

## **Hepatitis B Control Measures For the Infected Person and Infants Born to HBsAg Positive or Unknown Status Mothers**

There are many factors to consider during the surveillance and investigation of a potential perinatally-acquired hepatitis B case. It is imperative that you personally contact the mother-to-be as soon as a pregnant woman is identified as being infected with hepatitis B. Not only are you going to provide her with education and guidance on control measures for herself, but you will also be establishing a rapport to begin building a trusting relationship to ensure compliance with the infant's hepatitis B vaccination series and the Post Vaccination Serologic Testing (PVST) at the recommended time.

As the Communicable Disease Nurse, you should educate the mother on the importance and the need for the infant to receive immunoprophylaxis (Hepatitis B Immune Globulin (HBIG) and Hep B vaccine within 12 hours of birth), complete the Hep B vaccine series, and obtain the PVST preferably at 9-12 months of age or 1-2 months after the completion of the vaccine series if the completion of the series is delayed. You should also

- review control measures involving the care of an infant,
- provide information to the pregnant woman about hepatitis B to include modes of transmission, prenatal concerns, and medical evaluation of chronic hepatitis, and
- link to substance abuse treatment if indicated,
- refer to a medical specialist for evaluation of chronic hepatitis if not currently being followed, and
- stress the importance to the HBsAg (+) woman that she notify the hospital of her hepatitis B status at the time of delivery.

It is the responsibility of the local health director to ensure that control measures have been issued to persons known to be infected with a communicable disease such as hepatitis B. This can be delegated to the Communicable Disease Nurse at the local health department. Best practice for issuing control measures would be for the nurse to meet face to face with the client, explain the control measures required by law for hepatitis B infection, review written information with the client about hepatitis B, allow time for the client to ask questions, and then have the client sign a letter which indicates that control measures have been explained (see sample letter in this section). For practical reasons, this cannot always be done. Sometimes it is necessary to issue control measures verbally over the phone to the client or by mailing written control measures and information to the client. Regardless of the method of instruction, documentation that control measures were issued should always be completed. For more information on how to document that control measures were given to an infected person and an infant born to a hepatitis B positive mother, see Documentation of Control Measures in the Control Measures section of the North Carolina Hepatitis B manual: <https://epi.dph.ncdhhs.gov/cd/lhds/manuals/hepB/control.html>.

**According to NC  
General Statute Chapter 130A-144, Article 6, Investigation and Control  
Measures...**

(d) The attending physician shall give control measures prescribed by the Commission to a patient with a communicable disease or communicable condition and to patients reasonably suspected of being infected or exposed to such a disease or condition. The physician shall also give control measures to other individuals as required by rules adopted by the Commission.

(e) The local health director shall ensure that control measures prescribed by the Commission have been given to prevent the spread of all reportable communicable diseases or communicable conditions and any other communicable disease or communicable condition that represents a significant threat to the public health. The local health director shall provide, at no cost to the patient, the examination and treatment for tuberculosis disease and infection and for sexually transmitted diseases as designated by the Commission.

(f) All persons shall comply with control measures, including submission to examinations and tests, prescribed by the Commission, subject to the limitations of GS 130A-148.

**The following North Carolina Administrative Code specifies what control measures must be implemented.**

**According to 10A NCAC 41A .0203...**

(a) The following are the control measures for hepatitis B infection. The infected persons shall:

(1) refrain from sexual intercourse unless condoms are used except when the partner is known to be infected with or immune to hepatitis B;

(2) not share needles or syringes;

(3) not donate or sell blood, plasma, platelets, other blood products, semen, ova, tissues, organs, or breast milk;

(4) if the time of initial infection is known, identify to the local health director all sexual intercourse and needle partners since the date of infection; and, if the date of initial infection is unknown, identify persons who have been sexual intercourse or needle partners during the previous six months;

(5) for the duration of the infection, notify future sexual intercourse partners of the infection and refer them to their attending physician or the local health director for control measures; and for the duration of the infection, notify the local health director of all new sexual intercourse partners;

(6) identify to the local health director all current household contacts;

(7) be tested six months after diagnosis to determine if they are chronic carriers, and when necessary to determine appropriate control measures for persons exposed pursuant to Paragraph (b) of this Rule;

(8) comply with all control measures for hepatitis B infection specified in Paragraph (a) of 10A NCAC 41A .0201, in those instances where such control measures do not conflict with other requirements of this Rule.

(b) The following are the control measures for persons reasonably suspected of being exposed:

(1) when a person has had a sexual intercourse exposure to hepatitis B infection, the person shall be tested;

(2) after testing, when a susceptible person has had sexual intercourse exposure to hepatitis B infection, the person shall be given a dose appropriate for body weight of hepatitis B immune globulin and hepatitis B vaccination as soon as possible; hepatitis B immune globulin shall be given no later than two weeks after the last exposure;

(3) when a person is a household contact, sexual intercourse or needle sharing contact of a person who has remained infected with hepatitis B for six months or longer, the partner or household contact, if susceptible and at risk of continued exposure, shall be vaccinated against hepatitis B;

(4) when a health care worker or other person has a needlestick, non-intact skin, or mucous membrane exposure to blood or body fluids that, if the source were infected with the hepatitis B virus, would pose a significant risk of hepatitis B transmission, the following shall apply:

(A) When the source is known, the source person shall be tested for hepatitis B infection, unless already known to be infected;

(B) When the source is infected with hepatitis B and the exposed person is:

(i) vaccinated, the exposed person shall be tested for anti-HBs and, if anti-HBs is unknown or less than 10 milli-International Units per ml, receive hepatitis B vaccination and hepatitis B immune globulin as soon as possible; hepatitis B immune globulin shall be given no later than seven days after exposure;

(ii) not vaccinated, the exposed person shall be given a dose appropriate for body weight of hepatitis B immune globulin immediately and begin vaccination with hepatitis B vaccine within seven days;

(C) When the source is unknown, the determination of whether hepatitis B immunization is required shall be made in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention guidelines. Copies of the Control of Communicable Diseases Manual may be purchased from the American Public Health Association, Publication Sales Department, Post Office Box 753, Waldora, MD 20604 for a cost of twenty-two dollars (\$22.00) each plus five dollars (\$5.00) shipping and handling. Copies of Center for Disease Control and Prevention guidelines contained in the Morbidity and Mortality Weekly Report may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for a cost of three dollars fifty cents (\$3.50) each. Copies of both publications are available for inspection in the General Communicable Disease Control Branch, Cooper Memorial Health Building, 225 N. McDowell Street, Raleigh, North Carolina 27603-1382.

(5) Infants born to HBsAg-positive mothers shall be given hepatitis B vaccination and hepatitis B immune globulin within 12 hours of birth or as soon as possible after the infant is stabilized. Additional doses of hepatitis B vaccine shall be given in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention Guidelines. The infant shall be tested for the presence of HBsAg and anti-HBs within three to nine months after the last dose of the regular series of vaccine; if required because of failure to develop immunity after the regular series, additional doses shall be given in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention guidelines. Copies of the Control of Communicable Diseases Manual may be purchased from the American Public Health Association, Publication Sales Department, Post Office Box 753, Waldora, MD 20604 for a cost of twenty-two dollars (\$22.00) each plus five dollars (\$5.00) shipping and handling. Copies of Center for Disease Control and Prevention guidelines contained in the Morbidity and Mortality Weekly Report may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for a cost of three dollars fifty cents (\$3.50) each. Copies of both publications are available for inspection in the General Communicable Disease Control Branch, Cooper Memorial Health Building, 225 N. McDowell Street, Raleigh, North Carolina 27603-1382;

(6) infants born to mothers whose HBsAg status is unknown shall be given hepatitis B vaccine within 12 hours of birth and the mother tested. If the tested mother is found to be HBsAg-positive, the infant shall be given hepatitis B immune globulin as soon as possible and no later than seven days after birth;

(7) when an acutely infected person is a primary caregiver of a susceptible infant less than 12 months of age, the infant shall receive an appropriate dose of hepatitis B immune globulin and hepatitis vaccinations in accordance with current published Control of Communicable Diseases Manual and Centers for Disease Control and Prevention Guidelines.

Copies of the Control of Communicable Diseases Manual may be purchased from the American Public Health Association, Publication Sales Department, Post Office Box 753, Waldora, MD 20604 for a cost of twenty-two dollars (\$22.00) each plus five dollars (\$5.00) shipping and handling. Copies of Center for Disease Control and Prevention guidelines contained in the Morbidity and Mortality Weekly Report may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for a cost of three dollars fifty cents (\$3.50) each. Copies of both publications are available for inspection in the General Communicable Disease Control Branch, Cooper Memorial Health Building, 225 N. McDowell Street, Raleigh, North Carolina 27603-1382.

## [10A NCAC 41A .0203 CONTROL MEASURES - HEPATITIS B](#)

**Easily reproducible hepatitis B educational materials for clients can be found at the links below.**

**CDC Parent Handout for Control Measures:**

<https://stacks.cdc.gov/view/cdc/150525>

**CDC Parent Handout for Hep B Vaccine:**

<https://stacks.cdc.gov/view/cdc/150512>

**CDC Education Resources:**

[https://www.cdc.gov/hepatitis-b/public-resources/?CDC\\_AAref\\_Val=](https://www.cdc.gov/hepatitis-b/public-resources/?CDC_AAref_Val=)

<https://www.cdc.gov/hepatitis/hbv/patienteduhbv.htm>

**Hepatitis B Foundation:**

**Fact Sheets:** <http://www.hepb.org/resources-and-support/fact-sheets/>