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Original link: http://www.uptodate.com/contents/testing-for-hiv-beyond-the-basics

Patient information: Testing for HIV (Beyond the Basics)

HIV TESTING OVERVIEW

Human immunodeficiency virus (HIV) testing is used to determine if you are infected with HIV. Many individuals who are at the highest risk for HIV have not been tested, usually because they do not realize that they are at risk. Others avoid testing because they are worried about the possibility of a positive test result.

However, testing is encouraged because treatment for HIV is highly effective and early diagnosis can improve your chances of living longer and being healthier. Furthermore, knowing your HIV status can greatly reduce your risk of passing HIV to others if you take precautions.

WHAT IS HIV?

HIV is a virus that weakens your body's immune system, making it difficult to fight infections and certain cancers. People who are infected with HIV may have no signs or symptoms of their illness, but can still pass the infection to others through sexual contact or through exposure to contaminated needles. If HIV is not treated, you will eventually become very ill and may die. The advanced stage of HIV infection is called AIDS (acquired immune deficiency syndrome).

RISK FACTORS FOR HIV INFECTION

Nearly all HIV infections are acquired through sexual contact or exposure to contaminated needles.

You are at risk for getting HIV from sex if you have:

- Had a sexually transmitted disease
- Had a sexual partner infected with HIV
- Been a victim of sexual assault (see <u>"Patient information: Care after sexual assault</u> (Beyond the Basics)")
- Had unprotected sex with multiple partners
- Exchanged sex for money or drugs or have sex partners who do

You are at risk for exposure to HIV through contaminated needles if you have:

- Injected drugs with shared needles or "works"
- Been accidently stuck with a needle or sharp in a healthcare facility

Many people who have HIV have not been tested because they do not consider themselves at risk for infection.

Who should be tested for HIV — The Centers for Disease Control and Prevention recommend HIV testing for everyone between age 13 and 64 years. There are two reasons for this recommendation:

- The treatment of HIV is highly effective. People with HIV can live a nearly normal lifetime with currently available drugs. This treatment is most effective when it is started early in the course of the disease, before symptoms develop.
- Treating HIV can help prevent the spread of infection to others. If you know you are infected, you can change your behavior so you are less likely to put other people at risk.

HIV TESTING METHODS

There are several methods to test for HIV. All positive tests are confirmed with another test.

Rapid tests — Rapid tests for HIV use saliva or blood from a finger prick. These tests provide results within 5 to 40 minutes and are useful because they do not require that you go back on another day for your results. A positive result requires another test to confirm the result, but most positive test results will be confirmed with additional testing. A negative test does not have to be confirmed.

Standard tests — The standard HIV test uses a sample of blood taken from a vein. The results are usually available in a few days.

Anonymous testing — Anonymous testing allows you to be tested without disclosing your identity, and is offered in some areas. To locate a clinic that provides anonymous HIV testing in the United States, call 1-800-750-2016.

Home testing — Home test kits provide accurate and anonymous results and are available in most pharmacies. The kit requires a small sample of blood, obtaining by pricking the finger. The blood is blotted on a filter strip and mailed to a lab. The lab performs the test and calls you with the result. The results of the test are confidential and are not reported to anyone but you.

HIV TESTING PROCEDURE

Frequency of testing — The Centers for Disease Control and Prevention recommend an HIV test for all people between age 13 and 64, and a repeat test if you have new risk factors, such as a new sexual partner. People who are at high risk for HIV, such as men who have sex with men, injection drug users, and those with multiple sex partners or a partner known to be HIV- infected should be tested every 6 to 12 months.

If you are worried that you were exposed to HIV recently, you should be tested now, with a repeat HIV test at 6, 12, and 24 weeks after the potential exposure. (See <u>"Patient information: Symptoms of HIV infection (Beyond the Basics)"</u>.)

HIV TEST RESULTS

Test results are reported as being positive, negative, or indeterminate. The chances of having an inaccurate result are very small.

Negative — If your test is negative, you are unlikely to be infected with HIV. However, if you were exposed to HIV recently, you should be retested six weeks, three months, and six months after the suspected exposure. The first test may be negative if your body has not yet made antibodies to the HIV virus, which can take up to six months. Detection of early HIV infection is important because that is the time when transmission through sex is most likely because the virus levels are so high.

Positive — If your first HIV test is positive, the result needs to be confirmed with further tests. False positive results are uncommon. About a third of patients who are tested for HIV do not return to find out their confirmatory test results. This is a major problem since untreated infection can lead to serious complications and a risk of transmitting infection to others.

Indeterminate — An indeterminate result occurs when your result is not clearly positive or negative. The final result usually depends upon your risk of having HIV. In people at low risk for HIV infection, approximately 1 in 5000 results (0.02 percent) are indeterminate. Persons at high risk for HIV who have an indeterminate result are in the early stages of HIV infection, and subsequent tests will be positive. Less often, a person who is basically healthy can have an indeterminate result for unknown reasons, and subsequent tests will be negative.

If you have an indeterminate result, you will need further testing, as determined by an HIV specialist; a simple blood test will give an answer in just a couple of days or less. While awaiting the results of further testing, you should take precautions to avoid transmitting your potential infection to others. This includes discussing the possibility of infection with any sexual partners and use of a condom with every sexual encounter. You should also avoid sharing razors, toothbrushes, and any injection drug equipment (needles, syringes).

PREVENT HIV

In addition to testing, you should learn how to prevent HIV infection. This includes:

- Encourage your sexual partners to be tested for HIV.
- Use a latex or polyurethane condom with every sexual encounter.
- Do not use drugs or alcohol that can affect your judgment about sexual activities.
- Do not share needles and syringes that have been used by other IV drug users.

WHERE TO GET MORE INFORMATION

Your healthcare provider is the best source of information for questions and concerns related to your medical problem.

This article will be updated as needed on our web site (www.uptodate.com/patients). Related topics for patients, as well as selected articles written for healthcare professionals, are also available. Some of the most relevant are listed below.

Patient level information — UpToDate offers two types of patient education materials.

The Basics — The Basics patient education pieces answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer short, easy-to-read materials.

Patient information: HIV/AIDS (The Basics)

Patient information: Tests to monitor HIV (The Basics)

Patient information: Blood or body fluid exposure (The Basics)

Patient information: Preventing HIV after unprotected sex or needle-sharing (The Basics)

Beyond the Basics — Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are best for patients who want in-depth information and are comfortable with some medical jargon.

Patient information: Care after sexual assault (Beyond the Basics)
Patient information: Symptoms of HIV infection (Beyond the Basics)

Professional level information — Professional level articles are designed to keep doctors and other health professionals up-to-date on the latest medical findings. These articles are thorough, long, and complex, and they contain multiple references to the research on which they are based. Professional level articles are best for people who are comfortable with a lot of medical terminology and who want to read the same materials their doctors are reading.

Professional Level Information:

Acute and early HIV infection: Treatment

Acute and early HIV infection: Pathogenesis and epidemiology

Screening laboratory tests in HIV-infected patients

Serologic screening for HIV infection

Techniques and interpretation of HIV-1 RNA quantitation

Techniques and interpretation of measurement of the CD4 cell count in HIV-infected patients

The following organizations also provide reliable health information.

• Centers for Disease Control and Prevention (CDC)

Toll-free: (800) 311-3435

(www.cdc.gov and www.hivtest.org)

CDC (Centers for Disease Control and Prevention) National AIDS Hotline

English: (800) 342-2437 Spanish: (800) 344-7432

• National Institute of Allergy and Infectious Diseases (NIAID)

(www.niaid.nih.gov)

• HIV/AIDS Treatment Information Service

Toll-free: (800) 448-0440 (www.hivatis.org)

• AIDS Clinical Trials Information Service (ACTIS)

Toll-free: (800) 874-2572 (www.actis.org)

Patient Support — There are a number of online forums where patients can find information and support from other people with similar conditions.

About.com HIV/AIDS Forum

(http://aids.about.com/forum)

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Literature review current through: Oct 2013. | This topic last updated: Jun 12, 2012. Find Print

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