

**THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA**

Dr. Michael M. Krop, Chair  
Dr. Robert B. Ingram, Vice Chair  
Agustin J. Barrera  
Frank J. Bolaños  
Frank J. Cobo  
Perla Tabares Hantman  
Betsy H. Kaplan  
Dr. Marta Pérez  
Dr Solomon C. Stinson

***SUPERINTENDENT OF SCHOOLS***

Merrett R. Stierheim

***CHIEF EDUCATION OFFICER AND DEPUTY SUPERINTENDENT OF  
SCHOOLS***

Mercedes Toural

***ASSOCIATE SUPERINTENDENT INSTRUCTIONAL OPERATIONS***

Dr. George M. Koonce, Jr.

***ASSISTANT SUPERINTENDENT CURRICULUM SUPPORT  
AND INNOVATIVE PROGRAMS***

Nereida I. Santa-Cruz

***ADMINISTRATIVE DIRECTOR DIVISION OF LIFE SKILLS  
AND SPECIAL PROJECTS***

Lilia Garcia

***For Information Contact:***

Jacquelyn White, District Supervisor  
HIV/AIDS Education Program  
1500 Biscayne Boulevard, Suite 316  
Miami, FL 33132  
Phone: (305) 995-7118 or (305) 995-7273  
Fax: (305) 995-7122  
Website: <http://aidseducation.dadeschools.net>

This document was developed and distributed under cooperative agreement  
#U87/CCU422648-01 from the U.S. Centers for Disease Control and Prevention, Division of  
Adolescent and School Health.

November 2003

This curriculum is dedicated to all MDCPS students, faculty, staff and volunteers who are infected by HIV or affected.

## ***INTRODUCTION***

The HIV/AIDS: Get The Facts! Curriculum Guide has been revised to assist teachers in planning and presenting the required lessons on Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS). The purpose of this curriculum is to provide information, teaching strategies, and resources to teachers for grade/age appropriate dissemination to students in grades kindergarten through twelve.

## **HOW TO USE THE CURRICULUM**

### **Teacher Resource Section**

Before beginning a unit on HIV, teachers of all grade levels should review the Teacher Resource Section of this curriculum. This section provides the teacher with a thorough background on HIV/AIDS.

### **Teacher Lessons**

**Kindergarten through Grade Five.** The Teacher Lesson Plans provide general objectives, suggested materials, and lessons as identified in the scope and sequence. (See pages 4 & 5).

**Grade Six through Twelve.** The Teacher Lesson Plans provide general objectives, suggested materials, and lessons as identified in the scope and sequence (See pages 4 & 5). In addition, the HIV/AIDS Education Program's Speakers' Bureau is available to provide APPROVED speakers to help enhance and support your lessons.

### **Strategies**

Teachers will find that the curriculum focuses equally on dissemination of information and on the practicing of skills to promote positive behavior. Studies have shown that information and knowledge alone will not convince students that they should practice safer behaviors. Teachers are encouraged to give students the opportunity to think about and practice skills for a safer lifestyle.

At each progressively higher grade level, more detailed information and more complex skills about HIV disease spectrum are required of students. The students who progress through each grade level of the curriculum will have vital lessons repeated, as well as receive updated information.

We recognize the sensitivity of this curriculum, and therefore we have provided a section entitled "Teaching Sexuality" to assist those teachers with concerns about teaching students about HIV/AIDS and sexually related topics (See page 36).

## **Time Frame**

The lessons are designed to provide a minimum of five days of lecture and discussion, skill building, and assimilation of the major concepts taught in the unit. Ideally, the lessons should take place over consecutive daily class periods. HIV/ AIDS instruction in the primary and elementary grades should be taught as part of health education. In the middle grades and high school, HIV/AIDS instruction should be integrated with units on human sexuality, sexually transmitted diseases, drug education, social and emotional growth, self-esteem, values, decision-making, and dating. (Refer to August 20, 1999 section of the Work-site AIDS Packet entitled: Comprehensive HIV/AIDS Information and Education Programs).

## **Resources**

You may also contact your school's HIV/AIDS Education Resource Teacher, or call the Miami-DCPS HIV/AIDS Education Program at (305) 995-7118 or (305) 995-7273. **All resource materials, in addition to those presented in this curriculum guide, used to teach the HIV/AIDS curriculum must be approved prior to use with students.**

For additional information, see sections 15, 16 & 17; which provides further resources, such as web-sites, a list of approved materials, literature, books and other helpful information.

# TEACHING METHODOLOGY

The following are guidelines that may help you to effectively teach HIV/AIDS curriculum content:

**Present the facts accurately, simply, and explicitly.** Teachers must become comfortable with issues and vocabulary related to HIV/AIDS to teach effectively. The more you talk about HIV/ AIDS with your students and peers, the easier it will become. The HIV/AIDS Education Program staff, together with several local service organizations, will continue to offer in-service training and resources to help you speak about these issues with more comfort. (Call (305) 995-7118 or (305) 995-7273 to arrange for technical assistance).

**Utilize available resources.** Teachers who do not feel comfortable providing HIV/AIDS education may try alternate ways of communicating the information. Team teaching is one option; another is inviting a member of the district HIV/AIDS Speakers Bureau to help you present the material. If your school sponsors an HIV/AIDS Peer Leadership Club, invite a peer educator to speak.

**Encourage personal learning skills & research.**

These skills are built into many of the curriculum lessons. It is vital that students learn where to go for accurate and up to date information. Please give students every opportunity to learn how to use the library, phone book, hotline, internet and other community resources.

**Provide opportunities to practice decision-making/assertiveness skills through role-playing.** Studies have shown that facts alone will not convince any person, student or adult, to change to healthier behaviors (Seat belts and smoking.) Students must have a chance to practice skills that will enable them to make healthy choices.

**Relate HIV/AIDS to as many subject areas as possible.** HIV/AIDS education is often taught as a part of human growth and development, health, and/or science. However, it can also be taught in language arts, history, civil rights, math, the arts, and psychology. A student who may not be enticed to study HIV/AIDS as a health issue may be intrigued by how it is affecting the arts community, how it has caused political uproar in some cities, or how it affects immigration laws, etc.

**Be sensitive to the presence of HIV in our community.** As you prepare to teach lessons about HIV/AIDS, be aware that many families have members living with HIV, and some students, faculty and staff members in your school may be living with the virus as well. For this reason, it is important to stress the psychosocial and societal issues, found in sections 11, 12 & 13, along with the general prevention message of this curriculum.

**Include parents in the educational process.** Invite parents to look at the curriculum. Arrange a special PTA/PTSA meeting to provide AIDS education and information about the AIDS curriculum. If parents do not want their child to participate in the curriculum, they can have the child excluded by sending a letter to the principal. (See sample letter in the work-site AIDS Packet).

**Scope & Sequence**

## COMPETENCIES FOR HIV/AIDS EDUCATION

CATEGORY	THE STUDENTS WILL:	GRADE LEVEL
The Facts About HIV/AIDS	Describe components of good health	K-4
	Describe disease	K-4
	Identify how disease is spread	K-12
	Identify the acronyms AIDS and HIV	K-12
	Identify HIV as the virus that causes AIDS	K-12
	Identify the progression of HIV infection, from the moment of infection, to the development of AIDS	4-12
	Identify how disease is spread through HIV transmission patterns	4-12
	Describe instances of casual contact that do not transmit HIV	K-12
Prevention of HIV/AIDS	Identify infection control procedures in the event of a body fluid spill	4-12
	Describe safety measures used to avoid HIV transmission in health care settings	4-12
	Describe the safety status of the nation's blood and blood product supply	4-12
	Identify non-sexual behaviors that must be avoided to prevent HIV infection	4-12
	Discuss abstinence as the only certain way to avoid transmission of HIV	4-12
	Discuss the proper use of condoms as a way to reduce the possibility of HIV transmission during sexual intercourse	5-12
Medical Testing for HIV	Identify the test used by the medical community to test for HIV	4-12
	Describe the need for pre and post counseling	4-12
	Describe the meaning of positive or negative test results	4-12
	Describe the difference between confidential and anonymous testing	5-12
Psychosocial Aspects of HIV/AIDS	Describe what it feels like to be ill	K-4
	Describe what it feels like to be with someone who is ill	K-4
	Describe ways to assist someone who is ill	K-12
	Discuss grief as a normal reaction to loss and/or death and ways to cope with its effects	K-12
CATEGORY	THE STUDENTS WILL:	GRADE

		<b>LEVEL</b>
Societal Issues	Describe the impact of AIDS upon the medical community	5-12
	Describe the economic impact of AIDS	5-12
	Describe the impact of AIDS upon the legal system	5-12
	Describe the impact of AIDS upon family and friends	5-12

## **HIV/AIDS RELATED VOCABULARY**

Primary Level: K-4 is italicized

ABSTINENCE - Refraining from something. In terms of HIV infection/AIDS, abstinence refers to refraining from all behaviors, which could lead to the transmission of HIV. e.g., sexual intercourse or illicit drugs, etc.  
*(Abstinence-NOT doing something. Examples: abstaining from drugs or abstaining from sex).*

ACQUIRED - To get or obtain something. In terms of HIV /AIDS the word "ACQUIRED" means the disease was not transmitted genetically.

AEROSOLIZED PENTAMIDINE -Medicine prescribed to prevent and/or treat Pneumocystis carinii pneumonia (PCP) in persons with HIV/AIDS.

AIDS -Acquired Immune Deficiency Sndrome. AIDS is a disease diagnosed when a patient has the following elements:

- \* Is confirmed positive on a test for HIV/AIDS.
- \* Is Immuno-compromised as demonstrated by a low T cell count. (T-4 helper).
- \* Has developed either an opportunistic infection or AIDS related cancer.

*(AIDS- a disease caused by a virus named HIV)*

ANAL SEX - A form of sexual intercourse in which the penis is inserted into the partner's anus.

ANTIBODY -Proteins produced by the body to protect itself against a foreign substance. HIV antibody is a protein produced by the body to protect itself against invasion of the HIV virus. This antibody can co-exist with the virus in the body.

*(Antibody-a substance that the body makes to stop certain diseases from attacking the body.)*

ANTIGEN -Any substance that stimulates the production of antibodies.

ANTIVIRAL -A class of drugs that weakens or destroys a virus. AZT is one example of an antiviral drug used to treat HIV infection. To date, antivirals have been created that contain but do not eliminate HIV infection.

ANUS -The opening between the buttocks where the bowel movement is released. Students may refer to the Anus in slang terms.

*(Anus- the opening (hole) in the back of the body (between the buttocks) where bowel movements (feces) come out.)*

ARC -AIDS Related Complex. An obsolete term for the early stages of HIV infection when patients have certain symptoms of illness but do not have all the required elements necessary for a diagnosis of AIDS. This term is no longer used.

ASYMPTOMATIC -Infected but not demonstrating signs or symptoms of a disease.

AZT (azidothymidine) –The first significant antiviral drug that was proven to extend the life of HIV -infected persons. Now used as one component of multiple drug regimens.  
*(AZT- a special drug that helps people with HIV live longer and healthier lives.)*

B-CELL -A type of white blood cell involved in the production of antibodies that are used to help defend the body against invading microorganisms.  
*(B-Cell- A type of white cell inside the body that fights against certain diseases.)*

BACTERIA -Single-celled microorganisms; some of which are capable of causing disease. HIV is NOT a bacterial infection, however people with HIV/AIDS are susceptible to bacterial infections.  
*(Bacteria-Tiny cells which can cause disease in the body.)*

BISEXUAL- A person who has sexual relations with persons of both sexes.  
*(Bisexual- a person who is attracted to both males and females)*

BLADDER- The vesicle where urine is stored before urination.  
*(BLADDER, the place where urine (or pee) is collected inside the body).*

BLOOD TRANSFUSION -The infusion of blood or blood components into the bloodstream of a patient.

CANDIDIASIS (ORAL THRUSH) -A fungal infection usually in the mouth and or throat caused by a yeast-like organism that can appear as white patches. A condition commonly found in Immuno-compromised patients (such as persons with HIV/AIDS).

CASUAL CONTACT -Normal day-to-day contact between people, e.g., shaking hands. HIV infection is NOT spread by casual contact.

CDC -The Centers for Disease Control and Prevention. A federal agency that studies, monitors, and provides information on the nation's health and safety. The CDC is the source of accurate and up to date information on HIV/AIDS. Please refer to [www.cdc.gov](http://www.cdc.gov)

CD4 -A protein found on the surface of T Lymphocyte Helper cells. By binding to this protein, HIV crosses the cell membrane and enters the cell.

CELL -A very small unit of an organism. It usually contains a nucleus and cytoplasm, and is surrounded by a membrane.

CERVIX- the opening inside the vagina into the uterus

CESAREAN BIRTH -Delivery of a baby through surgical incision of the abdominal and uterine walls. This type of delivery reduces the risk that a fetus (born to an HIV infected mother) will become infected with HIV during the delivery process.

CHLAMYDIA - A sexually transmitted disease (STD) that is caused by a bacteria. The symptoms are almost identical to those of Gonorrhea; **burning sensation during urination, abnormal bleeding in women,etc.** Individuals infected with Chlamydia have an increased risk of becoming infected with HIV when exposed to the HIV virus.

COMMUNICABLE DISEASE -A disease that can be transmitted from person to person. HIV is a communicable disease.

CONDOM-Female - A polyurethane sheath inserted within the vagina to reduce the risk of pregnancy or sexually transmitted diseases. Proper use of female condoms, each and every time, can reduce HIV transmission rates during sexual intercourse.

CONDOM-Male (PROPHYLACTIC, RUBBER) -A sheath used to cover the penis during sexual intercourse to reduce the risk of pregnancy or sexually transmitted diseases. Proper use of latex and polyurethane condoms, each and every time, can reduce HIV transmission rates during sexual intercourse.

*(Condom- a covering that goes over a man's penis to protect against diseases and having a baby. It is made out of the same material as a medical glove that a doctor or nurse wears to protect their hands.)*

CONTAGIOUS -Capable of being transmitted from person to person. HIV is a contagious disease.

*(Contagious- when a disease is easily spread from one person to the other.)*

CONTRACEPTIVE- Methods used to reduce the risk of pregnancy. These methods do not reduce the risk of contracting HIV or other STDs.

COWPER'S GLAND. The gland that makes the tip of the penis wet BEFORE ejaculation. It produces a sex fluid called PRE-EJACULATORY FLUID or PRE-CUM. This fluid may contain sperm and/or HIV.

DEMENTIA -A loss of mental capacity. May be a symptom of AIDS (long term end stage of AIDS) infection of the central nervous system.

DENTAL DAM-A sheet of latex usually used in dental procedures. It can also be used as a barrier to the transmission of HIV when placed between the mouth and vagina or anus during oral sex.

DIAGNOSIS -The process of identifying a disease through history, examination and/or testing.

DISEASE-*(Disease- an illness or sickness.)*

DNA (DEOXYRIBONUCLEIC ACID) -Strands of molecules in a cell's nucleus that contain the body's genetic code. DNA contains the genetic information used for the reproduction of an organism. The HIV virus interposes itself into the DNA of the host cell in order to replicate itself.

ELISA -Enzyme-Linked Immunosorbent Assay. The acronym for a sensitive diagnostic screening test used to detect virus (or antibodies to virus) in

blood samples. ELISA tests are the most common types of tests used in screening for HIV infection.

EPIDEMIOLOGY -The statistical analysis and study of disease characteristics, origins, distribution and patterns of transmission. The CDC closely monitors the epidemiology of HIV.

EPPIDYMUS- A Latin word for long, coiled tubes that attach to the upper, rear portion of each testicle. Sperm cells mature in the eppidymus.

EXPOSURE -Contact with a disease-producing agent. HIV exposure sometimes, but not always, leads to HIV infection.

FALLOPIAN TUBES – Two hollow tubes connected to the upper uterus on either side. (named after a Dr. Fallopi). An ova (egg) travels through a fallopian tube on its way to the uterus.

FALSE NEGATIVE TEST RESULT - A negative test result when, in fact, the person is infected and should have tested positive. (This test result can occur during the "window period" of HIV infection). (See definition of window period below).

FALSE POSITIVE TEST RESULT- a positive test result when, in fact, the person is NOT infected and should have tested negative.

FUNGUS-A microorganism distinct from bacteria and viruses which can cause infection. Patients with HIV/AIDS are more susceptible to fungal infections than the general population.

GAY -A slang term used to describe a homosexual person. HIV/AIDS was originally thought to be a gay disease. Today, we know that there are no high-risk groups, only high-risk behaviors for HIV transmission.

*(Gay- another name for homosexual (a person that is attracted to a person of the same sex; woman with a woman or man with a man).*

GENITALS -The external sex organs. *(Genitals- the medical name for private parts.)*

GERMS - A common term for microorganisms that cause infection and disease, e.g., bacteria, viruses, fungus. *(Germs- Tiny cells that can cause infection and diseases in the body.)*

GONORRHEA - A sexually transmitted disease (STD) that is caused by a bacteria. When infected, some men experience a burning sensation on urination and develop a discharge from the penis. Some women develop an infection in the cervix and a vaginal discharge. Individuals infected with Gonorrhoea have an increased risk of becoming infected with HIV when exposed to the HIV virus.

GRID -Gay Related Immune Disorder. The first name given to what we now call AIDS. This obsolete term is no longer used.

HEMOPHILIA -A rare hereditary disease in which the blood does not clot normally; predominately found in men. Many Hemophiliacs developed HIV in the past from the blood products used to treat their disease. Newer therapies no longer carry the risk of HIV transmission.

HEPATITIS - Inflammation of the liver caused by toxic agents (alcohol, medications, etc) or viruses(Hepatitis A, Hepatitis B, or Hepatitis C). Hepatitis B is a disease that is transmitted in a similar manner to HIV.

HERPES SIMPLEX -A sexually transmitted disease that is caused by a virus. This infection produces painful watery blisters on the skin or mucous membranes of the genitals, anus, mouth or lips. Individuals infected with Herpes Simplex have an increased risk of becoming infected with HIV when exposed to the HIV virus.

HETEROSEXUAL -A person whose sexual attraction is toward members of the opposite sex. HIV transmission does not depend on sexual orientation, but does depend on sexual behavior. Heterosexuals are at risk for HIV infection when one of the partners is infected.

*(Heterosexual- a person who is attracted to a person of the opposite sex (man with woman/ woman with man).)*

HIGH RISK BEHAVIOR -Behavior where an infected body fluid may be introduced into the bloodstream of a non infected individual. e.g. unprotected sexual intercourse, or sharing infected needles.

HIV - The acronym for Human Immunodeficiency Virus. This virus causes HIV infection and AIDS.

HIV-INFECTED - A person who carries the HIV virus in their body. The HIV infected person may, or may not have AIDS. They may, or may not, have signs or symptoms of illness but are still infectious to others.

HOMOSEXUAL -A person whose sexual attraction is toward members of the same sex. HIV transmission does not depend on sexual orientation, but does depend on sexual behavior. Homosexuals are at risk for HIV infection when one of the partners is infected.

*(Homosexual-Another name for a gay or lesbian person. A person who is attracted to a person of the same sex (man with man/ woman with woman).)*

HTLV-III - An acronym for Human T-Cell Lymphotropic Virus, Type III. It was an early name for the HIV virus. Further research showed that HIV was not part of the HTLV family and the term is obsolete and no longer used.

IFA -An acronym for Immunofluorescent Assay. A test that is able to detect

HIV antibodies in blood. It is often used to confirm ELISA screening test results for HIV.

**IMMUNE SYSTEM** - The body's defense mechanisms against infection and disease. Individuals infected with HIV have a compromised immune system and are therefore more susceptible to infections and certain cancers.

*(Immune System- The part of the body that fights against infections and diseases.)*

**INFECTION** -Invasion by pathogenic (disease causing) microorganisms into the body. HIV infection occurs when the virus establishes itself within the body.

*(Infection-When "enemy" cells invade the body and could cause diseases).*

**INFECTIOUS** -Capable of causing infection. Contagious from one person to another. HIV is an infectious disease.

*(Infectious-When a disease can be easily passed from one person to another.)*

**INTRAVENOUS (IV) DRUGS** - Drugs injected into the veins with a needle.

Intravenous drugs do not cause HIV infection. Needles contaminated with HIV infected blood that are shared among IV drug users can transmit HIV.

**KAPOSI'S SARCOMA (KS)** -A rare form of cancer of the blood vessels that causes pink, purple, or brown spots, called "lesions," on the skin. This is a common form of cancer in AIDS patients that is seldom seen in people without AIDS.

**LATENCY** -The period during which a virus lives in an dormant state in the body. It does not cause any signs or symptoms during this phase. The latency period for HIV may last for weeks to years and is prolonged with proper treatment and a healthy lifestyle. **List specific times for weeks.**

**LAV** -An acronym for Lymphadenopathy Associated Virus. An early name given to the HIV/AIDS virus. The term is obsolete and no longer used.

**LESBIAN** – A term used to describe a female in a same sex relationship. Even though the incidence of HIV infection is low in the lesbian population, they are still at risk for HIV infection when they participate in a high -risk behavior for HIV transmission.

*(Lesbian-(see homosexual) A woman who is attracted to another woman.)*

**LUBRICANT** - A substance applied to condoms or sexual organs to reduce friction. Some lubricants contain Non-Oxynol 9, a compound that may decrease the transmission rate of HIV through sexual activity. However, some recent studies show that Non-Oxynol 9 may cause allergic reactions in the vaginal mucosa that may lead to an increase risk of HIV transmission. Oil-based lubricants should not be used because they degrade the latex barrier.

**LYMPH GLANDS (NODES)** - Small round or oval bodies located along the lymphatic vessels (under the skin), that produce lymph and lymphocytes, and that filter impurities

in the body. These glands enlarge in response to local infections. Enlarged lymph glands (Lymphadenopathy) are a common symptom of early HIV/AIDS infection.

**LYMPHOCYTE** -A type of white blood cell present in the blood and lymph nodes that is responsible for fighting infection and disease. Because the T-lymphocyte carries a CD4 receptor site, it is the primary blood cell infected by the HIV/AIDS virus.

**MICROORGANISM** - Any form of life of microscopic size, e.g. fungus, viruses, bacteria, and parasites.

**MONOGAMY** - A term to describe the situation when there is restriction of sexual intercourse to one person over a long period of time. Mutual monogamy between two HIV negative individuals will prevent HIV transmission.

**MUCOSA** – A medical term that refers to the thin membrane that covers the surfaces of the mouth, the vagina, the rectum, the urethra, and the eyes (conjunctiva).

**MUTUAL MONOGAMY** - A term to describe the situation when both partner's restrict their sexual activity exclusively to each other over a long period of time. Mutual monogamy between two HIV negative individuals will prevent HIV transmission.

**NON-COMMUNICABLE** - Cannot be transmitted from one person to another. Not contagious.

**NON-OXYNOL 9** – Is a spermicide that was believed to reduce the infectivity of HIV during sexual intercourse. It can be found in some lubricants and lubricated condoms. (Original studies showed that Non-Oxynol 9 decreased the transmission rate of HIV through sexual activity. However, some recent studies show that Non-Oxynol 9 may increase the transmission rate of HIV through sexual activity in some women who have allergic reactions to it in the vaginal mucosa).

**OPPORTUNISTIC INFECTIONS** -Infections which are caused by organisms that ordinarily do not infect people with healthy immune systems. (i.e. Thrush, Pneumocystis Carinii pneumonia, etc.)

**OUTER COURSE** – Sexual activity that does not involve penetration of the body (Mouth, vagina, penis or anus). Sexual activity where body fluids do not enter the body.

**OVARIES**- two rounded organs, one on either side of the uterus, that contain the ova (the female reproductive cells). These egg cells are very tiny (about the size of a grain of salt). Baby girls have about 250,000 of these ova in their ovaries that begin to mature, and are released monthly from puberty until menopause.

**PANDEMIC** -The occurrence of a disease over a wide geographic area, affecting vast numbers of people.

**PATHOGEN** -Microorganism capable of causing infection or disease.

PENIS – The male reproductive organ.

PLACENTA -A vascular organ that unites the fetus to the maternal uterus permitting exchange of food and waste material by diffusion between the maternal and fetal vascular systems. Maternal and fetal blood systems are separate and do not co-mingle during pregnancy. Therefore HIV transmission does not normally occur across the placenta except during parturition (the birth process) and/or amniocentesis.

PNEUMOCYSTIS CARINII PNEUMONIA (PCP) -A rare form of pneumonia caused by a Micro-organism that reproduces in the lung. It is an opportunistic disease that is one of the leading causes of death among people with AIDS.

PRE-EJACULATORY FLUID - Semen that comes out of the penis prior to ejaculation. Pre-ejaculatory fluid (pre-cum) may contain high concentrations of HIV. Safer sex activities require use of a condom early in sexual intercourse.

***Tell # of sperm in 1 drop.***

PREVENTION-(*to keep something from happening. Being SAFE prevents HIV from being passed from one person to another.*)

PROSTATE- Gland that adds more fluid to the semen which pushes the semen quickly through the urethra. This can occur either during sleep (nocturnal emission/ wet dreams), or during sex (ejaculation or cum).

PWA -A term used to describe a person living with AIDS.

REPLICATION -The process by which cells, genes, and viruses reproduce.

RETROVIRUS -A virus that carries its genetic information in the form of RNA and that contains reverse transcriptase, the protein that enables it to convert its RNA to DNA in a host cell. HIV is a retrovirus.

REVERSE TRANSCRIPTASE -A protein in the inner core of a retrovirus that enables it to make DNA copies from its RNA genes. This protein allows the HIV virus to reproduce in a host cell.

RISK -A dangerous chance; the possibility of harm, damage or loss.

In relation to HIV, risk refers to behaviors where there is a potential for HIV transmission.

*(Risk/Risky- a dangerous activity; an activity, which can easily spread HIV from one person to the other if one is infected (like sharing blood or sex fluids from private parts).)*

RNA (ribonucleic acid) -Strands of molecules in the nucleus of a cell, used instead of DNA to carry genetic information. Some viruses, such as HIV, use RNA instead of DNA to carry their genetic blueprint.

**SAFE-***(Safe- not dangerous; an activity, which will NOT spread HIV from one person to the other (NOT sharing blood or sexual fluids).)*

**SAFER SEX** -Sexual activity that reduces the risk that an infected body fluid (with HIV or other sexually transmitted disease) will be introduced into the body of a non infected individual. (i.e. outer-course, mutual masturbation, or use of a condom, etc.).

**SCROTUM**—The sac underneath the penis that contains the testicles inside. *(Scrotum-the medical name of the private part of a boy or man- the sac underneath the penis.)*

**SEMEN** -The body fluid discharged from a man's penis during sex. In an HIV infected person, semen contains the highest concentration of HIV. *(Semen- sex fluids from a man's penis, which could contain HIV).*

**SEMINAL VESICLES** – gland in the male body where SEMEN is produced (named after a Dr. Semen).

**SEROCONVERSION** -The term used when a sero-negative individual becomes sero-positive. In terms of HIV/AIDS, sero-conversion occurs when an infected individual turns positive on an HIV test.

**SERONEGATIVE-** a test result indicating that antibodies/antigens to a particular disease (i.e. HIV) are absent in a person's blood serum.

**SEROPOSITIVE** -A test result indicating that antibodies/antigens to a particular disease (i.e. HIV) or virus are found in a person's blood serum.

**SEXUAL INTERCOURSE** -Penetrative physical sexual contact between individuals. (May be anal, vaginal, and oral contact.) *(Sexual intercourse-activity during which private parts are put inside mouth, vagina, or anus. When one person has HIV, this activity is very RISKY.)*

**SEXUALLY TRANSMITTED DISEASE (STD)** -An infection that can be transmitted through sexual intercourse between an infected person and an uninfected person. HIV is considered to be a sexually transmitted disease.

**SIGNS AND SYMPTOMS** – complaints (headache, pain) and abnormal findings (*fever, cough, rash*) on physical examination indicating the presence of a disorder or a disease.

**SIMIAN IMMUNODEFICIENCY VIRUS (SIV)** -A virus that causes fatal AIDS- like illness in monkeys. Some people believe that AIDS started in monkeys and was introduced into the human species through bites in animal handlers or through bestiality (sexual activity between humans and animals).

**SPERMICIDE** -A contraceptive solution that kills sperm. Some Spermicides (See definition of Nonoxynol-9) were thought to reduce the risk of HIV transmission during sexual activity, but recent studies have questioned this assumption.

STD'S - Acronym for sexually transmitted diseases. See definition under Sexually Transmitted Diseases.

STEROIDS -Synthetic forms of testosterone and other male hormones. Sometimes the needles and syringes used to administer steroids in non medical settings are shared and can therefore be contaminated with HIV infected blood.

SYPHILIS -(Also called LUES) A sexually transmitted disease caused by a microorganism called a Treponeme. A small chancre (sore) develops during the first stage of the infection. Syphilis is an STD that is common in HIV infected patients.

TATTOO -An indelible mark or figure fixed upon the body through insertion of pigment under the skin by a sharp instrument or needle. When a tattoo is applied using a non-sterile (and contaminated) needle or ink, it may transmit disease, including HIV.

T -HELPER CELLS (T-4 cells) -The white blood cells (lymphocytes) that normally help in the attack on hostile organisms that are invading the body. HIV attaches itself to the CD-4 receptor site on the surface of the T-4 cell, thus allowing the virus to gain access to the inside of the cell. When these cells are killed by HIV then the person's immune capabilities are reduced. *(T-Helper Cells-(T-4 Cells)-special white blood cells in the body's immune system that fight germs and infections in the body so the body can be healthy. These cells are easily infected with HIV).*

THRUSH -A common name for Candidiasis, a yeast-like fungal infection that appears as white patches in the mouth, throat, and vagina.

TRANSMISSION -The passing of infection or disease from one person to another.

TUBERCULOSIS - (TB) - An infectious disease which especially affects the lungs, but which may affect any tissue in the body. Treatment/medication resistant TB is becoming more common amongst AIDS patients.

UTERUS – The female organ where fetal development occurs. When fertilization does not occur the lining of the uterus breaks down and is discharged through the cervix and into the vagina as menstrual fluid.

URETHRA – (male) The tube inside the male penis connecting the bladder to the opening in the penis through which urine and semen is discharged. –URETHRA (female) The tube that connects the bladder to the outside of the body. It is a separate opening located just above the opening to the vagina. Urine is discharged through the urethra. Females do not urinate and menstruate from the same opening.

VACCINE -A substance injected into the body which produces immunity to a specific disease. There is currently NO effective HIV vaccine, although several anti-HIV vaccines are under investigation.

*(Vaccine- a special substance a doctor/nurse puts in the body by a needle, or by mouth, which protects the body from getting a certain infection or disease.)*

VAGINA – Medical name for the female genitalia.

VAGINAL FLUIDS/SECRETIONS - The fluids that are discharged from the wall of the woman's vagina. Vaginal fluids contain a high concentration of HIV virus if infected.  
*(Vaginal fluids/secretions-fluids from a woman's private part (vagina), which could contain HIV.)*

VERTICAL TRANSMISSION – An epidemiological term that describes the transmission of a disease from a mother to her offspring.

VIRUS -A one-celled microorganism that cannot reproduce itself until it invades and takes over the genetic mechanisms of a living cell.  
*(Virus- A tiny cell that causes diseases when it gets into the body. If the virus does not get inside the body, the virus will die.)*

VULVA- *(Vulva-The medical name of the outside private part of a female).*

WESTERN BLOT - A test that is able to detect HIV antibodies/antigens in blood. It is often used to confirm ELISA screening test results for HIV.

WHITE BLOOD CELLS -Cells in the blood that fight against infection by destroying disease-causing organisms. These include T & B-lymphocytes, granulocytes, monocytes, and phagocytes.  
*(White blood cells- cells in the blood that fight against infection/diseases by destroying enemies (germs or bacteria) in the body.)*

WINDOW PERIOD - The period of time between initial infection with a virus and when a sufficient quantity of virus (or antibody against the virus) is produced to be detectable in the test system being used. During the window period, the person is infectious but tests negative. The newest and most sensitive HIV tests have reduced the window period from several months to less than several weeks.

WORLD HEALTH ORGANIZATION (WHO) -An organization that monitors worldwide health. It tracks the spread of AIDS throughout the world.

## **The Difference between HIV** (*Human Immunodeficiency Virus*) **& AIDS** (*Acquired Immune Deficiency Syndrome*)

HIV infection and **AIDS** are different.

- I) **Definition of HIV.** HIV infection exists when a person carries the **Human Immunodeficiency Virus** (HIV) in their body. HIV is recognized as the virus that causes the disease AIDS. Not everyone who is infected with HIV has AIDS. The words in the acronym, HIV, are defined as follows.
- **HUMAN-** Refers to the fact that this virus infects humans.
  - **IMMUNODEFICIENCY-** Refers to the fact that this virus decreases or weakens the body's ability to fight off infections and illnesses as compared to the effectiveness of a normal or fully capable immune system.
  - **VIRUS-** A micro-organism having the ability to replicate only inside a living cell. Once inside a living cell, viruses reproduce by using the genetic material of the host cell. In HIV infection, the host cell in the immune system (T-Helper Cells) are destroyed, which may lead to the signs and symptoms of HIV infection, and eventually to the disease AIDS.

### II) Signs/Symptoms of **HIV** Infection

A person who has become infected with **HIV** may complain of a **feeling of malaise** several days to several months after initial infection. However, some people show no

symptoms at all. Early warning signs might include **fever, skin rash, diarrhea, swollen glands, night sweats, fatigue, cough, oral problems, repeated vaginal infections, and/or weight loss**. (Remember, other illnesses can cause similar symptoms.)

III) Definition of AIDS: **AIDS** is a result of advanced progression of HIV infection .It is the most severe manifestation of infection with the **Human Immunodeficiency Virus**. The words in the acronym, AIDS, are defined as follows.

- **ACQUIRED**- To get or obtain something. In terms of HIV infection/AIDS the word “ACQUIRED” means the disease was not transmitted genetically
- **IMMUNE**- pertaining to the human system’s ability to destroy disease causing organisms.
- **DEFICIENCY**-A lack or weakness of functional capacity.
- **SYNDROME**- A group of signs or symptoms that occur together and characterize a particular abnormality.

#### IV) Signs/Symptoms of **AIDS**

Most people with **AIDS** develop **AIDS** related **opportunistic infections**. The most common opportunistic infection is **Pneumocystis Carina Pneumonia(PCP)**, which is a lung infection caused by a protozoal agent. Other opportunistic infections associated with **AIDS** are: **Toxoplasmosis, Cryptococcosis, Tuberculosis, Herpes, and Cytomegalovirus retinitis** Persons living with **AIDS** often have infections of the lungs, brain, eyes, and other organs, and frequently suffer debilitating weight loss and diarrhea. In addition to infections, people with AIDS also frequently develop cancers at a rate higher than the general population. **Karposi’s Sarcoma(KS)**, a type of cancer distinguishable by discolored lesions on the skin is the most common. Other cancers frequently seen in AIDS patients include, **invasive cervical cancer in females, and Lymphomas among others cancers**.

#### V) Clinical Definition of **AIDS**

An individual would meet The Centers for Disease Control and Prevention (CDC) definition of **AIDS**, if they are **HIV Positive and have a CD4+ (T-Cell) lymphocyte count of less than 200 per micro-liter of blood**. (A normal CD4+ count in a healthy adult is about 800-1500 per micro-liter of blood). **An HIV Positive test and diagnosis of the opportunistic infections associated with AIDS can also define AIDS regardless of CD4+(T-Cell) count**.

## The Pathophysiology and mechanism of HIV/AIDS

### *i) Progression of HIV from Initial infection to disease*

Since the identification of the HIV in 1984, scientists have learned the exact pathophysiology of HIV (the mechanism that the virus uses to infect an individual and cause disease), and the natural history of the infection. The following is an overview of these processes:

- \* Transmission of HIV occurs when an infected body fluid from one person is directly introduced into the body (blood stream and/or across mucous membranes) of a *non-infected* individual.
- \* The virus attaches itself to selected cells throughout the body.
- \* The virus attaches itself only to cells that contain a specific receptor site: CD4 receptor site. (A receptor site works in the "lock and key" concept).
- \* The most important cell that is attacked by the virus is a white blood cell called a T helper lymphocyte. This cell is an important part of our immune system's defense against invading microorganisms that may cause disease.
- \* The genetic material of the virus is then transported across the outer cell membrane at the receptor site, and the genetic material of the virus enters the cytoplasm of the cell.
- \* It makes its way to the nucleus of the cell where the genetic material (RNA) of the virus actually interposes (inserts) itself into the genetic material (DNA) of the host cell.
- \* The viral RNA then takes over the reproductive mechanism of the cell and starts to produce new viral RNA. It does this through the use of a process using a "reverse transcriptase". (A protein that directs the development of new RNA from DNA.).
- \* The viral RNA develops into new virus. When hundreds of thousands of copies of the virus are produced inside the cell, the cell is destroyed and the hundreds of thousands of copies of the virus are released into the blood stream where they seek out and infect other non-infected cells.
- \* There is a constant and continuously ongoing balance that exists between the number of new non-infected T helper cells produced by the body (Billions per day), versus the

number of cells that become infected with the HIV virus per day (Also billions per day). The individual's T cell count and the ratio of the number of helper to suppressor lymphocytes in the blood stream will vary depending on which process (production versus destruction) is more active.

- \* When the total number of T cells becomes very low, the individual then becomes susceptible to opportunistic infections, unusual cancers, and other symptoms of immunosuppression.

## ***ii) The natural history (course) of disease:***

- \* Within weeks of the time that a person becomes infected, some people will experience a mild flu like illness. This represents the initial infection and spread of the virus in the helper T cells. Within three weeks to three months, after exposure, the person's HIV test will become positive.
- \* The person then enters into a prolonged stage of infection that may last from weeks to decades (even without treatment) where there are no signs or symptoms of disease. Even though the person is not at all ill, they are infectious to others.
- \* At some point, where the virus infects more cells than are being produced by the body, the person becomes symptomatic with non specific symptoms (unexplained weight loss, unexplained night sweats, severe unexplained diarrhea, enlarged lymph nodes, etc), or an infection, or other disease, which are not normally found in immunocompetent persons (Pneumocystis carinii pneumonia, Thrush, Kaposi's Sarcoma). In addition, other organ systems may become infected and cause symptoms. Central Nervous System (CNS) infection may cause mental status changes, hematological infection may result in thrombocytopenia (low platelet counts), etc.
- \* At the point where the person's HIV test is positive, and, the T-Cell count drops below 200, and/or the person develops an opportunistic infection or an AIDS related cancer, the person has progressed from HIV infection to AIDS.
- \* Without treatment the disease may progress. The person becomes progressively ill over time. Eventually the person becomes so weak and debilitated that death ensues. Usually the cause of death is overwhelming infection.

## ***The Transmission of HIV***

- i) Concept:***Transmission of HIV occurs when an infected body fluid from one person is directly introduced into the body (blood stream and/or across mucous membranes) of a *non-infected* individual.

## ***ii) Examples of transmission:***

HIV can be present in a variety of body fluids and secretions. The presence of HIV in genital secretions blood, and breast milk, is significant for the spread of HIV. However, the appearance of HIV in saliva, urine and tears is of no major clinical importance, as

transmission of HIV in these fluids does not occur, primarily because of the low concentration of HIV in these fluids.

It is important to understand how HIV is spread from person to person. It is time to dispel the notion that only “*high risk groups*” can catch HIV; any one who engages in a “*risky behavior*” may be putting themselves at risk of HIV infection. A risky behavior occurs anytime a potentially infected body fluid is introduced into the body/blood stream of an uninfected individual. Examples of such risky behavior include:

- Unprotected Sexual Activity- Oral/Vaginal/Anal
- Sharing Contaminated Needles- I.V DrugUse/BodyPiercing/Tattooing/Branding
- Pregnancy in an HIV infected woman-During pregnancy and or Delivery/Breast Feeding
- Occupational exposure-Needle sticks/Blood splashes etc.

One of the primary risk behaviors for HIV transmission via blood is sharing of contaminated needles during intravenous (I.V) drug use. If needles are not shared, then this form of transmission will not occur. Less common practices of blood commingling, or use of instruments such as tattoo, body pierce and branding needles, not properly disinfected, also carry a potential risk. Sharing of these needles pose a threat, so people who wish to engage in body piercing, for example, should be directed to a reputable establishment, that practices safety measures and universal precautions.

Before lab tests were developed to detect HIV, persons who received blood products by transfusion were also at risk. Now with rigorous testing of donor blood, this mechanism of transmission is extremely rare- with a risk of occurrence of 1 case for nearly 2,000,000 transfusions of screened blood products in the US per year.

Sexual transmission poses a threat of HIV infection if, during the act, an infected fluid (from an infected person) is introduced into the body/blood stream of a non-infected individual. Note; this can occur across mucous membranes (eyes, mouth, vaginal lining, the lining of the urethra in the penis, rectal lining etc.). Sex “toys” can also transmit HIV when shared with an individual infected with HIV. Protected sex (using a latex/polyurethane barrier (condom/dental dam)) reduces, but does not eliminate, the risk.

In order of greatest to lowest risk the sexual behaviors are:

**Anal Intercourse:** This refers to sexual penetration in which the penis enters the anus into the rectum. This behavior is not limited to gay men, and poses a threat of infection from an infected partner, because body fluids may be exchanged between two individuals. The walls of the rectum are thin and are easily ruptured/torn during anal intercourse. When the blood vessels are damaged and receive direct HIV-infected semen the risk of exposure is high. Likewise bloody fluids, bacteria and viruses, from the rectum could cross the mucous membrane of the urethra in the penis. Transmission may occur across the intact rectal mucosa.

**Vaginal Intercourse:** This refers to sexual penetration in which the penis enters the labia into the vagina. The uninfected partner is at risk for HIV during vaginal intercourse because body fluids may be exchanged between two individuals. Pre–ejaculatory fluid

(Pre-cum) may also be infectious. An increase in transmission may occur if there are cuts, abrasions or sores due to the presence of other sexually transmitted diseases, or right before or during a woman's period when the virus has a more direct access to the blood stream. Transmission may occur across the intact vaginal mucosa. If the female is infected, the male is also at risk because infected vaginal fluid can be transmitted across the mucous membrane of the urethra of the penis.

**Oral Sex:** This refers to the use of the mouth to stimulate another person's genitals. It is important to understand that it is not the presence of saliva that causes transmission, but the possibility of receiving infectious fluids into the mouth cavity and entering the bloodstream of a person through some form of microscopic opening and/or across a mucous membrane. An oral infection may be present or it may simply be an opening caused during the flossing of one's teeth.

Oral sex is defined in three categories:

- \* Fellatio- Mouth-to-penis. The penis is stimulated by the mouth of the partner.
- \* Cunnilingus-Mouth -to-vulva/vagina. The vulva/vagina is stimulated by the mouth of the partner.
- \* Analingus- Mouth to anus. The anus is stimulated by the mouth of the partner.

### **Maternal Fetal Transmission**

Mothers with HIV infection can pass the virus to their babies, during the *third* trimester (the last three months of pregnancy), at the time of birth (as infected vaginal fluid/blood may pass through the conjunctiva [mucosa] of the baby's eye, or the mucosa of the mouth), or through breast-feeding. Worldwide, one third to one half of cases of vertical transmission of HIV from mother to child occur from breast-feeding. The risk for HIV transmission from an infected mother to an infant through breast-feeding is increased with the duration of breast-feeding, and is doubled when breast-feeding continues past 15 months. Congenital AIDS occurs, on average, in about one fourth of babies born to HIV -infected mothers (without maternal treatment with anti-HIV medications), with actual rates of transmission ranging from 7 to 71%, depending upon the presence of risk factors for transmission during the course of HIV infection and pregnancy. High levels of HIV, late in gestation and/or during labor and delivery, increase the risk of perinatal transmission. More recently, the rates of vertical transmission have markedly decreased by the treatment of the pregnant female with a series of anti- viral medications. Current estimates of transmission from infected mother to unborn baby are less than 10% with appropriate prenatal care and maternal therapy.

### **Contaminated Needle I.V. Drug Use/Body Piercing/Branding:**

Sexual transmission is NOT the only way individuals may expose themselves to HIV infection. Any time an infected body fluid is introduced into the bloodstream of a non-infected individual HIV can be transmitted. This can occur through the use of contaminated (dirty) needles. A "dirty" needle is one that has infected blood on or in it. HIV transmission may occur during sharing of Needles during I.V Drug Use, tattooing,

body piercing, and branding. It can also be transmitted during blood brother-blood sister rituals.

**Occupational Exposure:**

Some occupations put employees at risk of exposure to HIV. As an example, health care professionals may become exposed to contaminated fluid, through needle-stick incidents, splashes into the mucus membrane of the eyes or into open cuts, etc. In the normal classroom setting, following school board policy and procedures, there is NO RISK OF HIV INFECTION. Currently there have been no documented cases of HIV transmission in the classroom setting through normal classroom activities.

Even though HIV has been found in a variety of body fluids such as saliva, urine, feces, and tears, non-sexual transmission by these body fluids is extremely rare. The lack of transmission is related to the paucity (low concentrations) of HIV- infected cells in such secretions. Even though the amount of virus is small in body secretions and presents a very small risk with routine household contact, prolonged contact or contact in sexually intimate situations with such fluids should be avoided. Generally, the transmission of HIV occurs only through semen/ pre ejaculatory fluid, vaginal fluid, blood or blood components, and breast milk. In a liquid environment at room temperature, the virus can be detected for up to 15 days. However, despite the ability to detect the virus outside the body, infection through casual household and institutional contacts is extraordinarily rare. Likewise, HIV transmission by insect vectors such as mosquitoes appears highly improbable and has never been reported.

The following table illustrates the relative concentrations of HIV in various body fluids:

<b>Name of Fluid</b>	<b>High concentration of HIV</b>	<b>Low concentration of HIV</b>
Semen	✓	
Blood & Blood components	✓	
Menstrual Flow	✓	
Vaginal Secretions	✓	
Pre-Cum	✓	
Breast Milk	✓	
Cerebral Spinal Fluid	✓	
Pus		✓
<b>Saliva</b>		✓
Tears		✓
Urine		✓
Feces		✓
Vomit		✓
Nasal Mucous		✓

### **Special Note:**

It is extremely important to recognize that even though HIV can be found in all of the above fluids, the risk of transmission from low concentration fluids is highly unlikely. The reason for this is the concept of **dose response curve**. This concept states that the greater the amount of HIV introduced into the body, the greater the risk of HIV transmission. The amount of HIV is dependent on:

- the concentration of HIV in the infected fluid (see above chart)
- the quantity of fluid introduced into the body
- the access of the infected fluid to the T4 cell ( directly into the blood stream, across a mucous membrane, etc.)

See Appendix I for transparencies “Concentrations of HIV in body fluids” and “The HIV Puzzle”

### **Dispelling Myths About HIV/AIDS Concerning Blood**

**The following are myths and misconceptions regarding HIV and AIDS. For additional examples of myths regarding sexuality see page 42.**

### **Menstrual Fluid:**

The myth is: *“It is safe for me to have sex with my girlfriend during her period!”*

The truth is: Menstrual fluid is a mixture of blood and tissues of the uterine lining. If a woman is HIV infected, then her menstrual fluid would contain HIV; therefore, unprotected sexual intercourse carries a significant risk of HIV transmission.

### **Blood Supply:**

The myth is: *“ I can get AIDS by giving blood!”*

The truth is: You cannot get HIV (the virus which causes AIDS) or any other infectious disease from giving (donating) blood. The needles and all other equipment used to collect blood is pre-sterilized, used once, and then discarded.

The myth is: *“ Half of the students at my school, who donated blood, are HIV positive.”*

The truth is: In general, less than 1 in 10,000 blood donations are HIV positive. This rate is the same for students and the general population. Here in South Florida, it is extraordinarily rare to have a student who is HIV positive donate blood. All blood centers maintain HIV information in a confidential manner and do not notify schools of HIV positive students. Please see the letter in Appendix III for correspondence that can be used to effectively dispel this myth.

The myth is: *“We both have the same blood type so we don’t have to worry about giving each other HIV.”* The truth is: HIV infects individuals of all blood types. The blood type has nothing to do with transmitting the virus.

The myth is: *“ I am going to get AIDS from a blood transfusion.”*

The truth is: It is possible, but extraordinarily rare, to transmit HIV infection through a transfusion. All blood, before it is transfused, is tested and found negative for HIV. There are only a few cases of HIV transmission through transfusion per year in the U.S.

## **Prevention:**

# 1. Abstinence

Abstinence from all HIV related risky behaviors (such as sexual intercourse[either anal, oral, or vaginal], sharing of IV needles, body piercing, or tattooing using non sterile needles, etc) is the only 100% effective way to prevent transmission of HIV from an infected person to a non infected person.

Abstinence means that you do not participate in any behavior that puts you at risk of exposure to an infected body fluid. See the section on “Transmission” for a list of potentially infectious body fluids.

Behaviors that put someone at risk include but are not limited to:

- Vaginal sexual intercourse with an HIV infected person
- Anal sexual intercourse with and HIV infected person
- Oral sexual intercourse with an HIV infected person
- Sharing contaminated needles with an HIV infected person (including IV drug use/ body piercing/ tattooing/ branding)
- Blood brothers/ blood sisters/ gang initiations and other rituals that involve the exchange of blood.

# 2. Alternatives to risky behaviors

There are many safe ways to demonstrate affection and have fun in a social setting that do not put someone at risk of HIV transmission. Alternatives to HIV related risky behavior include but are not limited to:

- Hugging
- Holding hands
- Going to the movies
- Touching your own body
- Outercourse- any kind of sexual activity with skin-to-skin contact that does not involve cuts nor exchange of sex fluids (This is applicable for HIV, not for Herpes or HPV).
- Talking to your partner
- Dancing
- Manual sex (Hand) - masturbation
- Body rubbing with clothes on
- Eye contact and flirting

# 3. Risk/Harm reduction

**Safer Sex** – When abstinence and alternatives to HIV related risky behaviors is not chosen, then, safer sex should be practiced. Safer sex involves sexual activities that limit/reduce the exchange of potentially infected body fluids. Safer sex always involves the use of barrier methods.

**Barrier Methods-** Barrier methods include but are not limited to:

- Male latex and polyurethane condoms
- Female latex and polyurethane condoms
- Latex dental dams

**Spermicides** (Now called “Microbicides”)- Spermicides were believed to reduce the infectivity of HIV during sexual intercourse. Spermicides can be found in some lubricants and lubricated condoms. Original studies showed that some Spermicides (including Non-Oxynol- 9) decreased the transmission rate of HIV through sexual activity. However, some recent studies show that some Spermicides (including Non-Oxynol 9) may increase the transmission rate of HIV through sexual activity in some women who have allergic reactions to it in the vaginal mucosa).

**Avoidance of Alcohol/drug use-** Avoidance from alcohol/drug use can significantly reduce the transmission of HIV. The use of these substances impairs judgment and inhibits proper decision-making. Individuals who are under the influence of these substances have been shown to engage in more risky behaviors than people who have abstained from their use.

**Negotiation** – A significant strategy to reduce the risk of HIV transmission involves teaching students to negotiate alternatives to high- risk behaviors. Negotiation techniques include saying no, proposing safer alternatives, and agreeing to mutually acceptable and safe practices.

**Communication-** Effective communication is essential to reducing risk of HIV transmission. Communication involves discussions of feelings, expectations, fears, beliefs and levels of comfort concerning certain activities. Good communication is essential for negotiation to occur.

**Resisting negative peer pressure** - Peer pressure can be experienced by both adults and youth. It can be both positive and negative. Resisting negative peer pressure includes the following techniques: developing sufficient self-esteem to make independent and safe decisions, becoming knowledgeable about all aspects of HIV, finding a supportive network of friends and adults who will assist you in making healthy and safe decisions.

## 4. Road-Blocks to safety

The following are possible examples of road- blocks to making safe decisions. These issues may prevent the students from effectively learning about and implementing safer behaviors in their lives:

- Low Self-esteem/ self -efficacy
- Cultural/religious barriers
- Language Barriers
- Beliefs that prevent empowerment
- Physical/emotional and sexual abuse
- Sexual Identity Issues (Gender and/or Orientation)
- Ignorance & Mis-information
- Negative peer pressure
- Alcohol/drug use
- Lack of an adequate support system
- Lack of communication/negotiation skills
- Feelings of immortality and omnipotence
- Lack of Access to safety materials
- Economics

**Teaching Tip:**

These roadblocks may make it difficult to effectively teach this curriculum to some students. Therefore, when roadblocks are identified, attempt to address them by asking open-ended questions, affirming the reality of road blocks in students' lives, and discuss ways to remove roadblocks so the students can move toward personal safety.

## 5. Universal Precautions

**Universal Precautions** is a concept in infection control, in which **all** body fluids are treated as if they are infectious. Universal Precautions help protect you from exposure to HIV, Hepatitis, and other infectious diseases. According to Miami-Dade County Public School Policy, universal precautions must be followed whenever contact with body fluids might occur (Please see the HIV/AIDS Education Program's Worksite AIDS Packet). These procedures should always be followed since you can't be sure which fluids may be infected.

These precautions, including the use of latex gloves (other gloves are available if you are allergic to latex) and other barriers, are strongly recommended whenever there is a risk of exposure to blood or other body fluids. When gloves are not available, any barrier such as toweling or clothing that prevents direct contact with blood is recommended. In

the event of direct contact with blood, washing immediately with soap and water is a mandatory precaution.

Universal Precautions should be applied whenever dealing with blood (cuts, lacerations, puncture wounds, wounds from biting, nose bleeds), pus, and /or bleeding sores, vomit and other potentially infectious fluids.

Although Universal Precautions are important, always remember that HIV has never been reported to be transmitted in a classroom setting. HIV is ***not*** transmitted by casual contact, by hugging an infected child, in a bathroom, on the playground, in the cafeteria, etc. Therefore, while caution should be exhibited, the urgent care of a bleeding person should not be delayed for fear of infection.

## **HIV TESTING**

### **1. Types of Tests**

There are many ways that a person can be tested for HIV infection. There are tests for HIV antibodies, antigens (the virus itself), and for the HIV- RNA (genetic material of the virus).

The majority of HIV tests that are currently performed in the United States are antibody tests. HIV antibody testing has been available nationwide since March of 1985. The presence of this antibody is used as a marker for HIV infection. Antibody testing can be performed on blood, oral mucosal transudate (cells from the inside lining of cheeks and gums), and urine.

HIV testing consists of two phases: screening and confirmatory tests. Before concluding that a sample is truly positive, BOTH the screening and the confirmatory tests must be positive.

Most screening tests are performed by the ELISA (enzyme-linked Immunosorbent assay) technique. Most confirmatory tests are performed by a technique called the Western Blot.

The Window Period is the time between infection and when a sufficient quantity of virus or antibodies is produced to be detectable in tests. According to the CDC, it may take from 3 weeks to 3 months to become positive on an HIV test. During this “window period”, people can receive a negative result and still be infectious to others. The window period of some newer tests may be less than 10 days.

### **2. UNDERSTANDING TEST RESULTS**

There are three possible results of HIV testing: Negative, Positive and Indeterminate (inconclusive).

- Negative results mean that a person was not infected at the time of the test, or was recently infected (I.E. they may be in the window period).
- Positive results on both screening and confirmatory tests mean that the person is infected with HIV, and is infectious to others.
- Indeterminate results mean that the lab could not tell if the test was negative or positive. A new specimen would have to be used to retest that person.

### **3. TESTING OPTIONS**

Testing can be obtained in either a confidential or anonymous manner.

Confidential Testing is when a person's name is on the test and is attached to a medical record that is only available to a limited number of authorized individuals. HIV positive tests results, by law, must be reported to the Health Department.

Anonymous Testing is when counseling, consent, testing and reporting is performed but no names or personal identifiers are used.

There are a limited number of times when HIV testing can be mandated by law (military, some incarcerated individuals, etc).

### **4. WHO SHOULD GET TESTED?**

A person should think about getting tested if he or she ever engaged in a risky behavior that would have exposed them to blood and/or sex fluids from a person who's HIV status is unknown or HIV positive.

Testing is important because early detection and subsequent intervention (care and treatment) can significantly improve the quality and length of life.

### **5. WHY SHOULD SOMEONE GET TESTED?**

Knowing one's HIV status allows the infected individual to gain access to proper medical care. There are now effective ways of delaying the onset of signs and symptoms related to HIV disease. In addition, a person who knows their HIV status can protect themselves by developing and maintaining a healthier lifestyle. Finally, knowing one's HIV status will prevent the unknowing transmission of HIV to other individuals.

# **TREATMENTS:**

## **Overview:**

There is no cure for HIV/AIDS. However, there are new and increasingly effective treatments to limit and postpone the onset of symptoms in infected individuals.

Current therapy involves combinations of drugs in complex drug regimens.

Some individuals using these drugs may show *undetectable* levels of the virus in selected viral load tests. This does not mean the virus has been eliminated from the body. The person remains potentially infectious to others.

## **Drug Therapy:**

The main categories of HIV/AIDS drugs are :

- 1) Nucleoside Reverse Transcriptase Inhibitors (NRTI)-The first and best known is Zidovudine (AZT). This class of drugs acts by blocking the transcription of the viral RNA to DNA.
- 2) Protease Inhibitors. This class of drugs, usually given in combination with NRTI's, prevents the activation of some proteins necessary for viral reproduction.
- 3) Non -Nucleoside Reverse Transcriptase Inhibitors (NNRTI). This class of drugs is the newest and is usually used in combination with the other two drug categories to enhance their effectiveness.

Additionally, there are other medications to prevent and treat opportunistic infections, AIDS associated cancers, and modify immune functions, among others.

Challenges to effective anti-HIV/AIDS medications may include:

- High cost of medications
- Drug toxicity and side effects
- Difficulties adhering to the complex drug regimens
- Accessibility to health care systems

Anti HIV/AIDS medications is only one component of effective treatment of individuals with HIV/AIDS. It is strongly advised that people who live with HIV/AIDS:

- Maintain a healthy diet
- Exercise regularly
- Reduce stress
- Practice safer sex to prevent transmission/ re-infection
- Consider psychological counseling and /or group support
- Discuss family planning/pregnancy issues before coming pregnant
- Refrain from blood, organ, and tissue donation

- Be involved in their own treatment options with their physician

It is important that HIV infected individuals adhere closely to their treatment regimens in order to reduce the chances of development of drug resistant strains of HIV.

## EPIDEMIOLOGY – Trends & Statistics

The AIDS pandemic is still evolving. The statistics concerning infection rates, and mortality rates by age, gender, sex, locality, race, ethnicity, and mode of exposure, change daily. The most recent statistics can be found on any of the following web-sites ([www.cdc.gov/](http://www.cdc.gov/)) ([www.who.gov/](http://www.who.gov/)) ([www.unaids./](http://www.unaids./)) or ([www.myflorida.com](http://www.myflorida.com)). Please see the section of this curriculum called Yearly Updates for last year's statistics. Despite the need to refer to the most current statistics, trends tend to be more constant, and are discussed below:

### Trends in HIV Infection

#### Worldwide:

- Massive numbers of people are still being infected yearly.
- Large numbers of people are dying in developing countries disrupting the family units and national economies.
- Increasing numbers of women are becoming infected.
- Effective therapy is currently not available in developing countries.
- There is an increasing awareness of HIV/AIDS in more countries.
- Governments are now starting to address solutions to the AIDS epidemic.
- AIDS continues to be a leading cause of death.

#### National:

- Rates in youth are increasing regardless of sexual orientation
- Heterosexual transmission is increasing
- Rates of infection amongst minority females is increasing
- Effective treatments are increasing the life span of people living with AIDS
- Despite the increase of HIV infections, the funding has remained constant or has decreased
- As a result of effective treatments there is an inappropriate decrease in the concern about HIV transmission in many groups

Local (South Florida):

- People over 50 demonstrate double the national average for the number of new HIV cases reported (Over 4,000 cases in Florida)
- Rates in youth, minority women, and heterosexuals reflect the national trends
- Special challenges exist in HIV education and prevention in the Deaf and Hard of Hearing population **and for others with language and/or developmental disabilities**
- Rates of new HIV infection amongst minority populations is greater than their percentage in the general population
- Miami-Dade out ranks (within the top three) almost all major cities in rates of HIV infection

## TEACHING STRATEGIES RELATING TO SEXUALITY and HIV/AIDS

*The goals in addressing sexuality issues in the HIV/AIDS curriculum are to:*

- Increase comfort level of **both students and teachers** when discussing issues related to sexuality and STDs, (including HIV).
- Provide teachers with accurate information and techniques to teach students about:
  - The human body parts related to HIV transmission and prevention.
  - HIV Transmission and Prevention relating to sexuality issues.

*Objectives for this section of the HIV/AIDS curriculum are*

- Teachers will be able to effectively teach this sensitive subject matter to students.
- Teachers will be able to provide students with accurate, **age-appropriate**, and up to date information on sexuality and HIV/AIDS.
- Students will be able to identify public/private body parts related to transmission/prevention of HIV by MEDICAL names. See the Vocabulary List in the Teacher’s Resource Section of this curriculum.
- Students will be able to recall that the BRAIN controls all public and private body parts and will be able to identify activities that keep them SAFE. Students will be able to list the medical names of body fluids involved in sexual activities that transmit HIV. Students will be able to identify methods of sexual transmission of HIV.
- Students will identify ALL methods of HIV prevention from abstinence to protected intercourse.

## **INTRODUCTION:**

Teaching sexuality to students is extremely difficult for most teachers. Teaching sexuality issues related to HIV/AIDS can create many feelings for teachers, students, parents, and administrators. Honoring all feelings in teaching the sexuality part of the HIV/AIDS curriculum is essential.

Possible feelings that may be felt, both by students and teachers, during the presentation of the sexuality part of this curriculum, can be identified in the transparency titled

“Common Feelings” (In Appendix I). These feelings may include: Shock, Comfort, Anger, Disgust, Embarrassment, Happiness, Discomfort, etc.

These feelings may occur because of:

- Fears that teachers may have about administration's/parent's response to the teaching of this curriculum
- Medical words about body parts/ sexual activities not usually stated in the classroom
- Discomfort in answering a fact, opinion, or resource question relating to a taboo subject
- Conflicting personal beliefs about sex, sexual activities, communities of people
- Negative triggers about past personal experiences
- Embarrassment when talking about private body parts and private sexual activities in a public school setting
- **Inadequacies due to lack of experience or knowledge with sexuality education, information and subject matter**

No matter what feelings are felt or expressed by others, please remember the GOALS of these presentations are about transmission, prevention and SAFETY. In order to be safe, students must have accurate information, be able to ask questions about their body, and about sex in a non-judgmental environment. They must be able to feel positive about keeping their one and only body SAFE.

In addressing sexuality issues related to HIV/AIDS, it is often helpful to remember that sexuality issues include much more than sex ("SEX" is only 3 letters of the word "SEXUALITY"). All of the following components of sexuality are critical to the prevention of HIV:

- **Physical.** Students need to know the medical names of public and private parts of their bodies, which are critical in transmission/ prevention of HIV.
- **Emotional.** Students need to have a safe environment to identify feelings and to be able to understand and deal with the information provided. They must be able to trust the learning experience and ask any question without fear.
- **Intellectual.** Students need to know accurate information about sexuality related to transmission/prevention of HIV/AIDS and about their own SAFETY.
- **Social.** Students need to assess social interactions with peers/ others about SAFE/UNSAFE sexual and nonsexual activities. Students need to develop communication skills promoting negotiation for sexual safety.
  
- **Sexual.** Students need to understand basic mechanisms of sexual activity in order to keep their bodies safe from HIV/AIDS and other STDs. Students need to develop skill building techniques (abstinence, outer-course, safer sex practices, delaying, boundary setting/ saying no, negotiating, etc.) in order to assess sexual activities for risk and safety.
- **Spiritual/Ethical.** Students need to affirm values, building self-esteem and self-efficacy, which will keep them SAFE in all relationships.

A teacher once stated. “ I found out I could get over embarrassment, but we learned one doesn’t *get over* infection/re-infection. I was shocked at first by the directness of this information, but I kept focused on the goal of prevention, then I could answer all the questions with SAFETY in mind. It’s difficult for me to teach this part, but I’m practicing with a co-teacher who is more comfortable in answering student’s questions.”

## **Teaching Medical Names of Public/Private parts.**

Knowing medical terms is important because data indicates that approximately 80% of HIV transmission involves sexual activities; therefore, private parts, much more than public parts, are likely to be involved in HIV transmission.

In order to learn about transmission and prevention of HIV/AIDS and STDs, information and visuals of public/private parts is critical in classroom teaching. Since there are many languages represented in the classroom and even more family/cultural names of private parts, medical names must be used to communicate in a professional and mature manner. Students also need to know medical names as they read about their body, listen to teacher presentations, and discuss information with doctors or nurses. However, please do not make fun of family names for body parts, or of cultural, ethnic, or slang terms for body parts. A suggestion would be to affirm that many families use different names AND here, in the classroom, only medical names should be used in presentations and discussions.

Although medical terms are preferred, students may ASK questions using a variety of words, but teachers must use medical terms to ANSWER the question. Discriminatory (ethnic, gender, orientation, ability/disability, etc.), derogatory, or putdown names are never allowed in the classroom.

Transparencies found in Appendix I (Titled “Pre-Puberty Female/Male & Post-Puberty Female/Male”) show the male and female body, naming external public and private parts, including the female vulva with the clitoris on the outside and the vagina on the inside, the male penis and scrotum on the outside with testicles on the inside, and the anus on both. Transparencies found in Appendix I (Titled “ Female Reproductive System & Male Reproductive System”) show the internal reproductive systems of both the female and the male.

### **Note to teacher!**

Semen/ pre-ejaculatory fluid from the penis, and vaginal fluids/ menstrual blood from the vagina are NOT dirty or nasty words. They are normal and healthy body fluids having an important role in sexuality and reproduction. They can carry HIV in larger viral load than most other body fluids. Cervical fluids carry

large amounts of HIV virus which is why pregnant mothers could “vertically transmit” HIV to their unborn baby. It is very important that students understand how semen is produced, how it is made, and at what age(s); and how vaginal fluids could carry blood right before, during and right after menstruation.

Teacher quote:” When I first used these pictures, some students laughed and joked, others were quiet or upset; some turned their heads and covered their eyes. Once we began to answer questions about HIV and sexual transmission, the pictures helped students to understand where these parts were and how transmission could occur. They had many questions, which were important for their understanding of prevention. The students had many myths and they were able to learn the truth about sex and transmission and safety. Although I know this information, it is still hard for me to teach it due to my own discomfort and beliefs. I get someone from the HIV/AIDS Education Program to come and help teach part of the curriculum or one of the other teachers who went through the resource training and is more comfortable to help me out.”

## **Teaching Transmission related to sexuality.**

### **Concept:**

Transmission of HIV occurs when an infected body fluid from one person is directly introduced into the body (blood stream and/or across mucous membranes) of a *non-infected* individual.

There are four common methods of HIV transmission (See Transparency in Appendix I titled “HIV Transmission”):

- Blood to blood contact
- Sex Fluids transmitted inside another persons body (semen/pre-cum/vaginal fluids/menstrual fluids)
- Mother to Baby during pregnancy
- Mother to Baby during breast feeding

It is important to understand why sex **INSIDE** the body (intercourse) can transmit HIV while activities **OUTSIDE** the body (dancing, hugging, holding hands) cannot transmit it. HIV multiplies **INSIDE** the body when it attaches to T-cells in the body’s immune system. There are no T-cells on the outside of the body so any contact with clothes or skin is safe when there are no open sores on the skin. (See page 21on Pathophysiology).

Most people transmit HIV during unprotected sex inside the body. Sex inside the body is called **INTERCOURSE**. There are three types of intercourse:

- Oral sex (mouth is placed on the penis (felatio)/ vagina (cunilingus)/ anus (analingus))
- Vaginal Sex (penis is placed in the vagina)
- Anal Sex (penis is placed in the anus)

During unprotected oral intercourse (oral sex), vaginal intercourse, or anal intercourse, which involves an HIV positive individual, HIV can be transmitted when enough virus

(viral load), in enough strength (viral strength), gets into the body and into the cells of the immune system where it begins to multiply. The RECEIVER of infected blood, semen, or vaginal fluids is the person at risk for HIV infection.

- If neither person is HIV positive there is no risk of HIV transmission.
- The higher the concentration of HIV in the fluid being received in the body (semen, vaginal secretions, blood, etc.) the higher the risk of transmission.
- The greater the amount of the infected fluid introduced into the body, the greater the risk of transmission. (This is called the “dose response curve”)
- If both individuals are HIV positive there may still be added risk because the receiver of fluids may be exposed to:
  - A new strain of HIV
  - A strain of HIV that is already resistant to selected medications

Please See the three transparencies in Appendix I titled “Risk of HIV Transmission A, B and C”, which depicts a puzzle of transmission. These visuals can help demonstrate how in the same sexual act, one person gets infected and another does not. It also clearly shows how a person could get infected with just ONE unprotected sexual act.

In review: understanding the following about your body will help keep you SAFE from HIV infection/re-infection:

- You have only ONE body.
- Your body is controlled by your BRAIN—Keep your brain SAFE
- How can you keep your brain safe—NO drugs/alcohol; wear helmets; careful of head injuries, etc.
- You have TWO types of body parts—public & private parts
- ALL body parts have medical names & functions
- The medical names of the private parts or genitals are:
  - Males—Penis, Scrotum, Anus
  - Females—Vagina, Vulva, Clitoris, Anus
- There are many types of sexual activities that do not carry a risk of HIV transmission (See levels of safety below).

## ***Levels of Safety***

It is important for students to understand that HIV can be transmitted through any unprotected sexual activity with an HIV infected individual. The age, sexual orientation, ethnic group, ability/disability of the participants does NOT affect the possibility of HIV transmission during sexual activity.

### ***FIRST SAFEST—Abstinence***

100% SAFE—Abstinence (refraining from all risky behaviors) or Touching Your Own Body.

Because there is no exchange of body fluids, abstinence from all risky behaviors for HIV carries no risk of infection. You cannot give yourself HIV or re-infect yourself by touching your own private parts. Touching private parts is called masturbation. Some people masturbate and some don't. It depends on their feelings or values. Masturbation

is 100% SAFE. Nothing physically changes on/in your body if public or private parts are touched.

## ***SECOND SAFEST—Outercourse.***

Outercourse is usually safe because it involves sexual activities outside the body and therefore fluids do not get inside the body. The skin is an excellent barrier that prevents fluids from getting into the body.

Outercourse can include the following:

- Mutual masturbation (when both partners stimulate each other's sexual body parts)
- Manual sex (using hands to stimulate another person's sexual body parts)
- Body Rubbing
- Sexual dancing

If semen or blood gets on the skin, it is a good infection control procedure to wash the area with soap and water. This will prevent an infected fluid from getting into the body.

NOTE: Oral sex (mouth on/in private parts) is NOT outer-course as semen or blood can get IN the mouth.

## ***THIRD SAFEST—Protected Intercourse-***

Protected intercourse is when an effective barrier is used to prevent a potentially infectious fluid from entering the body.

- Un-lubricated Latex or polyurethane Condoms for Oral Sex on a Penis.
- Un-lubricated Latex Squares (Dental Barriers) for Oral Sex on a Vulva/Anus
- Lubricated Latex or polyurethane Condoms for Vaginal/Anal Intercourse
- Polyurethane Condoms (Trojan Poly, Avanti, and Reality Woman's Condom) should be used if allergic to Latex. Water-based Lubricant is placed on the outside of a male condom and inside the tip of the male condom so it won't break and mucosa inside body won't tear. The female condom (polyurethane) comes with a lubricant that is applied by the user.

**ALL OTHER UNPROTECTED SEXUAL ACTIVITIES, THAT INVOLVE THE EXCHANGE OF BODY FLUIDS INSIDE THE BODY, ARE NOT CONSIDERED "SAFER SEX PRACTICES."**

## ***MYTHS & MISCONCEPTIONS-Regarding Sexuality***

There are many myths (and misinformation) regarding the sexual transmission of HIV. The following are some common misconceptions about how HIV can be sexually transmitted.

You cannot get HIV if you:

- Stand up during sex
- Have unprotected oral sex
- Have sex for the first time
- Have sex with a virgin (many babies who were born with HIV are now older than 14 - some are virgins)
- Are not gay/bisexual (All people are at risk if they participate in risky behaviors – Risk is associated with what you do - not who you are)
- Do not have sex during a woman's period
- If you douche/clean out/pee after sex
- Do a little bit of sex and pull out- (pre-ejaculatory fluids could be infectious and can also impregnate a female)
- Already have HIV or AIDS (infected individuals could be re-infected by different viral strains)
- Do not have an orgasm

## Teacher Quote:

“It was amazing the number of myths and downright wrong facts that teens have...even when there is so much information. It was important to spend time answering all their questions. Now every time I teach the AIDS curriculum, we put MYTHS-WRONG INFO on the board, so if someone missed class or was sleeping that day, they still would see it or read it during the week. I'm shocked at how much teens talk about sex - I still think it is wrong, but I do not want them to get HIV.”

According to Miami-Dade County Public Schools, a demonstration of the correct way to put on a condom can be shown at 5<sup>th</sup> grade level or higher, by using two fingers for placement of the condom. Condoms are not to be distributed.

Note to teacher:

A video demonstrating condom use is available from the AV Library. Please see, in Appendix I, the transparencies titled “Choosing Condoms” and “Using Condoms” - that demonstrates steps for proper condom use.

## **BACK-UP PREVENTION:**

When driving a car, if the primary brake system does not work- then an emergency brake system is available for safety. Similarly, there should be a back up system when using condoms/barrier methods. Spermicides and microbicides are appropriate back up systems.

- Spermicides kill sperm and are primarily used to prevent pregnancy. A component of some Spermicides, NON-OXYNOL 9, was believed to reduce the

infectivity of HIV during sexual intercourse. Non-oxynol 9 can be found in some lubricants and lubricated condoms. (Original studies showed that Non-Oxynol 9 decreased the transmission rate of HIV through sexual activity. However, some recent studies show that Non-Oxynol 9 may increase the transmission rate of HIV through sexual activity in some women who have allergic reactions to it in the vaginal mucosa).

- MICROBICIDES kill micro-organisms. They may be an effective back up system to be used with condoms/barriers in the prevention of HIV transmission through sexual intercourse. MICROBICIDES are being produced in various forms i.e. vaginal/ anal suppositories/film that melts in body from body heat/ in the contraceptive sponge/ on condoms/ and in gel/foam options. **They are not currently available, as they are still in the experimental stage. FDA approval would also be needed before distribution. They could be a promising form of HIV prevention in the future.**

BACK UP PREVENTION SYSTEMS SHOULD NOT BE USED AS THE PRIMARY (ONLY) METHOD TO PREVENT HIV TRANSMISSION

## ***In Summary***

When making a decision about sexual activities always remember:

- USE YOUR HEAD—Get Information—Ask Questions
- USE YOUR HEART—Know your Values and Boundaries; Don't Let Anyone Take Your Power Away
- ALWAYS BE SAFE—physically, emotionally, sexually!

## **LEGAL ISSUES**

### **MDCPS-Policy & Procedures-Worksite AIDS Packet**

To assist Miami-Dade County Public School Teachers in handling HIV/AIDS issues, the Division of Life Skills, HIV/AIDS Education Program has created a worksite AIDS packet. The entire packet may be found on the web at [aidseducation.dadeschools.net](http://aidseducation.dadeschools.net), then click on HIV Home Page, then click on Worksite AIDS Packet. That packet includes the following information and resources:

- Comprehensive HIV/AIDS Information & Education programs.
- Required letter to parents regarding Implementation of the District AIDS Curriculum.
- Video support for "AIDS: Get the Facts!"
- HIV/AIDS Presentation in Schools.
- Revised District Procedures Student HIV/AIDS Cases.
- HIV/AIDS Testing for Adolescents.
- Guidelines for Handling Blood & Other Body Fluids in Schools.
- New Items Available through S&MD.
- CDC Facts about the Human Immunodeficiency Virus and its Transmission.
- CDC National Prevention Information Network List of Documents. Available via facsimile.

The following are AIDS related legal issues that may impact Public School Teachers in their daily routines:

- **Informed Consent of Minors:**

Minors in Florida (un-emancipated children under 18) are adults for the purposes of consenting to an HIV test. The general rule that parental consent is required prior to medical diagnosis or treatment of a minor does not apply when sexually transmitted diseases such as HIV infection are involved. Indeed, Florida specifically forbids telling parents the fact of the minor's HIV test or its results either directly or indirectly (such as by billing a parent without the child's permission). Infants and young children are treated as unable to make an informed decision and consent of their parents or legal guardian is required; however, for older children (such as teenagers), the provider must make an individual judgment whether the child has the cognitive and emotional capacity to understand the risks and benefits of the test or treatment to which child is being asked to consent. Please see the following reference for more information: "[Florida's Omnibus AIDS Act: A Brief Legal Guide for Health Care Professionals](#)", prepared by Jack P. Hartog, Esquire, Assistant Dade County Attorney, Copyright 08/1999.

- **ADA:**

The Americans with Disabilities Act (ADA) protects people with HIV/AIDS infection from discrimination in all forms of social access, including education, employment, housing, transportation, and more. Furthermore, the Individuals with Disabilities Education Act (IDEA) require that schools provide an Individual Education Plan (IEP) to students with HIV/AIDS and other disabilities.

- **Student Confidentiality:**

According to the Florida Omnibus Act of 1988, which was updated in 1998, HIV test results are "Superconfidential". Superconfidential results by state statutes, prohibits any further disclosure to individuals without a need-to-know as defined by the law. Those employees and agents who either provide care to the test subject (such as doctors, nurses, social workers); conduct administrative tasks supportive of the patient's care (such as secretaries, billing clerks, administrators); or handle body fluids or tissues of a test subject; have a "need-to-know". *In the school setting teachers do not have a need-to-know, under the law.* Even though teachers may feel a duty to warn a non-infected third party of the danger posed by the behavior of an infected individual, the law prevents such warning.

Note To Teacher: If a teacher knows or believes that a student is HIV positive and the teacher knows or believes that the student is engaging in risky sexual behavior with another student(s), the teacher may feel an obligation or responsibility to notify either the assumed non-infected student (partner) or school authorities. However, the Florida Omnibus Act of 1998 treats such third partner notification as a misdemeanor, or a felony. The proper and legal way to address this situation is as follows:

- 1) The teacher should discuss the situation (without divulging names) with their principal in order to obtain permission to discuss the situation with the MDCPS legal department.
- 2) The teacher should then follow the advice provided by the legal department.
- 3) The teacher should discuss with the student the risk of disease transmission through sexual activity and the laws relating to disclosure. See The Florida Statutes below.
- 4) The teacher could discuss their concerns regarding specific sexual activity with the student(s), without mentioning any student's names or their real or possible HIV status.

## **Additional Legal Resources:**

The following Florida Statutes may be consulted for further information relating to legal issues and HIV/AIDS:

### **F.S. 384.24**

- When an individual has knowledge of his/her HIV infection and has been informed that HIV is communicable through sexual intercourse, and he/she has sexual intercourse without informing the other person and getting consent:
- Penalties include:
- STD, excluding HIV, First Degree Misdemeanor
- HIV, Third Degree Felony
- Multiple Violations (HIV) First Degree Felony

### **F.S Section 384.29 & 381.004(3).**

- Covers medical file and contact investigation.
- Cannot reveal the existence, or nonexistence, of HIV and STD information in any public record.

### **Section 384.34, F.S. - Penalties**

- Covers breaches of confidentiality (s.384.29, F.S.)
- Penalties include:
- First Degree Misdemeanor
- Malicious or for personal gain - Third degree felony

### **F.S. Prostitution Section 796.08, F.S.**

A person commits criminal transmission of HIV, IF he or she:

- Commits or offers to commit prostitution, AND
- Has been informed of HIV infection, AND
- Has been informed that is communicable through sexual intercourse
- Affirmative defense that victim knew offender was infected and consented to the action.
- Penalties include:
- Third degree felony

### **Potentially applicable federal statutes may be found on the following web-sites:**

[www.onlinesunshine.org](http://www.onlinesunshine.org)

[www.leg.state.fl.us/statutes](http://www.leg.state.fl.us/statutes)

# ECONOMICAL ISSUES

HIV/AIDS infection not only involves medical, psychosocial, legal and ethical issues, but also involves significant economic consequences for individuals, families, communities, and nations. The following is an over-view of these economic considerations for society, families with infected members, and HIV positive individuals:

## **International:**

- Some nations (especially in sub-Saharan Africa, Asia and South America etc.) have a significant percentage of their population infected with HIV/AIDS.
- In many of these countries the average yearly income maybe as low as \$500, and the gross-national product of the nation could be less than the projected cost for treatment of HIV/AIDS in the country.
- Therefore, it appeared to be impossible to adequately address the economic, medical and psychosocial issues facing these societies.
- Recently, governments, drug-manufacturers, humanitarian organizations, world health organizations, and private individuals, have started to discuss mechanisms to address this situation.

## **U.S Society:**

In the United States, the following economic issues must be addressed:

- Loss of productivity from infected employees
- Massive cost of treatment regiments
- Marked increase in costs for treatment of infected indigent populations
- Availability of health care facilities
- Devastation of some professions with high percentages of HIV infected people (such as the arts)
- Higher insurance costs for all
- Costs for medical research of viral illnesses and human immunity
- Costs associated with the development of treatment-resistant infections. (i.e. T.B and certain cancers)

## **Families:**

In each family unit, the following economic issues must be addressed:

- Devastation of family structure because of the loss of an HIV infected individual
- Loss and shift in household earnings
- Dislocated children- (orphans and foster care)
- Treatment costs
- Changes in family priorities and goals

## **HIV infected Individuals:**

- Cost of medications can range from \$12k to \$30k per year
- Cost of treatment (medical/dental/psychological/psychiatric/home-health care etc.) can be overwhelming; reaching hundreds of thousands of dollars/ year.
- Inability to hold a job
- Loss of insurance
- The economic impact of HIV infection may lead to enormous psychological consequences (see psycho-social section of this curriculum)

# ETHICAL ISSUES

It is important for both teachers and students to be aware of the many ethical issues raised by the HIV/AIDS pandemic. These issues are represented by the alternative solutions to the following questions:

What is more important? The rights of an individual versus the rights of society?

Examples include-

- Should there be mandatory versus voluntary reporting of HIV positive individuals?
- Does an individual have a right to know, and a right not to know, their test result?
- Should there be mandatory, versus voluntary, versus no, reporting of individuals with CDC defined AIDS to the Public Health Department for case contact follow up investigation?
- Should there be anonymous, versus identifiable (using names), testing?
- Should there be mandatory versus voluntary reporting of HIV status in certain groups (prisoners, sex-workers, sex offenders, health care providers, high risk patients, all patients, food handlers, etc.)?
- Should there be mandatory testing of all pregnant females?
- Should parents have the right to know their child's HIV status? Is the answer different before and after the age of majority?
- Should there be a restriction of known HIV infected individuals performing their job duties (surgeons, dentists, food handlers, teachers, etc.)?
- Should there be universal versus selected access to medications and treatments in both the United States and developing countries?
- Who should have access to experimental drugs and therapies and how should those selected be chosen?
- Who should pay for the high cost of HIV drug therapies and treatments?
- Should doctors have a duty to warn the non-infected partners of HIV infected individuals?
- Should HIV infection be excludable from insurance coverage if it is a pre-existing condition?
- Should needle-exchange programs be implemented?
- Even if it means raising taxes, should drug-treatment programs be expanded?
- Should condom distribution and /or education be allowed in public schools?
- Should it be a crime to knowingly withhold your HIV status while participating in behaviors that expose others to HIV transmission?
- Should it be a crime to breach confidentiality when you know that someone else is knowingly exposing others to HIV transmission?
- Should individuals with HIV/AIDS be identified (labeled) so that others are aware of their HIV status?
- Should immigration laws be applied equally regardless of HIV status?
- Should laws be enacted to regulate businesses where risky behaviors are known to take place (bath houses, strip-clubs, massage parlors, etc.)

- Should counseling be mandatory after HIV testing?
- Should a parent have the right to opt their child out of HIV/AIDS education in public schools?

Teacher Strategy: The above is only a partial list of ethical questions that are raised by the HIV/AIDS pandemic. Have students develop their own list of ethical issues and supplement them with the above questions. Many types of lessons (debates, research projects, discussions etc.) can then be developed to address these issues in the classroom setting.

## Psychosocial aspects- Living with HIV/AIDS

Living with a life-long, life threatening, illness presents many psychological/ social issues of which teachers, counselors, and administrators, need to be aware. These issues may, or may not, be evident in day-to-day classroom activities. However, sensitivity to the following issues can help all students, including those infected with, and those affected by, HIV/AIDS.

### **Isolation-**

Many HIV infected students feel isolated living with HIV unless they actually know peers who also live with the virus. Even though most students living with HIV have medical support, many do not have adequate emotional peer support.

Teacher Strategy: Normalize living with HIV/AIDS by stating that many students and/ or their families live with diseases including HIV/AIDS. Encourage any students living with the disease to talk to their counselor or religious leader/ trusted friend to get support. If there is no support person(s), hot-line numbers like the Switchboard of Miami (305-358-HELP), 1-800-FLA-AIDS, 1-800-FLA-SIDA or the district office, (305) 995-7118, can provide referrals for professional, emotional support and information.

### **Denial-**

Some families do not tell the student that the parent, sibling, or the student HIM/HERSELF has HIV. Some students suspect that a family member or they themselves have “something different” and are confused. This “conspiracy of silence” continues the family or community script of avoidance, secrecy, lies and denial.

Another form of denial occurs when students believe that HIV is no “big deal” as there are many people living with HIV who are healthy and living “normal” lives. Some say “you just take your meds- and its no big deal”.

Teacher strategy: When presenting the HIV curriculum include a discussion about denial and the reasons for it. Encourage students to learn and talk about HIV with peers, counselors and family members. Send information home to ALL families so that parents know their children are learning about HIV with a prevention/esteem building ( not a judgmental /discriminating) focus. Contact the school PTA President to offer a workshop on HIV/AIDS.

For 5<sup>th</sup> grade and higher, contact the district office to identify an individual living with HIV ( who has been officially approved by the HIV/AIDS Education Program) to address the “no

**Fear-**

Although people with HIV/AIDS are living longer, it can be very frightening to live with a virus that is invisible and is often related to impending illness, death and dying. Many students infected with, or affected by, HIV/AIDS fear a negative response from teachers, school, family and community. Some students may express an irrational fear for a family member who has an occupational exposure to HIV (physicians, nurses, dental hygienists, paramedics, etc). Fear can affect daily living as well as school performance and social interaction.

Teacher strategy: Do not focus on death and dying. Emphasize the importance of taking care of our bodies, living with, and without, diseases. Validate the many feelings, including fear that may occur in individuals living with HIV/AIDS.

Fear can be diminished by learning about HIV/AIDS, re-enforcing the ways it is not transmitted, and by identifying positive ways that people cope with fear.

**Medically related confusion-**

HIV/AIDS is a complex medical disease. It is very normal for non-medical people to be confused and overwhelmed by the medical aspects of HIV/AIDS. There is an immense amount of accurate, and inaccurate, information and opinions on how to approach prevention and treatment. Many people may be very confused by the medical information presented.

Teacher strategy: Educate about the importance of medical check-ups as well as ALL students taking care of themselves; balanced diet, sleep, exercise, reduce stress, no drugs/alcohol, safer sex, and taking medications prescribed by their doctor.

If there is a question about the validity of information concerning HIV/AIDS, please contact your school's HIV/AIDS resource teacher, or call the district office at (305) 995-7118.

When a student is confused and has questions about medical issues, refer them to their medical professional for accurate information and recommendations.

**Anger**  
Sc

gets the disease or dies. It is difficult to express anger against an invisible virus or an impaired immune system. Therefore, the anger is often expressed outward towards family, friends, classmates, and teacher; OR turned inward against self. This anger can be expressed as depression, drug/alcohol use, eating disorders, and other self-destructive behaviors. Anger may be masking feelings of grief, frustration, fright,

hurt or vulnerability. Anger is a normal feeling and is important to express in healthy (non-abusive) ways.

Teacher Strategy--Discuss various feelings (positive and negative) that people experience when living with diseases including HIV/AIDS. Identify healthy ways to express anger (safe-non-threatening yelling, safe physical venting such as boxing, and physical exertion such as running). Anger should be affirmed and managed, not denied.

When the anger or the underlying feelings becomes severe, or begin to affect school performance, the student should be referred for professional help.

### **Paranoia**

Some people living with HIV/AIDS are suspicious that interactions with others are focused only on their HIV status. Examples include, "People must know that I have HIV", or "maybe they can tell that I have HIV", or "they must be talking about me because I have HIV", or "they must not like my family because my mom has HIV", or "God is punishing me/ my family because I have HIV", etc.

Another example of paranoia may be that all physical changes (body changes related to puberty, flu symptoms or other infections) are thought to be related to HIV, whether they are or not.

Teacher Strategy-Reinforce that one cannot tell if someone is infected with HIV just by looking at them. Reinforce that not every physical change in an HIV infected person is related to HIV infection. However, caution that any person living with HIV should report physical changes to their health care providers.

When paranoia becomes severe, or begins to affect school performance, the student should be referred for professional help.

### **Guilt-**

If a student/family member has (or thinks s/he has) transmitted HIV to another person (unprotected sex/mom to baby), a feeling of guilt can affect school, work, and family interactions. Often a child, teen, or adult, who has HIV, feels guilty about the amount of time, energy, cost, or response directed towards his/her disease and treatment. Guilt can be manifested by overindulgence of (or by) others, or conversely self-punishment.

Teacher Strategy- Admitting and accepting responsibility for consequences is part of life learning and can be a healthy response to guilt. Self-punishment and overindulgence are not healthy responses to guilt. Therefore, help students understand that honest self-knowledge, and accepting responsibility for actions, is crucial to living in a world with HIV.

Review the modes of transmission so that students can make healthy choices in future personal interactions.

## **Bereavement** –

Death from HIV/AIDS occurs. Students may be grieving the loss of family members or friends. **In the event of a child losing their parent (s) they will wonder as to who will be taking care of them.** Loss can create a sense of hopelessness and numbness. Bereavement is a normal response to death.

Teacher Strategy- Through the HIV/AIDS Education Program (Speakers' Bureau Request Form), invite members of "The Quilt Project" to bring in several quilt pieces that remember children, teens, and adults who have died. Their lives and memories often help students to honor loved ones with special memories who have lived with any life threatening illness and died from complications. Encourage students to compile their own journals, memory books, or quilt pieces for their loved ones, friends, or pets.

When bereavement becomes severe, or begins to affect school performance, the student should be referred for professional help.

## **Financial concerns-**

Economic concerns are a reality of many families with, and without, a disease. The financial burdens of HIV infection can be overwhelming. Some people with HIV/AIDS are unable to receive appropriate treatments (medications, etc.) due to financial restrictions, creating embarrassment and shame due to both disease and monetary status. Frequently, people from other cultures are not always familiar with, or eligible for, the network of medical/mental/health services. (Also see the Economic section of this curriculum.)

**D** Teacher Strategy: Discuss the availability of various disease support networks and hotline numbers (see resource section of this curriculum). Community based HIV/AIDS projects can facilitate medical/mental health intervention despite socioeconomic status.

discrimination regarding HIV.

Teacher Strategy-. Inform the students that Miami-Dade County School Policy protects all students and school employees under the Americans with Disabilities Act and, Florida Statutes that concern HIV confidentiality.

If you, as the teacher, have questions concerning any issue relating to HIV/AIDS in the classroom setting, you are encouraged to discuss it with others, but must never divulge names. **CONFIDENTIALITY MUST ALWAYS BE MAINTAINED.** It is not necessary, or recommended, to know the HIV status of your students. All students should be treated the same and "universal precautions" should always be followed. Refer to the Miami Dade County Worksite AIDS Packet for the following policies:

- Disclosure policy
- Universal precautions
- Policy for handling and cleaning up of blood and bodily fluids

Discuss how fear of HIV could create discriminating behaviors. Discuss how differences

### **Disclosure-**

Who to tell? Who to trust? How much to tell? When to tell? How to tell? Where to tell? And Why to tell? are all components of disclosure. Many parents have not told their child that they (the parents or the child) are HIV infected. It may, or may not, be in the best interest of the child to know.

Teacher Strategy-Discuss the difference between appropriate and inappropriate secrets (It is appropriate to disclose information when someone is being touched inappropriately, when someone has been raped, or when someone is thinking of suicide. It is inappropriate, and illegal, to disclose HIV status to others.)

The best decisions about disclosure may be different for different people, and under different circumstances. Therefore, professional assistance and support is recommended.

### **Quality of life –**

When a person finds out that s/he is HIV positive, their life changes. However, the quality of life does not HAVE to change. Many people have found that they can re-evaluate their priorities while living with HIV (as often happens with other life threatening diseases). Current medical management of HIV has vastly improved the quality of life for people with HIV/AIDS. Each person living with HIV/AIDS hopefully will be able to obtain medical, emotional, and spiritual support that enable them to make choices that could enhance their quality of life.

Teacher Strategy: Ask students to:

- Imagine what it would be like to live with HIV.
- Identify areas of their life that would be most important if they were living with HIV.
- List what they think they would need to make their life better if they were HIV positive.

Ask the same questions of guests in the classroom living with HIV/AIDS or learn answers from the approved resource videos that interview persons with HIV/AIDS.

## **Self-esteem –**

Any person living with a disease may struggle with their self-esteem. The following can affect the positive or negative self-esteem of a person living with HIV/AIDS:

- The way WORDS are used to describe the disease or person living with HIV/AIDS (factual versus judgmental)
- The accuracy and availability of INFORMATION about HIV
- The manner in which DIALOGUE occurs about the disease in the person's family and community
- The presence or absence of ROLE MODELS of other people who are living with HIV/AIDS
- The availability of TREATMENT, RESOURCES, and SUPPORT
- Whether the HIV positive individual feels ACCEPTED and VALUED as a person by others

Teacher Strategy: Review the above elements of self-esteem. Have students identify how their self-esteem (self pride) has been established and nourished (family life/acceptance, community groups and rituals, pride months, books and materials about themselves, achievements, etc.). Invite an approved HIV positive speaker (Speakers' Bureau Request Form) to discuss this issue with the class.

## **Complexity of treatment protocol-**

Even though there are medical standards of care, individuals must PERSONALLY decide to comply and maintain medical regimens. Each day how a person keeps taking medicines and what a person believes about the medications is an individual philosophy of medical treatment. Some people believe in Western medical interventions; some people believe in holistic medications; some believe in a combination of both; and some believe in taking NO medications at all. Most people living with HIV want accurate information about medications and want a choice and some control over how they are treated.

TEACHER STRATEGY--Invite an approved speaker with HIV (Speakers' Bureau Request Form) into the classroom to identify the medications they take, how much they cost, and what impact daily adherence to meds and regular medical visits play in their lives. It is important for students to realize that living with HIV is not "simple".

Invite an approved medical professional (Speakers' Bureau request Form) into the classroom to discuss the pros and cons of the various treatment approaches to HIV.

Have students discuss the following strategies that can help them make healthy decisions:

- Getting accurate and up to date information

### **Coping behaviors—**

There are many positive and negative ways a person can cope with HIV/AIDS. The following list is an example of coping behaviors you may see in students or families:

- Getting angry
- Crying
- Withdrawing
- Becoming depressed
- Determination to fight the virus
- Obtaining accurate information
- Joining support groups
- Talking about the virus to trusted people
- Planning daily time for rest, proper eating, and exercise
- Drinking
- Taking non-prescribed drugs-**over the counter, street drugs.**
- Thinking/attempting suicide
- Denial & Hopelessness
- Overachievement
- Becoming leaders in the field of HIV

TEACHER STRATEGY—Have students discuss the positive and negative aspects of each coping behavior. Have students list the variety of coping mechanisms they have heard from speakers who live with HIV (in person or on approved videos). Have students add coping behaviors THEY might utilize if they, family members, or friends were to live with HIV. Have students identify support persons/agencies available for help with coping behaviors.

### **Spirituality-**

Spirituality can include religious feelings/rituals or individual way of living one's life in relationship to self and others. Spirituality includes individual values and ethics. Living with HIV/AIDS, or other diseases, can impact a person's spirituality in many ways. Living with HIV/AIDS can motivate a person to examine their personal beliefs that can increase or decrease their spiritual commitment and behaviors.

TEACHER STRATEGY: Have students identify individual/family spiritual beliefs and rituals (religious events, prayer, music, meditation, yoga, exercise, nature events, etc.). Stress the importance of an individual's right to their own beliefs and values even if they are different from your own.

Invite people living with HIV/family members to share meaning of spirituality in their lives.

### **Sexuality-**

Sexuality and sexual feelings are a normal process of life including people living with diseases like HIV/AIDS. A student in your classroom with HIV maybe struggling with their sexuality, their sexual orientation, and their sexual decision making. People with HIV, like all people, need to make healthy and responsible sexual decisions protecting themselves and others from HIV infection and re-infection.

TEACHER STRATEGY: Review section in this curriculum on "teaching sexuality" that includes information on Safer Sex Practices (from Abstinence/Touching Own Body to Outercourse to Protected Intercourse). Stress that students can learn about driving before they are ready to drive; students can learn about college/military/jobs before they graduate. Highlight rules for decision making about your body-

- **USE YOUR HEAD** (get information);
- **USE YOUR HEART** (Personal Values/Boundaries)

### **Ambivalence about future-**

Often in a life-threatening illness, plans are interrupted or delayed so that any future planning can seem impossible. Frustration, anger, grief, fear, and indifference can be experienced in classroom discussions about the future (field trips, graduation, prom, etc.). A student may not be so sure about even simple questions regarding future goals if s/he is not sure of their life longevity or health.

Teacher Strategy-Discuss short and long term goals in a manner that help students keep focused on the present (this moment/this day/this month). The intent is that all the moments' of the present will lead to meeting long term goals. Affirm that many life "*Plan B's* ", as well as flexibility with safety, are skills that all people learn, living with and without diseases.

**In summary**, there are many psychosocial issues surrounding HIV/AIDS.

Students infected with, or affected by, HIV/AIDS face many CHALLENGES IN LIFE. Each day students, and/or their family members, living with HIV/AIDS are faced with CHOICES ABOUT DAILY LIVING even though they may not have chosen to become infected with the virus.

These CHALLENGES AND CHOICES include physical, medical, emotional, social, cultural, sexual and spiritual aspects of the student's life as they seek their goals and dreams.

In providing accurate information, valuing each student, and being sensitive to the multitude of psychosocial issues that students and their families face, a teacher can have a profound effect on how students face these challenges by making healthier choices in their lives.

## **BRIEF HISTORY-**

The following is a brief history of HIV pandemic in the world:

It is adopted from "The History of AIDS from 1981-2000" as presented on the AVERT web-site at [www.avert.org/his](http://www.avert.org/his). It is reproduced here by permission.

- **1981:** The Centers for Disease Control and Prevention (CDC ) noticed an unusually high number of requests for the drug Pentamidine used in the treatment of Pneumocystis Carinii Pneumonia (PCP).
- **1982:** The syndrome (PCP and Kaposi's Sarcoma) occurring in gay men in NY and LA was called GRID (Gay-Related Immune Deficiency) by some scientists and it started to be clearer that it was caused by an infectious agent, possibly a virus that could be spread through blood. The syndrome was later renamed because it was clear that it did not just affect gay men. It was given the name AIDS (Acquired Immune Deficiency Syndrome). The first blood transfusion recipient was identified with AIDS in the USA, as were the first babies.

- **1983:** Doctors at the Institute Pasteur in France believed that they had isolated a new virus, which was the cause of AIDS. The virus was called Lymphadenopathy-Associated Virus or LAV. Considerable public education was required before people were reassured that transmission only occurred in certain very specific ways, and that casual transmission did not occur. The first US conference on AIDS was held in Denver. AIDS had been reported in 33 countries. 3000 Americans had now had AIDS, of whom 1283 had died.
- **1984:** The US Government announced that Dr. Robert Gallo, at the national Cancer Institute (NCI) had isolated the retrovirus which caused AIDS and that it has been named HTLV III. Blood testing was started to detect antibodies to the virus. The US Health and Human Services Secretary, Margaret Heckler, confidently predicted a brief epidemic.
- **1985:** The FDA (in the USA) approved Dr. Gallo's AIDS diagnostic kit for detection of antibodies against HIV. AIDS had been reported in 51 countries. In March routine screening of the blood supply was instituted. This led to a dramatic decrease in the amount of people infected with HIV through blood transfusions.
- **1986:** It had become clear that the viruses LAV and HTLV-III were actually the same. An international committee ruled that both names be dropped and replaced by a new name Human Immunodeficiency Virus (HIV). The World Health Organization (WHO) launched its global AIDS strategy.
- **1987:** The FDA approved AZT as the first antiretroviral drug to be used as a treatment for AIDS. The CDC also revised their definition of AIDS to place a greater emphasis on HIV infection status. In the US, legislation was passed which prohibited entry to the US of HIV infected immigrants, aliens and short-term visitors. President Reagan gave his first speech on AIDS.
- **1988:** The FDA implemented new regulations, which would shorten the time taken for the development of new treatments for AIDS. The US became the last major Western industrialized nation to launch a coordinated education campaign. The distribution took place of 107 million copies of "Understanding AIDS", a booklet by Surgeon General C. Everett Koop.
- **1989:** A number of new drugs became available for the treatment of opportunistic infection. The FDA authorized DDI for use by patients intolerant to AZT. The American trial of AZT in early treatment was stopped, because it was considered that the drug used early had been shown to significantly slow progression of the disease.
- **1990:** Just a few months after Ryan White's death (a hemophiliac infected with HIV through the use of infected blood products), the Ryan White CARE Act was passed by Congress. The particular aim of this act was to provide systems of care for people with AIDS who did not have adequate health insurance or other resources. The sixth international conference on AIDS was held in San Francisco amid worldwide protests about the US immigration policies regarding HIV positive people.
- **1991:** There was great public concern over the connection between the dental profession and HIV infection, as Kimberly Bergalis neared death, apparently as the result of becoming infected with HIV from her dentist David Acer. She testified before Congress as well as writing to the American Medical Association requesting the mandatory testing of health care workers. Earvin (Magic) Johnson announced that he had tested HIV positive and decided to become a spokesperson to promote

AIDS awareness and safer sex. The red ribbon was launched as an international symbol of AIDS awareness. The FDA, for use by patients intolerant to AZT, authorized the third antiretroviral drug, DDC. All three of these drugs were in a group known as nucleoside analogues.

- **1992:** The FDA approved the use of DDC in combination with AZT for adult patients with advanced HIV infection who were continuing to show signs of clinical or immunological deterioration. This was the first successful use of combination drug therapy for the treatment of AIDS.
- **1993:** Russian ballet star Rudolf Nureyev died of AIDS. Tennis player Arthur Ashe also died, less than a year after announcing that he had been infected with the virus.
- **1994:** A study, ACTG 076, showed that AZT reduced by two-thirds the risk of transmission of HIV from infected mothers to their babies. AIDS had become the leading cause of death amongst Americans between the ages of 25 and 44. 400,000 people in the US had developed AIDS since 1981, and over 250,000 people had died.
- **1995:** The Delta trial proved that combining AZT with DDI or DDC provided a major improvement in treatment compared with AZT on its own. The FDA also during the year approved the use of Saquinavir, the first of a new group of protease inhibitor antiretroviral drugs.
- **1996:** The Joint United Nations (LTN) Program on AIDS (UNAIDS) became operational, replacing the work previously undertaken by the WHO Global Program on AIDS. Another treatment development that had taken place was the viral load test that provided information about the risk of disease progression. The first AIDS hospice founded in San Francisco closed because fewer people were dying of AIDS in the US as a result of the new treatments.
  
- **1997:** The FDA granted approval for Delavirdine, the first in the latest group of drugs, the non- nucleoside reverse transcriptase inhibitors. It became apparent that the number of people affected by the side effects of the protease inhibitor drugs was greater than had previously been thought. The development of drug resistance also continued to be of considerable concern, with many of the new drug combinations being extremely complicated and quite difficult to take. Worldwide, 1 in 100 adults of the 15- 49 age group were thought to be infected with HIV; and only 1 in 10 infected people were aware of their infection. It was estimated that by the year 2000 the number of people living with HIV/AIDS would have grown to 40 million. It was estimated that 2.3 million people died of AIDS in 1997 - a 50% increase over 1996.
- **1998:** In some countries HIV + people were able to return to work as a result of the improvement in their health due to combination therapy drug treatment. However, some people began to be affected by quite severe side effects of the drugs. These side effects known as Lipodystrophy began to cast doubt on the long term safety of combination therapy. Jonathan Mann, the first director of the Global Program on AIDS, died in the crash of Swissair flight 111, along with his wife the AIDS researcher Mary-Lou Clements-Mann.  
The former French Prime Minister Laurent Fabius was brought to trial, but acquitted in May 1999, for allegedly delaying the screening of donated blood  
In June the company VAXGen started the first human trial of an AIDS vaccine using 5,000 volunteers from across the USA.

The FDA gave approval for various new drugs including Sustiva, another drug in the NNRTI group.

- **1999:** In the United States a doctor, who injected his former lover with HIV infected blood, was sentenced to 50 years in prison. According to the annual World Health Report, AIDS had become the fourth biggest killer world-wide, only twenty years after the epidemic began. By the end of 1999, UNAIDS estimated that 33 million people around the world were living with HIV/AIDS.
- **2000:** Many pharmaceutical companies, Abbott Laboratories, Bristol Myers-Squibb, etc. received approval of their antiretroviral agents to be used in combination therapy.
- **2001:** Gilead Sciences received approval for treatment of HIV-1 infection by using Viread, a nucleotide that can block the replication of HIV.
- **2002:** A new experimental vaccine, called AIDSVAX, offers the world some real hope. VaxGen, a bio-pharmaceutical company based in San Francisco, are conducting clinical trials on human subjects in North America, Puerto Rico and the Netherlands. A similar trial is taking place in Thailand on a different strain of HIV. Results are due in early 2003. Whatever results AIDSVAX yield, more work will be needed; to make better AIDS vaccines, to prepare for global access AND most importantly, to maintain safer sex behaviors and clean needle use. (Printed with permission by AVAC- [www.avac.org](http://www.avac.org))

## Partial list of resources in the community

**Disclaimer:**

*The information given is neither a recommendation for any particular service nor a referral for any specific agency or provider. Of the agencies and providers listed below; we do not suggest one over another. There may be other agencies and providers that are not on the list; this does not suggest that any agency or provider not on the list is in any way inferior to those included. Neither school personnel making the referral, nor Miami-Dade County Public Schools will be responsible for payment of such services nor will neither school personnel nor Miami-Dade County Public Schools assume the liability for outcome of the services provided.*

<b>Organization</b>	<b>Address</b>	<b>Phone #</b>	<b>Fax #</b>
<b>American Red Cross</b>	<b>335 SW 27<sup>th</sup> Av. Miami Fl 33135</b>	<b>(305) 644-1200</b>	<b>(305) 644-1038</b>
<b>Borinquen Health Center</b>	<b>3601 Federal Hwy Miami Fl 33137</b>	<b>(305) 576-6084</b>	<b>(305) 576-0008</b>
<b>Camillus House</b>	<b>336 NW 5<sup>th</sup> Street Miami Fl 33128</b>	<b>(305) 374-1065</b>	<b>(305) 372-1402</b>
<b>Care Resource</b>	<b>225 NE 34<sup>th</sup> Street Suite 201 Miami Fl 33137</b>	<b>(305) 573-5411</b>	<b>(305) 573-2279</b>
<b>Center For Haitian Studies</b>	<b>8260 NE 2<sup>nd</sup> Av. Miami Fl 33138</b>	<b>(305) 757-9555</b>	<b>(305) 756-8023</b>

<b>Center For Independent Living</b>	<b>501 NE 1<sup>st</sup> Avenue Suite 102 Miami Fl 33132</b>	<b>(305) 379-6650</b>	<b>(305) 379-6653</b>
<b>Center For Positive Connections</b>	<b>12570 NE 7th Av. Suite 104 N. Miami, FL 33161</b>	<b>(305) 891-2066</b>	<b>(305) 891-5053</b>
<b>Deaf Services Bureau</b>	<b>Gables One Tower 1320 S. Dixie Hwy. Suite 760 Miami Fl 33146</b>	<b>(305) 668-4407</b>	<b>(305) 668-4669</b>
<b>Community Health of South Dade</b>	<b>10300 SW 216 Street Miami, Fl 33190</b>	<b>(305) 254-4912 (305) 253-5100</b>	<b>(305)254-2011</b>
<b>Deaf Services Bureau</b>	<b>1250 NW 7<sup>th</sup> Street Miami, FL</b>	<b>(305) 560-2866 V (305) 668-3323 TDD</b>	<b>(305) 560-2864</b>
<b>Economic Opportunity Family Health Center</b>	<b>700 S. Royal Poinciana Blvd. Suite 401 Miami Fl</b>	<b>(305) 805-1819</b>	<b>(305) 805-1860</b>
<b>Helen B. Bentley Family Health Center</b>	<b>3090 SW 37<sup>th</sup> Av. Miami Fl 33133</b>	<b>(305) 447-4950</b>	<b>(305) 447-6560</b>
<b>HIV/AIDS Education Program (MDCPS)</b>	<b>1500 Biscayne Blvd. Suite 316 Miami Fl 33132</b>	<b>(305) 995-7118</b>	<b>(305) 995-7122</b>
<b>HIV/AIDS Ministries PHAT Club</b>	<b>Mt. Sellers 8390 NW 14<sup>th</sup> Av. Miami Fl 33147</b>	<b>(305) 693-7292</b>	<b>(305) 693-7262</b>
<b>Jackson North CMHC</b>	<b>20201 NW 37<sup>th</sup> Av. Miami Fl 33056</b>	<b>(305) 620-4005</b>	<b>(305) 628-7421</b>
<b>Organization</b>	<b>Address</b>	<b>Phone #</b>	<b>Fax #</b>
<b>Miami Beach Community Health Center</b>	<b>710 Alton Road Miami Beach, Fl 33139</b>	<b>(305) 538-8835</b>	<b>(305) 532-5766</b>
<b>Miami Dade Dept. of Health-Office of HIV/AIDS Services</b>	<b>1350 NW 14<sup>th</sup> Street Building 7, 3 rd Floor Miami, FL 33125</b>	<b>(305) 324-2409</b>	<b>(305) 324-2445</b>
<b>Miami-Dade Dept. of Health- STD Services</b>	<b>1350 NW 14<sup>th</sup> Street Room #4 Miami Fl 33125</b>	<b>(305) 324-2422 (305) 325-3242</b>	<b>(305) 325-3134</b>
<b>MOVERS, Inc</b>	<b>6112 NW 7<sup>th</sup> Av Miami Fl 33150</b>	<b>(305) 754-2268</b>	<b>(305) 754-7199</b>
<b>Planned Parenthood</b>	<b>1699 SW 27<sup>th</sup> Av. Miami, Fl 33145</b>	<b>(305) 285-5532 (305) 285-7911</b>	<b>(305) 285-5571</b>
<b>South Beach AIDS Project</b>	<b>306 Lincoln Rd. Miami Fl 33139</b>	<b>(305) 532-1033</b>	<b>(305) 532-1813</b>
<b>South Florida AIDS Network</b>	<b>Jackson Memorial Hospital 1611 NW 12<sup>th</sup> Av. Miami, Fl 33136</b>	<b>(305) 585-5241</b>	<b>(305) 545-5693</b>
<b>The Village</b>	<b>3180 Biscayne Blvd. Miami Fl 33137</b>	<b>(305) 573-3784</b>	<b>(305) 576-1348</b>
<b>Union Positiva</b>	<b>1901 SW 1<sup>st</sup> Street #220 Miami, Fl 33135</b>	<b>(305) 644-0667</b>	<b>(305) 644-0636</b>
<b>University of Miami- Adolescent Program &amp;</b>	<b>1601 NW 12<sup>th</sup> Av. Miami, Fl 33136</b>	<b>(305) 243-5880</b>	<b>(305) 243-5956</b>

This is only a partial list. For further services please contact the Switchboard of Miami (701 SW 27<sup>th</sup> Av. #1000, Miami, Fl, 33135) at (305)358-HELP or 358-1640. Or access the Help Pages through-  
[www.unitedwaymiami.org](http://www.unitedwaymiami.org)

Click on “Helpful Links” on the left side of the page, scroll down to the Switchboard of Miami logo and click on the line of text reading “M-DCPS Employee Help Pages On-Line.

Log in by using user name dcps (small letters)

The password is plato (small letters)

## Additional educational resources

**MDCPS-Approved Materials:** See most recent approved list at:

- \* [aidseducation.dadeschools.net](http://aidseducation.dadeschools.net)

**MDCPS-Approved Web Sites:**

- \* [www.cdc.gov](http://www.cdc.gov)
- \* [www.unaids.org](http://www.unaids.org)
- \* [www.who.org](http://www.who.org)
- \* [www.myflorida.com](http://www.myflorida.com)

**MDCPS- Approved Speakers’ Bureau:**

- \* Please follow the procedures outlined in the Work Site AIDS Packet to request a speaker.

## Frequently Asked Questions:

The following questions represent a series of questions that have been posed to the HIV/AIDS education staff by students, teachers, and parents. They are not in any particular order, but may help provide answers to questions that you may have.

1. My friend and I are going to pierce each other's ears this weekend. Is this risky?
  - \* Piercing any body part can be risky, if you use the same needle on each other. Any time blood, or any body fluid, is introduced into the body; there is risk of transmitting an infectious disease, including HIV/AIDS.
2. I heard that a man could not get HIV from having vaginal intercourse with an HIV infected woman. Is this true?
  - \* No! HIV can be transmitted through any sexual activity where blood or sex fluids are exchanged. Vaginal fluid does contain HIV.
3. Women don't have to worry about HIV/AIDS? Is this true?
  - \* No! Statistics show that more and more women are becoming infected. If women are participating in any risky behaviors then they are at risk for getting infected with HIV.
4. I'm afraid to go for an HIV test. Do I need to know my HIV test results?

- \* The choice is yours. However, many studies have shown that people who know their HIV test results and who are linked to care and treatment, have a better chance of remaining healthy for a longer time.

5. When I went for an HIV test, they counseled me before and after the test. Why?

- \* Written consent for HIV testing is required by law. Pre-test Counseling is provided to help a person determine their risk, explain the possible test results, and understand the window period. Post test counseling, if negative, is to assist in helping to develop a personalized prevention plan, and if positive to refer to required services.

6. If two women have sex, could one get HIV from the other?

- \* Yes! If they are engaging in unprotected sex and/or other risky behaviors where there is an exchange of body fluids, they put themselves at risk for HIV infection.

7. Can I get HIV from donating blood?

- \* No! New, pre-sterilized needles are used each and every time blood is donated. There has never been a case of HIV transmission from donating (giving) blood.

8. My steady wants me to have sex, but I don't want to. What should I do?

- \* This is a common problem. "No" means "No"! Stick to your values. It is important to learn tips to negotiate for other ways to share your feelings safely. If your steady really cares about you, he/she will understand and respect you. If they don't, then they are not worth you putting your life at risk.

9. How do I know if I should get a blood test for AIDS?

- \* If you have ever gotten anybody's blood or sex fluids in your body, then you should be tested for HIV and other sexually transmitted diseases.

10. I don't have sex or shoot drugs, so why should I worry about AIDS?

- \* As long as you continue to refrain from *all* risky behaviors, and no one else's blood or body fluids gets into your body - you're right, you shouldn't have to worry. Remember, however, that many children are born infected with their mother's HIV.

11. Where can I get free condoms?

- \* Free condoms can be obtained at local Health Departments, University Wellness Centers, and AIDS Services organizations. They are available at your full-service

clinics (in certain high-schools), if you and your parents register. Also, there are many community HIV prevention activities where condoms are distributed.

12. Can my dog get AIDS?

- \* No. HIV is only transmitted between humans.

13. Our parents are trying to scare us with this AIDS stuff. They just don't want us to have fun. Should I be worried?

- \* AIDS *is* scary stuff! There are other ways to still have fun safely. If your parents are discussing this with you, it shows that they really care.

14. I just had the flu. How do I know if it was the start of AIDS?

- \* The flu is the flu - Sorry you had it! If you have not engaged in any risky activities, the flu that you had is not a sign of HIV infection.

15. Is it true that some people are AIDS carriers and they will never get sick?

- \* People wish that this were true. Some people who are infected may take years to display any signs or symptoms. Unless there is a cure, there are no guarantees that a person won't get sick.

16. Teacher comment: Will I know if I have a student with HIV/AIDS in my class?

- \* Not necessarily. According to the MDCPS policy, school personnel are not to be informed of the medical status of students, unless specifically requested by the parents. Proper disclosure forms must be signed and completed. (See page 18 of the AIDS Worksite AIDS Package available at the school site).

17. Teacher comment: Do I have to teach students with HIV/AIDS?

- \* Yes. According to MDCPS policy, students with HIV/AIDS are treated in all ways identical to students without HIV/AIDS. There is no risk to teachers or students when a child with AIDS is in the classroom.

18. How do you use a condom?

- \* There is an approved video called Condom Sense available from the school's AV library, which teaches students about the correct use of condoms. Technical assistance is also available from the HIV/AIDS Education Program. An overhead showing the correct procedure for choosing and using condoms can be found in Appendix I.

19. If a person with AIDS has a cold, and coughs on me, could I get AIDS?

- \* No! AIDS is not spread in this fashion.

20. A student cut himself in class and I got blood on me. Should I get an HIV test?

- \* No, intact skin is an effective barrier against the transmission of HIV/AIDS. Follow procedures in the Worksite AIDS Package on page 28-30 when a true exposure occurs. To relieve excessive anxiety, a test may be obtained.

21. My older brother says AIDS is a gay disease. Is this true?

- \* No. Any person, regardless of their sexual orientation, can get HIV, but only if they participate in behaviors that can transmit the Human Immunodeficiency Virus.

22. What kind of condom is safe?

- \* No condom is 100% safe. However, latex and polyurethane condoms are highly effective in preventing both pregnancy and STD's, including HIV, when used consistently and correctly.

23. Why do people talk about steroids? Steroids don't give you AIDS, do they?

- \* Steroids do not transmit HIV. The illicit intravenous (non-medical) injection of steroids is commonly used for bodybuilding. HIV/AIDS can be transmitted when the needle used for steroid injection is shared.

24. Is tattooing risky for HIV?

- \* Tattooing can transmit HIV when more than one person uses the needles and / or ink.

25. Teacher comment: I refuse to teach about AIDS! Is this okay?

- \* No. According to MDCPS policy, HIV/AIDS education is mandated to be taught in grades K-12. However, effective teaching of HIV/AIDS prevention requires knowledge and commitment. If you feel that you cannot effectively teach this curriculum, then technical assistance and resources are available through the HIV/AIDS Education Program @ (305) 995-7118 or (305) 995-7273.

26. Parent comment: I don't want my children to take AIDS education. Do they have to?

- \* No, according to Florida Statutes, a parent has the right to excuse their child from the HIV/AIDS curriculum.

27. Teacher comment: Can I give AIDS hotline phone numbers to students?

- \* Yes. It is encouraged to provide to interested students the Hotline and resource numbers listed in page 62 of this curriculum.

28. I heard some lubricants for condoms help kill HIV. What are they?

- \* Lubricants help reduce condom breakage. Traditionally, it has been taught that lubricants and spermicides containing nonoxynol 9 would decrease the risk of HIV transmission. However, recent studies question this finding.

29. Can you get HIV from open mouth kissing?

- \* It is extraordinarily unlikely that saliva will transmit HIV. However, there is the possibility of transmission during open mouth kissing if there is a chance that blood or blood fluid is present. (For example, gum disease and/or mouth sores).

30. I'm afraid my dentist is going to give me AIDS. Should I be worried?

- \* Standard dental procedures prevent HIV transmission. If you have any concerns, talk to your dentist. They are required to receive training in universal precautions.

31. If I play with someone with AIDS, am I going to get infected with HIV?

- \* No! HIV/AIDS is only transmitted when an infected body fluid (blood and sex fluids) is introduced into the body of a non-infected individual. Casual contact, as in play, does not transmit HIV/AIDS.

32. My dentist/doctor should have to tell me if he/she has HIV. Is this a law?

- \* No. Healthcare workers (including dentists) are not required by law to divulge personnel medical information including their HIV status.

33. What's the difference between confidential and anonymous testing?

- \* "Anonymous" testing uses no names or personal identifying information. In "confidential" testing, the identity of the person tested is known, but the results are available only to a limited number of authorized individuals.

34. Can my insurance company require me to take an HIV test?

- \* Yes.

35. Why aren't parents required by law to tell the school if their child has AIDS?

- \* According to MDCPS policy, parental disclosure of a child's HIV status is not required nor requested. There has never been a documented case of HIV/AIDS in a school setting.

36. My friends and I want to be blood brothers and sisters. Is this okay?

- \* No! Whenever blood is exchanged between individuals, there is a risk of HIV transmission. Anyone can be HIV infected, even a friend.

37. Is HIV the only infection you can get from contact with someone else's blood?

- \* No! Many blood borne pathogens, including hepatitis, can be transmitted through blood contact.

38. Why don't we isolate people with HIV/AIDS? Why do we let kids with HIV/AIDS attend school?

- \* People with HIV/AIDS are protected under the Americans with Disability Act (ADA). Remember, because there is no risk of HIV/AIDS transmission through casual contact- isolation is not necessary.

39. Why is Anal Sex so risky for HIV infection?

- \* Anal sex is risky for HIV infection because the opening to the anus and rectum is tight, and inelastic and therefore, prone to tearing when stretched. If any tears occur in the rectum, HIV can be directly introduced into the blood stream.

40. Which type of sexual contact has the highest risk of transmission?

- \* Any sexual activity (protected or unprotected) carries risk when infected blood and sex fluids are exchanged. In general unprotected anal intercourse carries a greater risk than unprotected vaginal intercourse, which carries a greater risk than unprotected oral sex. There is only a risk when one or more of the individuals are HIV infected.

41. How can I help someone with AIDS?

- \* The first step is to become knowledgeable and eliminate misinformation and prejudices relating to HIV/AIDS. Other ways to help include: be a friend to someone with HIV/AIDS., become an HIV Peer Educator, or volunteer at any one of the many community programs providing services to HIV infected individuals.

42. Can I get HIV from swimming in a pool or hot tub?

- \* No. The HIV virus does not live in these environments.

43. I've been dating someone for two weeks. We're monogamous, so we don't have to worry about AIDS, right?

- \* Wrong. Any person can be HIV infected from previous exposure, including a person you are currently dating, regardless of how long you've been dating. Two non-infected individuals who enter into a mutually monogamous relationship (where sexual activity is limited only to each other) are not at risk for new HIV infection through sexual contact. (Please see question # 44 on the Window Period).

44. If I had unprotected sex yesterday, how long do I have to wait before I know if I was infected with HIV?

- \* **According to the CDC, it may take from 3 weeks to 3 months to become positive on an HIV test. This time frame is called the Window Period.** During the window period, people can be negative on an HIV/AIDS test and still be infectious to others. The window period is the time between initial infection and when a sufficient quantity of virus, or antibodies, is produced to be detectable in tests.

45. If I pull out before I ejaculate, can I get HIV/AIDS?

- \* Yes! If your partner has HIV, then anytime your penis comes in contact with blood or sexual fluids from that partner (inside or outside the body), there is a risk for transmission of HIV infection.

46. If my partner pulls out before ejaculation, can I still become infected with HIV?

- \* Yes. It is possible because HIV is found in pre-ejaculatory fluids of an HIV infected individual.

47. Can I get AIDS from masturbation (touching your own body)?

- \* No. You can't give yourself HIV/AIDS. Mutual masturbation is also safe; providing there is no exchange of body fluids.

48. Where did HIV come from?

- \* It is not known where HIV/AIDS came from. The most commonly accepted *theory is* that an AIDS- like virus crossed into humans from monkeys.

49. Can you get HIV/AIDS from oral sex?

- \* It is theoretically possible to transmit HIV/AIDS through oral sex. This behavior is still considered to be risky.

50. How long do people live with HIV/AIDS?

- \* The life span with HIV/AIDS is variable and depends on many of the following factors, among others: General health of the person, genetics, viral strain, viral load, presence or absence of other diseases, the patient's response to anti-HIV/AIDS medications, repeated exposures to the virus, and accessibility to health care

51. Will my parents die if they get AIDS?

- \* Yes. Eventually all parents die. A person with HIV/AIDS is at greater risk of dying earlier than a person without HIV/AIDS. It is possible to live decades with HIV/AIDS infection that is appropriately managed and treated.

52. My steady just got a negative HIV test. It's okay to have sex now, right?

- \* No! A negative HIV test does not make it safe to have unprotected sex. There are many risks in addition to HIV/AIDS that are associated with unprotected sexual activity. Also see question 44 on the "Window Period" (where someone can be test negative and still be infectious).

53. My dad had a transfusion. Will he get HIV/AIDS?

- \* It is extremely rare for someone to get HIV/AIDS from a transfusion today. Over 13 million transfusions occur each year, and 99.99% do NOT transmit HIV. If there is any concern, he should be tested. Please remember, a person cannot get HIV by giving (donating) blood.

54. I take birth control pills so I don't have to worry about AIDS, right?

- \* Wrong! Birth control pills do not prevent transmission of HIV or other STD's.

55. Can you tell whether someone has AIDS just by looking at them?

- \* No.

56. Can you get AIDS through saliva?

- \* Although HIV can be detected in saliva, it is believed there are insufficient quantities to transmit the virus and there has NEVER been a documented case of this mode of transmission.

57. Can you get AIDS from Mosquito bites?

- \* No. There has never been a documented case of a mosquito transmitting HIV.

58. How do you know if you have HIV/AIDS?

- \* The only way to know for sure is to take an HIV/AIDS test and be evaluated by a knowledgeable physician.

59. How does a mother give HIV to her baby?

- \* HIV can be transmitted from the mother to the baby ONLY if the mother is infected with HIV. There are several possible ways to transmit HIV from an infected mother to her baby. It could occur at the time of natural delivery as the baby passes through the birth canal. It could also occur during the last trimester of pregnancy if there is a mixing of mother and fetal blood (normally the two blood systems are separate and do not mix). A third possible way is during an Amniocentesis. Another possible way is through breast-feeding her child after birth.

60. What are some of the ways that you can stay healthy after becoming infected with HIV?

- a. A person with HIV/AIDS can do many things to stay healthy. They include:
  - Routine health visits-developing a strong patient/doctor relationship.
  - Follow treatment recommendations
  - Develop and maintain good health habits i.e., diet, exercise, rest, etc.
  - Establish effective emotional support.
  - Avoid circumstances where re-infection is possible.

61. Why do people share needles?

- \* Sharing of needles can be part of the drug culture and may be influenced by economic considerations. The use of previously used needles is never recommended and is unsafe. Many people who re-use needles are not educated about, or ignore, the risk.

62. What is the best way to stay safe from HIV/AIDS?

- \* Except for those people born with HIV, the best way to avoid HIV/AIDS infection is to refrain from any risky behaviors. See section on transmission; page 22.

63. Can you contract HIV from a toilet seat?

- \* No.

64. How many people in Miami-Dade have HIV/AIDS?

Miami-Dade out ranks (within the top three) almost all major cities in rates of HIV infection **for the latest HIV Surveillance Report, please contact (305) 324-2459. See additional information (updated yearly) in Appendix IV.**

65. How would you define Oral Sex?

- \* Oral sex is any activity where a person's mouth is put on or in another person's genitals. (Penis/scrotum, vulva/vagina, anus).

66. What are the symptoms of HIV?

- \* See page 19

67. What are the symptoms of AIDS?

- \* See page 20

68. What determines how long before HIV becomes full-blown AIDS.

- \* The time between HIV infection and the development of AIDS varies from months to decades. The following may help to prolong the time before AIDS is manifested:
  - a. Routine health visits-developing a strong patient/doctor relationship
  - b. Follow treatment recommendations
  - c. Develop and maintain good health habits i.e., diet, exercise, rest, etc.
  - d. Establish effective emotional support
  - e. Avoid circumstances where re-infection is possible

69. Why can a mother be HIV positive and not her baby?

- \* The blood circulation of the fetus is completely separate from the mother. Giving anti-HIV/AIDS medications to the mother during the third trimester of pregnancy will reduce the risk of HIV transmission to the baby. In addition, birth by caesarian section carries less risk of transmission to the baby than vaginal delivery.

70. Why is Magic Johnson not becoming ill?

- \* Magic Johnson, like many others living with HIV, has responded well to newer drug regimens that has reduced his viral load. Although the virus may become undetectable in the bloodstream by using some HIV tests, Magic Johnson, like many others, is still infected and could transmit the virus to others.

71. Why can't they find a cure for HIV/AIDS?

- \* There are many diseases where there is no cure. Therefore, HIV is not unique. HIV is a viral disease and, to date, there is no cure for viral illnesses. Effective anti-viral treatments are available which limit symptoms and disease progression. The HIV virus mutates frequently, making it difficult to find an effective vaccine to prevent the disease. The HIV virus is a retrovirus that inserts itself into the host cells and becomes part of the genetic material of those cells. It is almost impossible to eliminate the virus from the cell without killing the cell itself. If all infected cells were destroyed, the patient would die. However, current therapies make it possible for people living with HIV or AIDS to live long and productive lives.

72. Is the AIDS epidemic getting worse?

- \* From a worldwide perspective the AIDS epidemic is of catastrophic proportions. In under-developed countries the impact of the epidemic will continue to dominate medical, social, economic and political aspects of their culture well into the future. In the United States where interventions are more available and economically feasible, the number of new cases and people dying is leveling off. This does not mean that the epidemic is over. Each individual must continue to be knowledgeable and protect himself or herself against exposure, infection or re-infection.

73. What are the chances that someone at my school is HIV positive?

- \* Any school, like any business, or other organization, could have people who are infected with HIV. You cannot tell by looking at someone if they have HIV infection. However, there has never been a documented case of HIV transmission in usual school activities.

74. Is it possible to become infected by wearing an infected person's contact lenses?

- \* It is theoretically possible to transmit HIV by wearing an infected person's contact lenses. In addition, other infectious diseases can be transmitted in this manner. Therefore, sharing contact lenses is not recommended.

75. Is it possible to become infected if a manicure attendant does not properly clean her utensils and equipment?

- \* Yes. However, most manicurists are licensed and trained in infectious disease control.

76. What cells in our immune system gets infected with HIV?

- \* Any cell that contains a CD-4 (see page 21) receptor site can become infected with HIV. The most common cells infected are the T-helper lymphocyte of the immune system and the cells of the Central Nervous System.

77. What are antibodies?

- \* Antibodies are proteins that are produced by the body to protect itself against a foreign substance. HIV antibody is a protein that is produced by the immune system directed against the HIV virus. However, the HIV antibody is a "non-neutralizing antibody", meaning that it is not 100% effective in destroying HIV. In addition, antibodies are not usually effective against viruses that live predominately within cells.

78. What happens to the immune system when HIV enters our body?

- \* Please refer to the section on Pathophysiology on page 21 of this curriculum. In general the immune system is severely compromised, limiting the body's ability to fight infections and prevent the development of some cancers.

79. How many T-cells are in the immune system normally?

- \* There are normally trillions of T-Cells in your body at any one time. Physicians measure T-Cells per micro-liter of blood. A normal T-Cell count ranges between 800-1500 per micro-liter. A low T-Cell count (less than 200 per micro-liter) can be seen with active HIV infection. However, low T-Cell counts may occur with many other infections or diseases.

80. What is the next safest method for HIV prevention after abstinence?

- \* There are many ways to practice safe sex. Hugging, kissing, masturbation, mutual masturbation, flirting, massaging, dancing, talking, reading, bathing,

fantasying, etc. are all 100% safe. Any activity where there is no exchange of blood and sex fluids is safe.

81. Why aren't condoms 100% effective?

- \* Condom failures are usually caused by improper and inconsistent use or breakage. Latex and polyurethane are recommended.

82. What types of HIV tests are there?

- \* Testing for HIV is complex. Please see the HIV testing section of this curriculum on page 31 for details.

83. What is the window period?

- \* The "Window Period" is a period of time between initial infection and when a sufficient quantity of virus or antibody is produced to be detectable on tests. During the window period people can be negative on a test and still be infectious to others.

84. What does a negative, positive, or inconclusive test result mean?

- \* Please see the HIV testing section of this curriculum on page 31.

85. What is the orasure test?

- \* It is a new test that uses oral mucosal fluids to look for the HIV antibody.

86. Why is it that some people have repeated exposure to the HIV virus and do not become infected?

- \* Exposure does not always mean infection. The major contributing factors include:
  - Genetics
  - Viral Strength
  - Viral Load
  - Modes of Transmission
  - Immune system condition
  - Co-existing diseases
  - **Co-Factors**

87. What are some options if students don't want to tell their parents about their HIV status?

- \* Living with HIV is extraordinary difficult and requires medical, emotional, social and economic support. Parents need to be involved in the variety of decisions a student with HIV must face. Referrals and support from community agencies are also available to assist the student.

\* **However**, according to Florida Statutes 384.30 Minors consent to treatment.

(1) The department and its authorized representatives, each physician licensed to practice medicine under the provisions of chapter 458 or chapter 459, each health care professional licensed under the provisions of part I of chapter 464 who is acting pursuant to the scope of his facility may examine and provide treatment for sexually transmissible diseases to any minor, if the physician, health care professional, or facility is qualified to provide such treatment. The consent of the parents or guardians of a minor is not a prerequisite for an examination or treatment.

(2) The fact of consultation, examination, and treatment of a minor for a sexually transmissible disease is confidential and exempt from the provisions of s. 119.07(1) and shall not be divulged in any direct or indirect manner, such as sending a bill for services rendered to a parent or guardian, except as provided in s.384.29.

**History.**—s. 90, ch. 85-220; s. 8, ch.90-344; s. 12, ch. 93-227; s. 682, ch. 95-148; s. 200, ch. 96-406; s. 90, ch. 2000-318.

## Related Topics

### **Drug-Facilitated Sexual Assault & HIV Transmission:**

Another topic of concern for health educators is that of “date-rape drugs”. These drugs are often used to incapacitate its victims for the purpose of committing a crime; usually sexual assault. In addition to the dangers associated with alcohol use, teens need to be aware of the dangers associated with *club drugs* that may lead to sexual assault; and the possibility of HIV transmission.

### **ROHYPNOL:**

- Often referred to as “ROOFIES”
- Is a very powerful sedative
- Is a brand name for Flunitrazepam
- Is not legally available in the U.S.
- Is legal in 60 countries as treatment for insomnia
- Is effective within minutes of consumption and lasts for many hours
- Is often confused with someone being intoxicated as the user may exhibit slurred speech, and has difficulty walking
- Is lethal for many as it causes deep sedation, respiratory distress, black outs and, in some cases, coma.
- Is deadly if mixed with alcohol or other drugs
- Is available in small white tablets which can be taken orally, ground up in a drink or snorted

### **PROGESTEREX:**

- Is actually an animal tranquilizer that can be dissolved into someone’s drink and is often used in conjunction with roofies

### **GAMMA HYDROXY BUTYRATE:**

- Often referred to as “Grievous Bodily Harm” and “Liquid Ecstasy” or “GHB”
- Is a strong sedative
- Was once sold as an enhancer for body builders but was subsequently banned in 1990 by the FDA due to severe side effects

- Can produce drowsiness, dizziness, nausea, severe respiratory depression and coma
- Is usually a homemade product mixed with solvents
- Is available in liquid and powder form and is odorless and tasteless; hence easily unnoticed if slipped into a drink

### METHYLENEDIOXYMETHAMPHETAMINE (MDMA):

- Often referred to as “Ecstasy”
- Is a designer drug that produces a “hallucinogenic” or “psychedelic” effect
- It usually comes in pill form
- Distorts perception
- Increases the body’s temperature
- May Leads to dehydration

### PROTECTIVE MEASURES:

**Class discussions should focus, not only on the dangers of club/rape drugs from a medical standpoint, but also from the standpoint of sexual assault, which may lead to an STD transmission. Be aware of the many street names for these drugs and be on the look out for their use in student’s conversations.**

The following are some tips that should be discussed in relation to ANY party drug.

- Be aware of your surroundings and take precautions when in social situations such as raves, parties or on dates (even with people you know and trust)
- Keep an eye on your drink or open soda, do not trust anyone to watch it for you
- Drink from tamper-proof bottles (such as those sports bottles) and cans- and insist on opening them yourself
- Insist on pouring your own drink or watch it being prepared. Avoid group drinks such as “punch”
- If you suspect you or a friend has been drugged – immediately call for help

### FOR MORE INFORMATION CONTACT THESE WEBSITES:

- [www.clubdrugs.org](http://www.clubdrugs.org)
- [www.drugfreeamerica.org](http://www.drugfreeamerica.org)
- [www.nsawi.health.org/compass](http://www.nsawi.health.org/compass)

## **Rape/Date Rape**

Statistics do not tell the true story of sexual assault as most cases go un-reported. Rape can happen to both men and women. Rape is an act of violence. Rape can happen in many ways from the perpetrator using physical strength or a weapon to dropping roofies inside of the victim's drink in order to intoxicate them.

One of the most important things to do for someone who has been raped is to believe and support him or her. Classroom discussions should focus on communication channels between two people on a date or in a relationship. Role-playing situations to increase sexual negotiation should be tried. Girls must be encouraged to hold to their values, and must be taught how to say, "No!". They must be taught to use the right body language when stating so.

## **Prostitution and related risky sexual behaviors**

Prostitution is a difficult social problem with medical, ethical, moral, and social perspectives. It is a very important mechanism in the transmission of HIV/AIDS.

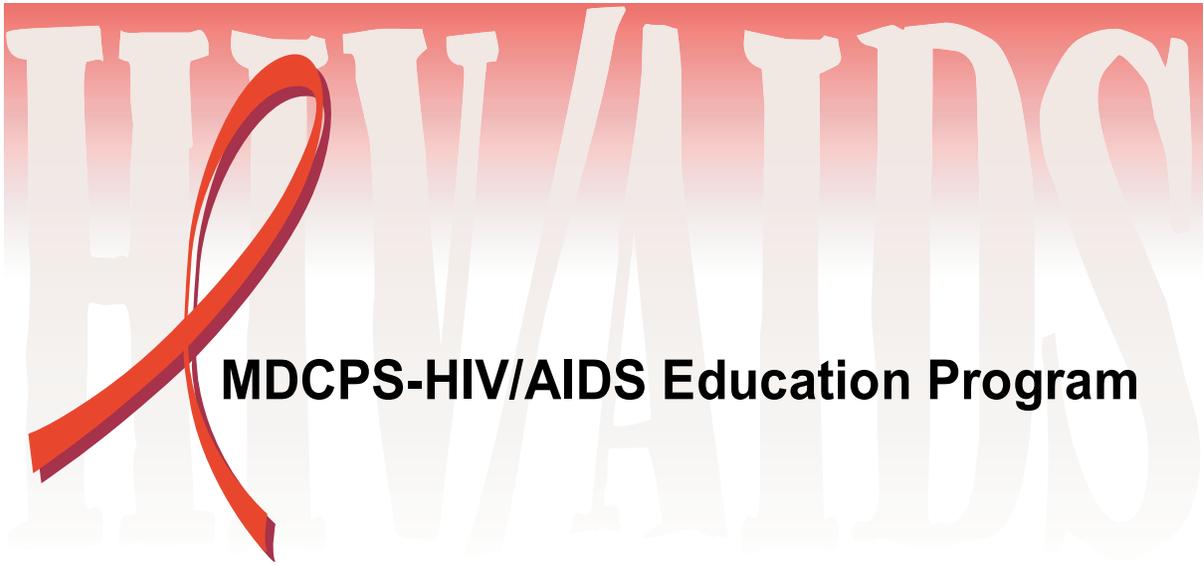
Florida Statutes 796.08 states that

- If a person is committing or offering prostitution
- AND has been informed that they are HIV positive
- AND knows it is a communicable disease through sexual intercourse
- THEN they may be charged with a third degree felony

**APPENDIX I:**

**SUGGESTED OVERHEADS**

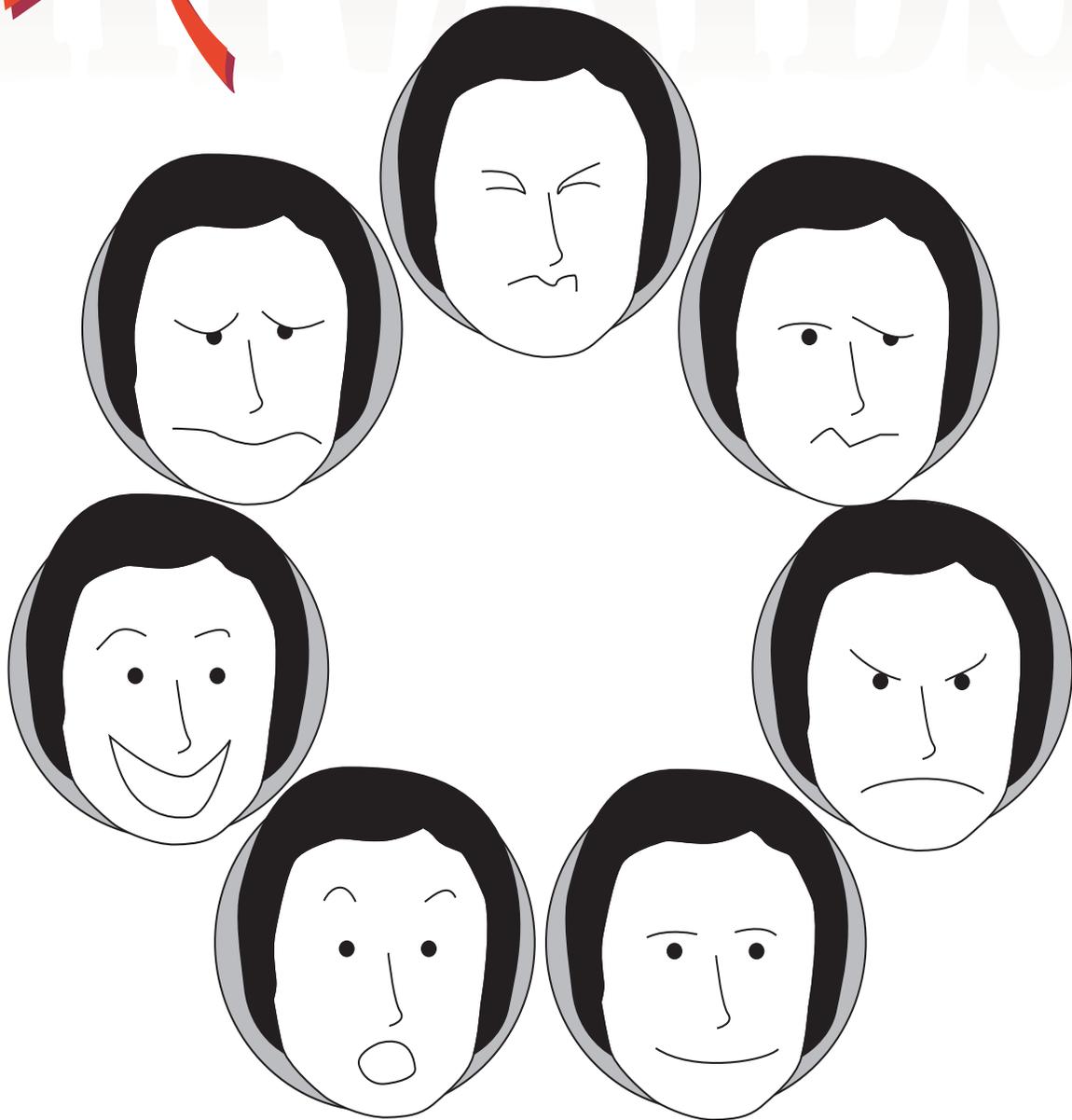




## Overheads related to the Curriculum Resource Guide

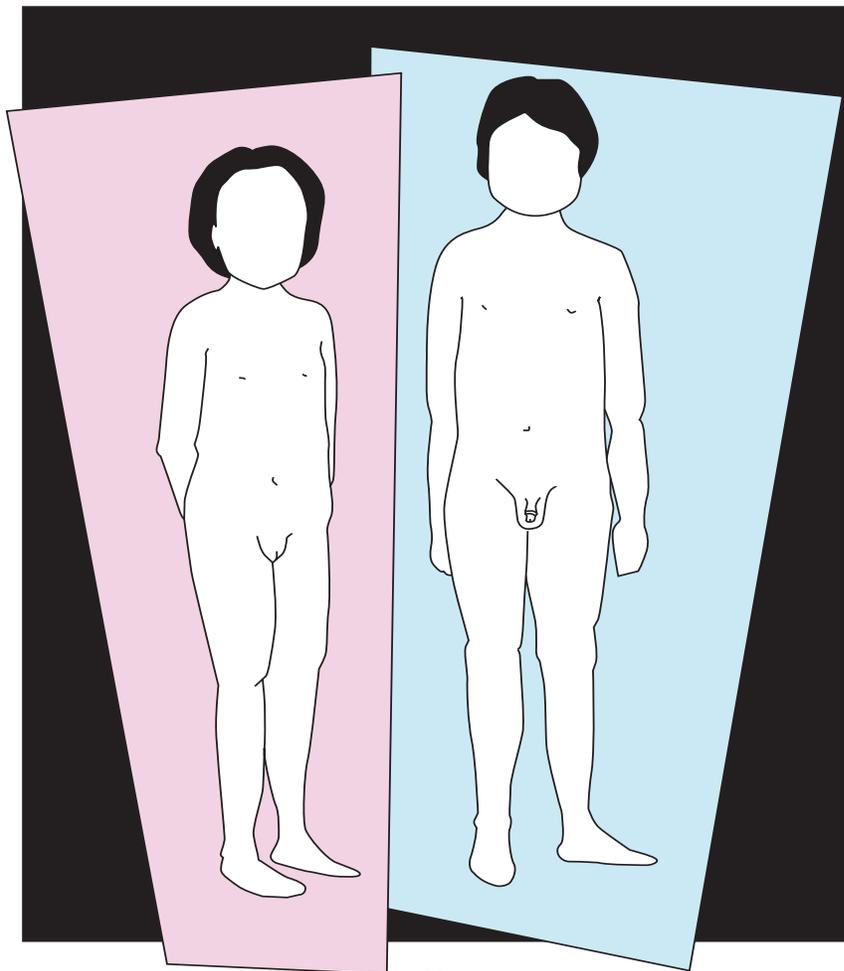


## COMMON FEELINGS



# HIV/AIDS

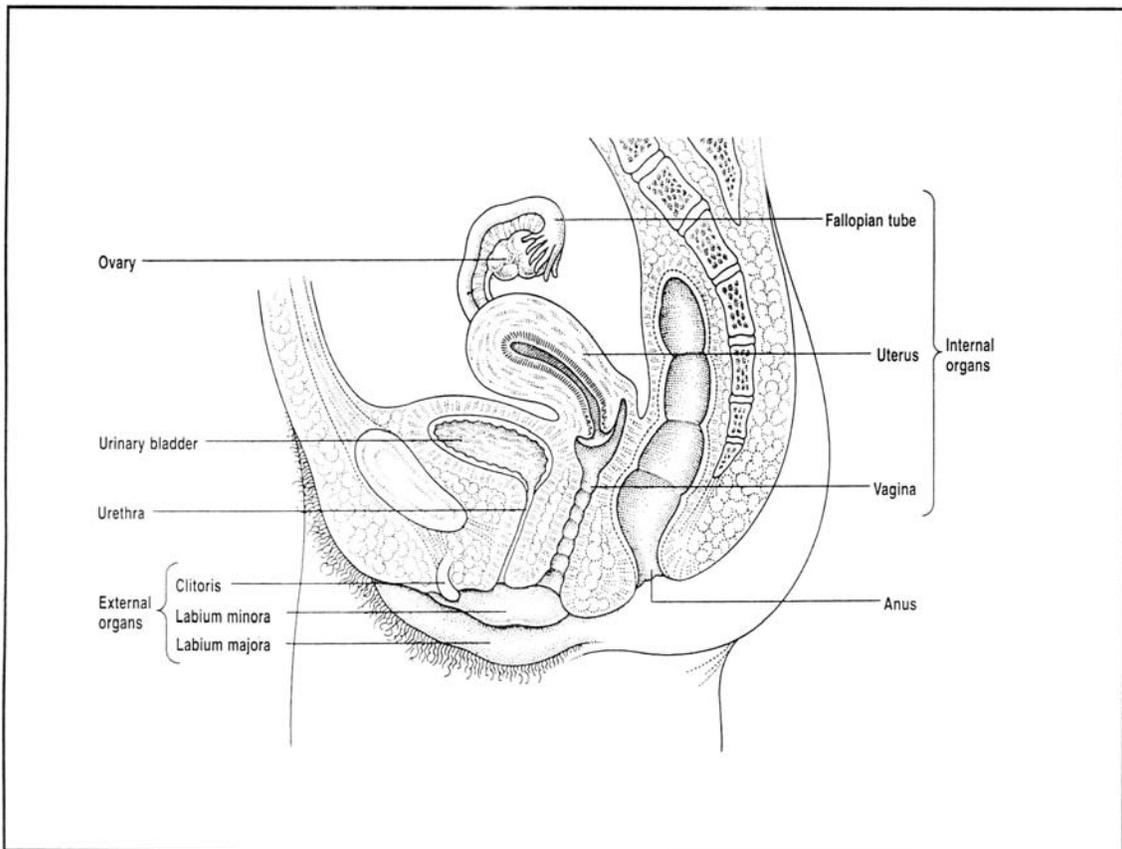
**Pre-Puberty Female/Male**



83

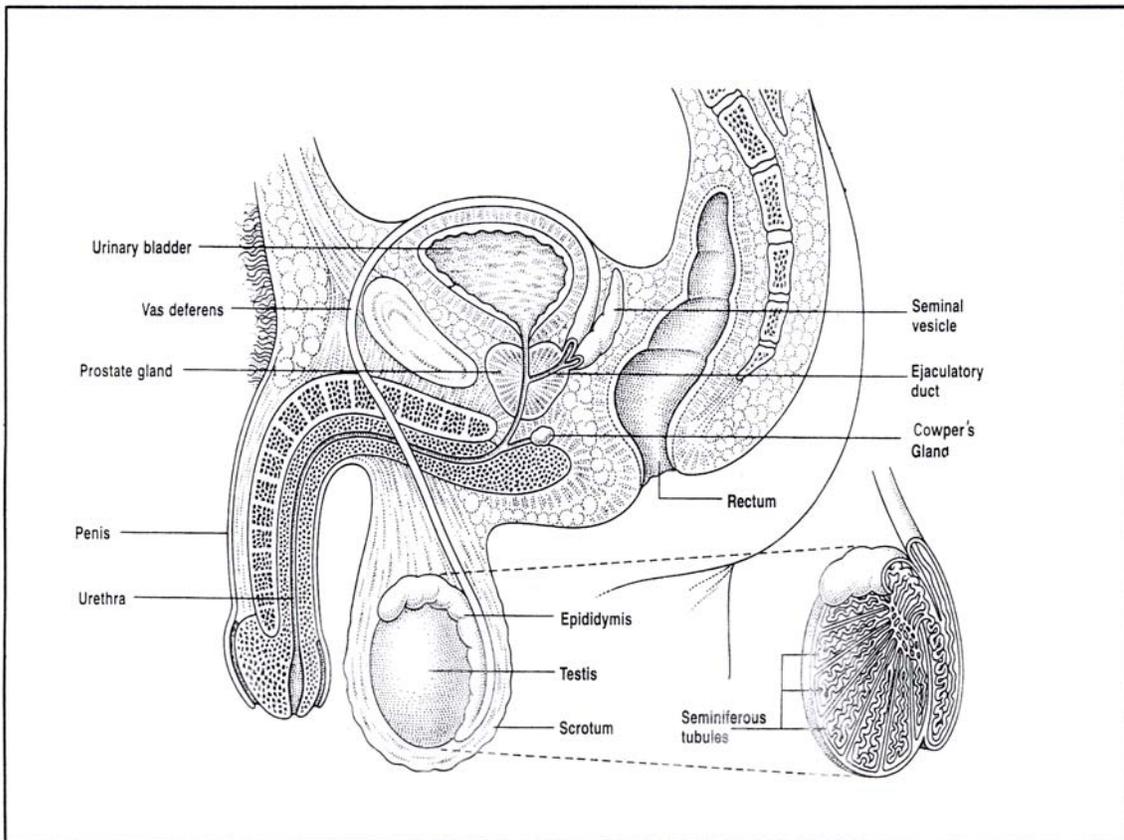
# HIV/AIDS

**Female Reproductive System**



# HIV/AIDS

## Male Reproductive System





- Blood to blood contact
- Sex Fluids transmitted inside another persons body:  
Semen/ pre-ejaculatory fluid/vaginal fluids/menstrual fluids
- Mother to baby during pregnancy/delivery
- Mother to baby during breast feeding



## Risk of HIV Transmission-A

- DOSE RESPONSE= The GREATER the amount of HIV introduced into the body- the GREATER the risk of HIV transmission

Name of Fluid	Concentration of HIV
Semen	High
Blood & Blood components	High
Menstrual Fluid	High
Pre-Ejaculatory Fluid	High
Breast Milk	High
Cerebral Spinal Fluid	High
Pus	Low
Saliva	Low
Tears	Low
Urine	Low
Feces	Low
Vomit	Low
Nasal Mucous	Low



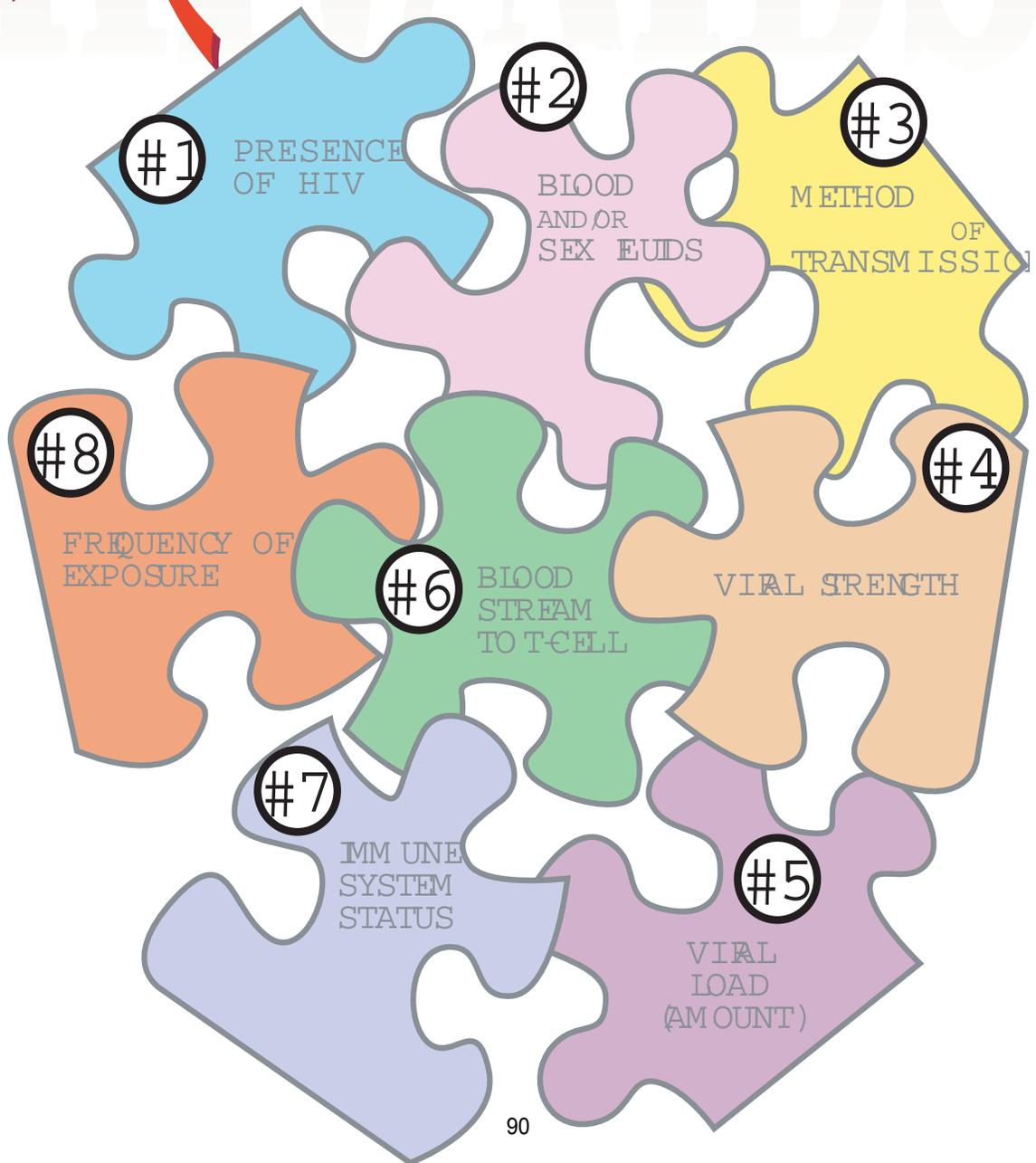
## **Risk of HIV Transmission-B**

**The amount of HIV is dependent on:**

- The concentration of HIV in the infected fluid
- The QUANTITY of fluid introduced into the body
- The ACCESS of the infected fluid to the T4 cell



## Risk of HIV Transmission-C





## **CHOOSING CONDOMS**

**Always use latex or polyurethane**

**(Animal skin condoms are porous!)**

**Check the expiration date**

**Check for a lot #**

**Feel for an air pocket**

**Use water based lubricants**

**Never keep them in a wallet or purse  
for a long time**

**Use microbicides or spermicides**



## **USING CONDOMS**

**Use a new one every time; from start to finish**

**Put a condom on the correct way before any contact is made (Forget the withdrawal method...)**

**Pinch the tip to avoid trapping air**

**Pull condom all the way down to the base of the penis**

**After ejaculation, hold condom and withdraw**

**Dispose of condom in an appropriate place**

**For female condoms-read instructions and follow same guidelines as male ones**

## **APPENDIX II:**

# **RUMORS CONCERNING RATE of HIV POSITIVE BLOOD DONORS**

## **APPENDIX II:**

# **RUMORS CONCERNING RATE of HIV POSITIVE BLOOD DONORS**



A NON-PROFIT ORGANIZATION  
IN COOPERATION WITH  
THE AMERICAN RED CROSS

CHARLES L. ROUAULT, MD  
President  
BRUCE A. LENES, MD  
Medical Director  
JERRY R. SCOTT, MD, Ph.D.  
Medical Director  
STEVEN P. ERJAVEC  
Chief Financial Officer

Dear Students, Parents, Faculty and Staff:

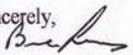
Your high school has or will soon be sponsoring a blood drive with Community Blood Centers of South Florida, Inc. (CBCSF). We need and welcome your participation. I am writing to address an issue of concern for many of you, as well as of the Community Blood Centers of South Florida.

Once again this year, false rumors have been circulating in communities around the United States, including South Florida, that large numbers of students who came to donate at their high school blood drives tested positive for the HIV virus that causes AIDS. There is absolutely no truth to this rumor! We need your help in stopping this rumor before it spreads further and have enclosed the following information to answer any of your questions.

- \* Community Blood Centers of South Florida, Inc. (CBCSF) regards the HIV virus test results as highly confidential. We release information about positive test results in a confidential manner and only to the donor. We do not report the names or numbers of those who test positive for the HIV virus to any blood donor sponsor group or outside agency. Therefore, anyone who claims to know the rate of positive tests at a donor group cannot have accurate information.
- \* In our region, **approximately one in 10,000 blood donations are confirmed positive** for the HIV virus. Be assured that there is no "epidemic" of AIDS among high school blood donors. This rate in student blood donors is equivalent to the rate of positive tests in essentially all of our other donor groups and remains exceptionally low. In essentially all cases there are **NO HIV positive donations** identified at school blood drives.
- \* If an HIV positive blood unit is identified, it is not released for transfusion to patients.
- \* High school students represent about 15 percent of all blood donors, and are a very important part of the CBCSF blood program. Research shows that students who become blood donors as young adults between the ages of 17 and 25 will remain committed to their community blood donation program for most of their adult lives.
- \* It is impossible to get AIDS from donating blood because we use only sterile, nonreusable needles to draw blood. The needles, tubes and bags are pre-sterilized, used only once and are then discarded.

If you have any other concerns or questions about donating blood or the false AIDS rumor, please contact me directly at (954) 777-2580.

Thank you for your support of the Community Blood Center blood program.

Sincerely,  
  
Bruce A. Lenes, M.D.  
Medical Director

**COMMUNITY BLOOD CENTERS OF SOUTH FLORIDA, INC.**  
1700 NORTH STATE ROAD 7 • LAUDERHILL, FLORIDA 33313-5097 • (954) 735-9600 • FAX (954) 735-2839

## **APPENDIX III:**

# **POWERPOINT PRESENTATIONS**

95

**Acknowledgements:**

94

This curriculum was developed with the support of the Miami-Dade County Public School Board under CDC Grant# by:  
Jacquelyn White, M.P.H., District Supervisor, HIV/AIDS Education Program, Miami-Dade County Public Schools  
Stephen Hart, M.S., Educational Specialist, HIV/AIDS Education Program, Miami-Dade County Public Schools  
Alex Moreno, M.P.H., Educational Specialist, HIV/AIDS Education Program, Miami-Dade County Public Schools

MIAMI-DADE COUNTY PUBLIC SCHOOLS would like to acknowledge and express their appreciation to the following individuals and organizations for their help in developing this curriculum.

Bruce Lenex, MD, Medical Director, Community Blood Centers of South Florida, Inc.

Marilyn Volker, Ed.D., Sexologist in Private Practice

A Special thanks to **Community Blood Centers of South Florida, Inc.** for volunteering Dr. Lenex' time to this project.

Miami-Dade County Public Schools would like to acknowledge the following individuals for the development of the FCAT lesson activities K-12.

Bonnie Jeroslow

Maria Manning

Mitzi Parlor

Louis Lazo

Miami-Dade County Public Schools would like to acknowledge the following individuals for the development of the K-12 lesson plans and activities:

Leyman Zapata

Chakevia Lewis

Thersa Borden

Francis Gibson

Tamar Burton

Miami-Dade County Public Schools would like to acknowledge the following individuals for the development of the overheads and related teaching materials:

Marcus Ortega

Miami-Dade County Public Schools would like to acknowledge the following individuals for their contributions to the curriculum content:

Lori Jordahl, OHAS, Florida Department of Health

Morten Leitner

Mark Sachs, MD

Charlie Lillis

Petra Johnson-Hopson

LaShaun Polk, MPH