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Lecture Outline

I. General

A. History of HIV/AIDS

1. The Discovery of HIV/AIDS
   a. The first cases of AIDS were reported in 1981. By the end of 1992, there were over 250,000 cases reported and more than 170,000 had died - almost three times the number of Americans who died in the Vietnam War.
   b. HTLV-III stands for Human T-Cell Lymphotrophic Virus Type III. This is an early name for the version of the AIDS virus discovered at the National Cancer Institute.
   c. LAV stands for Lymphadenopathy-Associated Virus. This is an early name for the version of the AIDS virus discovered in France.
   d. ARC is AIDS Related Complex. It is a set of symptoms observed in some persons infected with HIV who have not yet developed full-scale AIDS.

2. Developments
   a. Tests for HIV/AIDS
      1. ELISA - Enzyme-Linked Immunosorbent Assay; a method of testing blood for the presence of antibodies to the AIDS virus. If this test is positive, another test is usually run to confirm the positive reading.
      2. Western Blot Technique - a test for the presence of antibodies to the AIDS virus in blood. This is usually run to verify results from the simpler and cheaper ELISA test.
   b. Drugs used to treat HIV/AIDS
      1. AZT stands for Azidothymidine. This is a drug that slows the progress of the disease caused by HIV, allowing infected persons to stay healthy longer.
      2. ZDV stands for Zidovudine. This is another name for AZT.
      3. ddl stands for Didanosine. This is a drug used to treat AIDS infected people.
      4. ddC stands for Dideoxycytidine. This is a drug used to treat AIDS infected people.
More than 50 drugs and at least 5 potential vaccines are being tested.
c. The infection of people through blood transfusion has been virtually eliminated.
d. Transmission in hemophiliacs receiving blood clotting factors concentrates has been eliminated due to routine heat treatment.

II. The Disease

A. Definitions

1. HIV (see HIV Definition overhead)
2. AIDS (see AIDS Definition overhead)

B. Attack of the immune system

1. HIV infects T-cells, where the virus grows. The virus kills these cells slowly. The body's ability to fight infection weakens as more and more T-cells die.
2. A person with HIV may remain healthy for many years. People with HIV are said to have AIDS when they are sick with serious illnesses and infections that can occur with HIV. The illnesses tend to occur late in HIV infection, when few T-cells remain.

C. Number of AIDS cases

D. Modes of transmission (see Modes of HIV Transmission overhead)

E. Ways not transmitted (see HIV Cannot Be Transmitted By: overhead)

F. Symptoms

1. List symptoms (see Symptoms of HIV/AIDS overhead)
2. Explain symptoms, if necessary.

G. AIDS relate medical problems

1. Kaposi's Sarcoma - a form of cancer of the blood vessels that commonly afflicts AIDS victims, marked by skin blotches.
2. Pneumocystis Carinii - a form of pneumonia common in AIDS victims.
3. Tuberculosis
4. Encephalitis
5. Herpes Simplex
6. Meningitis
7. Shingles

H. Statistics

1. U.S. in general (see United States Statistics overhead)
2. Adolescents (see United States Adolescents overhead)
3. Local area statistics (available from the local health department)

III. Education

A. Why is HIV/AIDS education important? (see Why is AIDS Education Important? overhead)

1. AIDS does not discriminate.
   a. It affects all races
   b. It affects all religions
   c. It affects all ages
   d. It affects all lifestyles

B. Prevention (see Prevention of AIDS overhead)

1. Prevention is important because, if everyone works together, we can help to stop this deadly disease.
2. Ways of preventing
   a. Abstain (see Number of AIDS Cases - Heterosexually Transmitted overhead)
   b. Condoms
      1. Use (see Proper Use of Condoms overhead)
      2. Importance of consistency

C. What can we do? (see What Can You Do? overhead)

1. Protect yourself
   a. Learn the basic facts about how you can and cannot become infected with HIV.
   b. Assess your personal risk for HIV infection.
   c. Seek counseling and testing if you think you could be infected.
   d. Avoid risky behaviors and practice safer sexual behaviors.
e. Be aware of the risks of sharing needles and other drug equipment.
f. Avoid excess alcohol and any use of cocaine, marijuana, an other drugs that may affect your judgement.

2. Help prevent discrimination

3. Families
   a. Talk to your parents and siblings about AIDS.
   b. Share HIV prevention information with your friends.
   c. Discuss HIV infection openly with your sex partner.

4. Schools
   a. Find out whether local schools have health education programs.
   b. Urge schools to talk with parents when developing an education program which covers HIV infection.
   c. Encourage peer-based programs.
   d. Ensure that curricula address drug and alcohol abuse.
   e. Urge your school board to adopt an HIV/AIDS policy.
   f. Organize educational events through the year focusing on HIV prevention.
HIV/AIDS
Education in Public Schools

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Senior Colloquium HRCS 4100.700

October 31, 1994
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  Teacher's Guide to HIV/AIDS Education ................................. 1
Introduction
Clearly, many individuals do not recognize or take action to reduce their vulnerability to infection and probably many parents believe mistakenly that their children are not at risk.

Picture yourself as the parent of a bright, exuberant, fun-loving, seventeen year old daughter. Now, try to imagine your reaction when you are told that she has contracted AIDS and has only six months to live. For those six months, you live in constant fear that each day will be her last. The first six months pass, and you find yourself thankful for the extra time to spend with your daughter. Imagine living with a constant feeling of dread and grief. This is how many parents and families must deal with HIV/AIDS. Why should someone close to them become infected before they decide something must be done? The public schools must increase HIV/AIDS education to help prevent the above scenario from happening to more families.

HIV/AIDS is a disease having a great impact on the United States. Many have died and many more are infected with this debilitating disease. The first step toward the elimination of AIDS is to educate our youth. They are our future, and if they are not educated about the consequences of certain behaviors, then this disease could become more devastating than the bubonic plague. Parents and educators have the power to help stop this epidemic through intensive and thorough education surrounding the facts of AIDS.
General Information About AIDS
History of HIV/AIDS

The Discovery of HIV/AIDS

The first cases of AIDS were reported in 1981 and by the end of 1992, there were over 250,000 cases reported and more than 170,000 people had died. In the United States, the number of deaths from AIDS totals almost three times the number of Americans who died in the Vietnam War. According to the Centers for Disease Control, the number of AIDS cases in America could reach more than one million by the end of 1994, with as many as 385,000 deaths from the disease.

HIV stands for Human Immunodeficiency Virus, but it also is known by various other names as well. HTLV-III, which stands for Human T-Cell Lymphotropic Virus Type III, is an early name for the version of the AIDS virus discovered at the National Cancer Institute. LAV, or Lymphadenopathy-Associated Virus, is an early name for the version discovered in France. HIV, is the most common name given to the virus, and AIDS Related Complex (ARC) is a set of symptoms observed in some persons infected with HIV who have not yet developed full-scale AIDS.

Developments

Two tests are used to detect the possible presence of HIV: the ELISA test and the Western Blot Technique. The ELISA, Enzyme-Linked Immunosorbent Assay, test is a method of testing blood for the presence of antibodies to the AIDS virus. The Western Blot Technique test is usually run to verify the results (if positive) of the simpler and cheaper ELISA test. According to the Surgeon General, when these two tests are used together they are 99.9 percent accurate.

Currently, no vaccine or cure for HIV or the disease itself has been found; however, some experimental drugs have been used to treat the disease. At this time, there are over fifty drugs and five potential vaccines being tested. Azidothymidine (AZT), Zidovudine (ZDV), Didanosine (ddl), and Dideoxycytidine (ddC) are drugs currently being used to treat AIDS. These drugs slow the progress of the disease, allowing infected persons to stay healthy longer.

A major development in AIDS research has been the virtual elimination of infection through blood transfusions. Also, transmission in hemophiliacs receiving blood clotting factors concentrates has been eliminated due to routine heat treatment of such factors. As of January 1, 1993, the World Book Health & Medical Annual restated the definition of AIDS which was revised by the Centers for Disease Control.

Before that date [January 1, 1993], an HIV-infected person was not diagnosed as having AIDS until symptoms of at least 1 of 23 “indicator” disorders had developed. The new definition added three more indicator conditions: tuberculosis of the lungs, recurrent pneumonia, and invasive cervical cancer. Also under the new definition, an individual infected with HIV is diagnosed as having AIDS when CD-4 counts decline to 200 cells per cubic millimeter of blood. CD-4 cells are white blood cells that HIV attacks and destroys. The CD-4 count was not a part of the previous definition.
The Disease

Definitions

Acquired Immunodeficiency Syndrome (AIDS) is the name given to the disease caused by HIV. AIDS is a contracted impairment of the immune system which normally protects us from other diseases.

How AIDS Attacks the Immune System

The World Book Encyclopedia describes the attack of the immune system by the HIV virus as the following:

AIDS is a weakening of the body’s immune system; it is caused by a retro-virus called either HTLV-III or HIV. The retrovirus establishes itself directly inside a T-cell lymphocyte, a major component of the body’s immune system. The retrovirus is distinguished from other viruses because of its ability to use the host cell’s reproductive system to replicate itself many times; in this way, the AIDS virus eventually destroys the host cell and moves on to infect other T-cells. The body is then left vulnerable to opportunistic infections, which are easily fought off by a normally functioning immune system. The diseases, however, become highly disabling and eventually fatal if the immune system is compromised by AIDS.

Transmission of the Virus

The transmission of the HIV virus from an infected person to an uninfected person is limited to the following:

- Sex
  - Male to Male
  - Male to Female
  - Female to Female

- Blood Injection
  - Sharing of needles and syringes during drug use
  - Hemophilia treatments and blood transfusions (through both infected blood and unsterile needles)
  - Puncture by unsterile HIV-contaminated instruments

- Perinatal (to babies)
  - In the womb
  - During birth
  - While nursing
HIV cannot be transmitted in the following ways:

- Casual Contact
  - Handshakes or hugs
  - Toilet seats
  - Going to school, church or other public places with infected people

- Donating Blood

- Other Body Fluids
  - Saliva (social kissing)
  - Sneezing or coughing

- Insects

**Symptoms of the Virus**

Many of the symptoms of HIV/AIDS are also symptoms of other less life-threatening illnesses. A number of the following conditions taken together can lead to a diagnosis of HIV or AIDS:

- Unexplained fever
- General and persistent feeling of fatigue
- Recurring diarrhea
- Skin rashes
- Night sweats lasting many weeks
- Loss of appetite
- Swollen lymph glands
- Unexplained weight loss over ten pounds
- Lack of resistance to infection
- Chills
- Furry white spots in the mouth
- Dry cough accompanied by a shortness of breath
- Memory or movement difficulties
- Pink to purple blotches occurring anywhere on or under the skin, at first resembling bruises, but growing harder than the skin around them and lasting longer than bruises, also known as *Kaposi's Sarcoma*

**Related Diseases**

The leading cause of death among AIDS sufferers is the opportunistic infection *Pneumocystis Carinii Pneumonia*, also known as PCP. *Kaposi's Sarcoma*, another disease found to plague AIDS patients, is a form of cancer that usually originates in the skin looking like a bruise, but grows and spreads over the skin. Other opportunistic diseases facing AIDS sufferers are tuberculosis, shingles, herpes simplex, meningitis, and encephalitis.
Statistics

General Statistics

Figure 1, *U.S. AIDS Reported Cases/Fatalities*, comparatively illustrates the increase in the number of AIDS cases reported and the number of fatalities from AIDS reported in the United States in 1992 and 1993.

![U.S. AIDS Reported Cases/Fatalities](chart.png)

✓ Figure 1: Information found in *HIV/AIDS Surveillance Report, Vol. 5, No. 4.*

The statistics about AIDS reveal much about the disease. For example, they reveal the spread of AIDS in this country, the changing face of AIDS in this country, and the necessity for increased education in this country. The following information is for the United States on the whole as of September, 1993:

- In the United States, 339,250 cases of AIDS were reported\(^4\)
- In the United States, 202,000 deaths from AIDS were reported\(^5\)
- One out of every 250 Americans is infected with HIV\(^6\)
- It is the leading killer of men aged 25-44\(^7\)
- It is the fourth leading killer of women aged 25-44\(^8\)
- It is the sixth leading killer of adolescents aged 15-24\(^9\)
○ Every fifteen minutes someone dies of AIDS in the United States\textsuperscript{30}
○ Every nine minutes someone is diagnosed with AIDS in the United States\textsuperscript{31}
○ Every thirteen minutes someone is infected with HIV in the United States\textsuperscript{32}

Table 1 displays United States AIDS cases reported through December, 1993, by exposure category.

<table>
<thead>
<tr>
<th>Exposure Category</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men who have sex with men</td>
<td>53.62</td>
<td>193,652</td>
</tr>
<tr>
<td>Injection drug use</td>
<td>24.16</td>
<td>87,259</td>
</tr>
<tr>
<td>Men who have sex with men and inject drugs</td>
<td>6.47</td>
<td>23,360</td>
</tr>
<tr>
<td>Hemophilia/Coagulation Disorder</td>
<td>0.93</td>
<td>3,342</td>
</tr>
<tr>
<td>Heterosexual contact</td>
<td>6.41</td>
<td>23,166</td>
</tr>
<tr>
<td>Receipt of transfusion</td>
<td>1.8</td>
<td>6,510</td>
</tr>
<tr>
<td>Mother with/at risk for HIV</td>
<td>1.28</td>
<td>4,637</td>
</tr>
<tr>
<td>Other</td>
<td>5.33</td>
<td>19,238</td>
</tr>
<tr>
<td>Totals:</td>
<td>100</td>
<td>316,164</td>
</tr>
</tbody>
</table>

Table 1: Information gathered from \textit{HIV/AIDS Surveillance Report Vol. 5, No. 4, p. 13.}

One of the largest growing populations of AIDS sufferers are women. Most of the cases discovered in women were attributed to heterosexual contact with an infected partner\textsuperscript{33}

\textbf{Adolescent Statistics}

Between 1991 and 1992, AIDS cases among people 13 to 19 years of age arising from heterosexual HIV transmission increased by 65 percent; and increasing numbers of men and women in their twenties are developing AIDS, signifying infection in their teen years\textsuperscript{34}

The Centers for Disease Control reports the following as of September, 1993\textsuperscript{36}

○ 1,415 cases of AIDS in the 13-19 age group
○ 12,712 cases in the 20-24 age group
○ 51,006 cases in the 25-29 age group

\textbf{Dallas County Statistics}

The Dallas County Health Department reports these statistics as of June 6, 1994\textsuperscript{36}

○ 6,349 cases of AIDS
○ 16 cases in the 13-19 age group
○ 1,470 cases in the 20-29 age group
Figure 2 displays United States AIDS cases reported through December, 1993 by race and ethnicity.

![U.S. AIDS Cases by Race/Ethnicity](image)

**Legend**
- White, non Hispanic
- Black, non Hispanic
- Hispanic
- American Indian/Alaska native
- Asian/Pacific Islander

Figure 2: Information found in *HIV/AIDS Surveillance Report Vol. 5, No. 4, p. 14.*
Education
The Importance of HIV/AIDS Education

**Prevention**

"HIV is preventable, and increased resources must be devoted to prevention as well as to research to make such efforts more effective." Due to the fact that AIDS does not discriminate on any basis, education is extremely important to the survival of our species. Why is education about HIV/AIDS so important? The most apparent reason is for the prevention of the disease. Although AIDS is usually spread by sexual activity, it is also spread by ignorance, apathy, and denial. The only way to stop the spread of AIDS is through thorough education on the facts about it. Extensive prevention efforts may eventually lead to the elimination of this disease completely.

Education is vital to prevent discrimination toward HIV or AIDS-infected persons. The National Commission on AIDS suggests that public education should be intensified with a goal of increased general awareness of basic facts that can reduce "discrimination, stigmatization, or other callous and inappropriate responses to people living with AIDS." Despite the fact that casual contact does not transmit the disease, many HIV-positive or AIDS-infected people are not allowed to attend school, church, or other public places simply because they have a disease. Complete education on these facts may help to eliminate discrimination based on sexual preference and AIDS.

In order to make well-informed choices about their behavior, students, as well as parents, should have all the facts presented to them in an intense and organized manner. Educated decisions are born from a full investigation of all the facts. The teen years are a time of experimentation and exploration. Students have the freedom to make their own decisions, but they should not have to die because those decisions were made without knowledge of certain facts. Therefore, students must be taught not only the facts about sex and sexually transmitted diseases, but also the ramifications of their behaviors.

**Current HIV/AIDS Curriculum**

According to Linda Flack, the Science Coordinator for the Plano Independent School District, the current curriculum in the public schools focuses mainly on two areas: general information about the disease and prevention. Abstinence is touted as the best prevention, however, other means of prevention such as a discussion on condoms and spermicides, but no demonstration are discussed. The program takes place primarily at the ninth and tenth grade levels, and it is part of the Biology curriculum. Students may receive some HIV/AIDS education in their mandatory health classes. Instruction lasts approximately one week of fifty to fifty-five minute class periods. Time constraints and limits on what can be discussed in class hinder the information taught and barely scratches the surface of available, and important, facts.
Should HIV/AIDS Education be Taught in Public Schools

According to the Centers for Disease Control, "[a]bout one-fifth of the total U.S. population is in schools or colleges, providing an effective way to reach young people." It is important to note that many students do experiment with sex and drugs. Sixteen is the average age for the first sexual experience among American teenagers. More than half of graduating high school seniors are sexually active; therefore, teachers furnished with the appropriate materials can be extremely useful in the exchange of life-saving information.

The National Commission on AIDS feels that:

School-based health programs can provide a particularly effective resource . . . [i]n addition to teaching about HIV and other STDs, information about teenage pregnancy, awareness of substance abuse hazards . . . can be conveyed in such a setting to teens whose home environments are deficient in such knowledge . . . but lack of access to such information can be life-threatening to youth at risk, and school-based health programs have yielded promising results to date.

Arguments Against HIV/AIDS Education in the Public Schools

The main argument against education as stated above states that sex education and AIDS education should take place in the home. Unfortunately, it does not take place in many homes. The trend in this country is toward non-traditional families, such as single-parent families. Many times, a single-parent does not have the time necessary to provide their children with all the information about HIV/AIDS and other sexually transmitted diseases. Also, communication between parents and teens is often strained. Parents’ ignorance about the subject or embarrassment about talking about sex can cause a student to turn to his friends for information. Misinformation can be deadly.

Many people think that elementary school, and even middle school, is too early to begin HIV/AIDS education. Nevertheless, children are exposed to drugs and sex increasingly earlier in their lives. Educators and parents must off-set this exposure early through a discussion of the facts about this disease and the consequences of their children’s actions.

Although abstinence is the only 100 percent effective prevention method, it is not always practiced. Therefore, other means of prevention must be taught. Condoms, when used correctly and consistently, can be an extremely effective means of protection from the HIV/AIDS virus. Society must try to view condoms as a device for the prevention of a fatal disease, not as a birth control device.
Advocates against AIDS education argue that sex education encourages and increases sexual activity, but according to the Centers for Disease Control's *Prevention Marketing Initiative*.

A 1992 study reported in *Family Planning Perspectives* found that AIDS education and sex education resulted in decreases in the number of sex partners and the frequency of intercourse. Having received education was also associated with more consistent condom use.⁴³
An Alternative Educational Plan
HIV/AIDS Education Should be Taught at All Grade Levels

It is important to begin education about this disease early in the student’s academic career. Obviously, the information and presentation of the information will vary at each grade level, however, subsequent information will build upon previous instruction about the disease. Appendix I, Teacher’s Guide to HIV/AIDS Education, offers some examples of overheads or handouts that could be used during instruction.

Elementary School Objectives

At this level, it is vital that students learn the basic facts about the disease. The following are some suggested topics for discussion in kindergarten through fifth grade:

- The disease does not usually affect children
- The difficulty in contracting the virus
- Some ways HIV/AIDS can be transmitted
- Ways HIV/AIDS is not transmitted
- Scientists are searching for a cure

Middle School Objectives

The instruction should begin to be more intense and explicit at this level. Experimentation with drugs and sex sometimes begins at this age. The following are some suggested topics for discussion in the sixth through eighth grades:

- What a virus is
- The definitions of HIV and AIDS
- The number of people infected with HIV/AIDS
- Anyone can become infected with the virus
- Ways the virus is transmitted
- Ways the virus is not transmitted
- The virus’ period of gestation
- Life expectancy after diagnosis

High School Objectives

Over half of all graduating seniors have had sex; therefore, it is very important that the information provided during the AIDS instruction be as explicit as possible. The following are some suggested topics for discussion in the ninth through twelfth grades:

- Explicit information about the transmission of HIV/AIDS
- Specific methods of prevention with an emphasis on abstinence
- Definition of at-risk persons
- Explicit information about other sexually transmitted diseases
- Discussion of where to get tested and where to go for more information
Updating of Material

One of the purposes of yearly AIDS instruction is to provide a simple way of updating the information. New treatments, expanded definitions, and other modes of transmission are some examples of information that could change from year to year. Also, students that move into the school district from other districts may not have received AIDS education in their previous schools. Our society cannot afford to leave anyone out in its education efforts. A third reason yearly education is necessary is that repetition of material often serves as an effective teaching method. Therefore, previous information should be reviewed before continuing with new material.

Explicit Information

Explicit information should be presented at appropriate grade levels for many reasons. One of which is to scare the students. As cruel as that may sound, fear could be the only effective way to get through to teenagers. Also, students tend to get their information about sex from their peers who may or may not have good information. Students must receive the benefits of as much information as is available at the time of instruction if society expects them to make good choices about their personal behaviors.

Interviews

Interviews with AIDS sufferers could prove to be beneficial to students. Someone who contracted the disease during their teen years due to behavior choices may be able to reach the students. Teenagers believe that they are invincible; that it can't happen to them. An interview will put a face to the reality of this deadly disease, and possibly make them realize the consequences of their actions.
Final Analysis
Everyday, people put themselves at risk of becoming infected with HIV/AIDS, as well as many other sexually transmitted diseases. The Centers for Disease Control and Prevention reports that one million Americans are infected with HIV (that is 1 out of every 250 people); every fifteen minutes, someone dies of AIDS in the United States; every nine minutes, someone is diagnosed with AIDS; and every thirteen minutes, someone is infected with HIV.44

As staggering as these numbers are, we are still arguing about what to teach our children, where to teach our children, and when to teach our children about HIV/AIDS. We are still limiting the scope of the education our children receive at school out of our fear, denial, or ignorance of this deadly disease. It is imperative that we teach them everything we can now, while we have the opportunity. We must make our youth understand the consequences of their actions and the impact their actions have on others.

According to Joseph A. Califano, Jr.:

Whatever one's religion or moral beliefs, there's plenty of room to teach about the danger of AIDS and how to prevent it. For AIDS is a preventable disease. Every school, church, workplace, union hall and prison offers an opportunity.45

Teachers, parents, school boards, principals, religious leaders, and students must come together to fight this disease. The best way to do that is to institute a comprehensive HIV/AIDS/sex education plan that covers such issues as:

- the facts about AIDS
- the reality of AIDS
- the ways this disease can be prevented
- the proper use of condoms

It has become clear that, to be successful, HIV prevention efforts need to provide information, build skills to reduce risk, and provide easy access to the means to do so, for example, access to condoms... [t]hey must also be... reiterated, sustained over time, and complemented by broader efforts over the long haul, both to change behavioral norms... and to empower individuals to change.46

We must understand, just as we must make our children understand, that this disease is killing everyone: blacks, whites, Hispanics, Christians, Jews, homosexuals, heterosexuals, bisexuals, men, women, and children. It is important that our society realize that AIDS does not discriminate. We can no longer, with a clear conscience, refuse to teach our youth about this disease and ways of preventing it. If we do, we are contributing to the deaths of millions of people.
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Appendix
Teacher's Guide to HIV/AIDS Education
Ideas for AIDS Education
Important Ideas for AIDS Education to Elementary School Students

- The disease does not usually affect children
- The difficulty in contracting the virus
- Some ways HIV/AIDS can be transmitted
- Ways HIV/AIDS is not transmitted
- Scientists are searching for a cure
Important Ideas for AIDS Education to Middle School Students

- What is a virus
- The definitions of HIV and AIDS
- The number of people infected with the virus
- Anyone can become infected with the virus
- Ways the virus is transmitted
- Ways the virus is not transmitted
- The virus' period of gestation
- Life expectancy after diagnosis
Important Ideas for AIDS Education to High School Students

- Explicit information about the transmission of HIV/AIDS
- Specific methods of prevention with an emphasis on abstinence
- Definition of at-risk persons
- Explicit information about other sexually transmitted diseases
- Discussion of where to get tested and where to go for more information
Overheads
Are You At Risk?

If you answer "yes" to any of the following questions, you could have HIV infection or other sexually transmitted diseases.

Have you ever had unprotected sex (anal, vaginal, or oral) with a man or woman who:

- you know was infected with HIV?
- injects or has injected drugs?
- shared needles with someone who was infected?
- had sex with someone who shared needles?
- had multiple sex partners?
- you normally wouldn't have sex with?

Have you used needles or syringes that were used by anyone before you?

Have you ever given or received sex for drugs or money?

Did you or any of your partners:

- receive treatment for hemophilia between 1978 and 1985?
- have a blood transfusion or organ transplant between 1978 and 1985?
As of 1991,
OUT OF 100
TEXAS HIGH SCHOOL STUDENTS:

- 72 had sexual intercourse
- 20 had multiple sexual partners
- 81 used alcohol
- 40 used illegal drugs
- 16 contracted a STD
- 25 suffered in poverty
- 22 dropped out of school
- 8 became pregnant

These behaviors put students at risk for HIV/AIDS

- ?? were infected by HIV
HIV
An Abbreviation for a Virus

H is for
HUMAN
the virus does not cause disease in other animals

I is for
IMMUNODEFICIENCY
the virus attacks the immune system of the body causing a deficiency of the immune response

V is for
VIRUS
AIDS
An Acronym for a Disease Syndrome

A is for
- **ACQUIRED**
  - meaning not inherited, but contracted

I is for
- **IMMUNE**
  - referring to the immune system which normally protects us from disease

D is for
- **DEFICIENCY**
  - meaning the immune system is impaired

S is for
- **SYNDROME**
  - refers to a particular set of problems which, when occurring together, indicates a disease state of a standardized definition
Why is AIDS Education Necessary?

- AIDS kills adults, teens, and children
- AIDS infects the poor, the middle class, the wealthy, the educated, and the uneducated
- AIDS is most often spread by sexual activity and injection drug use
- AIDS is also spread by ignorance, apathy, and denial
- AIDS does not discriminate; it infects heterosexuals, homosexuals, bisexuals, males, and females
United States Statistics

As of February, 1993:

- One out of every 250 Americans is infected with HIV/AIDS
- AIDS is the leading killer of men and the fourth leading killer of women aged 25-44
- AIDS is the sixth leading killer among adolescents between the ages of 15-24
- Preliminary data indicate that AIDS is the ninth leading cause of death among United States residents of all ages
- Every 15 minutes someone dies of AIDS in the United States
- Every 9 minutes someone is diagnosed with AIDS in the United States
- Every 13 minutes someone is infected with HIV in the United States
- According to projections, the number of deaths from HIV infection and AIDS will likely exceed 300,000 by the end of 1994
United States Adolescents Statistics

Through September, 1993, the Centers for Disease Control reports:

- 1,415 cases of AIDS among persons ages 13 to 19
- 12,715 cases for ages 20 to 24
- 51,006 cases for ages 25-29

Many of the cases in the 20 to 29 year range were probably contracted during the teen years based upon the average incubation time of 10 years for AIDS.
Modes of HIV Transmission

Blood Injection
- sharing of needles and syringes during drug use
- Hemophilia treatments and blood transfusions
- puncture by unsterile HIV-contaminated instruments

Sex
- male to male
- male to female
- female to female

Perinatal (to babies)
- in the womb
- during birth
- while nursing
HIV Cannot be Transmitted By:

- **Insects**
  - mosquitos, ticks, and fleas
  - other biting insects

- **Other Body Fluids**
  - saliva (kissing, biting, spitting)
  - urine/feces (incontinence, bed linens, towels, diapers)
  - clothing (sweat, tears)
  - sneezing, coughing, work environment

- **Casual Contact**
  - food, eating utensils
  - handshakes/hugs
  - swimming pools
  - toilet seats
  - telephones
  - going to school, church, or other public areas with infected people

- **Donating Blood**
Symptoms of HIV/AIDS

- Chills
- Unexplained fever
- General and persistent feeling of fatigue;
- Recurring diarrhea
- Skin rashes
- Night sweats lasting many weeks
- Loss of appetite
- Swollen lymph glands
- Unexplained weight loss over ten pounds
- Lack of resistance to infection
- Furry white spots in the mouth
- Dry cough accompanied by a shortness of breath
- Memory or movement difficulties
- Pink to purple blotches occurring anywhere on or under the skin, at first resembling bruises, but growing harder than the skin around them and lasting longer than bruises, also known as Kaposi's Sarcoma
Prevention of AIDS

- Abstain from sex until marriage.
- Avoid sexual involvement until responsibly mature.
- Develop the right to say "NO".
- Avoid excessive use of alcohol, which alters one's judgement.
- All donated blood should be tested to ensure that it is not infected by the AIDS-associated viruses. If one tests positive for HIV, do not donate blood.
- Never share needles. If you have a drug problem, seek help immediately.
- Avoid multiple sex partners.
The Proper Use of Condoms

Proper use of a new latex condom every time you have sex - from start to finish - is an effective way of protecting yourself from HIV and other sexually transmitted diseases. Always have more than one condom available.

- Be careful when opening the condom. Do not use your teeth, fingernails, or other sharp objects to open the condom wrapper because you might tear or nick the condom inside.
- Put the condom on as soon as the penis becomes erect, roll it to the base of the penis, keep the condom on throughout intercourse, and be sure it stays on until the penis is fully withdrawn.
- If you use a lubricant for vaginal or anal sex, use one that is water-based. Water-based lubricants are for sale at any pharmacy. Do not use oil or grease, such as petroleum jelly, cold cream, baby oil, or cooking shortening as a lubricant; they weaken latex and make the condoms break more easily.
- Never re-use a condom.
- Never continue using a condom if it breaks during sex-stop and put on a new condom.
What Can You Do?

Protect Yourself

1. Learn the basic facts about how you can and cannot become infected with HIV.
2. Assess your personal risk for HIV infection.
3. Seek counseling and testing if you think you could be infected.
4. Avoid risky behaviors and practice safer sexual behaviors.
5. Be aware of the risks of sharing needles and other drug equipment.
6. Avoid excess alcohol and any use of cocaine, marijuana, and other drugs that may affect your judgment.

Families

1. Talk to your parents and siblings about AIDS.
2. Share HIV protection information with your friends.
3. Discuss HIV infection openly with your sex partner.

Schools

1. Find out whether local schools have health education programs.
2. Urge schools to talk with parents when developing an education program which covers HIV infection.
3. Encourage peer-based programs.
4. Ensure that curricula address drug and alcohol abuse.
5. Urge your school board to adopt an HIV/AIDS policy.
6. Organize education events throughout the year focusing on HIV prevention.
Class Demonstrations
Oreo Cookie

This can be used to demonstrate the importance of not having sexual intercourse with someone you do not know, or with someone who has had many partners.

Step 1
Give a student an Oreo cookie and tell him/her to hang on to it.

Step 2
Give a student on the other side of the room another Oreo cookie.

Step 3
Have students pass one cookie around the room with each person doing something to the cookie (bite it, lick it, spit on it, etc.).

Step 4
When the cookie makes it to the student holding the good Oreo cookie, ask "Would you trade your cookie [the good cookie] for this cookie [the bad cookie]?" Indicate the passed around cookie.
A banana can be a useful tool when demonstrating the proper use of a condom. A teacher can show students how to use a condom by putting the condom on a banana.

Bananas can also allow both male and female students to practice putting on condom properly. This knowledge may make students more comfortable with the idea of using a condom during every sexual experience.

It is important for female students to understand that their protection is their responsibility, just as it is the male students' responsibility to protect himself.
Class Handouts
Definitions of Key Terms

AIDS: Acquired Immunodeficiency Syndrome
A disease caused by the HIV, which interferes with your body’s natural immune system. AIDS is communicable primarily through sexual activity and unclean IV needle use. Infected women can also pass on the disease to their unborn or nursing children. There is no vaccine to protect you from AIDS or HIV, and there is no cure once you are infected.

ARC: AIDS Related Complex
A set of symptoms observed in some persons infected with HIV who have not yet developed full-scale AIDS.

AZT: Azidothymidine or Zidovudine
A drug that slows the progress of the disease caused by HIV, allowing infected persons to stay healthy longer.

CDC: Centers for Disease Control
Located in Atlanta, Georgia, maintains the latest information on prevention, control and treatment of HIV/AIDS and other diseases in the United States.

ELISA: Enzyme-Linked Immunosorbent Assay
A method of testing blood for the presence of antibodies to the AIDS virus.

HIV: Human Immunodeficiency Virus
The virus (kind of germ or disease-causing agent) that causes AIDS. The only way to tell if you have been exposed to AIDS is a blood test to see if your body is producing antibodies (disease-fighting agents) for HIV. If you
Definitions of Key Terms

have been exposed to HIV, the antibodies may not show up in a test for three to six months. *If you think you have been exposed to HIV, it is important to be tested so you can receive early treatment with drugs that can protect you from some AIDS related diseases.*

HTLV-III: Human T-Cell Lymphotropic Virus Type III
An early name for the version of the AIDS virus discovered at the National Cancer Institute.

Kaposi's Sarcoma
A form of cancer of the blood vessels that commonly afflicts AIDS victims, marked by skin blotches.

LAV: Lymphadenopathy-Associated Virus
An early name for the version of the AIDS virus discovered in France.

Pneumocystis Carinii
A form of pneumonia common in AIDS victims.

STD: Sexually Transmitted Disease
An STD is an illness that you can catch or give during intimate sexual activity. These diseases are usually transmitted in sexual intercourse (oral, anal, and vaginal) when bodily fluids (blood, semen, cum, saliva, and vaginal secretions) come in contact with mucous membranes (the wet surfaces of the openings in our bodies). STD's include syphilis, gonorrhea, herpes, genital warts, hepatitis, and AIDS.
Definitions of Key Terms

(continued)

T-cell
A type of white blood cell that matures in the thymus.

Western Blot Technique
A test for the presence of antibodies to the AIDS virus in blood. It is used to verify results from the simpler and cheaper ELISA test.

White Blood Cells
Any of several blood cells involved in the body's immune system.
### Facts and Fallacies About AIDS

<table>
<thead>
<tr>
<th>Fact or Fallacy</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AIDS can hide in an individual for 5 years or more without being detected.</td>
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<tr>
<td>2. AIDS is a disease that attacks men only.</td>
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<tr>
<td>3. The immune system is the first line of defense of the body.</td>
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<tr>
<td>4. AIDS works by preventing the body from fighting infections.</td>
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<tr>
<td>5. AIDS can be transmitted through dirty needles, by blood transfusions, and sexual contact with infected persons.</td>
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<tr>
<td>6. A person carrying AIDS who shows no signs of infection will not infect other.</td>
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<tr>
<td>7. Persons who have AIDS will be infected for the rest of their lives or until there is a cure.</td>
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<tr>
<td>8. The second most common way to acquire AIDS is through sexual contact with an infected person.</td>
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<td>9. The fourth most common way to transmit AIDS is in the uterus.</td>
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<tr>
<td>10. Over one million people do not know that they carry AIDS.</td>
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<tr>
<td>11. Which of the following are symptoms of AIDS:</td>
<td></td>
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<tr>
<td>□ hearty appetite</td>
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<td></td>
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<tr>
<td>□ night sweats</td>
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<td>□ weight gain</td>
<td></td>
<td></td>
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<tr>
<td>□ coated tongue</td>
<td></td>
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<tr>
<td>□ constipation</td>
<td></td>
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</tr>
<tr>
<td>Fact or Fallacy</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>• rectal bleeding</td>
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<td>• excessive growth of hair</td>
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<tr>
<td>• headaches</td>
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<td></td>
</tr>
<tr>
<td>• fatigue</td>
<td></td>
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<tr>
<td>12. ARC victims have mild symptoms of AID yet they do not develop AIDS diseases.</td>
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<tr>
<td>13. Many infections related to AIDS can be treated.</td>
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<tr>
<td>14. Most persons die within two years of AIDS diagnosis because of related infections.</td>
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<td>15. AIDS may be transmitted by:</td>
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<tr>
<td>• air</td>
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<td>• dishes</td>
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<td>• sexual contact</td>
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<td>• tooth brush</td>
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<td></td>
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<tr>
<td>• water fountain</td>
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<td></td>
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<tr>
<td>• food served by AIDS carrier</td>
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<td></td>
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<tr>
<td>• shaking hands</td>
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<td></td>
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<tr>
<td>• used needles</td>
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<tr>
<td>• body fluids</td>
<td></td>
<td></td>
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<tr>
<td>• donating blood</td>
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<td></td>
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<tr>
<td>• saliva containing blood</td>
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<tr>
<td>16. AIDS cases double every 14 months.</td>
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<tr>
<td>17. Homosexual men, bisexual men, and prostitutes are included in high-risk AIDS groups.</td>
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</tbody>
</table>
Answers to Facts/Fallacies About AIDS

1. True
2. False
3. True
4. True
5. True
6. False
7. True
8. False
9. False
10. True
11. a) False  d) True  g) False
    b) True  e) False  h) False
    c) False  f) False  i) True
12. True
13. False
14. True
15. a) False  e) False  i) True
    b) False  f) False  j) False
    c) True  g) False  k) True
    d) False  h) True
16. True
17. True
Additional Resources

The National AIDS Hotline
1-800-342-AIDS or 1-800-342-2437

The National STD Hotline
1-800-227-8922

Dallas HIV Testing and Counseling
(214) 920-7916

Dallas County Health Department
(214) 920-7900