

Newborn Hepatitis B Vaccine 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.

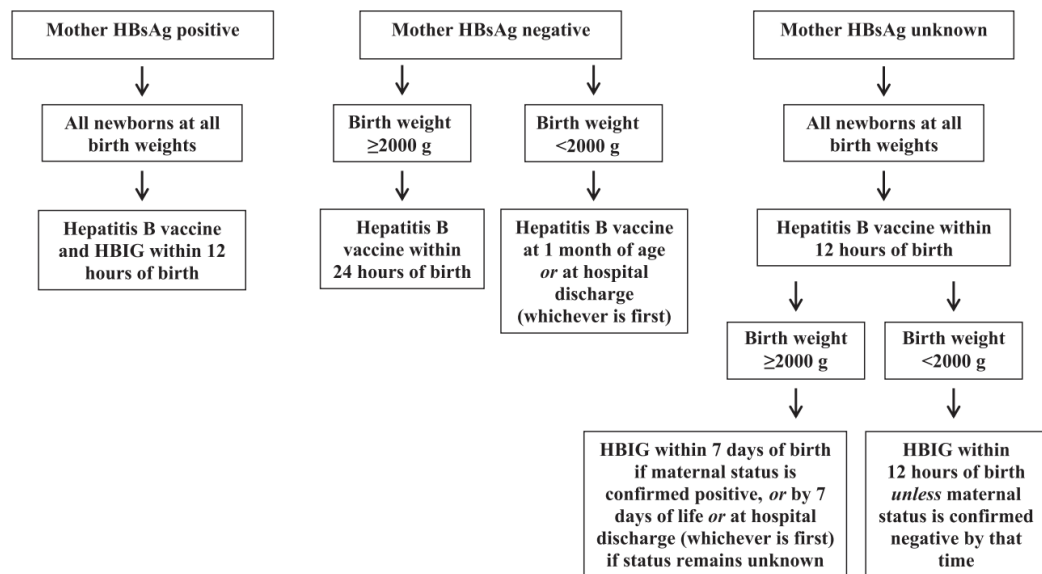


FIGURE 1

Administration of the birth dose of hepatitis B vaccine by maternal HBsAg status.

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)

Additional Important Information

INFANTS BORN TO HBsAg POSITIVE MOTHERS regardless of gestational age:

- Notify the state health department that the 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:

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

Reference: “Elimination of Perinatal Hepatitis B: Providing the First Vaccine Dose within 24 hours of Birth”. AAP Policy Statement Pediatrics 140(3) Sept. 2017

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 reviewed October, 2019