RED

Guideline: Screening for HIV: U.S. Preventive Services Task Force Recommendation Statement [2013]

Developer: U.S. Preventive Services Task Force

Summary: This is a high-quality guideline, but the CTFPHC does not recommend its use in Canada. In the opinion of the CTFPHC, available evidence does not justify routinely screening all adult Canadians for HIV. Pregnant women should continue to be routinely screened.

OVERVIEW This guideline focuses on screening for HIV in adolescents, adults and pregnant women[1].

At the end of 2009, the number of people with HIV in the United States who were aged 13 years and older was an estimated 1,148,200[2], representing a prevalence of 0.45%. In Canada, the number of people with HIV (including AIDS) was an estimated 71,300 in 2011[3], representing a prevalence of 0.21%. Similarly, the incidence rate in the United States is nearly twice that of Canada (19.0 vs. 9.9 per 100,000 in 2009[4,5]). Although the proportion of undiagnosed cases is higher in Canada than in the United States (25%[3] vs. 18%[6]), over 50% of some populations in the United States are likely to be unaware of their HIV infection[7].

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians screen all 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.

In addition, the USPSTF recommends that clinicians screen all pregnant women for HIV, including those presenting in labour who have not been tested and whose HIV status is unknown.

RELEVANCE TO CTFPHC MANDATE All sections of this guideline are applicable to the CTFPHC mandate of prevention in primary care.

POPULATION The target populations for screening are adolescents and adults aged 15 to 65 years, younger adolescents and older adults at increased risk for infection, and pregnant women.

EVIDENCE REVIEW METHODS The USPSTF searched Ovid MEDLINE for the period 2004 to June 2012 and the Cochrane Library through the second quarter of 2012, and reviewed reference lists to identify relevant articles published in English. The search for evidence relevant to adults and adolescents resulted in a total of 10,297 abstracts; 876 full-text articles were reviewed for relevance, of which 25 were included in the evidence synthesis. The search for evidence relevant to pregnant women resulted in a total of 1,636 abstracts; 387 full-text articles were reviewed for relevance, of which 38 studies from 43 publications were included in the evidence synthesis.

GRADING SYSTEM The USPSTF assigns 1 of 5 letter grades to each recommendation: A, B, C, D, or I[8]. These grades are based largely on the level of certainty and magnitude of the net benefit associated with providing the service. For more information on the grading scheme, see Table 1 and Table 2.

COMMENTARY The scope and purpose of this guideline are clearly outlined, with age-specific recommendations for adolescents and adults and no age limitations for pregnant women. All relevant professional groups were represented in the development process, and public opinion was sought before release. Further, the recommendations are specific, the methods used were rigorous, and there was no concern about editorial independence.

Although the indirect evidence presented in the USPSTF guideline is strong and logical (demonstrating that screening tests can detect HIV and that treatment of identified HIV will improve outcomes), there is no direct evidence on the effectiveness of screening on clinical outcomes.

In addition, the substantially higher prevalence of HIV in the United States relative to Canada makes this guideline of uncertain relevance to Canadian practice.

Canadian practitioners should consider testing those with clinical indicators of HIV or with factors that increase the risk for exposure to HIV infection, focusing on higher-prevalence groups such as men who have sex with men, people who inject drugs and people from HIV-endemic countries[3]. Although some Canadian jurisdictions[9,10] have moved to recommend routine screening in certain settings (e.g., primary and/or emergency care) in response to their local HIV epidemiology, it is important to note that this practice is not yet supported by direct evidence.

In the opinion of the CTFPHC, primary care practitioners in Canada should continue to offer HIV counselling and testing to individuals who may be at increased risk for exposure to HIV, given the potential benefits of timely detection. Pregnant women should continue to be screened for HIV as per existing guidelines[11].

CTFPHC APPRAISAL COLOUR LEGEND

This is a high-quality guideline that can be used to guide preventive care in Canada.

This is a high-quality guideline, but the CTFPHC has identified some concerns that may limit its applicability.

This is a high-quality guideline, but the CTFPHC does not recommend its use in Canada.

Recommendation: U.S. Preventive Services Task Force

The full guideline can be found at: http://www.uspreventiveservicestaskforce.org/uspstf13/hiv/hivfinalrs.htm

ADOLESCENTS AND ADULTS AGED 15 TO 65 YEARS, YOUNGER ADOLESCENTS AND OLDER ADULTS AT INCREASED RISK FOR INFECTION, AND PREGNANT WOMEN
Screen for HIV infection [Grade A].

TABLE 1 (SEE RIGHT): Summary of the U.S. Preventive Services Task Force grade definitions[8].

TABLE 2 (BELOW): Summary of the USPSTF levels of certainty regarding net benefit[8].

HIGH CERTAINTY: The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.

MODERATE CERTAINTY: The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by such factors as:

- The number, size, or quality of individual studies.
- Inconsistency of findings across individual studies.
- Limited generalizability of findings to routine primary care practice.
- Lack of coherence in the chain of evidence.

As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.

LOW CERTAINTY: The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:

- The limited number or size of studies.
- Important flaws in study design or methods.
- Inconsistency of findings across individual studies.
- Gaps in the chain of evidence.
- Findings not generalizable to routine primary care practice.
- Lack of information on important health outcomes.

More information may allow estimation of effects on health outcomes.

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, or poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

Recommendation: U.S. Preventive Services Task Force

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