

The image shows the front cover of a book. The cover is a deep red or maroon color. It features a wide, ornate border in a dark blue or black color with a repeating floral or vine-like pattern. In the center of the cover, the title is printed in a serif font. The title is arranged in five lines: 'THE', 'WORLD BOOK', 'HEALTH & MEDICAL', 'ANNUAL', and '1992'.

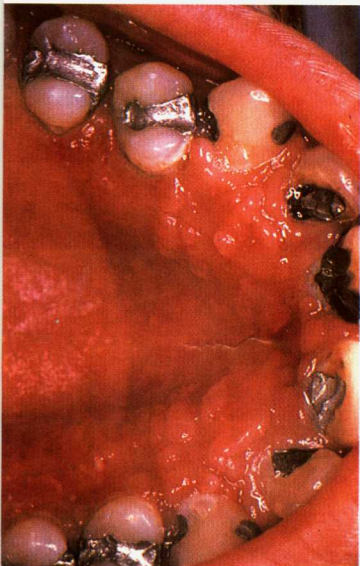
THE
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The Year's Major Health Stories

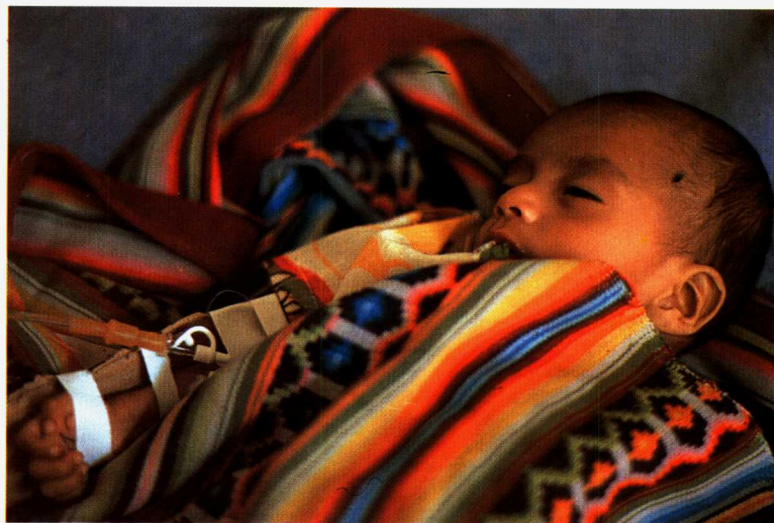


"Silver" Filling Safety

New evidence from animal studies reported in August 1990 prompted a debate in 1991 about whether dental amalgam fillings release enough toxic mercury to present a health risk. In the Health & Medical News Update section, see DENTISTRY.

From the dawning of the age of genetic medicine to the devastation of a cholera epidemic in South America, it was an eventful year in medicine. On these two pages are stories that *Health & Medical Annual* editors selected as among the most important, the most memorable, or the most promising of the year, along with details about where to find them in the book.

The Editors



Cholera Epidemic

A cholera epidemic spread through Peru and neighboring countries in South America during 1991, afflicting nearly 300,000 people by August. In the Health & Medical News Update section, see INFECTIOUS DISEASES (Close-Up).



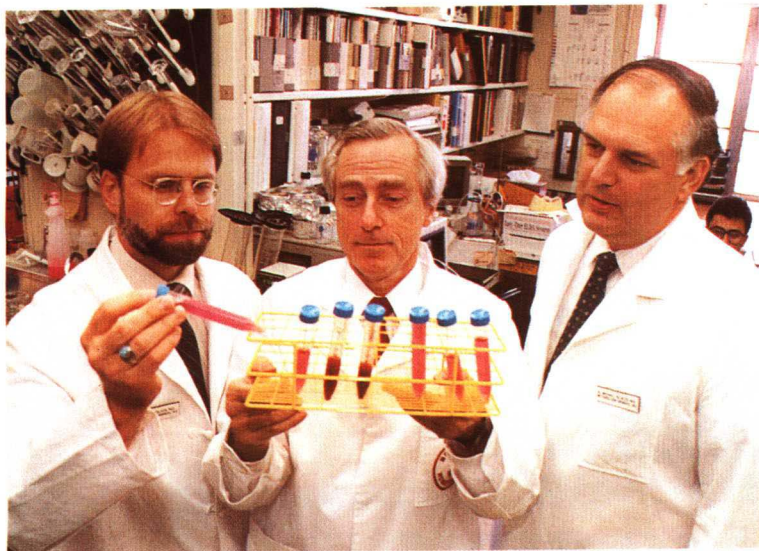
Making the Blood Supply Safer

American Red Cross in May 1991 announced new blood collecting, processing, and distributing procedures in response to criticisms about problems with its former methods. In the Health & Medical News Update section, see BLOOD.

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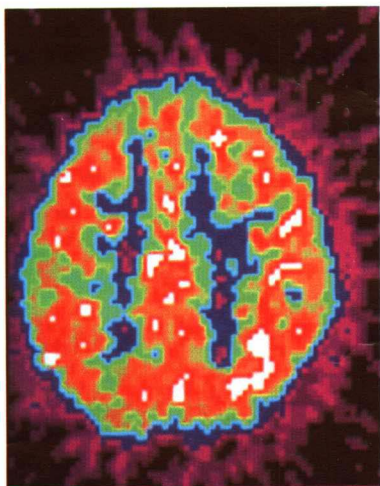


Dawn of Gene Therapy

Medical researchers in September 1990 began the first federally approved human trial of gene therapy, an approach that involves giving a patient new genes to correct a genetic defect or treat a disease. In the Health & Medical News Update section, see **GENETICS (Close-Up)**.

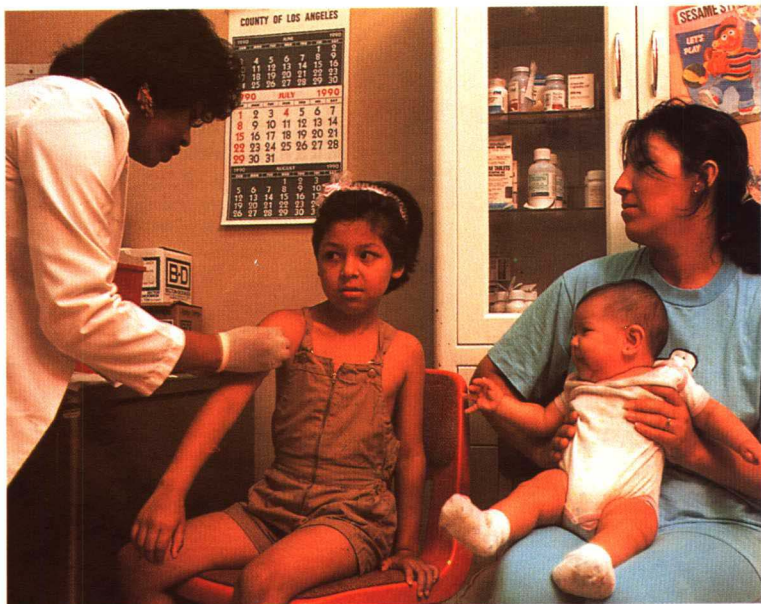
First Portable Heart Pump

Surgeons in May 1991 implanted the first fully portable mechanical device to help the failing heart of a patient awaiting a heart transplant. In the Health & Medical News Update section, see **HEART AND BLOOD VESSELS**.



Hyperactivity and the Brain

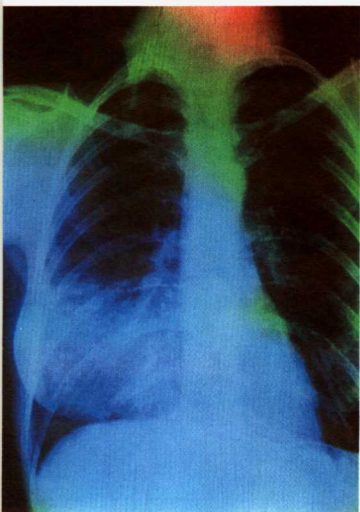
Scientists reported in November 1990 that specific abnormalities in the brain may play a role in hyperactivity and problems involving attention span. In the Health & Medical News Update section, see **MENTAL HEALTH**.



Measles Outbreaks

Measles cases in the United States soared during 1990 and 1991—even though there has long been an effective vaccine against the disease. In the Special Reports section, see **MEASLES ON THE RISE**.

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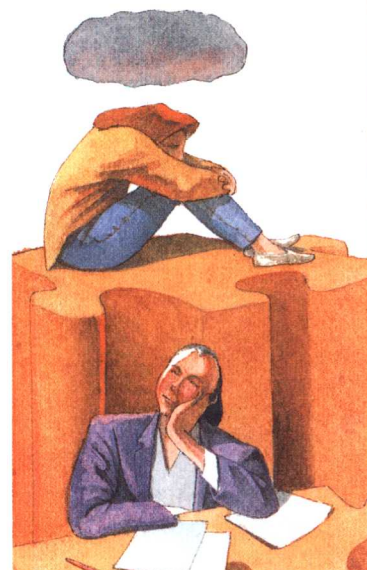
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| By taking care of their own health and seeking prenatal care, women today have far greater opportunities than ever before to have a healthy baby. | |

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Defeating Drug Dependency 110

by Dianne Hales

Breaking the devastating habit of drug abuse can be a daunting challenge. But for many people, the right treatment program can make the difference.

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Although researchers have not yet identified the cause of premenstrual syndrome, many women have found effective ways of coping with this condition.

Closing in on Parkinson's Disease 138

by Michael Woods

Scientists believe they are close to finding the cause or causes of Parkinson's disease, a brain disorder that results in a loss of muscle control.

Learning to Treat Schizophrenia 152

by Bruce Bower

Schizophrenia's symptoms bring anguish to patients and their families. But there is hope for recovery.

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by Robin Netherton

During the 1300's, a mysterious and deadly disease wiped out a third of Europe—roughly 20 million people.

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Psychologists say that some people are born with a tendency to be shy. Many learn to cope with their shyness, and parents can help shy children.

Poison on a Plate 196

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What caused Canada's largest outbreak of botulism, a deadly form of food poisoning? A team of "disease detectives" turned up an unlikely suspect.

Sexually Transmitted Danger 210

by Joseph Wallace

Rising at epidemic rates, sexually transmitted diseases rank among the most serious public health problems in the United States.

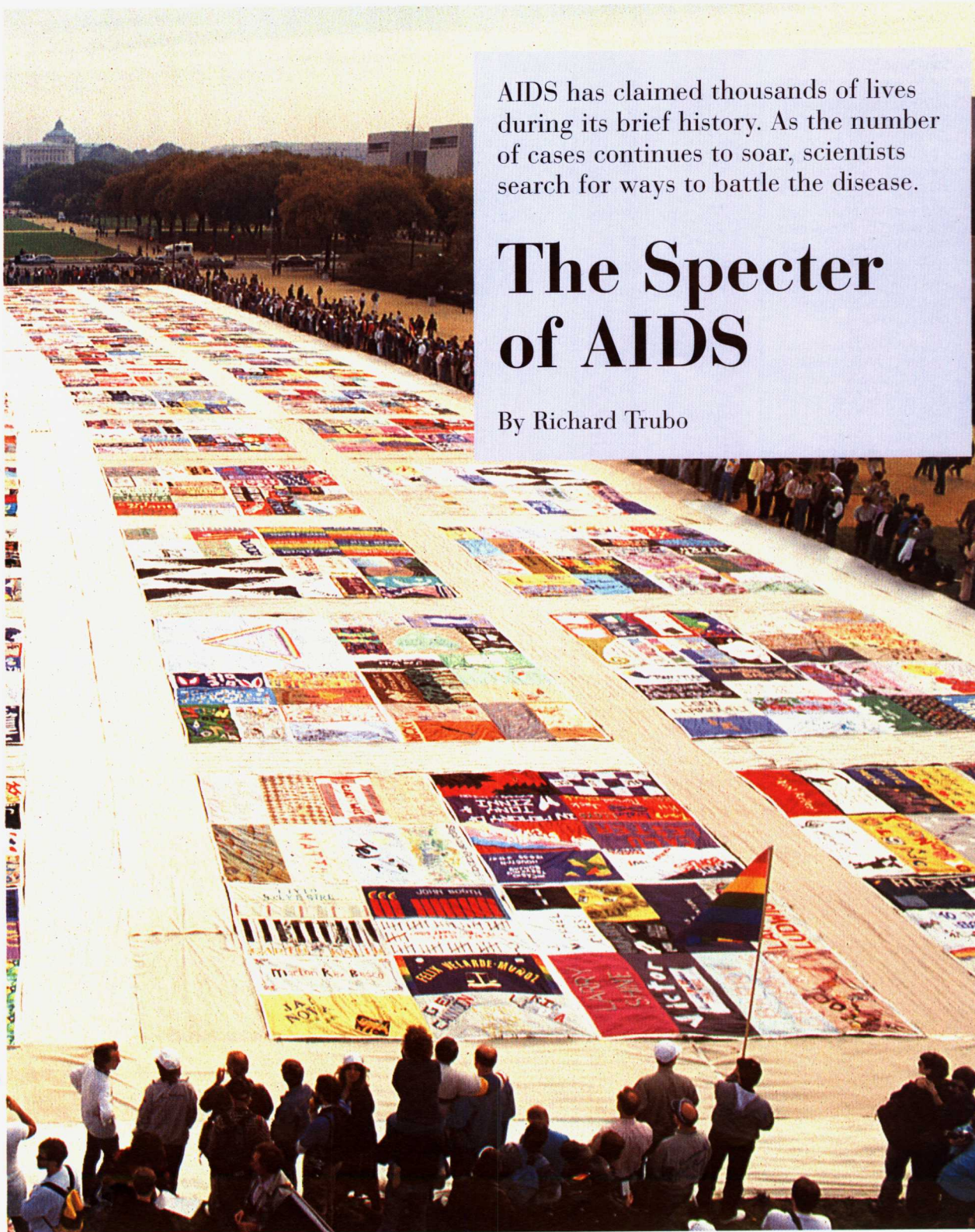
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A large AIDS Memorial Quilt is laid out on a city street, stretching far into the distance. The quilt is composed of many colorful, hand-made panels, each featuring different designs, patterns, and text. Some panels have names, dates, and messages. A large crowd of people is gathered around the quilt, looking at it and taking photos. In the background, there are trees and a large building, possibly a government or institutional building. The scene is set in a city park or plaza.

AIDS has claimed thousands of lives during its brief history. As the number of cases continues to soar, scientists search for ways to battle the disease.

The Specter of AIDS

By Richard Trubo

Glossary

AIDS: Acquired Immune Deficiency Syndrome, an extremely serious disorder that results from damage to the body's disease-fighting immune system.

AZT: Also called zidovudine, the only drug licensed in the United States to treat AIDS.

HIV: Human immunodeficiency virus, the agent that causes AIDS.

Opportunistic infections: Frequently fatal infections that occur in people with weakened immune systems, such as people with AIDS.

Syndrome: A collection of signs and symptoms that together indicate a particular disease.

T-helper cells: White blood cells essential for the routine functioning of the immune system and which are destroyed by HIV.

Previous pages: The AIDS quilt—thousands of quilted panels commemorating people who have died of AIDS—on display in Washington, D.C.

The author:

Richard Trubo is a contributing editor for *Medical World News*.

Many people can barely remember a time when AIDS was not one of the world's most ominous health threats. The media report news of the disease almost every day. Yet when the 1980's began, AIDS was not even an identified disease.

The first cases were reported in the United States in June 1981, when five young men were diagnosed with an extremely rare, serious infection—*Pneumocystis carinii* pneumonia (PCP), an illness that occurs in people with impaired immune systems. The men, all homosexuals, shared other symptoms, too, such as fatigue, night sweats, and *thrush*—a fungal infection of the mouth. Doctors were baffled as they tried to diagnose this mysterious combination of symptoms.

Since then, researchers have learned a lot about AIDS. By 1982, doctors had identified the constellation of symptoms as a new *syndrome* (a group of signs and symptoms that together indicate a particular disease). They named the syndrome *acquired immune deficiency syndrome* (AIDS), in recognition of the crippling effects the disease has on the body's infection-fighting immune system.

Other advances followed swiftly. In late 1983 and early 1984, French and American researchers isolated the virus that causes AIDS—the *human immunodeficiency virus* (HIV). By spring 1985, researchers had created a blood test to detect *antibodies* (disease-fighting proteins) made by the body in response to HIV infection. The presence of HIV antibodies in a person's blood (which doctors describe as "HIV-positive") strongly suggests that the virus is present, too. Researchers also discovered that HIV destroys specific white blood cells, called T-helper cells, that are essential for the routine functioning of the immune system. And in March 1987, the United States Food and Drug Administration (FDA) approved the first drug to combat the AIDS virus itself—zidovudine (AZT), which has modestly extended the life span of some patients.

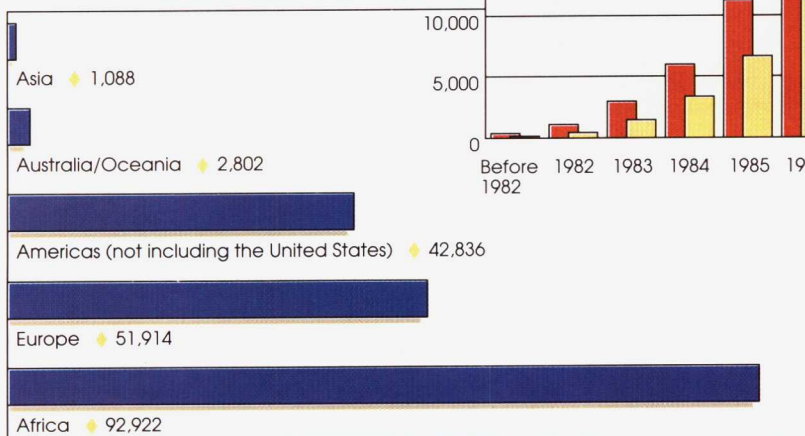
Scientists in the 1980's also determined that HIV is contracted in four basic ways: intimate sexual contact, sharing of contaminated needles, transfusion of contaminated blood or blood products, and transmission from infected mothers to their offspring during pregnancy or at delivery. Armed with this knowledge, public health officials began to distribute educational materials through clinics and other means in an attempt to control the spread of the infection.

Despite such accumulation of knowledge about AIDS, no cure yet exists nor is there a vaccine that can prevent HIV infection. The virus can remain 10 years or more in a person without causing any symptoms. But once the person develops one of the key AIDS-related illnesses, such as PCP or *Kaposi's sarcoma*, a rare skin cancer, doctors diagnose the patient as having AIDS. Statistics indicate that, once diagnosed, an AIDS patient probably will die, usually within two to three years.

AIDS: A global problem

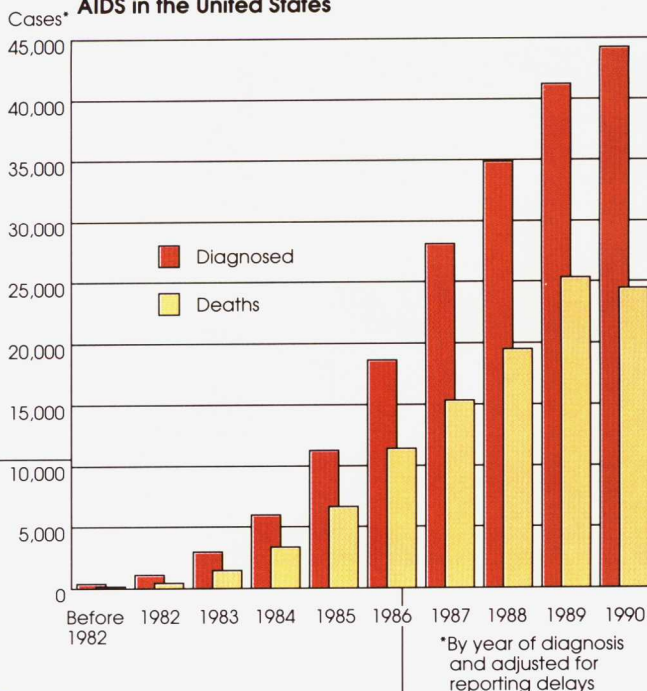
Most AIDS cases have been reported in the United States, though experts note that countries with less accurate record keeping than the United States may have more cases than they report. Africa had the second highest number of cases in 1990 and 1991. The World Health Organization estimates that the number of new cases in the United States and Europe may begin to level off in 1995, but will continue to rise in Asia and Africa beyond the year 2000.

AIDS around the world



Source: Centers for Disease Control and World Health Organization.

AIDS in the United States



A growing epidemic

The magnitude of the AIDS crisis is staggering. As of June 31, 1991, the Centers for Disease Control (CDC) in Atlanta, Ga., reported nearly 183,000 men, women, and children in the United States were diagnosed since 1981 as having AIDS, and more than 114,000 of these individuals had died. The worldwide statistics for AIDS are even more grim. Jonathan M. Mann, former director of the World Health Organization (WHO) Global AIDS Program, has labeled AIDS a *pandemic* (a widespread epidemic). WHO estimated that there were more than 1.3 million AIDS cases globally at the end of 1990 and about 8 million to 10 million people worldwide were infected with the AIDS virus.

Moreover, the epidemic is gaining momentum dramatically, and many experts are predicting that the worldwide epidemic will become much worse before it is effectively managed. Nearly 64,000 people died from AIDS in the United States in the three years from 1988 through 1990, exceeding the total number of

U.S. cities with the most AIDS cases

| | |
|------------------|--------|
| New York City | 33,490 |
| Los Angeles | 12,054 |
| San Francisco | 10,463 |
| Houston | 5,317 |
| Miami, Fla. | 5,303 |
| Washington, D.C. | 5,172 |
| Newark, N.J. | 4,811 |
| Chicago | 4,457 |
| Philadelphia | 3,776 |
| Atlanta, Ga. | 3,725 |

In the United States, AIDS is most prevalent in major metropolitan areas. As of June 30, 1991, the 10 hardest-hit U.S. cities had reported a total of more than 88,000 AIDS cases to the Centers for Disease Control, above.

U.S. deaths in the first seven years of the epidemic. The U.S. Public Health Service projects that by the end of 1993, the cumulative death toll in the United States could be as high as 340,000. By the year 2000, WHO estimates that 6 million people worldwide could have AIDS, and as many as 40 million people could be infected by the virus.

No region in the world has a more devastating AIDS crisis than Africa. More than half of the HIV-infected people worldwide live on this continent, experts say. The disease is infecting men and women alike, and it is striking people of all economic levels. In some cities in central Africa, an estimated 20 to 40 per cent of women of childbearing age are HIV-infected. In a 1990 study of corpses in morgues in Abidjan, the capital of Ivory Coast, 41 per cent of males and 32 per cent of females were infected with the virus. AIDS in many parts of Africa is spreading from urban areas to the rural areas where most Africans live.

In Latin America, the Pan American Health Organization estimates the number of HIV-infected people at nearly 1 million. The organization also reports that the infection rate is rising steeply, particularly among the people of Caribbean nations, such as Haiti. But Brazil is the country with the second highest number of recorded AIDS cases in the Western Hemisphere, after the United States, according to a July 1991 report. Health experts predict that this South American country's 18,000 AIDS cases will escalate to 250,000 cases by the year 2000. The port city of Santos has Brazil's highest infection rate, with an estimated 3 per cent of the city's 520,000 people already infected with HIV. According to public health specialists in Santos, the AIDS virus is transmitted mainly through intravenous drug use. They say that about half of the city's AIDS cases were infected via injection of drugs.

Asia, especially Thailand, is also showing staggering increases in AIDS cases, according to reports given at the Seventh International Conference on AIDS held in Florence, Italy, in June 1991. James Chin, who tracks and forecasts the global AIDS epidemic for WHO, said that HIV has infected 400,000 Thais. He also reported that, based on the results of a study of 20,000 to 30,000 Thai soldiers, at least 6 per cent of the Thai military are infected with HIV.

The rising cost of care

The medical costs for AIDS patients are soaring with the epidemic. Nearly half of WHO's \$90-million global AIDS program went to Africa in 1990, an amount the organization acknowledged as inadequate. In the United States, according to a study conducted jointly by the Health Insurance Association of America and the American Council of Life Insurance, private insurers estimated in 1989 that they paid more than \$1 billion for AIDS-