Unit 10: Sexually Transmitted Diseases

Introduction

Sexually transmitted diseases can happen to anyone who has unprotected sexual intercourse.

Sexually transmitted diseases can happen to anyone who has unprotected **sexual intercourse**. It doesn't matter whether a person is clean or does not engage in **casual sex**. It doesn't matter if a person is in love with the person with whom he or she had sexual intercourse. It doesn't matter whether a person is **heterosexual** or **homosexual**. It doesn't matter if a person abstains from drinking or smoking or doing drugs. It doesn't matter whether a person does well in school or keeps physically fit. None of these things keep people safe from ***s*exually *t*ransmitted *d*iseases (STDS)**.

Sexual intercourse includes oral intercourse, anal intercourse, and vaginal intercourse. Any one of us who has had sexual intercourse may have a *sexually transmitted disease (STD)*. There are more than 25 diseases spread primarily through sexual activity.

If a person has never had sexual relations but plans to in the future, then he or she will also be at risk of getting an STD. So everyone needs to know the facts about STDs. Knowing the facts will help people take **precautions** against getting an STD. Knowing the facts will help people recognize when they have gotten an STD. Knowing the facts will tell people when and how to get checked for an STD. It's that simple.

Sexually Transmitted Disease—The Words Say a Lot

The phrase *sexually transmitted disease* says it all. Study this phrase in reverse order, from the last word to the first. A *disease* is a sickness. There are many different kinds of diseases. Some diseases are **noninfectious**, or cannot be caught. Cancer, for example, is a *noninfectious* disease. So is sickle cell anemia, a blood disease.

STDs, however, are diseases that are **infectious**—they do not come from within the body. STDs are **transmitted**, or passed, from one person to another. STDs can be passed to us, and we can pass them to others. There is no other way to get an STD than to catch it from someone who already has it. An estimated 200-400 million people worldwide are affected. In the United States, more than 65 million people have an incurable STD. Each year an additional 15 million people become infected with one or more STDs. Approximately one-fourth of these new cases of STDs in the United States will be teenagers. More than three million teenagers a year are infected with an STD.

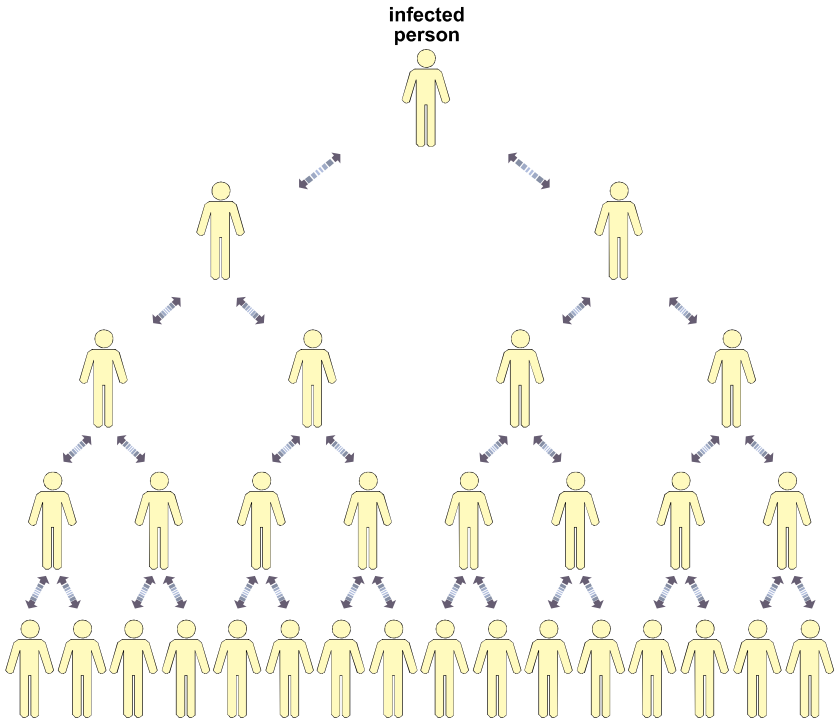
The first word in the phrase sexually transmitted disease, *sexually*, refers to sexual intercourse. Most STDs are passed from one person to another during oral, vaginal, or anal sexual intercourse. Most STDs are passed when the body fluid of a person who has an STD enters another person's body during sexual intercourse.

New Cases of Sexually Transmitted Diseases in the United States

Sexually Transmitted Disease	Estimated Number of New Cases Every Year
Chlamydia	3,000,000
Gonorrhea	650,000
Syphilis	70,000
Herpes	1,000,000
Human Papillomavirus (HPV)	5,500,500
Hepatitis B	120,000
Trichomoniasis	5,000,000

STDs: How They Grow

STDs travel from an infected person to another person through **pathogens**. *Pathogens* are very small organisms that cause diseases. They are so small that they can only be seen with a microscope. Once inside a body, these organisms begin growing. If left unchecked, some of these organisms can cause damage to parts or organs in the body. Some pathogens may attack the reproductive system. Others may attack the skin, the brain, or the heart. Some will eventually cause death. Pathogens occur in three different forms: *bacteria*, *viruses*, and *parasites*.



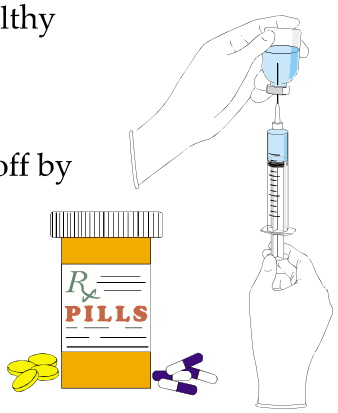
Remember factor trees in math—suppose this was the "factor tree" of an infected person who had two sexual partners, and those two sexual partners had two sexual partners, and … . Notice how rapidly the STD can spread from one infected person to many infected people.

Bacteria: The Winnable War in Our Body

Bacteria are one-celled organisms. Some bacteria in our bodies are good. They actually help us fight diseases. Good bacteria also help to digest food in our stomach. Bad bacteria, however, work in our bodies in ways

that cause disease. Bad bacteria may enter a body as a single cell. This single cell then divides into two cells. Those two cells divide into four cells, then eight, then 16, and on and on into the millions! As these bacteria grow, they damage or destroy healthy cells in our bodies.

Some bad bacteria can be destroyed by our bodies. However, STDs that are bacterial cannot be fought off by our bodies. These bacteria can only be destroyed by **antibiotics**. When we take antibiotics in a pill or as an injection, an amazing activity begins in our bodies. Antibiotics are actually very small organisms. Once in our bodies, they begin to fight and destroy bacteria. Antibiotics are a kind of very small army that we send into our bodies to do war. STDs caused by bacteria are curable. Bacterial STDs include chlamydia, gonorrhea, and syphilis.

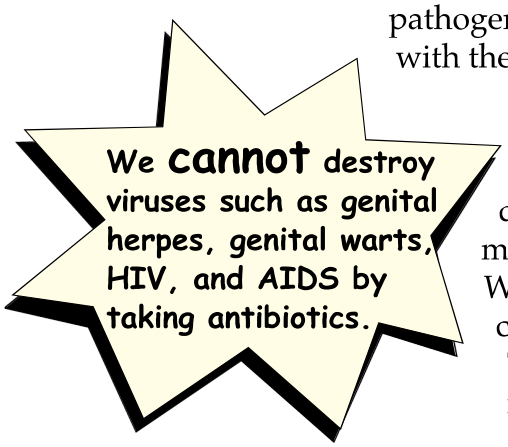


When we take antibiotics in a pill or as an injection, they begin to fight and destroy bacteria.

Viruses: Tiny but Destructive Sources of Disease

A **virus** is a very small pathogen, or source of disease. Unlike bacteria, viruses are not even considered to be living things because they cannot exist on their own. Viruses are not even made up of cells. A virus is only a piece of genetic material in a protein coating. Viruses survive and multiply by hijacking cells. They force cells to use their reproductive equipment to make more viruses.

We cannot fight and destroy viruses by taking the antibiotics we use against bacteria. Viruses can only be destroyed by **antibodies**. Antibodies are substances that the body's disease-fighting cells make in response to pathogens. For example, when we come down with the mumps, our bodies produce antibodies. These antibodies cannot destroy the mumps virus when we are first infected. But they help the body's disease-fighting system recognize the mumps virus if it tries to infect us again. With this early warning system, the body can fight off a second mumps infection. This is why most people only get the mumps one time.



Unfortunately, once people are infected with a viral STD, the virus remains in their bodies throughout life. People do not have a chance to recover from them and develop antibodies that would help fight them off. Viral STDs include genital herpes and genital warts and the ***h*uman *i*mmuno*d*eficiency *v*irus (HIV)** that causes the ***a*cquired *i*mmuno*d*eficiency *s*yndrome (AIDS)**. AIDS is also commonly written as **a***cquired* **i***mmune* **d***eficiency* **s***yndrome* and as **a***cquired* **i***mmuno***d***eficiency virus* **s***yndrome*.

Parasites: Living off Other Living Cells

Parasites are tiny animals. They live off our living cells. STDs caused by parasites include trichomoniasis, scabies, and pubic lice. They are curable when treated with medications.

STDs Caused by Bacteria

Chlamydia: The Most Common STD in the United States

Other than the common cold, *chlamydia* is the most common infectious disease in the United States. Over three million people a year become infected with chlamydia. Forty percent of chlamydia cases occur in sexually active teenagers who are 15-19 years old. Chlamydia is passed on from one person to another during sexual intercourse.

Chlamydia is the most common infectious disease in the United States.

Symptoms. Most often, people become aware of diseases in their bodies when **symptoms** appear. A *symptom* can be as slight as a runny nose or as great as paralysis. A symptom is a sign that the body has a disease or illness. Symptoms are very helpful in alerting us to problems in our bodies. Unfortunately, chlamydia may show no symptoms in our bodies, or it may show only very slight symptoms.

Seventy-five percent of women and 50 percent of men have no symptoms. Although males are more likely to experience symptoms from chlamydia than females, males may experience only mild symptoms. Males may feel a burning during urination. They may see a milky or clear discharge from their penis.

Females may experience stomach pain and vaginal discharge. Females, however, are likely to have no symptoms until chlamydia has already caused damage in their bodies. For this reason, anyone who has ever had sexual intercourse either with or without using a latex **condom** may have been exposed to chlamydia or another STD and not even know it.

A latex condom is a **contraceptive**, or a device used to avoid getting or passing an STD. If used correctly, a latex condom can make sex safer, but condoms cannot prevent infection 100 percent of the time. Sometimes condoms break and some infections, such as *genital warts*, can be transmitted if the condom does not completely cover the area. Anyone who has had unprotected sexual intercourse should be tested for STDs at their doctor's office or a health clinic.

Risks. The medical complications of chlamydia can be serious. If it spreads to a male's testicles, he may become sterile.

If chlamydia spreads to a female's reproductive system, she can develop pelvic inflammatory disease (PID). PID can be dangerous to a woman's health and life and can lead to sterility. Untreated chlamydia can also cause cervical cancer in women. Chlamydia can cause an **ectopic pregnancy** in women. An ectopic pregnancy occurs when a Fallopian tube becomes blocked and an embryo begins to grow there. This kind of pregnancy can cause the tube to rupture, a very serious, even fatal, condition. If an infected woman gives birth, her newborn may be born blind or with pneumonia—a difficult disease for a newborn to survive.

If an infected woman gives birth, her newborn may be affected.

Test and Treatment. There is a simple test done in a doctor's office to check for chlamydia. Chlamydia can be cured with antibiotics.

Gonorrhea: Causing Sterility If Untreated

Gonorrhea, also known by the common slang term *clap*, is the second most common STD. There are an estimated 650,000 new cases a year in the United States. Gonorrhea rates are highest among females ages 15-19 and males 20-24. Gonorrhea is passed on during oral, vaginal, or anal sexual intercourse.

Symptoms. Like chlamydia, gonorrhea may show only a few or even no symptoms in females and males. In fact, 80 percent of all infected females have no early symptoms. By the time some females develop any symptoms, some damage to their bodies may already have happened. This is why it is essential that males who discover they have the disease inform their sexual partners. Males can help protect females from the damage of this disease simply by alerting them.

Some symptoms that both sexes may experience from two to nine days after exposure are painful urination and a yellowish discharge from the penis or vagina. Infected persons may feel a sore throat or rectal pain and itching. Males may experience tender testicles. Females may see some bleeding after intercourse. Their menstruation following exposure may be more uncomfortable than usual.

Risks. If untreated, gonorrhea can spread through the reproductive system. Both males and females can become sterile if gonorrhea isn't treated. If a woman with gonorrhea gives birth, the infection may cause blindness in her newborn.

If the disease is not treated in its early stage, both sexes can also develop arthritis and heart problems.

Test and Treatment. A simple test of fluid from the male's penis or female's cervix can detect the disease. It can be cured with antibiotics.

Syphilis: A Silent Killer

Syphilis is a particularly devastating STD. If undetected and untreated, it can spread throughout the body and destroy many organs. About 70,000 people a year still contract this preventable disease in the United States. Syphilis is passed on during sexual intercourse or when one person's infected sex organ contacts an open cut in another person.

Symptoms. Symptoms from syphilis may not appear for 10-90 days after exposure to an infected person. The most obvious symptom is the appearance of a *chancre*. A chancre is a painless sore that appears on the genitals, rectum, or lips, or in the mouth. Chancres usually disappear within a week or two.

Some weeks or even months after chancres have disappeared, the infected person may develop a rash over the body, swollen joints, and flu-like illness.

Risks. After these symptoms disappear, an infected person may feel fine. Syphilis may then become a silent killer. He or she may experience no other symptoms, sometimes for years. Then, in the final stage of syphilis, devastation to the body begins. There can be damage to the nervous system, to the brain, and to the heart. If left untreated for many years, syphilis can cause insanity, paralysis, or even death.

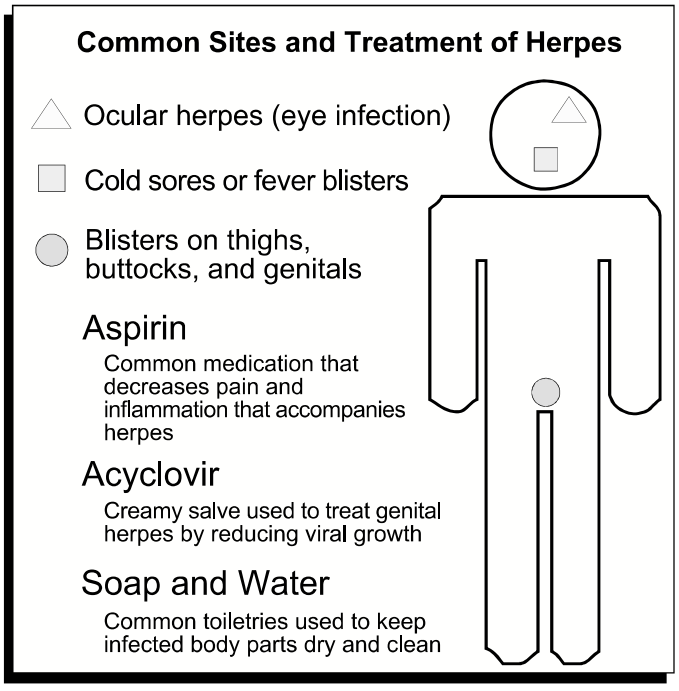
If an infected woman gives birth, her baby could have severe birth defects, including bone deformities and blindness. The baby could even die.

Test and Treatment. A simple blood test can spot the disease. Antibiotics can cure syphilis.

STDs Caused by Viruses

Genital Herpes: The Blister Disease

The numbers surrounding the STD called *genital herpes* are shocking. More than one in five people in the United States—45 million people—are infected with genital herpes. Each year another one million people get genital herpes. Herpes is more common in females than males. The herpes simplex virus that causes genital herpes has different forms. Scientists used to identify the virus that causes cold sores on the mouth and lips as *Herpes Simplex I* and the virus that causes genital herpes as *Herpes Simplex II*. Now doctors and scientists know that both kinds of herpes virus can infect the mouth and lips and the genital area.



Genital herpes is passed from one person to another during oral, vaginal, and anal sexual intercourse. A person with the disease

will experience *outbreaks*. During outbreaks, sores and blisters will appear on the genitals. During these outbreaks, an infected person can pass the disease on to another person during sexual intercourse.

Symptoms. The symptoms of genital herpes vary greatly. They all appear as some type of blister, sore, or red bumps on the skin that may appear as tiny clusters of fluid-filled blisters. They can, however, appear inside the vagina and anus, or on the thighs and lower abdomen. They can also appear in the mouth. If symptoms occur, they often show up between two and 20 days after sexual contact with an infected person.

However, some people may not experience symptoms. Or the signs may be very slight, such as a mild skin irritation in the form of skin bumps. Anyone who has sexual intercourse needs to be very aware of any changes in the skin around the genitals, anus, and mouth. Other symptoms include aching muscles, fever, and swollen glands.

Herpes sores last from one to three weeks and then go away. The person is still infected with herpes, though, and about two-thirds of those people will continue to have outbreaks of the sores from time to time.

Risks. Pregnant mothers with genital herpes can pass the disease on to their babies. In rare instances, the babies may be born blind or with encephalitis—a swelling of the brain. Recent studies have shown that babies are most at risk when they are born vaginally while the mother is having an outbreak.

Pregnant mothers with genital herpes can pass the disease on to their babies.

Test and Treatment. There is a simple test that can be done in a doctor's office to check for genital herpes. Genital herpes is a virus—it is incurable. There are, however, treatments available that can lessen and in some cases even eliminate the outbreaks. The antiviral prescription drug *acyclovir* can reduce the frequency of outbreaks.

Genital Warts: The Dangerous Wart

H*uman* **p***apilloma***v***irus* (HPV) is a virus that sometimes causes *genital warts*. In many cases, it infects people without noticeable symptoms. There are 30 types of HPV that can effect the genital area. Some types cause genital

warts; others cause infections that are invisible or cannot be seen. Genital warts is the third most common STD in the United States. An estimated 20 million people in the United States are infected with HPV that causes genital warts. More than 5.5 million new people a year become infected. Genital warts are extremely contagious, or easily spread. If you have sexual intercourse you can become infected with one or more of the many kinds of genital warts.

Symptoms. Genital warts usually appear on the vulva, vagina, cervix, penis, anus, or throat between three to four months after exposure. Warts are raised bumps that are cauliflower-shaped and the color of skin. They may itch or irritate. Warts can multiply quickly! They also can be treated, so it is essential that as soon as one genital wart is noticed, the person sees a doctor.

Many people who have the virus that causes genital warts do not develop the warts themselves. In fact, only about 10 percent of those people who have the virus ever develop warts they can see. Most women only discover they have this STD when they have a Pap smear. It is essential that males who spot warts on their genitals alert their sexual partners so they can be checked.

Risks. There are several different types of genital warts. A few of those types are associated with cancer of the penis, cervical cancer, and anal cancer. Genital warts in pregnant women can also threaten the health of the baby.

Test and Treatment. Women can be tested for genital warts with a Pap smear. Men are tested by a doctor simply checking for any visible warts or hard-to-see warts. Genital warts are a virus. The warts can be treated, but there is no treatment to cure HPV. Once the virus is on or in the body, it will remain. Doctors can, however, remove the warts. This procedure lessens the chance that the disease will spread or be passed to sexual partners.

Myths and Facts about STDs

Myth	Fact
1. It is easy to tell if a person has an STD.	1. Some people will show no outward signs they have an STD.
2. Washing genitals after sex will prevent STDs.	2. Washing is *not* an effective method to prevent STDs.
3. Birth-control pill will prevent STDs.	3. Birth-control pills offer no protection against STDs.
4. If the STD symptoms go away—do *not* go to the doctor.	4. If symptoms go away, it does not mean the STD is gone—STDs do *not* go away on their own.
5. Only one sex partner needs to be treated for an STD.	5. Sex partners must both be treated for an STD so they do *not* reinfect each other.
6. One medicine for an STD will cure any STD.	6. Consult a doctor for proper treatment—each STD requires different treatment.
7. Stop taking the medicine if feeling better.	7. Finish all medicine prescribed.

STDs Caused by Parasites

Trichomoniasis: *Trich*

Trichomoniasis is an infection in the vagina of females and in the urethra of males. It is caused by a protozoa—a tiny parasite that lives on and in the body. *Trich*, as it is sometimes called, is usually passed on from one person to another through sexual intercourse. It can also be caught by using another person's damp washcloth, towel, or bathing suit. There are about five million new cases reported each year in the United States.

Symptoms. Symptoms will usually appear about four to 20 days after exposure to this parasite. Females will get a greenish or yellowish, foul-smelling discharge from the vagina. The vagina may itch. They may have pain when urinating, and they may have to urinate often. They may notice that their vulva is swollen. Males may experience only slight symptoms. They may have some mild discomfort in the penis.

Risks. Trichomoniasis may make women more likely to develop cervical cancer. Unborn babies may be infected by their mothers.

Test and Treatment. A simple test at a doctor's office can check for trichomoniasis. Antibiotics will cure the disease. Both partners must be treated at the same time to stop the disease from coming back.

Scabies and Pubic Lice: The Itching Diseases

Both *scabies* and *pubic lice* are parasites. They can be passed from one person to another through sexual contact and through infected bedding, clothing, towels, and even toilet seats.

Anyone with either of these diseases needs to be sure not to share clothing or any other item that will touch the skin of another person.

Symptoms. Both of these diseases cause intense itching. Scabies will burrow under the skin of the genitals, buttocks, breasts, elbows, and hands. Pubic lice, also called *crabs*, will live in and lay small eggs on pubic hair.

Risks. Both of these diseases will cause skin irritation that is very uncomfortable. Both are very contagious.

Test and Treatment. Any trained professional can identify these diseases. Both scabies and pubic lice can be killed by using prescription creams. All infected clothing, bedding, towels, etc., must be washed in very hot water to kill the parasites.

AIDS: The Deadly Disease

AIDS is similar to some of the other STDs described in this unit. Like genital herpes and genital warts, AIDS is caused by a virus and cannot be cured. Like genital herpes and genital warts, AIDS is most often passed on from one person to another through sexual intercourse. However, unlike genital herpes and genital warts, AIDS is fatal. At this time, doctors and scientists think that anyone who has AIDS will eventually die from the effects of the disease.

Age	Cases of AIDS as of December 2000
Under 5	6,872
Ages 5 - 12	2,036
Ages 13 - 19	4,061
Ages 20 - 24	27,232
Ages 25 - 29	101,494
Ages 30 - 34	172,310
Ages 35 - 39	173,512
Ages 40 - 44	128,177
Ages 45 - 49	74,724
Ages 50 - 54	39,625
Ages 55 - 59	21,685
Ages 60 - 64	12,023
Ages 65 or older	10,711

Through the year 2000, more than 770,000 people were diagnosed with AIDS in the United States. Of these 770,000 people, almost half have already died from the disease. In Florida, more than 80,000 people were diagnosed with AIDS, and almost half of them have already died from the disease. In the same time period, more than 8,900 AIDS cases were reported in children under age 13.

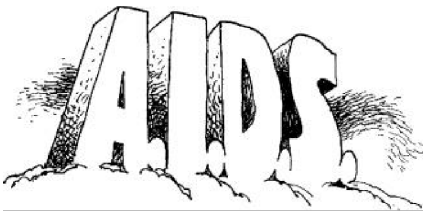
AIDS is caused by a virus that was only discovered in the early 1980s. Because the virus was only recently discovered, many myths, or untrue stories, surround AIDS. The most important way to stop the spread of AIDS is to learn the facts.

AIDS—The Words Say a Lot

AIDS stands for **a***cquired* **i***mmuno***d***eficiency* **s***yndrome*, also written **a***cquired* **i***mmune* **d***eficiency* **s***yndrome* and as **a***cquired* **i***mmuno***d***eficiency virus* **s***yndrome*. *Acquired* means that "our bodies do not produce the disease." It comes from outside the body. As with other STDs, AIDS is caused by pathogens from other persons entering the body.

Immune means "protected from." The body has an **immune system** that helps protect it from disease and infection. The AIDS virus attacks the immune system.

When the AIDS virus attacks the immune system, it begins to destroy it. The virus causes a *deficiency*, or lack, in the immune system. The immune system is then no longer able to protect the body from certain diseases and infections.



A *syndrome* is a "group of signs or symptoms that indicate a disease or illness." AIDS—acquired immunodeficiency syndrome—describes an illness caused when the immune system cannot fight or protect the body against certain infections and diseases.

How AIDS Works

To understand how AIDS works, we need to understand the basics of the immune system. The immune system has two kinds of cells that fight disease. *T cells* fight and destroy pathogens when they enter the body. T cells also trigger *B cells* to produce antibodies. These antibodies stay in the body and fight a specific disease. For example, if you have a cold, T cells will fight the cold germs. T cells will also signal B cells to produce antibodies that will recognize those cold germs and fight them in the future.

AIDS is caused by a virus known as **h***uman* **i***mmunodeficiency* **v***irus (HIV)*. HIV attacks the T cells in the immune system. HIV stops T cells from fighting pathogens and from triggering B cells to produce antibodies. In time, HIV destroys so many T cells that the immune system begins to fail. In the earlier stages of the disease, an infected person is called *HIV positive*. That means that he or she has the virus that causes AIDS. In the final stages of the disease, the person has AIDS.

The Symptoms of HIV and AIDS

The symptoms of HIV may not appear in an infected person for more than 10 years. However, during those years when a person shows no visible signs of the disease, he or she can still pass the disease on to others. Researchers believe that many people who are infected with the AIDS virus, HIV, do not even know it.

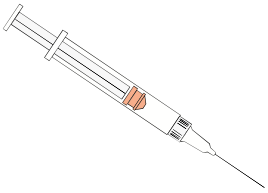
There are many different symptoms of HIV. These include a persistent fever, a nagging dry cough, frequent diarrhea, weight loss, reddish or purplish blotches on the skin, and minor illnesses and diseases.

In the latter stages of the disease—known as AIDS—the infected person often comes down with one or more *opportunistic diseases*. These are diseases that a healthy immune system would protect against. The immune system of a person with advanced HIV can't protect the person because so many T cells have been destroyed. These diseases include a rare form of pneumonia called *Pneumocystis carinii* and a rare form of cancer called *Kaposi's sarcoma*. AIDS can also cause severe mental disorders. The infected person may develop mood swings, depression, and even hallucinations.

How HIV, the AIDS Virus, Is Transmitted

How HIV is transmitted is the most misunderstood topic surrounding AIDS. You cannot get HIV from someone who is coughing or sneezing. You cannot get HIV from hugging or kissing someone with AIDS. Nor can you get the disease from sharing a bathroom with someone who has the disease. HIV, the virus that causes AIDS, does not survive well once exposed to air.

You can get HIV from passing semen, vaginal fluids, or blood with a person who is infected. This means that you can get HIV by having oral, vaginal, or anal sexual intercourse with an infected person. You can get HIV by sharing a needle used for drugs with an infected person. A pregnant mother with HIV or AIDS may pass the virus on to her newborn.



You can get HIV by sharing a needle used for drugs with an infected person.

It only takes one encounter in which semen, vaginal fluids, or blood are passed to get HIV. **And remember:** You can't tell by looking at someone whether he or she has HIV or AIDS. Because the symptoms often do not appear for several years, teenagers rarely show symptoms.

Myths and Facts about HIV and AIDS

Myth	Fact
1. You can get HIV from hugging or shaking hands.	1. You can get HIV from passing semen, vaginal fluids, or blood with a person who is infected.
2. Birth-control pills or a diaphragm can prevent getting HIV or AIDS.	2. It only takes one encounter in which semen, vaginal fluids, or blood are passed to get HIV.
3. Washing the genitals after sex prevents you from getting HIV from an infected person.	3. You can get HIV by having oral, vaginal, or anal sexual intercourse with an infected person.
4. You can take an antibiotic if you are infected with HIV by sharing a needle.	4. You can get HIV by sharing a needle used for drugs with an infected person.
5. A pregnant mother has natural antibodies that will prevent the newborn from getting the virus.	5. A pregnant mother with HIV or AIDS may pass the virus to her newborn.
6. It is easy to look at someone and tell if he or she is infected with HIV or AIDS.	6. You can't tell by looking at someone whether he or she has HIV or AIDS.

Who Is at Risk?

Everyone who has had unprotected oral, vaginal, or anal sexual intercourse without using a latex condom or who has shared needles to shoot drugs or steroids has placed themselves at risk for HIV infection. At one time, male homosexuals were the largest group of people infected by HIV or AIDS. Presently, however, heterosexuals are just as likely to contract HIV as homosexuals. The only 100 percent safe sexual activity is sexual intercourse with only one uninfected, **monogamous** partner for

Ten States/Territories Reporting the Hightest Number of AIDS Cases

State/Territory	Cases of AIDS as of December 2000
1. New York	142,164
2. California	119,826
3. Florida	80,416
4. Texas	53,987
5. New Jersey	42,143
6. Illinois	25,009
7. Puerto Rico	24,883
8. Pennsylvania	24,660
9. Georgia	22,837
10. Maryland	21,691

one's whole life. *Safer sex* refers to sexual intercourse using latex condoms consistently and correctly every time a person has sexual intercourse. Safer sex does not guarantee that a person won't get an STD or HIV, but it does make sexual intercourse less risky.

Test and Treatment for HIV and AIDS

Once HIV enters the bloodstream, the body begins to produce an HIV antibody. Doctors test for the existence of the HIV antibody to determine whether someone has been infected. This test is called the Enzyme-Linked Immunosorbent Assay *(ELISA)* test. The HIV antibody will usually show up on this test within six months after infection. If this test is positive, the patient is given a second test called a *Western blot* test. This test may confirm that the patient has HIV, or this test may show that the ELISA test was wrong.

Only a few drugs are available at this time to treat HIV and AIDS. One of these drugs is called Azidothymidine *(AZT)*. AZT cannot cure AIDS, but it can slow the development of AIDS in some patients. There is no cure for AIDS. Researchers continue to look for a cure and have very recently had some promising results.

Protecting against STDs

Reducing the Risk of STDs

If we talk to enough people who have had a curable STD, we are likely to hear: "I was lucky. Very lucky. Maybe next time I won't be so lucky." If we ask practically anyone who has an incurable STD, we'll probably hear: "I was stupid. I didn't know what the risks were, and my lack of knowledge led to an incurable STD." Or we might hear this: "I only had sex once. Just

once! I loved my partner, and so I did it. But that's all it took!" Or we might hear this: "I thought I was indestructible. I thought it couldn't happen to me. I took chances, and now I've got a problem."

We know of several ways to decrease the risk of catching an STD. Lifetime **sexual abstinence** from sexual intercourse eliminates the chance that a person will get HIV sexually. *Sexual abstinence* means not having oral, vaginal, or anal sexual intercourse. If a person does not ever have sexual intercourse, he or she can eliminate almost completely the risk of ever getting a *sexually transmitted disease.*

The way to greatly reduce nearly all risk of STDs is to practice lifetime, mutual monogamy.

Abstinence can be practiced by anyone. A person who has had sexual intercourse can choose to become abstinent at any time.

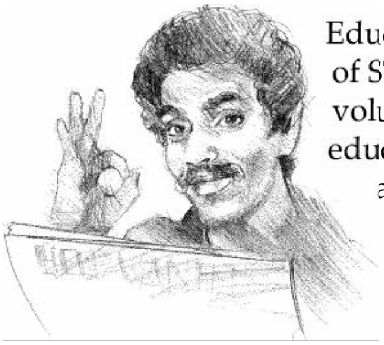
The way to greatly reduce nearly all risk of STDs is to have sexual intercourse with only one uninfected partner who has sex only with you for your whole lives. This is called *lifetime, mutual monogamy*.

If a person does have sexual intercourse outside of a lifetime, mutually monogamous relationship, there is no such thing as 100 percent safe sex. People can, however, have *safer* sex.

Most important in having safer sex is avoiding the body fluids of another person. To have safer sex takes thought and discipline. People who are sexually active should use a latex condom with an approved spermicide, and they should use the latex condom correctly each and every time they have sexual intercourse. (**Remember:** Condoms are not perfect; they are only helpful if the person using them uses them correctly each and every time he or she has sex.)

Responding to STDs

If you have any symptoms of any STDs, take action at once. Talk to a parent, or see a counselor, nurse, or doctor at your school. Go to a public health department or an STD clinic, or see your doctor. STDs never get better by themselves. Many of them are easily cured, particularly when treated early.



Education is the best tool for preventing the spread of STD's and HIV.

Education is the best tool for preventing the spread of STDs and HIV. Teenagers are encouraged to volunteer with school and local agencies to help educate as many people as possible throughout their areas. Many towns and cities provide local nonprofit organizations to benefit the public. Healthy communities are ones that work together to eliminate disease and other health problems. Talk with your school counselor if you are interested in joining a community service group in your area.

Notify Partners

If a person is diagnosed with an STD, he or she should notify all sexual partners. This can be done on the phone or in person and only when there is no one else who can hear the conversation. This is a strictly private matter! Anyone who is infected needs to be honest and up-front. The person should tell his or her partner what STD he or she has and encourage the other person to see a doctor.

All people are responsible for their bodies. When people discover a disease in their bodies and don't tell those they may have infected, they are being irresponsible and dishonest. They are letting others suffer potentially devastating diseases because they are not strong enough to face the truth.

STDs and Love

There are some ways to (nearly) eliminate the risk of getting an STD. There are some ways to reduce the chances of getting an STD. And there are some STDs that can be cured by antibiotics and special creams. But what if you or someone you love gets an incurable STD? What if you or someone you love has genital herpes, genital warts, or AIDS? What do you do then?

If a person has an incurable STD, the first responsibility is to learn everything about the disease. Finding out how to practice safer sex can reduce the chance of passing the disease to someone else. Using a latex condom can reduce the chances of passing on all STDs, including genital herpes, genital warts, and AIDS.

Education is the first line of defense. Local health clinics or health departments can provide the most recent information on living with an STD.

Telling a potential sexual partner about any STDs is each person's responsibility. This can be difficult. It will make a person feel vulnerable. Learning *how* to tell someone about an STD will help a person who is infected get through this difficult experience. Local health clinics or health departments can provide names of *help groups*. In these groups, infected individuals can learn how to talk to someone about STDs.

Always ask a potential sexual partner about his or her sexual history. Does he or she have an STD? Has he or she been checked recently? Does he or she engage in high-risk behavior? **Remember:** Some people may not be honest about their past or their diseases. More and more people have decided to wait until they have known someone for a long time and have married that person before having sex.

Not having sex is the one sure way to prevent a sexually transmitted disease.

Summary

Anyone who has *sexual intercourse* can be *infected* with an *STD (sexually transmitted disease)*. STDs are *transmitted*, or passed, through *pathogens* from one person to another during sex or while sharing needles.

STDs are caused by three different kinds of pathogens. STDs caused by *bacteria* include chlamydia, gonorrhea, and syphilis. Bacterial STDs can be cured by *antibiotics* if treated early enough.

STDs caused by *viruses* include genital herpes, genital warts, and *AIDS*. These STDs are incurable. The body cannot produce *antibodies* that can kill these viruses. AIDS (acquired immunodeficiency syndrome) is also fatal. AIDS can be passed through semen, vaginal fluids, and blood.

Unborn babies may be infected by their mothers with HIV.

STDs caused by *parasites* include trichomoniasis, scabies, and pubic lice. All three can be cured with medication.

Most STDs produce *symptoms*, or signs, that indicate an illness or disorder. Whenever there is a change in a person's body, no matter how slight, the person should see a doctor. Even a nagging, dry cough can be a symptom of an STD. Early treatment is always helpful. Some STDs produce no symptoms or symptoms that are hard to recognize. For this reason, teenagers who have had sexual intercourse should see a doctor for tests.

We can protect ourselves from STDs by practicing *sexual abstinence*, or not having sex. Abstinence is the only 100 percent effective way of not getting a viral or bacterial STD. Practicing *monogamy* with a spouse who has tested negative for STDs is also a good way to avoid STDs.

There is no such thing as "safe sex." We can practice "safer sex," however. Avoiding the body fluids of another person during sexual intercourse is the most important *precaution*. Using a latex *condom* is an effective, but not perfect, practice for avoiding STDs.

Remember: Education is the best defense against STDs.