

Assignment Discovery Online Curriculum

Lesson title:

AIDS: Who's at Risk?

Grade level:

9-12

Subject Area:

Health, Biology

Duration:

Two class periods (with a few days in between for partners to complete AIDS awareness campaign)

Objectives:

Students will do the following:

1. Analyze facts about who gets AIDS, how those populations have changed in the past few decades, and how AIDS is contracted
2. Advocate for AIDS awareness and prevention

Materials:

- Computers with Internet access
- Paper and pencils
- Bulletin board
- Newsprint and markers

Procedures:

Ask students to share what they know about HIV: How does it get transmitted? What happens to the body once someone contracts the virus? What groups are most at risk? After a brief discussion, share the following facts with students about HIV/AIDS. Make sure that students understand the difference between HIV and AIDS. HIV (human immunodeficiency virus) is a virus that severely damages the immune system by infecting and destroying certain white blood cells. AIDS (acquired immunodeficiency syndrome) is the final, life-threatening stage of infection of HIV. Simply because someone tests positively for HIV does not mean they have AIDS. You may want to print out these facts or display them on an overhead projector. They are available at <http://www.cdcnpin.org/hiv/>.

- **History:** The first case of AIDS in the United States was documented in 1981. This disease was most prevalent among homosexual men in the 1980s, but the spread of AIDS among that group has slowed in the 1990s. However, the rate of AIDS in other groups, such as heterosexual men and women and people who inject drugs, continues to rise.

- **AIDS in the United States:** An estimated 800,000 to 900,000 people in the United States are currently infected with HIV (Centers for Disease Control).
- **Risk:** Of the 40,000 new AIDS cases reported in the United States each year, 42 percent are men who have sex with men, 33 percent are men and women infected by heterosexual sex, and 25 percent were infected by injection drug use (IDU).
- **Youth:** Up to 50 percent of all new HIV infections are among those under age 25. It is estimated that 20,000 young people are infected with HIV every year. That means two young Americans between the ages of 13 and 24 are contracting HIV every hour.
- **Women:** Women account for 30 percent of new AIDS cases. (They represented only 7 percent of all AIDS cases in 1985.)
- **Minorities:** African Americans account for more than half (54 percent) of new AIDS cases, and Hispanics account for 19 percent. (African Americans and Hispanics represent only 13 percent and 12 percent of the general population, respectively.)

1. Ask students to share what they know about contracting HIV, the virus that causes AIDS. Review the different ways that HIV is transmitted:
 - Unprotected sexual contact with an infected person
 - Transmission from an infected woman to her fetus or baby
 - Through needle sharing among intravenous drug users
 - Rarely, through accidents involving needle-stick injuries and other blood exposures of healthcare providers (Healthcare workers now wear gloves, masks, and other protective clothing during many examinations and procedures.)
2. Now talk about ways that people can avoid getting and spreading AIDS.
Examples:
 - Avoid sexual contact with anyone who is or might be infected with HIV, or abstain from sexual contact.
 - Practice protected sex with a person who is infected with HIV or whose infection status is unknown.
 - Drug users should seek help to stop taking drugs and should never share hypodermic needles, syringes, or other injection equipment.
 - Women may take AZT during pregnancy and avoid breastfeeding to reduce the risk of transmitting HIV to the fetus or baby.
 - If you have put yourself in a high-risk situation, get tested for HIV to avoid spreading it to others.
3. On the board or on a piece of newsprint, write the following groups. These are some of the different populations that can be at risk for AIDS if they do not behave responsibly:
 - Homosexual men
 - Heterosexual men
 - Heterosexual women
 - Adolescents
 - Drug users

- Minority youth
 - Pregnant women
 - Homeless and poor people
 - Prisoners
 - Armed forces
4. Divide students into pairs or small groups and have each pair choose one of the populations you have listed to learn more about its risk for getting HIV/AIDS. They will find more statistics, background, and prevention resources for each population at <<http://www.thebody.com/whogets.html>>. As students research a population, have them consider the following questions:
- What are the specific dangers for this population?
 - How has the risk of contracting HIV/AIDS changed for this population over the past several years? (Provide statistics when possible.)
 - What behaviors put this population at risk for HIV/AIDS?
 - How could members of this population change their behavior to avoid getting or spreading HIV/AIDS?
5. Finally, ask each pair to create a public awareness campaign for that audience. Encourage them to be creative and consider the tone, language, and medium that would be most appropriate for that audience. For example, they may create a public service announcement for teens, a brochure for obstetrics offices, a needle exchange program for public health clinics, a poster for clubs frequented by homosexual men, a Web page for young professional men and women, or a bulletin board for their school hallway.
6. Have partners present their campaigns to the class. They should discuss why they chose the approach they did for their audience.

Discussion Questions:

1. Do you think most young people consider themselves at risk for HIV/AIDS? Why or why not? As a result of this lesson, how has your view of AIDS changed?
2. Given that young people are contracting HIV at alarming rates, why do you think so many are reluctant to abstain from sex or use condoms? What is it about being chaste or using condoms that is “uncool”? Do you think boys and girls view this issue differently? If so, why? Is there a difference among ethnic groups?
3. Imagine you have a friend who practices unsafe sex or is an injection drug user. What would you say to encourage him or her to stop or change this behavior?
4. Explain how injection drug use directly endangers those who don't use drugs.

Evaluation:

Use the following three-point rubric to evaluate how well students participate in class discussions on sensitive topics, research different topics, answer assigned questions, and complete their AIDS awareness campaign:

Three points: participated actively in class discussion, with maturity and insight; showed good understanding of the causes of HIV/AIDS and its prevention; demonstrated strong research skills; demonstrated above-average creativity and communication skills through the AIDS awareness campaign.

Two points: participated in class discussion, with some maturity and insight; showed average understanding of the causes of HIV/AIDS and its prevention; demonstrated on-grade-level research skills; demonstrated average creativity and communication skills through the AIDS awareness campaign.

One point: participated little in class discussion; had difficulty discussing topics with maturity and insight; showed below-average understanding of the causes of HIV/AIDS and its prevention; demonstrated weak research skills; demonstrated few creativity and communication skills through the AIDS awareness campaign.

Extension:

Twenty Years of AIDS

Ask students to create a timeline showing important events in the history of AIDS. Their timeline may include the first reported case, significant public policies, involvement of celebrities, the development of new drugs, famous cases, and new statistics reported about AIDS patients. Ask each student to create a news story about one of the events, explaining why that incident was so important. You may want to begin with the Web sites below.

Timeline of AIDS

<<http://www.journale.com/aidsdecade/timeline/index.html>>

AIDS & HIV History

<<http://www.avert.org/historyi.htm>>

Suggested Reading:

AIDS and HIV: Risky Business (Teen Issues series)

Daniel Jussim. Enslow Publishers, 1997.

Written in a straightforward manner, this title presents a brief history of the AIDS virus and the symptoms of and treatments for the disease. It introduces readers to students with AIDS, describes AIDS prevention programs, and details ways for teens to stay HIV free. It includes steps to take if you are at risk for HIV as well as a short directory of AIDS hotlines.

HIV Infection: The Facts You Need to Know

Kenneth L. Packer. Franklin Watts, 1998.

Intended as a reference guide for teens, this book is filled with information on HIV, from a short history of epidemics throughout history, to an explanation of what HIV is and how it is spread, to the search for a cure. The chapter on prevention talks about safe sex. One chapter is devoted to the true story of Yvette and how she became infected with HIV. Some photographs and illustrations add to the text.

Vocabulary:

AIDS (acquired immunodeficiency syndrome)

Definition: The final, life-threatening stage of infection with human immunodeficiency virus (HIV).

Context: One way to prevent the spread of **AIDS** is by educating people in schools and the community.

HIV (human immunodeficiency virus)

Definition: A virus that causes AIDS; this virus severely damages the immune system by infecting and destroying certain white blood cells.

Context: Anyone who practices unsafe sex or drug use is at risk for contracting **HIV**.

hypodermic needle

Definition: A needle used to inject drugs beneath the skin.

Context: Approximately 25 percent of new AIDS cases in the United States are caused by drug users sharing **hypodermic needles**.

IDU (injection drug user)

Definition: A person who injects drugs into his or her body.

Context: An **IDU** can be exposed to HIV-infected blood by sharing needles, syringes, or equipment used to prepare drugs for injection.

safe sex

Definition: Sexual activity and especially sexual intercourse in which various measures (as the use of latex condoms) are taken to avoid disease (as AIDS) transmitted by sexual contact.

Context: One way to avoid contracting HIV is to practice **safe sex** or abstain from sexual contact altogether.

Academic Standards:

The following standards are from the American Association for Health Education for students in grades six through eight:

1. Students will comprehend concepts related to health promotion and disease prevention.

2. Students will demonstrate the ability to access valid health information and health-promoting products and services.
3. Students will demonstrate the ability to use interpersonal communication skills to enhance health.
4. Students will demonstrate the ability to advocate for personal, family, and community health.

This lesson plan adheres to the standards set forth in the *National Science Education Standards*, in particular the category Science in Personal and Social Perspectives.

Credit: Joy Brewster, freelance writer and editor of educational material.

This lesson was developed in consultation with Nancy Hudson, health education consultant.

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