Recommendation Alert
Hepatitis B

Iowa Department of Public Health • Bureau of Disease Prevention and Immunization • 1-800-831-6293

Quick Reference Guide for Hepatitis B Prevention, Testing, and Treatment Recommendations

Maternal Hepatitis B Surface Antigen (HBsAg) Testing

- All pregnant women should be tested routinely for HBsAg during an early prenatal visit (e.g., first trimester) in each pregnancy, even if they have been previously vaccinated or tested.
- Women who were not screened prenatally, those who engage in behaviors that put them at high risk for infection and those with clinical hepatitis should be tested at the time of admission to the hospital for delivery.
- If the woman has a positive HBsAg , the case must be reported to the Iowa Department of Public Health, Center for Acute Disease Epidemiology within one week per Iowa Administrative Code 614 Chapter 1. The case may be reported by phone (1-800-362-2763), by secure fax (515-281-5698), or in writing. The form for reporting a Hepatitis B case is located in the EIP Manual, Hepatitis B section at: http://www.idph.state.ia.us/adper/common/pdf/epi_manual/hepatitis_b.pdf

Vaccination of Infants at Birth

- Birth Dose: Only single-antigen hepatitis B vaccine should be used for the birth dose.
- For all medically stable infants weighing >2,000 g at birth and born to HBsAg negative mothers, the first dose of vaccine should be administered before hospital discharge. On a case-by-case basis and only in rare circumstances, the first dose may be delayed until after hospital discharge for an infant who weighs >2,000 g and whose mother is HBsAg negative. When such a decision is made, a physician's order to withhold the birth dose and a copy of the original laboratory report indicating that the mother was HBsAg negative during this pregnancy should be placed in the infant's medical record.
- Infants born to mothers who are HBsAg positive should receive hepatitis B vaccine and hepatitis B immune globulin (HBIG) <12 hours of birth.
- Infants born to mothers whose HBsAg status is unknown should receive hepatitis B vaccine <12 hours of birth. The mother should have blood drawn as soon as possible to determine her HBsAg status; if she is HBsAg positive, the infant should receive HBIG as soon as possible (no later than one week of age).
- Preterm infants weighing <2,000 g and born to HBsAg negative mothers should have their first vaccine dose delayed until 1 month after birth or hospital discharge. For these infants, a copy of the original laboratory report indicating that the mother was HBsAg negative during this pregnancy should be placed in the infant's medical record.
- Preterm infants weighing <2,000 g and born to HBsAg positive mothers should receive hepatitis B vaccine and hepatitis B immune globulin (HBIG) <12 hours of birth. The initial vaccine dose (birth dose) should not be counted as part of the vaccine series because of the potentially reduced immunogenicity of hepatitis B vaccine in these infants; 3 additional doses of vaccine (for a total of 4 doses) should be administered beginning when the infant reaches one month of age.

After the Birth Dose—Completion of Vaccine

- All infants should complete the hepatitis B vaccine series with either single-antigen vaccine or combination vaccine, according to the recommended vaccination schedule.
- Administration of 4 doses of hepatitis B vaccine to infants is permissible in certain situations (e.g., when combination vaccines are administered after the birth dose).

Post-vaccination Testing

- For Infants born to mothers who are HBsAg positive, post-vaccination testing for anti-HBs and HBsAg should be performed after completion of the vaccine series, at age 9–18 months (generally at the next well-child visit). Testing should not be performed before age 9 months to avoid detection of anti-HBs from HBIG administered during infancy and to maximize the likelihood of detecting late HBV infection. Anti-HBc testing of infants is not recommended because passively acquired maternal anti-HBc might be detected in infants under 24 months of age born to HBV infected mothers.

Source: *Morbidity and Mortality Weekly Report*; CDC, December 23, 2005. Vol.54/ No. RR-16. http://www.cdc.gov/mmwr/PDF/rr/rr5416.pdf