

HIV/AIDS

“Safety in Your Workplace”

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Bloodborne Pathogens

Safety in Your Workplace

HIV/AIDS

Contents:

- What are HIV and AIDS
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We got our introduction to HIV/AIDS with the first reported case of HIV infection on June 5, 1981. That's the day that a medical publication reported an outbreak of what they called pneumocystis pneumonia, among five young, gay men in Los Angeles, Calif.

If you feel like you haven't heard a whole lot about HIV within the U.S. over the past few years ... you're right. Although 50,000 Americans become HIV positive each year and well over a million are living with the virus, it gets little attention any more from the media. Most news headlines focus on the epidemic in Africa, Latin America and developing countries.

But while news and activism have mostly looked elsewhere, an awful lot has changed about HIV since it was the #1 health scare in the U.S. in the late 1980s and early 1990s.

While there have been great strides in the prevention of HIV transmission and care of HIV infection and AIDS since AIDS was first recognized in 1981, many people still have questions about HIV and AIDS. The information in this booklet is designed to answer some of these questions based on the best available science.

What is HIV and how does it differ from AIDS?

There are two types of HIV; HIV-1 and HIV-2. In the United States, unless otherwise noted, the term "HIV" primarily refers to HIV-1.

Both types of HIV damage a person's body by destroying specific blood cells, called CD4+ T cells, which are crucial to helping the body fight diseases.

Within a few weeks of being infected with **HIV**, some people develop flu-like symptoms that last for a week or two, but others have no symptoms at all. People living with HIV may appear and feel healthy for several years. However, even if they feel healthy, HIV is still affecting their bodies. All people with HIV should be seen on a regular basis by a health care provider experienced with treating HIV infection. Many people with HIV,

including those who feel healthy, can benefit greatly from current medications used to treat HIV infection. These medications can limit or slow down the destruction of the immune system, improve the health of people living with HIV, and may reduce their ability to transmit HIV. Untreated, early HIV infection is also associated with many diseases including cardiovascular disease, kidney disease, liver disease, and cancer.

AIDS is the late stage of HIV infection, when a person's immune system is severely damaged and has difficulty fighting diseases and certain cancers. Before the development of certain medications, people with HIV could progress to AIDS in just a few years. Currently, people can live much longer - even decades - with HIV before they develop AIDS. This is due to the new combinations of medications that were introduced in the mid-1990s. At this time, there is no cure for HIV infection. Despite major advances in diagnosing and treating HIV infection, in 2007, 35,962 cases of AIDS were diagnosed and 14,110 deaths among people living with HIV were reported in the United States.



Electron microscope image of HIV, seen as small spheres on the surface of white blood cells.



A microscopic view of a cell infected with HIV.

Where did HIV come from?

Scientists identified a type of chimpanzee in West Africa as the source of HIV infection in humans. They believe that the chimpanzee version of the immunodeficiency virus (called simian immunodeficiency virus or SIV) most likely was transmitted to humans and mutated into HIV when humans hunted these chimpanzees for meat and came into contact with their infected blood. Over decades, the virus slowly spread across Africa and later into other parts of the world.

HIV-2

In 1986, a second type of HIV, called HIV-2, was isolated from AIDS patients in West Africa. HIV-2 has the same modes of transmission as HIV-1 and is associated with similar opportunistic infections and AIDS. In persons infected with HIV-2, immunodeficiency seems to develop more slowly and to be milder, and those with HIV-2 are comparatively less infectious early in the course of infection. As the disease advances, HIV-2 infectiousness seems to increase; however, compared with HIV-1, the duration of this increased infectiousness is shorter.

HIV-2 infections are predominantly found in Africa. West African nations with a prevalence of HIV-2 of more than 1% in the general population are Cape Verde, Côte d'Ivoire (Ivory Coast), Gambia, Guinea-Bissau, Mali, Mauritania, Nigeria, and Sierra Leone. Other West African countries reporting HIV-2 are Benin, Burkina Faso, Ghana, Guinea, Liberia, Niger, São Tomé, Senegal, and Togo. Angola and Mozambique are other African nations where the prevalence of HIV-2 is more than 1%.

The first case of HIV-2 infection in the United States was diagnosed in 1987. Since then, the Centers for Disease Control and Prevention (CDC) has worked with state and local health departments to collect demographic, clinical, and laboratory data on persons with HIV-2 infection.

How is HIV spread?

Worldwide, more than 90% of all adolescent and adult HIV infections have resulted from **heterosexual** intercourse. HIV is spread primarily by:

- Not using a condom when having sex with a person who has HIV. All unprotected sex with someone who has HIV contains some risk. However:
 - Unprotected anal sex is riskier than unprotected vaginal sex.
 - Among men who have sex with other men, unprotected receptive anal sex is riskier than unprotected insertive anal sex.
- Having multiple sex partners or the presence of other sexually transmitted diseases (STDs) can increase the risk of infection during sex. Unprotected oral sex can also be a risk for HIV transmission, but it is a much lower risk than anal or vaginal sex.
- Sharing needles, syringes, rinse water, or other equipment used to prepare illicit drugs for injection.
- Being born to an infected mother—HIV can be passed from mother to child during pregnancy, birth, or breast-feeding.

Less common modes of transmission include:

- Being “stuck” with an HIV-contaminated needle or other sharp object. This risk pertains mainly to healthcare workers.
- Receiving blood transfusions, blood products, or organ/tissue transplants that are contaminated with HIV. This risk is extremely remote due to the rigorous testing of the U.S. blood supply and donated organs/tissue.
- HIV may also be transmitted through unsafe or unsanitary injections or other medical or dental practices. However, the risk is also remote with current safety standards in the U.S.
- Being bitten by a person with HIV. Each of the very small number of cases has included severe trauma with extensive tissue damage and the presence of blood. There is no risk of transmission if the skin is not broken.

- Contact between broken skin, wounds, or mucous membranes and HIV-infected blood or blood-contaminated body fluids. These reports have also been extremely rare.
- There is an extremely remote chance that HIV could be transmitted during “French” or deep, open-mouth kissing with an HIV-infected person if the HIV-infected person’s mouth or gums are bleeding.
- Tattooing or body piercing present a potential risk of HIV transmission, but *no cases of HIV transmission from these activities have been documented*. Only sterile equipment should be used for tattooing or body piercing. To date, there have been no reported cases of infection from an electrolysis/hair removal treatment.

HIV cannot reproduce outside the human body. It is not spread by:

- Air or water.
- Insects, including mosquitoes. Studies conducted by CDC researchers and others have shown no evidence of HIV transmission from insects.
- Saliva, tears, or sweat. There is no documented case of HIV being transmitted by spitting.
- Casual contact like sitting next to someone, shaking hands, giving a hug, or sharing dishes.
- Closed-mouth or “social/dry” kissing.
- Using restrooms, water coolers or telephones.
- Eating in a restaurant or cafeteria.
- Swimming in a pool or using hot tubs.
- Donating blood.

All reported cases suggesting new or potentially unknown routes of transmission are thoroughly investigated by state and local health departments with assistance, guidance, and laboratory support from the CDC.

How do HIV tests work?

The most commonly used HIV tests detect HIV antibodies – the substances the body creates in response to becoming infected with HIV. There are tests that look for HIV’s genetic material or proteins directly; these may also be used to find out if someone has been infected with HIV.

It can take some time for the immune system to produce enough antibodies for the antibody test to detect, and this “window period” between infection with HIV and the ability to detect it with antibody tests can vary from person to person. During this time, HIV viral load and the likelihood of transmitting the virus to sex or needle-sharing partners may be very high. Most people will develop detectable antibodies that can be detected by the most commonly used tests in the United States within 2 to 8 weeks (the average is 25 days) of their infection. Ninety-seven percent (97%) of persons will develop detectable antibodies in the first 3 months. Even so, there is a small chance

that some individuals will take longer to develop detectable antibodies. Therefore, a person should consider a follow-up test more than three months after their last potential exposure to HIV. In extremely rare cases, it can take up to 6 months to develop antibodies to HIV.

Conventional HIV tests are sent to a laboratory for testing, and it can take a week or two before the test results are available. There are also 'rapid' HIV tests available that can provide results in as little as 20 minutes. A positive HIV test result means that a person may have been infected with HIV. All positive HIV test results, regardless of whether they are from rapid or conventional tests, must be verified by a second "confirmatory" HIV test.

How can HIV be prevented?

Because the most common ways HIV is transmitted is through anal or vaginal sex or sharing drug injection equipment with a person infected with HIV, it is important to take steps to reduce the risks associated with these. They include:

- Know your HIV status. The CDC recommends that everyone between the ages of 13 and 64 should be tested for HIV at least once. If you are at increased risk for HIV, you should be tested for HIV at least once a year.
 - If you have HIV, you can get medical care, treatment, and supportive services to help you stay healthy and reduce your ability to transmit the virus to others.
 - If you are pregnant and find that you have HIV, treatments are available to reduce the chance that your baby will have HIV.
 -
- Abstain from sexual activity or be in a long-term mutually monogamous relationship with an uninfected partner.
- Limit your number of sex partners. The fewer partners you have, the less likely you are to encounter someone who is infected with HIV or another STD.
- Correct and consistent condom use. Latex condoms are highly effective at preventing transmission of HIV and some other sexually transmitted diseases. "Natural" or lambskin condoms do not provide sufficient protection against HIV infection.
- Male circumcision has also been shown to reduce the risk of HIV transmission from women to men during vaginal sex.
- Do not inject drugs. If you inject drugs, you should get counseling and treatment to stop or reduce your drug use. If you cannot stop injecting drugs, use clean needles and works when injecting.
- Obtain medical treatment immediately if you think you were exposed to HIV. Sometimes, HIV medications can prevent infection if they are started quickly. This is called post-exposure prophylaxis.

Definitions:

- **Diagnosis of HIV infection:** This refers to persons diagnosed with HIV infection, regardless of the stage of disease at diagnosis (for example, if they have progressed to AIDS) from the 45 areas (40 states and 5 U.S. dependent areas) that have had confidential name-based HIV infection reporting long enough (i.e., since at least January 2006) to allow for stabilization of data collection and for adjustment of the data in order to monitor trends. According to the cumulative estimated number of AIDS diagnoses through 2009, these 40 states represent approximately 75% of AIDS diagnoses in the 50 states and the District of Columbia.
- **AIDS Diagnosis:** This refers to persons diagnosed with Stage 3 HIV infection (AIDS), based on the 2009 CDC case definition for adults, adolescents, and children.
- **Dependent Areas:** American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.
- **40 States and 5 U.S. Dependent Areas with Confidential Name-Based HIV Infection Reporting:** Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.
- **Transmission Category:** The classification of a case that indicates the risk factor most likely to have been responsible for transmission. Cases are counted only once in a hierarchy of transmission categories. Persons with more than 1 reported risk factor for HIV infection are classified in the transmission category listed first in the hierarchy. The exception is men who report sexual contact with other men and injection drug use; this group makes up a separate transmission category.
- **HIV Incidence:** The number of new HIV infections in a specific population during a specific period of time.
- **HIV Prevalence:** The number of people living with HIV infection in a given year.

Diagnoses of HIV Infection

In 2009, the **estimated number** of diagnoses of HIV infection in the 40 states and 5 U.S. dependent areas with confidential name-based HIV infection reporting was **42,959**. Of these, **42,011** were in the 40 states and **948** were in the 5 dependent areas. In the 40 states, diagnoses of HIV infection among adults and adolescents totaled **41,845** with

31,872 diagnoses in males and **9,973** diagnoses in females, Among children under age 13 years, there were an estimated **166** diagnoses of HIV infection in 2009.

Estimated numbers resulted from statistical adjustment that accounted for delays in reporting to the health department (but not for incomplete reporting) and missing risk factor information, where appropriate.

Because totals for the estimated numbers were calculated independently of the values for the subpopulations, the subpopulation values may not equal the totals.

Current information and statistics on Florida cases can be found here:
http://www.doh.state.fl.us/Disease_ctrl/aids/Docs/HIV_Epidemic_Snapshot_FL_2010.pdf

Current information for women in Florida with HIV/AIDS can be found here:
http://www.doh.state.fl.us/Disease_ctrl/aids/Docs/HIV_AIDS_Womens_Report_4_2008.pdf

Diagnoses of HIV Infection by Age

Of the **estimated number** of diagnoses of *HIV infection* in the 40 states with confidential name-based HIV infection reporting in 2009, the distribution of ages at time of diagnosis was as follows:

Age (Years)	Estimated Number of Diagnoses of HIV Infection, 2009
Under 13	166
Ages 13-14	21
Ages 15-19	2,036
Ages 20-24	6,237
Ages 25-29	5,951
Ages 30-34	5,020
Ages 35-39	5,232
Ages 40-44	5,519
Ages 45-49	4,865
Ages 50-54	3,323
Ages 55-59	2,004
Ages 60-64	900
Ages 65 or older	736

Diagnoses of HIV Infection by Race/Ethnicity

CDC tracks diagnoses of HIV infection information on seven racial and ethnic groups: American Indian/Alaska Native; Asian; Black/African American; Hispanic/Latino; Native Hawaiian/Other Pacific Islander; White; and Multiple Races.

In 2009, the **estimated number** of diagnoses of HIV infection in the 40 states with confidential name-based HIV infection reporting, by race or ethnicity was as follows:

Race or Ethnicity	Estimated Number of Diagnoses of HIV Infection, 2009
American Indian/Alaska Native	189
Asian	470
Black/African American	21,652
Hispanic/Latino ^a	7,347
Native Hawaiian/Other Pacific Islander	34
White	11,803
Multiple Races	516

^a Hispanics/Latinos can be of any race.

Diagnoses of HIV Infection by Transmission Category

Six common transmission categories are male-to-male sexual contact, injection drug use, male-to-male sexual contact and injection drug use, heterosexual contact, mother-to-child (perinatal) transmission, and other (includes blood transfusions and unknown cause).

Following is the distribution of the **estimated number** of diagnoses of HIV infection among adults and adolescents in the 40 states with confidential name-based HIV infection reporting, by transmission category. A breakdown by sex is provided where appropriate.

Transmission Category	Estimated Number of Diagnoses of HIV Infection, 2009		
	Adult and Adolescent Males	Adult and Adolescent Females	Total
Male-to-male sexual contact	23,846	-	23,846
Injection drug use	2,449	1,483	3,932
Male-to-male sexual contact and injection drug use	1,131	-	1,131
Heterosexual contact*	4,399	8,461	12,860
Other**	47	29	76

* Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

** Includes hemophilia, blood transfusion, perinatal exposure, and risk not reported or not identified.

The distribution of the **estimated number** of diagnoses of HIV infection among children* in the 40 states with confidential name-based HIV infection reporting, by transmission category, follows:

Transmission Category	Estimated Number of Diagnoses of HIV Infection, 2009
Perinatal	131
Other**	35

* The term "children" refers to persons under age 13 years at the time of diagnosis.

** Includes hemophilia, blood transfusion, and risk not reported or not identified.

Persons Living with a Diagnosis of HIV Infection.

At the end of 2008, the **estimated number** of persons living with a diagnosis of HIV infection in the 40 states and 5 U.S. dependent areas with confidential name-based HIV infection reporting was **682,668**. In the 40 states only, this included **660,062** adults and adolescents, and **3,022** children under age 13 years.

Data includes persons with a diagnosis of HIV infection regardless of the stage of disease at diagnosis. Estimated numbers resulted from statistical adjustment that accounted for delays in reporting to the health department (but not for incomplete reporting) and missing risk factor information, where appropriate.

Because of delays in reporting of deaths, data are only available through the end of 2008. The exclusion of data from the most recent year allows at least 18 months for deaths to be reported and for these persons to be removed from calculations of persons living with a diagnosis of HIV infection.

Totals include persons of unknown race/ethnicity. Because totals for the estimated numbers were calculated independently of the values for the subpopulations, the subpopulation values may not equal the totals.

AIDS Diagnoses

In 2009, the **estimated number** of persons diagnosed with AIDS in the United States and 5 U.S. dependent areas was **34,993**. Of these, **34,247** were diagnosed in the 50 states and the District of Columbia and **747** were diagnosed in the dependent areas. In the 50 states and the District of Columbia, **25,587** AIDS diagnoses were among adult and adolescent males, **8,647** were among adult and adolescent females, and **13** diagnoses were among children under age 13 years.

The cumulative **estimated number** of AIDS diagnoses through 2009 in the United States and dependent areas was **1,142,714**. Of these, **1,108,611** were diagnosed in the 50 states and the District of Columbia and **34,103** were diagnosed in the dependent areas. In the 50 states and the District of Columbia, **878,366** cumulative AIDS diagnoses were among adult and adolescent males, **220,795** were among adult and adolescent females, and **9,448** were among children under age 13 years.

Estimated numbers resulted from statistical adjustment that accounted for delays in reporting to the health department (but not for incomplete reporting) and missing risk factor information, where appropriate.

Cumulative totals include persons of unknown race/ethnicity. Because totals for the estimated numbers were calculated independently of the values for the subpopulations, the subpopulation values may not equal the totals.

AIDS Diagnoses by Age

Of the **estimated number** of AIDS diagnoses in the 50 states and the District of Columbia, the distribution of ages at time of diagnosis was as follows:

Age (Years)	Estimated # of AIDS Diagnoses, 2009	Cumulative Estimated # of AIDS Diagnoses, through 2009*
Under 13	13	9,448
Ages 13-14	58	1,321
Ages 15-19	484	7,214
Ages 20-24	2,095	42,920
Ages 25-29	3,476	129,639
Ages 30-34	4,043	214,149
Ages 35-39	4,893	234,575
Ages 40-44	5,689	193,237
Ages 45-49	5,466	126,380
Ages 50-54	3,983	72,327
Ages 55-59	2,191	39,025
Ages 60-64	1,010	20,633
Ages 65 or older	846	17,743

* From the beginning of the epidemic through 2009.

AIDS Diagnoses by Race/Ethnicity

CDC tracks AIDS information on seven racial and ethnic groups: American Indian/Alaska Native; Asian; Black/African American; Hispanic/Latino; Native Hawaiian/Other Pacific Islander; White and Multiple Races.

In 2009, the **estimated number** of AIDS diagnoses in the 50 states and the District of Columbia, by race or ethnicity was as follows:

Race or Ethnicity	Estimated # of AIDS Diagnoses, 2009	Cumulative Estimated # of AIDS Diagnoses, Through 2009*
American Indian/Alaska Native	155	3,700
Asian ^a	429	8,324
Black/African American	16,741	466,351
Hispanic/Latino ^b	6,719	190,263
Native Hawaiian/Other Pacific Islander	50	839
White	9,467	426,102
Multiple Races	686	12,726

* From the beginning of the epidemic through 2009.

^a Includes Asian/Pacific Islander legacy cases.

^b Hispanics/Latinos can be of any race.

AIDS Diagnoses by Transmission Category

Six common transmission categories are male-to-male sexual contact, injection drug use, male-to-male sexual contact and injection drug use, heterosexual contact, mother-to-child (perinatal) transmission, and other (includes blood transfusions and unknown cause).

Following is the distribution of the estimated number of AIDS diagnoses among adults and adolescents by transmission category in the 50 states and the District of Columbia. A breakdown by sex is provided where appropriate.

Transmission Category	Estimated # of AIDS Diagnoses, 2009		
	Adult and Adolescent Males	Adult and Adolescent Females	Total
Male-to-male sexual contact	17,005	-	17,005
Injection drug use	3,012	1,930	4,942
Male-to-male sexual contact and injection drug use	1,580	-	1,580
Heterosexual contact*	3,832	6,561	10,393
Other**	158	155	313

* Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

** Includes hemophilia, blood transfusion, perinatal exposure, and risk not reported or not identified.

Transmission Category	Cumulative Estimated # of AIDS Diagnoses, Through 2009*		
	Adult and Adolescent Males	Adult and Adolescent Females	Total
Male-to-male sexual contact	529,908	-	529,908
Injection drug use	186,318	87,126	273,444
Male-to-male sexual contact and injection drug use	77,213	-	77,213
Heterosexual contact**	72,183	126,637	198,820
Other***	12,744	7,032	19,776

* From the beginning of the epidemic through 2009.

** Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

*** Includes hemophilia, blood transfusion, perinatal exposure, and risk not reported or not identified.

The distribution of the **estimated number** of AIDS diagnoses, among children* in the 50 states and the District of Columbia, by transmission categories was:

Transmission Category	Estimated # of AIDS Diagnoses, 2009	Cumulative Estimated # of AIDS Diagnoses Through 2009**
Perinatal	12	8,640
Other***	1	807

* The term "children" refers to persons under age 13 years at the time of diagnosis.

** From the beginning of the epidemic through 2009.

*** Includes hemophilia, blood transfusion, and risk not reported or not identified.

AIDS Diagnoses by Top 10 States/Dependent Areas

The 10 states or dependent areas reporting the highest number of AIDS diagnoses in 2009 were:

State/Dependent Area	# of AIDS Diagnoses, 2009
New York	4,799
Florida	4,392
California	3,760
Texas	2,652
New Jersey	1,475
Georgia	1,391
Illinois	1,202
Maryland	1,134
North Carolina	1,088
Pennsylvania	917

State/Dependent Area	# of Cumulative AIDS Diagnoses Through 2009*		
	Adults or Adolescents	Children (<13)	Total
New York	199,433	2,438	201,871
California	160,998	696	161,695
Florida	120,701	1,577	122,278
Texas	79,568	399	79,967
New Jersey	54,483	809	55,292
Georgia	39,207	253	39,460
Illinois	38,886	289	39,175
Pennsylvania	38,282	375	38,657
Maryland	35,981	332	36,313
Puerto Rico	32,867	410	33,277

* From the beginning of the epidemic through 2009.

HIV/AIDS has claimed the lives of more than 550,000 Americans. Today, about 1.1 million Americans are living with HIV, the virus that causes AIDS, and one fifth of those infected are unaware of their infection.

BUREAU OF HIV/AIDS

What is HIV?

HIV: Human Immunodeficiency Virus

H - Human - virus can only infect human beings

I - Immuno-deficiency - failure of the body's immune system to work properly

V – Virus - one of its characteristics is that it is incapable of reproducing by itself. It reproduces by taking over the machinery of the human cell.

What is AIDS?

AIDS: Acquired Immune Deficiency Syndrome

AIDS is the most serious stage of HIV infection. It results from the destruction of the infected person's immune system.

A- Acquired: passed from one person to another

I- Immune: the body's defense system against disease

D- Deficiency: lack/shortage of or breakdown

S- Syndrome: a combination of symptoms and diseases

What causes AIDS?

AIDS is caused by the human immunodeficiency virus (HIV). That is, HIV is the *VIRUS* that causes AIDS.

HIV attacks and weakens the body's immune system by destroying the body's T-helper white blood cells; white blood cells are those cells in your body that fight infections

Why Talk About AIDS?

The fastest growing group of new HIV/AIDS cases (In the U.S.) is among African American and Hispanic women.

In 2004, HIV was the **fourth** leading cause of death for Floridians between the ages of 25 and 44.*

Among African Americans in this age group, HIV infection is the **leading cause** of death.

Many of these young adults likely were infected in their teens and twenties.*

Source: http://www.nmanet.org/National_Programs_HIVAids.htm

*CDC, <http://www.cdc.gov/hiv/pubs/facts/youth.htm>

HIV and AIDS Facts

- A person infected with HIV may not show symptoms for five to ten years. People who look completely healthy can still have HIV.
- HIV can **ALWAYS** be passed to others, even if they have **no symptoms** of AIDS.

Once HIV begins to destroy the body's immune system, the affected person progresses through different phases of AIDS until they die.

Who is at risk for HIV/AIDS?

EVERYONE who practices unsafe sex, has a pre-existing STD, or uses IV drugs is at HIGH RISK for contracting HIV/AIDS.

Females are at as much risk as Males.

<http://www.niaid.nih.gov/factsheets/womenhiv.htm>

How is HIV/AIDS Contracted?

The *BIG FOUR*: *Exchange of Bodily Fluids*

1. Sexual Contact (vaginal, oral, anal); does not include casual kissing (unless open mouth sores are present)
2. Sharing Hypodermic Needles through IV drug use
3. Mother to infant transmission: In utero exchange, during birth, or through breast-feeding after birth
4. Less commonly (and now very rarely in countries where blood is screened for HIV antibodies), through transfusions of infected blood or blood clotting factors

How can you protect yourself?

ABSTINENCE

ABSTINENCE is the **only certain** way to protect yourself against contracting HIV sexually as well as contracting other STDs.

MUTUAL monogamy in your relationships after you have both been tested.

SAFE sex- *Nobody has a body to die for.*

- If you have sex, LATEX CONDOMS are the most effective protection against HIV and other sexually transmitted diseases (STD's).
- Natural membranes have small microscopic holes that can let STD's through.
- Novelty condoms (like ones that glow in the dark) should not be used.
- Don't use oil based lubrication because it will cause the condom to tear.

AVOID drug use

Routine one-time testing of everyone would cut new infections each year by just over 20% Every HIV-infected patient identified would gain an average of 1 ½ years of life.

So, what did you learn?

AIDS is a *FAILURE* of your body's immune system (your body's ability to FIGHT INFECTION)

ANYONE who is practicing unsafe sex or drunk is at HIGH RISK for contracting HIV, AIDS or another STD.

ABSTINENCE is the best protection against HIV, AIDS and other STD's, followed by CONDOMS.

Terms & Vocabulary

AIDS-defining condition: Any one of several illnesses that can lead to a diagnosis of AIDS in a person infected with HIV. AIDS is the most advanced stage of HIV infection.

Antiretroviral therapy (ART): The recommended treatment for HIV. ART involves taking a combination of three or more anti-HIV medications from at least two different drug classes every day to control the virus.

CD4 cells: Also called T cells or CD4+ T cells. Infection-fighting white blood cells of the immune system. HIV destroys CD4 cells, making it harder for the body to fight infections.

CD4 count: The number of CD4 cells in a sample of blood. A CD4 count measures how well the immune system is working. HIV: Human immunodeficiency virus. HIV is a virus that attacks the immune system, putting people infected with HIV at risk for life-threatening infections and cancer. AIDS is the most advanced stage of HIV infection.

Regimen: A combination of three or more anti-HIV medications from at least two different drug classes.

Unprotected sex: Sex without using a condom.

Teach women how to advocate for themselves. Finally, BE SMART...PROTECT yourself and others.

LINKS

<http://www.thebody.com/index/whatis/origins.html>

<http://www.cdc.gov/hiv/topics/basic/index.htm>


References

This information is based on the U.S. Department of Health and Human Services' Guidelines for the *Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents* (available at <http://aidsinfo.nih.gov/guidelines>).

Reviewed June 2011

Staying Safe from Bloodborne Pathogens; 2009 Edition
Centers for Disease Control; Atlanta, GA
Florida Department of Health

INSTRUCTIONS FOR SUBMITTING EXAMINATION ANSWERS

- Please take the final exam on line!
- Use the same link that took you to the page that was emailed to you to access the course. You can also use the “back” arrow () on the top left corner of the PDF page to go back to the ‘home’ page to take the exam.
- At the bottom of that page is a “start exam now” button for you to click for taking the exam on the ‘Judy Adams Training Center of America’ website on the internet.
- When prompted, be sure to spell your name *exactly* the way you want it to appear on your certificate of completion.
- As soon as you have completed the exam, you will be sent an email with a link to a PDF file so you can print your certificate. You can also save that PDF file for your reference. You also have an option of printing your certificate as soon as you pass the exam – before you even get your email with the link.
- The license number (if applicable) that you provide is the number that will be used to enter your hours/credit into CEBroker
- “Judy Adams Training Center of America” will be copied on your certificate and will then enter your hours into CEBroker for you!

Thank you!