Quarterly Report to the Domestic Policy Council on the Prevalence and Rate of Spread of HIV and AIDS -- United States

This article summarizes the third report to the Domestic Policy Council (DPC) on the prevalence and rate of spread of human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) in the United States. The first report (1) extensively reviewed data on the prevalence and incidence of HIV infection. The second report was summarized in April 1988 (2). The third report was delivered to the DPC on July 22, 1988; its major points are summarized below, with information updated where appropriate.

A. Trends in Reported Cases of AIDS

By August 29, 1988, a total of 72,024 AIDS cases had been reported in the United States, including over 12,500 cases since the last summary on April 15, 1988.

In 1986, the Public Health Service (PHS) projected that approximately 270,000 cumulative AIDS cases would be diagnosed by the end of 1991, including 15,800 cases diagnosed in 1986 and 23,000 in 1987. The actual numbers of cases for these years, adjusted for reporting delays, are 17,100 and 25,200 cases, respectively.

Using a method similar to that used in 1986 (3), the PHS now projects a cumulative total of 365,000 cases diagnosed by the end of 1992, with 263,000 cumulative deaths (Figure 1).

In 1992 alone, 80,000 cases are expected to be diagnosed and 66,000 deaths to occur. A total of 172,000 AIDS patients will require medical care in 1992 at a cost expected to range from $5 billion to $13 billion.

In September 1987, the AIDS case definition was revised to include a broader spectrum of HIV-associated diseases and to allow for presumptive diagnoses of certain conditions. Comparisons of cases reported from the 12-month period before September 1987 with those reported since then show this change has led to an increase in the proportion of reported AIDS cases among blacks from 24% to 36% of all reported cases and an increase in the proportion of reported cases among Hispanics from 13% to 16%. Cases in persons thought to have been infected through heterosexual contact also increased from 2.6% of all cases to 3.6%. B. Trends in Prevalence and Incidence of HIV Infection

In April 1988, CDC convened a meeting of experts in mathematical modeling techniques to help estimate the number of Americans now infected with HIV. Based on two mathematical approaches, these experts agreed that the current CDC estimate of 1.0 million to 1.5 million is a reasonable working...
estimate of the number of persons now infected.

Recent data, including prevalence rates in childbearing women in three states (2), patients at six sentinel hospitals, and prisoners in 15 states (see below), are consistent with this estimate.

The current estimate for the number of infected Americans is the same as the estimate made in 1986. This does not mean that no new infections have occurred. The 1986 estimate, was based on preliminary data, and was probably too high.

Data on the prevalence rate of HIV infection (based on antibody prevalence) are now available from six urban and suburban sentinel hospitals, predominantly in the midwest. In the first 18,809 tests conducted in persons admitted for reasons not associated with HIV infection, the overall seroprevalence was 0.3%. The observed rate is three to four times that found in military recruit applicants in the same cities. The higher rate in hospital patients is expected because persons with risk behaviors are to some extent excluded from military service. Seroprevalence in inmates from 15 state correctional systems and the Federal Bureau of Prisons ranges from 0 to 15% (median 0.4%). The risk factor most often reported in seropositive inmates is a history of intravenous-drug abuse.

Seroprevalence in Job Corps entrants has been 0.4% for the first 65,960 persons tested. Infection rates are highest in males, blacks and Hispanics, and applicants from urban areas.

Infection rates in sentinel populations that have been followed over time have not shown significant increases. These populations include first-time blood donors (33 months of observation), applicants for military service (30 months of observation), and admissions to sentinel hospitals (15 months of observation). These findings are consistent with some continued HIV transmission (which is also seen in seroconversions in repeatedly tested active-duty military personnel and in repeat blood donors) but argue against an explosive spread of HIV in the population. C. Status of HIV and AIDS-Associated Surveys

Implementation of the Comprehensive Family of HIV Surveys To conduct sentinel surveillance for HIV in 30 metropolitan areas, funding was awarded to health departments of 23 states, the District of Columbia, and Puerto Rico on January 29, 1988, with additional funds awarded May 1, 1988. More than 420 different surveys will be conducted in sexually transmitted diseases clinics, drug abuse treatment centers, tuberculosis clinics, women's health clinics, sentinel hospitals, and newborn infant screening programs (in which a sample of specimens routinely collected from newborns are anonymously tested to indicate the prevalence of HIV infection in childbearing women).

A program to evaluate HIV seroprevalence in college students has begun. By the end of 1988, a total of 20 colleges will participate, and approximately 20,000 serum samples will have been tested.

National Household Seroprevalence Survey (NHSS) A contract for the NHSS was awarded to the Research Triangle Institute. The NHSS will be conducted in two phases. Phase I will be a pilot phase to determine the feasibility of conducting household interviews to obtain demographic information, HIV risk factors, and a blood test for HIV. If Phase I shows that the NHSS is feasible and if funds are available, Phase II, a probability sample of households from throughout the United States, would begin late in 1989 and would include approximately 50,000 respondents.

National Health Interview Survey: AIDS Attitudes and Knowledge Survey

An AIDS questionnaire was developed for the National Health Interview Survey to provide estimates of public knowledge and attitudes about AIDS and changes in knowledge and attitudes over time. The first phase of the survey was conducted from August 1987 through January 1988 and showed
continuous increases in knowledge of how HIV is transmitted. A second phase that began in early May 1988 contains additional questions to assist in the evaluation of the "Understanding AIDS" mailing (4). Reported by: AIDS Program, Center for Infectious Diseases; National Center for Health Statistics, CDC.

References

1. CDC. Human immunodeficiency virus infection in the United States: a review of current knowledge. MMWR 1987;36(suppl S-6).


Disclaimer All MMWR HTML documents published before January 1993 are electronic conversions from ASCII text into HTML. This conversion may have resulted in character translation or format errors in the HTML version. Users should not rely on this HTML document, but are referred to the original MMWR paper copy for the official text, figures, and tables. An original paper copy of this issue can be obtained from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402-9371; telephone: (202) 512-1800. Contact GPO for current prices.

**Questions or messages regarding errors in formatting should be addressed to mmwrq@cdc.gov.**

Page converted: 08/05/98

This page last reviewed 5/2/01