

Putting Prevention into Practice

An Evidence-Based Approach

Screening for HIV

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► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2014/0415/od1.html> and Editorial on page 614.

CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz Questions on page 623.

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The case study and answers to the following questions are based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. More detailed information on this subject is available in the USPSTF Recommendation Statement and the evidence report on the USPSTF website (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspshiv.htm>.

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

Case Study

A 19-year-old woman presents to the university health clinic for a well-woman examination. She reports no problems and mentions that she is sexually active with one male partner, who usually uses condoms. She has never been screened for a sexually transmitted infection.

Case Study Questions

1. Based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), what additional information about this patient is needed to determine whether she should be screened for human immunodeficiency virus (HIV) infection?

- A. She has volunteered at a homeless shelter for the past year.
- B. She reports marijuana use in the previous month.
- C. Her mother was recently diagnosed with tuberculosis.
- D. Her sex partner was recently diagnosed with chlamydial infection.
- E. No additional information is needed; the patient should be screened.

2. The patient asks whether her older sister, who is pregnant with her second child, should be screened for HIV infection. According to the USPSTF's recommendations, which one of the following statements is correct?

- A. She does not need to be screened if she was tested during her first pregnancy and was found to be HIV-negative.
- B. She does not need to be screened if she was already tested during her second pregnancy and was found to be HIV-negative, and if she has not been at increased risk since the screening test.
- C. She does not need to be screened if she has no current risk factors for HIV infection.
- D. She does not need to be screened if her husband was recently found to be HIV-negative.

3. A medical student who is present during the examination later asks about the benefits and harms of antiretroviral therapy. According to the USPSTF's recommendations, which one of the following is true?

- A. Antiretroviral therapy can cure chronic HIV infection.
- B. Antiretroviral therapy can reduce the risk of HIV transmission among men who have sex with men.
- C. In patients with HIV infection who have immunologically advanced disease, antiretroviral therapy can reduce risk of progression to AIDS, AIDS-related events, and death.
- D. Antiretroviral therapy has no adverse effects.

Answers appear on the following page.

Putting Prevention into Practice

Answers

1. The correct answer is E. The USPSTF recommends that clinicians screen for HIV infection in all adolescents and adults 15 to 65 years of age. Younger adolescents and older adults who are at increased risk should also be screened. Settings with a high HIV prevalence include homeless shelters and tuberculosis clinics, but volunteer work at a homeless shelter and a relative's diagnosis of tuberculosis are not HIV risk factors. Although illicit drug use should be discouraged, only injection drug use is a risk factor for HIV infection. A sex partner's diagnosis of chlamydial infection places the patient at even greater risk of sexually transmitted infections, including HIV.

2. The correct answer is B. The USPSTF recommends that clinicians screen all pregnant women for HIV infection, including those who present in labor who are untested and whose HIV status is unknown. Women screened during a previous pregnancy should be rescreened in subsequent pregnancies.

3. The correct answer is C. The USPSTF found convincing evidence that identification and treatment of HIV infection are associated with a markedly reduced risk of progression to AIDS, AIDS-related events, and death in persons with HIV infection who have immunologically advanced disease. The USPSTF also found convincing evidence that use of antiretroviral therapy is associated with a substantially decreased risk of transmission from persons with HIV infection to uninfected heterosexual partners. However, the USPSTF identified the need for direct evidence of the effectiveness of antiretroviral therapy in reducing HIV transmission among men who have sex with men and other high-risk groups. At this time, there is no cure for chronic HIV infection. The USPSTF found convincing evidence that all types of antiretroviral therapy are associated with short-term adverse events; long-term use of certain drugs may be associated with increased risk of cardiovascular and other adverse events. In light of earlier initiation of antiretroviral therapy and increased life expectancy for patients with HIV infection, the USPSTF identified the need for better evidence about the long-term harms of antiretroviral therapy.

SOURCES

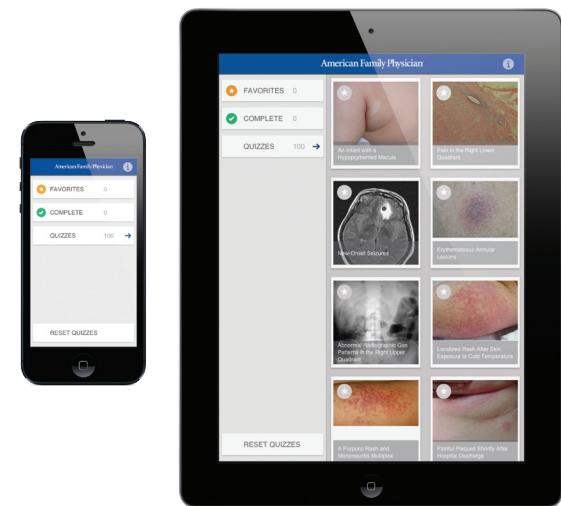
U.S. Preventive Services Task Force. Screening for HIV: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2013;159(1):51-60.

Chou R, Selph S, Dana T, et al. Screening for HIV: systematic review to update the 2005 U.S. Preventive Services Task Force recommendation. *Ann Intern Med.* 2012;157(10):706-718. ■

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