

# Putting Prevention into Practice

## *An Evidence-Based Approach*

### Screening for Hepatitis C Virus Infection in Adolescents and Adults

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#### Case Study

M.S. is a 20-year-old man who presents for a preemployment physical examination. He states that he is single, has two or three drinks per month on social occasions, does not smoke, is sexually active, and does not use illicit drugs.

#### Case Study Questions

1. According to the U.S. Preventive Services Task Force (USPSTF), which one of the following statements indicates why screening for hepatitis C virus (HCV) infection should be discussed and offered to M.S.?

- ☐ A. HCV infection is primarily acquired via sexual transmission.
- ☐ B. The patient's moderate intake of alcohol puts him at increased risk of HCV infection.
- ☐ C. All adults 18 to 79 years of age should be screened.
- ☐ D. Adult men are at increased risk of HCV infection.

2. According to the USPSTF, which one of the following statements about screening for HCV infection is correct?

- ☐ A. If the test result is negative and risk factors remain unchanged, the patient should be rescreened in five years.
- ☐ B. There is adequate evidence on the timing of repeat testing in people who continue to be at risk of new HCV infection.
- ☐ C. There is adequate evidence to recommend one-time testing in all adults and periodic testing in people at continued risk of new HCV infection.
- ☐ D. There is inadequate evidence that HCV testing accurately detects HCV infection.

3. According to the USPSTF, which of the following statements about potential harms associated with screening and treatment for HCV infection are correct?

- ☐ A. Anxiety, patient labeling, and feelings of stigmatization are potential harms of screening.
- ☐ B. The most common adverse effects of direct-acting antiviral regimens are fatigue, headache, nausea, and diarrhea.
- ☐ C. Direct-acting antiviral regimens are associated with fewer harms than older interferon-containing therapies.
- ☐ D. Direct-acting antiviral therapy commonly causes serious adverse effects that require additional medication.

Answers appear on the following page.

**See related** U.S. Preventive Services Task Force Recommendation Statement on page 363.

**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-c-screening#fullrecommendationstart>.

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**CME** This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 333.

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## Answers

**1. The correct answer is C.** The USPSTF recommends screening for HCV infection in asymptomatic adults 18 to 79 years of age, including pregnant women, with no known liver disease. All adults 18 to 79 years of age should be screened; however, a number of factors increase risk, most predominantly past or current injection drug use. In the United States, recent increases in HCV incidence have primarily been among young persons who inject drugs.<sup>1</sup> The USPSTF advises physicians to consider HCV screening in adolescents younger than 18 years and in adults older than 79 years who have a past or current history of injection drug use. Sexual contact is not an efficient mode of HCV transmission; however, high-risk sexual behaviors may be a marker for unacknowledged drug use or other risk factors. Moderate alcohol intake and male sex are not risk factors for HCV infection. The USPSTF found adequate evidence that the prevalence of HCV infection has increased in people 20 to 39 years of age. As a result, the USPSTF concluded that broadening the age for HCV screening will identify infected patients at earlier stages of disease who could benefit from effective treatment before developing complications.

**2. The correct answer is C.** Most adults need to be screened for HCV only once. However, people who inject drugs are at continued risk for HCV infection and should be screened periodically. The USPSTF found limited information about the specific screening interval that should occur in people who continue to be at risk of new HCV infection or the way in which pregnancy changes the need for additional screening. The USPSTF

found inadequate evidence on the timing of repeat testing. There is adequate evidence for one-time testing in all adults and periodic testing in persons at continued risk of new HCV infection. The USPSTF found adequate evidence that HCV testing (screening for the anti-HCV antibody followed by confirmation of active infection by HCV RNA assay for persons who test positive) accurately detects HCV infection.<sup>2</sup>

**3. The correct answers are A, B, and C.** The USPSTF found limited evidence on the harms of screening for HCV infection, which include anxiety, patient labeling, and feelings of stigmatization. The USPSTF found adequate evidence that direct-acting antiviral regimens are associated with fewer harms than older interferon-containing therapies. The most common adverse effects of direct-acting antiviral regimens are fatigue, headache, nausea, and diarrhea. Advantages of direct-acting antiviral regimens include a shorter duration compared with older interferon-containing therapies and that serious adverse effects are uncommon, self-limited, and typically resolve after treatment is discontinued.

**The views** expressed in this work are those of the authors and do not reflect the official policy or position of Rutgers New Jersey Medical School or the U.S. government.

## References

1. Owens DK, Davidson KW, Krist AH, et al. Screening for hepatitis C virus infection in adolescents and adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2020;323(10):970-975.
2. Chou R, Dana T, Fu R, et al. Screening for hepatitis C virus infection in adolescents and adults: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2020;323(10):976-991. ■