

# Current Trends Mortality Attributable to HIV Infection/AIDS -- United States, 1981-1990

From 1981 through 1990, 100,777 deaths among persons with acquired immunodeficiency syndrome (AIDS) were reported to CDC by local, state, and territorial health departments; almost one third (31,196) of these deaths were reported during 1990.\* During the 1980s, AIDS emerged as a leading cause of death among young adults in the United States. By 1988,\*\* human immunodeficiency virus (HIV) infection/AIDS had become the third leading cause of death among men 25-44 years of age and, by 1989, was estimated to be second, surpassing heart disease, cancer, suicide, and homicide (Figure 1). In 1988, HIV infection/AIDS ranked eighth among causes of death among women 25-44 years of age (Figure 2); in 1991, based on current trends, HIV infection/AIDS is likely to rank among the five leading causes of death in this population (1).

Most deaths from AIDS have occurred among homosexual/bisexual men (men who have had sex with other men) (59%) and among women and heterosexual men who are intravenous-drug users (21%) (Table 1). Nearly three fourths of deaths occurred among persons 25-44 years of age. Although most deaths occurred among whites, death rates have been highest for blacks and Hispanics. During 1990, the number of reported deaths (national AIDS surveillance) per 100,000 population was 29.3 for blacks (non-Hispanic), 22.2 for Hispanics, 8.7 for whites (non-Hispanic), 2.8 for Asian/Pacific Islanders, and 2.8 for American Indians/Alaskan Natives.

As a percentage of all deaths, HIV infection/AIDS mortality has been greatest among persons 25-44 years of age. In 1989, among persons in this age group, HIV infection/AIDS accounted for 14% and 4% of all deaths among men and women, respectively; these proportions were more similar for white men and black men (14% and 16%, respectively) than for white women and black women (2% and 9%, respectively) (2). Reported by: Local, state, and territorial health departments. Div of HIV/AIDS, Center for Infectious Diseases; Div of Vital Statistics, National Center for Health Statistics, CDC.

## Editorial Note

Editorial Note: From 1981, when AIDS was first recognized, through 1990, more than 100,000 persons in the United States have died from AIDS. The impact of AIDS has been greatest among men 25-44 years of age, contributing substantially to the overall increase in deaths among this group during the 1980s (3); in addition, AIDS is becoming a leading cause of death among women.

The impact of AIDS on mortality patterns has been greater in certain areas of the United States than in others. For example, in San Francisco, Los Angeles, and New York City, HIV infection/AIDS is the leading cause of death among young adult men. In both New York State and New Jersey, HIV infection/AIDS is the leading cause of death among black women 15-44 years of age; in New Jersey,

the number of deaths among this population from HIV infection/AIDS in 1988 was nearly equal to the number of deaths from the second and third leading causes combined (cancer and unintentional injuries) (1; CDC, unpublished data). In some locations, HIV infection/AIDS has become a major cause of death among young children; in New York State in 1988, HIV infection/AIDS was the leading cause of death among Hispanic children 1-4 years of age, and the second leading cause of death among black children 1-4 years of age, exceeding deaths from unintentional injuries among Hispanic children and from all other infectious diseases among both groups (4).

Surveillance for AIDS cannot identify deaths among persons in whom HIV infection or HIV-related illness has not been diagnosed; however, AIDS surveillance does identify most deaths among persons diagnosed as having HIV infection. From July 1986 through June 1987, 3001 death certificates listing diagnoses that indicate HIV infection/AIDS were filed in New York City; of the deaths registered by these certificates, 85% were among persons who met the CDC AIDS surveillance case definition, 6% among persons who would have met the definition if HIV serology results had been available, and 9% among HIV-infected persons with illnesses or conditions not included in the AIDS surveillance definition (5). When the effects of underdiagnosis and underreporting are considered, AIDS surveillance identifies 70%-90% of HIV-infection-related deaths and, therefore, provides a minimum estimate of HIV-infection-related mortality (3; CDC, unpublished data).

In addition to mortality statistics, measures of the public health impact of HIV infection/AIDS include morbidity, disability, and health-care costs. For example, the HIV infection/AIDS epidemic is straining the resources of public hospitals (6); in 1989, private insurers paid more than an estimated one billion dollars for reimbursement of AIDS-related claims for life and health insurance, an increase of 71% from 1988 (7).

An estimated one million persons in the United States are infected with HIV (8); of these, an estimated 165,000-215,000 will die during 1991-1993 (8). The impact of HIV infection/AIDS on mortality in the mid-1990s to late 1990s and early 2000s will depend on present efforts to prevent and treat HIV infection.

## References

1. Chu SY, Buehler JW, Berkelman RL. Impact of the human immunodeficiency virus epidemic on mortality in women of reproductive age, United States. *JAMA* 1990;264:225-9.
2. NCHS. Births, marriages, divorces, and deaths for 1989. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1990. (Monthly vital statistics report; vol 38, no. 12).
3. Buehler JW, Devine OJ, Berkelman RL, Chevarley F. Impact of the human immunodeficiency virus epidemic on mortality trends in young men, United States. *Am J Public Health* 1990;80:1080-6.
4. Chu SY, Buehler JW, Oxtoby MJ, et al. Impact of the human immunodeficiency virus epidemic on mortality in children, United States. *Pediatrics* 1991 (in press).
5. Hindin RH, Thomas P, Nicholas A, et al. Evaluating completeness of New York City's case registry (Abstract). V International Conference on AIDS. Montreal, June 4-9, 1989:110.
6. Andrulis DP, Weslowski VB, Gage LS. The 1987 US hospital AIDS survey. *JAMA* 1989;262:784-94.

7. Carroll W. AIDS-related claims survey: claims paid in 1989. Washington, DC: American Council of Life Insurance/Health Insurance Association of America, Sept. 1989.
8. CDC. HIV prevalence estimates and AIDS case projections for the United States: report based on a workshop. MMWR 1990;39(no. RR-16):30.
  - o Single copies of this article will be available free until January 25, 1992, from the National AIDS Information Clearinghouse, P.O. Box 6003, Rockville, MD 20850; telephone (800) 458-5231.

\*\* The most recent year for which national vital statistics data are available to compare rankings of HIV infection/AIDS with other causes of death by age and sex. Vital statistics data in this report represent deaths for which HIV infection or AIDS was designated as the underlying cause of death.

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