PART 2: ROUTINE SCREENING FOR HIV: RATIONALE AND METHODS

All individuals ages 13–65 years should be screened for HIV at least once in his or her lifetime.

Risk-based assessments often miss patients with HIV infection.

All pregnant women should be screened for HIV as part of routine prenatal care.

HIV screening is quick: Extensive pre-test counseling is no longer required.

We provide scripts to help get you started.
WHY SCREEN

Routine screening for HIV can save lives, just like routine screening for colon cancer, breast cancer or heart disease.

Just like these conditions, HIV can be detected before symptoms appear, thereby gaining a patient years of life if treatment is started early. Just like these conditions, treatment of HIV is more difficult once symptoms appear. Just like these conditions, the costs of screening are reasonable in relation to the anticipated benefits.

Among pregnant women, screening has proven substantially more effective than risk-based testing for detecting unsuspected maternal HIV infection and preventing perinatal transmission.
OVERVIEW OF ROUTINE HIV SCREENING

Routine HIV screening in primary care is important because risk-based assessments may miss patients with HIV infection.4

Routine HIV Screening

- The Maryland Department of Health and Mental Hygiene, the Centers for Disease Control and Prevention and the US Preventive Services Task Force recommend that all health care professionals: “in all health care settings (e.g. hospitals, urgent care or emergency departments, inpatient services, community health centers and clinics, correctional healthcare facilities, and primary care settings) offer diagnostic HIV testing and HIV screening as part of routine clinical care for individuals ages 13 – 65.” 3

- High risk patients who fall outside this age range should also be screened.

- All pregnant women, regardless of risk factors, should be screened for HIV. (See Frequency of HIV Screening).
OVERVIEW OF ROUTINE HIV SCREENING CONTINUED

HIV Screening for High Risk and Vulnerable Individuals

If an individual is known to be at high risk for HIV, he or she should be screened at least annually, ideally every three months.

Examples of individuals who may be at high risk include: patients being treated for other STIs (Sexually Transmitted Infections), injection-drug users and their sex partners, persons who exchange sex for money/drugs, men who have sex with men, persons who themselves or whose partners have had more than one sex partner since their most recent HIV test, sex/needle sharing partners of HIV-infected persons,9 patients with tuberculosis.

Types of Tests

HIV infection is diagnosed with
1) a rapid screen on site or
2) an Enzyme-linked immunosorbent assay (ELISA) with confirmation by Western blot or indirect immunofluorescence assay.

Acute HIV infection requires a plasma HIV RNA test to detect viral load.

The tests each offer different advantages. Rapid tests can be well-suited for patients that might not return to get the results.

See chart on page 31 for more detail about types of HIV tests.

Screening for Acute (Recent) HIV Infection

Acute HIV infection is the period of time immediately following infection prior to the presence of antibodies. This period between infection and the presence of antibodies is the window period (see graph on page 31). If a patient presents with flu-like symptoms and has a history of high risk behaviors, suspect acute HIV infection. These cases are quite rare. Both an HIV RNA (viral load) test and an antibody test are required when acute HIV infection is suspected (See Recent HIV Infection later in this section).

Retention in Care for HIV Infected Individuals

Reassure patients that adherence to antiretroviral (ART) medications will allow them to live a long and productive life.

The belief that HIV infection quickly leads to death can hinder patients' motivation to change high-risk behaviors such as unsafe sex and needle sharing.
FREQUENCY OF HIV SCREENING

Ages 13-65 Years
The U.S. Centers for Disease Control and Prevention (CDC) recommends screening all patients and repeating screening annually, if the patients are engaged in any ongoing risky behavior associated with HIV infection, including unprotected sex.

Patients with Risk Factors Listed Below
The Baltimore City Health Department recommends that the following patients be tested at least annually, ideally every 3 months:
- Injection drug users (IDUs) and their sex partners
- People who exchange sex for money or drugs
- Men who have sex with men (MSM)
- Heterosexual individuals who have had, or whose sex partners have had, more than one sex partner since their most recent HIV test
- Sex/needle sharing partners of HIV-infected persons

Patients with Symptoms and Signs of Acute HIV Infection
Patients presenting with flu-like symptoms (below) and have a history of high risk behaviors should be tested with BOTH an antibody and plasma HIV RNA test. Symptoms may include: Fever • Malaise • Rash • Pharyngitis • Lymphadenopathy • Aseptic meningitis

Pregnant Patients
Screen as early as possible during pregnancy. Maryland state law requires HIV screening as a part of the routine prenatal blood screens unless the patient opts out. HIV screening should be offered in the first trimester of pregnancy or the first prenatal visit, in the third trimester of pregnancy, and during labor and delivery for patients with an unknown or undocumented HIV status.

Patients Seeking Treatment for STIs: See Appendix
Screen all patients suspected of having an STI for HIV

Patients with Tuberculosis
Screen all patients initiating TB treatment for HIV. Screen annually, or every three months if they are engaged in any of the above risk behaviors.
RECENT (ACUTE) HIV INFECTION

As many as 50% of HIV transmissions occur during the acute and early stages of the illness.

Acute HIV Infection Defined
Acute HIV infection is the period immediately following infection with HIV, prior to the appearance of HIV antibodies. This period usually lasts 6 to 8 weeks. During this time, the level of virus increases rapidly in the blood. Between 5 and 30 days after infection, flu-like symptoms (fever, malaise, lymphadenopathy, rash) can appear and last for several weeks. Suspect acute HIV infection if a patient presents with flu-like symptoms and history of high risk behaviors. Acute HIV infection is also called Primary HIV infection, early or recent HIV infection, acute retroviral syndrome and acute HIV syndrome.

Transmission and Acute HIV Infection
Patients with acute HIV infection are at particularly high risk of transmitting HIV because of the high viral levels.

Testing and Acute HIV Infection
Finding a patient in the acute stage of HIV infection is a rare event. HIV antibodies can take up to three months to appear. Most standard HIV tests such as a rapid HIV test or ELISA/Western Blot tests respond to HIV antibodies. Patients with acute HIV infection will generally receive negative or indeterminate results from these two types of tests. If acute HIV is suspected, use an HIV RNA test in combination with an HIV-1 antibody test. The HIV RNA test can detect HIV viral load; a high viral load is indicative of HIV infection (see Providing Test Results in Section 4).
# TYPES OF HIV TESTS

<table>
<thead>
<tr>
<th>TEST TYPES</th>
<th>Rapid Test</th>
<th>ELISA (Enzyme linked immune absorbent assay)</th>
<th>Western Blot</th>
<th>Plasma HIV RNA (viral load test)</th>
<th>HIV-1/2 Ag/Ab (4th Generation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE</td>
<td>Initial HIV screening</td>
<td>Initial HIV screening</td>
<td>Confirmatory test</td>
<td>Identify acute/recent HIV infection</td>
<td>Identify HIV infections (Acute infections are determined if HIV RNA is reactive)</td>
</tr>
<tr>
<td>DETECTS</td>
<td>HIV antibodies</td>
<td>HIV antibodies</td>
<td>HIV antibodies</td>
<td>Amount of HIV (viral load) in the blood</td>
<td>HIV-1 and HIV-2 Antibodies, HIV-1 p24 Antigen</td>
</tr>
<tr>
<td>SOURCE OF SAMPLE</td>
<td>Finger prick or oral fluids</td>
<td>Blood, urine or oral fluids</td>
<td>Blood</td>
<td>Blood</td>
<td>Blood</td>
</tr>
<tr>
<td>PROCESSED BY A LAB</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TIME FOR RESULTS</td>
<td>20 minutes or less</td>
<td>2–14 days</td>
<td>2–14 days</td>
<td>1–3 weeks</td>
<td>Up to 1 hour (Additional testing needed, if reactive)</td>
</tr>
</tbody>
</table>

## Testing Timeline

PRE-TEST INFORMATION AND PATIENT CONSENT

As of July 1, 2015, HIV testing in health-care settings is opt-out. Patients must be informed that they will be screened for HIV along with routine blood tests unless they decline to have the test. Before undergoing HIV testing, pre-test information must be provided to the patient orally, in written form, or by/through the use of videos. If a patient declines HIV testing, it must be documented in the medical record.

*Providers working with adolescent patients (<18 years) should discuss that reproductive health services may appear on an explanation of benefits that their parents or guardians could receive. See appendix for considerations unique to adolescent patients.

Pretest Information Must Include:

- An explanation of HIV infection;
- The meaning of positive and negative test results;
- Their ability to ask questions and to decline HIV testing.

Obtaining Informed Consent

- When HIV testing is performed, consent for HIV testing is by law in Maryland (effective 7/1/2015) a part of the patient’s general informed consent for medical care as is done for other screening and diagnostic tests (i.e. Opt Out). This means that HIV testing does not need to be singled out in the general consent form but rather it is covered under the broader general consent language for services provided at the facility. A health care provider may not be required to obtain consent using a separate form. Providers must also inform the individual either verbally or in writing that the test will be performed unless they decline.
- Patients under 18 can consent to an HIV test and treatment.
- Patients must be capable of consenting.
- Patients need to know they can refuse an HIV test without penalty.
- In non-health care settings, such as venue testing or in Community Based Organizations, consent must be provided in writing. The Health Department’s HIV informed consent form must be used.
HOW TO OFFER
A ROUTINE HIV TEST

Sample Script for Routine HIV Screening

As part of routine care, we screen all patients between 13 and 65 years of age for HIV at least once, whether or not they think they are at risk.

We do this to help keep our patients healthy. There are excellent treatment options and catching it early can be a life saver.

This pamphlet tells you about HIV and why you should be screened. We are giving it to all our patients.

I would be glad to answer any questions you have. Like all medical screens, the results will be confidential.*

You can decline the test and it will not affect the care you receive today.

If patient declines:
Would you read the pamphlet about HIV and we’ll talk about it next time?

Are there concerns you have about the test?

What NOT to Say:
If a patient asks for an HIV test, make sure NOT to...
» ask why
» act surprised
» ask what they have been up to
» dissuade them

*For minors, remember to discuss EOB documents as a potential breach of confidentiality.