LESSON GUIDE

GRADE 10

How Is the Immune System Affected When HIV Enters the Body?

GRADE 10
Lesson
1

Performance Objective

Students will be able to:

- Describe how the immune system works.
- Describe how HIV affects the immune system.
- Clarify the difference between HIV and AIDS.
- Identify how treatments for HIV infection work.

Advance Homework

Have students read the Handout, "The Immune System: How It Works," as homework before this lesson, and write out three main ideas that they can share at the beginning of class. Write them on the board/newsprint.

Examples:

- The immune system is a network of cells and organs that communicates with each other to keep out or destroy pathogens.
- The immune system distinguishes between natural parts of the body (self) and invaders from outside (non-self).
- The immune system recognizes invaders by their antigens and uses antibodies to attach to antigens for removal by macrophages and other immune cells.

Motivation

- Ask, "How many of you have had the flu?" Elicit the symptoms they experienced and how long they were ill.
- Say, "While you were experiencing the effects of the flu, which system in your body helped you fight off the virus that caused the flu, so that you got better? Let's see how this system works."
- Explain that the immune system is the body's defense against pathogens (substances that cause disease). Major types of pathogens include viruses (the flu), bacteria (strep throat), fungi (athlete's foot), and parasites such as worms (pinworms) and protozoa (malaria). The healthy immune system usually overcomes the pathogens and removes them from the body. The immune system also has specific antibodies that can recognize and prevent future infections by similar pathogens.

NEW YORK STATE LEARNING STANDARDS
1

SKILLS

Resource Management

Self-Management

MATERIALS

Board/Newsprint

Handout:
The Immune System: How it Works

VOCABULARY

Antibodies

Antigens

Antiretroviral Therapy (ART)

Asymptomatic

B-cell

Helper T-cell or CD4 Cell

HIV-Positive

Immune System

Killer T-cell

Macrophages

Network

Pathogens

Prophylactic

- Ask, "If this is true, then why have some of us had the flu more than once?" Elicit that there are different strains (types) of flu viruses. Each time the body encounters a different virus or strain of virus, a person can get sick again. Also explain that there are some pathogens that are too strong for the immune system to fight on its own. These may require a person to take medication to control or get rid of the pathogen. And some pathogens are so strong that the body cannot get rid of them, even with the help of medication; their effects can only be controlled.

Procedure/Development

- Explain to students that a healthy immune system is made up of several defenses against pathogens.

  "The immune system can organize many different responses to attack specific invader organisms. We will learn about the one led by the Helper T-cell (often known as the CD4 cell), because that is the one most affected by HIV. The Helper T-cell acts like the leader of the response to the invasion by the pathogen and tells the other cells what they have to do. When the Helper T-cells aren't around, the other cells don't know what they should be doing.

  "When an invader enters the body, it gets engulfed by macrophages ("big eaters") that are close to the skin or mucous membranes, and the invader is taken into the lymph system where T-cells are stored. The macrophage takes the pathogen apart and reveals its antigens. Each invader has its own antigens. Antigens are proteins specific to each microorganism and act as "identification cards" that the immune system recognizes. Once the macrophage reveals the invader's antigens, the Helper T-cell, or CD4 cell, reads and recognizes the antigen. The CD4 cell sends a message out to the B-cells and to Killer T-cells to come help to destroy the invader.

  "The activated B-cell produces millions of antibodies. The antibodies will outnumber the invaders and help get rid of them by attaching themselves to specific antigens and then allowing both themselves and the antigens to be eliminated.

  "Antibodies and antigens fit together like a lock and a key. For example, a measles antibody will only attach itself to a measles virus. Once an antibody has 'caught' an invader, a signal is sent to the macrophages and Killer T-cells that it is ready to be eaten or destroyed with its capture. When a macrophage gets the message, it comes along and eats the antibody-antigen complex, ridding the body of the infectious agent."

Teacher Note: It is important for sexually active New Yorkers to get tested for HIV. Many people are infected and do not know it. For more information, see the "Get Tested for HIV" Health Bulletin, available at http://www.nyc.gov/html/doh/downloads/pdf/hb/dohmhnews5-01.pdf.

What is HIV?

- Say, "The most important thing to remember is the difference between HIV and AIDS. HIV stands for human immunodeficiency virus. HIV is the microorganism or "germ" that causes HIV infection. AIDS stands for "Acquired Immune Deficiency Syndrome," and refers to specific types of illnesses and conditions that persons who are infected with HIV can get if they are not treated, and when they are at an advanced phase of the illness."
  - Ask, "Why does this specify 'human'?" Human refers to people. HIV can infect humans but not animals. HIV does not infect mosquitoes, cats (cats do get their own acquired immune deficiency syndrome, but from a different virus), dogs, hamsters, or fish. Evidence suggests that the first human infections came from a mutation of a virus that affected chimpanzees (SIV, simian immunodeficiency virus). Mutation means change; the SIV mutated so it could affect humans. When humans hunted the chimpanzees for meat in Africa, they likely became infected when they came in contact with infected blood from a chimpanzee. But mutations occur rarely, so while there are now many strains of human immunodeficiency virus, people acquire HIV only from other people.

- Ask, "What is immunodeficiency?" If people are immunodeficient, it means their immune system is not able to fight germs and diseases the way it is supposed to. When this happens, their bodies are more vulnerable.
- Ask, "What is a virus?" A virus is a microscopic organism (or pathogen) that causes disease. Viruses cause illnesses like measles, chickenpox, the flu, and colds.

- What is AIDS?

  Say, "AIDS stands for Acquired Immune Deficiency Syndrome. AIDS is a syndrome, a group of related symptoms or health problems that combine to create a particular condition and which has one underlying cause. AIDS is a syndrome that is defined by a specific list of symptoms and specific infections (in addition to the presence of HIV infection)." This list of symptoms is compiled and reviewed regularly by the United States Department of Health and Human Services' Centers for Disease Control and Prevention

What Does HIV-Positive Mean?

- Say, "When a person becomes exposed to HIV, his or her body produces antibodies against the virus. The most common and least expensive blood tests for HIV detect the presence of antibodies, not of the virus. A person who has the antibodies for HIV is called HIV-positive. This means the person has been infected with HIV. In the early phases of HIV, which can last years, an infected person may have no symptoms or may experience only minor health problems associated with HIV (some swollen glands, night sweats, fatigue). However, if HIV is not treated and allowed to progress into AIDS, HIV-positive people almost always become ill, and may eventually die as a result of their HIV infection.

How Does HIV Make The Immune System Deficient?

- Say, "Once HIV enters a person's bloodstream, the virus begins to multiply. Its favorite target cell is the CD4 cell. HIV makes copies of itself inside the CD4 and may destroy the cell as the many copies burst out. This usually goes on for around 4 weeks before the body forms antibodies. After the antibodies are formed, infected cells may be destroyed by the body's own immune system. This means some infected CD4 cells are destroyed. Since CD4 cells organize much of the body's immune response, the immune system becomes weakened."
  - Ask, "How soon after acquiring HIV do you think an HIV-infected person can infect others?" Almost immediately. This is especially important because rapid replication of HIV occurs soon after infection, creating a spike in "viral load" or the amount of infection in the blood, which increases infectiousness. HIV infection cannot be detected immediately after it is acquired. Even if the most sensitive tests are used, the virus is usually not detectable in the bloodstream for 7-10 days after exposure. If standard HIV antibody tests are used, it typically takes up to twelve weeks before HIV antibodies can be detected.
  - Say, "Many HIV-positive individuals stay healthy for years after becoming infected. However, during this time the virus can still damage the immune system. Doctors (or other health care professionals) can measure the amount of damage to the immune system by counting the number of CD4 cells a person has."
  - Ask, "How many T-cells (or CD4 cells) do you think a healthy person has?" Healthy people have a CD4 count between 500 and 1500 cells per cubic millimeter of blood. An HIV-positive person will have fewer T-cells than healthy individuals. As the CD4 count goes down, he or she may start to have signs of HIV, such as diarrhea, fever, and weight loss, while swollen lymph nodes, fatigue, and nights sweats may continue.
  - Say, "Doctors rely on CD4 counts and a measurement of viral load to understand how much damage is being done to the immune system. As of December 1, 2011, the New York City Department of Health and Mental Hygiene recommends that antiretroviral therapy (ART) begin as soon as a person's positive HIV test is confirmed. If HIV infection is not treated and allowed to progress, the CD4 count will continue to decrease until the immune system is compromised enough to allow an

opportunistic infection to appear. While opportunistic infections can also appear in people who are immuno-compromised for other reasons (for example, the elderly or someone whose immune system has been purposely comprised so the person can accept a transplanted organ), their appearance in someone who is HIV-infected generally means that the person's HIV illness is very advanced.

Teacher Note: Visit http://www.cdc.gov/hiv/pubs/brochure/livingwithhiv.htm for examples of opportunistic infections on the Centers for Disease Control and Prevention's list of AIDS-defining illnesses. This site also provides more information about the difference between HIV and AIDS.

- Say, "Currently, there is no cure for HIV nor is there any vaccine to prevent it. However, drugs have been discovered to decrease HIV's effects on the immune system."
  - Drugs that fight HIV, called antiretroviral therapy (ART), interfere with the virus's ability to make copies of itself and its ability to weaken the immune system. As a result, in the United States, people with HIV are living longer, the progression of HIV is much slower, and HIV has become a chronic illness that people live with and manage for years. While people do still die from it, the death rates have dropped significantly. On World AIDS Day, 2011, The NYC Department of Health and Mental Hygiene Commissioner Thomas Farley announced his recommendation that anyone with a confirmed HIV diagnosis should begin ART without regard to CD4 count. The recommendation is based on evidence that ART can both improve the health of people infected with HIV, and prevent transmission from an HIV-infected person to an uninfected sexual partner.

    Even though effective treatments are keeping people infected with HIV healthier longer, they can still transmit HIV to others. It is important to avoid getting infected with HIV by avoiding high-risk behaviors and by staying healthy. However, it is still very important for young people to protect themselves from becoming infected with HIV.
- Say, "We know that there is no cure for HIV. The body cannot completely get rid of it and there is no medication that will do this. So, when a person has HIV, what can treatment accomplish?

Have students brainstorm what goals a person with HIV might have for treatment. After listing the following goals, give them (or elicit from them) examples of treatments that correspond to each goal:

- *Goal: Suppress replication of HIV.*

  Example: Several types of medicines effectively prevent HIV from reproducing itself in the body. Recent improvements in antiretroviral therapy (ART) are easier to tolerate and have fewer side effects. If students do not know what "side effects" means, explain to them that these medications can keep CD4 counts high yet affect the body in other ways—for example, a person can feel nauseated or dizzy, might have to eat certain foods, etc.
- *Goal: Prevent opportunistic infections.*

  Example: Suppressing HIV, or decreasing its numbers until they are so small that HIV can't be detected, protects the immune system so that it can continue to fight off infections. Thus taking medicine that keeps HIV from multiplying prevents opportunistic infections. If HIV is present for a long time before a person gets diagnosed and sees a doctor for treatment, then he or she might need to take prophylactic—or preventive—medicines in order to prevent opportunistic infections. These medicines must be taken until the HIV-infected person can take ART long enough for the virus to stop multiplying and the immune system repairs itself. One example of a prophylactic medication for an opportunistic infection is pentamidine, which is given in an aerosolized form so the person can breathe it in. Pentamidine can prevent pneumocystis pneumonia (PCP), a type of lung infection that killed many of the first people reported to have AIDS when the epidemic was first discovered in the early 1980s. Now that medicines to suppress HIV are widely available, immune systems of HIV-infected persons do not often deteriorate to the point where pentamidine is required for prophylaxis.

- *Goal: Strengthen the immune system and boost overall health.*

  Example: Medicines called immunostimulants boost the immune system to help fight opportunistic infections. Boosting overall health through increased rest, improved diet, exercise, and avoiding drugs and alcohol are non-medicinal ways to strengthen the immune system, as are reducing stress by avoiding or learning to cope better with anxiety-producing situations and/or by practicing yoga, meditation, or deep-breathing techniques.

Homework

Have students research and write a brief paper (one to two pages long) on one of the following:

1. a type of treatment for HIV, or
2. one of the opportunistic infections to which people with highly advanced HIV infection are particularly vulnerable, and which meets the CDC criteria for AIDS. Students may research their papers by contacting an HIV service organization, calling an HIV hotline, or locating information from an organization on the Internet. Government agencies such as the Centers for Disease Control and Prevention and the New York City Department of Health and Mental Hygiene have useful websites. If students do not have a computer with Internet access in their homes, a librarian at a New York City public libraries can help them access HIV information on the Internet.

Handout

The Immune System: How It Works

The immune system is a complex system or network (a system of things that are interrelated) of cells, tissues, chemicals and organs. Its mission is to protect us against foreign organisms and substances. The biggest organ in the immune system is your skin. Healthy, unbroken skin is the body's main defense against infection. The immune system has the ability to recognize something as self (belonging to the body) or non-self (invader) and it tries to get rid of anything that is an invader. Invaders of the body are microbes (microscopic organisms, also called pathogens or germs) and include fungi (athlete's foot), bacteria (strep throat), viruses (the flu), and parasites such as protozoa (malaria) and worms (pinworms). Many different cells and chemicals must be coordinated for the immune system to function at its best.

There are various ways the immune system functions. It has:

1. barriers, like skin;
2. innate or inborn immune responses (for example, stomach acid kills many pathogens); and,
3. a special response ("adaptive immune system") for each invader; it uses that response the next time it encounters the invader.

The adaptive immune system is composed of various types of white blood cells, which work together to identify and then destroy specific bacteria, viruses, or any other pathogens which enter the body.

If a pathogen gets into the body, this is how a healthy immune system works:

1. When an invader enters the body, it gets engulfed by macrophages ("big eaters") that are close to the skin or mucous membranes.
2. The macrophage takes the pathogen apart and reveals its antigens. Each invader has its own antigens, which act as "identification cards" that the immune system recognizes. The Helper T cell—also called CD4 cell—reads and recognizes the antigen. The CD4 cell sends a message out to the B-cells and to other cells to come help to destroy the invader.
3. The activated B-cell produces millions of antibodies. The antibodies will outnumber the invaders and help get rid of them by attaching themselves to specific antigens and then allowing both themselves and the antigens to be eliminated. Antibodies and antigens fit together like a lock and a key. For example, a measles antibody will only attach itself to a measles virus.
4. Once an antibody has "caught" an invader, a signal is sent to the macrophages and to other cells (Killer T-cells and others) that it is ready to be eaten or destroyed with its capture. When a macrophage gets the message, it comes along and eats the antibody-antigen complex, ridding the body of the pathogen or invader.

By the time you feel miserable with a cold, the virus that caused it is already under attack by macrophages, T-cells, and B-cells. The B-cells have a memory, so that if the same virus enters the body again, the B-cells will send out already made antibodies to help identify it and help the cells of the immune system destroy it.

What are the Facts About HIV Transmission?

GRADE 10
Lesson
2

Performance Objective

Students will be able to:

- Describe the course (natural history) of HIV.
- Identify the body fluids that can transmit HIV.
- Describe the most common modes of HIV transmission.
- Identify how HIV is not transmitted.
- Understand treatments available for HIV infection.

Motivation

- Say, "Imagine that you have a cousin who is one or two years younger than you who has just moved here from another state and has questions about how a person can get HIV. You want to be sure that you give accurate information. How can you obtain accurate information to explain HIV transmission to your cousin?"

  Elicit the following responses: health class, HIV workshops, the Health Resource Room in the school, the New York City Department of Health and Mental Hygiene (NYC DOHMH), a local hospital, community-based HIV organizations, local libraries, school clinics, health professionals, and websites (especially the Centers for Disease Control and Prevention (CDC) and NYC DOHMH).

Procedure/Development

- Ask, "What would a person who knew very little about HIV want to know?" Have the class brainstorm questions and write them on the board/newsprint.

  (Alternatively or additionally, ask the class to bring in questions they prepared as homework.) You may wish to "model" some questions. For example, you might say, "If I didn't know much about HIV, I might want to know how most people who have it became infected."
- Distribute the Handout, "Facts About HIV Transmission." After three minutes, read the students' questions aloud. Elicit answers based on the information on the fact sheet. Continue the process until the class has fully covered the body fluids in which HIV can be transmitted, (blood, including menstrual blood; semen, including preseminal fluid; vaginal fluids; breast milk), all the most common modes of transmission (the following types of sexual intercourse: vaginal/penile, oral—including mouth to vagina and mouth to penis, and anal/penile); sharing needles, etc.; HIV-positive mother to child, and common misconceptions about HIV.

NEW YORK STATE LEARNING STANDARDS
1

SKILLS

Advocacy

Communication

Self-Management

MATERIALS

Board/Newsprint

Handout:
Facts About HIV Transmission

VOCABULARY

Mode

Transmission

Teacher Note: Make sure students understand that HIV can be transmitted through body fluids of several kinds and through vaginal/penile, anal/penile, oral/vaginal, and oral/penile contact with an HIV-positive person. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

The modes of transmission of HIV are often discussed in terms of personal risk. It is important to emphasize being protective of oneself and others.

- Ask, "Is there any information on your fact sheet that has not been discussed that you would like to discuss?"

Teacher Note: Some students might be too shy or embarrassed to ask. For many young men, research has shown there is often an opposite problem—they often think they are supposed to know all about sex, so they feel if they ask questions they will be ridiculed. Therefore, you may wish to set up a "Question Box" in advance and periodically ask all the students to anonymously write down a question that they have regarding HIV or write "I have no question" to insure anonymity. Students should fold the piece of paper and the teacher should collect them and place them all in the Question Box. That way whenever the teacher pulls out a question from the box, the question-asker will be unknown, and students can find out information anonymously.

Assessment/Homework

- Do a quick "go-round" (oral review) to elicit from students the modes of HIV transmission and the body fluids that can carry the virus.
- Have students create a poster that targets teens and explains how HIV is transmitted. They must include the body fluids (blood, preseminal fluid/semen, vaginal fluid, breast milk) that can transmit the virus. Tell them to use at least four facts from the fact sheet in their posters.

Handout

Facts About HIV Transmission

What is the course of HIV Infection?

Once a person is infected with HIV, he or she must see a doctor who specializes in HIV. Medical treatment (ART or antiretroviral therapy) is very effective at keeping CD4 counts high and at lowering the viral load (amount of HIV in the blood). However, if a person does not receive medical treatment, over time HIV is likely to replicate and continue to attack the immune system. If HIV compromises the immune system, the person will be more susceptible to "opportunistic infections," some of which are serious and potentially fatal.

A person with untreated HIV typically goes through the following phases:

Acute Phase (Primary HIV Infection) – from exposure and infection to development of antibodies, often accompanied by flu-like symptoms;

Asymptomatic Phase – literally means "without symptoms," though the person may experience a few symptoms, such as fatigue, swollen glands and night sweats, and other signs that accompany most infections;

Symptomatic Phase – vulnerability to common illnesses (like colds) and additional symptoms (like weight loss, diarrhea). Person may experience first hospitalization;

AIDS – accompanied by symptoms due to the direct effects of HIV infection, such as wasting syndrome, along with symptoms from opportunistic infections.

There is no "cure" for HIV. However, HIV is a treatable disease. Antiretroviral therapy (ART), a very effective therapy that suppresses the virus, has been available since 1996. In 2011, the NYC Department of Health and Mental Hygiene (NYC DOHMH) recommended that all people infected with HIV begin treatment, regardless of CD4 count. ART has decreased the amount of HIV in the blood, keeping the immune system strong and able to fight off opportunistic infections longer. For persons who are not diagnosed until their immune system has suffered serious damage due to HIV, other medications, called prophylactic medications, must be taken to prevent the occurrence of common opportunistic infections. People with HIV who receive ART and monitor their health often live productive and healthy lives for decades.

How Do We Know Who Has HIV?

- One can't tell if a person has HIV by looking at him or her.
- HIV can have many different symptoms, and these are often symptoms of other, unrelated sicknesses. Only a laboratory diagnostic test for HIV—usually an HIV antibody test—can confirm the presence of HIV infection. In fact, most people with HIV feel healthy and therefore don't know that they have it until they are tested. That is one reason that sometimes people don't get tested until they have serious symptoms. The CDC estimates that 1 in 5 of people in the United States who are infected with HIV do not know it. In September, 2010, New York State passed a law requiring all persons aged 13-64 who seek healthcare in hospital emergency departments, inpatient units or outpatient primary care clinics/private practices to be offered an HIV test (Chapter 308 of the Laws of 2010).

- Occasionally, it is possible to have a negative HIV antibody test and still be HIV-positive. There is a "window" of about three months after infection when HIV may not be detected by the HIV antibody tests that are most commonly used for diagnosis. That is because it takes most people up to twelve weeks to develop detectable antibodies to HIV after infection. NAAT (nucleic acid amplification tests) or antigen tests detect the presence of HIV in the blood, rather than detecting HIV antibodies that fight the infection. These tests are not often used because they are more complicated and expensive. And even if a healthcare provider uses antigen tests, there is a window period of up to 10 days when even these tests cannot detect the presence of infection after it is acquired.

Some Ways HIV Can Be Transmitted

Sexual Intercourse: Sexual Behaviors That Can Transmit HIV

"Sexual intercourse" refers to sexual activity that involves vaginal/penile, anal/penile, oral/vaginal, and oral/penile contact. Most HIV infections are transmitted through sexual intercourse. HIV is transmitted during sex when the body fluids of one person come into contact with places on the other person's body through which the virus can enter that person's body.

No matter what a person's sexual orientation (whether that person is attracted to people of the same or different gender), sexual intercourse can put him or her at risk of HIV infection. Of these, penile/anal intercourse is most risky, and oral intercourse least risky for HIV transmission. In addition to being risky for HIV transmission, sexual intercourse also carries a risk of transmission of other STIs besides HIV. Several common STIs can increase one's vulnerability to HIV infection if they are present during sex. This is because open sores or lesions in the male or female genitalia may be present, and this interruption of skin integrity breaks down one of the body's natural defenses to infection – the skin. In penile/vaginal intercourse, women are at higher risk than men, for many reasons, though both partners are still at risk.
[Note: methods of prevention will be discussed in a subsequent lesson.]

People do not usually become infected with HIV through kissing, even deep kissing. The exception may be if blood can be exchanged, such as when one or both persons have bleeding gums or cuts in the mouth.

Drug Use

HIV can be transmitted through the sharing of needles, syringes, and other equipment (such as "cottons" or filters, "cookers" or mixing containers, drug solutions and water or other liquids) used to prepare drugs or other substances for injection. HIV can be transmitted because sharing these items allows blood or other body fluids from one person to be transferred to another.

HIV (and some types of hepatitis) can be transmitted through any type of drug use that allows body fluids to come in contact with another person's blood or a damaged mucous membrane.

HIV transmission is possible if equipment is shared, regardless of what substance is injected. Most commonly, people share equipment to inject illegal drugs (for example, heroin or cocaine), but sometimes it is to inject other substances (such as steroids, hormones, vitamins or prescription medications).

Use of alcohol or other drugs can be dangerous because they can diminish a person's ability to make healthy decisions about behavior, possibly putting the person in danger of risk behaviors that can lead to HIV/STI transmission.

Pregnancy, Childbirth, or Breastfeeding

HIV can be transmitted from an HIV-positive pregnant woman to her child during delivery and breastfeeding. In the U.S., the transmission of HIV from mother to child has been dramatically reduced through the use of antiretroviral medications (ART), delivery through C-section, and having HIV-positive mothers not breastfeed their infants. Antiretroviral medications are given to the woman during pregnancy and delivery, and given to the infant of an HIV-positive mother in the first weeks to months of life.

How Can We Improve Our Communication Skills When Talking About Risk Behaviors That Can Transmit HIV/STIs?

GRADE 10
Lesson
3

NEW YORK STATE LEARNING STANDARDS
1

SKILLS
Communication
Decision Making
Relationship Management
Self-Management

MATERIALS
Board/Newsprint
Activity Sheet:
Scenarios for Role-Playing

VOCABULARY
Aggressive
Assertive
Cultural Diversity
Gender Roles
Goal
Material
Non-Material
Value

Performance Objectives

Students will be able to:

- Identify effective communication skills that can help teens avoid risk behaviors that could lead to infection with HIV or other STIs.
- Recognize obstacles to effective communication, including cultural diversity and gender roles.
- Identify and appreciate the importance of assertiveness as a communication tool.
- Recognize that it is important for both partners to be responsible for communicating and deciding about sexual activity.
- Demonstrate how communication skills affect one's level of risk of infection for HIV or other STIs.

Motivation

- Say, "Imagine that a person is dating someone who is pressuring him or her to have sex, but for any number of reasons, the person does not want to have sex. What are some of the reasons that it might be difficult to tell the partner this?"

  Students' answers may include:

  – The person is afraid of hurting the partner's feelings.
  – The person wants to be in control of the sexual decision, but not alienate the partner.
  – The person is afraid that the partner might get angry and want to break up.
  – The person does not want to seem naive about sex.
  – The person doesn't want to feel pressured, but doesn't want to seem "uncool" either.
  – The person feels that it isn't appropriate to discuss such things.
  – The person is not sure of exactly what the partner wants.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm or search for "Respect for All Resources" on the NYCDOE Principals' Portal.

Procedure/Development

- Say, "The first step in figuring out how to communicate is deciding what you want to say. To know that, you need to look inside yourself and consider who you are, what you value, and what you want out of life. Then what you say can really be an expression of who you are, what you value, and what your goals are."
- Ask, "What are some non-material things that teens may value?" (Make sure students understand the term 'non-material.' Write students' ideas on the board/newsprint labeled "goals," as shown below. Then have the class fill in the right column—objectives— to show how values dictate actions.)

  Students' responses may include:

GOALS (What You Value)	OBJECTIVES (How will you achieve these values?)
strong family relationships	develop good communication with family; learn to talk about any problems
trusting, honest friendships	identify and develop potential friendships, meet appropriate people
education, achievement	complete high school, consider higher education, job training, apprenticeship
financial independence	get an after-school or weekend job
creativity	explore creative outlets (visual or performing arts, inventing, designing, writing)
romance	get to know individuals you might want to date, go out together or with friends; in the future have a committed relationship (such as marriage or other long-term relationship)
cultural identity	identify and maintain values and behaviors that are important to your culture and to you, attempt to find ways to practice them in new situations and with people who may not be like you
independence, controlling one's own life	be friends with people who respect you and don't pressure you to betray your beliefs; avoid unintended pregnancy; develop self reliance and responsibility; learn how to make healthy judgments
health	avoid behaviors that could lead to HIV/STI infection, pregnancy, stress; identify and seek help with these behaviors; practice behaviors that make you physically and emotionally stronger
fun	engage in relaxing or challenging activities you enjoy and avoid those that cause stress or worry

- Ask, "When people say that they want to know how to tell partners "no" to sexual activities without hurting their feelings, what values and actions are they expressing?" Students' responses may include:

GOALS	OBJECTIVES
friendship: considerate communication, respect	preserving friendship and harmony even when there are disagreements; learning how to work through disagreements so that all parties feel good about each other
independence: being in control of their own sexual decisions	learn to resist pressure by others, and not to put pressure on others
health	avoid the risks (transmission of HIV, other STIs, unwanted pregnancy) that can occur with sexual activity
healthy sexual behavior	make and maintain decisions about sexual activity and abstinence based on own values, as well as respect for others and their values and decisions

- Ask, "Why is it sometimes hard to say no?" Students' responses may include:

  Partners may:

  - Not take no for an answer.
  - Threaten them.
  - Try to persuade them.
  - Pressure them.
  - Make fun of them.
  - Reject them.
  - Lie about their feelings.

- Ask, "What does the word 'sex' mean? What does the word 'virgin' mean? What does the word 'sexuality' mean?" Ask students to list as many answers as possible, and write up their responses.
- Ask, "What are some of the reasons that people might have different opinions about the meanings of these words?" Be sure to elicit the responses and explanations in the box below, among others that students offer:

1. **Cultural identity.** People (especially in New York City) come from many different countries, backgrounds, or cultures. People from different cultures may have different ways of communicating (even if they speak the same language), and different ideas about what is appropriate to talk about, based on cultural expectations and norms within their communities of origin or local communities. Sometimes these expectations are influenced by religious beliefs or practices.
2. **Language and vocabulary.** People from different backgrounds, and sometimes from the same background, use the same words to mean different things. For example, people may mean different things by words like "abstinence," "celibacy," "chastity," "virginity," and even "sex" or "sexual intercourse."
3. **Gender roles.** People of different genders learn to behave and communicate differently, especially about issues of sex and sexuality. For example, some people think it is appropriate for a boy to know and talk more about sexual activity than a girl. Transgender students may find that discussion of sex and sexuality does not include their experiences.
4. **Sexual orientation.** Lesbian, gay, and bisexual students may recognize that their personal experiences and behaviors are ignored or defined differently from cultural norms for straight students. What a gay teen considers to be "sex" may or may not be different from what a straight teen considers to be "sex."

- Write on the board/newsprint: ASSERTIVE COMMUNICATION.
- Ask, "What does it mean to be assertive?" (Answer: To state in a positive way what one feels and what one wants, while attempting not to hurt or offend other people.)
- Say, "Being assertive is not the same thing as being aggressive. People who are assertive say what they feel and want, but don't attack or belittle other people who think differently. People who are aggressive attack or belittle those who think differently."
- Say, "It's not always easy to be assertive, or to deal with someone's resistance to what you want. So there are 'assertiveness techniques' that people can learn. These techniques help people stay positive and firm about saying what they feel and want and what they don't want, while not hurting or offending other people."
- Ask, "What do you think are some of the characteristics of assertive communication?"
- Make sure students' responses include those listed in the left column of the chart below. If students have difficulty proposing responses, ask them what poor communication skills are and write the more effective characteristics opposite them, making a chart like the following.

ASSERTIVENESS SKILLS	POOR / INEFFECTIVE COMMUNICATION
Identify what is being discussed. ("You seem to be talking about having [a particular kind of sexual activity].")	"Huh?"
Decide what you feel and want and state it clearly. ("I enjoy your company and want to keep seeing you. And I want you to understand and respect my decision not to express my feelings that way.")	Be dishonest about how you really think or feel. ("I don't like it.")
Use body language and nonverbal communication that expresses your feelings and confidence in what you are communicating. Make sure your body language and nonverbal communication are consistent with your words.	Communicating one thing with body language while saying another.
Choose words carefully; consider how the listener will receive them.	Blurt words without thinking about them first; use insulting or vulgar language to express disapproval or refusal.
Use "I" statements, which communicate your feelings without seeming judgmental. "I like you, but I am not ready for sex at this time in my life."	Use "you" statements, which can sound accusatory. ("You'd better back off… you keep pressuring me... the only thing you think about is sex.")
Listen carefully and respectfully: hear the other person out before responding.	Interrupt; "tune out" when the other person is speaking; jump to conclusions before the other person has had a chance to express his/her point of view.
Paraphrase what you heard the other person say to check that you understood correctly: e.g., "Are you saying that you need to…?"	Dismiss the other person's point of view and avoid letting the other person know you have listened and considered his/her point of view. ("You don't know what you're talking about.")
Reiterate what you want, as many times as necessary, to make sure the other person hears you and to enable yourself to withstand pressure. This is called the "broken record" technique.	Allow yourself to be trapped by someone else's "persuasive arguments"—and lose sight of what you want.

- Ask, "Why is assertiveness so important with regard to HIV or other STIs?" (Answer: Certain behaviors can transmit HIV or other STIs. Clearly stating one's own limits reduces the likelihood of getting talked into risky behaviors or doing something because you don't know how to say no without seeming hurtful or feeling ashamed. It also reduces pressure on your partner by making it clear where you stand and why.)
- Say, "The easiest relationships are often those in which a friend's values and goals are in sync with one's own. But when people have different values and goals, one is not necessarily 'right' and the other 'wrong.' They can still have a good relationship if they respect each other and 'agree to disagree.'"
- Say, "Assertiveness skills are effective, and like all skills, they need to be practiced so you can feel comfortable, confident, and prepared. Like any communication technique, assertiveness doesn't always work, so sometimes you have to be prepared to walk away, or set a cooling-off period."

Assessment/Homework

- Have students role-play one or more of the brief scenarios on the following page, demonstrating assertive responses to pressure situations. After each role-play, have the class point out the assertiveness techniques that were used, or propose responses that could have been tried. (See "How to Use Role-Plays in the Classroom" in Appendix B.) Alternatively, if time is short, postpone this activity for the next class session or choose one or two for the group as a whole to discuss. Also, you may use these scenarios throughout the HIV lessons to refresh students' skills.
- Have students write a dialogue based on one of the scenarios that you do not get to in class. Have them identify the assertiveness skills used.

Activity Sheet

Scenarios for Role-Playing

In the weight training room, some football players are doing strengthening exercises. Clinton comes out of the shower room. He whispers to Frazier that Steve, the team captain, has a syringe of steroids and is offering some of the guys on the team a shot. Clinton says, "Maybe this is what we need to win the championship." Frazier knows that sharing a syringe and needle can transmit HIV and hepatitis. He also knows that steroids have dangerous side effects. He refuses.

Danette and Tyrone have been dating for six months, and Danette is pressuring Tyrone into sexual activity. Tyrone is not ready for sex right now, and wants simply to enjoy Danette's company and high school activities, and not even think about having sexual activity until later. But Danette is unrelenting in the pressure, and Tyrone is fed up with the non-stop debate.

Jana's family came here from their home country when she was in elementary school. They are unfamiliar with the ways young men and women meet and associate with each other here, since in their country, "dating" or any sexual activity before marriage are frowned upon. They have allowed Jana to see Dean, a young man she met at school because his family is from the same country as Jana's. Dean, who was born in New York, has begun to suggest his interest in sexual activity to Jana, but she is not sure what is appropriate for her, and has difficulty asking her parents or even older sister for advice. How does she discuss her confusion and reluctance with Dean?

Alex and Carey have been seeing each other off and on. Carey has begun to use slang terms to suggest what they might do sexually. Alex doesn't know what a lot of these words mean, and is embarrassed to ask Carey. How does Alex find out what Carey is talking about, and then communicate a decision?

Pat and Lee have been close friends for years. Recently, Lee has started to have romantic feelings toward Pat. Although Lee thinks Pat might feel the same way, Lee is unsure of how Pat feels. Lee does not want to insult Pat or risk losing their friendship. Yet, Pat can't stop imagining how wonderful it would be if Lee shared these special feelings. What are some ways Lee can discuss this with Pat?

What Are the Advantages of Sexual Abstinence?

GRADE 10
Lesson
4

NEW YORK STATE LEARNING STANDARDS
1

SKILLS
Communication
Decision Making
Relationship Management
Self-Management

MATERIALS
Board/Newsprint

Activity Sheet:
Strategies for Choosing and/or Maintaining Abstinence

VOCABULARY
Abstinence
Influence
Negotiation
Pressure

Performance Objectives

Students will be able to:

- Define sexual abstinence in terms of HIV prevention.
- Understand how teens feel pressured, both internally and externally, to engage in sexual behavior that can transmit HIV or other STIs.
- Differentiate between abstinence and virginity, in terms of behavior that can transmit HIV or other STIs.
- Understand how teens, even those who have been sexually active in the past, can commit to abstinence.
- List the benefits associated with abstinence.
- Set goals and develop realistic negotiation and refusal techniques that will help them become or remain abstinent.

Motivation

Ask, "What kinds of influences persuade some teens that it is appropriate for them to be sexually active?" Possible responses may include:

- Teens like and admire people they know who say they have had sexual experiences during adolescence.
- TV and movies portray sexually active teens as glamorous, popular, and typical.
- Ads and mass marketing directed at teens use sexual images with teens portrayed in seductive, semi-nude embraces with members of the same or different gender.
- Popular music and music videos have strongly sexual messages; they often glorify sex as the ultimate thrill, and stress living for the pleasure of the moment.
- Peer pressure; teens often encourage other teens to become sexually active, usually by sending messages that signal some form of rejection, such as:
  - "You're not a man (or woman) until you've done it."
  - "Even if you don't do it, he/she will say you did."
  - "Real women (or men) like sex. What are you afraid of?"
  - "It's your body; do what feels good."
  - "Everyone's doing it."
  - "If you don't do it, he/she will just do it with someone else."
  - "Show me you love me."
  - "I love you. I want to be close to you."

Teacher Note: Students should understand that being able to identify the benefits of abstaining from sexual activity can help them withstand the considerable pressures described above.

Procedure/Development

- Say, "These are outside pressures."
- Ask, "Why do some teens succumb to these outside pressures and choose to become sexually active?" Possible responses may include that some teens become sexually active because:
  - They want to be loved and accepted.
  - They are curious.
  - They want to have a baby.
  - They want to feel powerful and in control.
  - They want to feel grown up.
  - Sex feels good and is fun.
- Say, "All people have sexual feelings; adolescents become more aware of these feelings as they get older. While teens HAVE these feelings, they can make choices about how to EXPRESS them."
- Say, "We all have thoughts and fantasies in many areas of our lives. Think about how chaotic the world would be if we acted out every one of them. In our fantasies we get to decide how things turn out. That doesn't always happen in real life. In real life we have to think about the consequences of our actions, and we get real experience from our actions. You probably already do this many times a day. Now let's think about what we consider when we think about activities that have to do with relationships and sex."
- Ask, "Are the expectations that young people have about sex always fulfilled?"
- Say, "In reality, many teens who are asked say that their early sexual experiences left them feeling disappointed and did not lead to the lasting relationships, better feelings, or higher self-esteem they desired."
- Say, "Teens may have felt that if they waited to be sexually active they would be off schedule for the 'norms' they've heard about. But when they act according to an external rather than internal clock, often things don't feel right. In reality, everyone takes different time and experiences to be ready for complicated relationships. Many teens try to hurry experiences, including the decision of whether or not to have sex."
- Ask, "Can someone who has had sex decide to become abstinent?"

  Answer: "Yes. The two are not tied together. Someone who has done something in the past can make a different decision in the future. For example, someone who has had sexual intercourse in the past can decide to abstain from sexual activity in the present and future, until he or she feels emotionally ready to take on the responsibility of being sexually active once again."
- Write on the board: "What are some of the benefits associated with abstinence?" Ask students to respond. Students' responses may include:

  Abstaining means:
  - Not worrying about getting or giving a sexually transmitted infection, including HIV.
  - Not worrying about the risk of becoming pregnant or causing pregnancy.
  - Not worrying about parenthood, abortion, or adoption.
  - Not worrying that HIV/STI infection or unintended pregnancy will interfere with educational, career, or financial goals.
  - The chance to experience a loving relationship without having to perform sexually.

- Summarize: "If a teen has already been sexually active but wants to stop, he or she has the right to do so any time. Both abstinent and sexually active teens can work toward the goal of postponing sexual activity that can transmit HIV or other STIs."
- Ask, "What strategies can teens use to work toward the goal of abstinence?" Review the Activity Sheet, "Strategies for Choosing and/or Maintaining Abstinence."
- Say, "In some cases, when a behavior a person suggests is dangerous, illegal, or unethical, it may be necessary to end a relationship. However, in most cases, you can use assertive communication skills to say no without ending the relationship."

Teacher Note: Make sure students understand that HIV can be transmitted through body fluids of several kinds and through unprotected vaginal/penile, anal/penile, oral/vaginal, and oral/penile contact with an HIV-positive person. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

Assessment/Homework

Write an essay describing the values people take into consideration when assessing their feelings about abstinence. How might feelings and values conflict with or support each other?

Teacher Note: Set aside 10 to 15 minutes in a subsequent class for volunteers to share and process their writing.

Activity Sheet

Strategies for Choosing and/or Maintaining Abstinence

1. Identify your long-term goals and personal values. Such goals may include: completing high school, getting a job, getting an apartment, going to college, getting married or forming a life partnership, or becoming financially independent. Values that underlie these goals may include: emotional self-sufficiency, deciding what constitutes personally appropriate behavior, the importance of focusing on education.

2. Focus on these goals and values. Don't jeopardize long-term goals and important values for short-term pleasure or excitement.

3. Understand that young people are most likely to be successful with abstinence if they set limits in advance. Sexual arousal generally increases as a couple increases their level of physical intimacy. Sexually active young people often say, "One thing led to another... we got carried away." Such sexual activity as fondling, for example, may progress into genital contact and eventually lead to sexual intercourse and risky activity, unless limits are set in advance. In reality, once started, arousal can be stopped.

   Therefore young people can limit themselves to such activities as holding hands, hugging, a goodnight kiss, and not permit these expressions to progress further. Even such activities as prolonged kissing can stop there and don't have to lead further. Teens who have been sexually active always have the option to set limits from this time on, and choose abstinence.

4. Plan activities and settings that will enable you to maintain the limits you have set for yourself, and avoid those that would make doing so difficult.

   For example:

   DO:
   - Double date with someone who shares your values—plan ahead.
   - Socialize within a group who share your values and beliefs; check in advance.
   - Go to someone's home, but only when responsible adults are present.
   - Plan assertive communication strategies to use if you need them, and practice them beforehand.

   DON'T:
   - Use alcohol or other drugs.
   - Go to places where drugs or alcohol are being used.
   - Go home with a date when no RESPONSIBLE adults are present.

5. Ask a trusted friend to help you safeguard your goals and values by encouraging you to remain firm, especially when you feel pressured to surrender your values for short-term sexual gratification.

6. Practice and use assertive communications skills to develop realistic responses to other people's pressure tactics.

How Can We Reduce Our Risk of Acquiring HIV or Other STIs?

Performance Objectives

Students will be able to:

- Explain why abstinence from behaviors that can transmit HIV or other STIs is the most effective way of eliminating the risk of the sexual transmission of these infections.
- Explain how "risk reduction" differs from "elimination of risk" in the context of the transmission of HIV or other STIs.
- Identify types of risk reduction behaviors.
- Understand how male and female condoms are designed to be used; why they may fail or be used incorrectly; and what the consequences are of failing to use a condom properly.
- Identify STIs other than HIV.

Motivation

- Say, "There is a lot of talk about abstinence from sexual behaviors that can transmit HIV. Let's look at this more closely."
- Write on the board/newsprint: "By choosing to remain sexually abstinent, young people can be free from..." Elicit responses and write them on the board. Possible student responses include freedom from:
  - Guilt, doubt, worry.
  - Sexually transmitted infections (STIs, also known as sexually transmitted diseases or STDs).
  - Pregnancy and its associated consequences.
  - Exploitation by others.
  - Loss of reputation.
  - Having to ask a partner to wear a condom.
  - Family reactions to behavior.
  - Pressure to marry or have a child early.
  - Having to perform sexually.
  - Having to get condoms.
  - Pressure to get more serious.

GRADE 10
Lesson
5

Prevention

NEW YORK STATE LEARNING STANDARDS
1, 3

SKILLS

Self-Management

MATERIALS

Board/Newsprint

Handout:
HIV is an STI—But Not the Only One

VOCABULARY

Chlamydia

Condom

Female condom

Genital Warts

Gonorrhea

Hepatitis B and C

Herpes

HPV or Human Papillomavirus

Risk Reduction

Sexually Transmitted Disease (STD)
or
Sexually Transmitted Infection (STI)

Syphilis

Procedure/Development

- Say, "There is another reason for abstinence, and that relates to health. Abstinence is the only 100 percent sure way of eliminating the risk of sexual transmission of HIV or other STIs." A person who abstains from vaginal/penile intercourse has no risk of pregnancy. A person who abstains from anal/penile, vaginal/penile, and oral (including mouth-to-vagina and mouth-to-penis) sexual intercourse has no risk of sexual transmission of HIV, and may also avoid other physical, emotional, social, and family problems that may be associated with sexual activity.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students who are lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm

or search for "Respect for All Resources" on the NYCDOE Principals' Portal.

Teacher Note: Make sure students understand that HIV can be transmitted through body fluids of several kinds and through unprotected anal/penile, vaginal/penile, and oral (including mouth to vagina and mouth to penis) intercourse with an HIV-positive person. When sexual intercourse is not clearly defined to include anal and oral, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

- Ask, "What does it mean to reduce the risk of transmission of HIV or other STIs?" Possible responses include:
  - Decrease the chances.
  - Make it less likely.
  - Lower the odds.
- Say, "Reducing risk is not the same as eliminating risk. Reducing risk means there is still some risk of becoming infected with HIV or other STIs, and we do not always know how great that risk is. That is why abstinence from sexual behavior that can transmit HIV or other STIs eliminates the risk of infection, and is the safest and most appropriate choice for young people."
- Ask, "With which body fluids does contact during sexual intercourse create a risk for the transmission of HIV?" Record students' responses on the board/newsprint. Make sure they include:
  - Blood, including menstrual blood.
  - Semen and preseminal fluid ("pre-cum").
  - Vaginal fluids.
  - Breast milk.

- Ask, "What are some of the other STIs that can be transmitted during sexual intercourse?" Make sure responses include syphilis, gonorrhea, chlamydia, herpes, human papillomavirus (also known as genital warts or HPV), and hepatitis B and C. Many of these diseases produce no visible symptoms. Gonorrhea and chlamydia can lead to sterility. Herpes, HPV, and hepatitis, like HIV, are viral and have no cure; they can only be treated to prevent and relieve symptoms.
- Say, "The U.S. Centers for Disease Control and Prevention state that the correct and consistent use of latex or polyurethane condoms during penile/anal, penile/vaginal, or oral/penile intercourse can reduce the risk of transmission of HIV and other STIs."

Teacher Note: Consider using the Condom Challenge Activity in Appendix C to help students learn the correct steps for using male and female condoms.

Most high schools are required to have a Condom Availability Program. Let students know that they can receive condom demonstrations and free condoms at the program. Free condoms are also available in thousands of locations citywide. Students can call 311 to request a location near them.

- Ask, "What does 'correct and consistent' condom use mean?" Make sure answers include:
  - Consistent condom use means using a condom during every act of penile/anal, penile/vaginal, or oral/penile intercourse, from the time of erection throughout the entirety of sexual contact.

  The male condom is a barrier device used to cover the penis during sexual intercourse in order to prevent the transmission of preseminal fluid, semen, blood, or vaginal fluids. Use of latex or polyurethane condoms is a method to protect against infection with HIV or other sexually transmitted infections (STIs). They also help to prevent pregnancy. Lambskin condoms should not be used, as the skin has small pores through which HIV or the germs that cause other STIs can pass.

  Correct condom use for the male condom means:
  - Making sure the condom package is not damaged or torn, and that the expiration date has not passed.
  - If using a latex condom, being sure that the condom has been stored where heat cannot damage the latex.
  - If using a lubricant with a latex condom (which is recommended, to reduce friction and improve the likelihood of a condom's effectiveness), use only water-based lubricants. Check the lubricant package to see if it says "water-based" or "safe to use with condoms." Do not use oil-based lubricants, such as baby oil, Vaseline, or other petroleum jelly, as they can damage a latex condom.
  - Never reusing condoms. Use a new one for each sexual act.
  - Not using the male condom with a female condom.
  - Following all of the manufacturer's directions on or with the condom package, which include:
    1. Tear the package open along the notched edge while being careful not to damage the condom. Never use a sharp object to help open the package.
    2. Pinch the tip to allow room for preseminal and seminal fluid.
    3. Be sure that the condom is right-side up (tip up), roll the condom down on the erect penis to the base.
    4. Smooth out any air bubbles. Use a water-based lubricant if needed to reduce friction.
    5. When finished, hold the base of the condom and withdraw the penis while it's still erect.
    6. It is now safe to remove the condom, carefully.
    7. Tie a knot in the end of the condom. Discard the used condom in the trash, not in the toilet.

The female condom (FC2) is a pouch made of synthetic nitrile that loosely lines the vagina and covers the outside vaginal area. It has thin, flexible rings at either end. The inner ring anchors the female condom behind the pubic bone and the outer ring lies outside of the vagina. It comes pre-lubricated (silicone-based) and can be inserted hours before intercourse, without male participation. The female condom has been reported as having similar rates of effectiveness in preventing STIs and pregnancy as the male condom when used correctly and consistently. FC2 is the name of the second generation of female condom because the synthetic nitrile appears to be as effective as its predecessor that was made of polyurethane, but the price has been drastically reduced. Female condoms are available throughout New York City and through the NYCDOE's high school condom availability programs.

Correct condom use for the female condom means:

- Practicing insertion. This can help the user feel more comfortable and confident.
- Making sure the package is not damaged or torn and that the expiration date has not passed.
- Inserting the female condom before there is any contact with the penis.
- NOT using a male condom and female condom together because this can:
  - > Increase friction and reduce the effectiveness of both.
  - > Cause slippage and displacement if they stick to each other.
- NEVER reusing any condom—male or female.
- Following all of the manufacturer's directions on or with the female condom package. These include:
  1. Tear open the package carefully along the notched edge. Do not use anything sharp (teeth, scissors, etc.) to open it.
  2. Squeeze the inner (closed-end) ring between your thumb and forefinger (or middle finger), making it long and narrow.
  3. After finding a comfortable position for insertion (squatting, lying down, etc.), insert the inner ring into the vagina and feel it move into place.
  4. Using your index finger, push it in as far as it will go. Be sure the sheath is not twisted. The open-ended ring should rest outside of the vulva.
  5. You are now ready to use the female condom with your partner. Be careful to guide the penis into the pouch THROUGH the outer ring, not outside it.
  6. To remove the condom, twist the outer ring and pull it out gently.
  7. Dispose of the condom in the trash, not the toilet.

- Say, "Condoms can reduce but not eliminate the risk of transmission of HIV and other STIs. What are the factors that affect how effective a condom is in reducing that risk?" Categorize responses on the board/newsprint.

  Correct and consistent use of a condom during sexual intercourse dramatically lowers the risk of HIV transmission, because it prevents the bodily fluids of the HIV-infected person from coming into contact with another person during sex. When latex or polyurethane condoms are used consistently and correctly during sexual intercourse, it is called "protected" sex. When condoms are not used consistently and correctly during sexual intercourse, this is called "unprotected" sex. For sex to be considered "protected" a male or female condom must be used for penile/anal sex or penile/vaginal sex, and a male condom must be used for oral/penile sex.

  Condoms must be used consistently and correctly to protect against HIV because HIV is present in several body fluids, including semen and preseminal fluid of men who are HIV-positive, and vaginal fluids of women who are HIV-positive.

Inconsistent/Incorrect use: For people who are sexually active, using condoms is the best way to prevent HIV infection. However, condoms must be used properly to protect from infection. It is therefore very important to learn when and how to put on a condom. The Health Resource Room's Condom Availability program offers condoms to students who need them.

Many people think they can tell if a partner has HIV. But most people who are HIV-positive do not look sick, and one in five people living with HIV in the United States today does not even know that he/she is infected. Because it is not possible to tell if someone is HIV-positive just by looking at him or her, it is important to use a condom for every time act of sexual intercourse. Some people may not disclose their HIV test results to a partner. Some people are not truthful about sex they might have had outside the relationship or any other risk behaviors they might have engaged in recently. Using condoms every time protects partners from infection and promotes peace of mind.

Manufacturing Defects: The FDA requires condom manufacturers to test condoms rigorously for strength, holes, and leaks. Only FDA-approved condoms should be used.

Use of oil- or petroleum-based lubricants on male latex condoms: Oil-based lubricants (such as Vaseline, baby oil, cooking oil, other oils) can damage a latex condom and cause breakage. Use only water-based lubricants such as K-Y Jelly on latex condoms. However, oil-based lubricants can be used with polyurethane condoms.

Limitations: Male condoms do not cover the area around the genitals. Some STIs can be transmitted skin-to-skin (for example, herpes and HPV).

Teacher Note: On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved TRUVADA®, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making new a virus as it enters the body. When used consistently, TRUVADA® has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as consistent and correct condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to

http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf

Handout

HIV Is an STI—But Not the Only One

A sexually transmitted infection, or an STI, is transmitted through sexual contact. Some STIs are well known, such as HIV, gonorrhea, syphilis, and herpes. Other potentially serious STIs include chlamydia, hepatitis B (HBV), and human papillomavirus (HPV).

Some STIs can be cured, but early diagnosis and treatment are crucial.

Some STIs can be asymptomatic, meaning they have no symptoms. Infected people may be unaware that they need medical advice and treatment. For example, chlamydia produces no symptoms in 70-75 percent of women and 50 percent of men. HIV can be relatively asymptomatic for months or even years after infection. Even without symptoms, HIV and other STIs can damage the immune system and other bodily organs. An STI-infected person without symptoms can still transmit the STI to sexual partners through intercourse.

If left untreated, some STIs can lead to other serious long-term diseases.

For example: gonorrhea and chlamydia can lead to pelvic inflammatory disease (PID), which can cause infertility in women. Hepatitis B can lead to chronic or fatal liver disease. HIV infection can lead to serious illness and death. Untreated gonorrhea can cause heart disease, skin disease, arthritis, and blindness. Untreated syphilis can cause brain damage, blindness, and death. HPV may lead to cervical cancer.

Having an STI can increase a person's chance of contracting another STI, including HIV because of open sores, rashes, and swollen or irritated skin and tissue.

These openings in the skin can provide a direct route for viruses and bacteria into the bloodstream. For example, a person with herpes or syphilis sores is more vulnerable to HIV infection.

Some STIs can be passed on from an infected pregnant or breastfeeding woman to her child.

HIV, HPV, gonorrhea, herpes, and syphilis are STIs that can be transmitted through the placenta during pregnancy, sores and lesions during birth, and breastfeeding. Pregnant women can be treated with drug therapies to help reduce the risk of transmission. HIV-positive mothers are encouraged to use formula instead of breastfeeding.

Bacterial STIs (chlamydia, gonorrhea, syphilis) can be treated and cured, though a person can contract them repeatedly. However, they can cause severe damage and even death if left untreated. Symptoms from viral STIs (HPV, herpes, HIV, HBV) can be treated, but not cured.

Abstaining from all forms of sexual intercourse is the best prevention against HIV and other STIs.

People who do not abstain can reduce, though not completely eliminate, their risk of infection through correct and consistent use of latex or polyurethane condoms.

It is important for anyone who suspects that he or she might have an STI to visit a doctor or clinic such as the free and confidential New York City Department of Health and Mental Hygiene STD clinics. For more information, call 311 or visit www.nyc.gov/html/doh/html/std/std.shtml. Minors do not need parental consent for examination and treatment. Additionally, avoid transmitting the STI to anyone else. By avoiding STIs or getting treated as early as possible, people can protect their health and fertility, as well as the health and fertility of others.

GRADE 10
Lesson
6

NEW YORK STATE LEARNING STANDARDS
1, 2, 3

SKILLS
Advocacy
Communication

MATERIALS
Board/Newsprint
Computer with Internet Access (where available)
CBO Brochures
Phone Book(s)
Community Newspapers

VOCABULARY
Community-Based Organization (CBO)
School Health Resource Room

What Community Resources Are Available for HIV-Positive Individuals, Their Families, and Their Support Networks?

Performance Objectives

Students will be able to:

- Identify at least three HIV community resources, including governmental and community-based organizations.
- List ways that family, friends and others can help individuals living with HIV.
- Identify the location, hours of operation, and services offered at the school's Condom Availability Program and Health Resource Room.

Motivation

- Write the following questions on the board for students to respond to aloud:
  1. How do people receive or obtain information?
  2. What do you do when you need to find information about a topic?
  3. How can you evaluate your information to ensure that it is accurate and reliable?
  4. What can friends to do to obtain information to support people with HIV?
- Divide the class into groups of four or five students who will share and discuss their answers to the above questions with each other. Each group will select a reporter/recorder. After five minutes, have the groups report the results of their discussion to the class, while you write their responses on the board. Have students copy the list from the board. Possible responses to each of these questions include:
  1. From other people (including family, friends, teachers, and other educators), from the media (including the Internet, TV, newspapers, magazines, books, etc.).
  2. Ask parents, friends, teachers, librarians, experts, etc.; read books, journals, etc.; watch television; listen to the radio; Government agencies such as the Centers for Disease Control and Prevention and the New York City Department of Health and Mental Hygiene have useful websites. Students can look up information on the Internet. If students do not have a computer with Internet access in their homes, a librarian at a New York City public libraries can help them access HIV information on the Internet.

3. Ask yourself the following questions to assist in judging accuracy and reliability: Is the source trustworthy (e.g., a governmental agency, sponsored by a university, a qualified adult)?

   Does a book or article cite reliable sources and do other sources make reference to it? Does the source discuss its own limitations and qualify its information (e.g., this was true in a certain year or for a certain population)? Is the information specific or does it consist of sweeping generalities? Does it support or contradict other sources?

4. Go to the library; consult a doctor or other health professional, community leaders, members of the religious community, youth leaders, or counselors; go to the high school Health Resource Room, the school counselor, a teacher; visit an HIV service organization.

- Say, "Each of you can be a resource for other people if you know where to go to get information and resources. How can you help others become aware of the facts about HIV?" Write responses on the board. Possible responses include:
  - Educate myself about what community resources are available.
  - Find accurate and up-to-date sources of information.
  - Speak with or write to others about HIV.
  - Try to clarify misconceptions when I hear them.
  - Advise people to seek HIV testing, counseling and other professional help when necessary.
- Say, "When seeking information about sexual health, including HIV and other STIs, many people wish to seek information privately."

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to:

http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm

Procedure/Development

- Say, "All New York City public high schools are required to have a Health Resource Room. The Health Resource Room is a designated area in the school with staff trained to provide health-related information and assistance to students in a safe, confidential, familiar setting, including personal instruction and counseling on the correct and consistent use of condoms. You can also receive referrals to appropriate school resources and outside agencies." Inform students of the location and hours of the site(s) in your school. Note that male and female condoms are routinely made available to high school students and that the staff in the resource room can demonstrate proper condom use.
- Say, "Many government organizations publish health information. Some potential sources of information are the New York City Department of Health and Mental Hygiene, the New York City Department of Education, the New York State Department of Health, the Centers for Disease Control and Prevention, the National Institutes of Health, and the World Health Organization. Each of these organizations maintains a website full of information for the public. Websites also contain links to additional organizations and sources of information."
- Ask, "If you don't have a computer with Internet access at home, where could you go to get information and to access the Internet?" Possible answers include: school library, public library.

- Invite the coordinator or a staff member of the school Health Resource Room, or a speaker from a community-based organization (CBO), to make a brief presentation to the class on local CBOs and government agencies such as the New York City Department of Health and Mental Hygiene (NYDOHMH) that provide services for people with HIV or for persons who are at risk for STIs. As there will be class activities to follow that are based upon this presentation, be sure to speak with the person making the presentation a week in advance to ensure that the following questions are covered:
  - What is a community-based organization (CBO)?
  - What are some different kinds of CBOs?
  - Do all communities have CBOs?
  - Do some CBOs specialize in HIV services for a particular group?
  - Can anyone go to a CBO, even if it is not in the neighborhood where he or she lives?
  - Do CBOs like yours provide referrals to other services?
  - How would someone find out about your CBO and others like it?

Teacher Note: Remember to obtain approval from your principal before inviting a guest to speak about HIV/AIDS or related topics. Meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level. Examine all materials with your principal at least 72 hours prior to the presentation.

- After the presentation, divide the class into groups of three to five students, each to develop lists of CBOs that provide HIV/AIDS information or services in the community in which the school is located. Distribute the materials brought in by the speaker. Have students within each group assign roles, e.g., recorder, investigator, reporter. Have each group focus on one of the following types of services when making their lists:
  - Case management.
  - Counseling and testing services.
  - General information.
  - Medical services.
  - Prevention and education programs.
  - Referral services.
  - Services for lesbian, gay, bisexual, and transgender people.
  - Services for runaways and/or other homeless teens.
  - Services for women.
  - Services for youth.
  - Substance abuse services.
- Have groups present the results of their work to the class for discussion. Be sure that the following topics/questions are covered:
  - Which CBOs offer more than one type of HIV/AIDS-related service?
  - How can these CBOs help people with HIV/AIDS, their families, and their support networks?

    (Possible responses include: educate, provide counseling, develop strategies for dealing with illness, provide financial support, etc.)

- Ask, "How else can family members or friends help the HIV-positive people in their lives?"
  Possible responses include:
  - Keep them company; provide companionship.
  - Provide them with moral, emotional, and financial support, as needed.
  - Encourage them to talk about their fears and feelings.
  - Encourage them to take their medications and see their doctors regularly.
  - Encourage them to educate themselves about HIV and living with HIV.
  - Help fill out forms and access insurance and benefit programs.
  - Treat them with respect and compassion.
  - Encourage them to seek out support groups or other people with HIV to share experiences.
  - Encourage and help family members to learn more about HIV and treatment.
  - Help plan outings, favorite activities, and fun things to do.
  - Help support family members and friends.
- Ask, "As a community institution, what roles can the school play in providing help and information on HIV?" Possible responses include:
  - Educate about abstinence, risk reduction, testing, treatment, and living with HIV.
  - Provide counseling and support.
  - Staff the Health Resource Room and provide accurate information in a confidential, nonjudgmental manner; they provide HIV/STI prevention materials, demonstrate proper condom use, and provide free condoms to students.
  - Provide Internet access and other means of seeking information.
  - Offer workshops for parents, teachers, and students.

Homework

Based on their research and what they have learned in class, have students create a poster that lists hotline services and other organizations and resources (namely, government agencies or approved organizations that visited the class) that provide information and/or help regarding HIV/AIDS. The completed posters should be displayed in a public information area in the school or the community.