

lay personnel who can receive training and remuneration to carry out HIV testing and counselling activities under the supervision of health care professionals with more specialized expertise. People living with HIV/AIDS, AIDS service organizations and other community-based organizations and civil society groups can provide an important source of skilled lay personnel. In some settings, expanding the types of health workers who are authorized to carry out HIV testing and counselling, including rapid HIV testing, may require a review of local laws and regulations.

Training programmes for personnel who will perform HIV testing and counselling in health facilities, as well as for other staff who deal with clients in health services, should be developed and implemented well in advance of the implementation of provider-initiated HIV testing and counselling. Training should be based on protocols which specifically address the following key areas:

- *Ensuring an ethical process for obtaining informed consent*

Guidance and ongoing supervision must be provided to health care providers on the process of obtaining informed consent. Patients must receive adequate information on which to base a personal and voluntary decision whether or not to consent to the test, and be given an explicit opportunity to decline a recommendation of HIV testing and counselling without coercion. More detailed guidance on the process of obtaining informed consent appears in Section 6.

- *Protecting confidentiality and privacy*

Training must emphasize that health care providers have a responsibility to maintain the confidentiality of HIV test results. The fact that the patient has provided informed and voluntary consent to an HIV test, and the test result, should be documented in patient records. Clinical care can be undermined by not recording HIV results or not communicating results to other health care providers responsible for patient care.

Medical records, including test results, should only be shared with health care professionals who have a direct role in the ongoing management of the patient. These principles apply to both verbal and written communications. Patients should be offered advice on the safe-keeping of patient-held records, such as antenatal care (ANC) cards and child health cards.

Privacy must also be ensured. For example, informed consent should be sought and given in a private setting and post-test counselling for an HIV-positive patient and other communications relating to HIV status should take place away from other patients or staff not involved with that patient's care.

Medical records administrators may need to receive specific training in the appropriate handling of medical records in clinical settings where HIV testing and counselling is performed.

– *Avoiding stigma and discrimination in the health facility*

People living with or who are suspected of having HIV frequently report mistreatment or discrimination on the part of health care providers. The implementation of provider-initiated HIV testing and counselling provides an opportunity to raise awareness about HIV/AIDS and human rights issues among health care providers and administrators and reinforce their adherence to appropriate standards of practice.

Staff interacting with patients should receive specific training and ongoing supervision to address the needs of people living with and at-risk for HIV. It should be standard practice to treat all patients decently, with respect and without discrimination on the basis of HIV status or risk behaviours, and to help patients address potential negative social consequences of HIV testing. Involving people living with HIV, members of at-risk populations and their advocates in training sessions for health care providers on these issues is strongly recommended.

– *Patient referral*

Health care providers will require training on the referral needs of patients, their partners and family members and the services that are available locally to provide follow-up and support, including the availability of client-initiated HIV testing and counselling services.

- **Codes of conduct and methods of redress**

Health facilities should develop codes of conduct for health care providers and methods of redress for patients whose rights are infringed. Consideration should be given to the appointment of an independent ombudsman or patient advocate to whom breaches of HIV testing and counselling protocols and codes of conduct can be reported.

- **A strong monitoring and evaluation system**

A system that monitors the implementation and scale-up provider-initiated testing and counselling should be developed and implemented concurrently. This is discussed in more detail in Section 9.

5.2.2 Other measures

Although the following measures may not be prerequisites for the implementation of provider-initiated HIV testing and counselling, they should be addressed as part of national plans to scale up HIV testing and counselling and to achieve universal access to HIV prevention, treatment, care and support:

- **Social and legal interventions**

Optimal delivery of provider-initiated HIV testing and counselling in the long term requires that laws and policies against discrimination on the basis of HIV status, risk behaviour and gender

are in place, monitored and enforced. These include legal and social protections which enhance privacy, autonomy and gender equality. Implementing these broad social and legal protections is the responsibility of diverse stakeholders, including parliamentarians, ministries of the interior, health and justice and civil society groups⁶⁷, emphasizing the need for multisectoral commitment to scaling up provider-initiated HIV testing and counselling.

- **Voluntary disclosure and ethical partner notification and counselling**

UNAIDS and WHO encourage voluntary disclosure of HIV status and ethical partner notification and counselling. This may require national policies and public health legislation authorizing partner notification in clearly defined circumstances, as well as the promotion of professional ethical codes among health care and social service providers. While beyond the scope of this document, these issues are comprehensively addressed in the UNAIDS/WHO publication *Opening up the HIV/AIDS epidemic: Guidance on encouraging beneficial disclosure, ethical partner counselling & appropriate use of HIV case-reporting*.⁶⁸

6. PROCESS AND ELEMENTS

6.1 Pre-test information and informed consent

Providers of client-initiated HIV testing and counselling typically conduct an education session and a risk assessment, with a primary focus on prevention counselling for clients both prior to and after receiving their test results.

In many health facilities, providers do not have the time to perform a detailed risk assessment. Because the objective of provider-initiated HIV testing and counselling in health facilities is the timely detection of HIV and access to health care services, pre-test information can be simplified. For example, individual risk assessment and risk reduction plans can be covered during post-test sessions, rather than in the pre-test information session, tailored to patient's HIV status.

Depending on local conditions, pre-test information can be provided in the form of individual information sessions or in group health information talks. Informed consent should always be given individually, in private, in the presence of a health care provider.

6.1.1 Minimum information for informed consent

When recommending HIV testing and counselling to a patient, the health care provider should at a minimum provide the patient with the following information:

- The reasons why HIV testing and counselling is being recommended
- The clinical and prevention benefits of testing and the potential risks, such as discrimination, abandonment or violence
- The services that are available in the case of either an HIV-negative or an HIV-positive test result, including whether antiretroviral treatment is available
- The fact that the test result will be treated confidentially and will not be shared with anyone other than health care providers directly involved in providing services to the patient
- The fact that the patient has the right to decline the test and that testing will be performed unless the patient exercises that right
- The fact that declining an HIV test will not affect the patient's access to services that do not depend upon knowledge of HIV status
- In the event of an HIV-positive test result, encouragement of disclosure to other persons who may be at risk of exposure to HIV
- An opportunity to ask the health care provider questions.

Patients should also be made aware of relevant laws in jurisdictions that mandate the disclosure of HIV status to sexual and/or drug injecting partners.

Verbal communication is normally adequate for the purpose of obtaining informed consent. Jurisdictions that require consent to be given in writing are encouraged to review this policy.

Some patient groups, such as populations most at-risk of HIV transmission and women, may be more susceptible to coercion to be tested and to previously discussed adverse outcomes. In such cases, additional measures to ensure informed consent may be appropriate beyond the minimum requirements defined in this document. The health care provider may need to particularly emphasize the voluntary nature of the test and the patient's right to decline it. Additional discussion of the risks and benefits of HIV testing and disclosure of HIV status, and providing further information about the social support that is available to the patient, may also be appropriate.

6.1.2 Additional information for women who are or may become pregnant

In addition to the information set out in 6.1.1, pre-test information for women who are or may become pregnant should include:

- The risks of transmitting HIV to the infant
- Measures that can be taken to reduce mother-to-child transmission, including antiretroviral prophylaxis and infant feeding counselling
- The benefits to infants of early diagnosis of HIV.

6.1.3 Special considerations for children

According to the UN Convention on the Rights of the Child, "the best interests of the child shall be a primary consideration" in all actions concerning children. This includes decision-making about medical care. As with all other patients, the purpose of HIV testing and counselling should always be to promote the best interests and optimal health outcomes for the child. HIV testing and counselling for children involve special considerations, however, and specific national policies may need to be developed.

As minors, children cannot legally provide informed consent. However, children have the right to be involved in all decisions affecting their lives and to make their views known according to their level of development. Every attempt should be made to explain to the child what is happening and to obtain her/his assent. Informed consent from the child's parent or guardian *is* required.

Where a child is extremely disadvantaged because he or she is orphaned, abandoned, undocumented, a survivor of trauma or affected by mental or intellectual disability, he or she may be at increased risk of discrimination, exploitation and unfavourable access to health care. HIV testing and counselling should be recommended for such children where the criteria of apparent HIV-related illness are satisfied, or maternal HIV-positive status is known. As with all patients, HIV testing should only be offered for the purpose of providing the child with appropriate HIV-related treatment, care and support.

Where there is no parent or legal guardian available to provide informed consent, health care providers should seek informed consent from an individual (sometimes known as a "substitute decision-maker" or "surrogate decision-maker") who has authority under the law to make a decision based on the best interests of the child.

The majority of children acquire HIV through mother-to-child transmission and a positive result in a child (serological or virological), in most instances indicates maternal infection and, possibly, paternal infection. HIV testing and counselling should therefore be recommended to parents and siblings of HIV-infected children, where possible and appropriate, in the form of couples or family HIV counselling and testing. Mothers should be specially informed that a negative test in the child does not mean that the mother is not HIV-infected⁶⁹.

Health care providers must be adequately equipped to deal with the needs of children. For example, counselling children requires skills that differ from adult and adolescent counselling, including the ability to assess maturity and use age-appropriate language.

6.1.4 Special considerations for adolescents

In most countries, the median age of sexual debut for adolescents is earlier than the age of legal majority, and many adolescents do not have independent access to HIV prevention services. With regard to sexual and reproductive information, including on family planning, the Committee on the Rights of the Child has stated in General Comment 4 (Adolescent Health and Development) that governments should ensure that adolescents have access to appropriate information regardless of their marital status and whether or not parents or guardians consent, and should remove all barriers to health services, including those relating to HIV prevention. For these reasons, WHO and UNAIDS encourage countries to provide adolescents with independent access to HIV prevention, treatment, care and support.

National and local laws may or may not stipulate precisely the age of majority for independent access to health services, or the age at which adolescents are allowed to give their own consent may vary for different procedures. For example, adolescents may be able to consent to be tested for HIV or receive condoms at a younger age than they can consent to surgical procedures. Many countries make allowances for groups of adolescents designated 'mature' or 'emancipated' minors (e.g. those who are married, pregnant, sexually active, living independently or who are themselves parents) which enable them to provide consent for themselves for some services.

Governments should develop and implement clear legal and policy frameworks that stipulate 1) the specific age and/or circumstances in which minors may consent to HIV testing for themselves or for others (as in the case of child-headed households) and 2) how the assent of and consent for adolescents should best be assessed and obtained. Efforts to expand provider-initiated HIV testing and counselling in health facilities should include training and supervision for health care providers on laws and policies governing the consent for minors to access clinical services, including when they can and cannot recommend an HIV test to an adolescent independent of the consent of the adolescent's parent or legal guardian.

Where the law does not allow a sufficiently mature adolescent to give his or her own informed consent to an HIV test, the health care provider should provide an adolescent patient with the opportunity to assent to HIV testing and counselling in private, without the presence or knowledge of his or her parents or legal guardians. The pre-test information should be adapted to the

patient's age, developmental stage and literacy level. If the adolescent provides assent, indicating that he or she understands the risks and the benefits of HIV testing and would like to receive the test, then the health care provider should seek the informed consent of the parent or legal guardian.

In some situations, a parent or legal guardian may not be available to give consent on the adolescent's behalf. The health care provider may need to assess whether an adolescent can request and consent to testing alone. The provider must always work within the framework of local or national laws and regulations and be guided by the best interests of the patient.

6.1.5 Seriously ill patients

Critically ill or unconscious patients may not be able to provide informed consent to HIV testing and counselling. In such circumstances, consent should be sought from the patient's next-of-kin, guardian or other caregiver. In the absence of such a person, health care providers should act according to the best interests of the patient concerned.

6.1.6 Follow-up where a test is declined

Declining an HIV test should not result in reduced quality or denial of services, coercive treatment or breach of confidentiality, nor should it affect a person's access to health services that do not depend on knowledge of HIV status. Individuals declining the test should be offered assistance to access either client-initiated or provider-initiated HIV testing and counselling in the future.

The patient's decision to decline the HIV test should be noted in the medical record so that, at subsequent visits to the health facility, a discussion of HIV testing and counselling can be re-initiated.

6.2 Post-test counselling

Post-test counselling is an integral component of the HIV testing process. All individuals undergoing HIV testing must be counselled when their test results are given, regardless of the test result. Given that many inpatient and outpatient facilities are crowded, care should be taken to discuss results and follow-up care in a confidential manner. Results should be given to patients in person by health care providers or by trained lay personnel. Ideally, post-test counselling should be provided by the same health care provider who initiated HIV testing and counselling. Results should not be given in group settings.

It is not acceptable practice for health care providers to recommend HIV testing and counselling to patients and to subsequently withhold or fail to convey test results. Although patients can refuse to receive or accept results of any test or investigation, health care providers should make every reasonable attempt to ensure that patients receive and understand their test results in a confidential and sympathetic manner.

6.2.1 Post-test counselling for HIV-negative persons

Counselling for individuals with HIV-negative test results should include the following minimum information:

- An explanation of the test result, including information about the window period for the appearance of HIV-antibodies and a recommendation to re-test in case of a recent exposure
- Basic advice on methods to prevent HIV transmission
- Provision of male and female condoms and guidance on their use.

The health care provider and the patient should then jointly assess whether the patient needs referral to more extensive post-test counselling session or additional prevention support, for example, through community -based services.

6.2.2 Post-test counselling for HIV-positive persons

The focus of post-test counselling for people with HIV-positive test results is psychosocial support to cope with the emotional impact of the test result, facilitate access to treatment, care and prevention services, prevention of transmission and disclosure to sexual and injecting partners. Health care providers should:

- Inform the patient of the result simply and clearly, and give the patient time to consider it
- Ensure that the patient understands the result
- Allow the patient to ask questions
- Help the patient to cope with emotions arising from the test result
- Discuss any immediate concerns and assist the patient to determine who in her/his social network may be available and acceptable to offer immediate support
- Describe follow-up services that are available in the health facility and in the community, with special attention to the available treatment, PMTCT and care and support services
- Provide information on how to prevent transmission of HIV, including provision of male and female condoms and guidance on their use
- Provide information on other relevant preventive health measures such as good nutrition, use of co-trimoxazole and, in malarious areas, insecticide-treated bed nets
- Discuss possible disclosure of the result, when and how this may happen and to whom
- Encourage and offer referral for testing and counselling of partners and children
- Assess the risk of violence or suicide and discuss possible steps to ensure the physical safety of patients, particularly women
- Arrange a specific date and time for follow-up visits or referrals for treatment, care, counselling, support and other services as appropriate (e.g. tuberculosis screening and treatment, prophylaxis for opportunistic infections, STI treatment, family planning, antenatal care, opioid substitution therapy, and access to sterile needles and syringes).

6.2.3 Post-test counselling for HIV-positive pregnant women

In addition to the information described in Section 6.2.2, post-test counselling for pregnant women whose test result is HIV-positive should address the following:

- Childbirth plans
- Use of antiretroviral drugs for the patient's own health, when indicated and available, and to prevent mother-to-child transmission
- Adequate maternal nutrition, including iron and folic acid
- Infant feeding options and support to carry out the mother's infant feeding choice
- HIV testing for the infant and the follow-up that will be necessary
- Partner testing.

6.3 Referral to other HIV services

HIV test results must be communicated with an explanation of the prevention, treatment, care and support services available to the patient. Programmes for other chronic illnesses and community-based HIV prevention, treatment, care and support services are especially important resources and it is important to establish and maintain collaborative mechanisms with them.

At a minimum, referral should include providing the patient with information about whom to contact as well as where, when and how to contact them. Patient referral works best if the health care provider makes contact in the presence of the patient and schedules an appointment, making note of the contact and the organization in the patient's file. Staff within the referral network need to routinely inform each other of changes in personnel or processes which could impact upon the referral of patients.

6.4 Frequency of testing

How often patients are re-tested will depend on the continued risks taken by the patient, the availability of human and financial resources and HIV incidence in the setting.

Re-testing every 6-12 months may be beneficial for individuals at higher risk of HIV exposure, such as persons with a history of STI, sex workers and their clients, men who have sex with men, injecting drug users and sex partners of people living with HIV. Additional research is needed in diverse settings with varying HIV epidemiology to determine the optimum interval between HIV tests for specific populations.

Risks of HIV transmission to the infant are very high if the mother acquires HIV during pregnancy or while breastfeeding. HIV-negative women should be tested as early as possible in each new pregnancy, particularly in high-prevalence settings and in the case of women who are at high risk of HIV exposure.

Repeat testing late in pregnancy should also be recommended to HIV-negative women in generalized epidemic settings.

HIV testing and counselling should generally be recommended to patients where doubt exists about the patient's prior testing history or the accuracy or veracity of prior test results.

It is important that regular HIV testing does not become a substitution for prevention behaviours. Health care providers should emphasize that people should sustain safer behaviour.

7. HIV TESTING TECHNOLOGIES

7.1 Factors to consider

The introduction of highly sensitive, specific, simple-to-use, rapid antibody tests that do not require sophisticated laboratory services, running water or electricity is an important advance. Accurate results can be available within a much shorter time than for traditional enzyme-linked immunosorbent assays (ELISA). The advantages of using rapid HIV tests for provider-initiated HIV testing and counselling – particularly for health facilities where laboratory services are weak – include visibility of the test and quick turn-around, increasing confidence in results and avoidance of clerical errors. Testing can occur outside laboratory settings, does not require specialized equipment and can be carried out in primary health facilities by appropriately trained non-laboratory personnel, including counsellors. However, trained laboratory supervisors are required for supervision and quality assurance, including quality control for testing and bio-safety. Tests selected should be of assured quality.

ELISA may be preferable in settings where large numbers of tests need to be performed, where immediate provision of test results is less important (such as for hospital inpatients) and in reference laboratories. ELISA allows large numbers of samples to be tested efficiently at one time but potential disadvantages include the necessary time to assemble enough samples to make a test run (approximately 40), the need for clerical rigour to unambiguously link individuals to test results and the reporting time of the results (half a day), which generally precludes outpatients receiving the test result at the same visit. ELISA tests are carried out using specialized laboratory equipment and therefore require certified laboratory staff to manage the test procedure, report results and maintain equipment.

Decisions on whether to use HIV rapid tests or ELISA for provider-initiated HIV testing and counselling should take into account factors such as:

- Cost and availability of the test kits, reagents and equipment
- Available staff, resources and infrastructure
- Laboratory expertise and personnel available
- Number of samples to be tested
- Sample collection and transport
- The setting in which testing is proposed
- Convenience
- The ability of individuals to return for results.

Definitive diagnosis of HIV infection in children younger than 18 months requires virological tests, as the presence of maternal HIV antibodies may complicate the interpretation of positive results of HIV rapid tests or ELISA tests. Virological testing depends upon complex procedures such as HIV-DNA or HIV-RNA polymerase chain reaction (PCR), is expensive and requires highly trained

staff. WHO promotes a centralized virological testing approach where specimens are collected on filter papers which are easily transported to a central laboratory, even in tropical conditions.

7.2 Testing algorithms

HIV testing should follow recommended CDC-UNAIDS-WHO HIV testing strategies⁷⁰ and relevant national HIV testing algorithms. Testing algorithms may involve serial (also called sequential) or parallel testing. ELISA-based algorithms are almost always serial in nature, while rapid test algorithms can be either.

With **serial testing**, if the result of the first test is negative, the HIV antibody test is reported as negative. If the test result is positive, the specimen is tested with a second test using different antigens and/or platform from the first. Tests that are exactly the same but sold under different names should not be used in combination. A second positive test result is considered to indicate a true positive result in populations with an HIV prevalence of 5% or more. In low prevalence settings where false positive results are more likely, a third confirmatory test may be required. WHO and UNAIDS recommend serial testing in most settings because it is cheaper and a second test is only required when the initial test is reactive.

With **parallel testing** – recommended only when using whole blood finger stick samples rather than venous blood – two tests are carried out simultaneously using assays based on different antigens and/or platforms. Concordantly negative or positive results are considered as true negatives or positives, respectively.

When two test results (serial or parallel) show dissimilar results (one is reactive and the other non-reactive), the tests results are described as discordant. Specialist laboratory advice may be required in cases of such test discordance.

In all cases, WHO and UNAIDS recommend that HIV tests used should have a sensitivity of at least 99% and a specificity of 98%. The specific test combinations need to be evaluated in the context in which they will be used before wide-scale implementation.

8. PROGRAMMATIC CONSIDERATIONS

Decisions on how best to implement provider-initiated HIV testing and counselling will depend upon an assessment of the situation in a particular country, including local epidemiology, the available infrastructure, financial and human resources, the available standard of HIV prevention, treatment, care and support and the existing social, policy and legal frameworks for protection against HIV-related discrimination. Where there are high levels of stigma and discrimination and/or low capacity of health care providers to implement provider-initiated HIV testing and counselling under the conditions of informed consent, confidentiality and counselling, adequate resources must be devoted to addressing these issues prior to implementation.

Decisions about whether and how to implement provider-initiated HIV testing and counselling should be made in consultation with all relevant stakeholders. The steps that may need to be taken to adapt the general recommendations in this document to national and local conditions are shown in Table 2.

Many settings with a high HIV burden face substantial human and financial constraints that limit the feasibility of implementing new health services on a large scale. As described in Section 4, it may be necessary to prioritize particular types of health facilities for the introduction of provider-initiated HIV testing and counselling, depending upon the social and epidemiological context and available resources.

Coordinated planning, training and procurement are important to help ensure synergies between provider- and client-initiated HIV testing and counselling approaches and will help to facilitate referral between different types of health services.

Table 2 Consultation and adaptation activities to implement provider-initiated HIV testing and counselling at country level

1. In countries considering the implementation of provider-initiated HIV testing and counselling, the Ministry of Health should convene a national consultation to plan an implementation strategy, including adaptation of this guidance document to local conditions. Participants should include:
 - National-level programme managers for HIV, tuberculosis and other clinical services
 - Ministries of justice, welfare, interior and finance
 - Health care providers
 - Regulatory bodies and health professional associations
 - Community- and faith-based organizations, including women's organizations
 - Most-at-risk populations
 - People living with HIV/AIDS
 - Human rights advocates
 - Private sector representatives
 - Representatives of legal and social support services.
2. Existing social, legal and policy frameworks should be assessed and reviewed to facilitate implementation of provider-initiated HIV testing and counselling and to protect the rights of patients, including advocacy and communication campaigns and social and legal support services.
3. Adequate resources must be planned and available for implementation, including for testing-related commodities, health care provider training and community preparedness and social mobilization.
4. Operational guidelines, protocols and codes of conduct for health care providers, training tools and education materials must be developed or adapted. These should be based on HIV epidemiology, available resources, ethical and human rights principles and legal and sociocultural contexts.
5. For countries choosing to implement provider-initiated HIV testing and counselling in a phased manner, priority settings for initial and subsequent scale-up should be selected.
6. Health care providers should be identified and trained.
7. Provider-initiated HIV testing and counselling should be incorporated into existing supervision, quality assurance and monitoring and evaluation systems.
8. Civil society should be engaged in ongoing monitoring and evaluation of provider-initiated HIV testing and counselling in health facilities.
9. At facility level, linkages should be strengthened between services to facilitate entry into HIV-related services following HIV testing and counselling, including community-based prevention, treatment, care and support services.

9. MONITORING AND EVALUATION

Monitoring and evaluation should form an essential and ongoing part of programmes to implement provider-initiated HIV testing and counselling. National monitoring and evaluation of provider-initiated HIV testing and counselling services should allow programme managers to:

- Monitor progress in implementation, including procedures for obtaining informed consent, ensuring confidentiality and providing counselling
- Identify problems, and refine and adapt implementation strategies
- Assess the effectiveness and impact of provider-initiated testing and counselling in terms of:
 - increasing access to HIV testing and counselling, and to test results
 - increasing access to and uptake of HIV-related prevention, treatment, care and support services
 - decreased morbidity and mortality
 - increased HIV awareness and treatment literacy
 - social impact (e.g. on rates of disclosure; on stigma and discrimination; and adverse outcomes).
- Assess cost-effectiveness and sustainability.
- Assess the quality of related laboratory services
- Assess the reasons that HIV testing and counselling is being recommended.

Monitoring and evaluation planning should aim, where possible, to utilize existing structures or mechanisms for collecting relevant indicators, rather than setting up independent systems. Standardized and simple data collection tools will enable comparability between sites and reduce burden on health care personnel. Appropriate training in data collection should be provided to health care providers and administrators.

As the amount of data in routine monitoring will always be limited, it is recommended to complement routine monitoring with focused evaluations on specific aspects of implementation. For example, quality assurance should be undertaken at the health facility level. Regular evaluations of health care provider performance and patient satisfaction (testing processes, pre-test information, consent process, post-test counselling) can help improve the effectiveness, acceptability and quality of HIV testing and counselling services.

Health facilities are encouraged to partner with non-governmental organizations and civil society groups in monitoring and evaluating provider-initiated HIV testing and counselling to ensure service quality and acceptability, including the maintenance of high ethical standards and human rights norms.

More detailed guidance on monitoring and evaluation of HIV testing and counselling, including provider-initiated HIV testing and counselling, is being developed by WHO and will be available in 2007.

Additional resources

A broad selection of tools and guidance for implementing HIV testing and counselling in different settings, including provider-initiated HIV testing and counselling, may be found on the **WHO HIV Testing and Counselling Online Toolkit**. This web site is periodically updated with the latest HIV testing and counselling resources available (Web site: <http://who.arvkit.net/tc/en/index.jsp>;

PDF file: http://whqlibdoc.who.int/publications/2005/924159327X_eng.pdf).

The following documents and internet sites may also be useful resources for planning, implementing and scaling-up provider-initiated HIV testing and counselling services:

Antiretroviral therapy and clinical care

- Antiretroviral therapy for HIV infection in adults and adolescents: towards universal access - recommendations for a public health approach, WHO, 2006 revision, <http://www.who.int/entity/hiv/pub/guidelines/artadultguidelines.pdf>
- Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants: towards universal access - recommendations for a public health approach, WHO, 2006 version. <http://www.who.int/hiv/pub/guidelines/pmtctguidelines2.pdf>
- Antiretroviral therapy for HIV infection in infants and children: towards universal access - recommendations for a public health approach, WHO, 2006. <http://www.who.int/hiv/pub/guidelines/paediatric020907.pdf>
- WHO ARV Toolkit. Website: <http://www.who.int/hiv/toolkit/arv/en/index.jsp>, PDF version: <http://whqlibdoc.who.int/hq/2003/9241591161.pdf>
- WHO Integrated management of adolescent and adult illness (IMAI) and Integrated management of childhood illness (IMCI) - various documents. Web site: <http://www.who.int/hiv/pub/imai/en/>

Legal and policy issues

- Policy statement on HIV testing, UNAIDS and WHO, 2004, http://data.unaids.org/una-docs/hivtestingpolicy_en.pdf
- HIV/AIDS and human rights - international guidelines, UNAIDS and OHCHR, 1996. <http://whqlibdoc.who.int/publications/1998/9211541301.pdf>
- International guidelines on HIV/AIDS and human rights, 2006 consolidated version, UNAIDS and OHCHR. http://data.unaids.org/Publications/IRC-pub07/jc1252-internguidelines_en.pdf
- Handbook for legislators on HIV/AIDS, law and human rights, UNAIDS and IPU, 1999 http://whqlibdoc.who.int/unaid/1999/UNAIDS_99.48E.pdf

Beneficial disclosure and partner counselling

- Opening up the HIV/AIDS epidemic: Guidance on encouraging beneficial disclosure, ethical partner counselling & appropriate use of HIV case-reporting (UNAIDS Best Practice Collection, Key Material, UNAIDS and WHO, Geneva, November 2000).
http://whqlibdoc.who.int/unaid/2000/UNAIDS_00.42E.pdf

HIV testing in women and girls

- Addressing violence against women in the context of HIV testing and counselling - a meeting report, WHO 2007 (forthcoming)
- Testing and Counselling for Prevention of Mother-to-Child Transmission of HIV (TC for PMTCT) Support Tools, CDC, WHO, UNICEF, USAID and PMTCT implementing partners. Web site: <http://www.who.int/hiv/pub/vct/tc/en/index.html>
- WHO Briefing Note -- HIV and Infant Feeding. Conference on Retroviruses and opportunistic infections. Los Angeles, 25-28 Feb 2007.
<http://www.who.int/hiv/mediacentre/Infantfeedingbriefingnote.pdf>
- Sexual and reproductive health of women living with HIV/AIDS, WHO and UNFPA, 2006.
http://whqlibdoc.who.int/publications/2006/924159425X_eng.pdf
- Prevention of mother-to-child transmission of HIV: generic training package, WHO and CDC, 2004. Web site: <http://www.cdc.gov/nchstp/od/gap/PMTCT/>
- Nutrition counselling, care and support for HIV-infected women, WHO, 2004.
<http://whqlibdoc.who.int/publications/2004/9241592125.pdf>

HIV Testing and Counselling in TB Clinical Settings

- Interim policy on collaborative TB/HIV activities WHO/HTM/TB/2004.330
(http://www.who.int/tb/publications/tbhiv_interim_policy/en/index.html)
- *CDC and WHO tools on HIV Testing and Counselling in TB Clinical Settings 2007*
 - Module One: Introduction, Background, and Rationale
http://www.cdc.gov/nchstp/od/gap/docs/tb_tools/TB%20Module%201_12.6.06.pdf
 - Module Two: Understanding the Provider-initiated and Delivered HIV Testing and Counseling Process in the Context of TB Clinical Settings
http://www.cdc.gov/nchstp/od/gap/docs/tb_tools/TB%20Module%202_12.7.06.pdf
 - Module Three: Preparing the Provider to Perform PTC
http://www.cdc.gov/nchstp/od/gap/docs/tb_tools/TB%20Module%203_12.12.06.pdf
 - Module Four: Administrative, Implementation and Standard Operating Procedures
http://www.cdc.gov/nchstp/od/gap/docs/tb_tools/TB%20Module%204_12.13.06.pdf
 - Module Five: Clinical Considerations
http://www.cdc.gov/nchstp/od/gap/docs/tb_tools/TB%20Module%205_12.6.06.pdf

- Module Six: Demonstration Clinic
http://www.cdc.gov/nchstp/od/gap/docs/tb_tools/TB%20Module%206%20Demo_12.1.06.pdf

Most-at-risk populations

- WHO online sex work toolkit (Web site: <http://who.arvkit.net/sw/en/index.jsp>; PDF version: http://www.who.int/entity/hiv/pub/prev_care/sexworktoolkit.pdf)
- HIV prevention through harm reduction among injecting drug users
<http://www.who.int/hiv/idu/en/index.html>
- Strategies for involvement of civil society in HIV testing within context of "3 by 5": Focus on marginalized communities, UNAIDS, 2004,
http://data.unaids.org/Topics/Human-Rights/hr_refgroup3_06_en.pdf

HIV testing and children

- Convention on the right's of the child, UN, 1989, Website:
<http://whqlibdoc.who.int/publications/1998/9211541301.pdf>
- Convention on the right's of the child general comment No 3: HIV/AIDS and the rights of the child, UN, 2003, Website: <http://whqlibdoc.who.int/publications/2002/9291730254.pdf>
- Integrated Management of Childhood Illnesses (resources). Website:
<http://www.who.int/child-adolescent-health/publications/pubIMCI.htm>

Testing technologies

- Training package for HIV rapid testing, CDC and WHO, 2006.
<http://www.phppo.cdc.gov/dls/ila/hivtraining/default.aspx>
- WHO Guidelines on HIV rapid testing, WHO (to be published)
- Guidelines for assuring the accuracy and reliability of HIV rapid testing: applying a quality system approach, CDC and WHO, 2005
http://www.who.int/diagnostics_laboratory/publications/HIVRapidsGuide.pdf
- Revised recommendations for the selection and use of HIV antibody tests, UNAIDS/WHO, 1997
<http://www.who.int/docstore/wer/pdf/1997/wer7212.pdf>
- The importance of simple/rapid assays in HIV testing, WHO/UNAIDS, 1998
<http://www.who.int/docstore/wer/pdf/1998/wer7342.pdf>

NOTES AND REFERENCES

- ¹ UNAIDS/WHO. *AIDS epidemic update*. Geneva: UNAIDS and World Health Organization; December 2006.
- ² WHO/UNAIDS/UNICEF. *Towards universal access: scaling up priority HIV/AIDS interventions in the health sector. Progress Report*. Geneva: World Health Organization, UNAIDS and United Nations Children's Fund; April 2007.
- ³ Dabis F, Schechter M, Egger M. Mortality of HIV-1-infected patients during the first year of potent antiretroviral therapy: comparative analysis of databases from low- and high-income countries. *Lancet* 2006, 367:817-24.
- ⁴ UNAIDS/WHO. *Policy Statement on HIV Testing*. Geneva: UNAIDS and World Health Organization; June 2004.
- ⁵ Paxton S et al. AIDS-related discrimination in Asia. *AIDS Care*, 2005,17(4):413-24.
- ⁶ Sahlu T et al. Sexual behaviours, perception of risk of HIV infection, and factors associated with attending HIV post-test counselling in Ethiopia. *AIDS*. 1999,13(10):1263-72.
- ⁷ Stein JA, Nyamathi A. Gender differences in behavioural and psychosocial predictors of HIV testing and return for test results in a high-risk population. *AIDS Care*. 2000,12(3):343-56.
- ⁸ Obermeyer C Makhoulouf, M Osborn. The uptake of testing and counseling for HIV: A review of the social and behavioral evidence. *American Journal of Public Health* (in press)
- ⁹ Yoder, S, A Katahoire, D Kyaddondo, Z Akol, R Bunnell, and F Kaharuzza. 2006. Home-based HIV Testing and Counseling in a survey context in Uganda. Calverton Maryland: ORC Macro.
- ¹⁰ Were W, Mermin J, Bunnell R, Ekwaru J, Kaharuzza F. Home-based model for HIV voluntary counselling and testing. *Lancet*. Volume 361, Issue 9368, 3 May 2003, Page 1569
- ¹¹ Wolff B et al. Evaluation of a home-based voluntary counselling and testing intervention in rural Uganda. Oxford Journals: *Health Policy and Planning*. 2005, 20(2):109-116.
- ¹² McDonald EA, Currie MJ, Bowden FJ. Delayed diagnosis of HIV: missed opportunities and triggers for testing in the Australian Capital Territory. *Sexual Health*. 2006, 3(4): 291-295.
- ¹³ Nakanjako D et al. Acceptance of Routine Testing for HIV among Adult Patients at the Medical Emergency Unit at a National Referral Hospital in Kampala, Uganda. *AIDS and behaviour*. 2006, (Epub ahead of print).
- ¹⁴ Op. cit. number 8

- ¹⁵ Gary M et al. Estimating sexual transmission of HIV from persons aware and unaware that they are infected with the virus in the USA. *AIDS*. 2006, 20(10):1447-1450.
- ¹⁶ Branson B et al. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. *Morbidity and Mortality Weekly Report (CDC)*. 2006, 55(RR14):1-17.
- ¹⁷ National AIDS and STD Control Programme: *Guidelines for HIV testing in clinical settings*. Nairobi, Ministry of Health, Republic of Kenya, 2004.
- ¹⁸ Weiser SD et al. Routine HIV Testing in Botswana: A Population-Based Study on Attitudes, Practices, and Human Rights Concerns. *PLoS medicine*. 2006, 3(7):e261.
- ¹⁹ Nuwaha F et al. Factors influencing acceptability of voluntary counselling and testing for HIV in Bushenyi district of Uganda. *East African medical journal*. 2002, 79(12):626-32.
- ²⁰ Perez F et al. Acceptability of routine HIV testing ("opt-out") in antenatal services in two rural districts of Zimbabwe. *Journal of acquired immune deficiency syndromes*. 2006, 4(14):514-20.
- ²¹ Zimba C et al. Impact of routine HIV counseling and testing with an opt-out strategy compared to voluntary counseling and testing in the implementation of PMTCT services, Lilongwe, Malawi. XVI International AIDS Conference, Toronto, Canada, August 13-18, 2006.
- ²² Etiebet M-A et al. Integrating prevention of mother-to-child HIV transmission into antenatal care: Learning from the experiences of women in South Africa. *AIDS Care*. 2004,16(1):37-46.
- ²³ Shankar A.V et al. Women's acceptability and husband's support of rapid HIV testing of pregnant women in India. *AIDS Care*. 2003, 15(6):871-4.
- ²⁴ Miller A.. Pilot Implementation of Revised National Policy for Routine Offer of HIV Testing in Antenatal Services: Quantitative and Qualitative Impact in Urban and Rural Zimbabwe. PEPFAR Implementers Meeting, Durban, South Africa, June 12-15, 2006 (Abstract 112).
- ²⁵ Centers for Disease Control and Prevention. Voluntary HIV testing as a part of routine medical care. *Morbidity and Mortality Weekly Report* 2004 53: 523-526
- ²⁶ Simpson WM et al. Uptake and acceptability of antenatal HIV testing: randomised controlled trial of different methods of offering the test. *British Medical Journal*. 1998, 316(7127):262-7.
- ²⁷ Op. cit. number 18
- ²⁸ Op. cit. number 22
- ²⁹ Thior I et al. Voluntary counseling and testing among post-partum women in Botswana. Patient education and counselling, 2007, 65(3):296-302. *Epub* 2006 Oct 9