**Hepatitis B Facts: Testing and Vaccination**

**Who Should Be Vaccinated**

The following people should receive routine hepatitis B vaccination, according to the Centers for Disease Control and Prevention (CDC):

**Routine vaccination**
- All newborns within 24 hours of birth
- All children and teens ages 0 through 18 years
- All people who wish to be protected from hepatitis B virus (HBV) infection. ACIP and CDC state it is not necessary for the patient to disclose a risk factor to receive hepatitis B vaccine.

**People who are at risk for sexual exposure**
- Sexually active people who are not in long-term, mutually monogamous relationships
- Sex partners of HBsAg-positive people
- People seeking evaluation or treatment for an STD
- Men who have sex with men

**People at risk for infection by percutaneous or mucosal exposure to blood**
- People with diabetes (type 1 and type 2): Vaccinate those <60 yrs. For those ≥60 yrs, vaccinate at discretion of physician.
- People with current or past injection-drug use
- Household contacts of HBsAg-positive people
- Residents and staff of facilities for developmentally disabled people
- Healthcare and public safety workers with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids
- People with end-stage renal disease and those receiving dialysis

**Others**
- Travelers to areas with moderate or high rates of HBV infection
- People with chronic liver disease
- People with HIV infection
- People who are incarcerated

Refugees, immigrants, and adoptees from countries where HBV infection is endemic should have hepatitis B testing. They should discuss their test results and need for hepatitis B vaccine with their healthcare provider.

For certain people at risk, postvaccination testing is recommended. Postvaccination testing, when it is recommended, should be performed 1–2 months after the last dose of vaccine. Infants born to HBsAg-positive mothers should be tested for HBsAg and anti-HBs after completion of at least 3 doses of a hepatitis B vaccination series, at age 9–18 months. Consult ACIP recommendations for details (see references on page 2).

**Hepatitis B Lab Nomenclature**

**HBsAg**: Hepatitis B surface antigen is a marker of current infection. Its presence indicates either acute or chronic HBV infection.

**Anti-HBs**: Antibody to hepatitis B surface antigen is a marker of immunity. Its presence indicates an immune response to HBV infection, an immune response to vaccination, or the presence of passively acquired antibody. (It is also known as HBsAb, but this abbreviation is best avoided since it is often confused with abbreviations such as HBsAg.)

**Anti-HBc (total)**: Antibody to hepatitis B core antigen is a nonspecific marker of acute, chronic, or resolved HBV infection. It is not a marker of vaccine-induced immunity. It may be used in prevaccination testing to determine previous exposure to HBV infection. (It is also known as HBcAb, but this abbreviation is best avoided since it is often confused with other abbreviations.)

**IgM anti-HBc**: IgM antibody subclass of anti-HBc. Positivity indicates recent infection with HBV (within the past 6 mos). Its presence indicates acute infection.

**HBV-DNA**: HBV deoxyribonucleic acid is a measure of viral load and reflects viral replication.

**About Hepatitis B Serologic Testing**

Serologic testing prior to vaccination may be done based on your assessment of your patient’s level of risk and your or your patient’s need for definitive information (see information in the left column). If you decide to test, draw the blood first, and then give the first dose of vaccine at the same office visit. Vaccination can then be continued, if needed, based on the results of the tests. If you are not sure who needs hepatitis B testing, consult your state or local health department (see www.cdc.gov/vaccines/vpd/hepb/hcp/perinatal-contacts.html).
Managing Chronic HBV Infection

People chronically infected with HBV need medical evaluation every 6–12 months to assess their liver health and need for antiviral therapy, and screen for liver cancer. Consultation with a specialist knowledgeable in the treatment of liver disease is recommended.

Household members and sex partners of HBsAg-positive people should be tested for HBV infection (HBsAg and anti-HBs or anti-HBc) and should be given the first dose of hepatitis B vaccine at the same visit. (Vaccinating a patient who has already been infected will do no harm). If testing indicates HBV susceptibility, complete the hepatitis B vaccination series. If testing indicates HBV infection, refer for medical care and consultation with a liver disease specialist.

REFERENCES