

**Maryland Department of Health
And Mental Hygiene**

Epidemiology and Disease Control Program

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**Labor and Delivery Unit and Nursery Unit Guidelines
to Prevent Hepatitis B Virus Transmission**

Standing orders must be in place to review the hepatitis B surface antigen (HBsAg)* results of all mothers at or before the time of delivery and to give immunoprophylaxis within 12 hours after birth to infants of HBsAg-positive mothers and infants of mothers who do not have documentation of HBsAg test results on their charts.

For all infants, the first dose of hepatitis B vaccine (0.5 ml., pediatric formulation) is recommended during the newborn period, preferably before the infant is discharged from the hospital, and no later than 2 months of age.**

Labor and Delivery Unit Guidelines

1. Review the HBsAg⁺ lab report and copy the test result onto (1) the labor and delivery record and (2) the infant's delivery record. (It is essential to examine a copy of the *original* lab report instead of relying only on the handwritten prenatal record due to the possibility of transcription error and/or misinterpretation of test results.)
2. If the HBsAg result is not available, order the test STAT. Instruct the lab to call the nursery with the result ASAP.
3. Alert the nursery if the mother is HBsAg-positive or if the mother's HBsAg result is unknown. If the mother is HBsAg positive the infant requires immunoprophylaxis within 12 hours of birth with hepatitis B vaccine and hepatitis B immune globulin (HBIG). See Nursery Unit Guidelines.
4. For an HBsAg-positive woman or a woman whose HBsAg status unknown, notify her (if possible prior to birth) of the need to administer immunoprophylaxis to her newborn within 12 hours of birth.

Nursery Unit Guidelines

Infants born to HBsAg-positive mothers:

1. Administer HBIG and hepatitis B vaccine at separate sites within 12 hours of birth
 - Give HBIG: 0.5 ml. IM
 - Hepatitis B vaccine: Give .05 ml. pediatric formulation
2. Give the mother an immunization record card with the dates of the hepatitis B vaccine and HBIG included, and instruct the mother to bring the immunization card with her each time she brings her baby to the well-child health provider.
3. Breastfeeding is NOT contraindicated for infants born to HBsAg-positive women. A mother who wishes to should be encouraged to breastfeed if her infant is given HBIG and hepatitis B vaccine.
4. Provide the mother with educational and written materials regarding:
 - a. the importance of her baby completing the hepatitis B vaccination schedule at 1-2 months and 6 months of age (doses #2 and #3);
 - b. the importance of post-vaccination testing for the infant at 9-15 months of age;

*Make sure you do not confuse the **HBsAg** with any of the following tests:

1. Anti-HBs or HBsAb = antibody to hepatitis B surface antigen; positive result shows patient is immune by natural infection or disease
2. Anti-HBc or HBcAb = antibody to hepatitis B core antigen; positive result indicates patient has been in contact with HBV and may or may not still be infected.

Make certain you order the **hepatitis B surface antigen (HBsAg)** test for your patient, and that this test result is accurately recorded on the labor and delivery record and on the infant's delivery summary sheet.

** Federal law requires that you give the parent a hepatitis B Vaccine Information Statement (VIS) *prior* to vaccine administration. To obtain VISs, call the Maryland Department of Health and Mental Hygiene at (410) 767-6679 or download them from the website: www.edcp.org (Click Immunization, then Vaccines for Children, then "Vaccine Information Statements.")

- c. the mother's need for ongoing medical follow-up for her chronic hepatitis B virus infection; and
 - d. the importance of household members being tested for hepatitis B and vaccinated if susceptible.
5. Notify your local or state health department that the infant has been born and has received post-exposure prophylaxis (include dates of receipt of HBIG and hepatitis B vaccine).
 6. Obtain the name, address and phone number of the infant's primary care clinic and doctor. Notify them of the infant's birth, the receipt of post-exposure prophylaxis, and the need for follow-up vaccination and post-vaccination testing.

Infants born to mothers with unknown HBsAg status:

1. Administer hepatitis B vaccine (0.5ml. pediatric formulation) IM within 12 hours of birth.**
2. Confirm that the lab has drawn a specimen from the mother for an HBsAg test and that it will be run and reported to the nursery STAT. Verify with the lab when the HBsAg test result should be available. If you do not receive the report when expected, call the lab for the result.
3. If the HBsAg report is positive, contact the physician ASAP for additional orders. The infant needs to receive HBIG as soon as possible. If more than 7 days have elapsed since exposure (birth) there is little benefit in HBIG administration.
4. If the mother is found to be HBsAg positive, follow the steps in the section , "Infants born to HBsAg-positive mothers."
5. If the infant must be discharged before mother's HBsAg result is known:
 - Clearly document how to reach the parent (address, telephone numbers, emergency contact person) as well as the infant's primary care clinic in case further treatment is needed.
 - Notify the infant's doctor that the HBsAg result is pending
 - Give the mother an immunization record card noting the hepatitis B vaccine date and the need for further doses.

Infants who are born to HBsAg-negative mothers but who are at high risk of early childhood infection⁺

1. Administer hepatitis B vaccine (0.5 ml. pediatric formulation) prior to nursery discharge.**
2. Give the mother an immunization record card with the hepatitis B vaccination date. Remind the mother to bring the immunization card with her each time she ring her baby to the well-child care provider.
3. Instruct the mother about the importance of her baby completing the hepatitis B vaccination schedule at 1-2 months and at 6 months of age.
4. Make sure that the infant's hospital record clearly indicated the date of hepatitis B vaccine administration and that this portion of the medical record is *always* forwarded to the infant's primary care clinic.

Infants born to HBsAg-negative mothers:

1. The first dose of hepatitis B vaccine (0.5 ml pediatric formulation) is recommended during the newborn period, preferably before the infant is discharged from the hospital and no later than 2 months of age.

NOTE: If there is not documentation (preferably a laboratory report) on the mother's chart that indicates she is HBsAg negative, hepatitis B vaccine should be administered to the infant within 12 hours of birth.

2. For infants vaccinated in the hospital:

- Give the mother an immunization record card with the hepatitis B vaccination date. Remind the mother to bring the immunization card with her each time she brings her baby to the well-child care provider.
- Make sure that the infant's hospital record clearly indicates the date of hepatitis B vaccine administration and that this portion of the medical record is *always* forwarded to the infant's primary care provider.

⁺ Infants at high risk of early childhood hepatitis B virus infection include the following:

- Infants whose mothers belong to populations and groups from area of moderate and high endemicity for HBV infection. These areas include Africa, Asia, Indonesia, the Philippines, the Middle East, the Pacific Islands, the Amazon Basin, Haiti, the Dominican Republic, eastern and southern Europe, and the former Soviet Union. Alaska natives are also a high endemicity group.
- Any infant who lives in a household with a person who is chronically infected with hepatitis B virus.