



VCT GUIDELINES

Introduction

Purpose of the Guidelines

Goals of VCT

- Ensure that HIV-infected persons and persons at increased risk for HIV
 - Have access to HIV testing to promote early knowledge of their HIV status;
 - Receive high-quality HIV prevention counseling to reduce their risk for transmitting or acquiring HIV; and
 - Have access to appropriate medical, preventive, and psychosocial support services.
- Promote early knowledge of HIV status through HIV testing and ensure that all persons either recommended or receiving HIV testing are provided information regarding transmission, prevention, and the meaning of HIV test results.

Principles of VCT

Effective VCT is based on the following principles:

- Protect confidentiality of clients who are recommended or receive VCT services. Information regarding a client's use of VCT services should remain private (i.e., confidential). Personal information should not be divulged to others in ways inconsistent with the client's original consent.
- Obtain informed consent before HIV testing. HIV testing should be voluntary and free of coercion. Informed consent before HIV testing is essential. Information regarding consent may be presented orally or in writing and should use language the client can understand. Accepting or refusing testing must not have detrimental consequences to the quality of care offered. Documentation of informed consent should be in writing, preferably with the client's signature. Local laws and regulations governing HIV testing should be followed. Provide clients the option of anonymous HIV testing. Anonymous testing (i.e., consented voluntary testing conducted without a client's identifying information being linked to testing or medical records, including the request for testing or test results) has been used widely and effectively. Anonymous testing can benefit the health of individual persons and the public by prompting earlier entry into medical care. Persons who would otherwise not be



tested might seek anonymous HIV testing and learn their HIV status. When the client has no clear preference regarding testing type, confidential testing (i.e., information documented in client's record) should be recommended to promote receipt of test results and linkage to follow-up counseling and referral for needed services. Clients opting for anonymous testing should be informed that the provider cannot link the client's test result to the client by name. Therefore, if the client does not return for test results, the provider will not be able to contact the client with those results.

- Provide information regarding the HIV test to all who are recommended the test and to all who receive the test, regardless of whether prevention counseling is provided. The information should include a description of ways in which HIV is transmitted, the importance of obtaining test results, and the meaning of HIV test results.
- Adhere to local, state, and federal regulations and policies that govern provision of HIV services.
- Provide services that are responsive to client and community needs and priorities. Providers should work to remove barriers to accessing services and tailor services to individual and community needs. To ensure that clients find services accessible and acceptable, services can be offered in nontraditional settings (i.e., community-based or outreach settings); hours of operation can be expanded or altered; unnecessary delays can be eliminated and test results can be obtained more easily (e.g., with rapid testing).
- Provide services that are appropriate to the client's culture, language, sex, sexual orientation, age, and developmental level. These factors could affect how the client seeks, accepts, and understands HIV services. Providers should consider these factors when designing and providing HIV services to increase the likelihood of return for test results and acceptance of counseling and referral services.
- Ensure high-quality services. To ensure ongoing, high-quality services that serve client and community needs, providers should implement the protocols for VCT and written quality assurance and evaluation procedures.

Prioritize VCT services.

Because of the availability of antiretroviral therapy to reduce the risk for perinatal HIV transmission, all pregnant women should be recommended HIV testing regardless of setting prevalence or behavioral or clinical risk.



Determining Individual HIV Risk through Risk Screening

A client's individual HIV risk can be determined through risk screening based on self-reported behavioral risk and clinical signs or symptoms. Behavioral risks include injection-drug use or unprotected intercourse with a person at increased risk for HIV. Clinical signs and symptoms include STDs, which indicate increased risk for HIV infection, or other signs or symptoms (e.g., of acute retroviral or opportunistic infections), which might suggest the presence of HIV infection. Insufficient data exist to support the efficacy of any one risk-screening approach over others (e.g., face-to-face discussion or interviews, self-administered questionnaires, computer-assisted interviews, or simple open-ended questions asked by providers).

Settings Serving Populations at Increased Behavioral or Clinical Risk

VCT should be routinely recommended for all clients in settings where the client population is at increased behavioral or clinical risk for acquiring or transmitting HIV infection, regardless of setting prevalence. These services should be provided on-site. In these settings, clients with ongoing risk behaviors should be linked to additional HIV prevention and support services (e.g. drug or alcohol prevention and treatment), as appropriate. HIV-infected clients should receive ongoing HIV prevention counseling applicable to their personal situation.

A Framework for Implementing VCT

VCT are interrelated interventions that ideally should be integrated and offered in all settings. However, these guidelines acknowledge public and private providers' needs for flexibility. Certain providers might be able to offer prevention counseling but not an HIV test, whereas others might be able to offer an HIV test but not prevention counseling. Although all providers in settings serving populations at increased behavioral or clinical risk for HIV (e.g., STD clinics) should provide VCT on-site, not all can. These providers should maintain clear and appropriate methods of referral to providers of prevention counseling or testing elsewhere. To ensure client referral, providers who offer HIV counseling and testing should collaborate with providers serving populations at increased risk for HIV who might not provide these services.

HIV COUNSELING

HIV counseling seeks to reduce HIV acquisition and transmission through the following:



- Information. Clients should receive information regarding HIV transmission and prevention and the meaning of HIV test results. Provision of information is different from informed consent.
- HIV prevention counseling. Clients should receive help to identify the specific behaviors putting them at risk for acquiring or transmitting HIV and commit to steps to reduce this risk. Prevention counseling can involve one or more sessions.

Information

All clients who are recommended or who request HIV testing should receive the following information, even if the test is declined:

- Information regarding the HIV test and its benefits and consequences.
- Risks for transmission and how HIV can be prevented.
- The importance of obtaining test results and explicit procedures for doing so.
- The meaning of the test results in explicit, understandable language.
- Where to obtain further information or, if applicable, HIV prevention counseling.
- Where to obtain other services.

In certain settings where HIV testing is offered, other useful information includes a) descriptions or demonstrations of how to use condoms correctly; b) information regarding risk-free and safer sex options; c) information regarding other sexually transmitted and blood borne diseases; d) descriptions regarding the effectiveness of using clean needles, syringes.

For efficiency, information can be provided in a pamphlet, brochure, or video rather than a face-to-face encounter with a counselor. This approach allows the provider to focus face-to-face interactions on prevention counseling approaches proven effective with persons at increased risk for HIV infection. Information should be provided in a manner appropriate to the client's culture, language, sex, sexual orientation, age, and developmental level. Certain informational videos and large-group presentations that provide explicit information regarding correct use of condoms have proven effective in reducing new STIs and could be effective in reducing HIV.

HIV Prevention Counseling

HIV prevention counseling should focus on the client's own unique circumstances and risk and should help the client set and reach an explicit behavior-change goal to reduce the chance of acquiring or transmitting HIV. HIV prevention counseling is usually, but not always, conducted in the context of HIV testing. The client-centered



HIV prevention-counseling model involves two brief sessions. Each session might require 15--20 minutes (including testing and referral) for clients at increased risk for HIV, but could take only a few minutes for those at lower risk. In the first session, a personalized risk assessment encourages clients to identify, understand, and acknowledge the behaviors and circumstances that put them at increased risk for acquiring HIV. The session explores previous attempts to reduce risk and identifies successes and challenges in these efforts. This in-depth exploration of risk allows the counselor to help the client consider ways to reduce personal risk and commit to a single, explicit step to do so. In the second session, when HIV test results are provided, the counselor discusses the test results, asks the client to describe the risk-reduction step attempted (and acknowledges positive steps made), helps the client identify and commit to additional behavioral steps, and provides appropriate referrals.

Elements of HIV Prevention Counseling

The following elements should be part of all HIV prevention counseling sessions:

- Keep the session focused on HIV risk reduction. Each counseling session should be tailored to address the personal HIV risk of the client rather than providing a predetermined set of information. Although counselors must be willing to address problems that pose barriers to HIV risk reduction (e.g., alcohol use in certain situations), counselors should not allow the session to be distracted by the client's additional problems unrelated to HIV. Certain counseling techniques (e.g., open-ended questions [Box 5], role-play scenarios, attentive listening, and a nonjudgmental and supportive approach) can encourage the client to remain focused on personal HIV risk reduction.
- Include an in-depth, personalized risk assessment. Sometimes called "enhancing self-perception of risk," risk assessment allows the counselor and client to identify, acknowledge, and understand the details and context of the client's HIV risk. Keeping the assessment personal, instead of global, will help the client identify concrete, acceptable protective measures to reduce personal HIV risk (Box 6). The risk assessment should explore previous risk-reduction efforts and identify successes and challenges in those efforts. Factors associated with continued risk behavior that might be important to explore include using drugs or alcohol before sexual activity, underestimating personal risk, perceiving that precautionary changes are not an accepted peer norm, perceiving limited self-efficacy for successful change efforts, receiving reinforcement for frequent unsafe practices (e.g., a negative HIV test result after risk behaviors), and perceiving that vulnerability is associated with "luck" or "fate".



- Acknowledge and provide support for positive steps already made. Exploring previous risk-reduction efforts is essential for understanding the strengths and challenges faced by the client in reducing risk. Support for positive steps already taken increases the clients' beliefs that they can successfully take further HIV risk-reduction steps. For some clients, simply agreeing to an HIV test is an important step in reducing risk.
- Clarify critical rather than general misconceptions. In most situations, counselors should focus on reducing the client's current risk and avoid discussions regarding HIV transmission modes and the meaning of HIV test results. However, when clients believe they have minimal HIV risk but describe more substantial risk, the counselor should discuss the HIV transmission risk associated with specific behaviors or activities the clients describe and then discuss lower-risk alternatives. For example, if clients indicate that they believe oral sex with a risky sex partner poses little or no HIV risk, the counselor can clarify that, although oral sex with an infected partner might result in lower HIV transmission risk than anal sex, oral sex is not a risk-free behavior, particularly when commonly practiced. With newly identified or uninformed HIV-infected clients, the counselor should discuss HIV transmission risks associated with specific sexual or drug-use activities, including those in which the client might not be currently engaged.
- Negotiate a concrete, achievable behavior-change step that will reduce HIV risk. Although the optimal goal might be to eliminate HIV risk behaviors, small behavior changes can reduce the probability of acquiring or transmitting HIV. Behavioral risk-reduction steps should be acceptable to the client and appropriate to the client's situation. For clients with several high-risk behaviors, the counselor should help clients focus on reducing the most critical risk they are willing to commit to changing. The step does not need to be a personal behavior change. For many clients, knowledge of a partner's recent HIV status (and talking with the partner about getting an HIV test) might be more critical than personal behavior changes. The step should be relevant to reducing the client's own HIV risk and should be a small, explicit, and achievable goal, not a global goal ([Box 6](#)). Identifying the barriers and supports to achieving a step, through interactive discussion, role-play modeling, recognizing positive social supports, or other methods will enhance the likelihood of success. Writing down the goal might be useful. For clients with ongoing risk behaviors, referral to additional prevention and support services is encouraged.
- Seek flexibility in the prevention approach and counseling process. Counselors should avoid a "one-size-fits-all" prevention message (e.g., "always use condoms"). Behaviors that are safe for one person might be risky for another. For example, unprotected vaginal intercourse might be



unsafe with anonymous partners whose HIV status is unknown, but safe for uninfected persons in a mutually monogamous relationship. The length of counseling sessions will vary depending on client risk and comfort (e.g., adolescents might require more time than adults).

- Provide skill-building opportunities. Depending on client needs, the counselor can demonstrate or ask the client to demonstrate problem-solving strategies such as a) communicating safer sex commitments to new or continuing sex partners; b) using male latex condoms properly; c) trying alternative preventive methods (e.g., female condoms); d) cleaning drug-injection equipment if clean syringes are unavailable.
- Use explicit language when providing test results. Test results should be provided at the beginning of the follow-up session. Counselors should never ask the client to guess the test results. Technical information regarding the test can be provided through a brochure or other means so the session can focus on personal HIV risk reduction for clients with negative tests and other considerations for clients with positive or indeterminate test results (see Additional Counseling Considerations for Special Situations). In-depth, technical discussions of the "window period (i.e., the time from when a person is infected until they develop detectable HIV antibody) should be avoided because they could confuse the client and diffuse the importance of the HIV prevention message. Counselors should clarify that negative test results do not mean the client has no HIV risk and work with the client to reconsider ongoing HIV risk behaviors and the benefits of taking steps to reduce those risks. A client with ongoing risk behaviors should not be given a false sense of the safety of those behaviors (i.e., avoid statements like "whatever you were doing seems to be safe" or "continue to do whatever you are doing now").

These counseling elements are considered necessary for high-quality counseling.

- Ensure that the client returns to the same counselor. Consistency of the client and counselor relationship helps the client feel secure, reduces misunderstanding, and promotes the likelihood of effective risk reduction. Effective counseling models tended to use the same counselor for all sessions. When follow-up prevention counseling sessions must be provided by a different counselor, careful record-keeping is recommended to ensure high-quality counseling.
- Use a written protocol to help counselors conduct effective sessions. A structured protocol outlining session goals can help keep the counselor focused on risk reduction. The protocol can include examples of open-ended questions (to help a new counselor avoid closed-ended questions)



and a list of explicit risk-reduction steps (to help a new counselor avoid accepting a client's suggestion of global risk-reduction steps).

- Ensure ongoing support by supervisors and administrators. Supervisory support is essential for effective counseling. Training in HIV counseling approaches that focus on personal risk reduction is recommended for persons supervising counselors. Staff appraisals should acknowledge that completion of critical counseling elements has higher priority than completion of paperwork.
- Avoid using counseling sessions for data collection. If required, paperwork should be completed at the end of the counseling session or by staff members who are not counseling. Checklist risk assessments driven by data collection forms are detrimental to effective counseling because they can encourage even skilled counselors to use closed-ended questions, limit eye contact, and miss critical verbal and nonverbal cues. The relevance of any routinely collected data should be periodically assessed.
- Avoid providing unnecessary information. An emphasis on providing information might prompt counselors to miss critical HIV prevention opportunities and cause clients to lose interest. Discussion of theoretical HIV risks (e.g., sex with a person with hemophilia or needle exposures through tattoos) tends to shift the focus away from the client's actual HIV risk situations to topics that are more "comfortable" or easy to discuss but irrelevant to the client's risk.

Who Should Deliver Prevention Counseling

In any setting where HIV testing is provided, existing personnel can be effective counselors if they have the desire and appropriate training and employ the essential counseling elements. Advanced degrees or extensive experience are not necessary for effective HIV prevention counseling, though training is. In situations where primary health-care providers (e.g., physicians) might not be able to provide prevention counseling, auxiliary health professionals trained in HIV prevention counseling models can provide this service. The following skills and counselor characteristics were identified by specialists in the field as important for effective HIV prevention counseling:

- Completion of standard training courses in HIV prevention counseling.
- Belief that counseling can make a difference.
- Genuine interest in the counseling process.
- Active listening skills.
- Ability to use open-ended rather than closed-ended questions.
- Ability and comfort with an interactive negotiating style rather than a persuasive approach.



- Ability to engender a supportive atmosphere and build trust with the client.
- Interest in learning new counseling and skills-building techniques.
- Being informed regarding specific HIV transmission risks.
- Comfort in discussing specific HIV risk behaviors (i.e., explicit sex or drug behaviors).
- Ability to remain focused on risk-reduction goals.
- Support for routine, periodic, quality assurance measures.

Additional Counseling Considerations for Special Situations

- Persons with newly identified HIV infection. Clients with newly identified HIV infection have immediate and long-term needs. Some clients might be better prepared to receive positive test results than others. The emotional impact of hearing an HIV-positive test result might prevent clients from clearly understanding information during the session in which they receive their results. Providers should provide appropriate referrals (see **Typical Referral Needs**) and, when necessary, additional sessions.

When a client receives the test result, the provider should ensure that the client understands it. As part of HIV prevention counseling, providers should explicitly discuss and clarify any misconceptions regarding HIV transmission risk to partners associated with specific sexual or needle-sharing activities. Clients should be advised to refrain from donating blood, plasma, or organs. For sexually active clients who are not in mutually monogamous partnerships, providers should also address strategies to prevent other sexually transmitted or blood borne infections (e.g., gonorrhea, syphilis, chlamydia, herpes simplex virus, human herpes virus type 8 [the virus linked to Kaposi sarcoma], hepatitis B virus, hepatitis C virus, and cytomegalovirus).

The first few months after persons learn they are HIV infected are important for accessing medical and other support services to help them obtain treatment and establish and maintain behavior changes that reduce the likelihood of transmitting the virus to others. For example, persons with ongoing risks might be referred for prevention counseling to prevent transmission to others or for prevention case management. For all newly identified clients, a follow-up appointment 3--6 months after diagnosis is recommended by some specialists to assess whether clients were able to initiate medical care, minimize transmission risk to uninfected partners, and access other needed services (e.g., partner counseling and referral services). See guidance on partner counseling and referral services and prevention case management.



- Persons with a single, recent non-occupational HIV exposure. After a reported sexual, injection-drug use, or other non-occupational exposure to HIV, providers should refer clients for prompt initiation of evaluation, counseling, and follow-up services. Early post exposure prophylaxis could reduce the likelihood of becoming infected with HIV, although the degree to which early treatment can prevent new infection after acute non-occupational HIV exposure is unclear. Further guidance on non-occupational HIV exposure is available.
- Persons with indeterminate HIV test results. Until follow-up test results are available, persons with an indeterminate result should receive information regarding the meaning of test results. HIV prevention counseling should be the same as for a person with newly identified HIV infection. Behaviors that minimize the risk for HIV transmission to sex and needle-sharing partners should be emphasized, even if the client reports no risk behaviors. Clients with repeated indeterminate test results ≥ 1 month apart are unlikely to be HIV-infected and can be provided test results in the same way as clients with negative test results, unless recent HIV exposure is suspected (see [Indeterminate Test Results](#)).
- Persons seeking repeat HIV testing. In addition to brief prevention counseling sessions, ongoing HIV prevention counseling aimed at personal risk reduction might be useful for persons seeking repeated HIV testing who have continued HIV risk. Counselors should encourage clients to explore alternative prevention strategies and to identify and commit to additional risk-reduction steps. Clients with ongoing risk behaviors might benefit from referral to other HIV prevention and support services because their current risk behavior might be reinforced by repeated negative HIV test results or they might view HIV testing as protective. More information on prevention case management is available (see [Ongoing Exposure](#)).
- Persons who use drugs. Persons who inject drugs might also be at increased risk for acquiring HIV through unprotected sex with an HIV-infected partner. For injection-drug users (IDUs), intervention studies indicate that personalized, interactive prevention counseling models using goal-setting strategies might be effective in reducing injection-drug and sexual-risk behaviors. Evidence also supports the efficacy of community strategies (e.g., [methadone maintenance programs or other drug treatment programs, outreach programs, and syringe exchange](#)) to reduce new HIV infections among IDUs. Specialists in the field advocate recommending such strategies, along with individual HIV prevention counseling, to persons who inject drugs.
- Sex or needle-sharing partners of HIV-infected persons. Sex or needle-sharing partners of HIV-infected persons should be encouraged to have



HIV prevention counseling and testing. Partners who are HIV discordant (i.e., one person is HIV-infected and the other is uninfected) should receive counseling aimed at preventing HIV transmission from the infected to the uninfected partner, including explicit discussion and clarification of any misconceptions regarding HIV transmission risk associated with specific sexual or needle-sharing activities. In addition, many HIV-discordant couples benefit from ongoing HIV prevention counseling aimed at personal risk reduction or from couples counseling that teaches safe sexual practices and proper condom use.

- Health-care workers after an occupational exposure. After an occupational exposure, health-care workers should use measures to prevent transmission during the follow-up period. HIV-exposed health-care workers should be advised that, although HIV is infrequently transmitted through an occupational exposure, they should abstain from sex or use condoms and avoid pregnancy until they receive a negative follow-up test result. In addition, they should not donate blood, plasma, organs, tissue, or semen; if a woman is breast-feeding, she should consider discontinuing. Health-care workers should also be advised of the rationale for post exposure prophylaxis, the risk for occupationally acquired HIV infection from the exposure, the limitations of current knowledge of the efficacy of antiretroviral therapy when used as post exposure prophylaxis, the toxicity of the drugs involved, and the need for post exposure follow-up (including HIV testing), regardless of whether antiretroviral therapy is taken.

Addressing Barriers to HIV Prevention Counseling

Several factors can prevent provision of high-quality HIV prevention counseling, including unavailability of trained prevention counselors at the setting in which the HIV test was conducted, client reluctance, and low rates of client return for test results. Recommended strategies for addressing these common barriers include a) providing counseling on-site, b) enhancing client acceptance of counseling by examining and improving the counseling provided, and c) considering alternate counseling methods.

Enhance Client Acceptance of HIV Prevention Counseling

Clients who agree to HIV testing but decline HIV prevention counseling often report they lack time or already are aware of HIV transmission modes. However, experienced counselors report that clients mainly refuse counseling because they do not perceive the service to be personally beneficial. These counselors believe that most of these clients are concerned about a specific risk, which they would be willing to explore if the counseling seemed useful. Three of the most commonly reported barriers to the perceived usefulness of counseling are the type of counseling provided,



how it is recommended, and the setting of the counseling. In settings where many clients are declining counseling, these barriers and others should be examined. The counseling might be providing information only rather than addressing personal risks. Counselors might not be offering counseling in ways appropriate to the client's culture, language, sex, sexual orientation, age, or developmental level. The setting might inhibit open discussion of risk (e.g., some outreach settings are not private). Counseling skills (e.g., attentive listening, use of open-ended questions) that allow clients to participate might have been overlooked. Even when clients at increased risk refuse counseling, use of 1--2 open-ended questions that urge clients to examine their personal situations could prompt personal exploration of risk (e.g., "What were your concerns that led you to decide to get tested today?").

Ensuring High-Quality HIV Prevention Counseling

All VCT providers should conduct routine, periodic assessments for quality assurance to ensure that the counseling being provided includes the recommended, essential counseling elements.

Supervisors must be aware of HIV prevention counseling goals and necessary counselor skills. Supervisor and administrator support of HIV counseling models that focus on personal risk reduction (distinct from provision of information) is critical to effective counseling. Quality assurance for counseling should contain the following elements:

- Training and continuing education. Basic training in the use of ≥ 1 of the interactive HIV prevention counseling models aimed at personal risk reduction is recommended for counselors and supervisors. Counselors should know the communities they serve and the available referral opportunities. They also might benefit from formal training on:
 - 1) Transmission and prevention of HIV and other sexually transmitted and blood borne diseases,
 - 2) The natural history of HIV, c) recognition and treatment of opportunistic infections,
 - 3) New therapeutic agents used to treat HIV and AIDS,
 - 4) Partner counseling,
 - 5) Prevention case management, and
 - 6) Other HIV prevention and support services available in the community (e.g., services related to substance abuse assessment, cultural competence, and adolescent concerns). Additional training in specific counseling skills is also warranted (e.g., training on how to facilitate groups for counselors conducting group sessions). For training opportunities, providers or



supervisors can contact their state health department's HIV/AIDS program office.

- Supervisor observation and immediate feedback to counselors. Direct observation of counseling sessions can help ensure that objectives are being met. Supervisors can perform this task periodically (with client consent). Sessions might also be audio-taped (with client consent), or counseling can be demonstrated through role-play scenarios between the counselor and supervisor. Observation and feedback should be structured, and the outcome should be constructive, not punitive. Supervisors should support positive elements of the prevention counseling session and provide specific, constructive comments regarding content areas needing improvement. Observation and feedback should be conducted regularly for routine counseling. Staff discomfort with observation typically wanes over time; many counselors report that the sessions are useful in enhancing skills. When observation is offered routinely, clients seldom refuse to participate. After observation, supervisors should provide feedback to counselors quickly, preferably the same week. Observation and feedback forms used in research studies of client-centered HIV prevention counseling are available at <http://www.SNAP.gov/hiv/projects/RESPECT/default.htm>.
- Periodic evaluation of physical space, client flow, and time concerns. Counseling sessions should be conducted in a private space where discussion cannot be overheard. Clients should not wait for long periods between testing and counseling, and information could be provided during waiting times (e.g., through videos). Periodic time-flow analyses or client surveys can be used to evaluate adequacy of space, client flow, and length of waiting period.
- Periodic counselor or client satisfaction evaluations. Evaluations of client satisfaction can ensure that counseling meets client needs. These evaluations also can provide important feedback to counselors who otherwise might not see the benefits of what they do. Evaluations can be brief. Surveys should address whether specific counseling goals were met, the type of interaction (e.g., "who talked more, the counselor or the client?"), and, when applicable, specifics of development of the risk-reduction plan (e.g., "what was the behavior change step that you agreed to work on?"). Linking client and counselor descriptions of a particular session might be useful. Conducting such evaluations only occasionally (e.g., for 1--2 weeks once or twice a year) decreases the programmatic burden and is probably sufficient to identify problems.
- Case conferences. Regularly scheduled meetings of counselors allow supervisors to understand counselors' skills and areas that need



improvement and can help counselors learn techniques from their colleagues. Case conferences are an opportunity for counselors to discuss specific or problematic questions asked by clients, allowing providers to better understand the concerns facing clients who are HIV-infected or at increased risk for HIV. Case conferences can help offset counselor fatigue and "burn out" by providing a positive outlet for dealing with difficult situations. Discussion might focus on a hard-to-address client or specific elements (e.g., developing acceptable and practical risk-reduction plans with clients who deny the magnitude of their HIV risk). Frequency of case conferences should be balanced with client volume.

HIV TESTING

Characteristics and Applications of HIV Test Technologies

Only WHO-approved HIV tests should be used for diagnostic purposes. The WHO has approved several HIV test technologies for diagnostic use. These tests enable testing of different fluids (i.e., whole blood, serum, plasma, oral fluid, and urine). The available technologies enable provision of HIV test results during a single visit at the time of testing (with rapid tests).

The decision to adopt a particular test technology in a clinical or nontraditional setting should be based on several factors, including

- Accuracy of the test,
- Likelihood of client returning for results,
- Ease of sample collection,
- Complexity of laboratory services required for the test,
- Availability of trained personnel, and
- WHO approval of the test.

Other Test Uses

Viral load and HIV-1 p24 antigen assays are not intended for routine diagnosis but could be used in clinical management of HIV-infected persons in conjunction with clinical signs and symptoms and other laboratory markers of disease progression.

Interpreting HIV Test Results

Standard Testing Algorithm

HIV-1 testing consists of initial screening with an rapid test to detect antibodies to HIV. Specimens with a non-reactive result from the initial rapid test are considered



HIV-negative unless new exposure to an infected partner or partner of unknown HIV status has occurred. Specimens with a reactive rapid test result are retested in duplicate. If the result of either duplicate test is reactive, the specimen is reported as repeatedly reactive and undergoes confirmatory testing with a more specific supplemental test (e.g., Western blot. Only specimens that are repeatedly reactive by rapid test and positive by ELISA or reactive by Western blot are considered HIV-positive and indicative of HIV infection. Specimens that are repeatedly rapid test-reactive occasionally provide an indeterminate Western blot result, which might represent either an incomplete antibody response to HIV in specimens from infected persons or nonspecific reactions in specimens from uninfected persons. Generally, a second specimen should be collected ≥ 1 month later and retested for persons with indeterminate Western blot results.

Modified Testing Algorithms

If ≥ 2 sensitive and specific rapid HIV tests became available, one positive rapid test could be confirmed with a different rapid test. This combination has provided positive predictive value compared with the EIA/Western blot or IFA algorithm.

Positive HIV Test Results

An HIV test should be considered positive only after screening and confirmatory tests are reactive. A confirmed positive test result indicates that a person has been infected with HIV. False-positive results when both screening and confirmatory tests are reactive are rare. However, the possibility of a mislabeled sample or laboratory error must be considered, especially for a client with no identifiable risk for HIV infection.

Negative HIV Test Results

Because a negative test result likely indicates absence of HIV infection (i.e., high negative predictive value), a negative test need not be repeated in clients with no new exposure in settings with low HIV prevalence. For clients with a recent history of known or possible exposure to HIV who are tested before they could develop detectable antibodies, the possibility of HIV infection cannot be excluded without follow-up testing. A false negative result also should be considered in persons with a negative HIV test who have clinical symptoms suggesting HIV infection or AIDS.

Indeterminate HIV Test Results



Most persons with an initial indeterminate confirmatory test result who are infected with HIV will develop detectable HIV antibody within 1 month. Thus, clients with an initial indeterminate confirmatory test result should be retested for HIV infection ≥ 1 month later. Persons with continued indeterminate confirmatory test results after 1 month are unlikely to be HIV-infected and should be counseled as though they are not infected unless recent HIV exposure is suspected.

Informing Clients of Test Results

Because low rates of return for test results occur in many settings offering VCT, providers should work to ensure that clients tested for HIV infection receive their test results as quickly as possible, particularly HIV-infected clients who might benefit from earlier entry into care and initiation of antiretroviral therapy. Reducing barriers to testing can maximize the number and proportion of persons tested for HIV who receive their test results in a timely manner (see Addressing Barriers to HIV Testing). Strict confidentiality of the receipt of the HIV test and the HIV test result must be maintained.

Because knowledge of HIV status is a critical HIV prevention strategy and essential for entry into care, providers should stress to clients the importance of returning to receive their test results and establish a plan for doing so with the client. Reminder systems might be useful.

Providing Test Results during the Initial Visit through Rapid Tests

More clients receive their HIV test results with rapid tests because results can be provided at the testing visit. Rapid test technology could be useful in urgent medical circumstances (e.g., when decisions must be made regarding post exposure prophylaxis) and in nontraditional settings with low return rates (e.g., community-based or outreach settings).

During the initial visit, the provider can definitively tell clients who have had a single rapid HIV test with negative results that they are not infected, except when retesting might be indicated because of recent known or possible exposure to HIV. A reactive rapid HIV test result should be considered preliminary until the completion of confirmatory testing, and results should be carefully communicated to the client because of the possibility of a false-positive result.

The likelihood that a positive screening test truly indicates the presence of HIV infection decreases as HIV prevalence in the tested population becomes lower. Therefore, false-positive HIV test results are more likely in settings where the tested population prevalence is lower than in settings where the tested population



prevalence is higher. Further testing is always required to confirm a reactive screening test result.

Follow-up Testing in Clients with Negative HIV Test Results

A negative HIV test usually indicates the absence of HIV infection. Because recent infection cannot be excluded without follow-up testing (see Negative HIV Test Results), the appropriate timing and frequency for follow-up testing among clients with negative HIV test results has not been firmly established. Providers should consider the following factors related to individual client needs when recommending the timing and frequency for follow-up HIV testing:

- Timing of the last potential exposure.
- Probability of HIV infection given type of exposure.
- Presence or likelihood of ongoing risk behavior.
- Likelihood of returning for follow-up HIV testing, prevention counseling, and referral.
- Client anxiety.
- Provider and client relationship.
- Resource constraints.

Recent Exposure

Follow-up testing might be appropriate for clients who have negative test results but who have not had time to develop detectable antibody after a recent documented occupational or non-occupational (sexual or needle-sharing) exposure to HIV-infected persons or persons at increased risk for HIV with unknown HIV status. The timing of follow-up testing should provide assurance that the exposure did not lead to infection. Follow-up testing should be conducted in a timely manner so clients identified as HIV-infected can receive appropriate antiretroviral treatment and prevention and support services as soon as possible.

Single Possible or Known Exposure

Most infected persons will develop detectable HIV antibody within 3 months of exposure. If the initial negative HIV test was conducted within the first 3 months after exposure, repeat testing should be considered ≥ 3 months after the exposure occurred to account for the possibility of a false-negative result. If the follow-up test is non-reactive, the client is likely not HIV-infected. However, if the client was exposed to a known HIV-infected person or if provider or client concern remains, a second repeat test might be considered ≥ 6 months from the exposure. Rare cases of sero-conversion 6--12 months after known exposure have been reported. Extended follow-up testing beyond 6 months after exposure to account for possible delayed sero-conversion is not



generally recommended and should be based on clinical judgment and individual client's needs.

Ongoing Exposure

Persons with continued HIV risk behavior pose a special challenge for follow-up testing. In some settings, clients with ongoing risk represent a substantial proportion of those receiving VCT. In most circumstances, follow-up HIV testing should be recommended periodically for clients with ongoing risk behavior. Follow-up testing would monitor the client's HIV status, but also promote continued client contact, opportunities for HIV prevention counseling ([see Additional Counseling Considerations for Special Situations](#)), and referral to additional preventive and support services.

No Identifiable Risk

In general, persons with no recent identifiable risk for HIV infection should receive additional HIV prevention counseling and follow-up testing when requested. Efforts should be made to understand why these clients repeatedly seek follow-up testing. These clients should be considered for in-depth prevention counseling and referral to support services, where appropriate.

Addressing Barriers to HIV Testing

Knowledge of HIV infection status can benefit the health of individual persons and the community. Thus, HIV testing should be as convenient as possible to promote client knowledge of HIV infection status. Efforts should be made to remove or lower barriers to HIV testing by ensuring that

- 1) testing is accessible, available, and responsive to client and community needs and priorities;
- 2) anonymous and confidential HIV testing are available;
- 3) the testing process considers the client's culture, language, sex, sexual orientation, age, and developmental level; and
- 4) Confidentiality is maintained ([see Principles of HIV Counseling, Testing, and Referral](#)).

Acceptance of HIV testing is reportedly lower when clients have been tested previously and are fearful of their ability to cope with their test results. Testing is more likely to be accepted when

- 1) clients perceive their own HIV risk and acknowledge behaviors placing them at increased risk;



- 2) testing is voluntary and routinely offered to clients rather than clients having to request it;
- 3) protections for client confidentiality are in place;
- 4) anonymous testing is available;
- 5) providers recommend testing as part of appropriate medical care; and
- 6) Providers and clients perceive HIV counseling and testing to be beneficial for early diagnosis and prevention purposes.

Ensuring High-Quality Testing

Testing activities should be coordinated with state and local laboratories to ensure high-quality HIV testing through proper specimen collection, storage, and transport. Laboratory errors most often occur in the pre-analytic (i.e., specimen collection, labeling, transporting, processing, and storing) and post-analytic steps of testing (i.e., results validation and reporting) rather than during the test itself. Laboratories performing HIV testing must be enrolled in proficiency testing programs and conduct activities in accordance with regulatory standards.

HIV REFERRAL

Definition of Referral

In the context of HIV prevention counseling and testing, referral is the process by which immediate client needs for care and supportive services are assessed and prioritized and clients are provided with assistance (e.g., setting up appointments) in accessing services. Referral should also include follow-up efforts necessary to facilitate initial contact with care and support service providers.

In this context, referral does not include ongoing support or management of the referral or case management. Case management is generally characterized by an ongoing relationship with a client that includes comprehensive assessment of medical and psychosocial support needs, development of a formal plan to address needs, substantial assistance in accessing referral services, and monitoring of service delivery.

Typical Referral Needs

Clients should be referred to services that are responsive to their priority needs and appropriate to their culture, language, sex, sexual orientation, age, and developmental level. Examples of these services include

- Medical evaluation, care, and treatment. HIV-infected clients should receive or be referred to medical services that address their HIV infection (including evaluation of immune system function and screening,



treatment, and prevention of opportunistic infections). Screening and prophylaxis for opportunistic infections and related HIV-conditions (e.g., cervical cancer) are important for HIV-infected persons. In addition, co-infection with HIV and communicable diseases (e.g., TB, STDs, and hepatitis) can, if untreated, pose a risk to susceptible community members. Thus, providers of HIV testing should be familiar with appropriate screening tests (e.g., TB), vaccines (e.g., hepatitis A and B), STD and prophylactic TB treatment, and clinical evaluation for active TB disease to ensure that these communicable diseases are identified early and appropriate clinical referrals are made, even if clients forego outpatient HIV treatment.

- Partner counseling and referral services. Persons with HIV-positive test results should receive or be referred to services to help them notify their sex or injection-drug-equipment--sharing partners or spouses regarding their exposure to HIV and how to access VCT.
- Reproductive health services. Female clients who are pregnant or of childbearing age should receive or be referred to reproductive health services. HIV-infected pregnant women should be referred to facilities which can provide prevention counseling and education, initiate medical therapy to prevent perinatal transmission, and provide appropriate care based on established treatment guidelines.
- Drug or alcohol prevention and treatment. Clients who abuse drugs or alcohol should receive or be referred to substance or alcohol abuse prevention and treatment services.
- Mental health services. Clients who have mental illness, developmental disability, or difficulty coping with HIV diagnosis or HIV-related conditions should receive or be referred to appropriate mental health services.
- STD screening and care. Clients who are HIV-infected or at increased risk for HIV are at risk for other STDs and should receive or be referred for STD screening and treatment.
- Screening and treatment for viral hepatitis. Many clients who are HIV-infected or at increased risk for HIV are at increased risk for acquiring viral hepatitis (A, B, and C). All clients without a history of hepatitis B infection or vaccination should be tested for hepatitis B, and if not infected, should receive or be referred for hepatitis B vaccination.
- Other services. Clients might have multiple needs that can be addressed through other HIV prevention and support services (e.g., assistance with housing, food, employment, transportation, child care, domestic violence, and legal services). Addressing these needs can help clients access and accept medical services and adopt and maintain behaviors to reduce risk for HIV transmission and acquisition. Clients should receive referrals as appropriate for identified needs.



Implement and Manage Referral Services

Clients should receive help accessing and completing referrals, and completion of referrals should be verified. In the context of HIV prevention counseling and testing, the following elements should be considered essential to the development and delivery of referral services.

Assess Client Referral Needs

Providers should consult with the client to identify essential factors that a) are likely to influence the client's ability to adopt or sustain behaviors to reduce risk for HIV transmission or acquisition or b) promote health and prevent disease progression. Assessment should include examination of the client's willingness and ability to accept and complete a referral. Service referrals that match the client's self-identified priority needs are more likely to be successfully completed than those that do not. Priority should be placed on ensuring that HIV-infected clients are assessed for referral needs related to medical care, and prevention and support services aimed at reducing the risk for further transmission of HIV.

Plan the Referral

Referral services should be responsive to clients' needs and priorities and appropriate to their culture, language, sex, sexual orientation, age, and developmental level. In consultation with clients, providers should assess and address any factors that make completing the referral difficult (e.g., lack of transportation or child care, work schedule, cost). Referrals are more likely to be completed if services are easily accessible to clients.

Help Clients Access Referral Services

Clients should receive information necessary to successfully access the referral service (e.g., contact name, eligibility requirements, location, hours of operation, telephone number). Clients must give consent before identifying information to help complete the referral can be shared. Outreach workers and peer counselors/educators can be an important and effective resource to help clients identify needs and plan successful referrals.

Document Referral and Follow-Up

Providers should assess and document whether the client accessed the referral services. If the client did not, the provider should determine why; if the client did, the provider should determine the client's degree of satisfaction. If the services were unsatisfactory, the provider should offer additional or different referrals.



Documentation of referrals made, the status of those referrals, and client satisfaction with referrals should help providers better meet the needs of clients. Information obtained through follow-up of referrals can identify barriers to completing the referral, responsiveness of referral services in addressing client needs, and gaps in the referral system.

Ensure High-Quality Referral Services

Providers of referral services should know and understand the service needs of their clients, be aware of available community resources, and be able to provide services in a manner appropriate to the clients' culture, language, sex, sexual orientation, age, and developmental level, given local service system limitations.

Provider Coordination and Collaboration

Providers should develop and maintain strong working relationships with other providers and agencies that might be able to provide needed services. Providers who offer HIV prevention counseling and testing but not a full range of medical and psychosocial support services should develop direct, clearly delineated arrangements with other providers who can offer needed services. Coordination and collaboration promotes a shared understanding of the specific medical and psychosocial needs of clients requiring services, current resources available to address these needs, and gaps in resources.

Memoranda of agreement or other forms of formal agreement are useful in outlining provider/agency relationships and delineating roles and responsibilities of collaborating providers in managing referrals. When confidential client information is shared between coordinating providers, such formal agreements are essential. These agreements should be reviewed periodically and modified as appropriate.

Referral Resources

Knowledge of available support services is essential for successful referrals. When referral resources are not available locally, providers should identify appropriate resources and link clients with them. A resource guide should be developed and maintained to help staff members make appropriate referrals.

VCT SERVICES IN NONTRADITIONAL SETTINGS

VCT should be provided in community-based and outreach settings as well as clinical settings. When VCT are not readily available, accessible, or acceptable, persons at increased risk might not take advantage of them. Expanding VCT into nontraditional settings can be accomplished through partnership with community-based service



providers and use of rapid test. To ensure effective VCT that is responsive to client needs, providers should develop and implement written quality assurance protocols and procedures specifically for services provided in nontraditional settings.

Privacy and Confidentiality

Ensuring clients' privacy and confidentiality during VCT is essential, but could present unique challenges in some nontraditional settings. Confidentiality can more easily be breached in settings where clients and providers can be seen or heard by others. Suggested strategies for maintaining privacy and confidentiality in nontraditional settings include the following:

- Use a separated area in a mobile van.
- Use rooms with locking doors.
- Mark a specific room with a "do not disturb" or "occupied" sign.
- Designate an area in the setting that provides physical privacy.
- In parks and similar locations, seek areas with as much privacy as possible.
- Provide counseling and testing services in the client's home or other secure setting.
- Have clients return to the setting to receive test results and counseling and referral.

Informed Consent

Staff members providing VCT services should be sensitive to barriers that can interfere with obtaining true informed consent, including alcohol and drug use, mental illness, and peer pressure in venues where persons congregate or socialize. Suggested strategies for obtaining informed consent in nontraditional settings include the following:

- Schedule an appointment to test at a later date/time.
- Follow up at a later time with the client if contact information is available.
- Read the informed consent form to the client.
- Use verbal prompts to ensure that the client understands information in the informed consent form.

Counseling

Staff members working in community-based and other nontraditional settings should know and use risk-screening strategies to determine whether HIV prevention counseling should be recommended. Staff members should be trained in HIV



prevention counseling or other approaches aimed at personal HIV risk reduction. When appropriate (e.g., among IDUs), information regarding other STDs and blood borne diseases should be incorporated into the counseling sessions.

Testing

The decision to offer HIV testing in nontraditional settings should be based on several factors, including availability of resources and feasibility of providing test results and follow-up. In some cases, referral to other providers is appropriate. The selection of a specific HIV test technology should be based on logistical issues (e.g., field conditions related to collection, transport, and storage of specimens; worker safety; and the likelihood that clients will receive HIV test results). Providers must understand the extent to which field conditions can affect specimens (e.g., extreme temperatures or time lapse from collection to processing). Test specimens should be collected, stored, and transported according to manufacturer instructions.

Provision of Test Results

Clear protocols for provision of test results and prevention counseling should be developed. The following strategies might be useful in ensuring the provision of results in nontraditional settings:

- Make an appointment with the client at the time of testing to receive results.
- Provide incentives (e.g., food certificates, hygiene kits, food).
- Return to a site on a regularly scheduled basis.
- Provide reminders when contact information is available.

Referral

Staff members working in community-based and outreach settings should be trained to implement and manage referrals. Providers should establish appropriate collaborative relationships for referrals.

Record Keeping

Maintaining the confidentiality of client records is critical. Providers should develop written protocols for record keeping that address transport of client records to and from outreach venues. Strategies to maintain confidentiality of client records in nontraditional settings include the following:

- 1) Return all client records to the office immediately after the VCT session.
- 2) Use codes or unique identifiers rather than client names.



- 3) Store all records in a secured area (e.g., locked file drawers).
- 4) Provide option of anonymous counseling and testing as well as confidential counseling and testing.
- 5) Verify identity of client (e.g., match client signature with that provided for informed consent or check identification card) when providing test results.
- 6) Store paperwork in a lockbox while in outreach settings.
- 7) Password protects and encrypts electronically stored client records.

When available, clients can choose anonymous HIV testing. Procedures to ensure client anonymity (i.e., no indication of testing in the client's record and no recording of personal identifying information on laboratory requests) should be developed. Even when staff members providing VCT services know the client (including name and locating information) from other activities, the client's right to be tested anonymously should be protected.

Staff Safety

Providing services in outreach settings, might compromise staff safety, which must be considered in development of outreach protocols. Appropriate training and precautions (e.g., working in teams) should be developed in planning services in nontraditional settings.

QUALITY ASSURANCE AND EVALUATION OF VCT SERVICES

Quality Assurance

Written quality assurance protocols should be developed, made available to all staff members providing VCT services, and routinely implemented. All staff members should receive training and orientation regarding quality assurance.

Ensuring High-Quality Testing, and Ensuring High-Quality Referral Services. Quality assurance activities should address the following:

- Accessibility of services (e.g., hours of operation, location, availability of supplies and materials such as brochures, posters, test kits, safe injection materials, condoms, or lubricant).
- Compliance with written protocols for provision of service to an individual client (e.g., appropriate counseling protocols, timely return of HIV test results, referral for services responsive to client's priority needs).



- Services and materials appropriate to the client's culture, language, sex, sexual orientation, age, and developmental level.
- Staff performance/proficiency (e.g., competence, skills, and training).
- Supervision of staff members, including routine, timely feedback.
- Compliance with program guidelines and performance standards.
- Appropriateness of services to client needs, measured with client satisfaction tools (e.g., surveys or suggestion boxes).
- Record-keeping procedures, including confidentiality and security.
- Community resources (availability and collaborative arrangements).
- Collection, handling, and storage of specimens.
- Assurance of adequate supplies and consumables for the VCTs.

Evaluation

VCT services should be continually evaluated to improve services to clients and provide accountability to stakeholders. Evaluation should be interactive, involving individual persons and organizations affected by the services. In public health settings, the community goals outlined in community health planning processes and other relevant local planning processes could be incorporated.

Providers should identify the key, relevant program goals and objectives that reflect services to the program, community, and client, and then determine what data are needed to evaluate those goals and objectives. Information obtained from the evaluation should be used to plan and prioritize provision of VCT services within a setting.

Data

Data collected should have a clear, anticipated use and should not be the focus of or interfere with provision of VCT services. Data should be used to evaluate the extent to which the goals of VCT and locally defined service outcomes (e.g., targeted return rates, knowledge of HIV infection status, and proportion of successful referrals) are met. Although sound data are essential for evaluation of services, the primary purpose of each visit should be to provide the best possible service to the client. Data should be recorded outside the time reserved for VCT discussions between the provider and the client. Clients could complete a questionnaire or intake information form on admission, providers could complete the forms immediately after meeting with a client, or a combination of the two approaches could be used.

Data collection methods should be compatible with the evaluation needs and priorities of the VCT setting and locally defined service outcomes. Data should be collected with



a standard collection instrument throughout the program. Simple data collection instruments (e.g., intake forms, medical record reviews) should be developed so data can be collected unobtrusively as part of the provision of services.

Publicly funded VCT sites collect data on client demographic characteristics, risk behavior/exposure category, test acceptance, and type of site where service is provided. Most sites record the date of visit, anonymous or confidential test status, previous test result, current test result, and return for current test result for each client encounter. Additional data can be useful for evaluation of services, including date of previous test, type of current test (e.g., standard, rapid), risk-reduction plan summary, information relevant to any referrals made (e.g., provider and service description, information and materials provided, whether an appointment was made), whether the referral was received, type of service provided, dates when services were provided, and other relevant information (e.g., follow-up required, additional service needs).

Confidentiality

Any data collected or recorded must be collected or recorded in a manner that ensures the confidentiality of the client. Clear procedures and protocol manuals must be developed and used.

Ensuring High-Quality Evaluation

- The system used to collect the information must be monitored periodically to ensure data quality, which depends on the cooperative efforts of all persons providing VCT services. Periodically, data collection systems should check records at each level of the data-collection process to ensure that information is recorded consistently and completely.
- Adequate training in the use of data collection instruments should be provided to all staff members to ensure that the evaluation process is not interfering with the provision of high-quality VCT services.
- The information assembled during the evaluation process should be analyzed and reported in a timely manner to individual persons and organizations affected by the service.
- Information and feedback gained during the evaluation process should be used to improve the services offered by the site to the client.



CONCLUSION

Advances in HIV prevention and medical treatment increase the importance of VCT services. Prevention counseling and knowledge of HIV status can help persons who are HIV-infected or at increased risk for HIV infection reduce their risk for transmitting or acquiring HIV infection. Referral can help persons access relevant medical, preventive, and psychosocial support services to reduce their risk for transmitting or acquiring HIV infection. These guidelines recommend how VCT can be provided to clients who could most benefit from these services across various settings and client populations.

Glossary

AIDS:

Acquired immunodeficiency syndrome. AIDS can affect the immune and central nervous systems and can result in neurological problems, infections, or cancers. It is caused by human immunodeficiency virus (HIV).

Anonymous:

In anonymous testing, client identifying information is not linked to testing information, including the request for tests or test results.

Antiretroviral therapy:

Treatment with drugs designed to prevent HIV from replicating in HIV-infected persons. Highly active antiretroviral therapy (HAART) is an antiretroviral regimen that includes multiple classifications of antiretroviral drugs.

Confidentiality:

Pertains to the disclosure of personal information in a relationship of trust and with the expectation that it will not be divulged to others in ways that are inconsistent with the original disclosure. Confidentiality must be maintained for persons who are recommended and/or who receive HIV counseling, testing, and referral (VCT) services.

Confidential HIV test:

An HIV test for which a record of the test and the test results are recorded in the client's chart.

EIA:

Enzyme immunoassay. Sometimes referred to as ELISA (see next definition). A commonly used screening test to detect antibodies to HIV.

ELISA:

Enzyme-linked immunosorbent assay. A type of EIA (see previous definition). A commonly used screening test to detect antibodies to HIV.

Evaluation:



A process for determining how well health systems, either public or private, deliver or improve services and for demonstrating the results of resource investments.

False negative:

A negative test result for a person who is actually infected.

False positive:

A positive test result for a person who is actually not infected.

Freestanding HIV test site:

A site that provides only HIV services. Sometimes referred to as alternate test site or anonymous test site.

HIV:

Human immunodeficiency virus, which causes AIDS. Several types of HIV exist, with HIV-1 being the most common in the United States.

HIV test:

More correctly referred to as an HIV antibody test, the HIV test is a laboratory procedure that detects antibodies to HIV, rather than the virus itself.

HIV prevention counseling:

An interactive process between client and counselor aimed at reducing risky sex and needle-sharing behaviors related to HIV acquisition (for HIV-uninfected clients) or transmission (for HIV-infected clients). See also client-centered HIV prevention counseling.

Incidence:

In epidemiology, the number of new cases of infection or disease that occur in a defined population within a specified time.

Indeterminate test result:

A possible result of a Western blot, which might represent a recent HIV infection or a false-positive.

Information:

In the context of HIV counseling, information encompasses the topics HIV transmission and prevention and the meaning of HIV test results.

Informed consent:

The legally effective permission of a client or legally authorized representative (e.g., parent or legal guardian of a minor child) to undergo a medical test or procedure.

Negative predictive value:

A negative predictive value estimates the probability that a person with a negative diagnostic test result will actually not be infected.

Non-occupational HIV exposure:

A reported sexual, injection-drug--use, or other non-occupational HIV exposure that might put a patient at high risk for acquiring HIV infection.

Occupational HIV exposure:

An occupational exposure to HIV that occurs during the performance of job duties. Defined as a percutaneous injury (e.g., a needlestick or cut with a sharp



object), contact of mucous membranes, or contact of skin (especially when the exposed skin is chapped, abraded, or afflicted with dermatitis or the contact is prolonged or involving an extensive area) with blood, tissues, or other body fluids to which universal precautions apply.

Perinatal HIV transmission:

Transmission of HIV from the mother to the fetus or infant during pregnancy, delivery, or breast-feeding.

Positive predictive value:

A positive predictive value estimates the probability that a person with a positive diagnostic test result will actually be infected.

Positive test:

For HIV, a specimen sample that is reactive on an initial ELISA test, repeatedly reactive on a second ELISA run on the same specimen, and confirmed positive on Western blot or other supplemental test indicates that the client is infected.

Prevalence:

The number or percentage of persons in a given population with a disease or condition at a given point in time.

Prevention counseling:

An interactive process between client and counselor aimed at reducing risky sex and needle-sharing behaviors related to HIV acquisition (for HIV-uninfected clients) or transmission (for HIV-infected clients). See also client-centered HIV prevention counseling and HIV prevention counseling.

Quality assurance:

An ongoing process for ensuring that the VCT program effectively delivers a consistently high level of service to the clients.

Rapid HIV test:

A test to detect antibodies to HIV that can be collected and processed within a short interval of time (e.g., approximately 10--60 minutes).

Referral:

The process through which a client is connected with services to address prevention needs (medical, prevention, and psychosocial support).

Risk assessment:

Risk assessment is a fundamental part of a client-centered HIV prevention counseling session in which the client is encouraged to identify, acknowledge, and discuss in detail his or her personal risk for acquiring or transmitting HIV.

Risk screening:

A brief evaluation of HIV risk factors, both behavioral and clinical, used for decisions about who should be recommended HIV counseling and testing. Risk screening is different from risk assessment.

Screening test:

An initial test, usually designed to be sensitive, to identify all persons with a given condition or infection (e.g., enzyme immunoassay [EIA] or enzyme-linked immunosorbent assay [ELISA]).



Sensitivity:

The probability that a test will be positive when infection or condition is present.

Sero-conversion:

Initial development of detectable antibodies specific to a particular antigen; the change of a serologic test result from negative to positive as a result of antibodies induced by the introduction of antigens or microorganisms into the host.

Specificity:

The probability that a test will be negative when the infection or condition is not present.

Tuberculosis (TB) disease:

Active disease caused by *Mycobacterium tuberculosis*, as evidenced by a confirmatory culture, or, in the absence of culture, suggestive clinical symptoms, including productive cough lasting ≥ 3 weeks, chest pain, hemoptysis, fever, night sweats, weight loss, and easy fatigability. Active TB is a communicable disease that is treatable, curable, and preventable, and persons with active TB disease should be under the care of a health-care provider. Active TB disease could indicate immune deficiency. For HIV-infected persons, active TB disease is considered an opportunistic infection and a qualifying condition for AIDS.

Tuberculosis (TB) infection:

Infection with the bacteria *M. tuberculosis*, as evidenced by a positive tuberculin skin test (TST) that screens for infection with this organism. Sometimes, TST is called a purified protein derivative (PPD) or Mantoux test. A positive skin test might or might not indicate active TB disease (see tuberculosis disease). Thus, any person with a positive TST should be screened for active TB and, once active TB is excluded, evaluated for treatment to prevent the development of TB disease. TB infection alone is not considered an opportunistic infection indicating possible immune deficiency.

Voluntary HIV testing:

HIV testing that is offered free of coercion. With voluntary HIV testing, participants have the opportunity to accept or refuse HIV testing.

Western blot:

A laboratory test that detects specific antibodies to components of a virus. Chiefly used to confirm HIV antibodies in specimens found repeatedly reactive using ELISA.