

STD & HIV/AIDS, Day 2:

HIV/AIDS - Staying Safe

Special Education, Lesson #26

Time Needed:

3-4 class periods

Student Learning Objectives:

To be able to...

1. Understand that AIDS is a very serious and life-threatening state of poor health
2. Understand that AIDS is caused by a germ/virus (HIV).
3. List the fluids in which this germ is found (blood, semen, vaginal fluid, and breast milk).
4. Identify risky behaviors that can cause HIV transmission: having unprotected sex or sharing needles with an infected person
5. Identify safe behaviors that won't expose a person to HIV.

Materials Needed:

Transparencies 1-5
Blackboard or butcher paper & pens for brainstorming
Hypodermic needle (optional)
Condom (optional)
One copy of the worksheet for each student

Agenda:

1. Review previous lesson concepts
2. What is HIV? What is AIDS?
3. How is HIV passed?
4. How do you catch HIV?
5. How do you avoid catching HIV?
6. Risky behaviors and Safe behaviors
7. Handling hypodermic needles
8. Condoms
9. Time between becoming infected with HIV and knowing it
10. Concerned, Not Scared - discussion

People with developmental disabilities are not immune to HIV or AIDS, and may be at slightly greater risk because they may not have access to easily understandable information about HIV/AIDS prevention, and because they are disproportionately vulnerable to sexual exploitation and abuse.

The goal of effective HIV/AIDS Education is to keep people from getting infected with HIV, which can lead to AIDS; to provide people with facts and information; to provide opportunities to learn about and practice making safe, healthy choices for themselves and others. We want people to know enough that they will be concerned about HIV and AIDS, but not scared – because they can protect themselves.

Note to teacher: This is a long lesson with a lot of important information about HIV and AIDS. It is probably best to split it up into 3-4 class periods.

Activities:

The statements on the left-hand side of each page in this lesson can be posed as true-false questions, to assess students' learning or simply used as the most basic ways to explain things.

1. Review previous lesson concepts

- A. Project Transparency 1 with the five terms on it (germs, risk, STDs, HIV, AIDS)
- B. Ask students to remind you what they've already learned about *the first three of these terms*. Be sure to include:
- C. *About germs:*
 - There are many different kinds of germs.
 - Germs travel into the body in different ways.
 - One of the ways germs can travel into the body is through the blood.
 - Some germs enter the body through sex.
 - Germs can make us sick.

About risk:

- We can make choices about risks we take.
- Sometimes taking risks can lead to good results (trying a new sport, answering a question in class, talking to a new friend).
- Sometimes taking risks can lead to unhealthy consequences (results).

About STDs:

- STDs are sexually transmitted diseases - that is, you get them by having unprotected sexual contact (sex) with an infected person.

2. What is HIV? What is AIDS?

- A. Ask if any of your students have heard about HIV or AIDS. Ask if they know what it is. Give them an opportunity to explore things they may have heard about the disease. Then tell them that today they will

Optional Variation: Block out the right hand side of this transparency, make copies, and use as a student worksheet.

learn about HIV and AIDS and how to stay safe from HIV infection and the disease it causes (AIDS).

- B. Define HIV and AIDS for your students. Project Transparency 2 and discuss each term individually.
“The immune system is like the body’s protective army. When someone is exposed to a germ, the army fights against that germ. The army is usually strong and can beat many common diseases. Sometimes medicine can help the army win against germs. However, HIV is a germ that is stronger than our immune system’s army, and it can kill and damage cells (soldiers) in the immune system. Having fewer soldiers in our protective army means that the immune system is weaker- so when different kinds of germs enter the body, they have more of a chance of making us sick than if our army was strong. We say that someone has AIDS when their body’s immune system (army) is so weak that it cannot fight against other specific diseases that enter the body and make him/her very sick.”¹
- C. Explain to students that HIV is the name of the “germ” or virus that causes AIDS by weakening the immune system over time.
- D. AIDS is a very serious disease. So far, there is no cure for HIV or AIDS. However, there are now powerful drugs that stop or at least delay the damage caused by HIV, slowing its progression to AIDS. People with HIV who take those medicines can live longer, often without developing AIDS.² Remember that these medicines are not a cure, and that the drugs can cause problems (called side effects) and are very expensive.

3. How is HIV passed?

- A. Remind students that different germs pass from person to person in different ways: some germs pass through the air, through sneezes, by eating food, in water, on dirty hands, etc.
- B. HIV, the virus that causes AIDS, isn’t passed through the air, through food or in water. It is passed only in bodily fluids:
- blood (both males and females)
 - semen – the white stuff that comes out of the penis during ejaculation (males)
 - vaginal fluid -- including menstrual fluid (females)
 - breast milk (from mother to baby)³
- Most of the time these fluids *don’t* contain HIV. Only when a person *has* HIV would their blood, semen, vaginal fluid or breast milk be infectious.

The HIV “germ” travels in blood, semen (in males) and vaginal fluid, breast milk (in females).

There are only a couple of ways to catch HIV. The two main ways that people catch HIV are:

1. unsafe sex and
2. sharing needles

C. To get infected with HIV, a person has to come into contact with one of these three fluids which is infected. And, the HIV germ in the infected fluid has to get into a person's body, usually through broken skin or through the mouth, nose, vagina, or rectum.

4. How do you catch HIV?

- A. Explain to students that HIV is a hard germ (or disease) to catch. There are two main ways that people catch HIV - both of them are behaviors that are risky.
- B. The two main ways people catch HIV are:
- by having unprotected sex with an infected person and
 - by sharing hypodermic needles with an infected person.⁴

Teacher note: Remind the students that “unprotected sex” means sex without the use of a condom. While condoms lower the risk of pregnancy and passing STDs or HIV, they do not make sex 100% safe. Abstinence is the only way to do that.

- C. Explain that a third way to catch HIV is when it is passed from mother to child. A woman who has HIV in her body can pass HIV to her baby:
- while she is pregnant (in utero)
 - when she is giving birth, or
 - while she is breast-feeding – through her breast milk.⁵

But make sure they understand that most women don't have HIV and therefore it is safe for them to do these things. And even if a woman has HIV, doctors may be able to give her medicine to keep the baby from catching it.

You can't catch HIV from ...

5. How do you NOT catch HIV?

- A. Discuss ways in which you do NOT get HIV - casual contact. Ask students to brainstorm safe behaviors, behaviors which would not pass HIV. The list might include:
- hugging
 - kissing
 - holding hands
 - sharing a pop
 - sharing a fork
 - using the same toilet
 - giving blood at a blood bank (new needles are used each time)
 - sitting by someone who is infected⁶

Students can point to the behaviors which are risky.

6. Risky behaviors and Safe behaviors

- A. Hand out *Transparency 3/Worksheet: Safe & Risky Behaviors*. Ask students to work individually or in pairs.
- B. Students are to circle all the behaviors on the worksheet that are safe behaviors – behaviors you could do and not catch HIV. They are to put an “X” through the behaviors that might pass HIV - risky behaviors.
- C. Debrief the worksheet. Students may have chosen between one and three behaviors to “X” out. Most types of contact are safe behaviors - you can’t catch HIV by doing them.
Teacher note: This activity will require some discussion about what the pictures actually represent. It is clear that the hypodermic needle is risky in many situations, but students should know that needles are not risky in hygienic, hospital situations in which new, sterile needles are used each time. The icon in the top left, of two people kissing, does *not* represent a risky behavior (unless that kissing behavior leads to sexual behavior). Lastly, the icon in the bottom left can be interpreted as risky if the students determine that the bottle contains alcohol. They have learned in previous lessons that being under the influence of alcohol can impair decision-making, and perhaps lead to risky behavior, like unprotected sex. It is **IMPORTANT** for the students to understand that sharing a glass is not a risky behavior, nor is shoulder-to-shoulder, or any, hugging.

What should you do if you see a used needle?

7. Handling Hypodermics

- A. Project *Transparency 4: Hypodermic Needles* or show one (optional). Ask students if they know what it is. Have they ever seen one? Where?
- B. Discuss that **most people use hypodermics for safe things** - like donating blood or getting a blood test, where every needle is new and sterilized (clean); getting medicine they need (like insulin for people with diabetes); or getting a shot at the doctor’s office.
- C. Explain that **some people use hypodermics, though, for injecting or “shooting up” illegal drugs to “get high”** and they might share these needles, which can spread HIV. After they’ve finished using the needles, they might leave them lying around. Students might have seen used needles on the street or in garbage cans.
- D. Model, then ask students to role-play what a person should do if they see/find a used hypodermic needle. Tell them that a used needle may contain blood infected with HIV. Practice walking away, leaving it alone, not touching it, and telling an adult where it is.

8. Condoms

- A. Project *Transparency 5: Condoms* or show a condom (optional). Ask students if they know what it is? Have they ever seen one?
- B. Explain that a condom is used for two reasons:
- as birth control - to keep from getting pregnant,⁷ and
 - to keep from catching STDs including HIV/AIDS.⁸
- C. Explain that the condom is placed over the man's penis when it becomes hard, before any sexual touch happens. The condom "catches" the semen (white stuff that comes out of the penis during ejaculation) and is thrown away after a couple has sex. The semen contains sperm which can result in pregnancy. And in a man with HIV, semen contains the HIV germ which could be passed to the partner. His partner's blood or vaginal fluid would contain HIV, if his partner had HIV. The condom is a barrier to protect both partners from pregnancy and germs. Explain that condoms should only be used once and then should be thrown away.
- D. Discuss places where condoms can be purchased - a pharmacy, a grocery store, a vending machine. They can be found at some clinics for free. If your school has a clinic where condoms are available, make sure students know that.

Teacher Note: This next activity is fairly sophisticated and should be considered optional, depending upon your particular students' social maturity and communication skills.

- E. Model, then role-play a couple discussing the use of condoms to avoid catching HIV.
Ask students what they could say to convince a partner to use a condom.
Have them brainstorm responses to partner objections and consider what they should do if their partner refuses to use a condom.

9. Time between becoming infected with HIV and knowing it

- A. Ask students how they know when they are sick with a cold or the flu.
- B. Explain to students that HIV infection is different from many diseases because many people who catch the germ do not get unusually sick right away. They may feel like they have the flu (cough, fever, tiredness) 2 weeks to 3 months after being infected with HIV, or they may

People who have HIV may feel fine for a long time...they may not know they are sick.

not notice any symptoms at all.⁹

Because many people who get HIV experience only mild sickness, HIV can be in a person's body without him or her knowing it. However, the germ is still contagious, even if the person does not know they have HIV. That means that person can pass it to another person through the methods talked about earlier, and not be aware of it.

AIDS is a late stage of HIV infection, often taking 10 years or more to develop after getting the germ. By the time AIDS has developed, most people will have become sick.¹⁰ However, AIDS is preventable or can be greatly delayed if the HIV infection is recognized early through testing and then treated.

How does someone know if he/she is infected?

There are tests people can take to find out if they have HIV. They are blood tests, and they check to see if the blood has developed antibodies to HIV. Only blood infected with HIV will have HIV antibodies. We say that someone is HIV-positive if antibodies are found in his or her blood, and HIV-negative if no antibodies are found.

Antibodies are special proteins that are made in response to HIV.¹¹ Use a metaphor to help explain this idea: "Imagine a country that has no army because it is peaceful. If that country were attacked, it would be likely to build an army to fight the enemy. This is what happens in an infected person's body: the antibodies – your body's army – develop (enlist) after HIV infection appears. It can take up to 3 months after the time of infection for enough antibodies to appear that a blood test can find them."¹²

It is important to be tested every 6 months if you have engaged in any risky behaviors, like needle sharing or sexual contact.¹³

Is there a cure for HIV/AIDS?

There is no cure for HIV or AIDS. There are drugs that help delay the onset of AIDS for people infected with HIV, so it can be longer than 10 years before someone with HIV gets AIDS.¹⁴ Talk with the students about what they might be doing in 10 years. (Working, being an aunt or uncle, have a family and kids, etc.)

Discuss that with these special medicines, it is possible for people with HIV to live for a long time. The medicine works to stop the HIV virus from destroying the immune system. These drugs are *not* a cure, but they help to stop the

damage to the immune system.¹⁵ These drugs are very strong and can cause other problems (called side effects), and they are expensive.

10. Concerned, Not Scared.

People can avoid being exposed to HIV.

Reinforce:

- Abstain from using needles to shoot up drugs
- Abstain from sexual intercourse
- Use condoms if you decide to have sexual intercourse (vaginal, anal or oral)
- Do NOT share injection equipment or needles and syringes.
- Do NOT re-use needles that have been used before for body piercing or tattoos.
- Do NOT share razors or toothbrushes, since these objects can come in contact with blood through razor cuts or bleeding gums.

You can be safe from HIV by...

Students should be concerned and informed, but not scared!

Dear Trusted Adult,

In class, we talked about HIV and AIDS. First, we reviewed previous work on germs and risk.

We talked about HIV, the virus that causes AIDS, and how HIV travels from one person to another - through blood, semen, vaginal fluid contact, and breast milk.

We talked about the many safe behaviors that do not pass HIV. We talked about the few risky behaviors (having sex with an infected partner, especially without protection, and using dirty needles) that are known to pass HIV.

We discussed hypodermic needles and condoms - what to do if you see a used one discarded in the community.

We discussed the concept that people with HIV may have no or only minor illness after becoming infected – and that a person can be infected with HIV and not know it until they develop AIDS after 10 years or more. During this period until infection is recognized, HIV can be passed without anyone knowing about it ... unless the person gets tested by a doctor or clinic.

We ended by discussing the fact that everyone should be greatly concerned about AIDS, but not scared, since we know how to prevent it.

You can support this learning about not being afraid of friends or family with HIV, by reading and discussing the following exercise.

- Each of you, student and trusted adult; name a couple of your best friends.
- Now choose one of these people to think about together.
- Fill his or her name in the blanks in the story below and discuss the situation afterwards.

What if...

Two years ago, _____ was traveling in a country that does not routinely test donated blood for HIV. (It takes money and personnel to be able to do this.) He or she was hurt badly in an accident, and the doctor had to do a blood transfusion. If he or she had been in the United States, the blood would have been tested for HIV, but in this country they did not do so.

Last week, _____ went to the doctor for a regular check-up and the doctor wanted to do an HIV test. _____ did the test. If it turns out that _____ does have the HIV virus, what will we do?

If you have any questions or comments, please call me.

Sincerely,

Teacher, Principal or Nurse

NOTE: All Trusted Adult Exercises are Optional.

Transparency 1: Terms

Germs

Risk

STDs

HIV

AIDS

Transparency 2: Definitions

H = human

I = immunodeficiency (not being able to fight disease)

V = virus (germ)

A = acquired (got from someone else)

I = immune (the part of your body that helps fight illness)

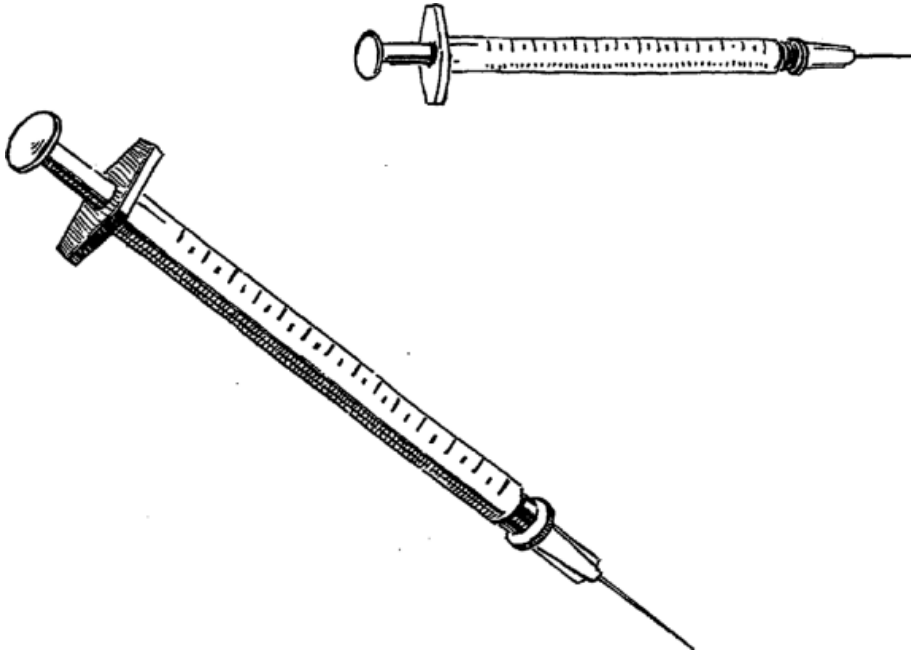
D = deficiency (not enough)

S = syndrome (sickness)

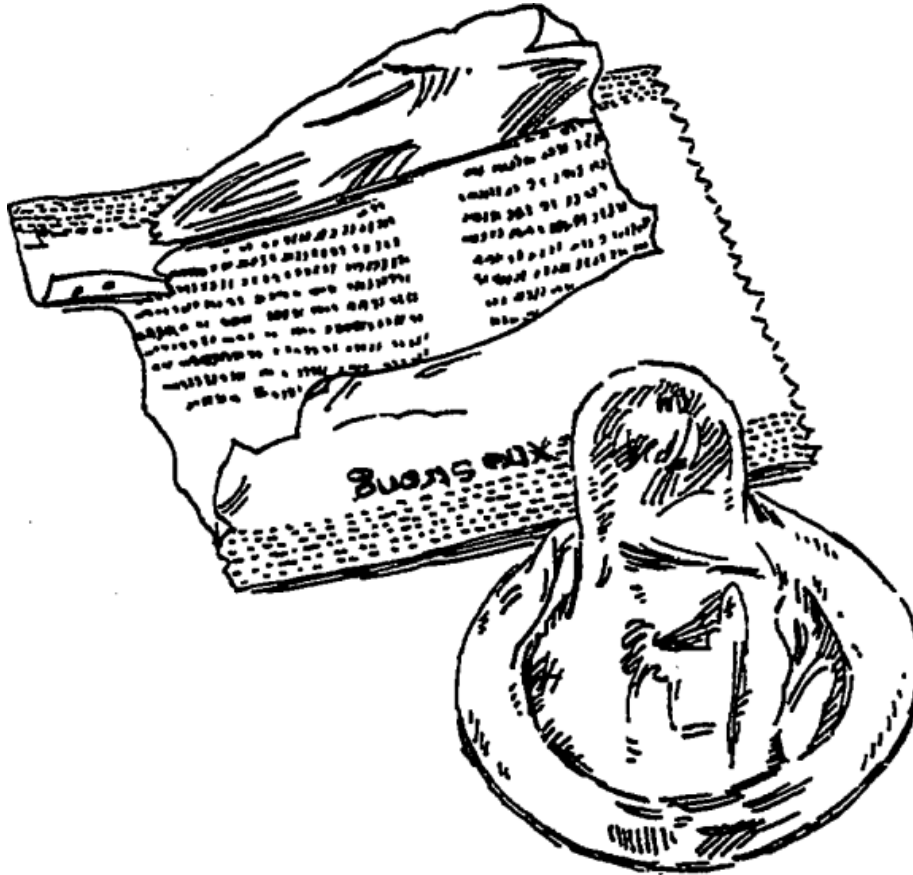
Transparency 3/Worksheet: Safe & Risky Behaviors



Transparency 4: Hypodermic Needles



Transparency 5: Condoms



REFERENCES:

1. UCSF Center for Health Information, *HIV InSite*. (copyright 2006). Retrieved on February 1, 2006 from <http://hivinsite.ucsf.edu/hiv?page=basics-00-03>.
2. Centers for Disease Control and Prevention. *Questions and Answers* (2006). Retrieved on February 1, 2006 from <http://www.cdc.gov/hiv/pubs/faq/faq4.htm>.
3. Centers for Disease Control and Prevention. *Questions and Answers* (2006). Retrieved on February 1, 2006 from <http://www.cdc.gov/hiv/pubs/faq/faq1.htm>.
4. Centers for Disease Control and Prevention. *Questions and Answers* (2006). Retrieved on February 1, 2006 from <http://www.cdc.gov/hiv/pubs/faq/faq16.htm>.
5. *Ibid.*
6. Centers for Disease Control and Prevention. *Questions and Answers* (2006). Retrieved on February 1, 2006 from <http://www.cdc.gov/hiv/pubs/faq/faq31.htm>.
7. Planned Parenthood. *Facts About Birth Control*. (2004). Retrieved on February 6, 2006 from:
<http://plannedparenthood.com/pp2/portal/medicalinfo/birthcontrol/pub-birth-control-14.xml>.
8. Public Health Seattle and King County. *HIV/AIDS Program, Safer Sex and Condoms*. (2004) Retrieved on February 6, 2006 from:
<http://www.metrokc.gov/health/apu/basic/condoms.htm>.
9. Public Health Seattle and King County. *Questions and Answers about HIV and AIDS*. (2005) Retrieved on February 23, 2006 from:
<http://www.metrokc.gov/health/apu/basic/index.htm#symptoms>.
10. Public Health Seattle and King County. *Questions and Answers about HIV and AIDS*. (2005) Retrieved on February 23, 2006 from:
<http://www.metrokc.gov/health/apu/basic/index.htm#aids>.
11. National Institutes of Health, United States Department of Health and Human Services. *HIV Infection and AIDS: An Overview*. (March 2005). Retrieved February 6, 2006 from <http://www.niaid.nih.gov/factsheets/hivinf.htm>.
12. *Ibid.*
13. Public Health Seattle and King County. *Questions and Answers about HIV and AIDS*. (2005) Retrieved on February 23, 2006 from:
<http://www.metrokc.gov/health/apu/basic/index.htm#test>.
14. National Institutes of Health, United States Department of Health and Human Services. *HIV Infection and AIDS: An Overview*. (March 2005). Retrieved February 23, 2006 from <http://www.niaid.nih.gov/factsheets/hivinf.htm>.
15. *Ibid.*