

Hepatitis B Clinical Practice Guideline

This guideline has been developed to ensure appropriate and timely treatment of infants born who are at risk of hepatitis B infection. This guideline follows the current recommendations from the AAP, CDC, and the National Immunization Program and includes the recommendation for universal administration of HBV within the first 12 hours of birth. Please direct any questions to the Medical Director of the Newborn Nursery.

General Information

Hepatitis B is transmitted through blood and body fluids.

Infants born to HBsAg positive women may become infected during the perinatal period (vertical transmission)

Infants born into a high risk family can become infected after birth from horizontal transmission

POST EXPOSURE IMMUNOPROPHYLAXIS WITH HEPATITIS B VACCINE AND HBIG CAN EFFECTIVELY PREVENT INFECTION AFTER EXPOSURE TO THE VIRUS

The risk of chronic infection with Hepatitis B Virus is related inversely to the age at the time the infection occurs.

The two vaccines available (Engerix-B and Recombivax HB) are interchangeable.

The pediatric dose is always 0.5 ml (equivalent to 10 micrograms of Engerix or 5 micrograms of Recombivax).

Hepatitis B infection in mother is NOT a contraindication to breastfeeding

NURSERY MANAGEMENT GUIDELINES

INFANTS BORN TO HBsAg POSITIVE MOTHERS regardless of gestational age:

Administer Hepatitis B vaccine 0.5ml IM within 12 hours of birth

Administer Hepatitis B Immune Globulin (HBIG) 0.5 ml IM within 12 hours of birth at a separate site

Notify the state health department that baby was born and received HBV and HBIG

Ensure series is completed with dose #2 in 1 month, dose #3 in 6 months*

Note the importance of other household members needing to be tested and possibly vaccinated

Infants born to HBsAg positive mothers should be tested for immunity at 9 to 15 months of age

*infants < 2000g require 4 vaccine doses at 0, 1, 2-3, 6-7 months of chronologic age

INFANTS BORN TO MOTHERS WITH UNKNOWN HBsAg STATUS:

Administer Hepatitis B vaccine 0.5ml IM within 12 hours of birth regardless of gestational age.

Test mother for HBsAg immediately.

Infants > 2kg If mother tests positive for HBsAg give HBIG as soon as possible (but no later than 7d)

Infants < 2kg If mother tests positive for HBsAg or maternal status unknown give HBIG within 12 hours

Ensure adequate follow-up if infant discharged home prior to maternal HBsAg result available

INFANTS BORN TO HBsAg NEGATIVE MOTHERS and GREATER THAN 2 KG:

Hepatitis B Vaccine within 12 hours of birth. This is to safeguard against maternal hepatitis B testing errors, to protect neonates discharged to households in which persons with chronic Hep B infection other than the mother may reside, and to enhance the completion of the childhood immunization series.

INFANTS BORN TO HBsAg NEGATIVE MOTHERS and LESS THAN 2 KG:

Hepatitis B Vaccine dose 1 at 30 days of chronologic age if medically stable, or at hospital discharge if before 30 days of chronologic age. These infants require 3 doses of vaccine (dose 1 as noted, dose 2 at 2-4 months, dose 3 at 6-18 months of age).

DIAGNOSTIC TESTING FOR HEPATITIS B DISEASE

HBsAg: acutely or chronically infected persons

Anti-HBs: persons who have resolved infections with Hepatitis B; immunity after immunization

HbeAg: infected persons at increased risk for transmitting Hepatitis B

Anti- HBe: infected persons with lower risk for transmitting Hepatitis B

Anti- HBc: acute, resolved, or chronic HBV infection- this is NOT PRESENT after immunization

IgM anti- HBc: acute or recent Hepatitis B infection (including those in HBsAg- negative persons during the "window" phase of infection)

References: www.cdc.gov/nip; www.immunize.org/cdc/hepbmemo.pdf; www.aap.org, AAP Clinical Report Immunization of Preterm and Low Birth Weight Infants. *Pediatrics*. July 2003. 112(1): 193-198.

Algorithms are not intended to replace providers' clinical judgement or to establish a single protocol. Some clinical problems may not be adequately addressed in this guideline. As always, clinicians are urged to document management strategies. *Last revised May, 2014.*