

### What You Need to Know

- **The CDC now recommends universal Hepatitis B vaccination for ALL patients ages 19-59.** This update is now reflected in the health maintenance report in EPIC.
- **Changing to universal vaccination eliminates the need to screen for risk factors and broadens payer coverage.** This change aims to reduce burden and discomfort around discussing risk factors to improve vaccine rates, which are currently low among high-risk patients.
- **Vaccination is still recommended for individuals ≥60 years with risk factors** and is acceptable for patients ≥60 years without risk factors based on shared decision making.

### Risk Factors for Adults

#### Risk via sexual exposure

- Sex partners of persons testing positive for HBsAg
- Sexually active, not in a long-term, mutually monogamous relationship (during the previous six months)
- Seeking evaluation or treatment for a sexually transmitted infection
- Men who have sex with men

#### Risk via percutaneous or mucosal exposure to blood

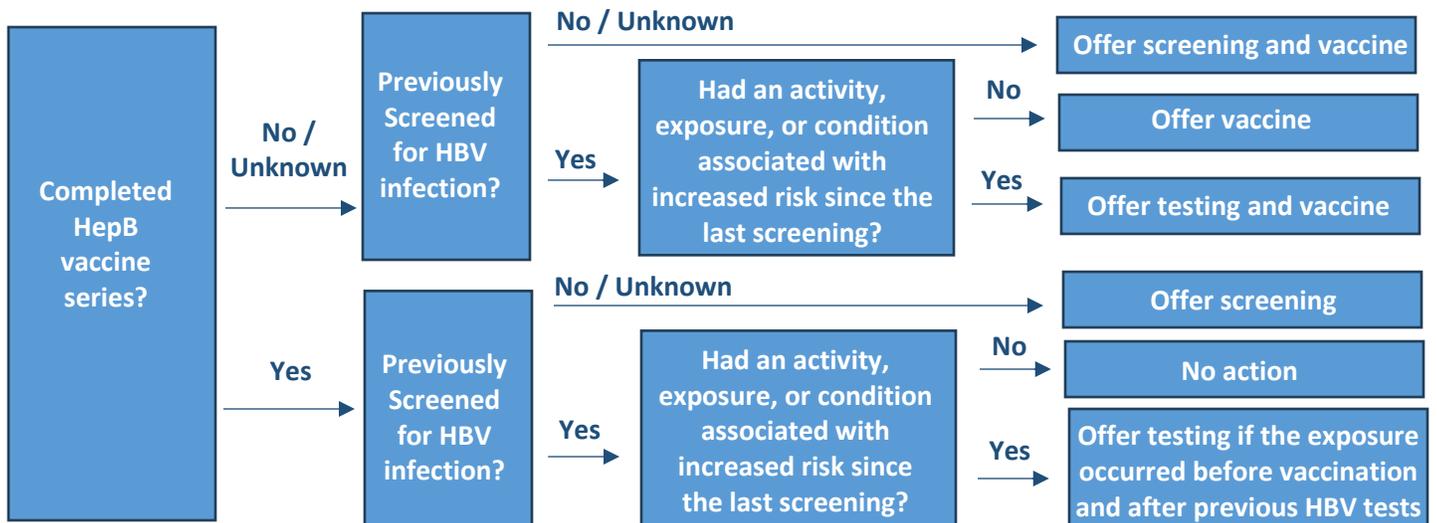
- Current or recent injection drug use
- Household contacts of persons testing positive for HBsAg
- Residents and staff members of facilities for persons with developmental disabilities
- Health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids
- On maintenance dialysis, including incenter or home hemodialysis and peritoneal dialysis, and persons who are predialysis
- Diabetes

#### Others

- International travelers to countries with high or intermediate levels of endemic HepB virus infection (HBsAg prevalence of ≥2%)
- Hepatitis C virus infection
- Chronic liver disease (including, but not limited to, persons with cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, and an AST or ALT > 2x ULN)
- HIV infection
- Persons who are incarcerated

### Incorporating Hepatitis B Virus Screening and Testing into a Clinic Workflow

Nonpregnant adults aged ≥ 18 years without a known history of HBV infection



## Frequently Asked Questions

### What if a patient is uncertain of their prior HepB vaccine status?

- **The CDC recommends administering the HepB vaccine if vaccine status is unknown.** Readministering the vaccine to previously vaccinated patients has not been associated with harm.

### What if a patient is uncertain of their HepB infection status?

- **Serology testing to assess for prior exposure to HepB is not required before giving the HepB vaccination to adults.** Though individuals previously infected with HepB will not benefit from vaccination, there is no known harm in receiving HepB vaccination following HepB infection. In areas with an increased prevalence of HepB, providers may wish to check HepB serology prior to, or at the time of, administering the first vaccine as the series would not be completed if the individual was previously infected with HepB due to lack of efficacy.

### Do the new recommendations suggest that individuals who completed the HepB series as a child require a booster?

- **All of the current HepB vaccines provide long-term or lifelong immunity. Therefore, a booster is not indicated for individuals who previously completed a HepB vaccine series.** In general, revaccination (i.e., booster dose, challenge dose, or revaccination with a complete series) is not recommended for immunocompetent patients who previously completed the series. The exception is patients on hemodialysis (see below).

### What about patients on hemodialysis?

- **If anti-HBs are <10 mIU/mL, a booster dose should be administered.** Levels should be checked annually.

### How and when do I give a high-dose vaccine?

- **High-dose HepB can be administered as 2 doses of Energix-B 20 mcg, given on the same day at two separate sites.** High dose vaccinations are recommended for hemodialysis and immunocompromised patients (ACIP does not define “immunocompromised” and defers to clinical judgement).

### Do patients need the same formulation of HepB vaccine to complete the series?

- **Completion of the vaccine series with the same vaccine formulation is preferred.** However, if the previous vaccine formulation is unknown or the same vaccine formulation is unavailable, the series can be completed with another HepB vaccine formulation as a 3-dose series, including Engerix-B and Recombivax HB. Heplisav-B is the only HepB vaccine offered as a 2-dose series that can be completed in 1 month compared to the 6 months for the other vaccines series.

### If the HepB vaccine series is interrupted or significantly delayed, does the patient need to restart the series?

- **There is no need to restart the HepB vaccine series.** To complete the series, the 2nd dose should be given at least 4 weeks after the 1st dose. If completing a three-dose series, the 3rd dose should be administered a minimum of 8 weeks after the 2nd dose and a minimum of 16 weeks after the 1st dose.

### Are there any contraindications to giving HepB vaccines?

- HepB vaccines are contraindicated in patients with a serious allergic reaction to a previous dose of the HepB vaccine, a component of the HepB vaccine, or yeast. PreHevbrio does not contain yeast and can be given to yeast-allergic patients.



# Pharmacy Pearls

## Hepatitis B (HepB) Vaccination

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Source: Conners EE, Panagiotakopoulos L, Hofmeister MG, et al. Screening and Testing for Hepatitis B Virus Infection: CDC Recommendations - United States, 2023. MMWR Recomm Rep. 2023;72:1-25

### Interpretation of Hepatitis B Serologic Test Results

HbsAg	Total anti-HBc	IgM anti-HBc	Anti-HBs	HBV DNA	Interpretation
-	-	-	-	-	Never infected; susceptible
+	-	-	-	+ or -	Early acute infection (positive or negative HBV DNA), <i>or</i> Transient (up to 18 days) after vaccination with negative HBV DNA
+	+	+	-	+	Acute infection
-	+	+	+ or -	+ or -	Acute resolving infection
-	+	-	+	-	Recovered from past infection and immune
+	+	-	-	+	Chronic infection
-	+	-	-	+ or -	Isolated core antibody False-positive (susceptible), <i>or</i> Past infection (resolved), <i>or</i> "low-level" chronic infection (unlikely to be infectious), <i>or</i> Passive transfer of anti-HBc to infant born to HBsAg-positive mother
-	-	-	+	-	Immune if anti-HBs concentration is $\geq 10$ mIU/mL after completing vaccine series, <i>or</i> Passive transfer after hepatitis B immune globulin administration (for 3-6 months)

**Abbreviations:** anti-HBc = antibody to hepatitis B core antigen; anti-HBs = antibody to hepatitis B surface antigen; HBsAg = hepatitis B surface antigen; HBV DNA = hepatitis B virus deoxyribonucleic acid; IgM = immunoglobulin class M.

**Source:** Schillie S, Vellozzi C, Reingold A, et al. Prevention of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices. MMWR Recomm Rep. 2018;67:1-31.