THE WORLD BOOK HEALTH & MEDICAL ANNUAL 1992

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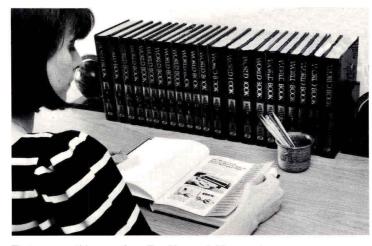
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1992

The Year's Major Health Stories

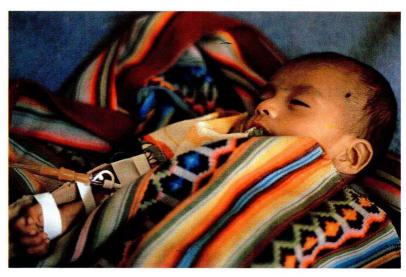


"Silver" Filling Safety

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 INFEC-TIOUS DISEASES (Close-Up).



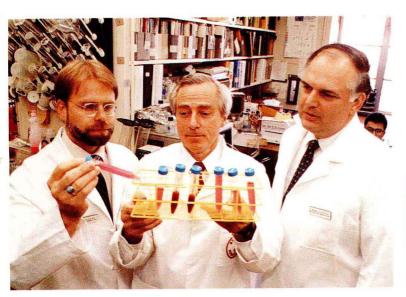
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Making the Blood Supply Safer

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.

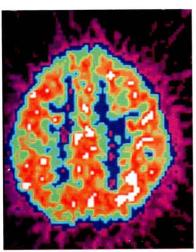


Dawn of Gene Therapy

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).

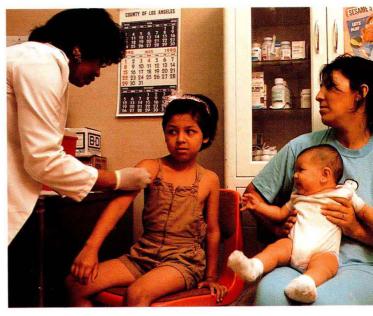
First Portable Heart Pump

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.

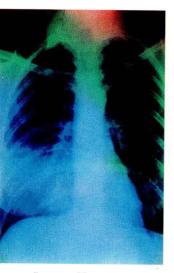


Measles Outbreaks

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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Infectious Diseases; Safety;
Infectious Diseases (Close-Up)]

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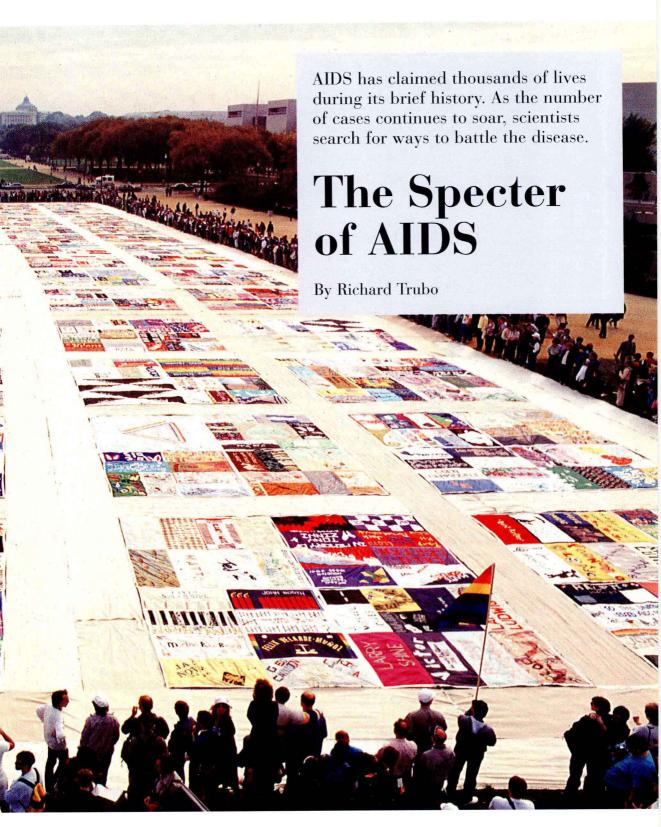
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Poison on a Plate	196
by Yvonne Baskin What caused Canada's largest outbreak of botulism, a deadly form of food poisoning? A team of "disease detectives" turned up an unlikely suspect.	
Sexually Transmitted Danger by Joseph Wallace	210
Rising at epidemic rates, sexually transmitted diseases rank among the most serious public health problems in the United States.	

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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.

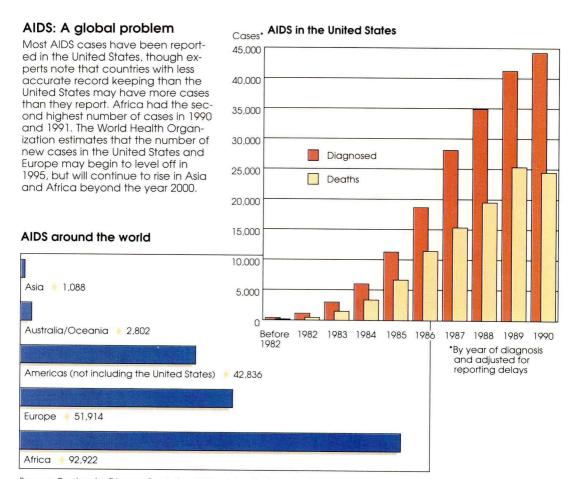
The first cases were reported in the United States in June 1981, when five young men were diagnosed with an extremely rare, serious infection—*Pneumocystis carinii* pneumonia (PCP), an illness that occurs in people with impaired immune systems. The men, all homosexuals, shared other symptoms, too, such 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.



Source: Centers for Disease Control and World Health Organization.

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