

HIV Prevention: Recommendations from the International Antiviral Society—USA Panel

Key Points for Practice

- Once a patient has tested positive for HIV infection, ART should be offered, with plans to provide support for adhering to therapy.
- PrEP should be offered to persons at high risk of HIV, those who have used PEP more than twice in the past year, and certain groups of injection drug users.
- Persons who have been exposed to HIV parenterally or via mucosa should be offered PEP as soon as possible, but definitely within 72 hours.
- Physicians should offer HIV testing to all adult and adolescent patients one or more times, and should occasionally evaluate each patient's risk of HIV.

From the AFP Editors

Coverage of guidelines from other organizations does not imply endorsement by AFP or the AAFP.

This series is coordinated by Sumi Sexton, MD, Associate Medical Editor.

A collection of Practice Guidelines published in AFP is available at <http://www.aafp.org/aafp/practguide>.

With the introduction of combination antiretroviral therapy (ART), human immunodeficiency virus (HIV) has become a chronic disease that can be managed, rather than a deadly infection. Although the overall incidence of new infections has decreased, an estimated 2.3 million infections occurred worldwide in 2012, with about 50,000 new infections annually in the United States.

To reduce the transmission of HIV, biomedical and behavioral approaches have been used; these approaches are combined with ART in persons who already have the infection. The International Antiviral Society—USA Panel has provided recommendations regarding these approaches that, when applied, should help to stop disease progression and new infections, as well as contribute to additional healthy years of life.

Recommendations

PREVENTIVE MEASURES

Persons with HIV Infection. Acute HIV infection has a nonspecific presentation and, if suspected, testing (e.g., plasma HIV viral load) should be conducted immediately to confirm a diagnosis. Once a patient has tested positive for HIV infection, ART should be offered, with plans to provide support (specific to each

patient or setting) for adhering to therapy. Additionally, each patient's readiness to start and continue ART in the long term should be determined, and information about the benefits of ART should be provided.

Injection drug users with HIV infection should be offered ART and given access to harm-reduction services such as needle exchange programs and supervised injection facilities. Persons who are substance users, but who do not inject, should also receive ART and support for adhering to therapy and counseling.

To guide counseling for reducing the risk of HIV transmission in persons infected with the virus, physicians should routinely evaluate each patient's sexual activity and substance use. This counseling should be provided with sexually transmitted infection (STI) testing, providing condoms, and implementing approaches to help patients adhere to therapy. Patients should be encouraged to inform their partners and other important persons of their HIV infection. Physicians should help with alerting these partners (either by the patient or with assistance from clinic staff) to facilitate the patient's testing and connection to care.

Persons Without HIV Infection. The following persons should be provided access to preexposure prophylaxis (PrEP) with oral emtricitabine/tenofovir disoproxil fumarate (FTC/TDF; Truvada) used daily:

- Persons at high risk of HIV because of an incidence greater than 2% in the area, or with a recent diagnosis of STI
- Persons who have used postexposure prophylaxis (PEP) more than twice in the past year
- Injection drug users who share equipment, inject at least once per day, or inject cocaine or methamphetamines.

Practice Guidelines

Before initiating PrEP, HIV testing should be performed; preferably, the test should be a combination antigen-antibody assay that can identify acute or early infection (a fourth-generation assay). This test should be performed routinely (every month to three months based on the patient's level of risk) after the initial test. Some symptoms can suggest that a patient may have an acute infection; therefore, physicians should perform screening for such symptoms. If a physician suspects acute HIV infection, plasma HIV viral load should be established right away, and PrEP should be delayed. If TDF-based PrEP is to be initiated, the patient should have a creatinine clearance rate of 60 mL per minute per 1.73 m² or greater; recommendations regarding PrEP for persons with a creatinine clearance rate less than this cannot be made. Physicians should also confirm immunity to hepatitis B virus.

Because PrEP is only one piece of a multifaceted strategy to reduce risk, it may not be needed if a person's risky behavior changes. For this reason, each patient's risk should be evaluated routinely, and stopping PrEP should be considered if there is a change in the patient's behavior that would reduce his or her risk.

Physicians should ask persons with HIV infection about the HIV status of their sex partners. If a patient's partner or partners are not infected and the patient is routinely in contact with the partner(s), a discussion regarding PrEP is warranted. If a partner's HIV status is not known, the partner should receive counseling and testing. Whether the person with HIV infection has a suppressed viral load while on ART should be considered, as well as the accessibility of care for the partner and related expenses.

Persons who have been exposed to HIV parenterally or via mucosa should be offered PEP as soon as possible, but definitely within 72 hours. The PEP used should be the one preferred by the U.S. Public Health Service; FTC/TDF and raltegravir (Isentress) were preferred when this guideline was published. Additionally, physicians should provide access to emergency contraception for women receiving PEP. A fourth-generation HIV antigen and antibody test should be used to screen persons three months after finishing PEP.

To help prevent transmission of HIV, especially in areas with high prevalence, physicians should recommend circumcision to heterosexual men who are sexually active, and information about circumcision should be provided to men who have sex with men whose sexual activity consists predominantly of insertive anal sex. The benefits of circumcision for preventing HIV should be discussed with parents of male infants.

To narrow the focus of counseling for reducing the risk of HIV infection, patients should be evaluated to

determine their sexual activity and substance use behaviors. Once this risk assessment is complete, the patient should be provided with information and suitable services. Providing interventions or access to services to reduce risk of HIV infection is reasonable in persons with high risk, even if they test negative.

PREVENTION ISSUES RELEVANT TO PERSONS WITH OR AT RISK OF HIV INFECTION

When first presenting for care, patients with HIV infection should be tested for hepatitis C virus, and they should be evaluated routinely for associated risks. For those without hepatitis B virus, physicians should confirm that they are immune to it. Quadrivalent human papillomavirus vaccination is an option for persons with HIV infection, as long as they meet the criteria to receive it. If a person with HIV infection does not know his or her herpes simplex virus type 2 status, but wants to take antiviral therapy to prevent it, routine screening should be contemplated. Physicians should test periodically for common STIs based on sexual history.

Although there is a lack of evidence to determine whether hormonal contraception use should be restricted in persons with HIV infection, physicians should instruct all women, including those who use injection progestin-only contraception, to use condoms with every sexual encounter and, when possible, to use other HIV prevention methods. Until there is definitive evidence, physicians should advise women with HIV infection about all contraception options, including hormonal contraception.

TESTING AND SEROSTATUS KNOWLEDGE

Physicians should offer HIV testing to all adult and adolescent patients one or more times, and should occasionally evaluate each patient's risk of HIV (e.g., sexual activities, illicit drug use). Testing should occur more often in persons who have a higher risk of HIV infection (e.g., risky behaviors, living in areas with high prevalence); when and how often this testing should occur should be based on each person's particular circumstance.

Before being tested, patients should be provided information about the testing, with counseling individualized to meet the needs of each patient and to fulfill the laws and regulations in the area. Each patient has the right to decline; however, physicians should confirm that patients have all the necessary information before they decline.

If a person who is at risk of HIV infection tests negative, physicians should provide information about the chances of a false-negative result during the window before antibodies can be detected. Physicians should encourage the patient to repeat the test if necessary,

based on the patient's specific situation and the test performed.

Physicians should use HIV tests that provide the highest sensitivity and specificity. If a patient is unlikely to come back for the test results, rapid testing should be used. Physicians should encourage testing for partners, and should consider using self-testing or home testing for persons who are repeatedly at risk of HIV infection or who have problems with getting tested in a clinic or office.

INTERVENTIONS AND CARE

It is critical to connect persons who have HIV infection with care, and it should be done as soon as possible after diagnosis is confirmed. Management strategies that center on determining and using each patient's strengths should be used when connecting patients with care, as well as retaining them in care. The Anti-Retroviral Treatment and Access to Services (ARTAS) website provides

examples at <http://effectiveinterventions.org/en/HighImpactPrevention/PublicHealthStrategies/ARTAS.aspx>. Other types of support include helping patients get and understand health care options, providing information on outreach programs, providing culture-specific handouts, and having office staff talk with patients about health care.

Guideline source: International Antiviral Society—USA Panel

Evidence rating system used? Yes

Literature search described? Yes

Guideline developed by participants without relevant financial ties to industry? No

Published: JAMA. July 23/30, 2014;312(4):390-409

Available at: <http://jama.jamanetwork.com/article.aspx?articleid=1889145>

LISA HAUKE, AFP Senior Associate Editor ■

Cost-Effectiveness Analysis of Treatment Options for Acute Otitis Media

ANNALS OF FAMILY MEDICINE

Free online access!

Research essential to family medicine

The Annals of Family Medicine, a peer-reviewed clinical research journal, is dedicated to advancing knowledge essential to understanding and improving health and primary care. View the full content online at www.AnnFamMed.org, or order your print subscription online or by calling 1-800-274-2237, Ext. 5165.

ANNALS OF FAMILY MEDICINE
www.AnnFamMed.org

Sponsors: American Academy of Family Physicians, American Board of Family Medicine, Society of Teachers of Family Medicine, Association of Departments of Family Medicine, Association of Family Medicine Residency Directors, North American Primary Care Research Group, College of Family Physicians of Canada

The Annals of Family Medicine is indexed in MEDLINE, MEDLARS, Science Citation Index Expanded, Current Contents/Clinical Medicine, PsycINFO, EMBASE, and CINAHL. Complete text of the journal is available online at <http://www.annfammed.org> and through various aggregators, including PubMed Central, EBSCO, and MDCConsult.