

Screening for HIV: U.S. Preventive Services Task Force Recommendation Statement

Virginia A. Moyer, MD, MPH, on behalf of the U.S. Preventive Services Task Force*

Description: Update of the 2005 U.S. Preventive Services Task Force (USPSTF) recommendation statement on screening for HIV.

Methods: The USPSTF reviewed new evidence on the effectiveness of treatments in HIV-infected persons with CD4 counts greater than 0.200×10^9 cells/L; effects of screening, counseling, and anti-retroviral therapy (ART) use on risky behaviors and HIV transmission risk; and long-term cardiovascular harms of ART.

Population: These recommendations apply to adolescents, adults, and pregnant women.

Recommendation: The USPSTF recommends that clinicians screen adolescents and adults aged 15 to 65 years for HIV infection.

Younger adolescents and older adults who are at increased risk should also be screened. (Grade A recommendation)

The USPSTF recommends that clinicians screen all pregnant women for HIV, including those who present in labor who are untested and whose HIV status is unknown. (Grade A recommendation)

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For author affiliation, see end of text.

* For a list of the members of the USPSTF, see the Appendix (available at www.annals.org).

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The U.S. Preventive Services Task Force (USPSTF) makes recommendations about preventive care services for patients without recognized signs or symptoms of the target condition.

It bases its recommendations on the evidence of both the benefits and harms of the service and an assessment of the balance. The USPSTF does not consider the costs of providing a service in this assessment.

The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision making to the specific patient or situation. Similarly, the USPSTF notes that policy and coverage decisions involve considerations in addition to the evidence of clinical benefits and harms.

SUMMARY OF RECOMMENDATIONS AND EVIDENCE

The USPSTF recommends that clinicians screen for HIV infection in adolescents and adults aged 15 to 65 years. Younger adolescents and older adults who are at increased risk should also be screened. (A recommendation)

See the Clinical Considerations for more information about screening intervals.

The USPSTF recommends that clinicians screen all pregnant women for HIV, including those who present in labor who are untested and whose HIV status is unknown. (A recommendation)

See the **Figure** for a summary of the recommendations and suggestions for clinical practice.

Appendix Table 1 describes the USPSTF grades, and **Appendix Table 2** describes the USPSTF classification of levels of certainty about net benefit (both tables are available at www.annals.org).

RATIONALE Importance

An estimated 1.2 million persons in the United States are currently living with HIV infection, and the annual incidence of the disease is approximately 50 000 cases. Since the first cases of AIDS were reported in 1981, more than 1.1 million persons have been diagnosed and nearly 595 000 have died from the condition. Approximately 20% to 25% of individuals living with HIV infection are unaware of their positive status.

Detection

The USPSTF found convincing evidence that conventional and rapid HIV antibody tests are highly accurate in diagnosing HIV infection.

See also:

Print

Editorial comment
Summary for Patients

Web-Only

Figure. Screening for HIV: clinical summary of U.S. Preventive Services Task Force recommendation.

Annals of Internal Medicine



SCREENING FOR HIV
CLINICAL SUMMARY OF U.S. PREVENTIVE SERVICES TASK FORCE RECOMMENDATION

Population	Adolescents and adults aged 15 to 65 years, younger adolescents and older adults at increased risk for infection, and pregnant women
Recommendation	Screen for HIV infection. Grade: A
Risk Assessment	Men who have sex with men and active injection drug users are at high risk for new HIV infection. Other persons at high risk include those who have acquired or request testing for other sexually transmitted infections. Behavioral risk factors for HIV infection include: Having unprotected vaginal or anal intercourse Having sexual partners who are HIV-infected, bisexual, or injection drug users Exchanging sex for drugs or money The USPSTF recognizes that the above categories are not mutually exclusive, the degree of sexual risk is on a continuum, and individuals may not be aware of their sexual partners' risk factors for HIV infection.
Screening Tests	The conventional serum test for diagnosing HIV infection is repeatedly reactive immunoassay, followed by confirmatory Western blot or immunofluorescent assay. Conventional HIV test results are available within 1 to 2 days from most commercial laboratories. Rapid HIV testing may use either blood or oral fluid specimens and can provide results in 5 to 40 minutes; however, initial positive results require confirmation with conventional methods. Other U.S. Food and Drug Administration–approved tests for detection and confirmation of HIV infection include combination tests (for p24 antigen and HIV antibodies) and qualitative HIV-1 RNA.
Interventions	At present, there is no cure for chronic HIV infection. However, appropriately timed interventions in HIV-positive persons can reduce risks for clinical progression, complications or death from the disease, and disease transmission. Effective interventions include antiretroviral therapy (ART) (specifically, the use of combined ART), immunizations, and prophylaxis for opportunistic infections.
Balance of Benefits and Harms	The net benefit of screening for HIV infection in adolescents, adults, and pregnant women is substantial.
Other Relevant USPSTF Recommendations	The USPSTF has made recommendations on behavioral counseling to prevent sexually transmitted infections. This recommendation is available at www.uspreventiveservicestaskforce.org .

For a summary of the evidence systematically reviewed in making this recommendation, the full recommendation statement, and supporting documents, please go to www.uspreventiveservicestaskforce.org.

Benefits of Detection and Early Intervention

The USPSTF found convincing evidence that identification and treatment of HIV infection is associated with a markedly reduced risk for progression to AIDS, AIDS-related events, and death in individuals with immunologically advanced disease (defined as a CD4 count $<0.200 \times 10^9$ cells/L). Adequate evidence shows that initiating combined antiretroviral therapy (ART) earlier (that is, at CD4 counts between 0.200 and 0.500×10^9 cells/L)—when individuals are more likely to be asymptomatic and detected by screening rather than clinical presentation—is also associated with reduced risk for AIDS-related events or death. The USPSTF found convincing evidence that the use of ART is associated with a substantially decreased risk for transmission from HIV-positive persons to uninfected heterosexual partners. Convincing evidence also shows that identification and treatment of HIV-positive

pregnant women dramatically reduces rates of mother-to-child transmission. The overall benefits of screening for HIV infection in adolescents, adults, and pregnant women are substantial.

Harms of Detection and Early Intervention

The USPSTF found convincing evidence that individual antiretroviral drugs, drug classes, and combinations are all associated with short-term adverse events; however, many of these events are transient or self-limited, and effective alternatives can often be found. Although the long-term use of certain antiretroviral drugs may be associated with increased risk for cardiovascular and other adverse events, the magnitude of risk seems to be small. The overall harms of screening for and treatment of HIV infection in adolescents, adults, and pregnant women are small.