



GUIDELINES ON HIV TESTING IN UN HEALTH FACILITIES

AUGUST 2021

BACKGROUND

This guidance developed by the Public Health Section of Division of Healthcare Management and Occupational Safety and Health (DHMOSH), in consultation with WHO technical experts, was developed for UN healthcare providers to provide key information on how to provide HIV testing as part of healthcare delivery services to UN personnel accessing UN health facilities.

This document provides information on when to test for HIV, testing modalities, algorithms and guidance on pre- and post-test counseling. Where possible, HIV testing services should be part of the UN medical services and provided as part of a continuum of strategies for HIV prevention and impact mitigation in the duty station/mission. All HIV testing should be implemented in accordance with the “5-Cs”: patient consent and confidentiality, pre-test information and post-test counselling, correct results and connections (linkage to care). All UN personnel should be provided with opportunities for HIV testing and follow up referral to treatment, care, and support services as needed.

For any questions, please contact dos-dhmosh-hiv@un.org

WHO & WHEN TO TEST FOR HIV?

Although great efforts have been made globally to reduce the stigma of HIV, individuals may not always be forthcoming with their risk factors of acquiring the infection, therefore **anyone who requests HIV testing should have access to this test with their informed consent.**

In addition to the above circumstance, there are also specific instances which might occur in duty stations, where HIV testing should be considered. These circumstances include but are not limited to:

- 1. Blood and bodily fluid exposures** – this includes needlesticks, sexual assault, emergency response, casualty handling etc. Testing should ideally be conducted for the exposed person as a baseline test (at time of the incident), at 4-6 weeks and at 3 months. People with on ongoing risk could be advised to return for testing every 6-12 months also.
- 2. In those with signs and symptoms or medical conditions that could indicate HIV infection** – including AIDS defining conditions such as cryptococcal meningitis, toxoplasmosis, PCP pneumonia, esophageal candidiasis, certain cancers including Kaposi’s sarcoma, and tuberculosis, as well as sexually transmitted infections.
- 3. All pregnant women**
- 4. Partners of those infected with HIV**

Re-testing is also recommended in certain groups such as all sexually active individuals in high HIV burden settings and individuals who have ongoing HIV-related risks in all settings.

PRE-TEST INFORMATION

HIV testing is voluntary and confidential. Concise pre-test information should be provided to the individual seeking testing in an environment that protects confidentiality, prevents stigma and discrimination, and has a consent policy. Pre-test information should include follow-up actions required



based on the test results. Given the fact that rapid testing is now readily available, individualize pre-test counselling is no longer recommended by the WHO and **rather concise pre-test information, such as posters, brochures, websites, and short video clips, is recommended.**

Pre-test message should focus on the following: benefits of HIV testing and implications of undiagnosed HIV, the meaning of a positive/negative test, benefits of early antiretroviral therapy (ART) and that people who are taking ART and are virally suppressed do not transmit HIV to sexual partners. All immediate concerns and client needs must be fully explored and addressed during the pre-test session to ensure adherence and compliance to the outcome of the tests and proposed course of management.

WHICH HIV TEST TO ORDER?

There are a variety of HIV diagnostic tests available depending on the duty stations. This might include nationally registered diagnostic tests, WHO prequalified diagnostic tests and in some instances products that are eligible from donors and/or implementing partners. (See here for WHO's pre-qualified HIV tests: <https://extranet.who.int/pqweb/vitro-diagnostics/vitro-diagnostics-lists>)

Several strategies for HIV testing are possible depending on availability of such tests locally in your own medical service, or through the local health authorities.

- **HIV self-testing** can be offered if available. If a HIV self-test is positive the patient should be referred for provider-based confirmatory testing. **See Annex 1.**
- **Rapid HIV testing.** If the rapid HIV testing is positive, the patient should be referred for further testing including confirmatory testing and HIV viral load etc.
- **Three consecutive reactive test** results are required to make an HIV-positive diagnosis. See **Annex 2** for more details.

**Please note that as of 2019 the WHO recommends against the use of Western Blots and line immunoassays in HIV testing strategies/algorithms.*

Note:

- **All individuals newly diagnosed with HIV require confirmatory HIV testing prior to initiating patients on life-long antiretroviral therapy.** Other laboratory tests, such as CD4 count and screening for opportunistic infections will be required based on physician assessment findings.
- **All UN health facilities conducting HIV services must ensure that they have three (3) consecutive HIV/AIDS Rapid tests required to make a HIV positive diagnosis** and where this is not possible, must have access to facilities that provides HIV confirmation test.
- A range of **different HIV/AIDS Rapid Reactive Tests are available to All UN health facilities to be procured directly from UNFPA.** All required information (list of tests; Request for Proforma Invoice and UNFPA Service Conditions) has been shared with all UN Medical entities via email and can also be **found in the “MSS Community of Practice” page at [UNFPA - HIV KITS AVAILABILITY](#)**

Consideration for other screening of blood borne viruses such as Hepatitis B and Hepatitis C or other sexually transmitted infections is recommended, since co-infections might affect treatment regimes.

For more information on test validation and algorithms, see **Chapter 8 of the WHO Consolidated guidelines on HIV testing services** <https://www.who.int/publications/i/item/978-92-4-155058-1>



This guidance should be reviewed and adapted to your duty station's specific context and existing SOPs.

POST-TEST COUNSELLING

The core package of post-test services should include concise messages and effective supportive interventions, rapid facilitation of antiretroviral therapy initiation and linkages to HIV prevention, care and support. The test results and diagnosis must be explained to the client or patient. You should provide clear information on further tests that may be required – ie. tests to confirm viral load, screen for opportunistic infections and other disease such as underlying liver and kidney diseases.

Most people who are HIV-negative do not need post-test counselling **with the exception of those who continue to be a risk of future HIV acquisition, where discussion of pre-exposure prophylaxis could be considered.**

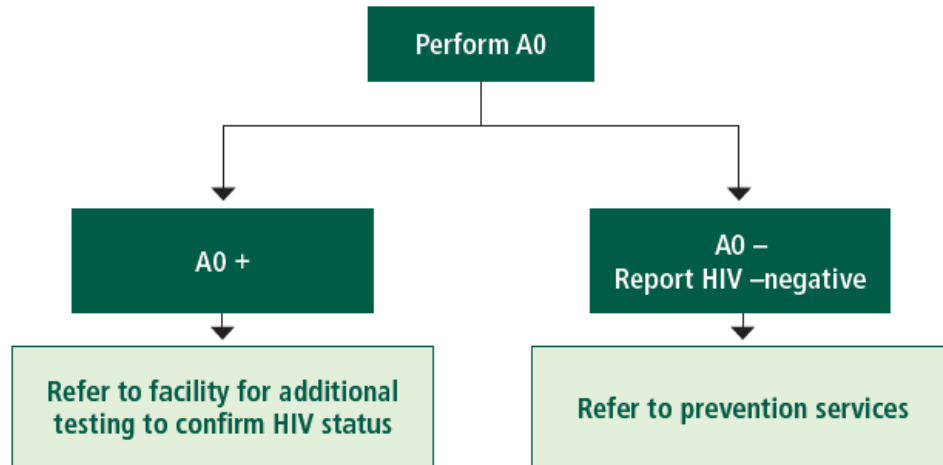
Post-test counseling may further include counseling on lifestyle and substance use to reduce risk of exposure to HIV infection.

For those who are HIV positive, immediate referral and connection to the UN HIV center of excellence where definitive HIV services and treatment are offered is required. This is because rapid initiation of anti-retroviral therapy is recommended for all people living with HIV regardless of their CD4 count.



ANNEX 1

Fig. 8.5. Alternative testing strategies: test for triage and HIV self-testing



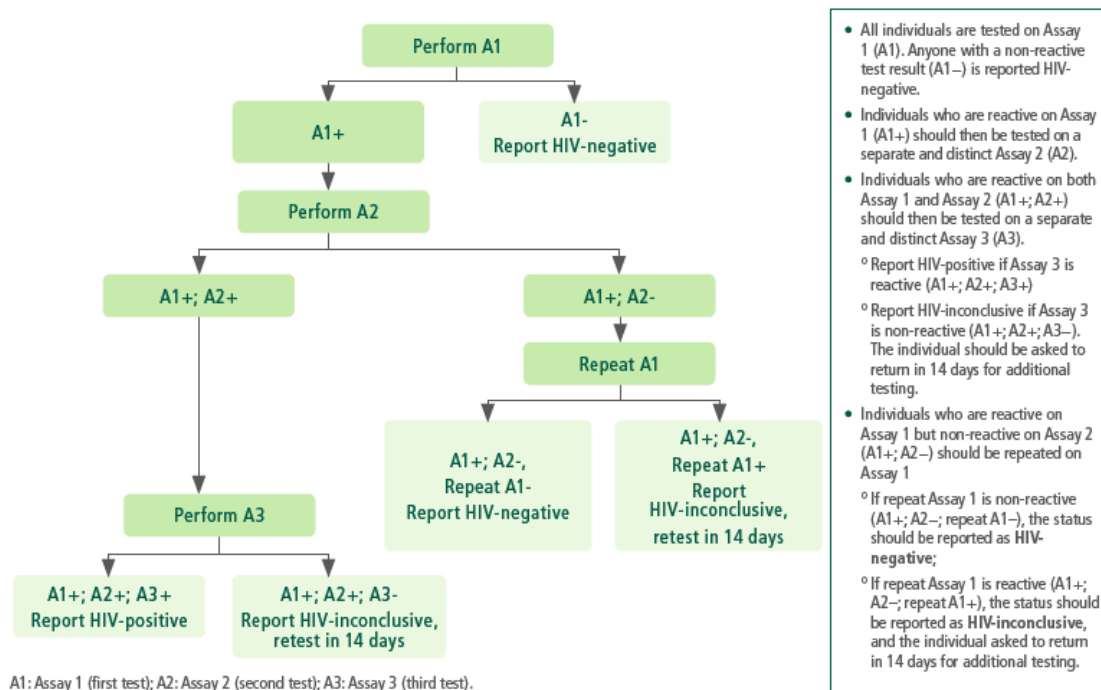
A0: Assay 0

REFERENCE: Chapter 8 of <https://www.who.int/publications/i/item/978-92-4-155058-1>.



ANNEX 2

Fig. 8.3. WHO standard testing strategy for HIV-1 diagnosis (among people ≥ 18 months of age)



This testing strategy, including repeat testing, aims to ensure that at least a 99% PPV is maintained and that false-positive misdiagnosis. To achieve at least a 99% PPV, it is critical that:

- Assay 1 provides the best chance to rule in all HIV-positive individuals and has the **highest sensitivity**. Notably, very high sensitivity will mean the test has lower specificity. For this reason, a degree of false HIV-reactive results on Assay 1 are expected in addition to true HIV-reactive results.
- Assay 2 and Assay 3 must be able to rule out any false HIV-reactive test results. For this reason, both test kits used as Assay 2 and Assay 3 must have **very high specificity – higher than Assay 1**. The relative cost of a testing strategy is driven by the numbers of Assay 1 that are conducted.
- Assay 1 (A1), Assay 2 (A2) and Assay 3 (A3) should be three different HIV assays (products) that share minimal common false reactivity.
- In the event of discrepant test results (A1+; A2-), it is important to repeat Assay 1. Repeating Assay 1 will determine if the individual is repeatedly reactive on the assay that has the highest sensitivity (expecting reduced specificity). Discrepant test results are driven by the specificity of the product chosen as Assay 1: If Assay 1 has 98% specificity, one expects at least two false HIV-reactive results per 100 tests. Individuals who are repeatedly reactive on Assay 1 but cannot be confirmed HIV-positive should be given an HIV-inconclusive status (19, 20).
- Unlike with Assay 1, there is no need to repeat Assay 2 after a reactive result, as the product for Assay 2 is chosen for its specificity, and both repeatedly reactive and non-reactive test results on A2 would lead to an HIV-inconclusive status. Similarly, there is no added value to testing individuals with discrepant results (A1+; A2-) on Assay 3, as the result would be HIV-inconclusive, irrespective.
- Where resources permit, other assays, such as assays that detect HIV p24 antigen only or assays that can detect specific types of HIV-1 and HIV-2 antibodies, may be used to resolve atypical diagnoses (21).