



August 29, 2016

## **Help stop the spread of hepatitis B virus (HBV) infection by offering post-vaccination serologic testing panels for infants born to HBV-infected women**

Post-vaccination serologic testing (PVST) helps identify infants born to hepatitis B virus (HBV)-infected women who do not have an adequate immune response to an initial hepatitis B vaccine series and might require additional vaccination. PVST also enables early identification of HBV-infected infants. CDC has recently recommended that infants born to HBV-infected women receive PVST consisting of a hepatitis B surface antigen (HBsAg) test and an antibody to hepatitis B surface antigen (anti-HBs) test at age 9-12 months (or 1–2 months after the final dose of the vaccine series, if the series is delayed).

**The Problem:** CDC estimates that only about 65% of infants born to HBV-infected women receive recommended PVST after completion of the hepatitis B vaccine series. Common reasons for less than optimal PVST testing among infants are that ordering providers often order (1) either an HBsAg test or an anti-HBs test, but not both, or (2) a hepatitis panel containing tests extraneous to recommended testing of these infants but missing an anti-HBs test.

**The Solution:** Laboratories can offer a hepatitis B PVST panel consisting of tests for both HBsAg and anti-HBs for assessing immunization of vaccinated infants born to HBV-infected women. Offering this panel will assist providers in ordering recommended PVST, reduce the need for additional blood draws, conserve resources and reduce the costs of unnecessary testing, and facilitate identification of infants with HBV infection or an inadequate immune response to the hepatitis B vaccine series.

**Please join this public health initiative to improve recommended PVST of infants born to HBV-infected women.**

### **Action Steps for Laboratories:**

*Create a Post-Vaccination Serologic Testing Panel for Infants Born to HBV-infected Women*

- ❖ CDC recommends this panel include two HBV serologic tests:
  - (1) HBsAg (CPT: 87340)
  - (2) Anti-HBs, quantitative (CPT: 86317) and/or qualitative\* (CPT: 86706)
    - \*test should allow determination of protective level of anti-HBs (i.e.  $\geq 10$  mIU/mL)
- ❖ Clearly indicate panel is intended for assessing both immunization and disease status of fully hepatitis B vaccinated infants born to HBV-infected women.
  - **Recommended method:** Include “Post-Vaccination Serologic Testing for Infants Born to Hepatitis B Virus-Infected Mothers” in name of panel.

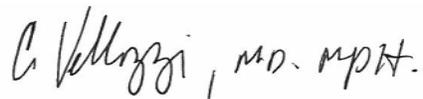
*Client Education*

- ❖ Educate ordering providers about recommended laboratory test options for and timing of PVST for infants born to HBV-infected women.
- ❖ Encourage ordering providers to select the PVST panel when assessing disease and immunization of fully hepatitis B vaccinated infants born to HBV-infected women.

For more information: <http://www.cdc.gov/hepatitis/hbv/pvst.htm>

For questions: Please contact [dvhwi@cdc.gov](mailto:dvhwi@cdc.gov)

Sincerely,



Claudia Vellozzi M.D., M.P.H.  
Chief, Prevention Branch  
Division of Viral Hepatitis  
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

**Additional Information:**

1. Schillie S, Murphy TV, Fenlon N, Ko S, & Ward JW. (2015). Update: Shortened Interval for Postvaccination Serologic Testing of Infants Born to Hepatitis B-Infected Mothers. MMWR Morb Mortal Wkly Rep, 64, 1118. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6439a6.htm>
2. Mast EE, Margolis HS, Fiore AE, Brink EW, Goldstein ST, Wang SA, et al. (2005). A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP) part 1: immunization of infants, children, and adolescents. MMWR Recomm Rep. 2005 Dec 23;54(RR-16):1-31. Available from: <http://www.cdc.gov/mmwr/PDF/rr/rr5416.pdf>