

# Hepatitis B in North Carolina, 2022



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**  
Division of Public Health

**Hepatitis B is a vaccine-preventable liver infection caused by the hepatitis B virus (HBV).** For most people, hepatitis B is a short-term (acute) illness. For others (5–10% of infected persons), short term infections can progress to a lifelong (chronic) infection that can cause severe health problems including cirrhosis and liver cancer. The risk of developing a chronic infection varies inversely with age. Around 9 in 10 infants infected at birth will develop a chronic infection. While only 1–10% of adults and children 6 years or older will develop a chronic infection. An estimated 0.3–0.7% of persons in the United States are chronically infected with HBV. Among those with a chronic HBV infection about 15–25% of persons will die prematurely to cirrhosis or liver cancer.



**In 2022, 26,971 persons diagnosed with chronic hepatitis B were presumed alive and residing in North Carolina.** Notably, this number significantly underestimates the total number of persons living with chronic hepatitis B in North Carolina as many chronic infections go undiagnosed.

## Hepatitis B Cases in North Carolina, 2022

❖ 111 persons with newly diagnosed acute HBV were reported (rate 1.1 cases / 100,000 persons)

❖ 1,124 persons with newly diagnosed chronic HBV were reported (rate 10.7 cases / 100,000 persons)

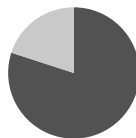
*Many more infections go undiagnosed and unreported.*



**2 in 3** persons with hepatitis B do not know they are infected.



Since 2018, newly diagnosed acute HBV cases have decreased by **51%**; however, newly diagnosed chronic HBV cases have remained relatively stable (8% decrease).



**80%** of newly reported acute HBV cases were among persons aged 30–59 years old in 2022.



**27%** of acute HBV cases reported injection drug use as risk factor in 2022.

## Hepatitis B Transmission



Hepatitis B is spread when blood, semen, or other bodily fluids from a person infected with HBV enters the body of someone who is uninfected.



**Perinatal transmission between an infected mother and her infant is common.** Around 1 in 4 infants born with HBV will die from chronic liver disease.

## Hepatitis B Causes and Symptoms



Symptoms are rare in occurrence; but can persist for weeks to months after exposure if present. Symptoms include fatigue, poor appetite, stomach pain, nausea, and jaundice.



Symptoms typically occur **60–90 days** after exposure if present.



## Who should get tested for HBV?


**A blood test is the only way to know if you have been infected with HBV.** All adults ( $\geq 18$  years) should be screened for HBV at least once in their lifetime. Pregnant persons should be screened during each pregnancy regardless of their vaccination status or history of testing. Susceptible persons and persons at increased risk of exposure should receive periodic risk-based testing.

### Persons at increased risk for developing Hepatitis B:

- Infants born to hepatitis B surface antigen (HBsAg) positive pregnant persons
- People born in regions of the world with hepatitis B virus (HBV) infection prevalence of  $>2\%$
- U.S. born persons not vaccinated as infants whose parents were born in regions with an HBV infection prevalence greater than  $8\%$
- Persons with a history of injection drug use
- Persons with a history of incarceration in a jail, prison, or other detention setting
- Persons with an HIV infection
- Persons with a hepatitis C virus infection
- Men who have sex with men
- Persons with a history of sexually transmitted infections or multiple sex partners
- Household contacts of people with known HBV infection
- Needle-sharing or sexual contacts of people with known HBV infection
- Persons receiving maintenance dialysis
- Persons with elevated liver enzymes (e.g., ALT/AST) of unknown origin

❖ Risk-based testing for hepatitis B is available through all local health departments at no cost.

## What are my prevention options for HBV?



**Treatments are available; however, no cure exists for hepatitis B infection. Vaccination is the best way to prevent HBV infection. Safer sex practices and avoiding high-risk behaviors such as injecting drugs with non-sterile injection equipment can also prevent HBV infection.**

**The Advisory Committee on Immunization Practices (ACIP) recommends that the following groups should receive hepatitis B vaccination if they have not previously completed vaccination:**

- All infants
- Unvaccinated children aged  $<19$  years
- Adults 19–59 years
- Adults  $\geq 60$  years with risk factors for HBV
- All other persons seeking protection from HBV infection

❖ Hepatitis B vaccine and hepatitis A/B combination vaccine are available at your local health department. Twinrix hepatitis A/B vaccine is available at no cost for patients who have not received a full HBV series of vaccine.

For more information visit: <https://www.cdc.gov/hepatitis/hbv/vaccadults.htm>.

## Additional Resources

- The NC Division of Public Health's Viral Hepatitis Program created a regional drug user health resource guide that provides information on low cost/free clinics, housing, food pantry and community resources, hepatitis treatment providers, and syringe access programs.  
For more information: [https://epi.dph.ncdhhs.gov/cd/hepatitis/DrugUserHealthResourceGuide\\_08102021.pdf](https://epi.dph.ncdhhs.gov/cd/hepatitis/DrugUserHealthResourceGuide_08102021.pdf).
- The North Carolina Harm Reduction Coalition (<http://www.nchrc.org>) provides harm reduction materials to syringe access programs and community-based organizations to prevent transmission of hepatitis C.
- Injury and Violence Prevention Branch (NC Division of Public Health) oversees the North Carolina Safer Syringe Initiative.

For more information: <https://www.ncdhhs.gov/divisions/public-health/north-carolina-safer-syringe-initiative>.

Data Sources: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of July 1, 2023), Surveillance for Viral Hepatitis, United States, 2000-2021 CDC reports (<https://www.cdc.gov/hepatitis/statistics/index.htm>).