NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

JOSH STEIN • Governor
DEVDUTTA SANGVAL• Secretary
KELLY KIMPLE • Director, Division of Public Health

May 8, 2026

MEMORANDUM

TO: Local Health Departments

FROM: Richard Moore II, MD,
Viral Hepatitis Medical Director

Jenny Myers, MPH,
Immunization Branch Director

SUBJECT: Hepatitis B Perinatal Provider Testing Memo

Please share this memo with all relevant healthcare partners within your county, including OB/GYN providers, providers offering maternal health services, pediatricians, hospital emergency departments, hospital labor, and hospital laboratories.

North Carolina Department of Health and Human Services (NCDHHS) is providing guidance to clinicians on recommended hepatitis B virus (HBV) testing during pregnancy. This guidance clarifies recommended follow-up evaluation of positive initial hepatitis B surface antigen (HBsAg) results and reinforces the need to ensure that infants exposed to hepatitis B receive appropriate prophylaxis at the time of delivery.

Background

Up to 2.4 million people within the United States are infected with the hepatitis B virus (HBV). Two-thirds of those infected with HBV are unaware of their status. Testing is recommended by the Centers for Disease Control and Prevention at least once for all adults, ongoing for those at risk who are non-immune, and during each pregnancy. For those with HBV who are pregnant, measures can be taken to reduce risk of mother-to-child transmission, including HBV vaccination, hepatitis B immune globulin (HBIG), and maternal antiviral therapy. The combination of these measures reduces transmission risk by as high as 95%.

False positive initial hepatitis B testing is possible, though uncommon. Appropriate follow-up testing for anyone with a positive hepatitis B surface antigen (HBsAg) test allows for correct interpretation of HBV status, coordination of adequate patient care, and clarification of

appropriate steps to be taken at time of delivery for those who are pregnant and living with HBV.

Hepatitis B Follow-Up Testing

For anyone with a positive initial HBsAg test, a hepatitis B neutralization assay is the recommended next step to confirm infection and is integrated into many laboratory platforms.

Hepatitis B DNA testing is not adequate to rule out HBV infection after positive HBsAg testing. In the inactive carrier state of HBV, Hepatitis B DNA levels can be low or negative despite ongoing infection. Reactivation of HBV is possible in these individuals, and infants born to mothers in the inactive carrier state of HBV still require vaccination and HBIG for protection against transmission.

Hepatitis B DNA testing in pregnancy helps to determine need for maternal antiviral therapy in addition to HBIG and vaccination for prevention of transmission. Pregnant individuals with HBV DNA levels over 200,000 IU/mL at 26 to 28 weeks of gestation should initiate antiviral therapy to reduce transmission risk.

If there is a concern for false positive initial HBV testing or discrepant laboratory values, additional testing including antibodies to hepatitis B core antigen (anti-HBc), antibodies to hepatitis B surface antigen (anti-HBs), and hepatitis B DNA testing can be useful in determining whether infection is present.

Recommendations for Providers

Providers should:

- Offer HBV screening to all adults at least once, on an ongoing basis for those at heightened risk who are non-immune, and during each pregnancy.
- Use laboratory platforms that include hepatitis B neutralization assay testing to confirm infection in those with initial positive HBsAg results.
- Provide infant HBV vaccine, HBIG, and antiviral therapy (if indicated) for prevention of mother-to-child transmission.
- Notify the local health department within 24 hours of any new acute or chronic HBV cases that are identified.
- Contact local health department communicable disease staff for guidance on laboratory interpretation and follow-up for anyone whose HBV status is unclear after testing is obtained, and to help clarify initial discrepant results.

How to Contact Us

For assistance or additional guidance, please contact your local health department or the NCDHHS Nurse On-Call Line at 919-707-5575.

Thank you for your ongoing partnership and dedication to improving immunization outcomes in North Carolina.

In Health,
NC Department of Health and Human Services