1. Can you give 2 pediatric doses at the same time for 1 adult dose?

While not recommended, one may in the setting of a vaccine shortage, or in attempting to remedy a vaccine administration error, give a second pediatric dose of hepatitis B vaccine on the same day as the first dose. The two doses together, given in different anatomical sites, may count as one adult dose. See Clinical Implications of Nonstandard Vaccination Practices at <https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html>.

1. I have seen numerous younger new staff that have been hired who have had the Pediatric [hepatitis B vaccine] HBV given to them. When I check their titers, it is less than 4.2 so I need to booster them. Has anyone else noticed this?

From our January 12, 2018 updated hepatitis B vaccine recommendations in Box 5 at <https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf>:

|  |
| --- |
| **“The issue:** An increasing number of HCP have received routine hepatitis B (HepB) vaccination during childhood. No postvaccination serologic testing is recommended after routine infant or adolescent HepB vaccination. Because vaccine-induced antibody to hepatitis B surface antigen (anti-HBs) wanes over time, testing HCP for anti-HBs years after vaccination might not distinguish vaccine nonresponders from responders.  **Guidance for health care institutions:** Health care institutions may measure anti-HBs upon hire or matriculation for HCP who have documentation of a complete HepB vaccine series in the past (e.g., as part of routine infant or adolescent vaccination). HCP with anti-HBs <10 mIU/mL should receive one or more additional doses of HepB vaccine and retesting (Figure 3). Institutions that decide to not measure anti-HBs upon hire or matriculation for HCP who have documentation of a complete HepB vaccine series in the past should ensure timely assessment and post exposure prophylaxis following an exposure (Table 5).  **Considerations:** The risk for occupational HBV infection for vaccinated HCP might be low enough in certain settings so that assessment of anti-HBs status and appropriate follow-up should be done at the time of exposure to potentially infectious blood or body fluids. This approach relies on HCP recognizing and reporting blood and body fluid exposures and therefore may be applied on the basis of documented low risk, implementation, and cost considerations. Certain HCP occupations have lower risk for occupational blood and body fluid exposures (e.g., occupations involving counseling versus performing procedures), and non-trainees have lower risks for blood and body fluid exposures than trainees. Some settings also will have a lower prevalence of HBV infection in the patient population served than in other settings, which will influence the risk for HCP exposure to HBsAg-positive blood and body fluids.” |

1. If a 19 year old receives an adult dose of HepB should it be repeated?

No. Administering an adult dose to a person less than adult age as defined by the vaccine manufacturer is a vaccine administration error. Please take steps to avoid such vaccine administration errors, and if they occur, we request you report them to our Vaccine Adverse Events Reporting System at <https://vaers.hhs.gov>. However, the dose is unlikely to cause significant adverse events, should provide an adequate immune response and need not be repeated.

1. Does ACIP recommend HepB for any adult who wants immunity to hepatitis B, or is it just birth through 18 years?

Our hepatitis B recommendations at <https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf> state:

“HepB vaccination is recommended for all unvaccinated adults at risk for HBV infection and for all adults requesting protection from HBV infection. Acknowledgement of a specific risk factor should not be a requirement for vaccination…”

1. If an infant who was perinatally exposed to HepB receives a vaccine series using only the minimum intervals (3rd dose at least 16 weeks after dose 1 and older than 24 weeks), when should they get their post vaccination serology testing so we don't pick up mom's antibodies?

CDC’s recommendations (at <https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf>) state:

“Postvaccination serologic testing for anti-HBs and HBsAg should be performed after completion of the vaccine series at age 9–12 months (generally at the next well-child visit following completion of the HepB vaccine series). Postvaccination serologic testing should be performed for infants born to HBsAg-positive mothers and infants whose mother’s HBsAg status remains unknown (i.e., those infants who are safely surrendered shortly after birth) (new recommendation). Anti-HBs testing should be performed using a method that allows detection of the protective concentration of anti-HBs (≥10 mIU/mL). Testing should not be performed before age nine months to avoid detection of passive anti-HBs from HBIG administered at birth 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 born to HBsAg-positive mothers up to age 24 months.”

1. Will someone who has been infected with HepB always be positive for HBsAg?

Only persons who have chronic infection will retain HBsAg indefinitely. Acutely infected persons usually do not have measurable HBsAg within 16 weeks. Our hepatitis B recommendations (<https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf>) state:

“A confirmed positive HBsAg result indicates current HBV infection, either acute or chronic. All HBsAg-positive persons are infectious. If HBsAg persists for >6 months, spontaneous clearance is unlikely, and the infection is deemed chronic. HBV DNA can be detected prior to the detection of HBsAg in an infected person. Occult infection occurs when HBsAg is undetectable despite the presence of HBV DNA (66–68). Transient HBsAg positivity can occur up to 18 days following vaccination (up to 52 days among hemodialysis patients) and is clinically insignificant (69).”

See Figure 2 in the recommendations and associated text for more information.

1. What is the current recommendation for HepB vaccination with individuals with chronic Hep C?

They should be vaccinated to prevent further injury to the liver. See our recommendations at <https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf>.

1. If my patient only has lab results with a negative HBeAg, and a negative HBeAb, this only shows that the patient doesn't have a high infectiousness. It doesn't prove that they don't have the disease, right? There is a lot of confusion about these labs with our providers.

You are correct. Presence or absence of HBsAg should be confirmed to assess infectiousness. Serology interpretation is described in our recommendations (<https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf>) on pages 6-7 and in Figure 2.

1. For nonresponders, I thought you could give one additional dose and then retest. Has this recommendation changed?

No. That approach is an option, particularly for remotely vaccinated health care personnel with documentation of vaccination, and a negative anti-HBs result, as described in our recommendations at <https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf> in Box 5 and Figure 3. Retesting should occur 1 to 2 months after the additional dose.

1. Can HEPLISAV-B be used for a second HepB vaccine series if needed?

Yes.

1. What is the recommendation for concomitant administration with other adjuvanted vaccines, such as Heplisav with Shingrix, Heplisav with Fluad?

These vaccines may be administered at the same time, in different limbs if possible.

1. If a patient has completed the childhood series of HepB and diagnosed later with diabetes, does she still need 3 HepB doses?

No.

1. What are the recommendations for when to give a 'double dose' for immunocompromised patients (other than those with ESRD)?

Our hepatitis B vaccine recommendations state are not definite, and offer latitude for the practitioner in this area (<https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.pdf>):

“Immunocompromising conditions. The humoral response to HepB vaccine is reduced in children and adults who are immunocompromised (e.g., hematopoietic stem cell transplant recipients, patients undergoing chemotherapy, and HIV-infected persons) (122,123). Modified dosing regimens, including a doubling of the standard antigen dose or administration of additional doses, might increase response rates. However, data on response to these alternative vaccination schedules are limited (6)…

For other immunocompromised persons (e.g., HIV-infected persons, hematopoietic stem-cell transplant recipients, and persons receiving chemotherapy), the need for booster doses has not been determined. Annual anti-HBs testing and booster doses should be considered for persons with an ongoing risk for exposure…

Post vaccination serologic testing should consist of testing for anti-HBs and HBsAg; –– HCP and public safety workers at risk for blood or body fluid exposure; –– hemodialysis patients (and other persons who might require outpatient hemodialysis), HIV-infected persons, and other immunocompromised persons (e.g., hematopoietic stem-cell transplant recipients or persons receiving chemotherapy), to determine the need for revaccination and the type of follow-up testing…”