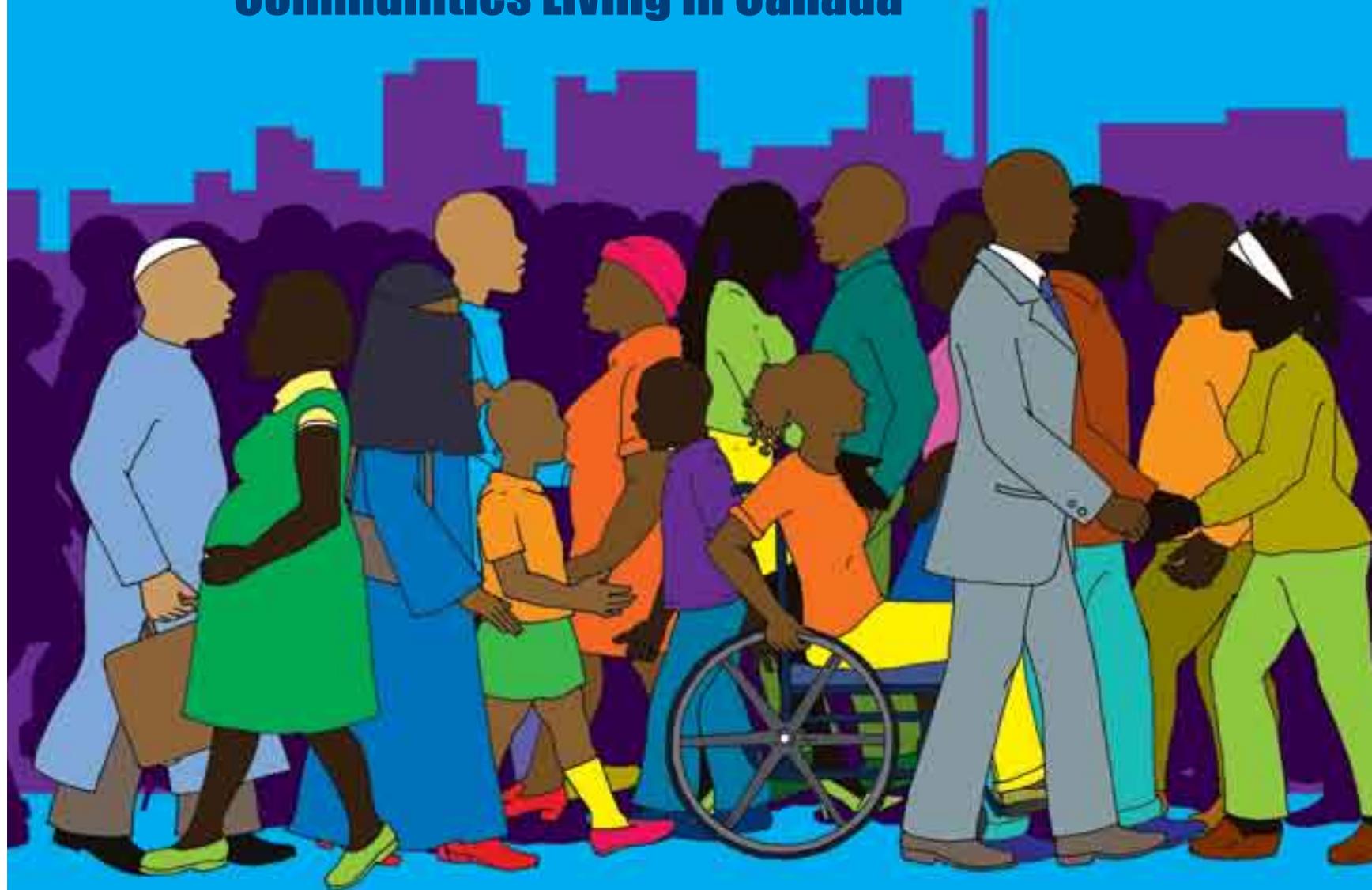


# PART II

## Service Providers' HIV Prevention Manual for African and African Caribbean Communities Living in Canada



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African and Caribbean HIV/AIDS Community Capacity Building Project



**CACVO**  
Le conseil des africains  
et caribéens sur le  
VIH/SIDA en Ontario



**ACCHO**  
African and Caribbean  
Council on HIV/AIDS  
in Ontario

**HIV Prevention Guidelines and Manual:  
A Tool for Service Providers serving African  
and African Caribbean Communities in Canada**

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The opinions expressed do not necessarily reflect the official views of the Public Health Agency of Canada or the AIDS Bureau, Ministry of Health and Long Term Care in Ontario.

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# Service Providers' HIV Prevention Manual for African and African Caribbean Communities Living in Canada

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## 1. SERVICE PROVIDER PREPARATION

In preparation for working with people from African and African Caribbean communities in Canada service providers should:

- Understand the basics of HIV transmission
- Understand how co-factors influence HIV transmission
- Share information focusing particularly on:
  - using plain language as opposed to medical terms
  - using clear diagrams to illustrate HIV transmission and prevention rather than relying on verbal information only
  - identifying non-verbal cues from clients about issues related to risk assessment, counseling and HIV prevention education
  - developing appropriate and non-judgemental responses
  - identifying and selecting appropriate interpreters particularly when issues of confidentiality and privacy are of concern to clients.

## 2. HIV TESTING

HIV testing is the cornerstone of effective HIV prevention initiatives and the only way for a person to know his / her HIV status. Pre- and post-test counseling:

- Requires service providers to share information about how HIV is transmitted
- Assists individuals with making timely decisions about when to access emotional support and medical interventions, as well as taking the necessary precautions to prevent HIV transmission to others

### 2.1 HIV STATUS

HIV status is determined by testing for HIV antibodies, which are produced by the body in response to HIV infection and develop within two to eight weeks after infection. The change in antibody status from HIV negative to HIV positive is called **seroconversion**. When someone is **HIV-positive** (HIV+), that means the person has tested positive for HIV infection; when someone is **HIV-negative** (HIV-) that means the person has tested negative and does not have an HIV infection.



HIV risk assessment involves a thorough assessment of the person's risk of exposure to and transmission of HIV. Trained service providers can help identify factors as well as activities that may contribute to HIV transmission. Service providers should ensure that all clients are educated about HIV testing and prevention interventions, including when and where to access HIV testing and how to effectively implement an HIV prevention plan.

Service providers should explain to clients that:

- An HIV test is a simple blood test
- It is voluntary, and the person must explicitly request and/or agreed to be tested
- There are different testing options [see 2.3, HIV Testing Options] with different benefits and risks
- Not all testing sites offer all types of HIV testing; service providers can refer individuals to the type of testing options that best suits the individuals needs including sites that offer culturally and linguistically appropriate testing and counselling
- Receiving pre-test counselling prior to taking an HIV test is a client's right
- To overcome barriers regarding testing, being tested in another community is an option

To reduce anxiety, service providers should explain the testing process and the approximate length of time it takes to receive test results. For more information about HIV testing sites, contact the local public health unit, AIDS service organization or a medical clinic. (Adapted from FAQ, Canadian Health Network)

## 2.2 INFORMED CONSENT

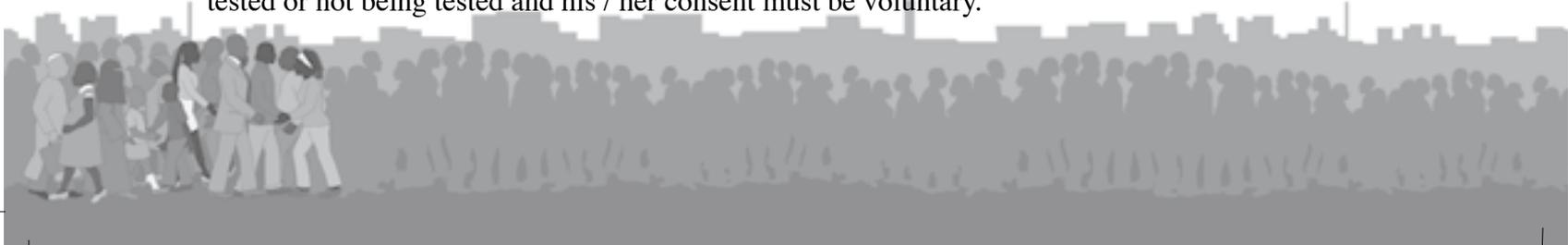
In Canada, except in a few well-defined circumstances, people should be tested only with their *informed, voluntary and specific consent, with counseling before and following testing and when confidentiality of results or anonymity of testing can be guaranteed.*

According to the Canadian Medical Association (CMA), Counseling Guidelines for HIV Testing, "informed consent cannot be implied or presumed." Obtaining informed consent involves:

- Educating/disclosing advantages and disadvantages of testing for HIV,
- Listening, answering questions and seeking permission before administering an HIV test

**2**

To provide informed consent for HIV testing, a patient must be competent (able to make decisions for themselves); must understand the purposes, risks, harms and benefits of being tested or not being tested and his / her consent must be voluntary.



## 2.3 HIV Testing Options

**Anonymous Testing:** Results cannot be linked to the person being tested. A code known only to the patient is used on the test requisition form. Neither the service provider ordering the test nor anyone else knows the patient's identity. The test results will **not** be recorded in the person's medical record or attached to the person's health card number.

If clients have concerns about confidentiality, immigration related issues or eligibility for insurance, an anonymous HIV test may be the best choice. Anonymous testing often eliminates most of the barriers to being tested.

**Non-Nominal Testing:** A code known to the person and the service provider is used to order the test instead of the person's name. The test results will be made available to the person's doctor or health care provider and recorded in the person's medical record and attached to the person's health card number.

**Nominal Testing:** The person's name will appear on the test requisition forms and results, and the test results will be made available to the person's service provider and recorded in the person's medical record and attached to the person's health card number.

To find out the degree of anonymity and confidentiality for their HIV test, clients can ask the following questions before agreeing to be tested:

- Will the test-request form have my name on it?
- Will the test result have my name on it?
- Will the test result be recorded in my medical record?
- Will my test result be reported to the public health authorities?
- What happens before I take the test?



### 3. RISK ASSESSMENT

A risk assessment involves taking into account and identifying all the factors – biological, social and economic – that may contribute to a person's risk. For a risk assessment to be successful, service providers must be:

- Well trained [see Manual 1.0, HIV Prevention Guidelines 2.2 to 2.2.3.10.2]
- Comfortable asking detailed questions
- Able to provide unbiased information
- Able to develop a basic rapport with an individual during the assessment

To develop a rapport, the service provider and service delivery agency must integrate an anti-racist, anti-oppression approach. Receiving trustworthy non-racist, non-sexist, non-heterosexist/homophobic or culturally appropriate information from service providers is crucial for effective information sharing.

During the risk assessment, the service provider will help the individual assess risk of exposure to and transmission of HIV. Historically service providers focused on **what** people were doing (i.e., oral, anal or vaginal sex) rather than **how** they were doing it (protected vs. unprotected sex, clean needles/crack pipes vs. used needles/ broken crack pipes).

Individuals have different perceptions of risk and how much risk they are willing to take. These perceptions may change over the course of time and/or type of relationship, so it is imperative that each individual understands the dynamics of HIV transmission and how they interact to create an individual's risk profile [see, HIV Prevention Guidelines 2.2.3-2.3.10.2].

These distinctions are important because African and African Caribbean people have struggled with factors such as stigma, discrimination and stereotyping in Canada and abroad. Reducing these factors can help African and African Caribbean people avoid engaging in denial or other coping mechanisms that may inhibit their ability to proactively select and practice HIV prevention in day-to-day living.



### 3.1 RISK ASSESSMENT QUESTIONS

Here is a list of questions that can be used to guide a risk assessment. Service providers should use the questions as opportunities to educate individuals and increase their understanding of HIV transmission and prevention (i.e., when asking the question, explain how or why it is considered a risk for HIV transmission). This approach supports client-centered service and dispels myths or misinformation.

Remember to go slowly enough to allow a person to reflect before answering the question. These questions are very personal and may trigger unwanted memories or forgotten experiences. Ask about four questions and then use a comfortable silence or light humour, if appropriate, to break any tension.

- Are you or your partner from an area where HIV is a generalized epidemic (i.e., greater than 1% of the general population is diagnosed with HIV or AIDS)?
- Were either or both of your parents HIV-positive during or after your birth? If so, were you tested for HIV?
- Did you have a blood transfusion in Canada, between 1978-1985? Blood screening began in November of 1985.
- Did you ever receive a blood transfusion outside of Canada? If so when and where? By 1990, universal precautions for protecting most blood supplies were in place in most parts of the world. Explain that the risk of HIV infection via blood transfusion and organ donation is low.
- Have you received a transfusion of blood products?
- Have you had surgery or emergency care in a field camp/impromptu setting with or without trained medical personnel (i.e., during war/civil unrest)?
- Have you ever been raped (i.e., in childhood and/or during war/civil unrest, marital rape, date rape, acquaintance rape)?
- Have you had female genital mutilation (circumcision)?
- How often do you have unprotected penetrative vaginal, anal, oral sex or vulva to vulva rubbing where pre-ejaculate, ejaculate, vaginal fluid or menstrual blood are present?
- How often do you use latex and/or polyurethane condoms or dental dams during oral, anal and vaginal sex and vulva to vulva rubbing?
- How often do you negotiate when and how you will have sex (i.e. Is consent considered automatic? Can you say no?)
- Are you aware of your past or current sexual partner(s) HIV status?
- Has your current or past male partner(s) had sex with men?
- Has your current or past partner(s) used injection drugs and/or smoked crack cocaine?
- Have you and/or your past or current partner(s) shared needles?
- How often do you share needles?
- Do you have access to clean needles or bleach to clean needles?
- How likely is it that your needle-sharing partner is HIV-positive?



### *3.1 Risk Assessment Questions Continued*

- What influence does the substance you inject have on your judgement and your decision to practice safer needle use and safer sex?
- How likely are you to share a crack pipe?
- How often do you share crack pipes?
- Do you have access to clean heat-resistant and unbroken crack pipes?
- What influence does crack have on your judgement and your decision to practice safer needle use and safer sex?

The information for risk assessment was adapted from Toronto's Hassle Free Clinic counseling guidelines.



## 4. HELPING CLIENTS DEVELOP AN HIV PREVENTION PLAN

Service providers are better able to share knowledge with clients when they take the time to establish a rapport with the client (e.g., authentically inquiring about the person's life and activities). Service providers should select various tools for knowledge sharing such as having full-size anatomy diagrams and/or three dimensional anatomy models with all relevant parts clearly labeled in languages spoken by clients. Demonstrating HIV transmission and prevention using diagrams, three dimensional anatomy models and scenarios, provides a variety of opportunities for clients to learn, understand and process the information.

It is important to discuss with the client whether (if at all) he/she considers HIV prevention a priority. The dialogue will provide insight about how to share your knowledge about HIV transmission and prevention with the client.

Service providers trained to deliver HIV transmission and prevention information can support HIV prevention efforts by encouraging and assisting individuals to map-out/develop a personal HIV prevention plan. Service providers must be aware of the barriers that may inhibit some people from practicing HIV prevention [see HIV Prevention Guidelines 2.3 to 2.3.10]

This section provides information on barriers as well as insights on how to develop respectful strategies to overcome individual objections and rebuffs. Effective service provision requires that service providers not generalize/stereotype African and African Caribbean people living in Canada instead service providers should:

- Ask questions/use listening skills and respond in a respectful, meaningful way that demonstrates some measure of cultural competence.
- Inform clients about the concerted efforts that African and African Caribbean people in Canada (such as ACCHO) are making to recruit and educate service providers in order to provide culturally competent, timely services that will help reduce HIV transmission among communities of the African Diaspora living in Canada

When sharing information about HIV prevention interventions, the service provider will:

- Review and explain the list of HIV prevention options [see 5.0] with the person.
- Support the person in identifying prevention options best suited for his/her type and frequency of sexual activity .Often service providers are not privy to the client's continuum of sexual activity. When this is the case providing all



information in a non biased manner is the best approach.

- Help the person identify any barriers [see HIV Prevention Guidelines 2.3 to 2.3.10] to consistent use of HIV prevention options (e.g., financial limitations, communication with partner, implicit and explicit beliefs about HIV transmission).
- Brainstorm with the client and identify strategies the person can use to incrementally increase use of self-selected safer sex/drug use method(s).
- Support the person in identifying a date to start implementing the HIV prevention intervention or testing schedule and a date for full and consistent implementation.
- Set a follow-up date and referral to additional support services/programs (e.g., a therapist/counsellor, community groups/activities, housing advocacy worker. HIV transmission is inextricably linked to the determinants and social determinants of health).
- Help the person identify their own success indicators or “milestones” to evaluate progress in implementing HIV prevention methods and testing schedule.
- Support the person in identifying what is and is not working in their HIV prevention practice; brainstorm with the client about possible adjustments that may assist the person in attaining his/her goal.
- Support the person’s process of implementing identified adjustments.
- Work with the person to re-evaluate and modify as required.

Preventing HIV transmission involves changes at both the individual and systemic level. Individual behaviour – such as practising safer sex and safer drug use will reduce the possibility and probability of transmitting HIV. The use of either the male or female condom, as well as other HIV prevention methods reduces the risk of HIV transmission.

## 4.1 CHOOSING APPROPRIATE PREVENTION METHODS

Service providers should stress:

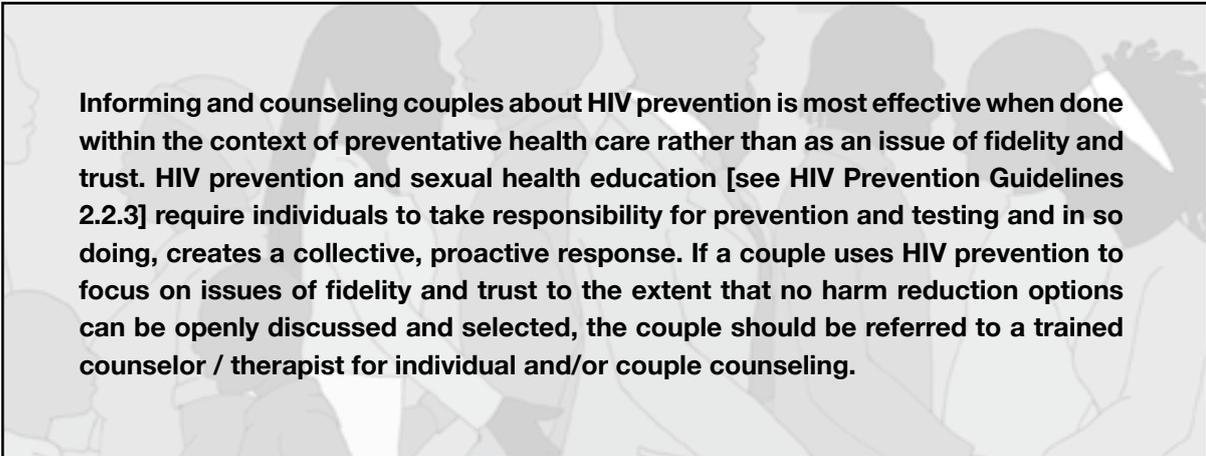
- The importance of using appropriate HIV prevention methods consistently, as well as being tested regularly
- That although HIV testing is important it is not a substitute for HIV prevention
- That HIV prevention is each person’s responsibility and that a person diagnosed with a positive HIV status is legally responsible for disclosing his/her HIV positive status before engaging in unprotected sex [contact the Canadian HIV/AIDS Legal Network, [www.aidslaw.ca](http://www.aidslaw.ca) or the HIV/AIDS Legal Clinic of Ontario, [www.halco.org](http://www.halco.org) for more information]



## 4.2 PREVENTION STRATEGIES FOR PEOPLE MOVING FROM A SHORT-TERM TO A LONG-TERM RELATIONSHIP

HIV prevention guidelines typically recommend the consistent, systematic use of either the male or female condom whenever vaginal, anal or oral sex takes place regardless of marital status and length of relationship. However, some people may choose to discontinue condom use, when they move from a short-term to a long-term relationship. Service providers should:

- Inform clients that it is important to take an HIV test and receive the results before discontinuing condom use
- Inform the client to use condoms within the relationship if unprotected sexual activity is taking place prior to being tested
- Inform clients that they and their partner(s) should be tested before attempting to conceive a child, in order to reduce the risk of HIV transmission



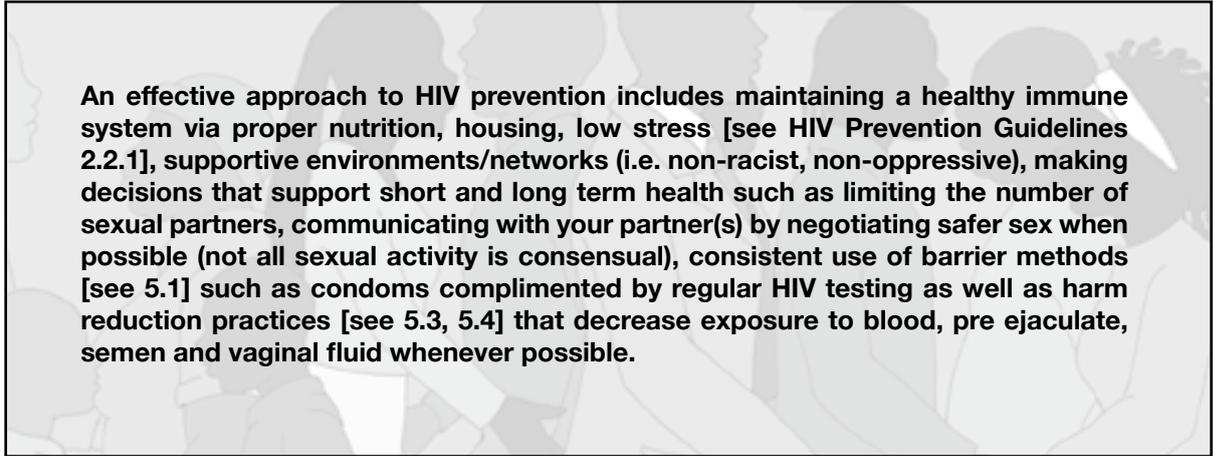
**Informing and counseling couples about HIV prevention is most effective when done within the context of preventative health care rather than as an issue of fidelity and trust. HIV prevention and sexual health education [see HIV Prevention Guidelines 2.2.3] require individuals to take responsibility for prevention and testing and in so doing, creates a collective, proactive response. If a couple uses HIV prevention to focus on issues of fidelity and trust to the extent that no harm reduction options can be openly discussed and selected, the couple should be referred to a trained counselor / therapist for individual and/or couple counseling.**



## 5. INTERVENTIONS: HIV PREVENTION

Some people think that they can tell who has HIV and protect themselves by not having sex with people they “think” are HIV positive (often based on stereotypes). The simple fact is that no one can tell who is HIV-positive, particularly during the asymptomatic stage [see Appendices 3.0 Clinical Progression of HIV]. It is therefore important for service providers to stress that HIV transmission may occur whenever unprotected sex takes place and that key factors [see HIV Prevention Guidelines 2.3-2.10] within the context of everyday life greatly impact on the risk of exposure and transmission of HIV.

Sections 4.0 to 5.2.1 and 5.3.1 to 5.4 provide a broad range of HIV prevention methods that service providers can discuss with clients. As many people have not had an opportunity to learn about, select and use HIV prevention methods, service providers must identify opportunities to respectfully and openly discuss the value of HIV prevention as it relates to the client values and priorities.



**An effective approach to HIV prevention includes maintaining a healthy immune system via proper nutrition, housing, low stress [see HIV Prevention Guidelines 2.2.1], supportive environments/networks (i.e. non-racist, non-oppressive), making decisions that support short and long term health such as limiting the number of sexual partners, communicating with your partner(s) by negotiating safer sex when possible (not all sexual activity is consensual), consistent use of barrier methods [see 5.1] such as condoms complimented by regular HIV testing as well as harm reduction practices [see 5.3, 5.4] that decrease exposure to blood, pre ejaculate, semen and vaginal fluid whenever possible.**

### 5.1 HIV BARRIER PREVENTION OPTIONS

Sections 5.1.1 to 5.4, contain a menu of safer sex and drug use options that provides clients with a variety of methods to prevent HIV transmission.



### 5.1.1 About Condoms

Male and female condoms made of latex or polyurethane are an effective barrier and one of the most important tools in preventing HIV transmission. Female condoms are made of polyurethane, and male condoms are available in both latex and polyurethane. Compared to latex condoms, polyurethane condoms are stronger but considerably more expensive. Male condoms made of polyurethane are easier to put on because they can be pulled on rather than rolled on; however, they do not stretch like latex, which may make it more difficult to ensure a proper fit. Unlike latex condoms, polyurethane does not breakdown when exposed to heat and light so they may be stored for up to five years. Polyurethane also conducts heat better than latex so the condoms have a more natural feel. People who are allergic to latex can use polyurethane condoms.

Note: Lambskin condoms do not have to meet the same standards as latex condoms (see box) and, when used alone, are not effective in preventing HIV because the virus can pass through the membrane. People who are allergic to latex can use a lambskin condom covered by a latex condom (i.e., double bagging). If the receiving partner is allergic to latex, the lambskin condom can be used over top of a latex condom. (Canadian AIDS Society, 2004.)

#### Condom Quality Control

In Canada, condoms are classified as medical devices and subjected to regulatory control under the Food and Drugs Act and Medical Devices Regulations, administered by the Health Protection Branch of Health Canada. The Regulations set out standards that condom manufacturers must meet, which apply to all types of condoms available for distribution and sale in Canada -- including those sold through vending machines and by mail order. For example, all condoms must be properly packaged and labeled, and all manufacturers must notify the Branch of the sale of condoms. Latex condoms must meet design, length and width requirements as well as specific tests for water leakage, bursting volume and bursting pressure. Manufacturers of condoms made from synthetic materials (e.g., the polyurethane female condom) must submit data about the safety and effectiveness of their product and demonstrate that it provides an effective barrier to micro-organisms and sperm.



## 5.1.2 Male Condom Use

**If condoms are used properly, they can substantially reduce the risk of HIV transmission. Therefore, it is important to encourage clients to follow these guidelines.**

**Condoms require getting used to. Men who are first-time condom users should practice using them by themselves before using one with a partner. Men should use condoms during masturbation to become accustomed to the feel of a condom on the penis, which makes putting on the condom easy. To ensure their partners are using condoms properly and to be more comfortable about their role in making condoms a regular part of intercourse women and men can also practice condom use by putting the condom on a penis-like object ie. dildo, cucumber.**

**Thicker latex condoms have been designed specifically for anal sex. Although there is little evidence to suggest that they are more effective than regular condoms, there is some evidence that condoms break or slip more frequently when used in anal sex although this may be due to higher levels of improper use.**

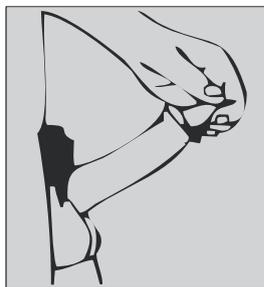
## HOW TO USE A LATEX CONDOM

**1**



Open the package carefully. Rough handling and long finger nails can damage condoms. The condom will only unroll one way. Figure out which way it unrolls. Do not open the package until you are ready to use the condom. Store packages in a cool, dry place.

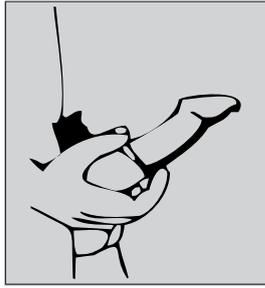
**2**



Gently press the air out of the condom tip as air may cause breakage. A generous dab of water-based lubricant in the tip of the condom increases sensation. On the outside, it helps prevent condom breaks. Use only water-based lubricants. Do not use oil-based lubricants as they may damage the condom.



**3**



Place the condom on the head of the erect penis and gently unroll it so the condom covers the entire penis. If uncircumcised, pull back the foreskin before rolling on the condom. Remove any air remaining at the tip by gently pressing the air out toward the base of the penis.

**4**



After ejaculation, withdraw the penis while it is still erect. Hold on to the rim of the condom as you slowly withdraw so that the condom does not slip off. Discard used condom in the garbage do not flush down the toilet.

(Canadian AIDS Society, 2004)

## Buying, Storing and Using Condoms

There are many different brands of condoms. Try several to find the most comfortable. Always use condoms before the expiration date on the package. If in doubt, get a fresh supply.

Condoms should be stored in a cool, dry place. Exposure to heat can break down latex. Polyurethane condoms are not affected by heat or light and may be stored for up to five years.

Carefully open the condom package; teeth or fingernails can tear the condom.

Use a new condom for each act of sexual intercourse (oral, anal or vaginal sex). Hold the condom over an erect penis. If a penis is uncircumcised, pull back the foreskin before putting on the condom. Put the condom on by pinching the reservoir tip and unrolling it all the way down the shaft of the penis from head to base. If the condom does not have a reservoir tip, pinch it to leave a half-inch space at the head of the penis for semen to collect after ejaculation. If the condom breaks, withdraw the penis and put on a new condom before resuming intercourse.

Use only water-based lubrication (oil-based lubricants, such as cooking or vegetable oil, baby oil, hand lotion or petroleum jelly will cause the condom to deteriorate and break).

Withdraw the penis after ejaculation while still erect, grasp the rim of the condom between the fingers and slowly withdraw the penis (with the condom still on) so that no semen is spilled.

Remove the condom, making certain that no semen is spilled. Carefully dispose of the condom. Do not reuse it. (Canadian AIDS Society, 2004)



### 5.1.3 Female Condom Use

The female condom is now approved and available for sale in Canada (availability may vary). For women who have experienced FGM (particularly Type III and Type IV) the female condom may not be physiologically appropriate if less than two fingers can be inserted into the vagina. The female condom is the first generation of HIV-specific vaginal barrier methods. It is a sheath that lines the vagina, with two flexible plastic rings at either end. The closed end is inserted in the vagina and the open end stays outside the body against the outer lips of the vagina. The condom comes with a water-based lubricant to make insertion easier and to allow comfortable movement during sex. It may be inserted into the vagina up to eight hours before intercourse.

Testing of the female condom indicates that:

- Semen leakage after sex is less frequent than with a male condom
- The risk of semen getting into the vagina due to the condom being dislodged is one-third lower
- There is little risk of infection or irritation (even when the female condom is left in the vagina over night); so even women with very sensitive skin can use it
- Many women and their partners find it acceptable, but some people are concerned that the part of the condom which stays outside the vagina is aesthetically unappealing and some women have reported discomfort with the rings (These problems tend to be reduced as people become more familiar with the device.<sup>1</sup>)

Because the female condom is made of polyurethane rather than latex, it is both sturdier than the male condom and more expensive to manufacture.<sup>2</sup> Several studies have been conducted to determine the safety and acceptability of reusing the female condom in an effort to make it more affordable and accessible. Based on expert consultations, the World Health Organization (WHO) does not recommend or promote reuse of female condoms.<sup>3</sup> However, recognizing the urgent need for risk-reduction strategies for women who cannot or do not have access new condoms, the WHO developed a draft protocol for safe handling and preparation of female condoms intended for reuse, which is based on the best available evidence but has not been extensively studied for safety and efficacy in human use. [For the WHO protocol and other resources relating to the reuse of the female condom, see [www.reusefemalecondom.org](http://www.reusefemalecondom.org).]

The female condom gives women the opportunity for more control over their own protection. Like the male condom, proper use is crucial to its effectiveness. Service providers should encourage clients to follow guidelines for use.

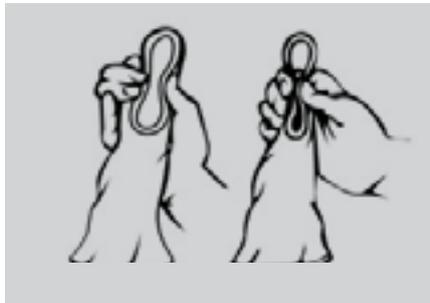
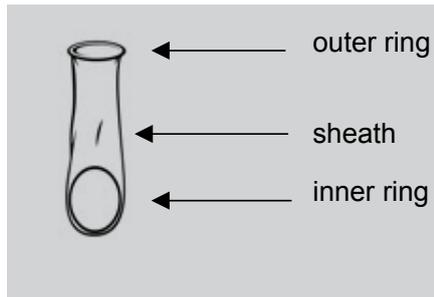
<sup>1</sup>Family Planning Perspectives Digest, 33(4), July/August 2001.

<sup>2</sup>Note that the studies have been conducted only on the Reality™ female condom, and the WHO guidelines apply exclusively to that product.

<sup>3</sup>XIV International AIDS Conference in Barcelona, July 2002



## HOW TO USE A FEMALE CONDOM



1. Look at the condom and make sure it is completely lubricated outside and inside. Add more lubricant as needed.
2. With one hand squeeze the inner ring.
3. With the other hand, separate the outer lips of the vagina.
4. Push it up the vagina as far as it will go. The inner ring will sit comfortably over the cervix.
5. The outer ring should remain visible on the outside of the vagina.
6. When both partners are ready, simply guide the penis into the female condom.
7. After ejaculation twist the outer ring and gently pull the condom out.
8. Throw the condom in the garbage and NOT in the toilet.

(Female Condom Testing and Counselling Guide)



## USING A FEMALE CONDOM

1. Be careful when you open the package that you do not tear the condom.
2. Choose a position that is comfortable: squat, raise one leg or sit. Look at the condom to be sure it is completely lubricated on the outside and the inside.
3. While holding the condom at the closed end, grasp the soft, flexible inner ring and squeeze it with the thumb and middle finger, or thumb and second finger, so it becomes long and narrow.
4. With the other hand, separate the outer lips of the labia.
5. Gently insert the inner ring completely into the vagina. Feel the inner ring go up and move into place.
6. Next, place the index finger on the inside of the condom, and push the inner ring up as far inside as it will go. The inner ring should be behind the pubic bone. Be sure the sheath is not twisted. The outer ring remains outside of the vagina.
7. The condom is now in place and ready for use with a partner. The sheath loosely lines the vaginal wall.
8. Gently guide the penis into the sheath's opening with your hand, making sure the penis is not slipping between the outside of the sheath and your vagina. Use enough lubricant so that the condom stays in place during sex. If the condom is pulled out or pushed in, there is probably not enough lubricant. Add more to the shaft of the penis and reinsert.
9. To remove the condom, twist the outer ring and gently pull it out. Try to do this before standing up to avoid semen spillage.
10. Throw the condom out in the garbage—do not flush it down the toilet.

Toronto Public Health, 2003

Although the female condom has not been designed or approved for use during anal intercourse, it is being used by many people for this purpose. One study that examined the use of the female condom by men having sex with men found that 57% of the men reported problems, including rectal bleeding by the receiving partner<sup>4</sup>. To reduce trauma or discomfort during anal sex, use lubricant inside, remove the inner ring and place the condom on an erect penis. (Toronto Public Health, 2003)

### 5.1.4 Dental Dams

Dental dams are relatively thick sheets of latex squares developed by dentists to isolate a tooth for infection control purposes. Although cunnilingus (mouth to vagina) and anilingus (mouth to anus) are negligible to low risk for HIV transmission, people who want to reduce risk can use dental dams, based on the following guidelines:

- Rinse off with water to get rid of powder coating

<sup>4</sup>Gross M, Buchbinder SP, Holte S, Celum CL, Koblin BA, Douglas JM. Use of reality female condoms for anal sex by US men who have sex with men. HIVNET Vaccine Preparedness Study Protocol Team. Am J Public Health, 89(11):1739-41. 1999 Nov.



- Put some water-based lubricant on the partner's vagina or anus and place a new latex square so that it completely covers the vaginal or anal opening
- Hold the dam firmly in place with both hands, and apply mouth and tongue to the unlubricated side of the dam only
- When finished, safely dispose of the dental dam in the garbage do not flush down the toilet

Many people find that dental dams are small, difficult to use and greatly reduce sensation. Dams are often available only from medical supply stores. An alternative that some people find more accessible and easier to use is to cut open an unused, unlubricated condom or latex glove and place it over the vagina or anus and use the method described above.

Some AIDS educators advocate the use of plastic wrap as a risk-reduction tool for cunnilingus and anilingus. Only one brand, Glad\* has been tested in the laboratory. It was found to be effective in preventing transmission of the herpes simplex virus. It has not been tested as a barrier for HIV. Plastic wrap is not subject to the quality control testing for filtering viruses and micro-organisms that condoms require, and it is not as elastic as latex, but it is cheap, accessible and easy to use. Plastic wrap marketed as microwavable is more porous than the conventional plastic wrap, and is not recommended for use during sexual activity. (Canadian AIDS Society, 2004)

### 5.1.5 Latex Gloves and Finger Cots

Latex gloves cover the entire hand including the base of the wrist. A finger cot(s) is latex and covers an individual finger, rather than the entire hand. Both reduce the risk of HIV transmission via open cuts, sores, lesions, burns or rashes on the hands or fingers when used prior to entering the vagina or anus. They are recommended for use during fingering and fisting. People who are allergic to latex or to the powder inside latex gloves can use polyurethane gloves instead. Care should also be taken to prevent holes being made in the glove by fingernails and jewelry during vigorous activity (e.g., fisting) and rings should be removed before putting on the glove. (Canadian AIDS Society, 2004)

### 5.1.6 Cervical Barriers

Cervical barriers (e.g., diaphragms and cervical caps) are soft latex or silicone cups that fit at the upper end of the vagina, covering the cervix. They are currently used to prevent pregnancy, but research is underway to see if their use may also reduce transmission of HIV and other STIs. Though the cervix is not the only site of vaginal transmission of HIV or STIs, it is possible a woman could reduce her risk of infection by protecting her cervix with a barrier. Developers



are working on new cervical barrier methods that would be easier to use for contraception and some researchers are exploring their potential use in disease prevention. Observational studies have already demonstrated an association between cervical barrier<sup>5</sup> use and reduced risk of other STIs. More research is needed to determine whether cervical barrier methods, used either alone or with a microbicide, could protect women from these diseases.<sup>6</sup>

Nonoxynol-9 (N-9) spermicide can cause vaginal irritation, which may increase the risk of getting HIV or other STIs from partners. Research on cervical barriers for HIV prevention indicates that the use of N-9 products is not recommended. (Canadian AIDS Society, 2004)

### **Importance of Protecting the Cervix**

**During sexual intercourse with a man where penetration takes place, women are physically more vulnerable to HIV transmission than men, due in part to the nature of the cervix. Unlike the vaginal epithelium (surface), which consists of approximately 30 to 50 layers of flat, sturdy cells, the surface of the cervix is made up of a single layer of fragile cells, which are more easily damaged.**

**In younger women, these fragile cervical cells are even more vulnerable and exposed than in adult women. In addition, several target cells for HIV, including CD-4 cells, are found more frequently on the cervix than the rest of the vagina. The passage of infectious fluids into the upper genital tract (also highly susceptible) via the cervix may be another factor that increases the risk of HIV transmission to women.**

<sup>5</sup> Moench T, Chipato T, Padian N. Preventing disease by protecting the cervix: the unexplored promise of internal vaginal barrier devices. *AIDS*, 15(13):1595-1602. 2001.

<sup>6</sup> Cervical barriers viewed on the Internet at [www.global-campaign.org/barriers.htm](http://www.global-campaign.org/barriers.htm) (source: pages 53-57 from CAS HIV Transmission: Guidelines for Assessing Risk 5th edition. website link: [http://www.cdnaids.ca/web/repguide.nsf/pages/45A115EBBCBA2586852570210054FC3E/\\$file/HIV%20TRANSMISSION%20Guidelines%20for%20assessing%20risk.pdf](http://www.cdnaids.ca/web/repguide.nsf/pages/45A115EBBCBA2586852570210054FC3E/$file/HIV%20TRANSMISSION%20Guidelines%20for%20assessing%20risk.pdf)



## 5.2 NON-BARRIER METHODS

### 5.2.1 Abstinence Only Model

The Abstinence Only Model is based on strict adherence to a complete prohibition of pre-marital sex and post-marital sex outside the marriage through the entire lifespan of individuals engaging in sexual intercourse. Some proponents also prohibit the use of condoms.

This model has may not be effective if:

- One partner is HIV-positive before subscribing to the model
- People subscribing to the abstinence only model avoid vaginal intercourse but may engage in unprotected oral and anal sex instead.

### 5.2.2 Microbicides

Microbicides are products that are able to prevent sexual transmission of HIV and other STIs. It is likely that complementary HIV prevention intervention(s), such as condoms, will be used to augment microbicides. At the time of publication, no microbicides have been approved for use in Canada or elsewhere (as of August 2006).

Microbicides are compounds that can be applied inside the vagina or rectum to protect against sexually transmitted infections (STIs) including HIV. They can be formulated as gels, creams, films, or suppositories. Microbicides may or may not have spermicidal activity (contraceptive effect).

### 5.2.3 HIV Vaccines

An HIV vaccine is a product that can prevent HIV transmission by triggering the body's immune system to develop antibodies that can fight off HIV. At the time of publication, no HIV vaccines have been approved for use in Canada or elsewhere.

The first generation of HIV vaccines may not be highly effective and will likely have to be used with existing prevention methods (e.g., condoms). Vaccines will be part of a comprehensive approach to HIV prevention that also includes health promotion and behavioural



interventions.

## 5.3 SAFER DRUG USE

### 5.3.1 Safer Injection Drug Use

Sharing needles or syringes to inject substances such as cocaine, heroin, insulin, anabolic steroids, hormones or vitamin supplements is high risk for HIV transmission because blood in the shaft of the used needle and the tube of the used syringe is injected directly into another person's bloodstream.

HIV may be present in the blood in a used needle or syringe for up to 24 to 72 hours.<sup>7</sup> Sharing needles and syringes can also transmit other bloodborne viruses, such as Hepatitis B and Hepatitis C. For people living with HIV, co-infection with Hepatitis C can hasten disease progression and complicate or reduce treatment options. To reduce the risks associated with injection drug use:

- Use a new needle and syringe every time
- If sharing a needle or syringe is absolutely unavoidable, clean them with a solution of bleach and water. Any brand of household bleach will do, although the most concentrated bleach (5% or more) is best.
- If undiluted bleach is not available, use diluted bleach
- If undiluted bleach is not available, use liquid dishwashing detergent, hydrogen peroxide, rubbing alcohol or strong drinking alcohol (Tunnel wash—a mix of soap, diluted bleach, vinegar and water—is widely used in prisons where undiluted bleach is not readily available.)
- Use sterile water (available from some needle exchanges) to rinse or water that has been recently boiled if sterile water is not available.

Injection drug use -- even with clean needles and syringes -- puts people at risk of abscesses, infections at the injection site, blood clots, heart infections and bacterial pneumonia which can seriously threaten the health of people living with HIV. (Canadian AIDS Society, 2004)

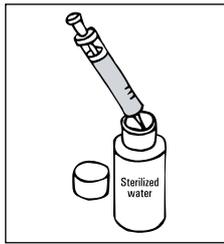


## Needle cleaning

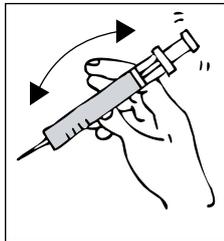
It is well established that sharing needles and syringes poses a high risk of transmission of HIV, HCV and other bloodborne viruses. To avoid the risk, a new and /or unshared needle and syringe should be used every time. Try not to share needles ("fits"). If you do share, always clean the needle and syringe with bleach and water. Here's how.

### Water rinse x1

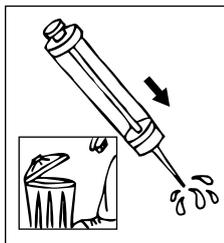
Fill the syringe completely with sterile water. (Soapy water if you can.) Shake. Squirt out. Do not reuse this water.



**FILL**



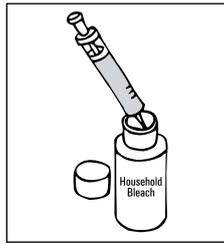
**SHAKE**



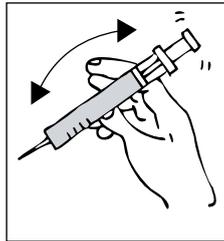
**EMPTY  
DISCARD WATER BOTTLE**

### Bleach x2

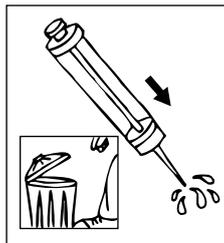
Fill the syringe completely with full strength bleach. Leave for at least 30 seconds. Shake. Squirt out. Do it again.



**FILL**



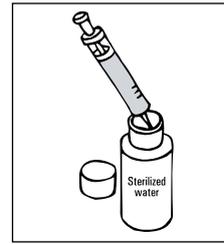
**SHAKE**



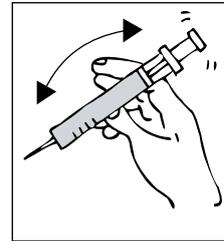
**EMPTY**

### Water rinse x2

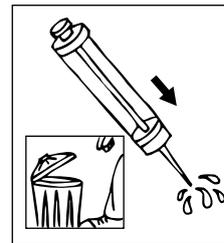
Fill the syringe completely with sterilized water. Shake. Squirt out. (not back into the container). Do it again.



**FILL**



**SHAKE**



**EMPTY**

Clean cooker including spoons with bleach and water. Use a new filter every time. You can get bleach and water from any needle exchange site.

(Canadian AIDS Society, 2004)

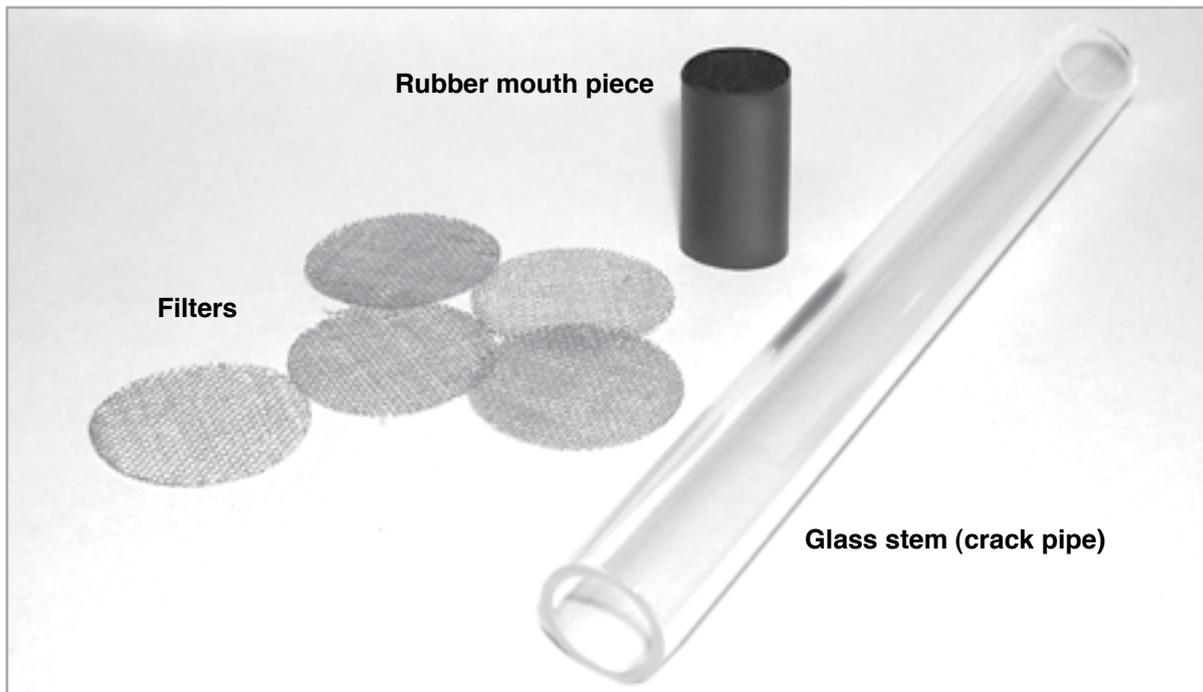


### 5.3.2 Safer Non-Injection Drug Use

HIV can spread by sharing straws or pipes for snorting or smoking drugs for example blood on the straw or pipe can enter a person's bloodstream through the nasal membranes or cuts and sores on the lips (often not visible to the eye). Crack smokers are also at high risk of other infectious diseases and health concerns. Burns and cuts from self-made crack pipes like glass bottles, aluminum cans, plastic bottles, and inhalers are a prime route for the transmission of Hepatitis C and the toxicity of many pipes can cause chronic lung infections.

To reduce the risk, people snorting or smoking drugs:

- Should not share equipment
- Should have access to Safer Crack Use Kits



A Safer Crack Use Kit includes a glass stem, a rubber piece to put over the pipe, and filters for the drug, so users don't share "dirty" pipes (i.e., broken, chipped, pipes used by others) and potentially spread diseases such as HIV and Hepatitis B. (Canadian Harm Reduction Network, 2006)



## 5.4 SAFER TATTOOING, PIERCING, ELECTROLYSIS AND ACUPUNCTURE

HIV can be spread during any procedures that use needles – such as tattooing, piercing, electrolysis and acupuncture if needles are reused. To reduce the risk:

- All tattooing, piercing, electrolysis and acupuncture practitioners should follow universal precautions similar to those used in hospitals ie. new needles used and equipment is sterilized
- All needles used in such procedures are required by law to be used only once and disposed of after use
- Individuals seeking these services should ask about the precautions used in the clinic or studio and request that the equipment be opened in front of you to alleviate any fears
- In environments where it is not possible to ensure needles or other instruments used for tattooing or piercing are new or clean, individuals will have to negotiate their own level of acceptable risk.

Genital piercing can increase the risk of sexual transmission of HIV because it increases the risk of puncturing the condom. To reduce this risk, men who have piercings on the head of the penis should use an extra-large condoms or condoms with larger reservoirs or remove genital jewelry. (Canadian AIDS Society, 2004)



## APPENDICES

### 1. ABOUT HIV

#### 1.1 TYPES OF HIV

There are two types of HIV: HIV-1 and HIV-2, that are genetically similar. Both are transmitted in the same ways [see HIV Prevention Guidelines 1.2] and cause clinically indistinguishable AIDS. HIV-1, subtype B is the predominant virus in Canada (North America and Europe). HIV-2 has a longer period between initial infection and illness and is less prevalent in Canada.

Strains of HIV-1 can be classified into three groups:

- Group M (major) represents 90% of HIV infection
- Group O (outlier)
- Group N (new)

Group M has nine subtypes that occur in different parts of the world.

When two viruses of different subtypes meet in the cell of an HIV-positive person, their genetic material can create a new hybrid virus. Many hybrid strains do not survive for long, but those that infect more than one person are known as circulating recombinant forms (CRFs) of HIV.

#### 1.2. Implications of HIV Genetic Variability

**Risk of co-infection or superinfection:** People can be infected by multiple HIV strains and subtypes and their immune systems are not usually equipped to fight a second infection by a different strain or subtype.

**Testing issues:** People who are HIV-positive may have to request a special test to identify the viral strain and subtype particularly if they are infected with Group N or O. Not all strains and subtypes can be identified during a routine HIV antibody test. However, blood tests have been modified to be able to detect most of these strains.

**Treatment issues:** The drugs used most widely for HIV treatment were designed to treat HIV-1 subtype B and may not be as effective against HIV-2 or other subtypes of HIV-1. Some subtypes or mutations may be more likely to develop resistance to certain drugs. Please consult with a specialist about appropriate treatment regimens and for specific information about non HIV-1, subtype B.



**Vaccine development.** Vaccines designed to prevent infection by one strain or subtype may not protect against all other strains.

## 2. ABOUT HIV TESTING

### 2.1 Accuracy and Validity of HIV Tests

Many people within the African Diaspora have either individual or collective memory or knowledge of oppressive medical research practice or medical treatment. As a result, some people may mistrust the HIV test and doubt its accuracy. In this case, open and transparent information sharing about the accuracy of the test and the process of determining HIV status may help people develop confidence in HIV testing and test results, create opportunities for community members to educate each other about HIV testing and sustain a community based response i.e. inform the individual that two separate HIV tests are administered to determine a HIV positive test result, first a HIV antibody screening test is administered then the confirmatory test. Providing information about the process and accuracy of HIV testing is an excellent example of a service provider implementing a client-centered approach to HIV prevention and care.

To help reassure people about the accuracy and validity of HIV tests, service providers can provide information on the components, steps and types of diagnostic testing [see Appendices 2.2 to 2.6].

### 2.2 Five Components to HIV Testing:

1. Informed consent to administer HIV test granted by client
2. Pre-test counseling
3. Administration of an approved HIV test
4. HIV testing performed in an approved testing laboratory
5. Post-test HIV counseling by a trained health-care professional

For clients who are particularly concerned about their test results, counseling during the period between administering the test and receiving results is sometimes useful.



## 2.3 Three Steps of Diagnostic HIV Testing

1. HIV antibody screening test (using the enzyme-linked immunosorbent assay [EIA or ELISA] on a blood/serum sample)
2. If the screening test in Step 1 is reactive or positive, HIV antibody screening is repeated (using EIA) in duplicate
3. If the second screening test is positive, a confirmatory HIV antibody testing (using the Western Blot or other approved confirmatory HIV testing protocol).

## 2.4 Factors Affecting Test Results

**False negative results** may occur if someone is tested immediately after being infected with HIV. For more than 95% of people who are infected, antibodies will appear within two to eight weeks after infection. However, there is a short period of time after exposure when antibodies may not be detectable. In rare cases, underlying immune deficiencies may prevent a person from developing antibodies. To obtain the most accurate results, allow a period of at least four weeks to elapse after an exposure before taking an HIV test and, if negative, repeat the test within three months.

**False positive results** occur very rarely and, when they do, are usually associated with misidentified specimens or laboratory handling errors.

More commonly but still infrequently, some people will receive an **indeterminate** result. This may indicate the HIV infection is too early to confirm, or it may be due to interference from non-specific proteins. The situation can usually be resolved fairly quickly by additional testing of the specimen and by collecting subsequent specimens within weeks of the first test.

## 2.5 Types of HIV Test and when they are used

**EIA Antibody Tests** show whether the person has become HIV positive. The EIA HIV test looks for the presence of HIV antibodies; it does not test for the virus itself. When HIV enters the body, it begins to attack certain white blood cells called CD4+ lymphocyte cells (helper white blood cells). The immune system then produces antibodies to fight off the infection. Although these antibodies are not able to destroy or control HIV, their presence confirms HIV infection.



Because it is inexpensive and very sensitive, the EIA is almost always the first screening tool used. Most of the time, it is used to test blood, but it can also be used to test urine and saliva samples.

EIAs are used for both standard and rapid screening tests and are able to detect antibodies to both HIV-1 and HIV-2. However, the EIAs used in the standard procedure are more complex than those used in the rapid screening tests and need to be performed in the laboratory setting.

EIAs have a high sensitivity (>99%) and high specificity (>99%). They can detect very small quantities of HIV antibody. The second EIA, also known as a supplementary EIA or ELISA, is run using a sample of blood that has been purified in the lab. In standard testing, a reactive EIA is not usually reported until the confirmatory test is positive (to avoid false positives).

**The Western Blot Test** is the most commonly used confirmatory test. It has a high sensitivity and a specificity of nearly 100%. An indirect immunofluorescence assay (IFA) can be used instead of the Western blot to confirm that HIV antibodies are present. Confirmatory tests are performed only if the EIA test is positive.

**The PCR or polymerase chain reaction test** can be used to detect the virus itself rather than the HIV antibodies. PCR tests amplify the genetic material (ribonucleic acid, or RNA) of HIV millions of times, making it possible to detect very low levels of virus. It is used to diagnose active infections in infants born to HIV-positive mothers.

**p24 antigen testing** is primarily used to test the blood supply and, in some cases, to test individuals. The p24 antigen is a protein that is part of HIV, which is produced early in HIV infection. The p24 test can detect HIV infection before the HIV antibody test can, and is used to diagnose HIV at an early stage.

**The viral load test** is done for HIV-positive people to measure the amount of virus in the blood. Viral load tests measure HIV RNA and show how fast the virus is multiplying in the body. They are used to monitor disease progression, assess the need for antiretroviral therapy and monitor the effectiveness of anti-HIV drugs. Since HIV reproduces by making copies of itself, the results are given as number of copies per milliliter (ml). Most viral load tests can only detect down to the level of 50 viral particles per ml of blood so an “undetectable” result means less virus per milliliter than this test can measure. A person with an “undetectable” viral load is still HIV-positive and can infect others.

**Rapid Testing screens** for the presence of HIV antibodies and has a rapid turnaround. It uses a finger prick drop of blood and the result is given to the patient after 15 to 20 minutes. Rapid



tests are not home test kits; they are intended for use under the supervision of a health care professional either in an approved laboratory or at the point of care. In March 2000, Health Canada licensed the first Rapid Test in Canada however, in 2002, Health Canada identified accuracy problems with the test and withdrew it from the market. Other Rapid Tests are currently under consideration by Health Canada and may be licensed in the near future. Please consult your local Public Health unit for further information about who can provide a Rapid Test, to whom it can be offered and why. Contact the Canadian HIV/AIDS Legal Network, [www.aidslaw.ca](http://www.aidslaw.ca) or the HIV/AIDS Legal Clinic of Ontario, [www.halco.org](http://www.halco.org) for more information about your legal rights and Rapid Testing.

## 2.6 HIV Testing in Infants

Infants (i.e., children under the age of 18 months) born to HIV-positive mothers must be tested with tests such as the PCR or p24 antigen test instead of the EIA. This is because maternal antibodies can be passively transmitted across the placenta to the unborn baby during pregnancy. Using the EIA, a baby may test HIV antibody positive at birth and will continue to test positive until the mother's antibodies gradually disappear from the child's blood (usually between 11 and 18 months) – even if the baby is not infected. The PCR test is very sensitive and the best test to diagnose HIV infection in babies, however it may fail to identify certain strains of HIV and yield false-negative results. To avoid a false-negative, a sample of the mother's blood should also be tested. If the mother tests PCR-positive with the same assay, then a negative test result on the child will be considered accurate, otherwise standard antibody testing will have to be used for the baby. The p24 test is less sensitive than the PCR test; it will fail to detect the virus in some HIV-positive children. With HIV tests, it is possible to establish the HIV status of a baby approximately 30 days after birth.

## 3. CLINICAL PROGRESSION OF HIV

The clinical progression of HIV occurs in three stages:

- primary HIV infection (associated with seroconversion)
- asymptomatic (latent) infection
- symptomatic infection (AIDS)

Appropriate, timely and effective interventions (e.g., early diagnoses, appropriate HIV treatment, adequate financial resources, nutrition, housing, support networks) can slow disease progression.



### 3.1 Primary HIV Infection (Seroconversion)

When a person is first infected, the virus replicates rapidly and the body responds with a vigorous immune response. Seroconversion occurs when a person who has been infected with HIV develops antibodies to HIV and becomes antibody-positive – usually 10 days to six weeks after HIV infection. (Seroconversion is the process that occurs when a person who does not have an HIV infection becomes HIV positive.) During the primary HIV infection stage, viral load is high and CD4+ cell counts drop. People in this stage of HIV disease are highly infectious but unlikely to be aware they are HIV-positive because there are no visible/obvious changes.

About 80% of people with HIV will develop flu-like symptoms two to eight weeks after they are infected. This is called “seroconversion illness” or “acute retroviral syndrome”. Symptoms include: fever, headache, lymphadenopathy, myalgia, rash, mucutaneous ulcers and diarrhea. These symptoms are not specific (i.e., they are similar to symptoms of other viral illnesses) so they are often not recognized as seroconversion illness.

If an HIV-positive person is infected a second time with another strain of HIV, superinfection may occur. This increases the burden on the immune system and can affect treatment options.

### 3.2 Asymptomatic Infection

Many people with HIV will live up to 10 years with few or no signs or symptoms (i.e., asymptomatic infection). Some, called non-progressors, may continue to have normal CD4+ cell counts and no symptoms for a longer period of time. In other people, HIV disease may progress more quickly: they will experience symptoms in the first few years after HIV infection or co-infection. Co-infection means that there is more than one infection i.e. Herpes and HIV and Tuberculosis and HIV are two examples of co-infection.

Factors that may affect the speed or rate of HIV infection progression are: viral load, the type and strain of HIV, the type of immune response produced against the virus, the person's overall health and well-being at the time of infection as well as their quality of life (such as access to timely, appropriate, effective health care, consistent nutrition, uninterrupted housing, employment and supportive environment).



### 3.3 Symptomatic Infection

During the symptomatic stage, people with HIV experience symptoms such as: chronic fatigue, weight loss, skin problems and diarrhea. People living with HIV infection can also develop persistent or recurrent illnesses. When people develop opportunistic infections that weaken the immune system (e.g., pneumonia, cancer), then HIV related illness occurs. However an HIV related illness and AIDS are not the same. If HIV related illness persists for a prolonged period and the immune system significantly declines, a diagnosis of Acquired Immunodeficiency Syndrome (AIDS) may occur. However an AIDS diagnosis does not mean a person is close to death.

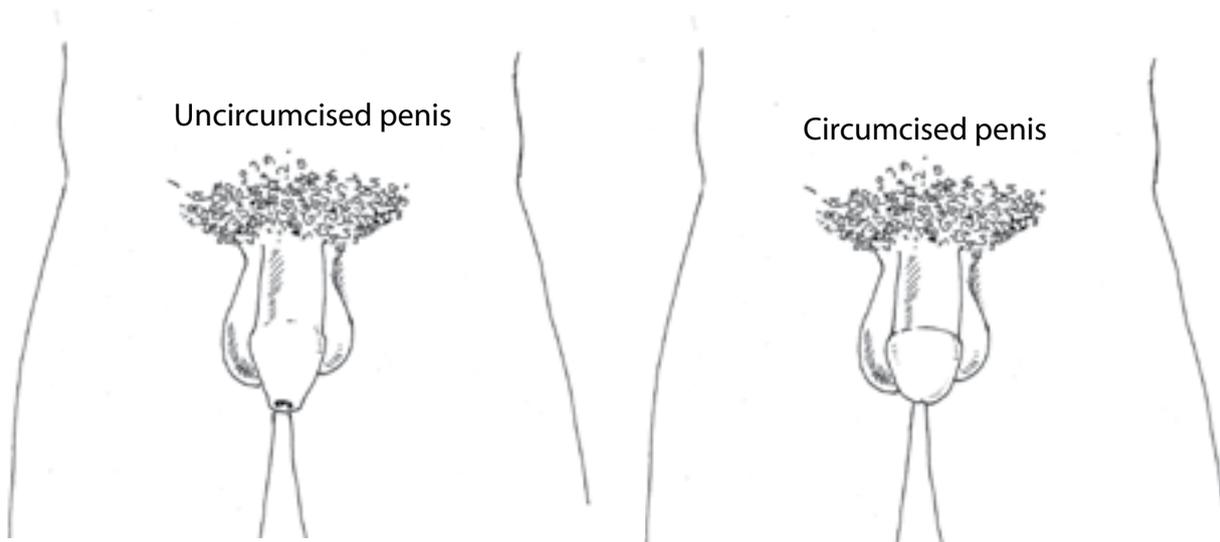
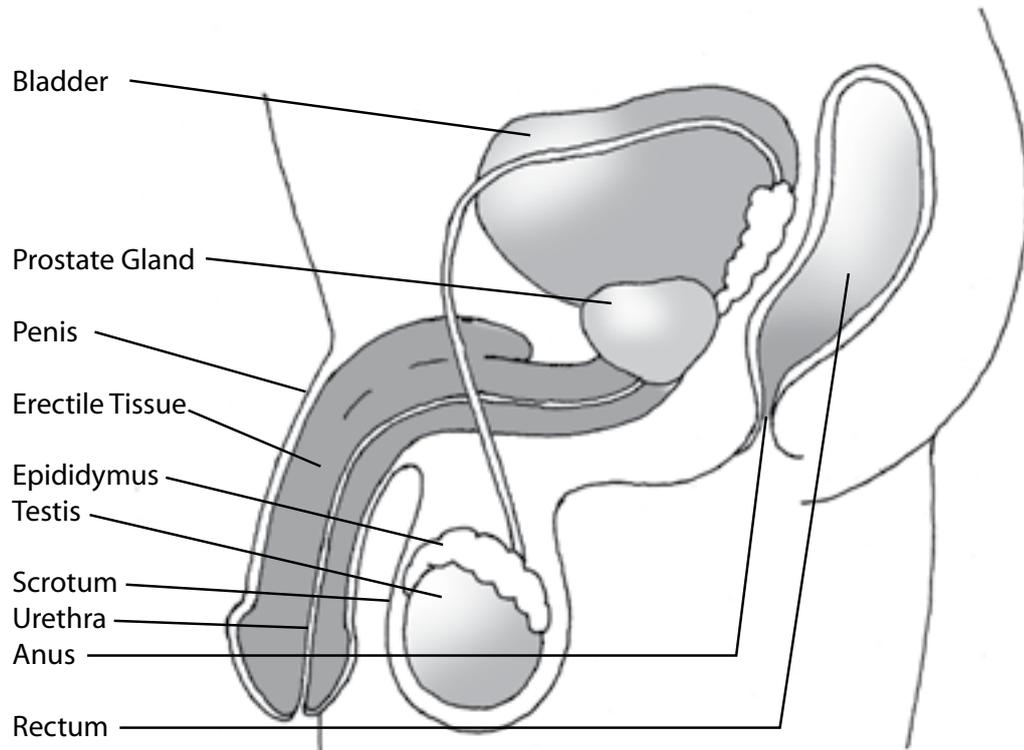
AIDS is not a single disease. AIDS describes the status of the immune system and its decreased ability to protect the body from illness.

In Canada, a person is diagnosed with AIDS when he or she has tested positive for HIV and has one or more of the clinical illnesses that are indicator diseases that characterize AIDS. Over time, the definition has changed to reflect new knowledge about HIV. For example, in 1993, the list of AIDS-defining conditions was expanded to include: pulmonary tuberculosis (i.e., in the lungs), recurrent pneumonia (often due to bacterial or fungal infections that do not usually cause pneumonia in people with intact immune systems) and invasive cervical cancer.

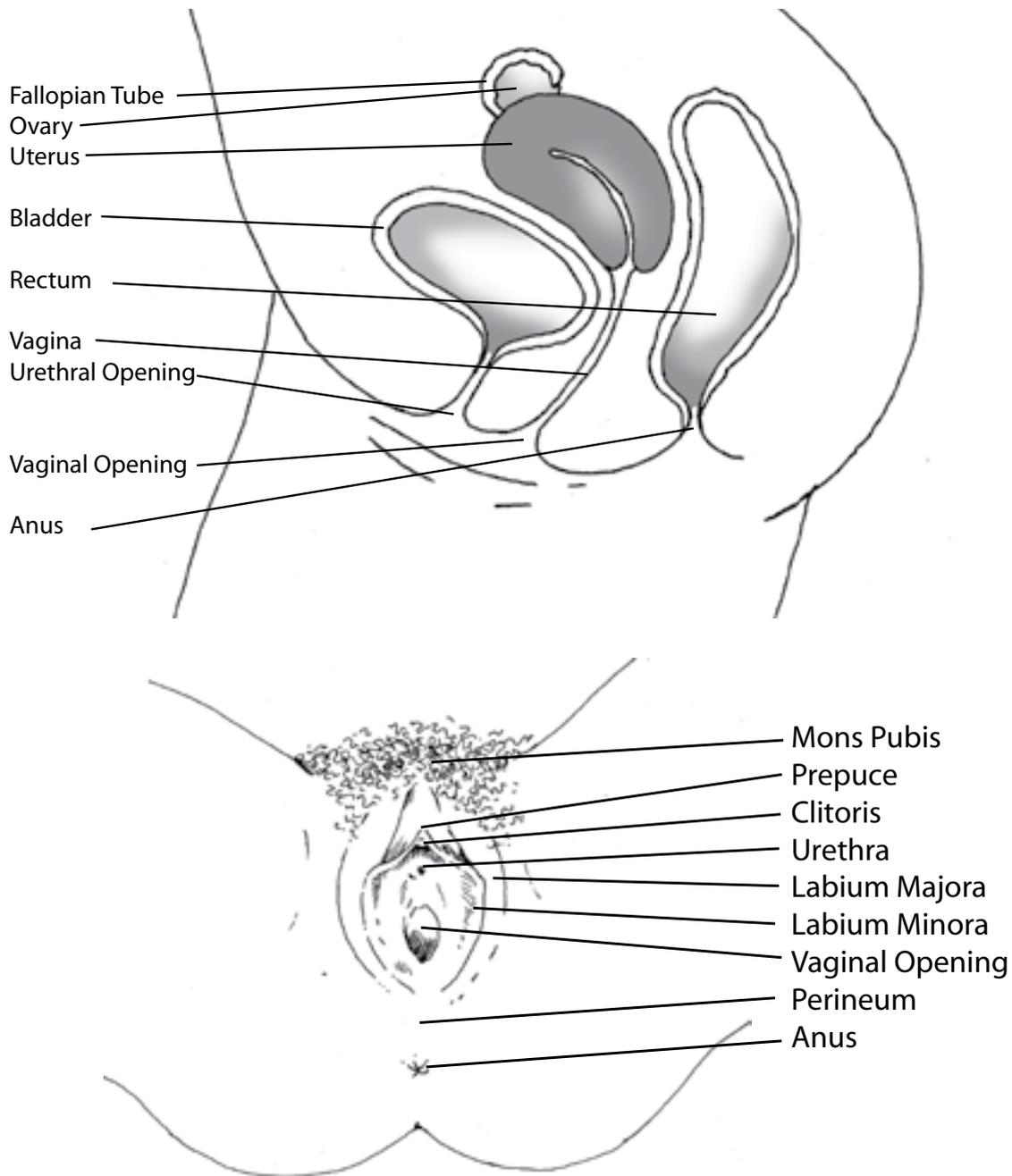
This definition is used in all provinces and territories in Canada and in 48 other countries whereas, in the United States, a person must also have a CD4 T-lymphocyte count less than 200 cells per cubic millimetre of blood ( $< 200/\mu\text{L}$ ) to be diagnosed with AIDS.



## 4. DIAGRAM of the MALE REPRODUCTIVE ORGANS



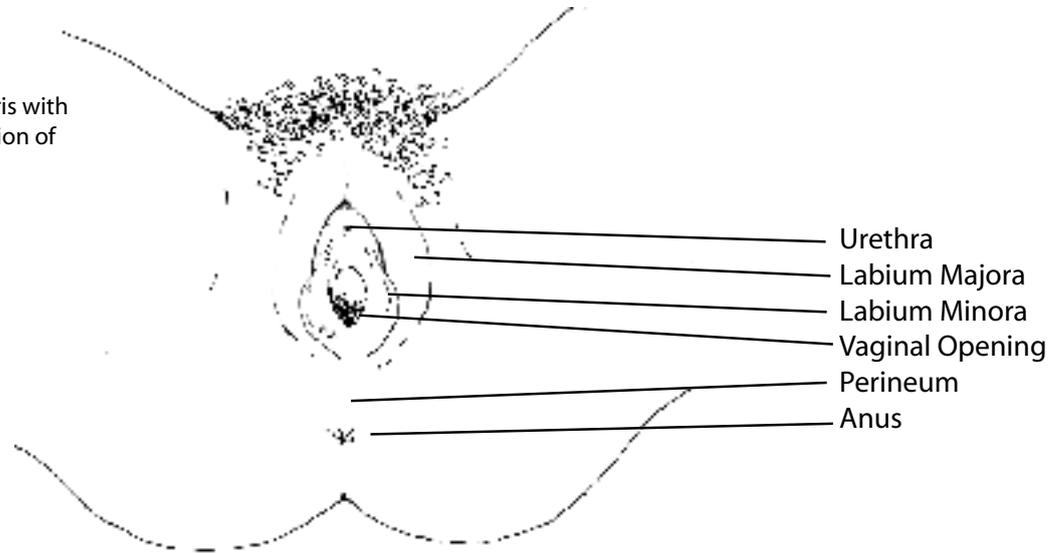
## 5. DIAGRAM of the FEMALE REPRODUCTIVE ORGANS



## 6. DIAGRAM of FEMALE GENITAL MUTILATION

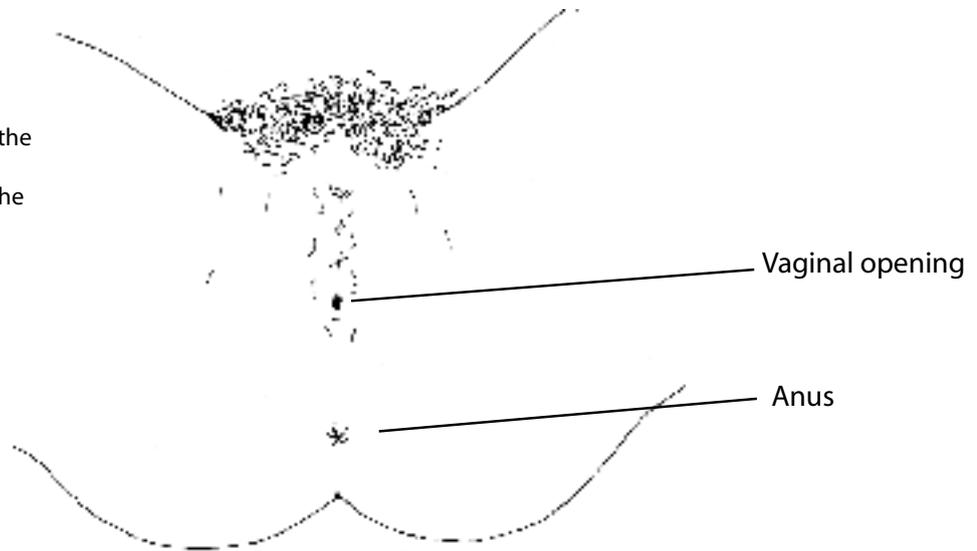
### Type II:

Excision of the clitoris with partial or total excision of the labia minora

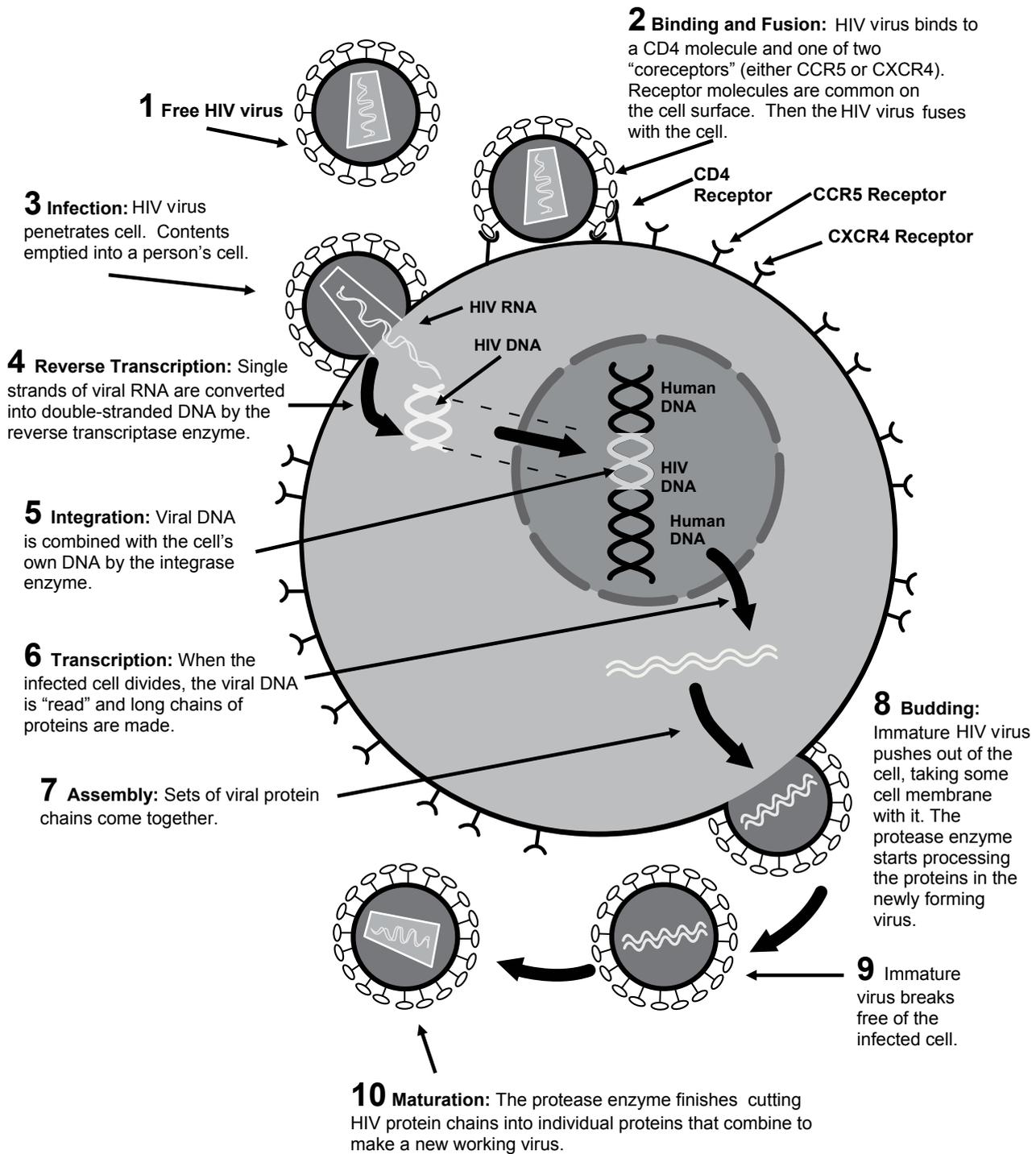


### Type III:

Excision of part or all of the external genitalia and stitching/narrowing of the vaginal opening (infibulation)



## 7. THE HIV LIFE CYCLE



## SOURCES

Adeyemi, Yinka. (2001). *A Media Handbook for HIV Vaccine Trials for Africa.*, UNAIDS/01.05E. Geneva.

Adrien, A., Leane, V., Remis, R.S. Boivin, J.F. Rud, E. Duperval, R., et al. (1999) *Migration and HIV: an Epidemiological Study of Montrealers of Haitian Origin.*, *International Journal of STD and AIDS*, 10(4), 237-242.

Alliance for Microbicides. *Development Weekly News Digest*, August 2003, 4(11).

Arufred, Signe. (2004). *Rethinking Sexuality in Africa.*, Signe Arufred (ed), 2004.

Beitune, Patricia. et al. (2004). *Antiretroviral Therapy during Pregnancy and Early Neonatal Life: Consequences for HIV Exposed, Uninfected Children.* *The Brazilian Journal of Infectious Diseases*, 8(2),140-150.

Buske, Lynda. (1999). *The changing face of AIDS in Canada.*, *Canadian Medical Association Journal*, 161(2),124.

Canadian AIDS Society. (2004). *Disclosure of HIV Status after Cuerrier: Resources for Community Based AIDS Organizations.*, Retrieved July 26,2006, from <http://www.aidslaw.ca/Maincontent/reports.htm>.

Canadian AIDS Society. (2004). *HIV Transmission: Guidelines for Assessing Risk: A Resource for Educators, Counselors and Health Care Providers.* Retrieved July 26, 2006, from <http://www.cdnaids.ca/web/casmisc.nsf/pages/cas-gen-0002>.

The Change Foundation. (2004). *Moving Forward: Sustaining and Growing Disease Management Programs in Ontario.* [www.changefoundation.com](http://www.changefoundation.com).

The Change Foundation. (2002). *The Disease Management Approach in Ontario: Current Perspective.*, [www.changefoundation.com](http://www.changefoundation.com)

Chinouva, Fetou K., Davidson, M., Copas, O, A. (2001). *HIV Transmission Risk among Sub Saharan Africans in London Traveling to Their Countries of Origin.* *AIDS*, 15(11),1571-1588.

Chipaux, Jean P., (2005) *Pharmaceutical Colonialism in Africa.* *Le monde diplomatique.*, Retrieved August 11, 2005, from <http://MondeDiplo.com/2005/08/11pharma>.



Colfax G.N., Buchbinder S.P., Cornelisse PGA et al. (2002) Sexual Behavior and Implications for Secondary HIV Transmission During and after HIV Seroconversion. *AIDS*,16,1529-1535

Committee on Paediatrics Care. Identification and Care of HIV-Exposed and HIV Infected Infants, Children and Adolescents in Foster Care. *Pediatrics*,106(1),149-153.

Currah, Paisley. Minter, Shannon. (2000). *Transgender Equality: a Handbook for Activists and Policymakers*. National Center for Lesbian Rights. <http://www.thetaskforce.org>

Dewa, C.S., Durbin, J., Wasylenki, D. et al. (2002) Considering a Multisite Study? How to Take the Leap and Have a Soft Landing. *Journal of Community Psychology*, 30(2),173-187.

The Future of the Female Condom. *International Family Planning Perspectives* Volume 30, Number 3, September 2004

Fenta, Haile. (2001). *AIDS: Knowledge, Attitude and Risk-taking Behavior of Adult Ethiopians in North America*.

Gay and Lesbian Medical Association. (2006). *Healthy People 2010:Lesbian,Gay, Bisexual, and Transgender Health* Retrieved April 20, 2006, from [www.glma.org](http://www.glma.org)

Handa, Amita., Negash, Aister., (2003). *HIV Endemic Task Force: Report on Phase Two of Community Consultation*. Prepared for the HIV Endemic Task Force. Toronto. Canada

Hanna, L. (1999). The Menstrual Cycle and Viral Load, *BETA*.12(2):18.

Hart, Trevor., Peterson, John L.et al. (2004). Predictors of Risky Sexual Behaviour among Young African American Men who Have Sex with Men. *American Journal of Public Health*. 94(7),1122-1124.

Hemphill, Mary. (2005).*Harm Reduction All Around*. Retrieved July 27, 2006, from [http://www.thebody.com/asp/novdec05/harm\\_reduction.html](http://www.thebody.com/asp/novdec05/harm_reduction.html).

Henry, F., Tator,C. (2000). *The Colour of Democracy, Racism in Canadian Society*.Toronto: Harcourt Brace.

HIV Endemic Task Force. (2001). *Complete Report of the Community “For Us, By Us, About Us”*: An Opportunity for African and Caribbean Communities to Address the Issue of HIV/AIDS Related Stigma and Denial. Toronto.

HIV Endemic Task Force. (December 2003). *Strategy to Address Issues Related to HIV Faced by People in Ontario From Countries Where HIV is Endemic*. Toronto. Canada



Hoch, Jeffrey S., Briggs, Andrew H., Willan, Andrew R. (2002). Something Old, Something New, Something Borrowed, Something Blue: a Framework for the Marriage of Health Econometrics and Cost-effectiveness Analysis. *Health Economics*, 11(5): 415-430

Holmgren, B., Aaby, P., Jensen H., Olav, et al. (1999) Increased Prevalence of Retrovirus Infections Among Older Women in Africa. *Scandinavian Journal of Infectious Diseases*, 31(5), 459-466.

Holmgren, B., Da Silva Z., Larsen, O., et al., (2003), Dual Infections with HIV-1, HIV-2 and HTLV-1 are More Common in Older Women than in Men in Guinea-Bissau. *AIDS*, 17, 241-253.

Holmes, D., Warner, D., (2005). The Anatomy of a Forbidden Desire: Men, Penetration and Semen Exchange. *Nursing Inquiry*, 12(1), 10-20.

Infectious Diseases and Immunization Committee, Canadian Paediatric Society. (1993). HIV Antibody Testing in Children. *Canadian Medical Association Journal*, 148 (5):759-761.

International HIV/AIDS Alliance. (2003). Positive Prevention: Prevention Strategies for People with HIV/AIDS. Draft background paper.

James, LLana. (October 2005). Changing with the Times, The Rape Crisis Movement 25 Years Later: Renewing Advocacy, Programs and Policy Work Across Ontario. Ontario Coalition of Rape Crisis Centres

Kalichman, S.C., Simbayi, L.C. (2004). Sexual Exposure to Blood and Increased Risks for Heterosexual HIV Transmission in Cape Town, South Africa. *African Journal of Reproductive Health*, 8(2), 55-58.

Klevens, R.M., Fleming, P.L., Neal, J.J., Li, J. (2001). Knowledge of Partner Risk and Secondary Transmission of HIV. *American Journal of Preventive Medicine* 20(4), 277-281.

Koopman, J., Pilcher, C.D. (2001). Where Epidemiology Meets Biology: Primary HIV Infection and Sexual Transmission. *The Physician Research Network Notebook*, 6 (4), 20-27 ([www.Prn.org](http://www.Prn.org)).

Lands, L., Maclean, D. (2002). A Practical Guide to HAART for People Living with HIV/AIDS, Canadian Strategy on HIV/AIDS.

Lavreys L., Baeten, J.M., Overbaugh J. et al. (2002). Virus Load During Primary Human Immunodeficiency Virus (HIV) Type 1 Infection is Related to the Severity of Acute Illness in Kenyan Women. *Clinical Infectious Diseases*, 35 (1), 77-81.



Lawson, Erica et al. (2005). HIV/AIDS Stigma Denial, Fear and Discrimination: Experiences and Responses of People from African and Caribbean Communities Living in Toronto. Retrieved July 27, 2006 from. <http://www.ohtn.on.ca/pdf/>.

Lines, Rick .(2002).Pros & Cons: A guide to Creating Successful Community-Based HIV/AIDS Programs for Prisoners. Prisoners ' HIV/AIDS Support Action Network (PASAN).

Maman., Suzanne, Medley ,Annie. HIV Status Disclosure to Sexual Partners: Rates, Barriers and Outcomes. WHO. Review Paper. 2004. WC:503. 07 (<http://www.who.int/gender/documents>).

Marindo, Ravai. Pearson, Steve. Casterline, John B. (2003). Condom Use and Abstinence among Unmarried Young People in Zimbabwe: Which Strategy, Whose Agenda? Population Council. Policy Research Division Working Papers, No:170.

Mayaud, Philip., McCormick, Duncan. (2001). Intervention Against Sexually Transmitted Infections (STI) to Prevent HIV Infection. British Medical Bulletin, 58:129-153.

Menka, Eunice., (2005). Science and Religion, Which Should Lead the HIV/AIDS Prevention Campaign? Retrieved July 26, 2006, from <http://www.ghanaweb.com>.

The Microbicides Quaterly. (October, November, December 2004).V2 no1 ([www.microbicide.org](http://www.microbicide.org))

Montgomery, J.P., Mokotoff E.D., Gentry, A.C., Blair, J.M. (2003) The Extent of Bisexual Behavior in HIV Infected Men and Implications for Transmission to their Female Sex Partners. AIDS CARE,15(6),829-837.

Morrow, Kate. (1998). Say it Women get AIDS:HIV among Lesbians. Retrieved February 02, 2006 from, <http://www.selfhelpmagazine.com>.

National Institute of Allergies and Infectious Diseases. (2004). NIAID 's HIV Vaccine Trials Network. Retrieved February 18, 2006 from,<http://www.niaid.nih.gov/factsheets/hvtn.htm>.

National Institute of Allergy and Infectious Diseases., National Institutes of Health, Department of Health and Human Services .(2001). Scientific Evidence on Condom Effectiveness for Sexually Transmitted Disease (STD) Prevention Report

Nemoto,T., Operario, D., Keatley, J. Villegas, D. (2004) Social Context of HIV Risk Behaviors among Female to Male Transgender of Colour. AIDS CARE, 16(6), 724-735.



Ontario Advisory Committee on HIV/AIDS. (2002) .A Proposed HIV/AIDS Strategy for Ontario 2008.

Public Health Agency of Canada. (December 2005) HIV in Canada Among Persons from Countries where HIV is Endemic. HIV/AIDS Epi Update

Public Health Agency of Canada. (May 2004) Ethnicity Reporting for AIDS and HIV in Canada: Aboriginal and Black Communities Demand Attention. HIV/AIDS Epi Update

Public Health Agency of Canada. (May 2004). HIV/AIDS among Older Canadians. HIV/AIDS Epi Update

Public Health Agency of Canada. (May 2004). HIV and AIDS among Women in Canada. HIV/AIDS Epi Update

Public Health Agency of Canada. (May 2004). HIV Infections among MSM in Canada. HIV/AIDS Epi Update

Public Health Agency of Canada. (May 2004). HIV and AIDS among Youth in Canada. HIV/AIDS Epi Update

Public Health Agency of Canada. (2005). HIV-1 Strain and Primary Drug Resistance in Canada: Surveillance Report to March 31, 2004. Surveillance and Risk Assessment Division, Centre for Infectious Disease Prevention and Control

Public Health Agency of Canada. (May 2004). HIV-1 Strain Surveillance in Canada. HIV/AIDS Epi Update

Public Health Agency of Canada. (May 2004). HIV Testing and Infection Reporting in Canada. HIV/AIDS Epi Update

Public Health Agency of Canada. (July 2001). The Population Health Template: Key Elements and Actions that Define a Population Health Approach

Public Health Agency of Canada. (May 2004). Nonoxynol-9 and the Risk of HIV Transmission. HIV/AIDS Epi Update

Public Health Agency of Canada. (May 2004). Oral Sex and the Risk of HIV Transmission. HIV/AIDS Epi Update

Ryan, Bill. (2004). A New Look at Homophobia and Heterosexism in Canada. Canadian AIDS Society. <http://www.cdnaids.ca/web/repguide.nsf/cl/cas-rep-0188>



Ramjee G., Morar, N. S., Alary, M., Mukenge-Tshibaka, L., Vyulsteke B., et al. (2000). COL 1492 Study Group, Challenges in the Conduct of Vaginal Microbicide Effectiveness Trials in the Developing World. 14 (16): 2553-2557.

Smagata, David. (1998). Worker's Compensation Claims and Disclosure. Canadian HIV/AIDS Policy and Law Newsletter. 3(4), 4(1)

Siyam 'kela, Measuring HIV/AIDS Related Stigma. A report on the Fieldwork Leading to the Development of HIV/AIDS Stigma Indicators and Guidelines <http://www.csa.za.org>.

Siyam 'kela. Measuring HIV/AIDS Related Stigma. Tackling HIV/AIDS Stigma: Guidelines for Faith Based Organization. (<http://www.csa.za.org>)

Songkok, Elijah M., et al. (2003) The Use of Short-Course Zidovudine to Prevent Perinatal Transmission of Human Immunodeficiency Virus in Rural Kenya. American Journal of Tropical Medicine and Hygiene, 69(1), 8-13

Strike C., Goering, P., Wasylenki D., (2002). A Population Health Framework for Inner-City Mental Health. Journal of Urban Health, 79,(4)1:S-13-20

Tharao, Esther., Massaquoi, Notisha., Telcom, Senait. (2005) The Silent Voices of the HIV/AIDS Epidemic: African and Caribbean Women in Toronto. Women's Health in Women's Hands Community Health Center.

Tharao, Esther et al.(2002). Research Skills Building/Enhancement and Research Protocol Development Project. Retrieved July 27, 2006 from, <http://www.whiwh.com/research.htm#researchskills>

Toronto Public Health. (October 2003). The Female Condom: Teaching and Counselling Guide for Health Care Provider.

UNAIDS. Preventing HIV Infection in Girls and Young Women. The global Coalition on Women and AIDS. (<http://womenandaids.unaids.org/resources>)

UNAIDS/WHO. (June 2004). Policy Statement on HIV Testing.

United Nations Population. (2005). Female Genital Mutilation Cutting in Somalia, Fund. Report, Retrieved March 17, 2005 from [http://siteresources.worldbank.org/INTSOMALIA/Data%20and%20Reference/20316684/FGM\\_Final\\_Report.pdf](http://siteresources.worldbank.org/INTSOMALIA/Data%20and%20Reference/20316684/FGM_Final_Report.pdf).



racial Communities. Toronto. Prepared by Women 's Health in Women 's Hands.

Walker, Tyrer. Gillet F. A. S, Porter, S. (2003). Register of HIV Seroconverters, The relationship Between HIV Seroconversion Illness, HIV Test Interval and Time to AIDS in a Seroconverter Cohort. *Epidemiology and Infection*, 131(3),117-1123.

World Health Organization.(2003). *HIV Infected Women and their Families: Psychosocial Support and Related Issues*. Geneva.

World Health Organization. (June 2000). *Women, Ageing and Health*. Fact Sheet no 252.

World Health Organization. (June 2000). *Women and Sexually Transmitted Infections*. Fact Sheet no 249.

World Health Organization. (June 2000). *Human Rights, Women and HIV/AIDS WHO*. June 2000, Fact Sheet no 247.

World Health Organization. (2003). *HIV Infected Women and their Families: Psychosocial Support and Related Issues*. Geneva.

Wooltorton, Eric., (2002) Failure of Rapid HIV Tests. *Canadian Medical Association Journal*, 167(2),170

Zablostky, Diane., Kennedy, Michael (2003) . Risk Factors and HIV Transmission to Midlife and Older Women: Knowledge, Options, and the Initiation of Safer Sexual Practices. *Journal of Acquire Immune Deficiency Syndrome*, 33(2) 122-130.

### **Websites Resources**

[www.accho.ca](http://www.accho.ca)

[www.afa.org.sg/issue/issue25/HIVSeroconversion.htm](http://www.afa.org.sg/issue/issue25/HIVSeroconversion.htm)

[www.avert.org/femcond.htm](http://www.avert.org/femcond.htm)

[www.global-campaign.org](http://www.global-campaign.org)

[www.icad-cisd.com](http://www.icad-cisd.com)

[www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

[www.unaids.org](http://www.unaids.org)

[www.who.org](http://www.who.org)



