

HIV and AIDS 101 Trainer Manual

This 90-minute training is designed for those just entering the HIV/AIDS field, students, community groups, and for those with very little information on HIV and AIDS.

This workshop includes information on:

- Epidemiology
- Definition of HIV and AIDS
- Basics of the Immune System and how HIV works
- How HIV is transmitted
- How AIDS is diagnosed
- HIV Antibody Testing
- Risk Reduction for Sex, Drug Use and Maternal/Child Transmission

The objectives of this training:

- Participants will understand the impact of HIV/AIDS on communities.
- Participants will know the difference between HIV and AIDS and how they are diagnosed.
- Participants will understand how HIV infects and does not infect.
- Participants will know how HIV is detected, and how people can prevent infection.

Trainer Notes: How to use the trainer manual

- Power point slides are included in the body of the trainer manual. Notes accompany the slides so trainers can elaborate on the information.
- Trainer manual pages line up with the participant manual.
- Text boxes only appear in the trainer manual. Participant manuals have blank areas where “Trainer Notes” appear.
- Process points, instructions on how to facilitate activities, and approximate times to complete activities are included in the trainer manual. Keep your time limits in mind.
- Activities can be essential components of a workshop, but they also take up a lot of time. If an activity does not fit your time limitations, feel free to exclude it.
- Feel free to only use sections relevant to your agency or particular need. This workshop without activities should take between 60 and 90 minutes. It can be expanded up to three hours, or broken into multiple sessions depending on your agency’s need.
- Separate handouts are included in this package. The trainer manual indicates the section they may be useful in.

Acknowledgements

The development and design of this curriculum was funded by the Department of Health and Human Services, Office of Minority Health through the **Syracuse Area HIV/AIDS Technical Assistance Program**, a program of Central New York Health Systems Agency (CNYHSA). This three-year capacity-building grant, *seeks to enhance the administrative and programmatic ability of minority-serving organizations to address the HIV/AIDS epidemic by providing free technical assistance*. Services available from the Syracuse Area HIV/AIDS Technical Assistance Program under this grant include:

- **One-on-one technical assistance** to help individual organizations and collaborative groups address specific needs.
- **Leadership development programs and workshop series** which provide opportunities for administrators, managers, and volunteers to learn more about potential solutions to common needs.
- **Resource products** which provide reference materials and management tools recipients can share with others.

CNYHSA has provided planning and program development assistance to the community since 1976. Issues addressed include health care access, need, utilization, finance, and program design; information system development; program evaluation; case management; strategic planning; and grant writing. **CNYHSA** also sponsors the Ryan White Central New York HIV Care Network and operates two HIV rental assistance programs.

This curriculum was developed and designed by Jeanette Shanley and Steve Wood of REACH CNY. REACH CNY's mission is to ensure access and support for the full range of quality, culturally-sensitive health and human services, reduce teen pregnancies and promote the health and well-being of individuals and families through education and advocacy.

Materials herein have been adapted from the NYS Department of Health, AIDS Institute curriculum "Overview of HIV Infection and AIDS." In addition, materials have also been adapted from the Centers for Disease Control and Prevention (CDC).

Table of Contents

Introduction to the Manual	Page 1
Acknowledgements	Page 2
Introductions & Origins	Page 4 Slides 1-2
Epidemiology	Page 5-6 Slides 3-8
What is HIV? What is AIDS?	Page 7-8 Slides 9-14
How is HIV transmitted? How is it NOT?	Page 9-12 Slides 15-21
AIDS Diagnoses & HIV Testing	Page 13-15 Slides 22-30
Risk Reduction: Sex	Page 16-19 Slides 31-36
Risk Reduction: Substance Use	Page 20-22 Slides 37-45
Risk Reduction: Maternal/Child Transmission	Page 22 Slide 46
Transmission & Risk Reduction Activity	Page 23-29 Slide 47
Wrap Up and Resources	Page 29 Slide 48

Introduction and Origins:

Slide 1

WELCOME!

to

**HIV & AIDS
101**

Trainer Notes:

Introduction:

The trainer should introduce themselves and include information such as: why HIV interests them, how long they have worked in the field, what qualifies them to provide this training, etc.

It can be helpful to have introductions from the group. Ask each participant to introduce themselves by stating: name, agency (or department they work in if this is an inter-agency training,) and what they hope to get out of this training. This information is important, as it may give you an opportunity to tailor the material to better suit your group's needs.

Slide 2

HIV Origins

- www.snopes.com
- Category: Medical
- Sub-Category: Disease
- Title: AIDS Was Created By the CIA

Trainer Notes:

HIV Origins

One of the most common questions in basic HIV training is “where did it come from?” Trainees may have conspiracy theories regarding HIV. These theories are prevalent in all segments of the population and not exclusive to one racial/ethnic/cultural group.

Trainers should avoid entertaining conspiracy theories. In addition, only strong trainers with a good grasp of the science behind HIV origins should engage discussions on the topic.


If this question is asked, refer participants to the website www.snopes.com. This renowned urban legends website has an article on HIV's origins, but also why people may believe in a conspiracy theory. It is a very useful and rational article. It can be found in the “Medical” category, sub-category “Disease.” The article is entitled “AIDS was created by the CIA.”

Epidemiology (Statistics and Trends)

Slide 3

HIV Infection rates in the U.S.

- In 2007, it was estimated that 33.2 million people worldwide are living with HIV/AIDS.
- More than 25 million people worldwide have died of AIDS since 1981.
- Each year 50,000 U.S. citizens become infected with HIV
- Of those, 24-27% are unaware of their HIV infection




*includes 1 person whose sex is unknown

Slide 4

AIDS in the U.S.

- AIDS has been reported in all 50 states.
 - The cumulative number of AIDS cases reported to the CDC at the end of 2005 is 984,155
 - 80% Male
 - 19% Female
 - 1% Under 13 Years Old



*includes 1 person whose sex is unknown

Slide 5

Breakdown of Transmission
Cumulative AIDS Cases in USA

- 1981 – 2005
 - MSM 452,111
 - IVDU 241,364
 - Heterosexual
 - Males = 61,438
 - Females = 102,171
 - Other 86,441

Slide 6

By the Numbers
Cumulative AIDS Cases in USA

- Racial and Ethnic groups make up 25% of the US population
- Right now, 59% of AIDS Cases are made up of racial or ethnic groups
 - 41% White
 - 42% Black/African-American
 - 16% Latino
 - Less than 1% Asian/Pacific Islander
 - Less than 1% Native American

Slide 7

By the Numbers
Cumulative AIDS Cases in USA

- More than 50% of new AIDS Cases each year happen to African-American/Black People
- 1 in 50 Black/African-American Men
- 1 in 160 Black/African American Women
 - 1 in 3,000 White Women

Slide 8

YOUTH

- Half of all new HIV infections happen to people under 25
- 4 million people under 20 will get an STD
- Women under 24 are at highest risk

Epidemiology

Trainer Notes: Several power point slides were developed that include HIV/AIDS in the United States by gender, race and risk factor. Trainers should continuously check the New York State Department of Health website each year for updated numbers.

<http://www.health.state.ny.us/diseases/aids/statistics/index.htm>

Other Important Points:

Up to 25% of those infected with HIV are unaware of their infection. It is crucial to encourage HIV antibody testing to prevent further spread of the virus.

Historically, the majority of AIDS cases have been men. However, in recent years there has been an increase within females. This may be due to increased testing efforts aimed at the female population, and new recommendations to OB/GYN practitioners.

In the United States, the highest numbers of AIDS cases and deaths have been in the gay male population. This population was the first group identified in the U.S. as being impacted by HIV. The gay male population has also gone to great lengths to educate their peers on risk reduction and encourage testing within this community. Gay men are still one of the largest groups experiencing this disease. We often refer to this population as MSM – men who have sex with men. This term is more inclusive of men who do not identify as “gay” yet still have romantic or sexual relationships with other men.

Within the last decade, HIV/AIDS has increased dramatically in the Black and African American communities in the U.S.

<p>Trainer Notes: Brainstorm Activity: (Optional)</p>
--

<p>The trainer may want to brainstorm why participants think such disparities exist.</p>
--

Young women of any race appear to be at very high risk for HIV and sexually transmitted diseases (STDs.) It may be due to physical development of the cervix, which does not mature until around the age of 17.

What is HIV? What is AIDS? How does it work?

Slide 9

HIV	vs.	AIDS
■ Human		■ Acquired
■ Immunodeficiency		■ Immune
■ Virus		■ Deficiency
		■ Syndrome

What is HIV and AIDS?

HIV stands for

Human Immunodeficiency Virus

It is a virus transmitted only by people to other people. Since HIV is a virus it is not curable, although treatment is available.

AIDS stands for

Acquired Immune Deficiency Syndrome.

“AIDS” is not a virus, but a diagnosis caused by long-term infection with HIV.

Slide 10

Strains of HIV	
<ul style="list-style-type: none">• HIV-1<ul style="list-style-type: none">- major type in United States, Europe, & Africa	<ul style="list-style-type: none">• HIV-2<ul style="list-style-type: none">- progresses slower than HIV-1- mostly found in Western Africa- few cases in the United States

There are two strains of HIV:

HIV-1 and HIV-2.

Because there are so few cases of HIV-2 in the U.S., standard testing only looks for antibodies for HIV-1. This does not mean a person infected with HIV-2 will go undiagnosed. Standard HIV testing can detect abnormalities that indicate a specific HIV-2 test should be ordered.

The lab testing the sample will automatically test for HIV-2 if deemed necessary. Written request is not required

Slide 11

<p>Defining AIDS</p> <p>HIV is the virus that causes AIDS</p> <p>AIDS is a clinical condition that requires:</p> <hr/> <ul style="list-style-type: none">✓ A positive HIV antibody test✓ T cell count of 200/mm³ or less, t cell ratio of 14% less (&/or)✓ Having one or more “AIDS Indicator Conditions”

Defining AIDS

AIDS is defined as a T-cell count of 200 or less, or diagnosis of an opportunistic infection, or both. One must also have a positive HIV antibody test.

Slide 12

T-Cell Counts

- Healthy Immune System 800- 1200
- HIV-Related Illness – 500 & Below
- AIDS – 200 & Below

HIV-Related Illness is diagnosed when T-cells drop to 500 or below. This indicates that the immune system is declining, and a patient may have a difficult time getting over simple infections. The most common infections associated with HIV-Related Illness are vaginal yeast infections and other fungal infections (toenail, throat, etc.) that do not respond to over-the-counter medications or treatments, sinus infections that are difficult to treat, or an increase in outbreaks of herpes simplex (if the patient is infected with HSV-I)

Slide 13

Immune System

- External Immune system
 - skin (protects against germs, viruses, & bacteria)
- Internal Immune system
 - various cells, such as CD 4 T cell, B cells, macrophage cells
 - healthy immune system = 800-1200 CD4 T cells

The immune system

Intact skin is a great barrier to many infectious diseases including HIV. The virus cannot “soak through” skin. It must have an opening like a cut or sore.

Slide 14

Functions of the CD4 T cell

- CD4 T cell or helper cell:
 - type of white blood cell
 - plays a major role in starting the immune response by identifying the invading foreign agent & stimulates other cells to react and fight.
 - This is what HIV attacks



HIV attacks the internal immune system – particularly the **CD4 T-cells**. These cells are the very part of the immune system that identifies invaders and helps destroy them. By attacking these cells, HIV depletes the immune system until it is unable to fight off simple and/or unusual infections that a healthy immune system can easily take care of.

How is HIV Transmitted? How is it NOT Transmitted?

Slide 15

What's Risky?

- Razors
- Toothbrushes
- Mosquitoes
- Animals
- Sneezes
- Food
- Doorknobs
- Toilet Seats
- Bites
- Kissing
- Swimming Pools
- Hot Tubs
- Sheets/Blankets
- Hugs

Trainer Notes: What's Risky?

The trainer may want to brainstorm with the group what they think is risky behavior (behaviors that would put someone at risk for HIV.) Do not process the activity as participants call out risk factors – the power point slides will expand on each risk behavior and what is not a risk factor for contracting HIV.

The following items appear on power point slides and may need additional processing. This is an opportunity to lighten the mood in the room, as a trainer can use their humor to alleviate participants stress or confusion around transmission issues.

Razor blades & toothbrushes: Both of these items will have trace amounts of blood on them and should never be shared with another individual. However, the risk of contracting HIV is extremely low to non-existent. Razor blades are made of stainless steel which, when exposed to air, dry off very quickly. HIV does not survive outside of the body. Remember, both razors and toothbrushes can transmit hepatitis, particularly hepatitis B.

Mosquitoes: Many people believe that these insects can transmit the virus. In reality, if they could, we all would have HIV. Mosquitoes live in every environment and we all have been bitten at least once in our lives. Mosquitoes do transmit a variety of diseases that include: Malaria and West Nile and some others. That is because those diseases infect the mosquito too, which makes it possible to pass the infection to another source. HIV does not infect a mosquito, nor does it survive their digestive process. Mosquitoes do not inject a person with anything from their stomach, nor do they bite multiple people when searching for blood. They chose one host and then must “rest & digest.”

Sneezes: Unless there is a lot of blood in the sneeze and it hits you in the eye, don't worry.

Animals: HIV is a human disease. Animals cannot become infected. Even though HIV has its origins in Simian Immunodeficiency Syndrome (SIV,) it has

mutated way too far in humans to be infectious to any other living being. Many animals have immunosuppressive diseases, (cats can have FIV, more commonly known as feline AIDS), however these cannot be passed to people, and we cannot pass HIV to them. They are unrelated diseases.

Food: HIV cannot survive outside of the body. Salt, seasonings and other additives to food, even in totally organic items, will kill the virus.

Toilet Seats: HIV and STDs are not transmittable from toilet seats. HIV dies on contact with the air. Most STDs also die when exposed to the air. The period of time from when an individual got up from the toilet and you sat down is sufficient in killing any infectious agent. Pubic lice/crabs are not transmittable from toilet seats either, contrary to popular belief. They cannot hold onto smooth surfaces, only human hair, and would not migrate to such a place.

Swimming pools & hot tubs: HIV is not water-borne. If blood or body fluids were present in one of these items, chemicals used to treat the water would kill the virus.

Sheets and blankets: These items are exposed to the environment and usually too dry to support HIV or STDs.

Slide 16

What body fluids are capable of transmitting HIV?	
Do transmit	Do NOT transmit*
<input type="checkbox"/> Blood	<input type="checkbox"/> Saliva
<input type="checkbox"/> Semen (cum)	<input type="checkbox"/> Tears
<input type="checkbox"/> Vaginal &/or cervix fluid	<input type="checkbox"/> Sweat
<input type="checkbox"/> Breast milk	<input type="checkbox"/> Urine
<input type="checkbox"/> Fluids around body parts i.e. brain, joints	<input type="checkbox"/> Feces
	*unless blood is present

Slide 17

How HIV is & is not transmitted....	
How HIV is transmitted...	How HIV is not transmitted...
<ul style="list-style-type: none"> <input type="checkbox"/> Anal, vaginal, & oral intercourse <input type="checkbox"/> Sharing needles or works <input type="checkbox"/> Mother to infant <ul style="list-style-type: none"> -labor & delivery -pregnancy -breast feeding <input type="checkbox"/> Occupational exposure 	<ul style="list-style-type: none"> <input type="checkbox"/> Kissing <input type="checkbox"/> Toilet seats <input type="checkbox"/> Hugging <input type="checkbox"/> Holding hands <input type="checkbox"/> donating blood & body parts

What body fluids are capable of transmitting HIV?

Saliva: There is not enough HIV present in saliva to be infectious. In addition, enzymes and bacteria present in saliva break HIV down very quickly. Kissing is considered a safe activity. Participants may be confused because they may believe that oral HIV antibody tests are collecting saliva. They do not. The oral tests draw antibodies from the inside of a person's cheek.

Sweat: HIV is not present in this fluid.

Tears, Urine and Feces: These items are not infectious with HIV

The amount of HIV present in saliva, tears, urine and feces is far too low and broken to be infectious. There has never been a case of transmission through these items.

If blood is present in any of these items, then a risk of HIV transmission is possible. Remember it's the blood that's infectious, not the saliva, feces, urine or tears.

Slide 18

Fluids & Risks

- Semen
- Vaginal Fluid
- Pre-Cum
- Breast Milk
- Internal Fluids
 - (spinal, heart, lungs, etc.)
- Discharge

- TO A
 - Mucous Membrane
 - OR
 - Cut
 - Wound
 - Sore
 - Injection

Trainer Notes:

Fluids and risks:

Process the power point slide which details the various infectious fluids and how they may be transmitted from one person to another.

Slide 19

What is a mucous membrane?

Trainer Notes: Brainstorm with the group what a mucous membrane is – what do they look like? What do they do?

Slide 20

What is a mucous membrane

- A thin, moist layer of skin that lines various body cavities that are, or might be, exposed to the environment.
- Easily broken
- Lots of blood vessels at the surface
- Secrete mucous
- Feel the inside of your cheek – that's a mucous membrane

Slide 21

What is a Mucous Membrane

- Name 5 Mucous Membranes for Women
- Name 5 Mucous Membranes for Men

Trainer Notes: Ask the group to name five mucous membranes on a woman, and five on a man.

They are as follows:

Mouth

Inside of the nose

Eyes

Vagina

Rectum

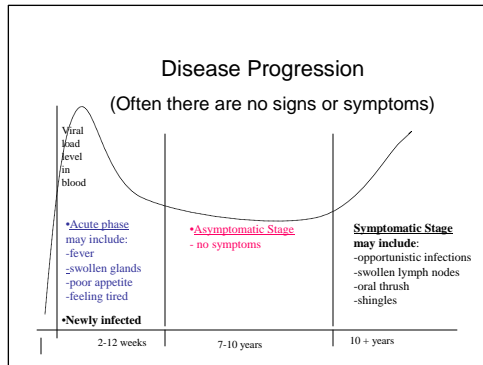
Inside of the ears: Keep in mind that HIV transmission through the ears would be next to impossible. Very few, if any infectious fluids could enter the ear and ear wax would provide a sufficient barrier to the virus.

Urethra: (Most participants will forget about this one when identifying mucous membranes on men. It's important to note that men can become infected through sex by HIV entering through the urethra by engaging in vaginal or anal sex.)

Participants may identify the breasts or nipples as a mucous membrane, they are not. The penis is not a mucous membrane.

AIDS Diagnoses and HIV Testing

Slide 22



Disease Progression:

The time line on this slide is generalized. During the initial stage of HIV infection, levels of the virus in the body increase dramatically. An individual is at very high risk for transmitting the virus in the first few weeks of infection because of the efficient and fast replication of the virus. This is due to HIV having T-cells to attack and the body has not begun an immune system response yet.

Slide 23

Disease Progression

Often there are NO signs or symptoms

- **Acute Phase**
 - (2-12 weeks)- flu like symptoms, fever, swollen glands, poor appetite... then symptoms go away
- **Asymptomatic Stage**
 - On average, a person may take up to 10 years to develop symptoms
- **Symptomatic Stage may include:**
 - swollen lymph nodes, oral thrush, diarrhea, frequent fevers, vaginal yeast infections, abnormal pap smears

Once the immune system becomes aware of HIV in the body, usually within a couple of weeks, the immune system is able to keep the virus at bay for a number of years. Some people progress to AIDS in a very short time, while others have not progressed in 20 years. The majority of infected individuals do progress to AIDS in around ten years.

Slide 24

What are AIDS Indicator Conditions?

- Wasting syndrome
- Dementia
- Certain types of cancers (KS, invasive cervical cancer)
- Certain types of infections which may be caused by:
 - Parasites (Toxoplasmosis)
 - Viruses (CMV)
 - Fungi (Pneumocystis Pneumonia)
 - Bacteria (TB)

Slide 25

What is an opportunistic infection (OI)?

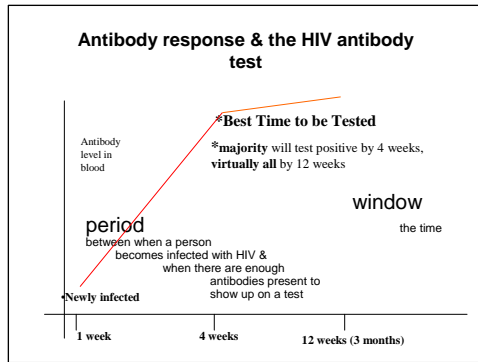
- OIs are infections that take advantage of a compromised immune system
 - A healthy immune system can fight off infections

Trainer Notes:

AIDS Indicator Conditions and Opportunistic Infections:

These can be confusing, and may not be of much interest to participants. Spend as much or as little time as your group wants on this topic.

Slide 26



Window Period, Antibody response & the HIV antibody test:

The “**window period**” is from the time an individual was infected with HIV, to when enough antibodies are present to be detected by an HIV antibody test. It takes a little while for our immune systems to produce enough antibodies in response to HIV infection for the HIV antibody test to detect HIV antibodies.

In New York State there is a “window period” of 1-3 months, although a majority (95%) of infected people will test positive after 30 days from initial infection.

- If the HIV antibody test is positive, then further antibody testing is not necessary.
- Tests are reflective of HIV status to one to three months before a test was conducted.
- If the test was negative, individuals should be encouraged to get another test in three months to be sure that they are HIV negative.
- Further testing is not necessary if the individual has not put themselves at risk for HIV during this time period.

Trainer Notes: Getting tested every six months for ten years for someone once exposed or potentially exposed to the virus is very old information, and is not necessary or recommended. You may find many participants with this information. Assure them that if they have not participated in risky behavior, and previous tests were negative – then they are negative.

Slide 27

Basics of the Antibody Test

<ul style="list-style-type: none"> • Blood Test <ul style="list-style-type: none"> - testing for antibodies - 2 teaspoons of blood drawn • Oral Fluid Test <ul style="list-style-type: none"> - testing for antibodies - a collection pad is placed between the gum & cheek for 2-5 mins. to collect cells from mucous membranes 	<ul style="list-style-type: none"> • Rapid Test <ul style="list-style-type: none"> - testing for antibodies - screening test - Testing samples <ul style="list-style-type: none"> • Finger stick • Blood draw • Oral fluid • Home collection kits <ul style="list-style-type: none"> - test is performed at in the privacy of the home
--	--

Trainer Notes:
Basics of the antibody test:
 Remind participants that these tests look for antibodies, not the virus itself.

Blood Test: The blood sample is put in a test tube and sent to a lab where the blood is tested for HIV antibodies.

Oral Fluid Test: Oral sample is processed the same way as blood.

Rapid Test: Blood is drawn by pricking the finger or by drawing blood or oral sample is taken. The screening results are available within 5 to 40 minutes depending on the test used. If the result is non-reactive, there are no HIV


antibodies. If the test is reactive, the client **may** be infected and they will need a blood or oral fluid test to tell for sure. The client will have to return for a second visit to receive the results.

Slide 28

Basics of the Antibody Test

How are HIV tests performed?

<ul style="list-style-type: none"> • ELISA- (Enzyme-Linked ImmunoSorbent Assay) <ul style="list-style-type: none"> - screens for antibodies • Western Blot <ul style="list-style-type: none"> - confirmatory test - performed on all ELISA positive results 	<ul style="list-style-type: none"> • Resources <ul style="list-style-type: none"> - anonymous HIV testing in NYS call - 1-800-872-2777 or - 1-800-541-AIDS
--	--



ELISA test: inexpensive, good screening test, can pick up other things and deliver a false positive, (flu shots, infection with hepatitis, vaccines, Lupus, pregnancy, etc.)

Western Blot: expensive, specific to HIV antibodies only.

Because the majority of people seeking HIV testing will be negative, New York State uses the less expensive ELISA screening test. All ELISA positives are confirmed with a Western Blot. Both tests are done from the same blood or oral sample.

Slide 29

Types of Testing

<ul style="list-style-type: none"> • Anonymous Testing <ul style="list-style-type: none"> - informed consent to perform an HIV related test - a number is assigned & no names are linked to the test - not recorded in medical record - can convert to confidential if HIV positive - can access partner notification services - offered by some county DOHs - FREE! 	<ul style="list-style-type: none"> • Confidential Testing <ul style="list-style-type: none"> - informed consent to perform an HIV related test - a name is linked to the test results & to the medical chart - positive results reported to state DOH - can access partner notification services - offered by many local DOHs hospital, clinics, private MDS, family planning clinics, etc. - Can access medical care
---	--

People who think they are at risk for HIV infection can get tested anonymously (where no one knows their name) or confidentially (where their name is known and the test result becomes part of their medical record)

For anonymous HIV testing call the NYS counseling hotline at 1-800-872-2777.

Slide 30

Benefits of being HIV tested

<ul style="list-style-type: none"> • If not infected, a person can... <ul style="list-style-type: none"> - learn to practice healthier behaviors for example, safer sex , safer injection practices, accessing SEPs, ESAP - reduce worries about infection - learn strategies to negotiate safer sex 	<ul style="list-style-type: none"> • If infected, a person can... <ul style="list-style-type: none"> - work on getting care, support & treatment to delay onset of illness - referrals for case management, support groups etc. - take precautions to eliminate or reduce the risk of infecting others, including unborn children
---	--

Trainer Notes: Brainstorm other benefits of being HIV tested with participants

Risk Reduction: Sex

“Risk Reduction” is simply helping a person modify a particular behavior which will decrease their exposure to HIV. Abstinence from sexual activity or drug use may be the ultimate goal of risk reduction, but it is not the focus. It is about keeping someone safer during risky behavior that the client may be unwilling or unable to change.

Examples of a risk reduction message are:

- “Out of the next ten times you have sex, would you use a condom at least once?”
- “Would you consider cleaning your needles at least once the next five times you share?”
- “Would you be able to rotate your injection sites, instead of only shooting up in your arm?”

As the client progresses, messages can be modified to work towards increased condom, clean needle, etc. usage.

Slide 31

Increased Transmission Risks	
<ul style="list-style-type: none">• STDs• Lowered Immune System• Frequency of Exposure• Receptive vs. Insertive• Prevalence in Location	<ul style="list-style-type: none">• Substances<ul style="list-style-type: none">– Drugs, alcohol, cigarettes• Cervical Ectopy• Lifestyle<ul style="list-style-type: none">– Nutrition, stress, douching• Access to contraception & Education <p>These issues will also help an HIV+ person progress to AIDS faster</p>

Increased transmission risks:

STDs: Having an STD makes it easier to contract or transmit HIV. All people who have an STD should be tested for HIV.

Lowered immune system due to a chronic disease, or an acute infection, like the flu. Anything that makes the immune system work hard, may lower its response to new infections.

Frequency of exposure: The more you come in contact with HIV, the more chances you have to become infected.

Receptive vs. insertive: the person receiving someone else’s body fluids or blood inside of them is more likely to become infected. In other words, the person who inserts their penis inside a vagina or rectum is less likely to become infected (although they still have a risk because of infection through the urethra, or from microscopic cuts & abrasions on the penis.)

Cervical ectopy: Females aged 17 and under do not have a fully developed cervix. It is covered in cells that are easily penetrated by HIV and STDs. After the age of 17, those cells retreat behind the cervical opening.

Slide 32

Abstinence

- 100% Effective
- How do you define abstinence?
- How does that effect prevention?
- Is Abstinence just about sex?

Trainer Notes: Abstinence

Ask participants how they define abstinence and how that definition can affect prevention. Also discuss how abstinence is not just about sex, but substance use as well.

Slide 33

Risk Reduction - SEX

- Nonoxynol-9
 - No Longer Recommended
 - N-9 can cause irritation & lesions
 - Should NEVER be used for anal sex
- If N-9 is all you have – it is better than using nothing

Risk Reduction: Sex

Nonoxynol-9 is no longer recommended as part of risk reduction because it can cause irritation and lesions in the genital area. Some condoms still have N-9 on them and should not be used. However, if it's the only barrier, it's better than nothing.

Slide 34

Male Condoms

- Latex is best
- Poly for latex allergies
- No Lambskin
- No double bagging! (only in certain situations)
- Throw used condom out carefully
- Do NOT flush

Male Condoms: Using two condoms at once: Latex on latex will cause breakage. Latex on poly-condoms will be painful. The only time two condoms can be used is if someone has a latex allergy and poly male or female condoms are not available. For the penetrative partner with an allergy – put a lambskin condom on and then a latex condom.

This will protect him from his allergy. For the receptive partner with an allergy, the penetrative partner puts a latex condom on and then a lambskin over that. This protects the other individual with an allergy. Poly condoms are available wherever latex condoms are sold. Lambskin condoms alone do not prevent HIV infection. Simply throw out used condoms. Do not tie them up, because the fluids inside the condom will not be exposed to the environment and can remain infectious for a period of time. In addition, tying up a condom increases contact with potentially infectious fluids on the outside of the condom from a partner's vagina or rectum.


Trainer Notes: Handouts are included on how to use a male condom, female condom and other methods of contraception.

Trainer Notes: If time allows, the trainer can lead an activity around using male condoms. Show the group how to properly put a condom on using a penis model, banana or other object. Pair people up, give them a penis model and each person receives a condom. Ask them to demonstrate to each other how to properly put a condom on. Ask them how it felt to demonstrate to another person, and if they think they did a good job. This simply allows participants to practice a skill associated with HIV risk reduction.
(30 Minutes)

Slide 35

Female Condom

- Poly- can be used w/ water or oil based lubricant
- Control!



Trainer Notes: If available, pass around a female condom so participants are familiar with what they look like, how they feel and how they are used. It is best to rinse off a female condom before passing it around as they come packaged with an oily lubricant. This can potentially stain clothes and make fingers greasy.

The cleaned off condom can be stored and used for further trainings. Although it is not approved for anal sex, female condoms are effective in preventing HIV infection in this practice.

Remind participants that menstrual blood can contain HIV.

Slide 36

Oral Sex

- Is it safe?
 - Studies, studies, studies
- Oral Health – can you assess yours?
 - Flossing
 - Brushing
 - Food
 - Dental Health

Oral Sex:

The risk involved with oral sex all depends on what is happening in your mouth at any given time. Some issues to consider; when did you last floss or brush your teeth? Microscopic cuts are formed every time you brush your teeth. This could be a way for HIV to enter the body.

These cuts generally heal up enough within 8 hours to prevent HIV infection. What have you eaten lately? M&Ms, potato chips, hard candy, popcorn, etc., all cut the inside of the mouth. These cuts are generally deeper than what you would experience from brushing your teeth. How is your dental health? Do you have gingivitis? Gum disease? Recent tooth loss or surgery? All of these can create a way for HIV to enter the body.

Risk Reduction: Substance Use

Slide 37

Injection Drugs

- Drawing Blood
- Booting
- Works
 - Cooker
 - Filter
 - Water

Injection drug use:

When someone shoots drugs into their veins, they stick the needle into their flesh and pull back the plunger. If blood appears in the barrel of the syringe, then they have hit a vein. This blood can stay inside a syringe. If it is infected with HIV, the virus also stays inside the syringe. Because the inside of a syringe is not exposed to the environment, the virus can stay alive for quite some time.

Trainer Notes: The trainer should become familiar with how drugs are injected and why it poses such a risk for HIV. It is important to become familiar with all of the items a substance user may need to prepare an injection, i.e., cookers, cotton, water glasses, etc.

Slide 38

Injection Drugs

- What kind of drugs do people inject?

Trainer Notes:

What kind of drugs do people inject?

Brainstorm this question with participants.

Slide 39

What kind of drugs do people inject

- Heroin
- Methamphetamine
- Cocaine
- Ketamine
- Ecstasy
- Any thing that can be converted to a liquid can be injected

Generally anything that can be turned to a liquid can be injected. Most commonly people inject heroin and methamphetamines.

Slide 40

Substance Use

- IV Drug Use is most effective way for HIV to enter the body
- ESAP – Expanded Syringe Access Program
- Syringe Exchange
- Syringe Disposal
- Abstinence
- Risk Reduction
- Harm Reduction

Slide 41

Cleaning Injection Equipment

- Bleach – most effective
- Alcohol – effective
- Water only – least effective (better than doing nothing!)
- All materials used must be cleaned including cookers & water glasses, cotton must not be reused.

Slide 42

Bleach is best & fastest

- Rinse syringe and needle with clean water
- Fill with full strength bleach
- Shake the syringe full of bleach for 30 seconds– this dislodges any blood still inside
- Squirt the bleach out
- Rinse with clean water & make sure all the bleach is out
- This should be repeated 3 times using new clean water each time

Slide 43

Alcohol

- Rinse syringe and needle with clean water
- Fill a glass full of rubbing alcohol
- Drop the syringe and needle into the glass
- Let it sit for 20 minutes
- Remove syringe, fill with alcohol and shake
- Squirt alcohol out
- Rinse with clean water

Slide 44

Water rinse

- This method is not very effective, but is better than doing nothing at all.
- Fill syringe with clean water
- Shake for 30 seconds
- Squirt out water
- This must be done at least 3 times.

Slide 45

Other Needle Use

- Tattooing
- Body Piercing
- Accupuncture
- Steroids
- Hair Removal
- Manicure
- Insulin/Fertility/Arthritis/Diabetes



Substance Use:

ESAP: NYS Expanded Syringe Access Program. Participating pharmacies can provide syringes without a prescription at very low cost. Most pharmacies participate.

Syringe Exchange: These programs provide free, clean syringes to injection-drug users who bring in used syringes. There are no syringe exchanges in the Syracuse region. There are programs in New York City, Buffalo, Rochester, Ithaca and Johnson City.

Syringe Disposal: Used syringes should be disposed of properly. They can be dropped off at any hospital or nursing home. They may also be put in the trash if they are sealed in a plastic laundry detergent bottle.

Trainer Notes: The trainer should note that all drug and alcohol use can put a client at risk for HIV as decision-making is impaired. In addition, other equipment used with drugs can have traces of blood on them, i.e., sharing of straws for snorting methamphetamine or cocaine.

Risk Reduction: Maternal/Child Transmission

Slide 46

Maternal-Child Transmission

- AZT/ZDV can reduce transmission from 25% to 8% after the first trimester
- Combination Therapy may reduce transmission to 4%
- C-Section & Combination therapy reduces transmission to less than 1%

Maternal-Child Transmission

The transmission rate of HIV from an untreated mother to her baby is around 25%. With treatment though, transmission drops to less than 1%.

Transmission and Risk Reduction Counseling Activity:

Slide 47

Activity

- Case studies & transmission

Trainer Notes: Case Study Activity

Break participants into groups. Tell them that this is an opportunity to apply what they have learned today. Tell them they will “meet” a client via a case study and ask them to identify the client’s risk factors, and what messages they should receive around HIV transmission.

Give participants 10 minutes to read their case study and answer the questions.

Each group should report out to the larger group by first reading their scenario aloud and then give their answers. Make sure every group gets a chance to speak.

(40 – 60 minutes)

Client #1

Donna:

Donna is in high school. One of her friends has HIV. They shared a bag of potato chips last month and Donna is afraid that her friend may have infected her.

- Could Donna have been exposed to HIV?
- How could she have been exposed?
- What messages should Donna receive about HIV?

Trainer Process Notes:

Client #1

Donna:

Could Donna have been exposed to HIV?

No

How could she have been exposed?

She couldn't have been exposed in this case. Even if blood was present, the salt on the chips would have killed the virus.

What messages should Donna receive about HIV?

Donna should learn about the body fluids and behaviors that transmit the virus. Donna may need to know that saliva is not considered infectious, nor is intact skin.

Client #2

Cliff:

Cliff works at a large shipping corporation. Last year someone got cut on the loading dock, and Cliff cleaned up the blood with ammonia and paper towels. He is afraid that the blood may have had HIV in it and he got infected.

- Could Cliff have been exposed to HIV?
- How could he have been exposed?
- What messages should Cliff receive about HIV?

Trainer Process Notes:

Client #2

Cliff:

Could Cliff have been exposed to HIV?

There is a potential but unlikely.

How could he have been exposed?

If Cliff had an open sore or cut on his hand and it came in contact with HIV-infected blood, he may have a risk. In reality the air and ammonia used would have killed the virus.

What messages should Cliff receive about HIV?

How HIV is transmitted, the body fluids, behaviors and how the virus enters the body. He should also be advised to use gloves when cleaning up blood spills, if he is not already.

Client #3

Roger:

Roger is single and has sexual contact with a few female friends. He has never shot drugs, had sex with another man, or had a blood transfusion. He does not think that he is at risk for HIV.

- Could Roger have been exposed to HIV?
- How could he have been exposed?
- What messages should Roger receive about HIV?

Trainer Process Notes:

Client #3

Roger:

Could Roger have been exposed to HIV?

Yes

How could he have been exposed?

Oral, vaginal and/or anal sex

What messages should Roger receive about HIV?

Roger should learn how HIV can be passed from a woman to a man through vaginal/cervical fluids and potential blood from the rectum. He should know that HIV can enter the body through the urethra, or through tiny cuts or abrasions on his penis. He should know that menstrual blood can transmit HIV.

Client #4

Linda:

Linda is a meth user. She says that she never injects the drug, but snorts it. She sometimes shares the straws with others to snort meth.

- Could Linda have been exposed to HIV?
- How could she have been exposed?
- What messages should Linda receive about HIV?

Trainer Process Notes:

Client #4

Linda:

Could Linda have been exposed to HIV?

Yes

How could she have been exposed?

Blood to blood contact by sharing straws since the nose is a mucous membrane. She may potentially have been exposed by engaging in sexual activity when high.

What messages should Linda receive about HIV?

Risk reduction for her drug use, and for any sexual behaviors.

Client #5

Mark:

Mark is an ex-heroin user. He has not shot up in six years. Recently he has been feeling tired and ill. He tells you that he doesn't think that he ever shared needles.

- Could Mark have been exposed to HIV?
- How could he have been exposed?
- What messages should Mark receive about HIV?

Trainer Process Notes:

Client #5

Mark:

Could Mark have been exposed to HIV?

Yes

How could he have been exposed?

Through sharing needles. Remember, Mark “doesn't think” he shared. There is always the chance that he shared when under the influence, or engaged in risky sexual behavior while using or seeking money to buy/trade for drugs.

What messages should Mark receive about HIV?

Mark should learn the benefits of testing. Mark may not want to learn about safer injection practices as he considers himself an ex-user. Looking at, or handling syringes may be a trigger for him. A provider should approach this topic only with Mark's permission. Mark should learn about sexual risk reduction.

Client #6

Bill:

Bill is 13 years old. He recently masturbated with another boy. He is afraid that he now has AIDS.

- Could Bill have been exposed to HIV?
- How could he have been exposed?
- What messages should Bill receive about HIV?

Trainer Process Notes:

Client #6

Bill:

Could Bill have been exposed to HIV?

No

How could he have been exposed?

The only way he could have been exposed is if the other boy was infected and his body fluids got inside Bill.

What messages should Bill receive about HIV?

Bill should learn that HIV doesn't just "appear," but that someone has to be infected in order to pass the virus on to others. He should know that masturbation is safe. He should know that intact skin is a good barrier to the virus. The provider may want to talk, in an age appropriate manner about how HIV is passed from one person to another.

Wrap Up and Resources:

Slide 48

Resources	
For information about...	
<ul style="list-style-type: none">• Training & Education<ul style="list-style-type: none">- visit the DOH website at www.health.state.ny.us• HIV/AIDS call the NYS AIDS Hotline:<ul style="list-style-type: none">- 1-800-541-AIDS- Spanish AIDS hotline 1-800-233-7342	<ul style="list-style-type: none">• HIV Educational Materials for Consumers & Providers contact:<ul style="list-style-type: none">- (212) 268-6144 or- (518) 474-9866- HIVpubs@health.state.ny.us 