Screening for Hepatitis B in Nonpregnant Adolescents and Adults

The US Preventive Services Task Force (USPSTF) recently published recommendations on screening for hepatitis B virus infection in nonpregnant adolescents and adults.

**What Is Hepatitis B?**
Hepatitis B is a virus that infects and harms the liver. It can be transmitted sexually or by blood (such as by sharing needles). It can also be transmitted during pregnancy from mother to fetus. Symptoms of initial acute hepatitis B infection include fever, fatigue, abdominal pain, nausea, and sometimes yellowing of the eyes and skin (jaundice). Most people recover fully from acute hepatitis B infection without treatment, but about 1 in 20 people are not able to clear the virus from their body and subsequently develop chronic hepatitis B infection. In people with chronic hepatitis B infection, the virus stays in the liver, and over the course of years to decades, can cause liver cirrhosis, liver failure, liver cancer, and death.

Not everyone needs treatment right away for chronic hepatitis B infection. Treatment involves antiviral medications such as tenofovir. There is also a hepatitis B vaccination available, which in the US is routinely given to all infants at birth as well as to adults for catch-up vaccination.

**What Tests Are Used to Screen for Hepatitis B Infection?**
Screening for hepatitis B infection is done by blood tests. Different blood tests can detect current infection, past infection, or immunity. The best initial screening test for hepatitis B infection is the hepatitis B surface antigen (HBsAg) test.

**What Is the Patient Population Under Consideration for Screening for Hepatitis B Infection?**
This USPSTF recommendation applies to adults and adolescents who are not pregnant and are at increased risk of hepatitis B infection. People at increased risk include

- People born in countries or regions with a high prevalence of hepatitis B infection (regardless of vaccination history)
- People born in the US who were not vaccinated as infants and whose parents were born in regions with a high prevalence of hepatitis B infection
- Past or current users of injected drugs
- Men who have sex with men
- People with HIV infection
- Close contacts of people known to be HBsAg positive

**What Are the Potential Benefits and Harms of Screening for Hepatitis B Infection?**
The goal of screening for hepatitis B infection is to lower the rates of cirrhosis, liver cancer, and death as a result of chronic hepatitis B infection. Although there is currently no direct evidence that screening leads to these improved health outcomes, there is evidence that (1) screening is an accurate way to diagnose hepatitis B infection, which then leads to treatment, and (2) treatment of hepatitis B infection is effective in improving outcomes of cirrhosis, cancer, and death. Potential harms of screening are small, as false-positive rates are low (the HBsAg test is very accurate), and treatments are rarely harmful.

**How Strong Is the Recommendation to Screen for Hepatitis B Infection?**
Based on current evidence, the USPSTF concludes with moderate certainty that screening for hepatitis B infection in adolescents and adults at increased risk of infection has moderate net benefit.