

Putting Prevention into Practice

An Evidence-Based Approach

Screening for Hepatitis B Virus Infection in Adolescents and Adults

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Case Study

A 15-year-old adolescent, J.M., presents for a well-child examination. J.M. was born in Central America before moving to the United States eight years ago with their family. J.M. reports that their older sibling, who lives at home, was diagnosed with hepatitis B virus (HBV) infection last month. J.M. is not sexually active, has no history of drug use, and wonders whether they should be tested for HBV.

Case Study Questions

1. According to the U.S. Preventive Services Task Force (USPSTF), which one of the following is an appropriate next step for this patient?

- ☐ A. Check J.M.'s immunization records, and screen for HBV only if J.M. was not vaccinated as a child.
- ☐ B. Do not screen for HBV because J.M. is not at high risk.
- ☐ C. Do not screen for HBV because J.M. is younger than 18 years.
- ☐ D. Screen for HBV because all adolescents and adults should be screened periodically for HBV.
- ☐ E. Screen for HBV because J.M. is at high risk.

2. According to the USPSTF, which of the following are high-risk groups for whom HBV screening should be considered?

- ☐ A. All people who were not vaccinated against HBV as infants.
- ☐ B. Men who have sex with men.
- ☐ C. Household contacts of people with HBV infection.
- ☐ D. Sex partners of people with HBV infection.

3. According to the USPSTF, which one of the following countries has a high prevalence of HBV infection?

- ☐ A. Uganda.
- ☐ B. Panama.
- ☐ C. United States.
- ☐ D. Austria.

Answers appear on the following page.

See related U.S. Preventive Services Task Force Recommendation Statement on page 495.

This PPIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and supporting documents on the USPSTF website (<https://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hepatitis-b-virus-infection-screening#fullrecommendationstart>.

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A collection of Putting Prevention into Practice published in *AFP* is available at <https://www.aafp.org/afp/ppip>.

CME This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 460.

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Answers

1. **The correct answer is E.** The USPSTF recommends screening for HBV infection in adolescents and adults who are at high risk of infection. The patient is considered to be at high risk because they have a household contact with HBV infection. The patient's immunization records do not affect whether screening should occur because Central America is not a region with a high prevalence of HBV infection.¹ Age does not affect the decision to screen high-risk patients for HBV infection.

2. **The correct answers are B, C, and D.** Among people who were not vaccinated against HBV as infants, only those whose parents were born in regions with a very high prevalence of HBV should be screened. Men who have sex with men and household contacts or sex partners of persons with HBV infection are considered high-risk groups for HBV infection.² Other important high-risk groups include people born in countries with a high prevalence of HBV infection ($\geq 2\%$) and people with current or past injection drug use.

3. **The correct answer is A.** Regions with a high prevalence of HBV infection are Asia, Africa, the Pacific Islands, and parts of South America; Uganda is in a region with a high prevalence of HBV infection. Regions that generally do not have a high prevalence of HBV infection include Europe, North America, and Central America. A complete list of countries in each region and the prevalence of HBV infection is available at <https://wwwnc.cdc.gov/travel/yellowbook/2020/travel-related-infectious-diseases/hepatitis-b>.

The views expressed in this work are those of the authors and do not reflect the official policy or position of Johns Hopkins Bloomberg School of Public Health or the U.S. government.

References

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2. Chou R, Blazina I, Bougatsos C, et al. Screening for hepatitis B virus infection in nonpregnant adolescents and adults: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2020; 324(23):2423-2436. ■



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