

HIV crosses the boundaries of gender, sexual orientation, age, race, and ethnicity. With routine HIV screening, you can help reduce HIV transmission and improve health outcomes for patients in your practice.

HIV Screening Is Standard Care
Learn more at: cdc.gov/HIVNexus.







#### **HIV Testing: The Time Is Now**

More than 1 million people in the United States have HIV, and many are unaware of their status. About 40% of new HIV infections are transmitted by people whose HIV is undiagnosed and who are unaware they have HIV. Diagnosing HIV quickly and linking people to treatment immediately are crucial to reducing new HIV infections.<sup>1</sup>

Health care providers are the front line for detecting and preventing HIV transmission. The Centers for Disease Control and Prevention (CDC) encourages health care providers to<sup>2</sup>:

- Conduct routine HIV screening at least once for all their patients.
- Link all patients who test positive for HIV to medical treatment, care, and prevention services.
- Link all patients who test negative for HIV to prevention services, including pre-exposure prophylaxis (PrEP).
- Conduct more frequent screenings for patients at ongoing risk for HIV.

#### Routine HIV screening is endorsed by:

- US Preventive Services Task Force: <u>uspreventiveservicestaskforce.org/uspstf/</u> recommendation/human-immunodeficiency-virus-hiv-infection-screening.
- ◆ American Academy of Family Physicians: <u>aafp.org/afp/2014/0415/p614.html</u>.
- American College of Physicians: <a href="acpjournals.org/doi/full/10.7326/0003-4819-150-2-200901200-00300">acpjournals.org/doi/full/10.7326/0003-4819-150-2-200901200-00300</a>.

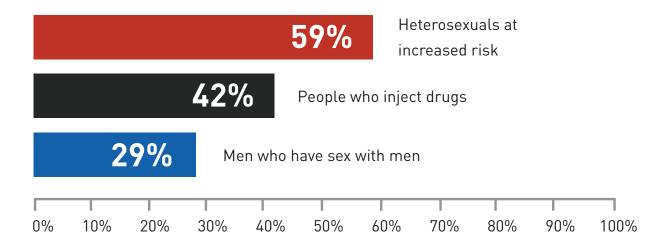
#### **Missed Opportunities for HIV Testing**

CDC recommends that individuals between the ages of 13 and 64 get tested for HIV at least once as part of routine health care and that those at increased risk get tested more frequently.

Patients who may be at greater risk for HIV should be screened at least annually.<sup>2,3</sup> Those likely to be at greater risk include:

- People who inject drugs and their sex partners.
- People who exchange sex for money or drugs.
- Sex partners of people with HIV.
- Sexually active gay, bisexual, and other men who have sex with men (more frequent testing may be beneficial [e.g., every 3–6 months]).
- Heterosexuals who themselves or whose sex partners have had ≥1 sex partner since their most recent HIV test.
- People receiving treatment for hepatitis, tuberculosis, or a sexually transmitted disease (STD).

Despite seeing a primary care provider, approximately 75% of people at increased risk for HIV are not getting tested every year.<sup>4</sup> The graph below shows the percentages of people at risk who were not tested in the last year.

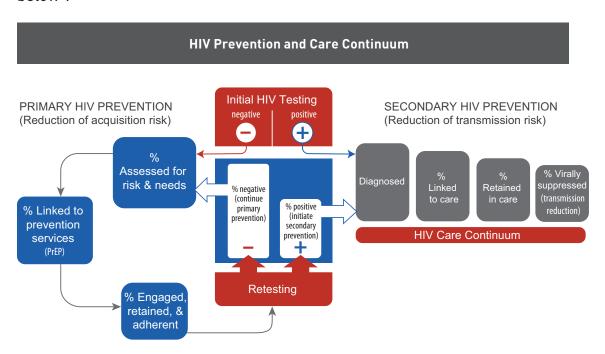


#### Linking Patients to Prevention and Care Is Essential

Routine HIV screening is only the *first step*. To improve their health outcomes, all people with HIV must have access to the full *continuum of HIV prevention and care*. Linking your patients to prevention and care services is essential.<sup>2</sup>

#### What Is the HIV Prevention and Care Continuum?

The HIV prevention and care continuum is an ongoing, lifelong process that encompasses HIV testing, prevention, and care, as shown in the figure below<sup>5</sup>:



For those with a negative HIV result, assess each of your patient's needs and risk and link them to prevention services, such as PrEP and risk-reduction counseling. These patients should be retained in ongoing prevention services and be re-tested for HIV as long as they remain at risk for HIV infection.

Not all people with HIV are getting the care and treatment they need. Health care providers who routinely screen for HIV play a key role in improving outcomes at each step of the HIV prevention and care continuum.<sup>6</sup>



The ultimate goal of HIV treatment is to achieve viral suppression, meaning the amount of HIV in the body is very low or undetectable. This is important for people with HIV to stay healthy, live longer, and reduce their chances of transmitting HIV to others. The HIV prevention and care continuum consists of several steps required to achieve viral suppression<sup>3,6</sup>:

- Diagnosed: The patient receives an HIV test and is found to have HIV.
- Linked to care: The patient visits a health care provider within 1 month after learning they have HIV.
- Received care: The patient receives medical care for HIV.
- Retained in care: The patient has ongoing contact with a health care provider for HIV treatment.
- **Viral suppression:** The patient's viral load is so low that it is undetectable (<200 copies/mL).

Connecting your patients diagnosed with HIV to medical care, including ART and other services, is essential. The following resources can be used to find an HIV care provider when a referral is needed:

- American Academy of HIV Medicine (AAHIVM): aahivm.org.
- HIV Medicine Association (HIVMA): <u>hivma.org</u>; 703-299-1215.
- Ryan White HIV/AIDS Program: <a href="mailto:findhivcare.hrsa.gov">findhivcare.hrsa.gov</a>; 877-464-4772.
- HIV.gov: <u>hiv.gov/hiv-basics/starting-hiv-care/find-a-provider/locate-a-hiv-care-provider.</u>

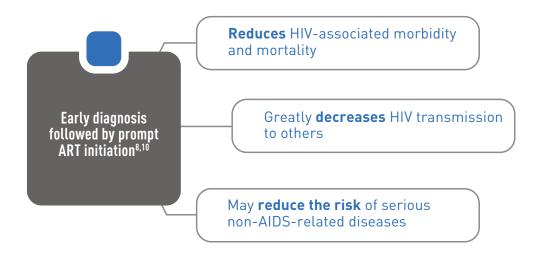
## **Benefits of Early HIV Diagnosis**

Studies have demonstrated the benefits of early HIV diagnosis in terms of patients' health outcomes.

#### Early ART Keeps People With HIV Alive and Healthier

In the large, multinational Strategic Timing of Antiretroviral Treatment (START) study,<sup>7</sup> asymptomatic patients with HIV infection who started antiretroviral therapy (ART) immediately after diagnosis had a >50% reduction in morbidity and mortality compared with patients who deferred treatment until they had a CD4 count ≤350 cells/mm³.

CDC recommends that people start treatment as soon as possible after diagnosis to gain maximum benefit from ART. People with HIV who are aware of their status should be prescribed ART and, by achieving and maintaining an undetectable (<200 copies/mL) viral load, can remain healthy for many years.<sup>8</sup> ART is now recommended for all people with HIV, regardless of CD4 count.<sup>9</sup>



#### Early ART Reduces the Risk of Transmitting HIV to Others

Another compelling reason for treating HIV at all CD4 counts is to prevent HIV transmission. The multicontinental HIV Prevention Trials Network (HPTN) 052 trial compared the effects of immediate versus delayed ART (started when the CD4 count was <250 cells/mm³) in 1,763 heterosexual mixed-HIV-status couples. Three versus 43 HIV-negative participants, respectively, acquired HIV from partners with HIV who received immediate versus delayed ART—a 93% reduction in the risk of HIV infection when ART was initiated early.¹¹ No linked infections were observed when the partner with HIV was virally suppressed.

Based on the evidence, people with HIV who take HIV medicines as prescribed and achieve and maintain an undetectable viral load have *effectively no risk* of transmitting HIV to a sexual partner who is HIV negative.<sup>12</sup>



Since HPTN 052, there have been additional studies of mixed-HIV-status couples that have found no HIV transmissions when the partner with HIV was virally suppressed. For more information, visit:

cdc.gov/hiv/risk/estimates/preventionstrategies.html.

## Risk of HIV Transmission With Undetectable Viral Load by Transmission Category

Transmission Category	Risk for People Who Keep an Undetectable Viral Load
Sex (oral, anal, or vaginal) <sup>10</sup>	Effectively no risk
Pregnancy, labor, and delivery <sup>13</sup>	1% or less*
Sharing syringes or other drug injection equipment <sup>14</sup>	Unknown, but likely reduced risk
Breastfeeding <sup>15</sup>	Substantially reduces, but does not eliminate, risk Current recommendation in the United States is that mothers with HIV should not breastfeed their infants <sup>13</sup>

<sup>\*</sup> The risk of transmitting HIV from mother to baby can be 1% or less if the mother takes HIV medicine daily as prescribed throughout pregnancy, labor, and delivery and gives HIV medicine to her baby for 4–6 weeks after giving birth.

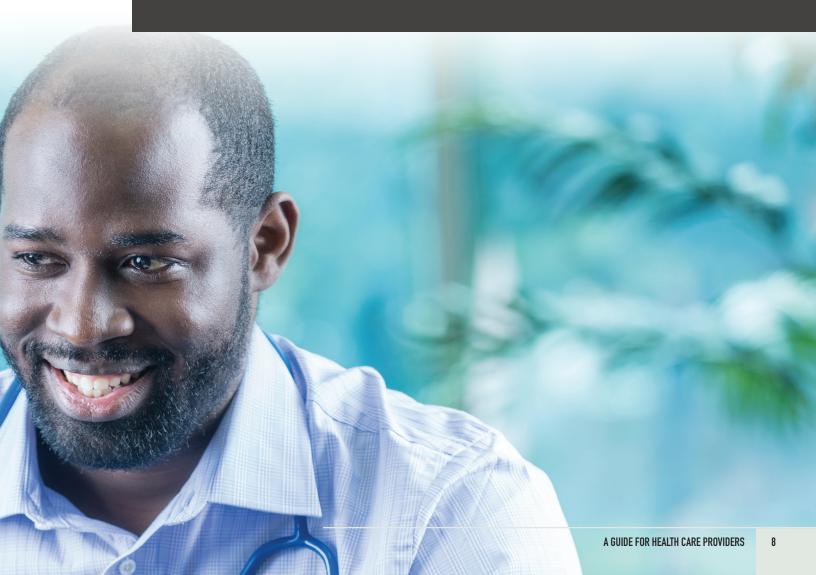
# Early ART May Reduce Risk of Serious Non-AIDS-Related Diseases

Mortality associated with uncontrolled HIV replication at higher CD4 counts is believed to be due to immune activation and an inflammatory milieu that promotes progression of end-organ disease.

Untreated HIV replication increases risk of serious non-AIDS events. 16-18

ART is known to reduce levels of multiple markers of immune activation and inflammation. Evidence suggests that starting ART before advanced immunodeficiency is one of several interventions that reduces the risk of serious non-AIDS events, such as cardiovascular disease, renal disease, hepatic disease, and cancer, as well as lowers the risk of mortality.<sup>16</sup>

Make routine screening a part of standard care to ensure each patient is tested for HIV.



## **Integrating Routine Screening Into Your Practice**

HIV crosses the boundaries of gender, sexual orientation, age, race, and ethnicity. By making routine HIV screening the standard of care in your practice, you can help to reduce HIV transmission and improve health outcomes for your patients.

#### Justifications for routine HIV screening:

- HIV is a serious health disorder that can be detected before symptoms develop.
- HIV is detectable by reliable, inexpensive, acceptable screening tests.
- People diagnosed with HIV have years of life to gain if treatment is started early, before symptoms develop.
- Screening costs are reasonable in relation to proven benefits.



## Using an "Opt-Out" Approach

Conducting risk-based screening may fail to identify persons with HIV, and many people with HIV are not diagnosed until they have advanced HIV or AIDS. These people most often include:

- People <20 years of age.</li>
- Women.
- Members of minority races/ethnicities.
- Nonurban dwellers in low-incidence areas.
- Heterosexual men and women who are unaware of their risk of HIV.

When an opt-out approach is implemented, your patients should be informed (e.g., through a patient brochure, practice literature/form, or discussion) that an HIV test will be included in the standard preventive screening tests and that they may decline the test (opt-out screening).<sup>2</sup> A patient's decision to decline testing should be noted in their medical record. *HIV prevention counseling is not a requirement for HIV testing.* 

The prevention counseling is not a requirement for the testing.

Routine, opt-out screening has proven to be highly effective because it:

- Removes the stigma associated with HIV testing.
- Fosters earlier diagnosis and treatment.
- Reduces risk of transmission.
- Is cost-effective.

# Start the Conversation With Your Patients About HIV Screening

Offering HIV screening to all your patients helps to eliminate any stigma associated with HIV testing and creates opportunities to foster discussion about sexual health, behaviors, and overall health. Here are some tips for how you can start the conversation with your patients about routine HIV screening.

- Talk to all your patients about HIV.
  - "Have you had an HIV test?"
  - "Do you know your partner's HIV status?"
- Tell them HIV testing is a routine part of a patient's health care.
  - "As part of your visit today, I recommend doing a routine screening test for HIV."
  - "We perform a one-time routine screening for HIV for all patients, and we'll be doing that as part of your visit today."



#### **Conducting Risk Assessments**

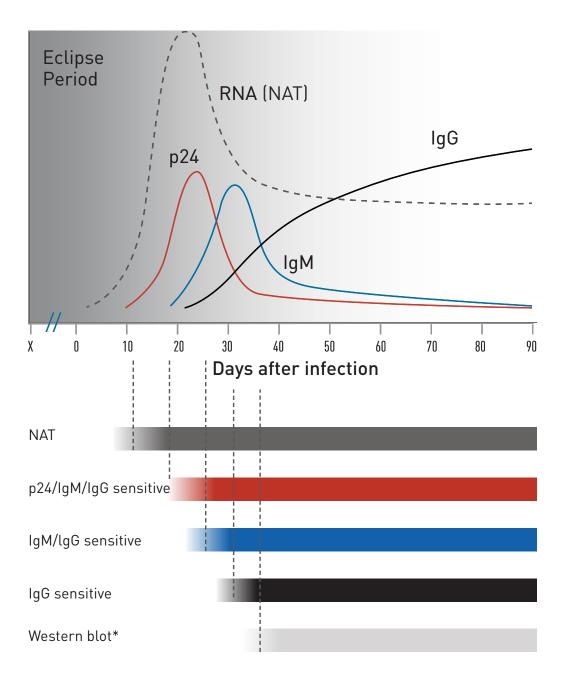
Risk assessment should be included as part of routine primary care visits for all your sexually active patients.

- Individuals at greater risk may need to be screened more frequently.
- Prevention counseling may also be needed for your patients at greater risk for acquiring HIV but should not be required for general testing.
- People receiving treatment for hepatitis, tuberculosis, or an STD may be at risk for HIV.
- People who inject drugs are also at risk of HIV. Heroin use has increased substantially in recent years. The heroin and prescription opioid epidemics have led to new HIV outbreaks.<sup>19,20</sup> Routine screening offers you an opportunity to screen patients who may be reluctant to discuss or disclose risk factors.

CDC's HIV Risk Reduction Tool shows the HIV risk of various sexual activities when one partner has HIV and the other doesn't. It also provides tailored information to help your patients understand their risk for getting HIV and how to reduce it. To access the tool, visit: hivrisk.cdc.gov.

#### Newer, Improved HIV Tests Allow for Earlier HIV Detection

The improved diagnostic tests available today reduce the time to diagnosis and treatment of early HIV infection by decreasing what is known as the *window period*.<sup>21,22</sup> Following an exposure that leads to HIV infection, the amount of time during which no existing diagnostic test is capable of detecting HIV is called the *eclipse period*.<sup>21</sup> In contrast, the *window period* is the time between a potential HIV exposure and an accurate test result.



<sup>\*</sup> Western blot is no longer used for HIV.

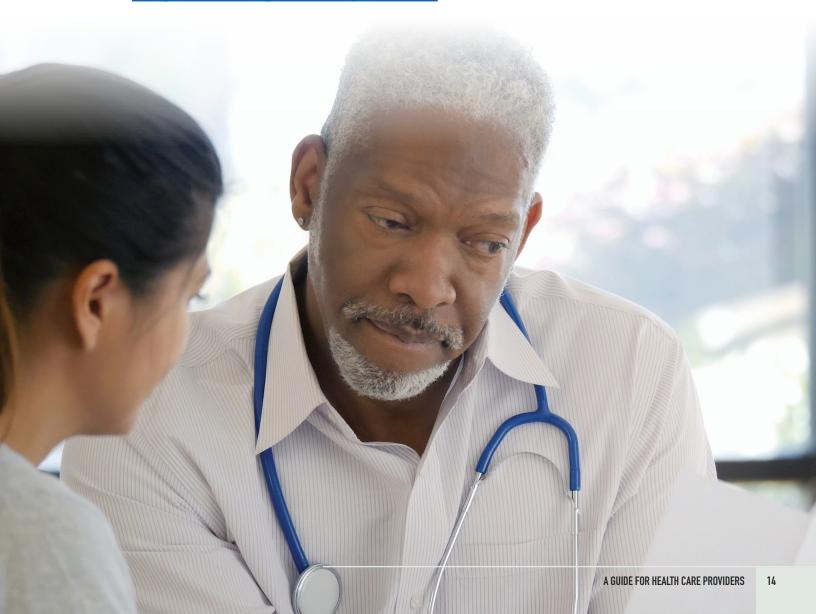
Three types of HIV tests are available:

- 1. Nucleic acid tests (NATs) detect HIV ribonucleic acid (RNA).
- 2. **Antigen/antibody combination tests** detect HIV p24 antigen as well as HIV immunoglobulin M (IgM) and immunoglobulin G (IgG) antibodies.
- 3. Antibody tests detect HIV IgM and/or IgG antibodies.

As shown on the previous page, each type of HIV test has its own testing window, with the NAT capable of detecting HIV the earliest, followed by the antigen/antibody combination test, and lastly, the antibody test.

For more information on the US Food and Drug Administration-approved HIV assays used for screening, visit: <a href="mailto:cdc.gov/hiv/testing/laboratorytests.html">cdc.gov/hiv/testing/laboratorytests.html</a>.

For additional guidance and updated recommendations on HIV testing, visit: cdc.gov/hiv/testing/laboratorytests.html.



# Know Your State HIV Testing and Partner Services Policies and Laws

HIV testing laws vary from state to state. Some state laws require that health care providers offer all patients a voluntary (opt-out) HIV test. Each state also has specific HIV test reporting laws and regulations. Your state may also require that the partner(s) of a patient who tests positive for HIV be notified of the patient's HIV diagnosis.

Partner Services programs are a function of local and state health departments and provide free, confidential services for people with diagnosed HIV or STDs to assist in notifying their sexual and drug injection partners.

For more information on Partner Services, visit: <a href="mailto:cdc.gov/hiv/clinicians/screening/partner-notification-services.html">cdc.gov/hiv/clinicians/screening/partner-notification-services.html</a>.

To access detailed guidelines for Partner Services for HIV and STDs, visit: <a href="mailto:cdc.gov/hiv/guidelines/partners.html">cdc.gov/hiv/guidelines/partners.html</a>, where you will find additional provider resources.

For the most up-to-date details on your state's HIV testing laws and policies, contact your health department. To find your local health department, go to: <u>usa.gov/state-health</u> and select your state.

#### Resources

#### CDC-INFO (CDC's national contact center):

1-800-232-4636; TTY: 888-232-6348; in English or Spanish. To find an HIV testing site, text your ZIP code to KNOWIT (566948), call 800-CDC-INFO, or visit: **gettested.cdc.gov.** 

Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014:

cdc.gov/hiv/guidelines/recommendations/personswithhiv.html.

2021 Sexually Transmitted Infections Treatment Guidelines: <a href="mailto:cdc.gov/std/treatment-guidelines/toc.htm">cdc.gov/std/treatment-guidelines/toc.htm</a>.

HIV Nexus (CDC resources for clinicians): cdc.gov/HIVNexus.

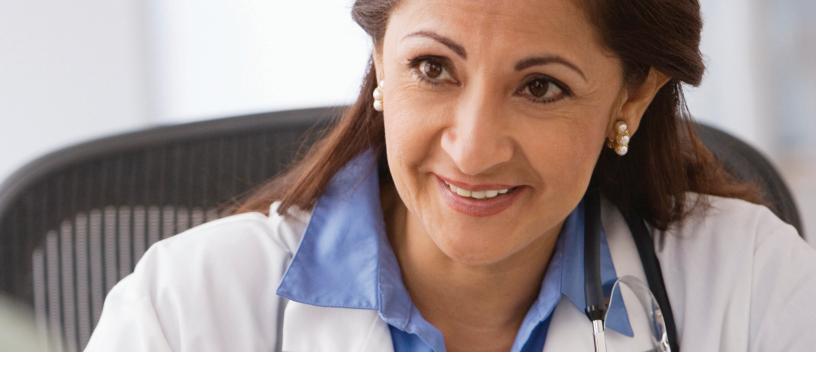
National Clinician Consultation Center: <a href="nccc.ucsf.edu">nccc.ucsf.edu</a>; 800-933-3413.





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