

Some clinical agencies may require students to sign an acknowledgment of risk of acquiring Hepatitis B without proof of immunity when students do not submit a titre proving immunity to Hepatitis B. The enclosed documents entitled, Acknowledgment of Risk of Acquiring Hepatitis B without Proof of Immunity describes this risk. Please discuss any concerns about this request with your health care provider.

### **Acknowledgment of Risk of Acquiring Hepatitis B without Proof of Immunity**

The recommendations of the Advisory Committee on Immunization Practices (ACIP) recommendations are the basis for CDC guidelines regarding immunization practices as referenced in Recommendations & Reports dated November 25, 2011 / 60(RR07);1-45. The excerpts below, from the ACIP, speak to the importance of titers in checking for immunity.

### **Vaccination of Adults**

Primary vaccination consists of  $\geq 3$  intramuscular doses of hepatitis B vaccine (Table 2). The 3-dose vaccine series administered intramuscularly at 0, 1, and 6 months produces a protective antibody response in approximately 30%--55% of healthy adults aged  $< 40$  years after the first dose, 75% after the second dose, and  $> 90\%$  after the third dose (124,125). After age 40 years, the proportion of persons who have a protective antibody response after a 3-dose vaccination regimen declines below 90%, and by age 60 years, protective levels of antibody develop in only 75% of vaccinated persons (126). In addition to age, other host factors (e.g., smoking, obesity, genetic factors, and immune suppression) contribute to decreased vaccine response (127--130). Alternative vaccination schedules (e.g., 0, 1, and 4 months or 0, 2, and 4 months) have been demonstrated to elicit dose-specific and final rates of seroprotection similar to those obtained on a 0-, 1-, 6-month schedule (131).

### **Preexposure**

Unvaccinated and Incompletely Vaccinated HCP and Trainees: Pre- and Postvaccination Serologic Testing

- Prevaccination serologic testing for previous infection is not indicated for the majority of persons being vaccinated because of occupational risk unless the hospital or health-care organization considers such testing cost-effective (3,52,69--72). However, such testing is indicated for HCP and is cost-effective in certain high-risk populations (see HCP and Trainees at Additional Risk), regardless of vaccination status (71,73).
- All unvaccinated persons whose work- and training-related activities involve reasonably anticipated risk for exposure to blood or other infectious body fluids (e.g., HCP, long-term-care facility staff, and public safety workers) should be vaccinated with the complete,  $\geq 3$ -dose hepatitis B vaccine series.
- Persons with an incomplete series are not considered protected and should complete the  $\geq 3$ -dose series.
- Because higher risk has been reported during the professional training period, the vaccination series should be completed before trainees have contact with blood; vaccination should be offered in schools of medicine, dentistry, nursing, laboratory technology, and other allied health professions.
- To determine the need for revaccination and to guide postexposure prophylaxis, postvaccination serologic testing should be performed for all HCP at high risk for occupational percutaneous or mucosal exposure to blood or body fluids. Postvaccination serologic testing is performed 1--2 months after administration of the last dose of the vaccine series using a method that allows detection of the protective concentration of anti-HBs ( $\geq 10$  mIU/mL). Persons determined to have anti-HBs concentrations of  $\geq 10$  mIU/mL after receipt of the primary vaccine series are considered immune, and the result should be documented. Immunocompetent persons have long-term protection and do not need further periodic testing to assess anti-HBs levels. Postvaccination testing for persons at low risk for mucosal or percutaneous exposure to blood or body fluids (e.g., public safety workers and HCP without direct patient contact) likely is not cost effective (52); however, persons who do not undergo postvaccination testing should be counseled to seek immediate testing if exposed.

- Persons determined to have anti-HBs concentrations of <10 mIU/mL soon after receipt of the primary vaccine series should be revaccinated. For these persons, administration of a second complete 3-dose series on an appropriate schedule, followed by anti-HBs testing 1--2 months after the third dose, usually is more practical than conducting serologic testing after each additional dose of vaccine.
- Persons who do not have a protective concentration of anti-HBs ( $\geq 10$  mIU/mL) after revaccination (i.e., after receiving a total of 6 doses) should be tested for HBsAg and anti-HBc to determine infection status. Those determined not to be infected but who have anti-HBs <10 mIU/mL (nonresponders) should be considered susceptible to HBV infection and should be counseled about precautions to prevent HBV infection and the need to obtain hepatitis B immune globulin (HBIG) postexposure prophylaxis for any known or likely exposure to HBsAg-positive blood (72). Persons determined to be infected (anti-HBc-positive) and positive for HBsAg should be provided counseling regarding how to prevent HBV transmission to others and referred for further evaluation (e.g., HBV viral load testing), care, treatment, and other services, as appropriate (69--71). Persons who are HBsAg-positive and who perform exposure-prone procedures should seek counsel from a review panel comprised of experts with a balanced perspective (e.g., HCPs' personal physicians and infectious disease specialists) regarding the procedures that they can perform safely. They should not be excluded from work (69). Persons who were infected in the past (anti-HBc-positive but negative for HBsAg) require no vaccination or treatment.

Acknowledgement Form Revised 9/1/2015

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### **Acknowledgement of Risk of Acquiring Hepatitis B without Proof of Immunity**

I understand that exposure to potentially infectious blood and body fluids may put me at risk for developing Hepatitis B infection. As explained on pages 1 and 2 of the **Acknowledgement of Risk of Acquiring Hepatitis B without Proof of Immunity**, having completed a Hepatitis B vaccination series does not guarantee immunity. Evidence of immunity is determined by the presence of a reactive Hepatitis B Surface Antibody (also referred to as a "positive titer"). Following a negative or nonreactive Hepatitis B surface antibody result it is my responsibility to follow up with my healthcare provider for further instructions. I understand that it is my responsibility to obtain and pay for the necessary testing to determine my immunity.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_ Student ID#: \_\_\_\_\_