan	68	Macon	277	Wake	3,674
Clay	73	Madison	232	Warren	64
Cleveland	369	Martin	175	Washington	46
Columbus	292	McDowell	438	Watauga	147
Craven	842	Mecklenburg	3,058	Wayne	592
Cumberland	1,523	Mitchell	153	Wilkes	544
Currituck	103	Montgomery	133	Wilson	674
Dare	219	Moore	334	Yadkin	221
Davidson	1,162	Nash	642	Yancey	171
Davie	201	New Hanover	1,091	Unassigned <sup>b</sup>	11,768
Duplin	158	Northampton	95	<b>North Carolina</b>	<b>62,831</b>
Durham	1,935	Onslow	638		
Edgecombe	468	Orange	582		
Forsyth	1,380	Pamlico	112		
Franklin	261	Pasquotank	173		
		Pender	268		

<sup>a</sup>Chronic 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.

<sup>b</sup>Unassigned includes cases diagnosed at long-term residence facilities, including prisons.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 2, 2020).

**Table 6. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by County of Report and Year of Report, 2016-2019\***

County	2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>						
Alamance	77	48.0	245	150.1	272	163.3	206	121.5
Alexander	23	61.9	64	172.3	77	206.3	50	133.3
Alleghany	4	36.6	22	200.2	23	206.5	18	161.6
Anson	12	47.7	27	108.7	19	77.6	20	81.8
Ashe	7	26.3	33	123.2	23	84.9	30	110.3
Avery	18	103.2	37	211.2	28	159.7	18	102.5
Beaufort	17	35.9	58	123.3	48	102.0	170	361.7
Bertie	7	36.0	16	83.1	19	99.4	43	226.9
Bladen	5	14.9	31	92.7	46	138.8	47	143.6
Brunswick	74	58.6	300	229.3	220	160.7	214	149.8
Buncombe	131	51.4	955	371.5	853	329.0	689	263.8
Burke	94	105.1	260	288.4	140	154.9	188	207.8
Cabarrus	78	38.7	203	98.1	128	60.5	137	63.3
Caldwell	38	46.5	203	247.8	183	223.1	145	176.4
Camden	0	0.0	4	38.0	7	65.6	9	82.8
Carteret	43	62.5	136	197.3	115	165.6	138	198.6
Caswell	8	35.2	31	137.1	38	167.9	30	132.7
Catawba	72	46.0	249	157.7	245	154.4	193	121.0
Chatham	7	10.1	55	77.3	112	153.2	83	111.5
Cherokee	30	107.9	132	472.2	91	320.8	86	300.6
Chowan	2	14.1	9	64.2	28	199.1	29	208.0
Clay	11	102.3	28	254.5	22	197.8	12	106.8
Cleveland	42	43.3	110	113.2	121	124.1	96	98.0
Columbus	25	44.4	97	173.1	103	184.5	67	120.7
Craven	80	77.9	292	284.9	242	236.5	228	223.2
Cumberland	144	43.2	492	148.6	443	132.9	444	132.3
Currituck	2	7.8	35	133.1	33	122.1	33	118.9
Dare	22	61.4	74	204.4	61	166.6	62	167.5
Davidson	90	54.8	353	213.7	344	206.8	375	223.7
Davie	14	33.4	66	156.0	51	119.8	70	163.4
Duplin	12	20.2	41	69.6	47	79.7	58	98.7
Durham	92	29.9	764	244.8	586	184.9	493	153.3
Edgecombe	40	75.1	129	244.5	121	232.8	178	345.8
Forsyth	117	31.5	400	106.4	442	116.6	421	110.1
Franklin	15	23.2	72	108.8	100	147.9	74	106.2
Gaston	107	49.4	384	174.8	344	154.5	297	132.3
Gates	2	17.3	8	69.5	10	86.5	17	147.0
Graham	9	105.5	30	351.9	38	449.1	29	343.6
Granville	16	27.3	147	247.6	139	231.7	109	180.3

Continued

\*Chronic hepatitis C became reportable in North Carolina in October 2016 and is only reported from laboratories reporting electronically. These numbers are likely an underestimation. The number of chronic hepatitis C cases is given as "reported" rather than "newly diagnosed"; 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.

<sup>a</sup>Rates 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 August 2, 2020).

**Table 6 (Continued). Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by County of Report and Year of Report, 2016-2019**

County	2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>	Cases	Cases	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>
Greene	17	80.7	60	286.2	27	127.9	188	892.3
Guilford	108	20.6	534	101.1	712	133.7	653	121.6
Halifax	14	27.0	65	126.7	82	161.9	96	192.0
Harnett	39	29.8	170	128.4	196	145.9	149	109.6
Haywood	62	102.6	215	352.4	196	316.7	145	232.7
Henderson	45	39.6	197	171.0	210	180.3	176	149.9
Hertford	5	20.7	30	125.4	33	138.2	45	190.1
Hoke	14	26.4	60	110.8	50	91.4	48	86.9
Hyde	4	73.6	9	171.8	4	79.6	19	384.8
Iredell	79	45.8	226	128.7	218	122.2	224	123.2
Jackson	40	93.8	108	249.9	121	277.5	120	273.1
Johnston	45	23.6	157	79.9	259	127.8	224	107.0
Jones	6	62.6	17	177.6	9	93.6	19	201.7
Lee	28	46.9	94	155.6	121	197.7	101	163.5
Lenoir	20	34.9	74	130.7	68	121.5	176	314.6
Lincoln	44	54.2	107	129.6	62	73.7	73	84.8
Macon	17	49.6	106	306.5	70	198.4	84	234.3
Madison	7	32.8	100	463.8	75	346.2	50	229.8
Martin	4	17.3	23	101.0	25	110.3	123	548.1
McDowell	20	44.6	176	390.4	130	285.9	112	244.8
Mecklenburg	434	41.1	1,154	107.0	733	67.0	737	66.4
Mitchell	14	93.4	56	373.5	52	346.8	31	207.2
Montgomery	19	69.6	38	139.4	38	140.3	38	139.8
Moore	24	25.2	84	86.3	103	104.2	123	121.9
Nash	63	67.1	227	241.4	145	154.1	207	219.5
New Hanover	104	46.3	337	147.3	314	135.2	336	143.3
Northampton	3	14.9	27	135.7	28	142.1	37	189.9
Onslow	78	40.6	168	86.1	215	109.2	177	89.4
Orange	22	15.4	139	96.8	239	161.5	182	122.6
Pamlico	17	133.2	28	221.6	38	300.8	29	227.9
Pasquotank	10	25.4	42	106.6	58	146.5	63	158.2
Pender	35	59.6	103	169.6	68	109.6	62	98.3
Perquimans	1	7.5	14	104.2	17	127.0	27	200.5
Person	10	25.5	61	155.1	67	169.9	46	116.5
Pitt	57	32.2	200	112.0	213	118.6	2,571	1,422.5
Polk	4	19.6	26	126.4	30	145.2	29	139.9
Randolph	90	62.9	290	202.7	279	194.8	233	162.2
Richmond	12	26.7	48	107.1	102	227.2	98	218.6

Continued

\*Chronic hepatitis C became reportable in North Carolina in October 2016 and is only reported from laboratories reporting electronically. These numbers are likely an underestimation. The number of chronic hepatitis C cases is given as "reported" rather than "newly diagnosed"; 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.

<sup>a</sup>Rates 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 August 2, 2020).

**Table 6 (Continued). Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by County of Report and Year of Report, 2016-2019**

County	2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>	Cases	Cases	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>
Robeson	54	40.5	177	133.5	210	159.2	185	141.6
Rockingham	25	27.4	102	112.3	144	158.9	127	139.5
Rowan	87	62.4	328	233.7	260	184.2	256	180.2
Rutherford	43	64.9	140	210.4	105	157.2	92	137.3
Sampson	31	49.0	91	143.8	66	104.2	69	108.6
Scotland	11	31.2	59	167.7	57	164.0	55	157.9
Stanly	25	41.1	78	126.8	63	101.3	41	65.3
Stokes	16	34.8	71	155.3	75	164.8	64	140.4
Surry	31	43.1	125	173.4	118	164.0	77	107.3
Swain	9	63.4	59	413.7	59	414.1	90	630.6
Transylvania	10	29.9	89	263.6	75	219.5	67	194.9
Tyrrell	4	99.4	7	167.5	12	291.6	9	224.1
Union	48	21.2	134	57.9	112	47.5	147	61.3
Vance	7	15.7	79	178.4	97	217.3	68	152.7
Wake	287	27.4	1,224	114.2	1,174	107.6	989	89.0
Warren	5	25.1	23	115.9	18	90.8	18	91.2
Washington	4	33.1	7	58.6	7	59.5	28	241.8
Watauga	17	31.4	45	81.5	47	83.9	38	67.6
Wayne	32	25.8	130	105.7	166	134.7	264	214.4
Wilkes	79	115.2	190	277.4	137	199.8	138	201.7
Wilson	64	78.7	200	245.6	131	160.9	279	341.1
Yadkin	16	42.5	63	167.6	74	197.4	68	180.5
Yancey	12	68.1	54	305.1	57	318.9	48	265.6
Unassigned <sup>b</sup>	981	---	3,728	---	3,799	---	3,260	---
<b>North Carolina</b>	<b>5,100</b>	<b>50.2</b>	<b>19,365</b>	<b>188.6</b>	<b>18,432</b>	<b>177.5</b>	<b>19,934</b>	<b>190.1</b>

\*Chronic hepatitis C became reportable in North Carolina in October 2016 and is only reported from laboratories reporting electronically. These numbers are likely an underestimation. The number of chronic hepatitis C cases is given as "reported" rather than "newly diagnosed"; 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.

<sup>a</sup>Rates 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 August 2, 2020).

## North Carolina State Totals and Rates for Hepatitis B and C by Selected Demographics, 2019

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Table 7. Number of Infants Diagnosed with Hepatitis B (Perinatal Hepatitis B) in North Carolina by Year of Diagnosis, 2010-2019.....	17
Table 8. Acute Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2015-2019 .....	18
Table 9. Acute Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019 .....	19
Table 10. Acute Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019 .....	21
Table 11. Acute Hepatitis B Cases in North Carolina by Gender, Risk of Exposure, and Year of Diagnosis, 2015-2019 .....	22
Table 12. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina as of 12/31/2019 .....	23
Table 13. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2015-2019.....	24
Table 14. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019 .....	25
Table 15. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019 .....	27
Table 16. Newly Diagnosed Chronic Hepatitis B Cases in North Carolina by Gender, Risk of Exposure, and Year of Diagnosis, 2015-2019.....	28
Table 17. Acute Hepatitis C Annual Rates in North Carolina by Selected Demographics, 2015-2019 .....	29
Table 18. Acute Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019 .....	30
Table 19. Acute Hepatitis C Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019 .....	32
Table 20. Acute Hepatitis C Cases in North Carolina by Gender, Risk of Exposure, and Year of Diagnosis, 2015-2019 .....	33
Table 21. Newly Reported Chronic Hepatitis C in North Carolina by Selected Demographics, as of 12/31/2019 .....	34
Table 22. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Report, 2016-2019.....	35
Table 23. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Report, 2016-2019.....	37

**Table 7. Number of Infants Diagnosed with Hepatitis B (Perinatal Hepatitis B) in North Carolina by Year of Diagnosis, 2010-2019**

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2	1	0	1	2	1	0	1	1	3

Data Source: Immunization Branch (data as of June 2020).

**Table 8. Acute Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2015-2019**

Demographics	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
<b>Gender</b>										
Men	94	1.9	102	2.1	107	2.1	150	3.0	121	2.4
Women	52	1.0	67	1.3	80	1.5	77	1.4	64	1.2
<b>Age at Diagnosis</b>										
Less than 13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13-14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15-19	1	0.2	1	0.1	0	0.0	4	0.6	0	0.0
20-24	7	1.0	15	2.1	6	0.9	7	1.0	9	1.3
25-29	7	1.0	7	1.0	8	1.1	11	1.5	6	0.8
30-34	15	2.3	12	1.9	16	2.4	12	1.8	13	1.9
35-39	29	4.6	34	5.3	35	5.4	38	5.8	26	3.9
40-44	23	3.5	25	3.9	38	6.0	31	4.9	32	5.0
45-49	23	3.4	24	3.5	24	3.4	46	6.6	33	4.8
50-54	16	2.3	22	3.2	29	4.2	26	3.8	26	3.8
55-59	14	2.1	15	2.2	10	1.5	18	2.6	13	1.8
60-64	8	1.3	9	1.5	10	1.6	17	2.6	9	1.4
65 and older	3	0.2	5	0.3	11	0.7	17	1.0	18	1.0
<b>Race/Ethnicity</b>										
American Indian/Alaska Native <sup>b</sup>	4	3.3	3	2.5	2	1.6	0	0	0	0
Asian/Pacific Islander <sup>b</sup>	0	0	1	0.3	2	0.6	1	0.3	3	0.9
Black/African American <sup>b</sup>	27	1.2	29	1.3	28	1.2	41	1.8	35	1.5
Hispanic/Latino	7	0.8	3	0.3	3	0.3	7	0.7	6	0.6
White/Caucasian <sup>b</sup>	95	1.5	120	1.8	138	2.1	152	2.3	138	2.1
Multiple Race <sup>c</sup>	2	--	1	--	2	--	2	--	1	--
Unknown/Unspecified <sup>c</sup>	11	--	12	--	12	--	24	--	2	--
<b>Exposure Category<sup>d</sup></b>										
Heterosexual Contact <sup>e</sup>	73	--	84	--	95	--	123	--	91	--
IDU <sup>f</sup>	24	--	35	--	62	--	64	--	46	--
MSM <sup>f</sup>	6	--	2	--	4	--	3	--	11	--
Other Risk <sup>g</sup>	16	--	16	--	28	--	28	--	19	--
Unknown <sup>h</sup>	56	--	63	--	58	--	64	--	61	--
<b>Total</b>	<b>146</b>	<b>1.5</b>	<b>169</b>	<b>1.7</b>	<b>187</b>	<b>1.8</b>	<b>227</b>	<b>2.2</b>	<b>185</b>	<b>1.8</b>

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Non-Hispanic/Latino.

<sup>c</sup>Rates are not available due to the lack of overall population data for the multiple race and unknown/unspecified race/ethnicity groups.

<sup>d</sup>People 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.

<sup>e</sup>Heterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

<sup>f</sup>IDU = injection drug use; MSM = men who report sex with men.

<sup>g</sup>Other risk includes health care exposure or contact with a positive hepatitis B individual.

<sup>h</sup>Unknown 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 August 2, 2020).

**Table 9. Acute Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019**

Gender	Age at Diagnosis (Year)	2015			2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>												
Men	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	15-19	1	1.1	0.3	1	1.0	0.3	0	0.0	0.0	2	1.3	0.6	0	0.0	0.0
	20-24	7	7.4	1.9	9	8.8	2.4	4	3.7	1.1	4	2.7	1.1	6	5.0	1.7
	25-29	4	4.3	1.2	5	4.9	1.4	5	4.7	1.4	8	5.3	2.2	4	3.3	1.1
	30-34	12	12.8	3.8	4	3.9	1.3	7	6.5	2.2	4	2.7	1.2	9	7.4	2.7
	35-39	16	17.0	5.2	16	15.7	5.1	23	21.5	7.2	19	12.7	5.9	16	13.2	5.0
	40-44	12	12.8	3.7	15	14.7	4.8	21	19.6	6.8	21	14.0	6.8	21	17.4	6.7
	45-49	14	14.9	4.2	17	16.7	5.0	11	10.3	3.2	36	24.0	10.6	23	19.0	6.9
	50-54	10	10.6	2.9	15	14.7	4.5	19	17.8	5.7	18	12.0	5.4	17	14.0	5.2
	55-59	11	11.7	3.4	9	8.8	2.8	4	3.7	1.2	13	8.7	3.9	5	4.1	1.5
	60-64	4	4.3	1.4	6	5.9	2.1	7	6.5	2.4	14	9.3	4.6	7	5.8	2.3
	65 and older	3	3.2	0.5	5	4.9	0.7	6	5.6	0.8	11	7.3	1.5	13	10.7	1.7
<b>Total</b>		94	100.0	1.9	102	100.0	2.1	107	100.0	2.1	150	100.0	3.0	121	100.0	2.4
Women	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	15-19	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2	2.6	0.6	0	0.0	0.0
	20-24	0	0.0	0.0	6	9.0	1.8	2	2.5	0.6	3	3.9	0.9	3	4.7	0.9
	25-29	3	5.8	0.9	2	3.0	0.6	3	3.8	0.8	3	3.9	0.8	2	3.1	0.6
	30-34	3	5.8	0.9	8	11.9	2.4	9	11.3	2.7	8	10.4	2.4	4	6.3	1.2
	35-39	13	25.0	4.0	18	26.9	5.5	12	15.0	3.6	19	24.7	5.6	10	15.6	2.9
	40-44	11	21.2	3.2	10	14.9	3.0	17	21.3	5.2	10	13.0	3.1	11	17.2	3.3
	45-49	9	17.3	2.6	7	10.4	2.0	13	16.3	3.7	10	13.0	2.8	10	15.6	2.8
	50-54	6	11.5	1.7	7	10.4	2.0	10	12.5	2.8	8	10.4	2.3	9	14.1	2.6
	55-59	3	5.8	0.9	6	9.0	1.7	6	7.5	1.7	5	6.5	1.4	8	12.5	2.2
	60-64	4	7.7	1.3	3	4.5	0.9	3	3.8	0.9	3	3.9	0.9	2	3.1	0.6
	65 and older	0	0.0	0.0	0	0.0	0.0	5	6.3	0.5	6	7.8	0.6	5	7.8	0.5
<b>Total</b>		52	100.0	1.0	67	100.0	1.3	80	100.0	1.5	77	100.0	1.4	64	100.0	1.2

Continued

<sup>a</sup>Rate 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 August 2, 2020).

**Table 9 (Continued). Acute Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis 2015-2019**

Gender	Age at Diagnosis (Year)	2015			2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>												
<b>Total</b>	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	15-19	1	0.7	0.2	1	0.6	0.1	0	0.0	0.0	4	1.8	0.6	0	0.0	0.0
	20-24	7	4.8	1.0	15	8.9	2.1	6	3.2	0.9	7	3.1	1.0	9	4.9	1.3
	25-29	7	4.8	1.0	7	4.1	1.0	8	4.3	1.1	11	4.8	1.5	6	3.2	0.8
	30-34	15	10.3	2.3	12	7.1	1.9	16	8.6	2.4	12	5.3	1.8	13	7.0	1.9
	35-39	29	19.9	4.6	34	20.1	5.3	35	18.7	5.4	38	16.7	5.8	26	14.1	3.9
	40-44	23	15.8	3.5	25	14.8	3.9	38	20.3	6.0	31	13.7	4.9	32	17.3	5.0
	45-49	23	15.8	3.4	24	14.2	3.5	24	12.8	3.4	46	20.3	6.6	33	17.8	4.8
	50-54	16	11.0	2.3	22	13.0	3.2	29	15.5	4.2	26	11.5	3.8	26	14.1	3.8
	55-59	14	9.6	2.1	15	8.9	2.2	10	5.3	1.5	18	7.9	2.6	13	7.0	1.8
	60-64	8	5.5	1.3	9	5.3	1.5	10	5.3	1.6	17	7.5	2.6	9	4.9	1.4
	65 and older	3	2.1	0.2	5	3.0	0.3	11	5.9	0.7	17	7.5	1.0	18	9.7	1.0
<b>Total</b>		<b>146</b>	<b>100.0</b>	<b>1.5</b>	<b>169</b>	<b>100.0</b>	<b>1.7</b>	<b>187</b>	<b>100.0</b>	<b>1.8</b>	<b>227</b>	<b>100.0</b>	<b>2.2</b>	<b>185</b>	<b>100.0</b>	<b>1.8</b>

<sup>a</sup>Rate 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 August 2, 2020).

**Table 10. Acute Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019**

Gender	Race/Ethnicity	2015			2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>												
<b>Men</b>	American Indian/Alaska Native <sup>b</sup>	2	2.1	3.4	1	1.0	1.7	1	0.9	1.7	0	0.0	0.0	0	0.0	0.0
	Asian/Pacific Islander <sup>b</sup>	0	0.0	0.0	1	1.0	0.7	1	0.9	0.6	0	0.0	0.0	2	1.7	1.2
	Black/African American <sup>b</sup>	15	16.0	1.4	17	16.7	1.6	12	11.2	1.1	30	20.0	2.8	27	22.3	2.5
	Hispanic/Latino	7	7.4	1.5	3	2.9	0.6	3	2.8	0.6	5	3.3	1.0	6	5.0	1.1
	White/Caucasian <sup>b</sup>	62	66.0	2.0	75	73.5	2.3	80	74.8	2.5	96	64.0	3.0	84	69.4	2.6
	Multiple Races <sup>c</sup>	1	1.1	--	1	1.0	--	2	1.9	--	1	0.7	--	1	0.8	--
	Unknown/Unspecified <sup>c</sup>	7	7.4	--	4	3.9	--	8	7.5	--	18	12.0	--	1	0.8	--
<b>Total</b>		94	100.0	1.9	102	100.0	2.1	107	100.0	2.1	150	100.0	3.0	121	100.0	2.4
<b>Women</b>	American Indian/Alaska Native <sup>b</sup>	2	3.8	3.2	2	3.0	3.2	1	1.3	1.6	0	0.0	0.0	0	0.0	0.0
	Asian/Pacific Islander <sup>b</sup>	0	0.0	0.0	0	0.0	0.0	1	1.3	0.6	1	1.3	0.6	1	1.6	0.6
	Black/African American <sup>b</sup>	12	23.1	1.0	12	17.9	1.0	16	20.0	1.3	11	14.3	0.9	8	12.5	0.6
	Hispanic/Latino	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2	2.6	0.4	0	0.0	0.0
	White/Caucasian <sup>b</sup>	33	63.5	1.0	45	67.2	1.3	58	72.5	1.7	56	72.7	1.7	54	84.4	1.6
	Multiple Races <sup>c</sup>	1	1.9	--	0	0.0	--	0	0.0	--	1	1.3	--	0	0.0	--
	Unknown/Unspecified <sup>c</sup>	4	7.7	--	8	11.9	--	4	5.0	--	6	7.8	--	1	1.6	--
<b>Total</b>		52	100.0	1.0	67	100.0	1.3	80	100.0	1.5	77	100.0	1.4	64	100.0	1.2
<b>Total</b>	American Indian/Alaska Native <sup>b</sup>	4	2.7	3.3	3	1.8	2.5	2	1.1	1.6	0	0.0	0.0	0	0.0	0.0
	Asian/Pacific Islander <sup>b</sup>	0	0.0	0.0	1	0.6	0.3	2	1.1	0.6	1	0.4	0.3	3	1.6	0.9
	Black/African American <sup>b</sup>	27	18.5	1.2	29	17.2	1.3	28	15.0	1.2	41	18.1	1.8	35	18.9	1.5
	Hispanic/Latino	7	4.8	0.8	3	1.8	0.3	3	1.6	0.3	7	3.1	0.7	6	3.2	0.6
	White/Caucasian <sup>b</sup>	95	65.1	1.5	120	71.0	1.8	138	73.8	2.1	152	67.0	2.3	138	74.6	2.1
	Multiple Races <sup>c</sup>	2	1.4	--	1	0.6	--	2	1.1	--	2	0.9	--	1	0.5	--
	Unknown/Unspecified <sup>c</sup>	11	7.5	--	12	7.1	--	12	6.4	--	24	10.6	--	2	1.1	--
<b>Total</b>		146	100.0	1.5	169	100.0	1.7	187	100.0	1.8	227	100.0	2.2	185	100.0	1.8

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Non-Hispanic/Latino.

<sup>c</sup>Rates are not available due to the lack of overall population data for the multiple race and unknown/unspecified race/ethnicity groups.

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 August 2, 2020).

**Table 11. Acute Hepatitis B Cases in North Carolina by Gender, Risk of Exposure<sup>a</sup>, and Year of Diagnosis, 2015-2019**

Gender	Exposure Category	2015		2016		2017		2018		2019	
		Cases	% <sup>a</sup>								
<b>Men</b>	Heterosexual <sup>b</sup>	49	52.1	45	44.1	51	47.7	81	54.0	59	48.8
	IDU <sup>c</sup>	17	18.1	22	21.6	41	38.3	38	25.3	31	25.6
	MSM <sup>c</sup>	6	6.4	2	2.0	4	3.7	3	2.0	11	9.1
	Other Risks <sup>d</sup>	9	9.6	6	5.9	13	12.1	16	10.7	10	8.3
	Unknown <sup>e</sup>	32	34.0	40	39.2	34	31.8	45	30.0	40	33.1
<b>Women</b>	Heterosexual <sup>b</sup>	24	46.2	39	58.2	44	55.0	42	54.5	32	50.0
	IDU <sup>c</sup>	7	13.5	13	19.4	21	26.3	26	33.8	15	23.4
	Other Risks <sup>d</sup>	7	13.5	10	14.9	15	18.8	12	15.6	9	14.1
	Unknown <sup>e</sup>	24	46.2	23	34.3	24	30.0	19	24.7	21	32.8
<b>Total</b>	Heterosexual <sup>b</sup>	73	50.0	84	49.7	95	50.8	123	54.2	91	49.2
	IDU <sup>c</sup>	24	16.4	35	20.7	62	33.2	64	28.2	46	24.9
	MSM <sup>c</sup>	6	4.1	2	1.2	4	2.1	3	1.3	11	5.9
	Other Risks <sup>d</sup>	16	11.0	16	9.5	28	15.0	28	12.3	19	10.3
	Unknown <sup>e</sup>	56	38.4	63	37.3	58	31.0	64	28.2	61	33.0
<b>Total<sup>a</sup></b>		<b>146</b>	<b>100.0</b>	<b>169</b>	<b>100.0</b>	<b>187</b>	<b>100.0</b>	<b>227</b>	<b>100.0</b>	<b>185</b>	<b>100.0</b>

<sup>a</sup>People 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.

<sup>b</sup>Heterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

<sup>c</sup>IDU = injection drug use; MSM = men who report sex with men.

<sup>d</sup>Other risk includes health care exposure or contact with a positive hepatitis B individual.

<sup>e</sup>Unknown 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 August 2, 2020).

**Table 12. Number of People Diagnosed with Chronic Hepatitis B, Presumed Alive, and Residing in North Carolina as of 12/31/2019**

Demographics	Men			Women			Total <sup>i</sup>		
	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
<b>Current Age (Year)</b>									
Less than 13	19	0.1	2.3	12	0.1	1.5	31	0.1	1.9
13-14	12	0.1	8.8	15	0.1	11.5	27	0.1	10.1
15-19	69	0.5	19.7	65	0.6	19.2	134	0.5	19.5
20-24	164	1.1	45.5	122	1.2	36.1	286	1.1	40.9
25-29	376	2.5	101.5	331	3.3	91.1	709	2.8	96.6
30-34	749	4.9	223.4	689	6.8	198.5	1,440	5.7	211.0
35-39	1,031	6.8	319.1	1,134	11.2	334.3	2,168	8.5	327.4
40-44	1,491	9.8	479.1	1,368	13.5	414.6	2,869	11.3	447.5
45-49	1,675	11.0	499.4	1,404	13.9	397.5	3,088	12.1	448.4
50-54	1,818	11.9	552.1	1,237	12.2	357.3	3,066	12.0	453.9
55-59	2,095	13.7	621.4	1,010	10.0	275.8	3,115	12.2	442.9
60-64	1,872	12.3	604.6	790	7.8	226.2	2,670	10.5	405.3
65 and older	3,877	25.4	505.6	1,954	19.3	198.5	5,852	23.0	334.2
Missing <sup>b</sup>	5	0.0	--	3	0.0	--	8	0.0	--
<b>Race/Ethnicity</b>									
American Indian/Alaska Native <sup>c</sup>	81	0.5	135.5	32	0.3	49.3	113	0.4	90.7
Asian/Pacific Islander <sup>c</sup>	3,537	23.2	2091.8	3,688	36.4	2050.2	7,245	28.5	2,076.1
Black/African American <sup>c</sup>	5,198	34.1	478.9	2,843	28.1	230.3	8,061	31.7	347.4
Hispanic/Latino	313	2.1	59.2	387	3.8	77.9	701	2.8	68.3
White/Caucasian <sup>c</sup>	4,432	29.1	136.1	2,129	21.0	41.7	6,581	25.8	98.7
Multiple Race <sup>b</sup>	360	2.4	--	330	3.3	--	690	2.7	--
Unknown/Unspecified <sup>b</sup>	1,332	8.7	--	725	7.2	--	2,072	8.1	--
<b>Exposure Category<sup>d</sup></b>									
Heterosexual Contact <sup>e</sup>	2,411	15.8	--	2,059	20.3	--	4,470	17.6	--
IDU <sup>f</sup>	321	2.1	--	136	1.3	--	457	1.8	--
MSM <sup>f</sup>	271	1.7	--	--	--	--	271	1.1	--
Other Risk <sup>g</sup>	163	1.1	--	116	1.1	--	279	1.1	--
Unknown <sup>h</sup>	12,422	81.4	--	8,001	79.0	--	20,499	80.5	--
<b>Total<sup>i</sup></b>	<b>15,253</b>	<b>100.0</b>	<b>299.1</b>	<b>10,134</b>	<b>100.0</b>	<b>188.1</b>	<b>25,463</b>	<b>100.0</b>	<b>242.8</b>

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Rates are not available due to the lack of overall population data for the missing age, multiple race and unknown/unspecified race/ethnicity groups.

<sup>c</sup>Non-Hispanic/Latino.

<sup>d</sup>People 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.

<sup>e</sup>Heterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

<sup>f</sup>IDU = injection drug use; MSM = men who report sex with men.

<sup>g</sup>Other risk includes health care exposure or contact with a positive hepatitis B individual.

<sup>h</sup>Unknown is defined as individuals who did not report any risks for acquiring hepatitis B.

<sup>i</sup>Totals 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 August 2, 2020).

**Table 13. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Selected Demographics, 2015-2019**

Demographics	2015		2016		2017		2018		2019	
	Cases	Rate <sup>a</sup>								
<b>Gender</b>										
Men	696	14.2	862	17.4	702	14	698	13.8	673	13.2
Women	417	8.1	522	10.0	477	9.0	411	7.7	392	7.3
<b>Age at Diagnosis</b>										
Less than 13	7	0.4	9	0.6	4	0.2	3	0.2	4	0.2
13-14	2	0.8	8	3.1	2	0.8	4	1.5	1	0.4
15-19	12	1.8	34	5.0	17	2.5	14	2.0	14	2.0
20-24	58	8.2	76	10.8	46	6.6	49	7.0	38	5.4
25-29	130	19.3	111	15.9	92	12.9	101	13.9	82	11.2
30-34	137	21.4	159	24.6	135	20.7	114	17.2	122	17.9
35-39	149	23.6	204	31.7	186	28.6	151	22.9	149	22.5
40-44	114	17.2	201	31.2	141	22.1	130	20.4	133	20.7
45-49	117	17.3	135	19.6	124	17.8	126	18.1	123	17.9
50-54	103	14.7	122	17.6	104	15.1	109	16.0	88	13.0
55-59	104	15.5	111	16.3	111	16.1	77	11.1	108	15.4
60-64	86	14.3	83	13.5	80	12.7	82	12.7	80	12.1
65 and older	94	6.2	131	8.3	138	8.5	149	8.8	125	7.1
<b>Race/Ethnicity</b>										
American Indian/Alaska Native <sup>b</sup>	9	7.4	5	4.1	12	9.8	1	0.8	2	1.6
Asian/Pacific Islander <sup>b</sup>	311	105.7	406	130.8	288	88.3	248	73.4	291	83.4
Black/African American <sup>b</sup>	315	14.2	420	18.7	343	15.1	289	12.6	309	13.3
Hispanic/Latino	30	3.3	30	3.2	23	2.4	37	3.7	32	3.1
White/Caucasian <sup>b</sup>	297	4.6	332	5.1	313	4.8	329	5.0	363	5.4
Multiple Race <sup>c</sup>	44	--	57	--	52	--	37	--	35	--
Unknown/Unspecified <sup>c</sup>	107	--	134	--	149	--	168	--	35	--
<b>Exposure Category<sup>d</sup></b>										
Heterosexual Contact <sup>e</sup>	391	--	479	--	409	--	439	--	395	--
IDU <sup>f</sup>	46	--	69	--	78	--	89	--	82	--
MSM <sup>f</sup>	23	--	28	--	25	--	17	--	24	--
Other Risk <sup>g</sup>	31	--	27	--	27	--	31	--	26	--
Unknown <sup>h</sup>	674	--	846	--	702	--	603	--	603	--
<b>Total<sup>i</sup></b>	<b>1,113</b>	<b>11.1</b>	<b>1,384</b>	<b>13.6</b>	<b>1,180</b>	<b>11.5</b>	<b>1,109</b>	<b>10.7</b>	<b>1,067</b>	<b>10.2</b>

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Non-Hispanic/Latino.

<sup>c</sup>Rates are not available due to the lack of overall population data for the multiple race and unknown/unspecified race/ethnicity groups.

<sup>d</sup>People 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.

<sup>e</sup>Heterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

<sup>f</sup>IDU = injection drug use; MSM = men who report sex with men.

<sup>g</sup>Other risk includes health care exposure or contact with a positive hepatitis B individual.

<sup>h</sup>Unknown is defined as individuals who did not report any risks for acquiring hepatitis B.

<sup>i</sup>Totals 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 August 2, 2020).

**Table 14. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019**

Gender	Age at Diagnosis (Year)	2015			2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>												
<b>Men</b>	Less than 13	4	0.6	0.5	5	0.6	0.6	2	0.3	0.2	3	0.4	0.4	2	0.3	0.2
	13-14	2	0.3	1.5	7	0.8	5.3	1	0.1	0.7	1	0.1	0.7	1	0.1	0.7
	15-19	7	1.0	2.1	23	2.7	6.7	10	1.4	2.9	7	1.0	2.0	11	1.6	3.1
	20-24	34	4.9	9.2	35	4.1	9.5	20	2.8	5.5	24	3.4	6.6	17	2.5	4.7
	25-29	63	9.1	18.8	50	5.8	14.4	47	6.7	13.1	49	7.0	13.4	51	7.6	13.8
	30-34	76	10.9	24.2	95	11.0	30.0	71	10.1	22.1	60	8.6	18.4	66	9.8	19.7
	35-39	98	14.1	31.7	137	15.9	43.6	115	16.4	36.2	94	13.5	29.3	96	14.3	29.7
	40-44	82	11.8	25.3	146	16.9	46.4	92	13.1	29.6	100	14.3	32.3	88	13.1	28.3
	45-49	79	11.4	23.8	91	10.6	26.9	72	10.3	21.1	83	11.9	24.4	80	11.9	23.9
	50-54	77	11.1	22.7	75	8.7	22.3	73	10.4	21.9	75	10.7	22.6	57	8.5	17.3
	55-59	62	8.9	19.3	76	8.8	23.3	67	9.5	20.3	46	6.6	13.8	74	11.0	22.0
	60-64	53	7.6	18.9	44	5.1	15.3	50	7.1	16.9	58	8.3	19.1	58	8.6	18.7
	65 and older	59	8.5	9.0	78	9.0	11.4	82	11.7	11.5	98	14.0	13.3	72	10.7	9.4
<b>Total</b>		696	100.0	14.2	862	100.0	17.4	702	100.0	14.0	698	100.0	13.8	673	100.0	13.2
<b>Women</b>	Less than 13	3	0.7	0.4	4	0.8	0.5	2	0.4	0.2	0	0.0	0.0	2	0.5	0.2
	13-14	0	0.0	0.0	1	0.2	0.8	1	0.2	0.8	3	0.7	2.3	0	0.0	0.0
	15-19	5	1.2	1.5	11	2.1	3.3	7	1.5	2.1	7	1.7	2.1	3	0.8	0.9
	20-24	24	5.8	7.1	41	7.9	12.1	26	5.5	7.7	25	6.1	7.4	21	5.4	6.2
	25-29	67	16.1	19.8	61	11.7	17.5	45	9.4	12.6	52	12.7	14.4	31	7.9	8.5
	30-34	61	14.6	18.7	64	12.3	19.5	64	13.4	19.3	54	13.1	16.0	56	14.3	16.1
	35-39	51	12.2	15.8	67	12.8	20.3	71	14.9	21.3	57	13.9	16.9	53	13.5	15.6
	40-44	32	7.7	9.4	55	10.5	16.7	48	10.1	14.7	30	7.3	9.2	45	11.5	13.6
	45-49	38	9.1	11.0	44	8.4	12.5	52	10.9	14.6	43	10.5	12.1	42	10.7	11.9
	50-54	26	6.2	7.2	47	9.0	13.2	31	6.5	8.8	34	8.3	9.7	31	7.9	9.0
	55-59	42	10.1	12.0	35	6.7	9.8	44	9.2	12.2	31	7.5	8.5	33	8.4	9.0
	60-64	33	7.9	10.3	39	7.5	11.9	30	6.3	8.9	24	5.8	7.0	22	5.6	6.3
	65 and older	35	8.4	4.1	53	10.2	6.0	56	11.7	6.1	51	12.4	5.4	53	13.5	5.4
<b>Total</b>		417	100.0	8.1	522	100.0	10.0	477	100.0	9.0	411	100.0	7.7	392	100.0	7.3

Continued

<sup>a</sup>Rate 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 August 2, 2020).

**Table 14 (Continued). Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis 2015-2019**

Gender	Age at Diagnosis (Year)	2015			2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>												
<b>Total<sup>b</sup></b>	Less than 13	7	0.6	0.4	9	0.7	0.6	4	0.3	0.2	3	0.3	0.2	4	0.4	0.2
	13-14	2	0.2	0.8	8	0.6	3.1	2	0.2	0.8	4	0.4	1.5	1	0.1	0.4
	15-19	12	1.1	1.8	34	2.5	5.0	17	1.4	2.5	14	1.3	2.0	14	1.3	2.0
	20-24	58	5.2	8.2	76	5.5	10.8	46	3.9	6.6	49	4.4	7.0	38	3.6	5.4
	25-29	130	11.7	19.3	111	8	15.9	92	7.8	12.9	101	9.1	13.9	82	7.7	11.2
	30-34	137	12.3	21.4	159	11.5	24.6	135	11.4	20.7	114	10.3	17.2	122	11.4	17.9
	35-39	149	13.4	23.6	204	14.7	31.7	186	15.8	28.6	151	13.6	22.9	149	14	22.5
	40-44	114	10.2	17.2	201	14.5	31.2	141	11.9	22.1	130	11.7	20.4	133	12.5	20.7
	45-49	117	10.5	17.3	135	9.8	19.6	124	10.5	17.8	126	11.4	18.1	123	11.5	17.9
	50-54	103	9.3	14.7	122	8.8	17.6	104	8.8	15.1	109	9.8	16.0	88	8.2	13.0
	55-59	104	9.3	15.5	111	8	16.3	111	9.4	16.1	77	6.9	11.1	108	10.1	15.4
	60-64	86	7.7	14.3	83	6	13.5	80	6.8	12.7	82	7.4	12.7	80	7.5	12.1
	65 and older	94	8.4	6.2	131	9.5	8.3	138	11.7	8.5	149	13.4	8.8	125	11.7	7.1
<b>Total</b>		<b>1,113</b>	<b>100</b>	<b>11.1</b>	<b>1,384</b>	<b>100</b>	<b>13.6</b>	<b>1,180</b>	<b>100</b>	<b>11.5</b>	<b>1,109</b>	<b>100</b>	<b>10.7</b>	<b>1,067</b>	<b>100</b>	<b>10.2</b>

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Totals 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 August 2, 2020).

**Table 15. Newly Diagnosed Chronic Hepatitis B Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019**

Gender	Race/Ethnicity	2015			2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>												
<b>Men</b>	American Indian/Alaska Native <sup>b</sup>	6	0.9	10.3	4	0.5	6.8	10	1.4	16.9	1	0.1	1.7	2	0.3	3.3
	Asian/Pacific Islander <sup>b</sup>	160	23.0	112.7	216	25.1	144.0	139	19.8	87.9	131	18.8	80.0	164	24.4	97.0
	Black/African American <sup>b</sup>	217	31.2	20.9	279	32.4	26.6	215	30.6	20.2	206	29.5	19.2	206	30.6	19.0
	Hispanic/Latino	16	2.3	3.4	18	2.1	3.7	14	2.0	2.8	24	3.4	4.7	18	2.7	3.4
	White/Caucasian <sup>b</sup>	200	28.7	6.3	227	26.3	7.1	195	27.8	6.1	203	29.1	6.3	244	36.3	7.5
	Multiple Races <sup>c</sup>	33	4.7	--	37	4.3	--	26	3.7	--	23	3.3	--	19	2.8	--
	Unknown/Unspecified <sup>c</sup>	64	9.2	--	81	9.4	--	103	14.7	--	110	15.8	--	20	3.0	--
<b>Total</b>		696	100.0	14.2	862	100.0	17.4	702	100.0	14.0	698	100.0	13.8	673	100.0	13.2
<b>Women</b>	American Indian/Alaska Native <sup>b</sup>	3	0.7	4.8	1	0.2	1.6	2	0.4	3.1	0	0.0	0.0	0	0.0	0.0
	Asian/Pacific Islander <sup>b</sup>	151	36.2	99.1	190	36.4	118.5	148	31.0	88.0	117	28.5	67.2	127	32.4	70.6
	Black/African American <sup>b</sup>	98	23.5	8.3	141	27.0	11.8	128	26.8	10.6	83	20.2	6.8	102	26.0	8.3
	Hispanic/Latino	14	3.4	3.2	12	2.3	2.7	9	1.9	1.9	13	3.2	2.7	14	3.6	2.8
	White/Caucasian <sup>b</sup>	97	23.3	2.9	105	20.1	3.1	118	24.7	3.5	126	30.7	3.7	118	30.1	3.5
	Multiple Races <sup>c</sup>	11	2.6	--	20	3.8	--	26	5.5	--	14	3.4	--	16	4.1	--
	Unknown/Unspecified <sup>c</sup>	43	10.3	--	53	10.2	--	46	9.6	--	58	14.1	--	15	3.8	--
<b>Total</b>		417	100.0	8.1	522	100.0	10.0	477	100.0	9	411	100.0	7.7	392	100.0	7.3
<b>Total<sup>d</sup></b>	American Indian/Alaska Native <sup>b</sup>	9	0.8	7.4	5	0.4	4.1	12	1	9.8	1	0.1	0.8	2	0.2	1.6
	Asian/Pacific Islander <sup>b</sup>	311	27.9	105.7	406	29.3	130.8	288	24.4	88.3	248	22.4	73.4	291	27.3	83.4
	Black/African American <sup>b</sup>	315	28.3	14.2	420	30.3	18.7	343	29.1	15.1	289	26.1	12.6	309	29	13.3
	Hispanic/Latino	30	2.7	3.3	30	2.2	3.2	23	1.9	2.4	37	3.3	3.7	32	3	3.1
	White/Caucasian <sup>b</sup>	297	26.7	4.6	332	24	5.1	313	26.5	4.8	329	29.7	5.0	363	34	5.4
	Multiple Races <sup>c</sup>	44	4	--	57	4.1	--	52	4.4	--	37	3.3	--	35	3.3	--
	Unknown/Unspecified <sup>c</sup>	107	9.6	--	134	9.7	--	149	12.6	--	168	15.1	--	35	3.3	--
<b>Total</b>		<b>1,113</b>	<b>100</b>	<b>11.1</b>	<b>1,384</b>	<b>100</b>	<b>13.6</b>	<b>1,180</b>	<b>100</b>	<b>11.5</b>	<b>1,109</b>	<b>100</b>	<b>10.7</b>	<b>1,067</b>	<b>100</b>	<b>10.2</b>

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Non-Hispanic/Latino.

<sup>c</sup>Rates are not available due to the lack of overall population data for the multiple race and unknown/unspecified race/ethnicity groups.

<sup>d</sup>Totals 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 August 2, 2020).

**Table 16. Newly Diagnosed Chronic Hepatitis B Cases in North Carolina by Gender, Risk of Exposure<sup>a</sup>, and Year of Diagnosis, 2015-2019**

Gender	Exposure Category	2015		2016		2017		2018		2019	
		Cases	%								
<b>Men</b>	Heterosexual <sup>b</sup>	208	29.9	281	32.6	225	32.1	258	37.0	229	34.0
	IDU <sup>c</sup>	36	5.2	44	5.1	58	8.3	61	8.7	55	8.2
	MSM <sup>c</sup>	23	3.3	28	3.2	25	3.6	17	2.4	24	3.6
	Other Risks <sup>d</sup>	16	2.3	14	1.6	21	3.0	20	2.9	13	1.9
	Unknown <sup>e</sup>	447	64.2	538	62.4	423	60.3	386	55.3	389	57.8
<b>Women</b>	Heterosexual <sup>b</sup>	183	43.9	198	37.9	184	38.6	181	44.0	166	42.3
	IDU <sup>c</sup>	10	2.4	25	4.8	20	4.2	28	6.8	27	6.9
	Other Risks <sup>d</sup>	15	3.6	13	2.5	6	1.3	11	2.7	13	3.3
	Unknown <sup>e</sup>	227	54.4	308	59.0	278	58.3	217	52.8	212	54.1
<b>Total<sup>f</sup></b>	Heterosexual <sup>b</sup>	391	35.1	479	34.6	409	34.7	439	39.6	395	37.0
	IDU <sup>c</sup>	46	4.1	69	5	78	6.6	89	8	82	7.7
	MSM <sup>c</sup>	23	2.1	28	2.0	25	2.1	17	1.5	24	2.2
	Other Risks <sup>d</sup>	31	2.8	27	2.0	27	2.3	31	2.8	26	2.4
	Unknown <sup>e</sup>	674	60.6	846	61.1	702	59.5	603	54.4	603	56.5
<b>Total</b>		<b>1,113</b>	<b>100.0</b>	<b>1,384</b>	<b>100.0</b>	<b>1,180</b>	<b>100.0</b>	<b>1,109</b>	<b>100.0</b>	<b>1,067</b>	<b>100.0</b>

<sup>a</sup>People 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.

<sup>b</sup>Heterosexual risk is defined as a person reporting sexual contact with a partner of the opposite sex.

<sup>c</sup>IDU = injection drug use; MSM = men who report sex with men.

<sup>d</sup>Other risk includes health care exposure or contact with a positive hepatitis B individual.

<sup>e</sup>Unknown is defined as individuals who did not report any risks for acquiring hepatitis B.

<sup>f</sup>Totals 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 August 2, 2020).

**Table 17. Acute Hepatitis C Annual Rates in North Carolina by Selected Demographics, 2015-2019<sup>^</sup>**

Demographics	2015		2016 <sup>^</sup>		2017 <sup>^</sup>		2018 <sup>^</sup>		2019 <sup>^</sup>	
	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>	Cases	Rate <sup>a</sup>
<b>Gender</b>										
Men	71	1.5	109	2.2	99	2.0	113	2.2	95	1.9
Women	46	0.9	94	1.8	93	1.8	84	1.6	89	1.7
Missing	3	--	0	--	0	--	0	--	0	--
<b>Age at Diagnosis</b>										
Less than 13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13-14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15-19	8	1.2	7	1.0	3	0.4	2	0.3	0	0.0
20-24	22	3.1	28	4.0	28	4.0	29	4.1	16	2.3
25-29	24	3.6	45	6.5	37	5.2	52	7.1	36	4.9
30-34	17	2.7	31	4.8	34	5.2	32	4.8	30	4.4
35-39	12	1.9	34	5.3	21	3.2	27	4.1	39	5.9
40-44	12	1.8	20	3.1	19	3.0	14	2.2	20	3.1
45-49	9	1.3	15	2.2	19	2.7	12	1.7	11	1.6
50-54	9	1.3	11	1.6	13	1.9	15	2.2	15	2.2
55-59	5	0.7	7	1.0	7	1.0	6	0.9	8	1.1
60-64	1	0.2	4	0.6	8	1.3	7	1.1	8	1.2
65 and older	1	0.1	1	0.1	3	0.2	1	0.1	1	0.1
<b>Race/Ethnicity</b>										
American Indian/Alaska Native <sup>b</sup>	3	2.5	9	7.4	9	7.3	12	9.7	8	6.4
Asian/Pacific Islander <sup>b</sup>	1	0.3	0	0	1	0.3	0	0	0	0
Black/African American <sup>b</sup>	6	0.3	12	0.5	13	0.6	12	0.5	16	0.7
Hispanic/Latino	1	0.1	3	0.3	4	0.4	2	0.2	5	0.5
White/Caucasian <sup>b</sup>	108	1.7	170	2.6	148	2.2	149	2.2	152	2.3
Multiple Race <sup>c</sup>	0	--	1	--	1	--	4	--	1	--
Unknown/Unspecified <sup>c</sup>	1	--	8	--	16	--	18	--	2	--
<b>Exposure Category<sup>d</sup></b>										
Sexual Contact <sup>e</sup>	25	--	38	--	34	--	29	--	27	--
IDU <sup>f</sup>	47	--	88	--	89	--	96	--	86	--
Other Risk <sup>g</sup>	0	--	1	--	3	--	1	--	1	--
Unknown <sup>h</sup>	48	--	76	--	66	--	71	--	70	--
<b>Total<sup>i</sup></b>	<b>120</b>	<b>1.2</b>	<b>203</b>	<b>2.0</b>	<b>192</b>	<b>1.9</b>	<b>197</b>	<b>1.9</b>	<b>184</b>	<b>1.8</b>

<sup>^</sup>Case definition of Hepatitis C changed in 2016. See Appendix A: Technical Notes for the change.

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Non-Hispanic/Latino.

<sup>c</sup>Rates are not available due to the lack of overall population data for the multiple race and unknown/unspecified race/ethnicity groups.

<sup>d</sup>Risk 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.

<sup>e</sup>Sexual contact includes heterosexual and men who report sex with men.

<sup>f</sup>IDU = injection drug use.

<sup>g</sup>Other risk includes health care exposure or contact with a positive hepatitis B individual.

<sup>h</sup>Unknown is defined as individuals who did not report any risks (including missing) for acquiring hepatitis C.

<sup>i</sup>Total 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 August 2, 2020).

**Table 18. Acute Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis, 2015-2019<sup>^</sup>**

Gender	Age at Diagnosis (Year)	2015			2016 <sup>^</sup>			2017 <sup>^</sup>			2018 <sup>^</sup>			2019 <sup>^</sup>		
		Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
Men	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	15-19	1	1.4	0.3	4	3.7	1.2	1	1.0	0.3	2	1.8	0.6	0	0.0	0.0
	20-24	12	16.9	3.2	9	8.3	2.4	9	9.1	2.5	15	13.3	4.1	7	7.4	1.9
	25-29	16	22.5	4.8	29	26.6	8.4	19	19.2	5.3	33	29.2	9.0	21	22.1	5.7
	30-34	14	19.7	4.5	15	13.8	4.7	20	20.2	6.2	12	10.6	3.7	14	14.7	4.2
	35-39	5	7.0	1.6	20	18.3	6.4	14	14.1	4.4	17	15.0	5.3	16	16.8	5.0
	40-44	9	12.7	2.8	14	12.8	4.4	7	7.1	2.3	8	7.1	2.6	13	13.7	4.2
	45-49	5	7.0	1.5	7	6.4	2.1	10	10.1	2.9	6	5.3	1.8	4	4.2	1.2
	50-54	6	8.5	1.8	5	4.6	1.5	9	9.1	2.7	11	9.7	3.3	11	11.6	3.3
	55-59	2	2.8	0.6	5	4.6	1.5	2	2.0	0.6	4	3.5	1.2	5	5.3	1.5
	60-64	1	1.4	0.4	1	0.9	0.3	6	6.1	2.0	4	3.5	1.3	3	3.2	1.0
	65 and older	0	0.0	0.0	0	0.0	0.0	2	2.0	0.3	1	0.9	0.1	1	1.1	0.1
<b>Total</b>		71	100.0	1.5	109	100.0	2.2	99	100.0	2.0	113	100.0	2.2	95	100.0	1.9
Women	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	15-19	7	15.2	2.2	3	3.2	0.9	2	2.2	0.6	0	0.0	0.0	0	0.0	0.0
	20-24	9	19.6	2.7	19	20.2	5.6	19	20.4	5.7	14	16.7	4.1	9	10.1	2.7
	25-29	8	17.4	2.4	16	17.0	4.6	18	19.4	5.0	19	22.6	5.3	15	16.9	4.1
	30-34	3	6.5	0.9	16	17.0	4.9	14	15.1	4.2	20	23.8	5.9	16	18.0	4.6
	35-39	6	13.0	1.9	14	14.9	4.3	7	7.5	2.1	10	11.9	3.0	23	25.8	6.8
	40-44	3	6.5	0.9	6	6.4	1.8	12	12.9	3.7	6	7.1	1.8	7	7.9	2.1
	45-49	3	6.5	0.9	8	8.5	2.3	9	9.7	2.5	6	7.1	1.7	7	7.9	2.0
	50-54	3	6.5	0.8	6	6.4	1.7	4	4.3	1.1	4	4.8	1.1	4	4.5	1.2
	55-59	3	6.5	0.9	2	2.1	0.6	5	5.4	1.4	2	2.4	0.6	3	3.4	0.8
	60-64	0	0.0	0.0	3	3.2	0.9	2	2.2	0.6	3	3.6	0.9	5	5.6	1.4
	65 and older	1	2.2	0.1	1	1.1	0.1	1	1.1	0.1	0	0.0	0.0	0	0.0	0.0
<b>Total</b>		46	100.0	0.9	94	100.0	1.8	93	100.0	1.8	84	100.0	1.6	89	100.0	1.7

Continued

<sup>^</sup>Case definition of Hepatitis C changed in 2016. See Appendix A: Technical Notes for the change.

<sup>a</sup>Rate 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 August 2, 2020).

**Table 18 (Continued). Acute Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Diagnosis 2015-2019<sup>^</sup>**

Gender	Age at Diagnosis (Year)	2015			2016 <sup>^</sup>			2017 <sup>^</sup>			2018 <sup>^</sup>			2019 <sup>^</sup>		
		Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
<b>Total<sup>b</sup></b>	Less than 13	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	13-14	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	15-19	8	6.7	1.2	7	3.4	1.0	3	1.6	0.4	2	1.0	0.3	0	0.0	0.0
	20-24	22	18.3	3.1	28	13.8	4.0	28	14.6	4.0	29	14.7	4.1	16	8.7	2.3
	25-29	24	20.0	3.6	45	22.2	6.5	37	19.3	5.2	52	26.4	7.1	36	19.6	4.9
	30-34	17	14.2	2.7	31	15.3	4.8	34	17.7	5.2	32	16.2	4.8	30	16.3	4.4
	35-39	12	10.0	1.9	34	16.7	5.3	21	10.9	3.2	27	13.7	4.1	39	21.2	5.9
	40-44	12	10.0	1.8	20	9.9	3.1	19	9.9	3.0	14	7.1	2.2	20	10.9	3.1
	45-49	9	7.5	1.3	15	7.4	2.2	19	9.9	2.7	12	6.1	1.7	11	6.0	1.6
	50-54	9	7.5	1.3	11	5.4	1.6	13	6.8	1.9	15	7.6	2.2	15	8.2	2.2
	55-59	5	4.2	0.7	7	3.4	1.0	7	3.6	1.0	6	3.0	0.9	8	4.3	1.1
	60-64	1	0.8	0.2	4	2.0	0.6	8	4.2	1.3	7	3.6	1.1	8	4.3	1.2
	65 and older	1	0.8	0.1	1	0.5	0.1	3	1.6	0.2	1	0.5	0.1	1	0.5	0.1
<b>Total<sup>b</sup></b>		<b>120</b>	<b>100.0</b>	<b>1.2</b>	<b>203</b>	<b>100.0</b>	<b>2.0</b>	<b>192</b>	<b>100.0</b>	<b>1.9</b>	<b>197</b>	<b>100.0</b>	<b>1.9</b>	<b>184</b>	<b>100.0</b>	<b>1.8</b>

<sup>^</sup>Case definition of Hepatitis C changed in 2016. See Appendix A: Technical Notes for the change.

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Total 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 August 2, 2020).

**Table 19. Acute Hepatitis C Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Diagnosis, 2015-2019<sup>^</sup>**

Gender	Race/Ethnicity	2015			2016 <sup>^</sup>			2017 <sup>^</sup>			2018 <sup>^</sup>			2019 <sup>^</sup>		
		Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
<b>Men</b>	American Indian/Alaska Native <sup>b</sup>	0	0.0	0.0	5	4.6	8.5	5	5.1	8.5	6	5.3	10.1	4	4.2	6.7
	Asian/Pacific Islander <sup>b</sup>	1	1.4	0.7	0	0.0	0.0	1	1.0	0.6	0	0.0	0.0	0	0.0	0.0
	Black/African American <sup>b</sup>	3	4.2	0.3	2	1.8	0.2	9	9.1	0.8	6	5.3	0.6	11	11.6	1.0
	Hispanic/Latino	1	1.4	0.2	3	2.8	0.6	3	3.0	0.6	2	1.8	0.4	3	3.2	0.6
	White/Caucasian <sup>b</sup>	66	93.0	2.1	94	86.2	2.9	71	71.7	2.2	83	73.5	2.6	75	78.9	2.3
	Multiple Races <sup>c</sup>	0	0.0	--	0	0.0	--	0	0.0	--	3	2.7	--	1	1.1	--
	Unknown/Unspecified <sup>c</sup>	0	0.0	--	5	4.6	--	10	10.1	--	13	11.5	--	1	1.1	--
<b>Total</b>		71	100.0	1.5	109	100.0	2.2	99	100.0	2.0	113	100.0	2.2	95	100.0	1.9
<b>Women</b>	American Indian/Alaska Native <sup>b</sup>	3	6.5	4.8	4	4.3	6.3	4	4.3	6.3	6	7.1	9.3	4	4.5	6.2
	Asian/Pacific Islander <sup>b</sup>	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
	Black/African American <sup>b</sup>	3	6.5	0.3	10	10.6	0.8	4	4.3	0.3	6	7.1	0.5	5	5.6	0.4
	Hispanic/Latino	0	0.0	0.0	0	0.0	0.0	1	1.1	0.2	0	0.0	0.0	2	2.2	0.4
	White/Caucasian <sup>b</sup>	39	84.8	1.2	76	80.9	2.3	77	82.8	2.3	66	78.6	1.9	77	86.5	2.3
	Multiple Races <sup>c</sup>	0	0.0	--	1	1.1	--	1	1.1	--	1	1.2	--	0	0.0	--
	Unknown/Unspecified <sup>c</sup>	1	2.2	--	3	3.2	--	6	6.5	--	5	6.0	--	1	1.1	--
<b>Total</b>		46	100.0	0.9	94	100.0	1.8	93	100.0	1.8	84	100.0	1.6	89	100.0	1.7
<b>Total<sup>d</sup></b>	American Indian/Alaska Native <sup>b</sup>	3	2.5	2.5	9	4.4	7.4	9	4.7	7.3	12	6.1	9.7	8	4.3	6.4
	Asian/Pacific Islander <sup>b</sup>	1	0.8	0.3	0	0.0	0.0	1	0.5	0.3	0	0.0	0.0	0	0.0	0.0
	Black/African American <sup>b</sup>	6	5.0	0.3	12	5.9	0.5	13	6.8	0.6	12	6.1	0.5	16	8.7	0.7
	Hispanic/Latino	1	0.8	0.1	3	1.5	0.3	4	2.1	0.4	2	1.0	0.2	5	2.7	0.5
	White/Caucasian <sup>b</sup>	108	90.0	1.7	170	83.7	2.6	148	77.1	2.2	149	75.6	2.2	152	82.6	2.3
	Multiple Races <sup>c</sup>	0	0.0	--	1	0.5	--	1	0.5	--	4	2.0	--	1	0.5	--
	Unknown/Unspecified <sup>c</sup>	1	0.8	--	8	3.9	--	16	8.3	--	18	9.1	--	2	1.1	--
<b>Total<sup>d</sup></b>		<b>120</b>	<b>100.0</b>	<b>1.2</b>	<b>203</b>	<b>100.0</b>	<b>2.0</b>	<b>192</b>	<b>100.0</b>	<b>1.9</b>	<b>197</b>	<b>100.0</b>	<b>1.9</b>	<b>184</b>	<b>100.0</b>	<b>1.8</b>

<sup>^</sup>Case definition of Hepatitis C changed in 2016. See Appendix A: Technical Notes for the change.

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Non-Hispanic/Latino.

<sup>c</sup>Rates are not available due to the lack of overall population data for the multiple race and unknown/unspecified race/ethnicity groups.

<sup>d</sup>Total 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 August 2, 2020).

**Table 20. Acute Hepatitis C Cases in North Carolina by Gender, Risk of Exposure<sup>a</sup>, and Year of Diagnosis, 2015-2019<sup>^</sup>**

Gender	Exposure Category	2015		2016 <sup>^</sup>		2017 <sup>^</sup>		2018 <sup>^</sup>		2019 <sup>^</sup>	
		Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
<b>Men</b>	Sexual <sup>b</sup>	14	19.7	17	15.6	15	15.2	11	9.7	15	15.8
	IDU <sup>c</sup>	27	38.0	50	45.9	46	46.5	56	49.6	41	43.2
	Other Risks <sup>d</sup>	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1
	Unknown <sup>e</sup>	30	42.3	42	38.5	38	38.4	46	40.7	38	40.0
	<b>Total</b>	71	100.0	109	100.0	99	100.0	113	100.0	95	100.0
<b>Women</b>	Sexual <sup>b</sup>	11	23.9	21	22.3	19	20.4	18	21.4	12	13.5
	IDU <sup>c</sup>	18	39.1	38	40.4	43	46.2	40	47.6	45	50.6
	Other Risks <sup>d</sup>	0	0.0	1	0.5	3	1.6	1	0.5	0	0.0
	Unknown <sup>e</sup>	17	37.0	34	36.2	28	30.1	25	29.8	32	36.0
	<b>Total</b>	46	100.0	94	100.0	93	100.0	84	100.0	89	100.0
<b>Total<sup>f</sup></b>	Sexual <sup>b</sup>	25	20.8	38	18.7	34	17.7	29	14.7	27	14.7
	IDU <sup>c</sup>	47	39.2	88	43.3	89	46.4	96	48.7	86	46.7
	Other Risks <sup>d</sup>	0	0.0	1	0.5	3	1.6	1	0.5	1	0.5
	Unknown <sup>e</sup>	48	40.0	76	37.4	66	34.4	71	36.0	70	38.0
	<b>Total<sup>f</sup></b>	<b>120</b>	<b>100.0</b>	<b>203</b>	<b>100.0</b>	<b>192</b>	<b>100.0</b>	<b>197</b>	<b>100.0</b>	<b>184</b>	<b>100.0</b>

<sup>a</sup>Risk 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.

<sup>b</sup>Sexual contact includes heterosexual and men who report sex with men.

<sup>c</sup>IDU = injection drug use.

<sup>d</sup>Other risk includes health care exposure or contact with a positive hepatitis B individual.

<sup>e</sup>Unknown is defined as individuals who did not report any risks (including missing) for acquiring hepatitis C.

<sup>f</sup>Total 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 August 2, 2020).

**Table 21. Newly Reported Chronic Hepatitis C\* in North Carolina by Selected Demographics, as of 12/31/2019**

Demographics	Men			Women			Total <sup>d</sup>		
	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
<b>Age at Report (Year)</b>									
Less than 13	79	0.2	9.5	107	0.4	13.3	187	0.3	11.4
13-14	3	0.0	2.2	5	0.0	3.8	8	0.0	3.0
15-19	255	0.7	72.8	459	1.8	135.7	716	1.1	104.0
20-24	1,607	4.4	445.5	2,035	7.9	601.8	3,649	5.8	522.1
25-29	3,711	10.1	1,001.9	3,560	13.8	980.2	7,293	11.6	994.2
30-34	3,674	10.0	1,095.6	3,150	12.2	907.4	6,843	10.9	1,002.6
35-39	3,245	8.8	1,004.4	2,309	9.0	680.8	5,577	8.9	842.1
40-44	2,317	6.3	744.5	1,667	6.5	505.2	4,001	6.4	624.0
45-49	2,595	7.0	773.8	1,714	6.7	485.2	4,319	6.9	627.2
50-54	4,014	10.9	1,219.0	2,481	9.6	716.7	6,505	10.4	963.0
55-59	5,757	15.6	1,707.7	3,127	12.1	854.0	8,906	14.2	1,266.3
60-64	5,325	14.4	1,719.9	2,656	10.3	760.6	8,002	12.7	1,214.6
65 and older	4,231	11.5	551.8	2,433	9.5	247.2	6,685	10.6	381.8
Unknown <sup>b</sup>	90	0.2	--	34	0.1	--	140	0.2	--
<b>Race/Ethnicity</b>									
American Indian/Alaska Native <sup>c</sup>	249	0.7	416.5	216	0.8	333.0	468	0.7	375.5
Asian/Pacific Islander <sup>c</sup>	77	0.2	45.5	66	0.3	36.7	144	0.2	41.3
Black/African American <sup>c</sup>	4,966	13.5	457.5	3,302	12.8	267.4	8,277	13.2	356.8
Hispanic/Latino	345	0.9	65.2	243	0.9	48.9	588	0.9	57.3
White/Caucasian <sup>c</sup>	10,155	27.5	311.8	8,505	33.0	249.3	18,680	29.7	280.1
Multiple Race <sup>b</sup>	362	1.0	--	324	1.3	--	690	1.1	--
Unknown/Unspecified <sup>b</sup>	20,749	56.2	--	13,081	50.8	--	33,984	54.1	--
<b>Total<sup>d</sup></b>	<b>36,903</b>	<b>100.0</b>	<b>723.6</b>	<b>25,737</b>	<b>100.0</b>	<b>477.7</b>	<b>62,831</b>	<b>100.0</b>	<b>599.1</b>

\*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.

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Rates are not available due to the lack of overall population data for the unknown age, multiple race, and unknown/unspecified race/ethnicity groups.

<sup>c</sup>Non-Hispanic/Latino.

<sup>d</sup>Total 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 August 2, 2020).

**Table 22. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Report, 2016-2019\***

Gender	Age at Diagnosis (Year)	2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
<b>Men</b>	Less than 13	5	0.2	0.6	21	0.2	2.5	26	0.2	3.1	27	0.2	3.2
	13-14	0	0.0	0.0	2	0.0	1.5	0	0.0	0.0	1	0.0	0.7
	15-19	8	0.3	2.3	45	0.4	13.0	47	0.4	13.5	155	1.4	44.3
	20-24	142	4.7	38.7	497	4.3	137.0	434	4.0	120.1	534	4.7	148.0
	25-29	253	8.4	72.9	1,157	10.1	323.3	1,096	10.0	299.6	1,205	10.5	325.3
	30-34	271	9.0	85.5	1,080	9.4	336.3	1,051	9.6	322.2	1,272	11.1	379.3
	35-39	210	7.0	66.9	918	8.0	289.1	978	8.9	304.8	1,139	9.9	352.5
	40-44	161	5.4	51.2	669	5.8	215.4	641	5.8	207.0	846	7.4	271.8
	45-49	244	8.1	72.2	813	7.1	238.4	772	7.0	226.9	766	6.7	228.4
	50-54	415	13.8	123.3	1,430	12.5	428.2	1,179	10.7	355.9	990	8.6	300.6
	55-59	575	19.1	176.2	1,946	17.0	590.5	1,744	15.9	524.0	1,492	13.0	442.6
	60-64	453	15.1	157.3	1,749	15.2	590.9	1,639	14.9	540.1	1,484	13.0	479.3
	65 and older	268	8.9	39.1	1,133	9.9	159.3	1,320	12.0	178.8	1,497	13.1	195.2
	Missing	3	0.1	--	14	0.1	--	41	0.4	--	45	0.4	--
<b>Total</b>		<b>3,008</b>	<b>100.0</b>	<b>60.8</b>	<b>11,474</b>	<b>100.0</b>	<b>229.6</b>	<b>10,968</b>	<b>100.0</b>	<b>217.2</b>	<b>11,453</b>	<b>100.0</b>	<b>224.6</b>
<b>Women</b>	Less than 13	3	0.1	0.4	39	0.5	4.9	34	0.5	4.2	31	0.4	3.9
	13-14	0	0.0	0.0	3	0.0	2.3	1	0.0	0.8	1	0.0	0.8
	15-19	30	1.4	9.0	80	1.0	23.9	67	0.9	19.9	282	3.4	83.4
	20-24	172	8.3	50.9	676	8.6	201.2	504	6.8	149.3	683	8.1	202.0
	25-29	303	14.6	86.8	1,114	14.1	311.8	1,025	13.9	283.4	1,118	13.3	307.8
	30-34	222	10.7	67.6	896	11.4	269.8	983	13.3	291.5	1,049	12.5	302.2
	35-39	168	8.1	51.0	635	8.1	190.4	664	9.0	197.0	842	10.0	248.2
	40-44	110	5.3	33.4	447	5.7	137.0	470	6.4	143.7	640	7.6	194.0
	45-49	157	7.5	44.6	520	6.6	146.1	492	6.7	137.9	545	6.5	154.3
	50-54	239	11.5	67.0	890	11.3	252.2	668	9.1	191.5	684	8.1	197.6
	55-59	290	13.9	81.6	1,029	13.1	286.4	956	13.0	263.5	852	10.1	232.7
	60-64	216	10.4	65.9	859	10.9	255.8	782	10.6	227.8	799	9.5	228.8
	65 and older	172	8.3	19.4	678	8.6	74.0	719	9.7	75.8	859	10.2	87.3
	Missing	0	0.0	--	7	0.1	--	11	0.1	--	21	0.2	--
<b>Total</b>		<b>2,082</b>	<b>100.0</b>	<b>40.0</b>	<b>7,873</b>	<b>100.0</b>	<b>149.4</b>	<b>7,376</b>	<b>100.0</b>	<b>138.4</b>	<b>8,406</b>	<b>100.0</b>	<b>156.0</b>

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.

<sup>a</sup>Rate 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 August 2, 2020).

**Table 22 (Continued). Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by Gender, Age, and Year of Report 2016-2019\***

Gender	Age at Diagnosis (Year)	2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
<b>Total<sup>b</sup></b>	Less than 13	8	0.2	0.5	60	0.3	3.7	61	0.3	3.7	58	0.3	3.5
	13-14	0	0.0	0.0	5	0.0	1.9	1	0.0	0.4	2	0.0	0.7
	15-19	38	0.7	5.6	126	0.7	18.5	115	0.6	16.8	437	2.2	63.5
	20-24	315	6.2	44.7	1,174	6.1	168.0	939	5.1	134.3	1,221	6.1	174.7
	25-29	560	11.0	80.4	2,274	11.7	318.0	2,129	11.6	292.7	2,330	11.7	317.6
	30-34	494	9.7	76.5	1,976	10.2	302.5	2,047	11.1	308.5	2,326	11.7	340.8
	35-39	379	7.4	58.9	1,555	8.0	238.8	1,654	9.0	251.4	1,989	10.0	300.3
	40-44	273	5.4	42.4	1,117	5.8	175.4	1,119	6.1	175.7	1,492	7.5	232.7
	45-49	401	7.9	58.1	1,334	6.9	191.4	1,266	6.9	181.6	1,318	6.6	191.4
	50-54	654	12.8	94.3	2,322	12.0	338.0	1,851	10.0	272.2	1,678	8.4	248.4
	55-59	865	17.0	126.8	2,977	15.4	432.1	2,713	14.7	390.0	2,351	11.8	334.3
	60-64	669	13.1	108.7	2,609	13.5	412.9	2,432	13.2	376.1	2,292	11.5	347.9
	65 and older	441	8.6	28.1	1,812	9.4	111.3	2,046	11.1	121.2	2,363	11.9	134.9
	Missing	3	0.1	--	24	0.1	--	59	0.3	--	77	0.4	--
<b>Total<sup>b</sup></b>		<b>5,100</b>	<b>100.0</b>	<b>50.2</b>	<b>19,365</b>	<b>100.0</b>	<b>188.6</b>	<b>18,432</b>	<b>100.0</b>	<b>177.5</b>	<b>19,934</b>	<b>100.0</b>	<b>190.1</b>

\*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.

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Total 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 August 2, 2020).

**Table 23. Newly Reported Chronic Hepatitis C Annual Rates in North Carolina by Gender, Race/Ethnicity, and Year of Report, 2016-2019\***

Gender	Race/Ethnicity	2016			2017			2018			2019		
		Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>	Cases	%	Rate <sup>a</sup>
<b>Men</b>	American Indian/Alaska Native <sup>b</sup>	15	0.5	25.6	55	0.5	93.0	68	0.6	114.5	111	1.0	185.7
	Asian/Pacific Islander <sup>b</sup>	7	0.2	4.7	19	0.2	12.0	15	0.1	9.2	36	0.3	21.3
	Black/African American <sup>b</sup>	411	13.7	39.1	1,360	11.9	128.0	1,299	11.8	120.9	1,896	16.6	174.7
	Hispanic/Latino	19	0.6	3.9	65	0.6	13.1	84	0.8	16.3	177	1.5	33.5
	White/Caucasian <sup>b</sup>	776	25.8	24.2	2,820	24.6	87.6	3,148	28.7	97.2	3,411	29.8	104.7
	Multiple Races <sup>c</sup>	39	1.3	--	108	0.9	--	96	0.9	--	119	1.0	--
	Unknown/Unspecified <sup>c</sup>	1,741	57.9	--	7,047	61.4	--	6,258	57.1	--	5,703	49.8	--
<b>Total</b>		<b>3,008</b>	<b>100.0</b>	<b>60.8</b>	<b>11,474</b>	<b>100.0</b>	<b>229.6</b>	<b>10,968</b>	<b>100.0</b>	<b>217.2</b>	<b>11,453</b>	<b>100.0</b>	<b>224.6</b>
<b>Women</b>	American Indian/Alaska Native <sup>b</sup>	10	0.5	15.8	42	0.5	65.9	66	0.9	102.6	98	1.2	151.1
	Asian/Pacific Islander <sup>b</sup>	3	0.1	1.9	12	0.2	7.1	18	0.2	10.3	33	0.4	18.3
	Black/African American <sup>b</sup>	198	9.5	16.6	652	8.3	54.0	713	9.7	58.4	1,739	20.7	140.8
	Hispanic/Latino	2	0.1	0.4	47	0.6	10.1	41	0.6	8.5	153	1.8	30.8
	White/Caucasian <sup>b</sup>	625	30.0	18.7	2,404	30.5	71.4	2,591	35.1	76.4	2,885	34.3	84.6
	Multiple Races <sup>c</sup>	33	1.6	--	100	1.3	--	83	1.1	--	108	1.3	--
	Unknown/Unspecified <sup>c</sup>	1,211	58.2	--	4,616	58.6	--	3,864	52.4	--	3,390	40.3	--
<b>Total</b>		<b>2,082</b>	<b>100.0</b>	<b>40.0</b>	<b>7,873</b>	<b>100.0</b>	<b>149.4</b>	<b>7,376</b>	<b>100.0</b>	<b>138.4</b>	<b>8,406</b>	<b>100.0</b>	<b>156.0</b>
<b>Total<sup>d</sup></b>	American Indian/Alaska Native <sup>b</sup>	25	0.5	20.5	97	0.5	78.9	134	0.7	108.3	212	1.1	170.1
	Asian/Pacific Islander <sup>b</sup>	10	0.2	3.2	31	0.2	9.5	33	0.2	9.8	70	0.4	20.1
	Black/African American <sup>b</sup>	610	12.0	27.2	2,013	10.4	88.7	2,012	10.9	87.6	3,642	18.3	157.0
	Hispanic/Latino	21	0.4	2.3	112	0.6	11.7	125	0.7	12.6	330	1.7	32.2
	White/Caucasian <sup>b</sup>	1,403	27.5	21.4	5,227	27	79.3	5,744	31.2	86.6	6,306	31.6	94.6
	Multiple Races <sup>c</sup>	72	1.4	--	208	1.1	--	180	1.0	--	230	1.2	--
	Unknown/Unspecified <sup>c</sup>	2,959	58	--	11,677	60.3	--	10,204	55.4	--	9,144	45.9	--
<b>Total</b>		<b>5,100</b>	<b>100.0</b>	<b>50.2</b>	<b>19,365</b>	<b>100.0</b>	<b>188.6</b>	<b>18,432</b>	<b>100.0</b>	<b>177.5</b>	<b>19,934</b>	<b>100.0</b>	<b>190.1</b>

\*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.

<sup>a</sup>Rate is expressed per 100,000 population.

<sup>b</sup>Non-Hispanic/Latino.

<sup>c</sup>Rates are not available due to the lack of overall population data for the multiple race and unknown/unspecified race/ethnicity groups.

<sup>d</sup>Total 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 August 2, 2020).

## APPENDIX A: Technical Notes

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*Readers should be aware that acute hepatitis B and C, and chronic hepatitis B data are all presented by date of diagnosis rather than date of report. Chronic hepatitis C data are presented by date of report. Please see the individual surveillance disease notes below for more information.*

### 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 *2018 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 for several categories of race/ethnicity, age group, and gender for each disease. Rates are also presented for counties across the state and are expressed as cases per 100,000 population. Rate denominators were calculated using the available bridged-race population estimates for 2018 from the National Center for Health Statistics. More information about bridged-race categories is available at the website [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm).

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, which were updated in March 2018. 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, and either a positive IgM antibody to HBV core antigen (anti-HBc) or HBV surface antigen (HBsAg).<sup>17</sup> 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.<sup>18</sup> 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.<sup>20</sup>

## 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.<sup>21</sup> 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). Therefore, 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.<sup>21</sup> Chronic HCV case reports are people who do not have discrete onset of symptoms and are either positive anti-HCV (probable) or positive HCV RNA, HCV genotype, or have the presence of HCV antigen (confirmed).<sup>22</sup>

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<sup>17</sup>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>.

<sup>18</sup>Centers for Disease Control and Prevention (2012). National Notifiable Disease Surveillance System (NNDSS): Hepatitis B, chronic 2012 case definition. <https://wwwn.cdc.gov/nndss/conditions/hepatitis-b-chronic/case-definition/2012/>.

<sup>20</sup>Centers for Disease Control and Prevention (2017). National Notifiable Disease Surveillance System (NNDSS): Hepatitis B, perinatal infection 2017 case definition. <https://wwwn.cdc.gov/nndss/conditions/hepatitis-b-perinatal-virus-infection/case-definition/2017/>.

<sup>21</sup>Centers for Disease Control and Prevention. (2017). National Notifiable Disease Surveillance System (NNDSS): Hepatitis C, Acute 2016 Case Definition. Retrieved from <https://wwwn.cdc.gov/nndss/conditions/hepatitis-c-acute/case-definition/2016/>.

<sup>22</sup>Centers for Disease Control and Prevention. (2017). National Notifiable Disease Surveillance System (NNDSS): Hepatitis C, Chronic 2016 Case Definition. Retrieved from <https://wwwn.cdc.gov/nndss/conditions/hepatitis-c-chronic/case-definition/2016/>.

Chronic HCV became reportable 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.

Reports are summarized by the **date of diagnosis** not **date of report** for both acute, chronic, and perinatal hepatitis B and acute hepatitis C. Reports for chronic hepatitis C are summarized by the **date of report**, not **date of diagnosis**; since reporting for chronic hepatitis C is new and therefore incomplete, we cannot identify whether a report reflects a new diagnosis or a new laboratory test on a previously diagnosed person.