

Screening for Hepatitis C Virus Infection in Adults: Recommendation Statement

U.S. Preventive Services Task Force*

This statement summarizes the U.S. Preventive Services Task Force (USPSTF) recommendations on screening for hepatitis C virus (HCV) infection, which are based on the USPSTF's examination of evidence specific to asymptomatic persons for HCV testing and treatment. The complete information on which this statement is based, including evidence tables and references, is available in the accompanying article in this issue and in the summary of the evidence and systematic evidence review on this topic. The complete USPSTF recommendation statement (which includes a brief review of the supporting evidence), the accompanying journal

article, and the complete systematic evidence review are available through the USPSTF Web site (www.preventiveservices.ahrq.gov). The journal article and the USPSTF recommendation statement are available in print through the Agency for Healthcare Research and Quality Publications Clearinghouse (telephone, 800-358-9295; e-mail, ahrqpubs@ahrq.gov).

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See related article on pp 465-479.

* For a list of the members of the U.S. Preventive Services Task Force, see the Appendix.

SUMMARY OF THE RECOMMENDATIONS

The U.S. Preventive Services Task Force (USPSTF) recommends against routine screening for hepatitis C virus (HCV) infection in asymptomatic adults who are not at increased risk (general population) for infection. This is a **grade D recommendation**. (See Appendix Table 1 for a description of the USPSTF classification of recommendations.)

The USPSTF found good evidence that screening with available tests can detect HCV infection in the general population. (See Appendix Table 2 for a description of the USPSTF classification of levels of evidence.) The prevalence of HCV infection in the general population is low, and most who are infected do not develop cirrhosis or other major negative health outcomes. There is no evidence that screening for HCV infection leads to improved long-term health outcomes, such as decreased cirrhosis, hepatocellular cancer, or mortality. Although there is good evidence that antiviral therapy improves intermediate outcomes, such as viremia, there is limited evidence that such treatment improves long-term health outcomes. The current treatment regimen is long and costly and is associated with a high patient dropout rate due to adverse effects. Potential harms of screening include unnecessary biopsies and labeling, although there is limited evidence to determine the magnitude of these harms. As a result, the USPSTF concluded that the potential harms of screening for HCV infection in adults who are not at increased risk for HCV infection are likely to exceed potential benefits.

The USPSTF found insufficient evidence to recommend for or against routine screening for HCV infection in adults at high risk for infection. This is a **grade I recommendation**.

The USPSTF found no evidence that screening for HCV infection in adults at high risk (see Clinical Considerations) leads to improved long-term health outcomes, although the yield of screening would be substantially higher in a high-risk population than in an average-risk population and there is

good evidence that antiviral therapy improves intermediate outcomes, such as viremia. There is, as yet, no evidence that newer treatment regimens for HCV infection, such as pegylated interferon plus ribavirin, improve long-term health outcomes. There is limited evidence from non-U.S. studies that older therapies have some long-term health benefits for patients referred for treatment, but the generalizability of these results to the U.S. population is unknown. Of those infected with HCV, the proportion who progress to liver disease is uncertain. There is limited evidence that 10% to 20% of patients with chronic HCV infection develop cirrhosis within 20 to 30 years after infection. There is also limited evidence that available treatments are effective in preventing cirrhosis in patients with asymptomatic HCV infection. Potential harms of screening and treatment include labeling, adverse treatment effects, and unnecessary biopsies, although there is limited evidence to determine the magnitude of these harms. As a result, the USPSTF could not determine the balance of benefits and harms of screening for HCV infection in adults at increased risk for infection.

CLINICAL CONSIDERATIONS

Established risk factors for HCV infection include current or past intravenous drug use, transfusion before 1990, dialysis, and being a child of an HCV-infected mother. Surrogate markers, such as high-risk sexual behavior (particularly sex with someone infected with HCV) and the use of illegal drugs, such as cocaine or marijuana, have also been associated with increased risk for HCV infection. The proportion of people who received blood or blood product transfusions before 1990 will continue to decline, and HCV infection will be associated mainly with intravenous drug use and, to some extent, unsafe sexual behaviors.

Initial testing for HCV infection is typically done by enzyme immunoassay (EIA). In a population with a low prevalence of HCV infection (for example, 2%), approxi-

mately 59% of all positive tests using the third-generation EIA test with 97% specificity would be false positive. As a result, confirmatory testing is recommended with the strip recombinant immunoblot assay (third-generation RIBA).

Important predictors of progressive HCV infection include older age at acquisition; longer duration of infection; and presence of comorbid conditions, such as alcohol misuse, HIV infection, or other chronic liver disease. Asymptomatic individuals with HCV infection identified through screening may benefit from interventions designed to reduce liver injury from other causes, such as counseling to avoid alcohol misuse and immunization against hepatitis A and hepatitis B. However, there is limited evidence of the effectiveness of these interventions.

The brief review of the evidence that is normally included in USPSTF recommendations is available in the complete recommendation statement on the USPSTF Web site (www.preventiveservices.ahrq.gov).

RECOMMENDATIONS OF OTHERS

Recommendations for HCV infection screening from other major entities can be obtained from the National Institutes of Health (NIH) Consensus Panel (1) at http://consensus.nih.gov/cons/116/091202116cdc_statement.htm and from the Centers for Disease Control and Prevention (CDC) (2) at <ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4719.pdf>. Both recommend screening for groups at high risk for HCV infection, although the way they define high-risk groups differs slightly. Both recommend screening for users of injection drugs, hemodialysis patients, and recipients of transfusions or organs (CDC recommendations cover the years before 1992, and NIH recommendations cover the years before 1990). In addition, the NIH panel recommends screening for individuals with multiple sexual partners, spouses or household contacts of HCV-infected patients, and those who share instruments for intranasal cocaine use; the CDC recommends screening for children born to mothers infected with HCV, those who received clotting factor concentrates before 1987, those with occupational exposure to HCV-positive blood, and patients with persistently abnormal alanine aminotransferase levels. Other groups identified by the CDC for whom routine screening is uncertain include recipients of transplanted tissue, those who use intranasal cocaine and other noninjection illegal drugs, persons with a history of tattooing or body piercing, those with a history of multiple sex partners or sexually transmitted diseases, and long-term steady partners of HCV-positive persons. The CDC guidelines for reporting HCV test results (3) can be accessed at www.cdc.gov/mmwr/PDF/rr/rr5203.pdf.

APPENDIX

Members of the U.S. Preventive Services Task Force are Alfred O. Berg, MD, MPH, *Chair* (University of Washington, Seattle, Washington); Janet D. Allan, PhD, RN, CS, *Vice-Chair*

Appendix Table 1. U.S. Preventive Services Task Force Grades and Recommendations*

Grade	Recommendation
A	The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. <i>The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.</i>
B	The USPSTF recommends that clinicians provide [the service] to eligible patients. <i>The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.</i>
C	The USPSTF makes no recommendation for or against routine provision of [the service]. <i>The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.</i>
D	The USPSTF recommends against routinely providing [the service] to asymptomatic patients. <i>The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.</i>
I	The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. <i>Evidence that [the service] is effective is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.</i>

* The U.S. Preventive Services Task Force (USPSTF) grades its recommendations according to 1 of 5 classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms).

Appendix Table 2. U.S. Preventive Services Task Force Strength of Overall Evidence*

Grade	Definition
Good	Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes
Fair	Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies; generalizability to routine practice; or indirect nature of the evidence on health outcomes
Poor	Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes

* The U.S. Preventive Services Task Force (USPSTF) grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor).

(University of Maryland Baltimore, Baltimore, Maryland); Ned Calonge, MD, MPH (Colorado Department of Public Health and Environment, Denver, Colorado); Paul Frame, MD (Tri-County Family Medicine, Cohocton, and University of Rochester, Rochester, New York); Joxel Garcia, MD, MBA (Pan American Health Organization, Washington, DC); Russell Harris, MD, MPH (University of North Carolina School of Medicine, Chapel Hill, North Carolina); Mark S. Johnson, MD, MPH (University of Medicine and Dentistry of New Jersey–New Jersey Medical School, Newark, New Jersey); Jonathan D. Klein, MD, MPH (University of Rochester School of Medicine, Rochester, New York); Carol Loveland-Cherry, PhD, RN (University of Michigan, Ann Arbor, Michigan); Virginia A. Moyer, MD, MPH (University of Texas at Houston, Houston, Texas);

C. Tracy Orleans, PhD (The Robert Wood Johnson Foundation, Princeton, New Jersey); Albert L. Siu, MD, MSPH (Mount Sinai School of Medicine, New York, New York); Steven M. Teutsch, MD, MPH (Merck & Co., Inc., West Point, Pennsylvania); Carolyn Westhoff, MD, MSc (Columbia University, New York, New York); and Steven H. Woolf, MD, MPH (Virginia Commonwealth University, Fairfax, Virginia). This list includes members of the Task Force at the time this recommendation was finalized. For a list of current Task Force members, go to www.ahrq.gov/clinic/uspstfab.htm.

From the U.S. Preventive Services Task Force, Agency for Healthcare Research and Quality, Rockville, Maryland.

Disclaimer: The USPSTF recommendations are independent of the U.S. government. They do not represent the views of the Agency for

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References

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