## SURGEON GENERAL'S REPORT TO THE AMERICAN PUBLIC ON HIV INFECTION AND AIDS

#### A Message from the Surgeon General



Surgeon General Antonia Coello Novello, M.D., M.P.H.

It began, like so many epidemics, with a few isolated cases, a whisper that caught the ear of only a few in medical research. Today, that whisper has become a roar heard around the world. AIDS—acquired immunodeficiency syndrome—is now the epidemic of our generation, invading our lives in ways we never imagined—testing our scientific knowledge, probing our private values, and sapping our strength. AIDS no longer attracts our attention—it commands it.

This report is for you, the American people. It is meant to provide you with the facts about the epidemic of HIV infection and AIDS and to tell you how to protect yourself and those you love.

More than 12 years have passed since people began to die of AIDS. About 1 million Americans are now infected with human immunodeficiency virus (HIV), the virus that causes AIDS. That is about 1 American out of every 250. In the next 10 years, many

more Americans will develop this fatal disease, and more persons of all ages will become infected.

AIDS is already a leading killer of men and women 15 to 44 years old in our country. HIV infection continues to spread, despite the fact that most people know how to prevent it. Too many people continue to take chances, and too many of them become infected. Sadly, everyone infected with HIV will very likely eventually develop AIDS.

Some people ask why AIDS is so important compared with other diseases. After all, more people die each year of heart disease and cancer than of AIDS. The issue is not whether AIDS is more or less important than any other single disease. From a public health standpoint, the concern is that HIV infection has now become an epidemic—transmitted from an infected person to a non-infected person, spreading relentlessly, yet able to be prevented. That is why, as your Surgeon General, I have placed such emphasis on HIV and AIDS education.

Adolescents are a special concern. During the 1990s, we have seen our children confronted by issues of sexuality and drugs as never before in our generation. More and more adolescents are becoming infected with HIV. As parents, we cannot stand idly by while AIDS threatens our children's future.

Yes, it is painful to think about the temptations and the dangers they face every day. But sex and drugs are facts of life; we can no more ignore them than we can death itself. We must prepare our children to face the reality of AIDS in their lives.

To face the challenges ahead, our children must have scientific, dependable information about HIV and AIDS. And equally important, they must have our understanding and support and trust.

I continue to hear that "AIDS isn't my problem. . . it's theirs." The truth is that AIDS is everyone's problem. Because so many people are infected with HIV, all of us who share our fragile humanity are also affected—if not by the virus itself, then by those devastating companions of AIDS—fear, loss, sorrow, denial, and prejudice.

We must face our fears squarely and shed our false beliefs about HIV and AIDS. We need to know how deeply HIV and AIDS affect our communities. We must care for those infected with and affected by HIV, and we must prevent further infections.

I believe good health is intertwined with hope and optimism. We know that a positive self-image is a critical part of the healing process. As the nation's doctor, I do not say this lightly, because I am in the business of healing and curing.

So many people with HIV might be prone to say, "What's the use?" Let me answer that plea as a doctor, in just one word: LIVING and living with dignity. As a society, we must care not only to promote and prolong human life, but equally to promote its quality. Having AIDS does not signal an end to life or to the spirit. Rather, the experience of illness can also inspire. Until there is a cure, we must live with AIDS the only way we know how: by devoting ourselves to LIFE.

This report offers no shortcuts or false promises. It describes what we know and what we can do now: getting educated about HIV/AIDS and its relationship to sex and drugs; getting the benefits of early counseling; going for testing and treatment, if HIV infected; monitoring the immune system; eating a nutritionally sound diet; getting plenty of rest and exercise; reducing stress; and limiting or eliminating the use of alcohol, tobacco, and other drugs.

You may find it difficult to deal with some of the information in this report and to convey these painful realities to your family and friends. But remember that coming to grips with the facts of life is, in itself, crucial to our well-being.

As members of the American family, we must reach out through our local communities to help educate others about AIDS, to help those who are ill, and above all, to help erase fear, prejudice, and discrimination from our lives.

Until there is a cure, we must instill hope in those who are discouraged, reassure the worried with practical advice, and inspire those who are ill with a renewed sense of control over their health and well-being.

Scientists around the world are fighting AIDS with the newest methods of modern medicine. Let us join them by fighting AIDS with our minds and hearts. And, as we do so, let us make compassion our constant companion.

Antonia Coello Novello, M.D., M.P.H.

Stehma Coeile Westellmi

Surgeon General

## **C**ONTENTS

HIV INFECTION AND AIDS — A STATUS REPORT		1
KNOW THE FACTS ABOUT HIV		5
How You Get HIV, and How You Don't		6
ARE YOU AT RISK?		10
How to Protect Yourself From HIV Infection		14
Research Advances are Promising		17
LIVING WITH HIV AND AIDS		19
YOU CAN HELP STOP AIDS		21
Appendix:	Summary of Centers for Disease Control and Prevention (CDC) AIDS Case Reports	24
NEED MORE INFORMATION? - TELEPHONE NUMBERS		26



How many more?

### HIV INFECTION AND AIDS-A STATUS REPORT

Infection with human immunodeficiency virus (HIV), the virus that causes acquired immunodeficiency syndrome (AIDS), is one of our country's greatest health challenges. Today 1 million Americans—1 in every 250—are infected with HIV. About 1 in 100 men and 1 in 800 women are now infected with HIV. Most of them look and feel healthy, since it takes an average of 10 years before a person with HIV develops AIDS. For infants and some adults, this time may be much shorter.

The first cases of AIDS were reported in 1981. By the end of 1992, more than 250,000 Americans had developed AIDS and more than 170,000 had died—nearly three times more Americans than those who died in the Vietnam War. In 1993 alone, from 47,000 to 66,000 more Americans may die of AIDS; an estimated 40,000 to 80,000 will get infected with HIV.

In this second decade of the AIDS epidemic, gay men still account for the majority of AIDS cases reported each year and continue to suffer an enormous burden. However, AIDS is becoming more prominent in the young and in heterosexual men and women. AIDS is now one of the three main causes of death for women and men 15 to 44 years old in this country. It is among the top 10 causes of death for children 1 to 4 years old. AIDS is now becoming a disease of families.

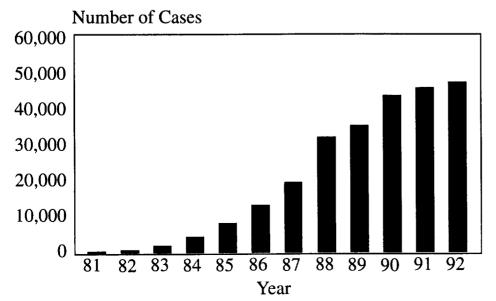
Today, most of the people with AIDS are young adults. Although survival times have improved greatly for people who are diagnosed early and receive medical treatment, the disease is usually fatal. Survival times today are about the same for men and women when they find out about their infection early and receive comparable medical treatment.

#### **Heterosexual Spread of AIDS**

Although most reported AIDS cases continue to be among men who have sex with men and among injecting drug users, cases due to heterosexual contact have been increasing over the last several years. In 1992, 9 percent

of the total AIDS cases and 39 percent of reported AIDS cases in women were attributable to heterosexual contact, an increase of nearly 42 percent from 1990 to 1992.

# New AIDS Cases Each Year, by Year of Report, United States, 1981-1992



# AIDS Is Increasing Among Racial and Ethnic Minority Populations

People of ALL races and ethnic groups have been infected with HIV, but racial and ethnic minority populations have been most disproportionately affected.

Through 1992, 47 percent of all reported AIDS cases were among blacks and Hispanics, while these two population groups represent only 21 percent of the total U.S. population. Asians and Pacific Islanders and American Indians and Alaska Natives account for a small percentage of all reported AIDS cases.

### AIDS Is Increasing Outside Big Cities

Most people with HIV infection and AIDS live in big cities, but the number of people developing AIDS in smaller cities, towns, and rural areas is growing. The highest U.S. rates are in the Northeast and in Puerto Rico, but the rest of the country has been catching up. Before 1985, more than half of the children with AIDS were from New York City, Newark, and Miami; since then, the majority of children with AIDS have come from outside these cities.

### Cumulative AIDS Cases Among Adult and Adolescent Women Ages 13 and Older, United States, 1981-1992

Number of Cases
7,000
6,000
5,000
4,000
3,000
2,000
1,000
81 82 83 84 85 86 87 88 89 90 91 92
Year



Women are at risk for HIV infection.

#### More Women Are Becoming Infected

The Centers for Disease Control and Prevention (CDC) estimates that about 100,000 women in the United States are infected with HIV. They comprise 11 percent of all AIDS cases, and the percentage increases each year. Almost half of the cases of AIDS in women have been reported in the last 2 years.

Women can get HIV infection by having sex with somebody infected with HIV or using "contaminated" needles (previously used by an HIV-infected person) to inject drugs. While nearly half of the women with AIDS today got infected by using contaminated needles to inject drugs, more and more women are becoming infected through unprotected sex with infected men.

There is evidence that, like other sexually transmitted diseases (STDs), women may be more likely to get HIV during sex from an infected man than a man is to get it from an infected woman. However, women infected with HIV can transmit the virus to men. Cases among women who have sex only with women have been reported, although the number of cases is small: only four cases of possible female-to-female HIV sexual transmission have been reported in the medical literature.



Children of HIV-infected women often become orphans.

#### Children of the Epidemic

An added tragedy to the growing AIDS epidemic is the children infected with HIV and the thousands of others who will be orphaned when their mothers or fathers die from AIDS. Through December 1992, more than 4,000 children were reported with AIDS—most of them were infected through contact between the infected mother and her child before it is born or during birth. However, she can also infect her baby through breastfeeding.

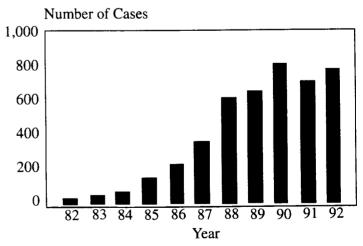


One in four babies of HIV-infected women may be infected.

There are also many more children who are infected with HIV but have not been diagnosed with AIDS. About one of every four babies born to infected women will have HIV infection. In addition, a small number of children with AIDS were infected through blood transfusions and blood products received before testing of blood began in 1985.

By 1994, an estimated 7,500 children in the United States will have developed AIDS from being infected before or during birth, or from breastfeeding after birth. During the next decade, at least 125,000 children will become orphans of this epidemic and will need to be cared for by family members, caring adults, or extended family members—or placed in foster care. These orphaned children, three-fourths of them not infected with HIV, will require our care, financially and socially.

### New AIDS Cases Each Year Among Children 13 Years of Age and Younger, United States, 1982-1992





Can you tell if your partner has HIV?

#### **Teenagers Are Getting Infected**

The teen years are often a time of experimentation with alcohol, drugs, and sex. Some teenagers don't believe they can become infected with HIV because they rarely see people their own age who have AIDS. Teens need to understand this discrepancy. Because the time between getting infected with HIV and developing AIDS can be 10 years or more, many people with AIDS who are in their 20s (currently 1 of 5 reported with AIDS) were infected while they were teenagers.

Teenagers who share needles to inject drugs (including steroids) or who have sex without a latex condom are getting infected. However, most won't show any symptoms of HIV infection or AIDS until they are in their 20s, even though they can still transmit the infection to others.

## We Now Have Treatments for HIV Infection

We now have medical treatments that can delay many of the illnesses associated with AIDS, and more treatments are on the way. There is hope for a vaccine in the future. However, unless many Americans change some of their behaviors, hundreds of thousands more Americans will become infected before the year 2000.

### KNOW THE FACTS ABOUT HIV

#### HIV Is the Virus That Causes AIDS

After a person is infected with HIV, the virus gradually weakens the disease-fighting immune system of that person. A weakened immune system lets other diseases successfully attack the body. When a person's immune system is so weakened by HIV that his or her body can no longer fight off serious infections and some types of cancer, that person develops AIDS.

#### Early Symptoms Are Hard to Spot

Most people do not have any symptoms when they are first infected with HIV. Because they look and feel healthy, most people with HIV infection don't know they are infected until they have an HIV test. However, HIV is in their bodies and they can infect other people.

### Symptoms of AIDS or HIV Disease Eventually Appear

It may take anywhere from a few weeks to many years for symptoms to appear. Symptoms of AIDS or HIV disease can take many forms, but the symptoms usually include fever, diarrhea, weight loss, tiredness, and enlarged lymph glands. Since HIV destroys the immune system, a person with AIDS often gets many types of infections, and those infections happen more often and get worse. Some infections that may occur include yeast infections in the mouth or throat and serious infections caused by the herpes viruses.

Other common problems that occur when the person develops AIDS are certain pneumonias (*Pneumocystis carinii*) that cause coughing, fever, and difficult breathing, and a form of cancer (Kaposi's sarcoma) that produces purple blotches on the skin. Tuberculosis is also a common problem in some areas of the country. Some of these illnesses may not get better even with medication or they may come back again and again. HIV can also affect the brain, causing loss of memory or other nervous system or mental symptoms.

## Other Symptoms of HIV Infection in Women

In women, the first signs of HIV infection may be any of the ones listed above or repeated serious yeast infections of the vagina. Vaginal yeast infections are common in women for many reasons other than HIV infection and can be treated with over-the-counter medications.

Women with yeast infections that do not readily go away with treatment, however, or that happen over and over again, should be tested for HIV, especially if their behaviors place them at risk. Women with HIV infection may also be at increased risk of cancer of the cervix, and other conditions such as pelvic inflammatory disease. In HIV-infected women, these conditions may be more severe or difficult to treat. All such women should get PAP smears at least once a year.

## How You GET HIV, AND HOW YOU DON'T

#### HIV is Everyone's Concern

Your age doesn't matter. Neither does your race, religion, hometown, or gender. No matter who you are or where you live, it's possible you know somebody who has HIV infection or AIDS or may be at risk. It may be a friend or coworker. It may be a member of your family. It may be you.

#### **How HIV Spreads**

HIV is in the blood, semen, or vaginal secretions of an infected person. The two main ways of spreading HIV are having sex and using contaminated needles to inject drugs. In addition, infected women can pass HIV infection to their newborns.

### **Unprotected Sex Is Dangerous**

"Unprotected sex" is sex without a latex condom. HIV can be in semen (including the first drop of fluid, even before ejaculation) and in vaginal fluids. HIV can enter the body through the vagina, penis, rectum, and, when engaging in oral sex, through the mouth. Anal sex is especially risky for both men and women. Any form of unprotected sex is risky, including oral sex. Although condoms are not perfect, they are highly effective in preventing HIV and other STDs when used consistently and correctly. Condom failure is usually due to a person not using the condom correctly, rather than flaws in the condom itself.

### Oral Sex Can Spread HIV

Getting semen, vaginal secretions, or blood from an infected person in your mouth puts you at risk of HIV infection. The risk of getting HIV from oral sex is not as

high as from anal or vaginal sex, but there is a risk. Sores or cuts anywhere in your mouth would make oral sex even more risky.

### Sexually Transmitted Diseases (STDs) Increase Your Chances of Getting HIV

Some STDs, such as herpes or syphilis, produce open sores or blisters on the genitals. These sores or blisters make it easier for HIV to be transmitted during sex.

Other STDs, including gonorrhea and chlamydia, place a person at higher risk of getting HIV infection.

#### Sex with Multiple Partners Increases Your Risk

If you have sex with more than one person, you increase your odds of having sex with someone infected with HIV or other STDs. The more people you have sex with, the greater your risk of getting infected. In a sense, you are also "having sex" with all the people your partner has had sex with.

#### Contraceptives Other Than Condoms Do Not Protect You

Birth control pills, sponges, foams, diaphragms, intrauterine devices (IUDs), or being sterilized do not protect you from HIV. Having sex during your period or while pregnant does not protect you either. No matter what method you use for birth control, a latex condom—when used correctly and consistently—offers the best protection against HIV and other STDs.



Using contaminated needles is risky.

## Using Contaminated Needles to Inject Drugs Is Very Risky

When a person injects drugs into his/her body, some of that person's blood remains in the needle or syringe. If someone else then uses the same needle or syringe ("works") to inject drugs, he/she could be shooting HIV directly into the bloodstream. This makes using needles or syringes that have been used by someone else one of the riskiest things you can do.

## Any Drug Use May Increase Your Risk of Unsafe Behaviors

When you are under the influence of alcohol, cocaine, heroin, or other drugs, you are not thinking clearly. This can lead you to take risks for HIV infection, such as having sex with people with whom you would not normally have sex or having sex without a condom. Crack and other forms of cocaine are associated with risky sexual activity. Don't mix sex with alcohol or other drugs that affect your judgment.

## Pregnant Women Can Pass HIV to Their Newborn Babies

Women infected with HIV can infect their newborn babies. About one of every four babies born to infected women will have HIV infection. The time from birth to the development of AIDS for these infected children varies from weeks to years. Most often, the mother passes the HIV infection to her baby before it is born or during the birth. However, a baby can also become infected by breastfeeding from an infected woman. In the United States, if the mother is infected, the baby should be given formula instead of breast milk.

A baby born to an HIV-infected woman will test positive for HIV at birth whether or not the baby itself is actually infected, since the positive antibody is transferred from the mother. If the baby is not infected, its HIV test will become negative within about a year and a half. Most of the babies born to HIV-infected mothers will not have HIV infection, but they will probably become orphans because their mothers and, often, their fathers are infected and will likely die before the child is grown.

#### Ways You Do Not Get HIV Infection

There are no reports of HIV transmission from saliva, tears, or human bites.

You do not get HIV from:

- Being bitten by mosquitoes or other bugs
- · Being bitten by an animal
- Eating food handled, prepared, or served by somebody with HIV infection
- Sharing toilets, telephones, or clothes
- Sharing forks, spoons, knives, or drinking glasses
- Touching, hugging, or kissing a person with HIV infection
- Attending school, church, shopping malls, or other public places with HIV-infected people.

#### You Don't Get HIV from Sports

Based on current knowledge, participation in sports carries virtually no risk for getting HIV. This is because most sports do not involve contact likely to cause bleeding. If bleeding occurs, however, you should minimize contact with an injured person's blood. It is also advisable to remove the injured person from further play until bleeding is controlled. Sweat from an HIV-infected athlete will not transmit HIV infection.

#### You Don't Get HIV from Kissing

It has been known for years that a small amount of HIV may be present in the saliva of some infected people. However, the amount of HIV in saliva is much less than in blood, semen, or vaginal fluids. Even deep or "French" kissing seems to have little risk for transmitting HIV.

#### Going to the Doctor or Dentist Is Safe

To date, six people are known to have been infected with HIV while getting medical or dental treatment, and all six of them were infected by one infected dentist. Even though scientists have looked carefully at over 19,000 persons treated by HIV-infected health care providers, this is the ONLY time we know of where any medical or dental patient was infected with HIV during treatment. Doctors, dentists, and hospitals have been given information about how to prevent the spread of HIV infection in health care settings. If you are worried about getting HIV or any other infection from your doctor or dentist, share your concern and talk to them about it.



No matter what shape you're in, you can get infected with HIV.

#### Our Blood Supply Is Among the Safest in the World

Today, there is very little chance of getting HIV from a blood transfusion, certainly not enough to stop you from receiving blood if your doctor feels you need it. Clotting factors obtained from donated blood are equally safe. Nearly all people infected with HIV through blood transfusions received those transfusions before 1985, the year it became possible to test donated blood for HIV.

Since mid-1983, all blood donations in the United States have come from volunteers who are questioned about their risks for HIV infection. People at increased risk of being infected are not allowed to donate blood. Since mid-1985, all donated blood has been tested for HIV and other viruses (seven different tests are now conducted on each blood sample). Blood that tests positive for HIV is safely discarded and is not used for transfusion. Donors are confidentially told that they are infected with HIV, and they are not allowed to donate blood again.

There is NO RISK of getting infected with HIV by GIVING blood because a new, sterile needle is used for each blood donation.

#### **Organ and Tissue Transplants**

Organ and tissue transplants are becoming more common. As with blood transfusions, the Public Health Service and the American Association of Tissue Banks have recommended that attempts be made to eliminate donors at high risk, that all donors be tested, and that organs and tissues from donors testing positive for HIV not be used. Thus, there is very little chance of getting HIV from a transplant.

#### Artificial Insemination and HIV

To be safe, sperm banks are requested to test sperm donors for HIV at the time of the donation, freeze and quarantine the sperm, and test the donor again 6 months later. If both HIV tests are negative, the sperm can then be thawed and used. If you are considering artificial insemination, talk to your doctor or call your sperm bank to discuss the procedures they use to protect you from HIV infection.

### ARE YOU AT RISK?

#### **Assess Your OWN Risk**

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

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

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

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

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

Did you or any of your sex partners:

- receive treatment for hemophilia between 1978 through 1985?
- have a blood transfusion or organ transplant between 1978 through 1985?

If we are to stop the spread of HIV, we must talk about it openly and honestly. The preceding questions cover the most common risks and raise topics that you may not be used to discussing.

Every person is responsible for his or her actions. HIV is passed from person to person because of what people do. Not because of who they are, where they came from, or where they live. Your actions can keep you at no risk or place you at high risk of infection. Remember, these issues must be dealt with frankly and in plain language if we are to stop this epidemic.

If you answered "yes" to any of the above questions, or if you have any doubts about how to answer these questions, it does not mean that you have HIV or other STDs. It does mean you should go to your doctor or local health clinic, talk to them about your situation, get information, and then decide if you need to be tested. If you are concerned, seek counseling and get tested. You may have HIV infection and look and feel healthy. Early diagnosis and treatment can slow the development of HIV infection into AIDS and can also help you protect your sex or drug partners.

If you don't have a doctor, your medical society can refer you to one. Or, you can find a clinic or community health center that provides both counseling and testing. At some sites, you don't even have to give your name to be tested, because testing is done anonymously. Some sites will test you for free; others will charge a fee. To find a testing site near you, call your local or state public health department or the CDC National AIDS Hotline (1-800-342-AIDS).



Can you tell who has HIV infection?

#### Facts About the HIV Tests

To know for certain if you are infected with HIV, you must have your blood tested specifically for HIV infection, not just a "routine" blood test. The tests available today to detect HIV infection are among the most accurate medical tests known. Two separate tests for HIV (called ELISA and Western blot), when used together, are correct more than 99.9 percent of the time.

When you become infected with HIV, your body makes substances called antibodies. These HIV antibodies usually show up in the test within 3 months after you become infected, and almost all people who are infected will show antibodies in their blood within 6 months. The tests detect these antibodies, not the virus itself. If your HIV test is negative, it means no antibodies were found and you probably are not infected with HIV. However, if you did something risky less than 6 months before the test, you may need to be tested again later just to be sure you are not infected.

Remember, testing negative today does not mean you can't get infected in the future if you use contaminated needles or have sex with an infected person. Even after a previous negative test, if you do something that puts you at risk for HIV infection, you could get infected.

Most people who test negative feel a sense of relief. If you test negative, this is the perfect time to stop doing things that may put you at risk again.

If you test positive, the sooner you take steps to protect your health and the health of others, the better. Early treatment, a healthy lifestyle, and a positive attitude can help you stay well.

#### What Has Your Sex Partner Done?

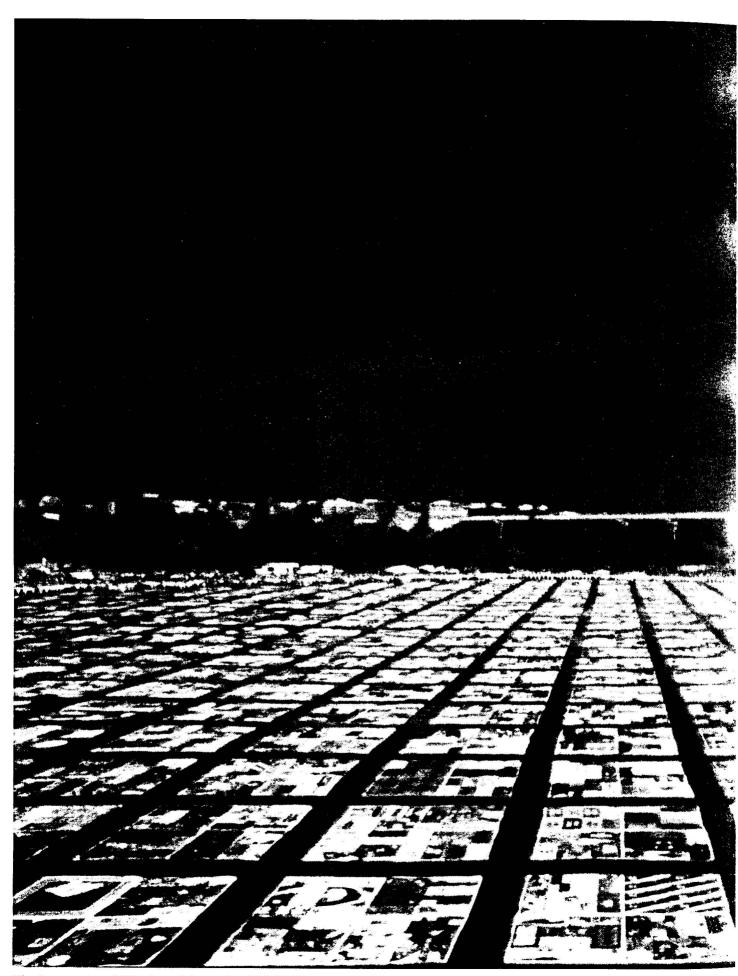
It's hard to be absolutely sure what risks your sex partner has taken. Don't take someone's word for whether or not they might be infected, no matter how well you know them. Remember, you can't tell just by looking at someone whether they are or are not infected. Some people don't understand that something they did might have infected them. Some people don't know if they are infected because they haven't been tested. Some people deny that they might be infected. Some people don't tell the truth. If you're not sure whether your sex partner is infected, ask your doctor or someone at your clinic whether you need to be tested. In the meantime, the safest thing to do is to avoid having sex with your partners until you are sure they are not infected, or to use a latex condom correctly each time you have sex.



How do you know what your partner has done?

#### What About a Blood Transfusion?

From 1978 through 1985, a small proportion of the blood used for transfusion or blood clotting factor concentrates (used by people with hemophilia or "bleeding disorder") was infected with HIV. If you received blood or clotting factors between 1978 through 1985, you could have been infected with HIV and should be tested.



 ${\it The International \ Display \ of the \ entire \ NAMES \ Project \ AIDS \ Memorial \ Quilt.}$ 

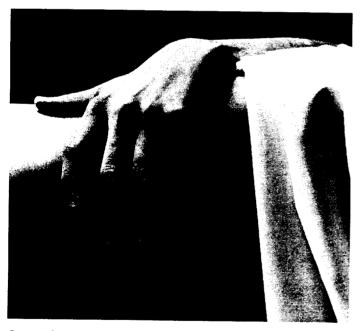


Photo by Mark Thiessen.

## How to Protect Yourself From HIV Infection

#### **HIV** and Sex

The surest way to protect yourself against HIV infection and STDs is not to have sex at all, or to have sex only with one steady, uninfected partner. It is best for you to wait to have sex until you and your partner are committed to a relationship. If you are not in such a relationship, and engage in sex, you should use a latex condom correctly every time you have sex. It's not a matter of how much you trust someone, or how well you know him or her, or how healthy he or she looks—condoms help protect both of you.



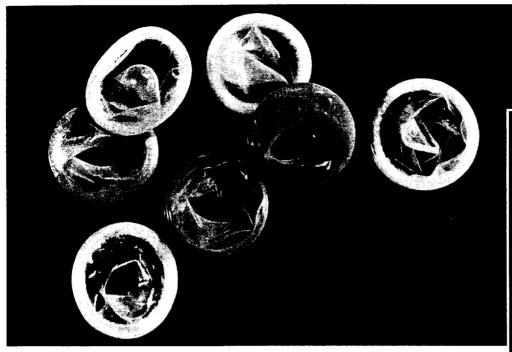
Sex with a steady, uninfected partner is one of the surest ways to protect yourself against HIV infection and STDs.

## Latex Condoms Can Prevent HIV Infection

A latex condom, used properly, helps protect you and your partner from HIV and other infections spread through having sex. When used correctly and consistently, latex condoms are highly effective in preventing HIV infection and other STDs. The latex condom, correctly used, stops semen or vaginal fluids, which might have HIV in them, from passing from one person to another. This is only true for latex condoms; natural membrane (lamb skin) condoms will not provide protection against HIV because they contain tiny pores or holes. Always look for the words "latex condom" on the package when you purchase your condoms.

"Female condoms" (pouches that fit into the vagina) are being evaluated; one has been approved by the Food and Drug Administration (FDA). Because they have not been fully tested, how well they protect against HIV infection is uncertain.

You and your partner should agree to use condoms before you start having sex. You should not expose condoms to heat or sunlight, and you should make sure to check the manufacturer's expiration date on the package before use. If you have questions about selecting or using condoms, talk to your doctor, pharmacist, or counselor at your health department or AIDS service organization, or call the CDC National AIDS Hotline (1-800-342-AIDS).



The new female condom.



Latex condoms.

#### The Proper Use of Condoms

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

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

#### **Spermicides**

Studies show that some spermicides kill HIV in test tubes. However, the ability of a spermicide to kill HIV in the vagina during sex is uncertain. Spermicides alone should not be used for HIV prevention. When used with a condom, the spermicide (gel, foam, film, or suppository) should be put directly inside the vagina according to the directions on the package. The amount of spermicide in a spermicide-lubricated condom is not enough to provide protection against HIV.

Adding spermicide to the inside of a condom does not help. If the condom were to break, the semen (and any HIV) would reach the vagina before the spermicide could spread out and cover the inside of the vagina. In addition, spermicides may cause vaginal sores or irritation in some women and irritation of the penis in some men. These sores or irritations, like any sore or irritation of the vagina or penis, may make it easier for HIV to get into the bloodstream.

#### HIV and Drug Use

Injecting drugs, including steroids, can spread HIV from one person to another when injection equipment is shared or re-used by another person. HIV may be found in a variety of items used for drug injection, including needles, syringes, cotton, and "cookers."

- If you use drugs, stop using them for your sake and for the sake of others. Seek drug abuse treatment to help you stop.
- If you can't stop injecting drugs, never share your equipment with anyone or re-use equipment used by someone else. Don't share, borrow, or rent injection equipment ("works").
- If you share or re-use injection equipment, clean and disinfect it between uses. To do the best cleaning job possible, flush needles and syringes with water until the equipment is at least visibly clear of blood and debris. You should then completely fill the equipment SEVERAL TIMES with full-strength household bleach. The longer the syringe is completely full of fresh bleach, the more likely that HIV will be killed (some suggest that the syringe should be full of bleach for at least 30 seconds). After each bleach filling, rinse the syringe and needle by filling several times with clean water.
- Remember, however, that cleaning injection equipment with cleaners, such as bleach, does not guarantee that HIV is killed. If you cannot stop injecting drugs, use only sterile needles and syringes.

For more information call the CDC National AIDS Hotline (1-800-342-AIDS).

#### **How to Protect Others**

If you have HIV infection, you must take steps against infecting others. The safest way not to transmit HIV is not to use drugs, not to share drug injecting equipment, and not to have sex. Don't let anyone else use your

needles or syringes, and don't use anybody else's. If you do have sex, your sex partner needs to know that you are infected with HIV, and a latex condom should be used every time you have sex.

If you have HIV infection you should tell anyone with whom you've had sex or shared needles. People that you may have infected, or who may have infected you, may not know they have been exposed to HIV. They may be infected and can continue to infect others without knowing it. Let them know about your test results so they can talk to their doctor and be counseled and tested. If you are uncomfortable talking to your present or past sex or drug-use partners, ask a counselor from your health department to help you, or even to speak for you. Health department counselors are trained to do this carefully, without revealing your name.

## Health Care Workers Can Reduce Their Risk

A small number of health care workers have been infected on the job, usually by being stuck with a needle already used on an HIV-infected patient. This risk can be reduced if health care workers follow "universal precautions," treating all blood, semen, or vaginal secretions, no matter whom the fluid comes from, as if it contained HIV. Health care workers must wash their hands between patients; wear gloves, masks, gowns, and eye-wear when doing some procedures; dispose of used needles and other sharp medical tools by putting them in special containers; and disinfect or sterilize appropriate equipment.

New medical devices that reduce the chances of cuts or needle sticks are being developed. These precautions are for your own protection. You should support all health care workers in taking these precautions with everyone.

### RESEARCH ADVANCES ARE PROMISING

We have learned a lot about HIV and AIDS since 1981. We know that HIV causes AIDS by weakening the immune system and how HIV is, and is not, passed from one person to another.

# People Are Living Longer

Because of what we have learned, people with HIV infection and AIDS are living longer. They are also healthier and able to live active lives for a longer period. Although we still do not have a cure for HIV



People with HIV infection are living longer.

infection, three medicines (AZT, ddI, and ddC) that fight HIV are already available. Other medicines that prevent or treat many of the illnesses which accompany AIDS are also available. Antibiotics and other newer medicines can be used both to prevent and to treat several of the common illnesses seen with HIV infection and AIDS. Additional medicines are being developed and tested.

### **Drug Approvals Are Faster**

The Food and Drug Administration (FDA) has made the review process faster for AIDS drugs. The FDA now makes available some promising drugs, still being tested, to those who have no other drugs to take. Many of the changes made to speed up the review of AIDS drugs are also being used to speed the approval of drugs for other serious diseases. For more information call 1-800-TRIALS-A.

#### **Early Treatment Helps**

Doctors can diagnose many illnesses that occur in people with HIV infection. Treatments can be started early in the illness, when they are most effective. By monitoring the immune system, doctors can give medicines that help prevent persons with HIV from getting severe infections. Researchers are also working on ways to strengthen the immune systems of people with HIV infection, delaying or preventing many illnesses. Because early diagnosis, counseling, and treatment can improve the length and quality of life of AIDS patients, it is important for persons who might be infected to be evaluated by their doctor long before they become sick.

Drugs, such as AZT, for HIV infection or its complications, work just as well for blacks and Hispanics as they do for whites. In addition, these drugs work as well for women as they do for men. How well these medicines work does not depend on race or gender but on such things as the physical condition you are in when you start taking the drug, how soon treatment is begun, and how well you follow the course of treatment.

#### Vaccines Are Being Tested

Steps are being taken to find vaccines to prevent HIV infection. More than a dozen potential HIV vaccines are in the early stages of human testing right now. If these small-scale tests show promise, we can begin tests involving larger numbers of people.

Two ways of using HIV vaccines are being tested. One use is to prevent infection or disease in a person not already infected, as measles and polio vaccines have done for those illnesses. Early trials of vaccines have begun, but much more research must be done before we will know if any of them will work.

The other possible use of a vaccine is in treatment for people already infected with HIV. Use of such vaccines may strengthen the immune system and help the body defend itself against HIV. Although several vaccines of this type are being tested now, we do not yet know if any of those being tested today will be of benefit for those infected. If you are interested in participating in a clinical trial, please call 1-800-TRIALS-A.

## LIVING WITH HIV INFECTION AND AIDS

#### You Can Still Lead an Active Life

Life does not end with HIV infection. Many people with HIV have received early treatment, have continued to stay healthy, and are able to lead productive lives. Even if you are infected, you are still an important member of your family and your community, and you can still contribute to society.

You have much living yet to do, many things to enjoy. Knowing you are infected with HIV is not easy, but many people in national, state, and local organizations are working to make things better for you. There are many people who care about you and are working to combat HIV infection. In the meantime, you need to help us by taking care of yourself physically, spiritually, and emotionally.

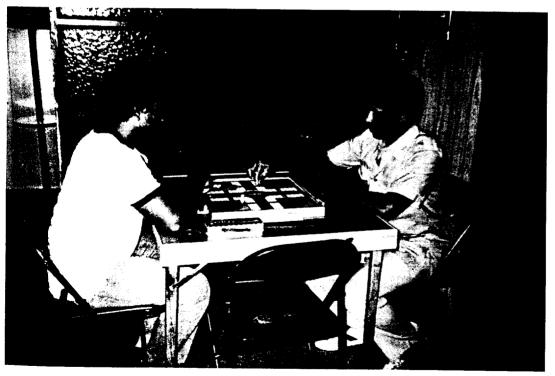
#### Understanding the Immune System

CD4+ cells (also called T-helper cells or T4 cells) are very important in fighting infection. Unfortunately, HIV attacks these cells. In a person not infected with HIV, the number of CD4+ cells remains constant over time. In an HIV-infected person, as months and years go by, the number of CD4+ cells drops. Your CD4+ cell count is a measure of the damage to your immune system by HIV and of your body's ability to fight infection. Your doctor uses your CD4+ cell count to help decide what medical treatments are best for you.

#### **Get Treatment**

There are several medicines approved by the FDA for the treatment of HIV infection. Some of these medications may help slow the development of HIV infection to

AIDS. Some have serious side effects. You should discuss all medications with your doctor or pharmacist before taking them. Other medicines may prevent or delay some of the diseases that attack your body as your immune system gets weaker. More medicines are being tested. Research is also going on to find the best doses and combinations of medicines.



People with AIDS are able to lead normal lives.

Many new medicines and some old ones used for other diseases are being tested to see if they can safely kill or control HIV, boost the immune system, or help fight other illnesses. Some of these experimental medicines may be available to you. Talk to your doctor and call the AIDS Clinical Trials Information Service (1-800-TRIALS-A) if you need more information or are interested in participating in a clinical trial.

#### **Get Checked for TB**

Tuberculosis (TB) is a serious infection of the lungs (and sometimes other organs such as the brain or spine). TB germs are spread from people with active TB of the lungs or airways to other people, usually during close contact that lasts for a long time. TB germs can be spread through the air when a person with TB coughs or sneezes. TB can be both prevented and treated.

Not everybody infected with TB germs gets sick with active tuberculosis. In most people who become infected, the TB germs remain inactive and do not cause sickness. However, due to damage to their immune system, people with both HIV infection and TB germs are much more likely to get sick with active TB than people with TB germs who are not infected with HIV. For this reason, people with HIV need to be evaluated regularly for TB.

If TB is recognized early, you can be given medications to prevent you from getting sick with TB and spreading it to others. Active TB can usually be cured, but it takes a long time, at least 6 months. If you are infected with both HIV and TB, you may have to take medications for a longer time. Without treatment, HIV and TB work together to shorten your life. For more information call the CDC National AIDS Hotline (1-800-342-AIDS).

## YOU CAN HELP STOP HIV/AIDS

When people work together, they can do almost anything. When people step forward, and communities work together to change the behaviors that spread HIV,

their actions speak

louder than words.

All of us have a job to do in stopping the spread of HIV and in caring for those infected and their families and friends. We need to learn how to prevent HIV infection and then teach others. We need to help each other stay healthy. And we need to reach out to those who are affected by, and infected with, HIV-to men, women, children. entire families-to all in need of help. No matter who you are,

We all must do our part.

where you come from, where you live, you can help stop HIV and AIDS.

#### **Help Prevent Discrimination**

You can help by treating people with HIV infection or AIDS the same way you would want to be treated if you were in their place. Because this problem is a very personal, emotional one, you need to understand that what you think and feel makes a difference to people

around you. If you understand HIV and AIDS and help others understand, it will make a real difference. People with HIV infection and AIDS need to be protected from

discrimination on the job, in housing, in schools, or in getting health care.

If people feel they will be treated badly if others know about their infection, they may try to keep it a secret or even avoid finding out if they are infected.

These actions only let HIV spread faster.

However, if people feel they will be treated with respect and understanding, they will be more willing to get tested, seek medical care, and tell their sex and drug-

use partners about their infection. These actions will help slow the spread of HIV.

The new Americans with Disabilities Act (Public Law 101-596) helps fight discrimination against people with disabilities and can protect people who are infected with HIV or are believed to be infected with HIV. Businesses and employers have been made aware of this law. For more information, call the CDC National AIDS Hotline (1-800-342-AIDS).

#### The Family and HIV

Families play an important role in stopping HIV. Families nurture children, provide a supportive environment, and teach values and discipline. Parents should teach their children how to protect themselves against HIV infection and other STDs as soon as their children are able to understand. There is no substitute for the concerned attention of a parent, caring adult, or extended family member. For a free brochure on how to talk to children about HIV infection and AIDS, call the CDC National AIDS Hotline (1-800-342-AIDS).



Teach your children about AIDS.



We can make their future brighter.

## Schools Can Help Prevent HIV Infection

Many schools have excellent AIDS education programs that also teach children how to protect themselves against HIV infection.

The most effective programs support and reinforce the AIDS prevention messages given at home. They are part of a comprehensive health curriculum for every grade. Schools must ensure that students receive AIDS/HIV education appropriate to their age and their needs. They must not discriminate against children with HIV and must support the right of HIV-infected children to attend school.

#### Talk Openly About HIV and AIDS

Social injustice and social intolerance help spread HIV infection. Respect, understanding, tolerance, and compassion make it possible for those infected or at risk to cooperate with those who would help them. This approach helps all of us prevent the spread of HIV infection.

Do you have relatives, friends, or coworkers who may be at risk? Talk to them about HIV infection and AIDS. Even people who have difficulty listening to loved ones or authorities often will listen to friends. Get them to call the CDC National AIDS Hotline (1-800-342-AIDS) or a local AIDS hotline for more information.



Talk openly about HIV and AIDS.

#### **Communities Can Stop HIV**

Community action is a very powerful weapon. The strongest educational and prevention efforts are those that involve all parts of the community: businesses, schools, civic and volunteer groups, religious organizations, and individuals. Community-based organizations in many areas are already actively involved in HIV education, services, and health care—and in raising money to pay for these activities.

The CDC has started a program called "Business Responds to AIDS" to provide businesses and workers with information about how to prevent work disruptions and new HIV infections among their employees, their families, and their community.

#### What Can You Do?

Does your community, club, organization, or religious group have a program to teach HIV prevention and help people with AIDS? Does your employer have an HIV education program? If so, support those programs. If not, start a program or talk to somebody who can.

There are many things you can do. You can make time to talk to people about HIV infection. You can help someone with AIDS. You can run errands for someone sick with AIDS. You can cuddle an HIV-infected baby with no parents. Even if all you do is improve the way you talk about people living with AIDS, you are taking a step in the right direction.

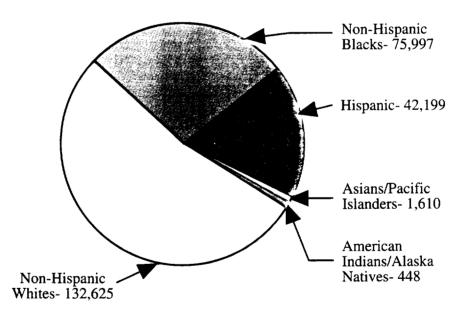
### **A**PPENDIX

## Summary of Centers for Disease Control and Prevention (CDC) AIDS Case Reports

Through December 1992, CDC had received 253,448 reports of AIDS cases. These included:

- 221,714 cases in men, 27,485 cases in women, and 4,249 cases in children.
- 132,625 cases in non-Hispanic whites; 75,997 cases in non-Hispanic blacks; 42,199 cases in Hispanics; 1,610 cases in Asians/Pacific Islanders; and 448 cases in American Indians/Alaska Natives (race/ethnicity is unknown for 569 persons)

# AIDS Cases Reported to CDC Through 1992, by Race/Ethnicity



Total\*: 253,448

Racial and ethnic minority populations have been heavily affected by HIV infection and AIDS. Through 1992, 47 percent of all reported AIDS cases were among blacks and Hispanics, while these two population groups represent only 21 percent of the total U.S. population.

Although Black and Hispanic women are 16 percent of all U.S. women, they are 74 percent of U.S. women reported with AIDS since 1981. Nearly 84 percent of children with AIDS who were infected before, during, or after birth are black or Hispanic. In New York State, AIDS has been the leading cause of death since 1988 for Hispanic children 1-4 years of age, and the second leading cause of death for black children in the same age group.

<sup>\*</sup> Includes 569 persons for whom race/ethnicity is not known.

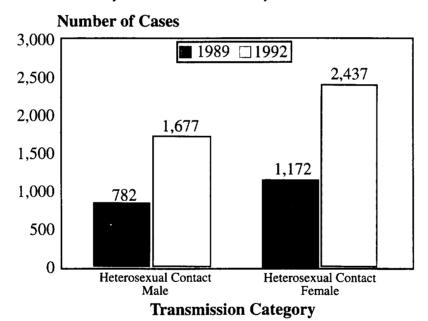
Through 1992, a total of 946 cases of AIDS among adolescents (13-19 years of age) were reported. In 1990, HIV infection and AIDS was the sixth leading cause of death among 15- to 24-year olds in the United States.

Among adolescents reported with AIDS, older teens, males, and racial and ethnic minorities are heavily affected.

Among adolescents with AIDS the proportion of women has increased, from 18 percent of all cases in adolescents in 1987 to 29 percent in 1992.

In recent years, the fastest growing groups of persons reported with AIDS in the United States have been women and men who acquired HIV through heterosexual contact. The new cases reported annually in these population groups have more than doubled since 1989 (women-1,172 in 1989, 2,437 in 1992), (men-782 in 1989, 1,677 in 1992). New AIDS cases reported annually in men who have sex with men has increased 22 percent over the same period (homosexual/bisexual men-19,652 in 1989; 23,936 in 1992).

### Increases in Reported AIDS Cases Due to Heterosexual Transmission of HIV, United States, 1989-1992



Through December 1992, 27,485 AIDS cases were reported among U.S. adult and adolescent women. Nearly three-fourths of those cases were directly or indirectly associated with drug injection—50 percent (13,626) of these women reported injecting drugs themselves, and another 21 percent (5,896) reported having sex with men who injected drugs.

Although most women reported with AIDS were infected through shared needles and syringes, women who were infected through heterosexual contact have the highest rate of increase. HIV has been transmitted both from men to women and from women to men and has occurred mainly through vaginal intercourse. AIDS cases among U.S. women increased 17 percent between 1990 and 1991; among men, the increase during the same time period was 4 percent.

### NEED MORE INFORMATION?

In addition to this report, there are many other publications on HIV and AIDS, including guides for teaching HIV prevention and caring for AIDS patients. Many of them are available at no charge. To get copies, to find out what programs are available in your local area, or just to ask questions about HIV or AIDS, call the CDC National AIDS Hotline. The call is free and confidential, and you do not have to give your name to get your questions answered.

#### **CDC National AIDS Hotline:**

- English service (7 days a week, 24 hours a day) 1-800-342-AIDS (2437)
- Spanish service (7 days a week, 8 a.m. till 2 a.m. eastern time) 1-800-344-7432
- TDD service for the deaf (10 a.m. till 10 p.m. eastern time, Monday through Friday) 1-800-243-7889

#### **National Institute on Drug Abuse Hotline:**

English service 1-800-662-HELP (4357)

Spanish service 1-800-66-AYUDA (662-9832)

#### **CDC National Clearinghouse for Alcohol and Drug Information:**

1-800-SAY-NO-TO (1-800-729-6686)

#### **AIDS Clinical Trials Information Service (ACTIS):**

1-800-874-2572 or 1-800-TRIALS-A

If you need more information about programs and services in your area, you can also call your local American Red Cross chapter or your state or local health department.

Further information can also be obtained from:

CDC National AIDS Clearinghouse

P.O. Box 6003

Rockville, MD 20849-6003