WINDOW PERIOD

What is the window period? The “window period” occurs between the time of HIV infection and the time when diagnostic tests can detect HIV. The length of the window period varies depending on the type of diagnostic test used and the method the test employs to detect the virus.

Can an infected person transmit HIV to others during the window period? Yes. During the window period, and despite a negative test result, an HIV-infected person may transmit the virus to others.

How long can the window period last? The window period varies slightly from person to person, but virtually everyone infected with HIV develops antibodies within 3 months of infection.

When is follow-up HIV testing warranted? If a person tests negative for antibodies 3 months after a potential exposure to HIV, he or she does not require further testing. However, follow-up testing is warranted for individuals with repeated potential exposures during that 3-month period or when the antibody test results are incompatible with the person’s clinical history.

HIV TESTING

What are the recommendations for routine HIV testing of adults in New York State? With the dual goals of routinizing HIV testing and ensuring that clinical practice keeps pace with the changing demographics of the epidemic, NYS updated its public health law in 2010 to require that HIV testing be offered to all individuals aged 13 years and older who receive care in hospital or primary care settings. Since then, key provisions were passed in 2010, 2014, 2015, and 2016, and a comprehensive updated version of HIV Testing, Reporting and Confidentiality in New York State regulations was finalized and published in the State Register on May 17, 2017. Among other changes, the requirement for written or oral patient informed consent before ordering an HIV-related test was removed. Accessible and routine testing for individuals over the age of 13 is intended to expand the number of people who know their HIV status and to facilitate entry into the continuum of care or prevention once HIV testing is completed.

Who should be offered ongoing HIV testing? Testing should be offered at least annually to anyone whose behavior increases his or her risk for exposure to HIV. Since many people choose not to disclose their risk behaviors, providers should consider adopting a low threshold for recommending the test.

How often should individuals who engage in high-risk behavior be tested? Clinicians should recommend testing every 3 months for individuals who engage in unprotected anal sex, sex with multiple or anonymous partners, needle-sharing, or sex with partners who share needles. In these high-risk cases, testing is used to ensure early access to care and to prevent transmission to others if the patient becomes infected.

Should pre-exposure prophylaxis (PrEP) be offered to individuals with high-risk behavior? Yes. PrEP to prevent HIV infection should be considered for persons with ongoing high-risk behaviors. PrEP should be prescribed as part of a comprehensive prevention strategy that includes risk-reduction counseling about safer sex practices, condom use, and safer injection practices, as well as referral to syringe exchange programs and drug treatment services when appropriate. The NYSDOH AIDS Institute guideline PrEP to Prevent HIV Acquisition is available on the Clinical Guidelines Program website: www.hivguidelines.org.
KEY POINT

NYSDOH, CDC, and USPSTF recommend HIV testing for all adults as a routine part of healthcare.

TESTING ALGORITHM

- **What is the HIV Diagnostic Testing Algorithm?** This is a laboratory–based diagnostic algorithm that recommends a combination of laboratory tests performed in a defined sequence. Extensive evidence supports this algorithm for maximal sensitivity, specificity, and accuracy for HIV detection.

- **What is the initial test of the HIV Diagnostic Testing Algorithm?** The algorithm begins with an immunoassay (sometimes called a "4th generation test") that detects both HIV-1 and HIV-2 antibodies and HIV-1 p24 antigen. The HIV-1 p24 antigen appears before antibodies develop so that acute HIV infection can sometimes be detected.

- **What steps are taken when the initial test is reactive?** Specimens reactive on the initial assay are tested with a supplemental assay that differentiates HIV-1 and HIV-2 antibodies. Specimens that are reactive on the initial assay but nonreactive or indeterminate on the antibody differentiation assay are then tested for HIV-1 RNA to differentiate acute HIV infection from a false-positive screening result. The final interpretation is based on a combination of test results. The NYSDOH Testing Toolkit provides more information about HIV diagnostic tests and the algorithm. The NYSDOH AIDS Institute's HIV Testing guideline should be consulted as well.

KEY POINT

It is important to know which HIV tests are being used by your agency or laboratory so you can provide patients with accurate information regarding their HIV test results.

EXPOSURE TO HIV & POST EXPOSURE PROPHYLAXIS (PEP)

- **What are the recommendations for persons who report an exposure?** HIV exposure is a medical emergency. If the patient reports a significant exposure, the first dose of PEP should be given. Other testing and evaluation can be continued following the first dose. When PEP is initiated immediately after an exposure (ideally, within 2 hours), it can prevent HIV infection.

  - PEP is most likely to prevent infection when initiated within 36 hours of exposure. The decision to start PEP later, beyond 36 hours post-exposure, should be made jointly by the clinician and the exposed individual, with the understanding that PEP is less likely to prevent HIV infection the longer it is delayed.

- **Can HIV infection be detected immediately after exposure?** HIV infection is not immediately detectable.

- **How often should an exposed individual be tested?** NYSDOH protocols recommend testing at baseline and at 4 and 12 weeks post-exposure.

- **Are the guidelines for PEP different for different types of exposure?** The NYSDOH AIDS Institute provides specific guidelines for PEP following occupational exposure, non-occupational exposure, and sexual assault.
ACUTE HIV INFECTION

- **What is acute HIV infection?** Acute HIV infection is the very early, initial stage of HIV infection when the virus is multiplying rapidly and the body has not yet developed antibodies to fight it.

- **What are the symptoms of acute HIV infection?** Symptoms of acute HIV infection are similar to flu symptoms and may include fever, fatigue or malaise, joint pain, headache, loss of appetite, rash, night sweats, myalgia, nausea or diarrhea, and pharyngitis.

- **If acute HIV infection is suspected, what steps should be taken for testing?** If a patient presents with signs/symptoms of acute HIV, then HIV RNA testing should be requested in conjunction with an initial 4th generation (recommended) or 3rd generation (alternative) screening test. In the absence of serologic evidence of HIV infection:
  - If HIV RNA is not detected, no further testing is needed.
  - Detection of HIV RNA with ≥5,000 copies/mL indicates a preliminary diagnosis of HIV infection.
  - Detection of HIV RNA with <5,000 copies/mL requires repeat HIV RNA testing.
  - If a diagnosis of HIV infection is made on the basis of HIV RNA testing alone, a new specimen should be collected 3 weeks later, and HIV diagnostic testing should be repeated.

- **Why is it so important to diagnose HIV infection during the acute phase?** In most infected persons, HIV viral load increases quickly after exposure, peaks at about 3 weeks post exposure, and then declines over the next several months. An HIV−infected person is most infectious during this acute phase because of the high viral load. The NYSDOH AIDS Institute clinical guideline on *Diagnosis and Management of Acute HIV Infection* recommends ART for all patients diagnosed with HIV infection.

- **Is specialty consultation required for pregnant women with acute HIV infection?** Yes. If acute HIV infection is suspected in a pregnant woman, request HIV RNA testing in addition to a 4th generation (recommended) or 3rd generation (alternative) screening test. If reactive, consultation with a provider experienced in diagnosing and evaluating acute HIV infection is important. Earlier diagnosis and treatment can reduce the risk of mother-to-child transmission.

- **How can I locate an experienced HIV care provider?** The Clinical Education Initiative CEI line provides access to providers with experience in acute HIV infection: 866-637-2342.