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WEEKLY REPORT

First Report of AIDS

Twenty years ago, on June 5, 1981, *MMWR* published a report of five cases of *Pneumocystis carinii* pneumonia (PCP) among previously healthy young men in Los Angeles (*1*). All of the men were described as "homosexuals"; two had died. Local clinicians and the Epidemic Intelligence Service (EIS) Officer stationed at the Los Angeles County Department of Public Health, prepared the report and submitted it for *MMWR* publication in early May 1981. Before publication, *MMWR* editorial staff sent the submission to CDC experts in parasitic and sexually transmitted diseases. The editorial note that accompanied the published report stated that the case histories suggested a "cellular-immune dysfunction related to a common exposure" and a "disease acquired through sexual contact." The report prompted additional case reports from New York City, San Francisco, and other cities. At about the same time, CDC's investigation drug unit, the sole distributor of pentamidine, the therapy for PCP, began to receive requests for the drug from physicians also to treat young men. In June 1981, CDC developed an investigative team to identify risk factors and to develop a case definition for national surveillance. Within 18 months, epidemiologists conducted studies and prepared *MMWR* reports that identified all of the major risks factors for acquired immnodeficiency syndrome (AIDS). In March 1983, CDC issued recommendations for prevention of sexual, drug-related, and occupational transmission based on these early epidemiologic studies and before the cause of the new, unexplained illness was known.

MMWR has published more than 400 reports about human immunodeficiency virus (HIV) and AIDS and remains a primary source of information about the epidemiology, surveillance, prevention, care, and treatment of HIV and AIDS. This anniversary issue provides new reports on the epidemiologic features and impact of HIV/AIDS on communities in the United States and in other countries. A compilation of notable *MMWR* reports on HIV and AIDS is available at http://www.cdc.gov/mmwr/hiv_aids20.html. A video that includes interviews with participants in these first AIDS investigations and reports and a video summary of each report in this issue is available at http://www.cdc.gov/mmwr.

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HIV and AIDS — United States, 1981–2000

The acquired immunodeficiency syndrome (AIDS) epidemic has had a substantial impact on the health and economy of many nations (*1*). Since the first AIDS cases were reported in the United States in June 1981, the number of cases and deaths among persons with AIDS increased rapidly during the 1980s followed by substantial declines in new cases and deaths in the late 1990s. This report describes the changes in the characteristics of persons with AIDS since 1981. The greatest impact of the epidemic is among men who have sex with men (MSM) and among racial/ethnic minorities, with increases in the number of cases among women and of cases attributed to heterosexual transmission. The number of persons living with AIDS has increased as deaths have declined. Controlling the epidemic requires sustained prevention programs in all of these affected communities, particularly programs targeting MSM, women, and injection drug users.

CDC analyzed reported AIDS cases from 1981 through 2000 from the 50 states, District of Columbia, and U.S. territories. Proportions by sex, age, race/ethnicity, region, and vital status (living or deceased) were computed over four time periods corresponding to changes in the AIDS case definition and the introduction of effective combination antiretroviral therapy (Table 1). Trends in estimated AIDS diagnoses and deaths of persons with AIDS were adjusted for reporting delays based on the number of cases reported to CDC through June 2000, and for anticipated reclassification of cases originally reported without human immunodeficiency virus (HIV) infection risk information. Estimated AIDS prevalence was calculated as the cumulative incidence of AIDS minus cumulative deaths adjusted for reporting delays (*2*).

As of December 31, 2000, 774,467 persons had been reported with AIDS in the United States; 448,060 of these had died; 3542 persons had unknown vital status. The number of persons living with AIDS (322,865) is the highest ever reported. Of these, 79% were men, 61% were black or Hispanic, and 41% were infected through male-to-male sex. Of the AIDS cases, approximately one third were reported during 1981–1992, 1993–1995, and 1996–2000 (Table 1).

AIDS incidence increased rapidly through the 1980s, peaked in the early 1990s, and then declined (Figure 1). The peak of new diagnoses was associated with the expansion of the AIDS surveillance case definition in 1993 (*2*). As of 1996, sharp declines were reported in AIDS incidence and deaths. From 1998 through June 2000, AIDS incidence and deaths leveled off and AIDS prevalence continued to increase. Throughout the epidemic, approximately 85% of persons diagnosed with AIDS were aged 20–49 years (Table 1).

In the early 1980s, most AIDS cases occurred among whites. However, cases among blacks increased steadily and by 1996, more cases occurred among blacks than any other racial/ethnic population. Cases among Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives have increased also (Table 1).

Male-to-male sex has been the most common mode of exposure among persons reported with AIDS (46%), followed by injection drug use (25%) and heterosexual contact (11%). The incidence of AIDS increased rapidly in all three of these risk categories through the mid-1990s; however, since 1996, declines in new AIDS cases have been higher among MSM and injection drug users than among persons exposed through heterosexual contact (Figure 2).

HIV and AIDS in the United States — Continued

TABLE 1. Number and percentage of persons with AIDS, by selected characteristics and period of report — United States, 1981–2000

	1981–1987		1988–1992		1993–1995		1996–2000	
Characteristic	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**
Sex								
Male	46,251	(92.0)	177,132	(87.5)	211,909	(82.4)	204,730	(77.4)
Female	4,029	(8.0)	25,387	(12.5)	45,353	(17.6)	59,672	(22.6)
Age group (yrs)								
0–4	649	(1.3)	2,763	(1.4)	2,105	(0.8)	1,355	(0.5)
5–12	101	(0.2)	667	(0.3)	650	(0.3)	618	(0.2)
13–19	199	(0.4)	759	(0.4)	1,381	(0.5)	1,722	(0.7)
20–29	10,523	(20.9)	38,507	(19.0)	43,445	(16.9)	36,252	(13.7)
30–39	23,239	(46.2)	92,178	(45.5)	116,335	(45.2)	114,072	(43.1)
40–49	10,472	(20.8)	46,922	(23.2)	67,475	(26.2)	78,032	(29.5)
50–59	3,684	(7.3)	14,494	(7.2)	19,153	(7.4)	23,980	(9.1)
≥60	1,413	(2.8)	6,230	(3.1)	6,718	(2.6)	8,373	(3.2)
Race/Ethnicity								
White, non-Hispanic	30,033	(59.7)	102,130	(50.4)	109,101	(42.4)	88,896	(34.0)
Black, non-Hispanic	12,796	(25.5)	63,319	(31.2)	97,742	(38.0)	118,665	(44.9)
Hispanic*	7,044	(14.0)	35,116	(17.3)	47,442	(18.4)	52,092	(19.7)
Asian/Pacific Islander	312	(0.6)	1,342	(0.7)	1,927	(0.8)	2,147	(0.8)
American Indian/ Alaska Native	68	(0.1)	437	(0.2)	870	(0.3)	962	(0.4)
Region†								
Northeast	19,541	(38.9)	62,102	(30.7)	78,000	(30.3)	81,466	(30.8)
North Central	3,772	(7.5)	20,416	(10.1)	25,778	(10.0)	25,532	(9.7)
South	12,933	(25.7)	65,754	(32.5)	89,559	(34.8)	102,576	(38.8)
West	13,502	(26.9)	46,303	(22.9)	55,586	(21.6)	45,574	(17.2)
U.S. territories	524	(1.0)	7,883	(3.9)	8,812	(3.2)	8,829	(3.3)
Vital status								
Living	2,103	(4.2)	20,572	(10.2)	96,998	(37.7)	203,192	(76.9)
Deceased	47,993	(95.5)	181,212	(89.5)	159,048	(61.8)	59,807	(22.6)
Total§	**50,280**	**(6.5)**	**202,520**	**(26.2)**	**257,262**	**(33.2)**	**264,405**	**(34.1)**

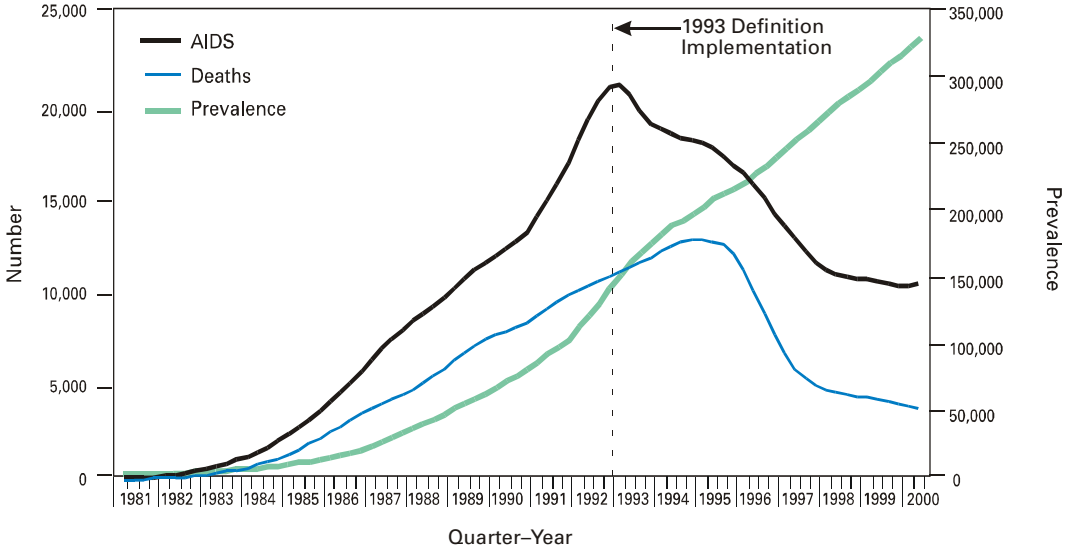
* Persons of Hispanic origin may be of any race.

† *Northeast*=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; *North Central*=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; *South*=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; *West*=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

§ Includes persons for whom sex, age, race/ethnicity, region, or vital status are missing.

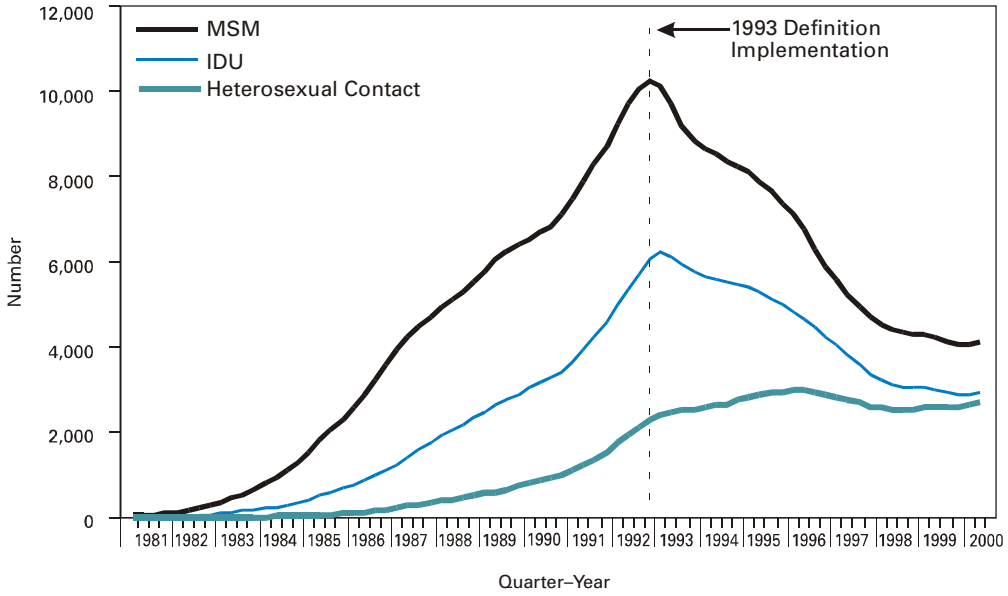
HIV and AIDS in the United States — Continued

FIGURE 1. Estimated AIDS incidence*, deaths, and prevalence, by quarter-year of diagnosis/death — United States, 1981–2000



* Adjusted for reporting delays.

FIGURE 2. Number of AIDS cases among men who have sex with men (MSM), injection drug users (IDU), and persons exposed through heterosexual contact, by quarter-year of diagnosis — United States, 1981–2000



HIV and AIDS in the United States — Continued

Nearly all transmission of HIV through transfusion of blood or blood products occurred before screening of the blood supply for HIV antibody was initiated in 1985 (*3*). The number of persons reported with AIDS who were exposed through blood transfusions was 284 in 2000, down from a peak of 1098 in 1993. The number of perinatally acquired AIDS cases peaked in 1992 (901 cases), followed by a sharp decline through December 1999. In 1999, 144 cases of perinatally acquired AIDS were diagnosed.

Reported by: Surveillance Br, Div of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: AIDS in the United States remains primarily an epidemic affecting MSM and racial/ethnic minorities. A new generation of MSM has replaced those who benefitted from early prevention strategies, and minority MSM have emerged as the population most affected by HIV. Socioeconomic factors (e.g., homophobia, high rates of poverty and unemployment, and lack of access to health care) are associated with high rates of HIV risk behaviors among minority MSM and are barriers to accessing HIV testing, diagnosis, and treatment (*4*). Minority MSM may not identify themselves as homosexual or bisexual because of the stigma attached to these activities and may be difficult to reach with HIV prevention messages. In addition, the proportion of AIDS cases attributed to heterosexual contact and among women is substantially greater than earlier in the epidemic.

Several public health successes have been achieved during the AIDS epidemic. Disease-monitoring systems were established following the first reports in 1981 (*5*). Data from these systems helped determine how AIDS was transmitted and provided a basis for the Public Health Service (PHS) to make prevention recommendations. The licensure of a blood test to screen the nation's blood supply and donor and self-deferral measures dramatically reduced the incidence of transfusion-associated HIV infections (*6*). Less than one in 450,000–660,000 screened blood donations are estimated to be contaminated with HIV (*7*).

In 1985, the first federal resources dedicated to HIV prevention were made available to all state and local health departments nationwide. In 1987, a national effort to educate the public about HIV and AIDS was launched and CDC created a comprehensive AIDS information resource, the CDC National AIDS Hotline and National AIDS Information Clearinghouse. Comprehensive school-based HIV education to inform and educate young persons began in 1987, and funding for national, regional, and community-based organizations began in 1988.

The first research on effective behavior interventions to reduce transmission of HIV among sex partners and injection drug users began in the early 1980s. Behavior interventions, including school-based programs, peer-to-peer interventions, strategies that limit needle sharing, strategies that use parent-to-child communication, client-centered counseling, and personalized risk-reduction strategies, are effective in promoting healthy behaviors that are protective for HIV (*8*).

PHS released guidelines in 1994 and 1995 for routinely counseling and voluntarily testing pregnant women for HIV and for offering zidovudine to infected women and their infants (*9*). Since this intervention, mother-to-child HIV transmission rates have decreased dramatically. During 1985–1999, AIDS cases among children declined 81%.

As a result of these and other HIV prevention efforts and increases in societal awareness of and response to the AIDS epidemic, new infections in the United States, which had risen rapidly to a peak of 150,000 per year in the mid-1980s, declined to an estimated

HIV and AIDS in the United States — Continued

40,000 per year since 1992. With the advent of highly active antiretroviral therapy in the mid-1990s, the number of new AIDS cases and deaths declined dramatically and then stabilized in the United States and several other industrialized nations.

Despite the decline in HIV-related disease and death in the United States, major gaps exist in the tools needed to address HIV prevention. The development of an HIV vaccine is important to control the global epidemic. Development of a microbicide that is safe and effective in reducing HIV transmission through sexual intercourse may be key to controlling the epidemic among women. New behavior interventions, particularly targeting minority MSM, are needed.

Political, financial, and social barriers have often kept the most effective prevention and treatment strategies from reaching those at highest risk. In addition, HIV-related stigma continues to hinder prevention, testing, and treatment. Expanding HIV prevention programs remains an urgent priority in the United States. Reaching populations at risk to ensure early diagnosis and ensuring sustained access to preventive and treatment services for all at risk and HIV-infected persons can have a major impact on the HIV and AIDS epidemic (*10*).

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The Global HIV and AIDS Epidemic, 2001

Human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) are pandemic and pose one of the greatest challenges to global public health. As a bloodborne and sexually transmitted infection, HIV has variable patterns of transmission and impact among world regions and has disproportionately affected disadvantaged or marginalized persons such as commercial sex workers, injection drug users, men who have sex with men (MSM), and persons living in poverty. HIV infection

Global HIV and AIDS Epidemic — Continued

has caused approximately 20 million deaths; an estimated 36 million persons are infected (Figure 1). On the basis of data from the Joint United Nations Program on AIDS (UNAIDS) and other sources, this report summarizes epidemiologic trends, highlights several HIV and AIDS prevention milestones, and describes some prevention activities for the coming decade (*1–4*).

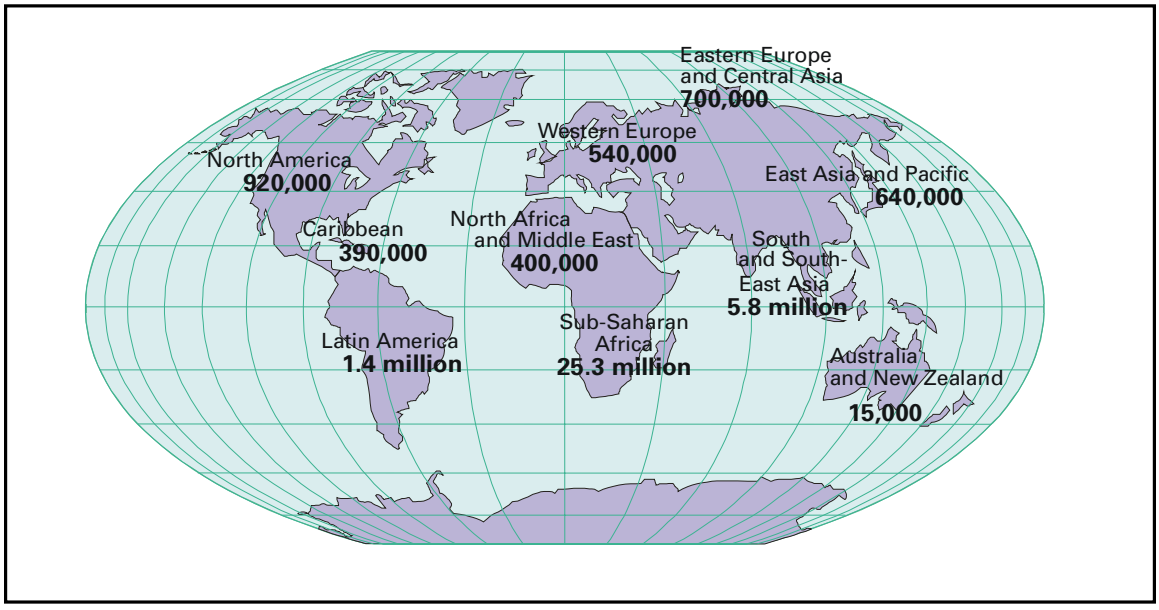
Sub-Saharan Africa (SSA)

SSA* is the region of the world most severely affected by HIV and AIDS. Uganda, Kenya, and Tanzania were among the countries where the HIV epidemic was first recognized during the early 1980s. In 2000, an estimated 25.3 million persons in SSA were infected with HIV, and the average national prevalence of HIV infection among persons aged 15–49 years was 8.8%. Approximately four million new infections occurred during 2000. Approximately 10% of persons aged 15–49 years are infected in 16 countries, including seven in southern and eastern Africa, where approximately 20% are infected. In Botswana, the country with the highest prevalence, 36% of the adult population is infected with HIV (Figure 2).

Despite these trends, intensive and aggressive prevention programs for behavior change, condom promotion, voluntary HIV counseling and testing, and blood transfusion safety have lowered prevalence or slowed HIV transmission in several SSA countries. For example, in Uganda during 1990–2000, overall adult HIV prevalence declined from

*Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Cotê d'Ivoire, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, Togo, Sao Tome-Principe, Uganda, Zambia, and Zimbabwe.

FIGURE 1. Number* of adults and children estimated to be infected with HIV and AIDS — worldwide, 2000

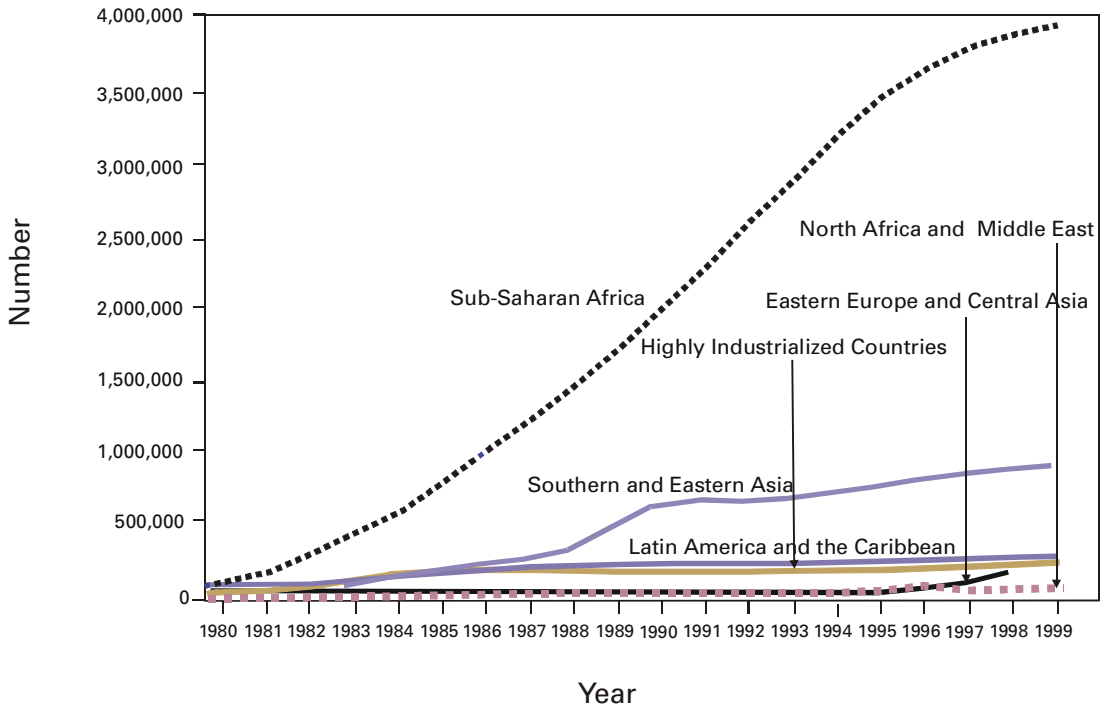


* n=36.1 million.

Source: Jointed United Nations Program on AIDS.

Global HIV and AIDS Epidemic — Continued

FIGURE 2. Estimated number of new HIV infections, by region and year — worldwide, 1980–1999



Source: Jointed United Nations Program on AIDS.

14% to 8%. In Masaka, Uganda, HIV prevalence among females aged 20–24 years decreased from 20.9% during 1989–1990 to 13.8% during 1996–1997 (*5*). Also, in Lusaka, Zambia, which had an early and severe epidemic, HIV prevalence declined among females aged 15–19 years attending prenatal clinics from 27% in 1993 to 17% in 1998. In West Africa, Senegal has maintained a prevalence of approximately 2%; prevention efforts have included regulating commercial sex, intensive condom promotion, treatment of sexually transmitted diseases (STDs), and community mobilization.

Asia

The epidemic continues to spread in the world's most populous areas, where the infrastructure for an effective response is underdeveloped. In China, HIV prevalence was as high as 82% among injection drug users and 6% in commercial sex workers during 1998–1999. A sustained increase also occurred in all reported STDs among males and females during 1989–1998. In India, the estimated HIV infection rate among persons aged 15–49 years is 0.7%. As of mid-1998, an estimated 3.5 million persons were infected with HIV. An exception to countries with increasing prevalence is Thailand, where the epidemic began in the mid-1980s among injection drug users and commercial sex workers and their clients and spread rapidly to the wider population through heterosexual transmission. In response, health officials developed HIV and AIDS surveillance systems and mounted a sustained and effective response, including the "100% condom use" campaign for commercial sex. The resulting decline in STD and HIV transmission was reflected in a decrease in STD rates and HIV prevalence in military recruits and women attending prenatal clinics.

Global HIV and AIDS Epidemic — Continued

Eastern Europe and Central Asia

Eastern Europe has had recent and rapid growth of HIV infection among injection drug users. By January 1999, approximately 10,000 HIV cases had been reported in the Russian Federation. By December 2000, the cumulative total increased to 70,000, and HIV infection among injection drug users was reported from 82 of the 89 regions in the Russian Federation. Ukraine was the country most affected in Eastern Europe and Central Asia, where newly reported infections increased from 47 cases per year during 1992–1994 to approximately 15,000 cases in 1997. Ukraine accounted for 90% of all AIDS cases reported in the region in 1998 and 1999. HIV probably will spread further in the region as a result of the large number of injection drug users, increasing rates of STDs, the growing commercial sex industry, and socioeconomic transitions.

United States and Western Europe

In Western Europe and the United States, deaths attributed to HIV have declined substantially since the introduction of highly active antiretroviral therapies. However, reported increases in STDs among MSM and other indicators of increased risk-taking behavior may be leading to an increase in HIV transmission.

Latin America and the Caribbean

In Latin America and the Caribbean, the leading modes of transmission include sex between men, sex between men and women, and injection drug use. By December 2000, an estimated 1.4 million adults and children were infected with HIV/AIDS in the region compared with 1.3 million in 1999. Barbados, Belize, Dominican Republic, Guyana, Haiti, and Suriname have an HIV prevalence of approximately 1%. The Caribbean, with an adult prevalence of 2.1%, is the second most affected world region. In Brazil, reported HIV-related deaths have declined from approximately 25 per 100,000 in 1995 to approximately 15 per 100,000 in 1999, in large part because of the government policy of providing universal, free access to antiretroviral therapies (*6*).

Reported by: Global AIDS Program, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: HIV and AIDS is the leading cause of death in Africa and the fourth leading cause of death worldwide. In the countries most affected in Africa, life expectancy has declined by 10 years and infant death rates have doubled. In countries with the highest prevalence, such as Botswana, South Africa, and Zimbabwe, the full impact of the epidemic has not been felt because those infected recently have not developed symptoms. Equally important is the effect of HIV deaths on families, social systems, and national growth and development. Young adults who contribute substantially to countries' gross domestic product are most commonly affected. In families, loss of one or both parents to HIV can lead to loss of income, cessation of children's education, increased child labor, and disruption of family and social support systems. For example, in Zambia, a shortage of school teachers has occurred because more teachers are dying of AIDS than can be trained to replace them.

Considerable heterogeneity of rates exist in HIV-infected countries throughout the world, and the differences have been attributed to risk factors associated with the spread of HIV and AIDS. They include migration, economic instability, drug use, STDs, low levels of literacy, and poverty. These are formidable challenges to implementing effective prevention programs (*4*). Although the earliest epidemiologic studies described the modes of transmission of HIV and AIDS and provided insights into the types of interventions needed to prevent transmission, this understanding has been difficult to translate into

Global HIV and AIDS Epidemic — Continued

effective interventions worldwide. The HIV epidemic has challenged public health agencies to develop new and often controversial prevention programs that contradict established practices and social norms.

Despite these challenges, even countries with modest resources have demonstrated that the epidemic can be stabilized or reversed. In these countries, successful programs have included strong, high-level political leadership for HIV prevention, a national program plan, adequate funding, and strong community involvement. Effective and feasible interventions for HIV prevention and control are available. Quality testing and guidelines for blood use can promote a safer blood supply. Widespread condom promotion can reduce HIV seroprevalance in high-risk populations, and education programs for young persons can result in decreased risk-taking behavior. Increasing access to drug treatment and providing education about and increasing access to clean syringes can reduce infection risk in drug using populations. Prophylaxis with co-trimoxazole can prevent certain opportunistic infections and reduce the number of HIV-related deaths. Administering antiviral agents, such as niverapine or short-course zidovudine, and advice to women on breastfeeding, can substantially reduce mother-to-infant transmission (*7*). Improving treatment for STDs can slow HIV infection rates (*8*). When effective STD treatment programs continue to be compromised by weak infrastructure, important opportunities for HIV prevention are lost. Efforts are needed to strengthen STD services and to integrate these with HIV prevention and control programs.

The social stigma associated with HIV infection in many cultures combined with difficulties in providing treatment or services for infected persons are major barriers to expanding voluntary counseling and testing for HIV. Persons who may benefit from knowing their serostatus often reject counseling and testing because they fear the consequences of disclosure of their HIV status. Other disincentives are the lack of resources for care and treatment and the sense that little is gained from learning that one is infected with HIV. Prevention programs must be accompanied by efforts to improve the care of HIV-infected persons. Isoniazid prophylaxis for TB (*9*) and other low-cost interventions should be incorporated into prevention programs (*10*).

The most effective intervention therapy for persons infected with HIV is the use of a combination of antiretroviral agents. However, the high cost of these regimens and the infrastructure needed to monitor their use have put these medications beyond the reach of most HIV-infected persons. Although the price of these drugs has fallen, making treatment a possibility for a greater number of persons, infrastructures to support the effective use of these medications remain inadequate and need strengthening. Given the needs for both prevention and treatment, public health officials and international donors will need to determine the best mix of drug treatment and prevention programs.

Globally, the HIV epidemic has intersected with other, underlying public health problems, most notably tuberculosis (TB). TB remains the principal cause of death in persons with HIV infection worldwide. National TB rates have escalated over the past decade in SSA and South-East Asia. Since the mid-1980s, in many African countries with well-organized programs, annual TB notification rates have increased fourfold, reaching peaks of more than 400 cases per 100,000 population. In some countries, up to 70% of patients with sputum smear-positive pulmonary TB are HIV-infected. To the extent possible, integration of HIV and TB prevention programs should be a priority in these countries.

The increase in HIV infection and AIDS deaths has led to increases in aid from governments and national and international organizations and foundations. Since 1999, the U.S.

Global HIV and AIDS Epidemic — Continued

government increased its financial support to HIV/AIDS prevention and care programs in affected countries. For fiscal year 2001, this totaled $457.5 million. Participating agencies include the U.S. Agency for International Development, the U.S. Department of Health and Human Services (including CDC, and the Health Resources and Services Administration), the Department of Defense, the Department of Labor, and the Department of Commerce. The National Institutes of Health recently launched the Comprehensive International Program for Research on AIDS (CIPRA) to assist developing countries with research agendas relevant to their populations and to enhance infrastructure. CDC established the Global AIDS Program (GAP) to implement international HIV prevention efforts in collaboration with other federal agencies. The program emphasizes sustaining intervention programs for primary prevention of HIV infection, infrastructure development and laboratory support, and home- and community-based care for persons with HIV infection. CDC is supporting these activities in 24 countries in partnership with other U.S. agencies, national ministries of health, UNAIDS, and other international agencies.

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HIV Incidence Among Young Men Who Have Sex With Men — Seven U.S. Cities, 1994–2000

Twenty years after the first report on human immunodeficiency virus (HIV) infection in the United States, studies of sexually transmitted diseases (STDs) and sexual behaviors suggest a resurgent HIV epidemic among men who have sex with men (MSM) (*1,2*). However, few recent studies have measured HIV incidence in this population (*3–7*). To determine HIV incidence among young MSM, CDC analyzed data from the Young Men's Survey (YMS), a study that found a high prevalence of HIV and associated risks among MSM aged 15–22 years sampled in seven U.S. cities (*8*). This report confirms high HIV incidence among these young men.

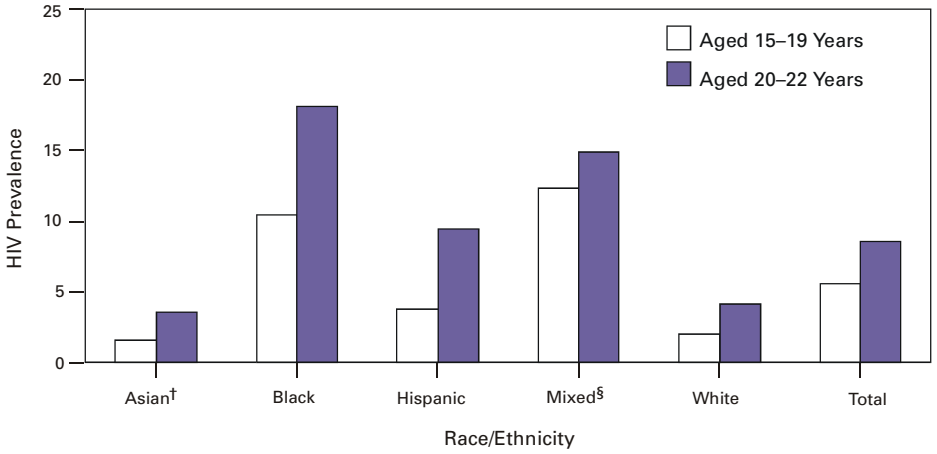
YMS Phase I was a cross-sectional, multisite, venue-based sample survey of men aged 15–22 years who attended public venues where young MSM congregate (e.g., urban shopping blocks, dance clubs, bars, and young gay organizations) (*8*). During the survey start-up in each city, formative research was conducted to identify all venues frequented by young MSM, and the days and times when young men frequented these venues. A three-stage sampling plan was used to randomly select venues from the sampling frame of venues and then to randomly select times. Sampled venues and times were then scheduled for the third stage of sampling in which young men were sampled at 194 venues in Baltimore, Maryland; Dallas, Texas; Los Angeles, California; Miami, Florida; New York, New York; San Francisco, California; and Seattle, Washington. Eligible men (i.e., local residents aged 15–22 years) were recruited for the survey. Participants were asked about their risk behaviors and demographics, and counseled about and tested for HIV; blood specimens were tested anonymously for HIV. Participants were scheduled to return in 2 weeks for test results, posttest counseling, and service referrals. Duplicate enrollees were removed from the database by various screening methods, including the Miragen Assay, which profiles antibodies. Because no association was found between frequency of venue attendance and HIV prevalence, the data were not weighted according to venue attendance.

An enzyme immunoassay was used to screen blood specimens for HIV antibody. Repeatedly reactive specimens were confirmed by Western blot or indirect immunofluorescence. To estimate HIV incidence, a serologic testing algorithm was used to determine recent HIV seroconversion (STARHS) (*9*). HIV-positive specimens were tested with a sensitive HIV-1 whole viral lysate EIA (3A11) (Abbott, Abbott Park, Illinois) that detects infection approximately 30 days after transmission. Specimens that were 3A11-reactive were retested using the 3A11-LS (less-sensitive), which detects HIV infection approximately 140 days after the 3A11 (95% confidence interval [CI]=125–156 days). A specimen that was 3A11-reactive but 3A11-LS-nonreactive was categorized as a recent infection. Incidence was calculated using the number of persons with recent infections as the numerator and the number of persons with recent infections plus the number of persons who were HIV-negative as the denominator. Incidence estimates were adjusted for HIV-positive specimens that were not tested by STARHS. Incidence was annualized to units of percent per year. All data were analyzed using SAS version 6.12.

In the seven cities, 3492 young MSM enrolled (range for the seven cities: 357–702 MSM) (*8*). The enrollment rate was 62% (range: 51%–75%). The prevalence of HIV infection was 7.2% (range: 2.2%–12.1%), increased with age, and was higher among blacks, Hispanics, and men of mixed race than among whites or Asians/Pacific Islanders (Figure 1). These findings and the high prevalence of unprotected anal sex during the

HIV Among Young Men Who Have Sex With Men — Continued

FIGURE 1. HIV prevalence among men aged 15–22 years who have sex with men, by race/ethnicity and age group — seven U.S. cities,* 1994–1998



*Baltimore, Maryland; Dallas, Texas; Los Angeles, California; Miami, Florida; New York City, New York; San Francisco, California; and Seattle, Washington.
† Asian indicates Asian/Pacific Islander.
§ From multiple racial backgrounds.

preceding 6 months (41%; range: 33%–49%) suggested that HIV incidence was high among these young men.

Of the 3449 young MSM tested, 249 were HIV-positive. Of the 249 HIV-positive specimens, 224 were tested by STARHS; 29 met the criteria for recent infection (Table 1). HIV incidence was 2.6% overall, 3.5% among persons aged 20–22 years, 4.0% among blacks, and 5.4% among men of mixed race. Of the 29 persons with recent infections, 14 were from New York City. HIV incidence was similar among homosexual and bisexual men. Recent risk behaviors associated with high HIV incidence were having $\geq$5 male sex partners during the preceding 6 months, having unprotected anal sex with men, or having injected drugs.

During 1998–2000, YMS Phase II was conducted to sample MSM aged 23–29 years in six of the seven cities (excluding San Francisco). Data are preliminary. Of the 2942 young MSM, 1409 (48%) were white, 651 (22%) were Hispanic, and 497 (17%) were black. Of these, 373 (13%) were HIV-positive; HIV prevalence was 7% among whites, 14% among Hispanics, and 32% among blacks. Of the 373 HIV-positive specimens, 290 were STARHS-tested; 38 were recent infections. Overall incidence was 4.4% (95% CI=2.9%–6.7%); HIV incidence was 2.5% among whites (95% CI=1.4%–4.6%), 3.5% among Hispanics (95% CI=1.4%–8.6%), and 14.7% among blacks (95% CI=7.9%–27.1%).

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HIV Among Young Men Who Have Sex With Men — Continued

TABLE 1. HIV prevalence* and incidence† among men aged 15–22 years who have sex with men — seven cities§, United States, 1994–1998

Characteristic	No.¶	HIV prevalence (%)	No. with recent HIV infection	HIV incidence (% per year)	(95% CI**)
Age group (yrs)					
15–19	1542	(5.6)	8	1.6	(0.5– 3.7)
20–22	1906	(8.6)	21	3.5	(1.8– 6.3)
Race/Ethnicity					
American Indian/ Alaska Native	45	(6.7)	0	0.0	(0.0–34.7)
Asian/Pacific Islander	203	(3.0)	0	0.0	(0.0– 6.6)
Black	587	(14.1)	7	4.0	(1.3– 9.9)
Hispanic	1027	(6.9)	6	1.8	(0.5– 4.8)
Mixed	335	(13.4)	6	5.4	(1.5–14.8)
White	1246	(3.3)	10	2.4	(1.0– 5.3)
City					
Baltimore	352	(8.5)	1	0.8	(0.0– 6.0)
Dallas	523	(6.5)	5	3.3	(0.9– 8.9)
Los Angeles	506	(8.3)	4	2.9	(0.7– 8.4)
Miami	484	(5.8)	1	0.7	(0.0– 4.5)
New York	530	(12.1)	14	7.6	(3.3–15.8)
San Francisco	690	(6.2)	3	1.2	(0.2– 4.5)
Seattle	364	(2.2)	1	0.7	(0.0– 5.3)
Sexual identity††					
Homosexual	2240	(7.5)	19	2.6	(1.3– 4.8)
Bisexual	1025	(6.5)	7	2.2	(0.7– 5.4)
Heterosexual	132	(3.8)	2	4.0	(0.3–19.1)
Transgender	42	(14.3)	1	7.1	(0.1–52.9)
Sex partners during preceding 6 months					
Men	2522	(7.8)	19	2.4	(1.2– 4.3)
Men and women	589	(6.6)	8	4.3	(1.5–10.1)
Women	111	(1.8)	0	0.0	(0.0– 9.8)
None	227	(5.3)	2	2.4	(0.2–11.3)
No. male partners during preceding 6 months					
≥5	791	(9.7)	10	4.0	(1.5– 8.8)
1–4	2320	(6.8)	17	2.3	(1.1– 4.3)
None	338	(4.1)	2	1.6	(0.1– 7.5)
Reported risk behaviors during preceding 6 months					
Unprotected anal sex with men	1408	(8.5)	17	3.8	(1.8– 7.2)
Sex while "high" on alcohol/drugs	1756	(7.6)	17	3.0	(1.4– 5.7)
Injected drugs	120	(19.2)	2	6.0	(0.5–26.4)
Total	**3449**	**(7.2)**	**29**	**2.6**	**(1.5– 4.4)**

* Enzyme immunoassay could not be conducted on 43 blood specimens because of insufficient volumes.
† Of the 249 HIV-positive specimens, 224 had quantity sufficient for a serologic testing algorithm for determining recent HIV seroconversion.
§ Baltimore, Maryland; Dallas, Texas; Los Angeles, California; Miami, Florida; New York, New York; San Francisco, California; and Seattle, Washington.
¶ Numbers may not add to total because, for some characteristics, a possible response category was "don't know" or "refuse." For "reported risk behaviors," only the subsamples with these risk behaviors are shown.
** Confidence interval.
†† Participants were asked whether they considered their sexual identity to be straight (heterosexual), bisexual/gay (homosexual), or transgender.

HIV Among Young Men Who Have Sex With Men — Continued

Editorial Note: The findings in this report document a high incidence of HIV among a sample of young MSM, particularly blacks in their 20s. The overall incidence was comparable to that reported in recent studies of adult MSM (*3–7*). In the 20th year of the HIV epidemic, young MSM in these cities continue to be at high risk for HIV infection.

This is the first published report using STARHS to provide incidence estimates in community-recruited sample surveys. In this study, HIV incidence was high among MSM in their 20s and young racial/ethnic minority MSM, especially blacks. Because there were no earlier incidence studies of MSM aged 15–22 years, it is unknown whether HIV transmission among very young MSM is increasing. However, the preliminary high incidence data among MSM aged 23–29 years in YMS Phase II, in conjunction with other recent findings on STDs and sexual behaviors (*1,2*), are of concern and may suggest a resurgent MSM epidemic among young MSM in the late 1990s.

The findings in this report are subject to at least three limitations. First, although enrollment rates were high, sampling was conducted through outreach at venues, and it is not known whether young men with recent high-risk behaviors were more likely to enroll. Second, young men were sampled only at randomly selected venues, and incidence may have been lower if young MSM who did not go to venues or did not live in cities had been sampled. Third, data for YMS Phase II are preliminary, particularly because not all specimens were STARHS-tested and the final results may change slightly.

Young MSM need to be targeted with early and sustained prevention efforts specifically tailored to their needs. In a recent health bulletin sent to HIV prevention providers, CDC encouraged local areas to assess their current situation and services and, if necessary, develop new prevention messages, improve the quality of STD clinical services for MSM, expand prevention and outreach for HIV-positive MSM, and address the factors that may be contributing to high incidence such as the impact of racism and homophobia on risk behavior (*10*). The high HIV incidence described in this report calls for a vigorous public health and community response to prevent HIV.

References

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HIV Among Young Men Who Have Sex With Men — Continued

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Notice to Readers

The 20th Year of AIDS: A Time to Re-Energize Prevention

Since the first acquired immunodeficiency syndrome (AIDS) cases were reported in 1981, human immunodeficiency virus (HIV) has caused approximately 22 million deaths worldwide. In the United States, approximately 400,000 persons have died, and approximately one million have been infected. However, numerous persons have avoided infection through prevention efforts, and many lives have been prolonged through advances in treatment.

The 20th year of AIDS is a milestone in the fight against HIV/AIDS; it is a time to remember persons who have become ill and died from the disease and to reflect on the progress made in both HIV prevention and treatment. A way to commemorate those persons who have died from AIDS is to accelerate efforts to stop HIV transmission. Accordingly, at this milestone, CDC has outlined a new strategy to reduce further HIV infection.

The response to HIV/AIDS in the United States has demonstrated the necessity of collaboration between health officials and affected communities. Since the mid-to-late 1980s, CDC has worked with all sectors of society (e.g., state and local public health, media, business, religious, medical, and academic and community-based organizations) to inform the public about AIDS and implement prevention efforts. These efforts evolved from public information campaigns to highly targeted community-based programs using proven behavior interventions. During this time, U.S. infection rates declined dramatically.

New strategies are needed to maintain and accelerate progress in HIV/AIDS prevention that sustain and reinvigorate communities most severely affected during the early years of the epidemic, particularly men who have sex with men and to meet the evolving needs of an increasingly diverse epidemic. Efforts also must be tailored to equip racial/ethnic minority communities with the skills and knowledge to prevent HIV infection.

Highly active antiretroviral therapies have improved the length and quality of life for HIV-infected persons. However, some infected persons on treatment assume that they are not infectious and engage in behavior that increases risk for transmission (*1*). In addition, some persons may have decreased concern about infection because of advances in treatment. Increases in risk behaviors and rates of sexually transmitted diseases among men who have sex with men have been reported from multiple cities, which may herald an increase in HIV transmission.

CDC begins the third decade of HIV/AIDS with a new strategic plan designed to reduce annual infections by half within 5 years. This three-part plan includes: 1) intensifying efforts to help all infected persons learn their HIV status; 2) establishing new prevention programs to help HIV-infected persons establish and maintain safer behaviors, combined with improved linkages to treatment and care; and 3) expanding highly targeted prevention programs to reach all HIV-negative persons at greatest risk.

Notice to Readers — Continued

Additional information about the HIV strategic plan is available at http://www.cdc.gov/nchstp/od/news/prevention.pdf

HIV prevention programs contribute to healthier behaviors and reduce the number of new HIV infections in the United States. An expanded and sustained commitment to prevention on a global, national, community, and personal level is required to further reduce the number of new infections and of persons living with HIV.

Reference

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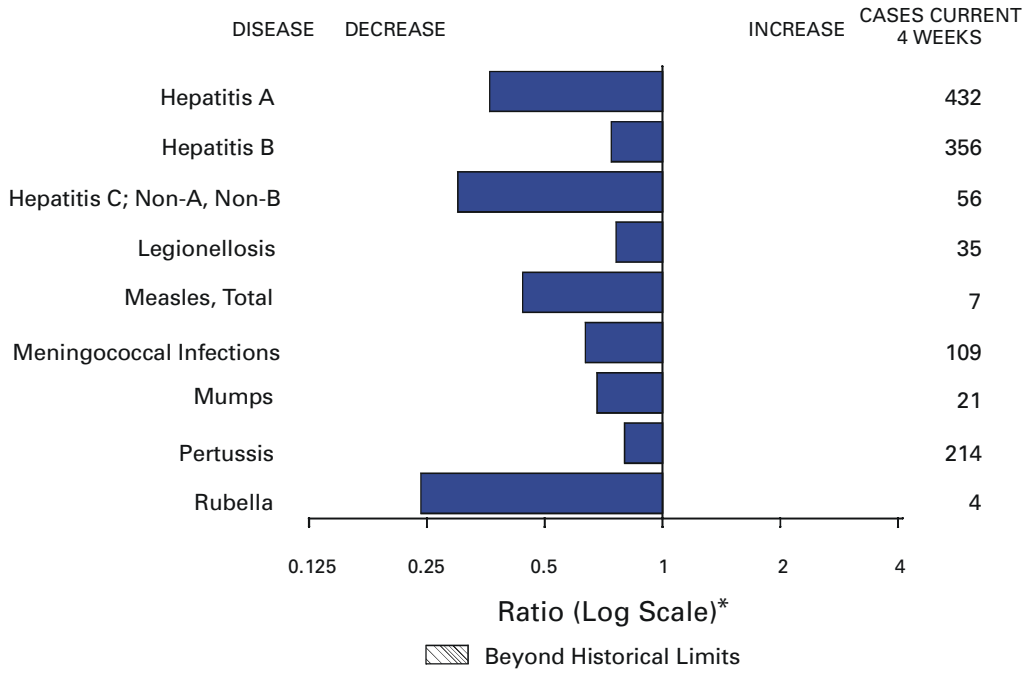
FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending May 26, 2001, with historical data



* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending May 26, 2001 (21st Week)

	Cum. 2001		Cum. 2001
Anthrax	-	Poliomyelitis, paralytic	-
Brucellosis*	20	Psittacosis*	4
Cholera	-	Q fever*	6
Cyclosporiasis*	39	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	68
Ehrlichiosis: human granulocytic (HGE)*	29	Rubella, congenital syndrome	-
human monocytic (HME)*	6	Streptococcal disease, invasive, group A	1,587
Encephalitis: California serogroup viral*	-	Streptococcal toxic-shock syndrome*	23
eastern equine*	-	Syphilis, congenital¶	40
St. Louis*	-	Tetanus	6
western equine*	-	Toxic-shock syndrome	57
Hansen disease (leprosy)*	22	Trichinosis	5
Hantavirus pulmonary syndrome*†	3	Tularemia*	13
Hemolytic uremic syndrome, postdiarrheal*	29	Typhoid fever	86
HIV infection, pediatric*§	72	Yellow fever	-
Plague	-		

-: No reported cases.
*Not notifiable in all states.
† Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update April 24, 2001.
§ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2001, and May 27, 2000 (21st Week)

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7*			
							NETSS		PHLIS	
	Cum. 2001§	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	11,921	14,542	248,136	280,555	558	591	453	661	317	543
NEW ENGLAND	469	975	8,920	9,358	21	34	56	76	39	75
Maine	14	14	484	543	3	5	6	5	6	6
N.H.	13	13	484	419	-	2	10	4	6	6
Vt.	10	1	226	221	9	10	2	2	1	3
Mass.	271	668	3,909	4,007	4	10	22	35	16	29
R.I.	40	33	1,078	1,038	3	2	4	3	2	5
Conn.	121	246	2,739	3,130	2	5	12	27	8	26
MID. ATLANTIC	2,254	3,254	25,281	30,992	60	115	43	97	31	75
Upstate N.Y.	97	157	4,607	5,316	32	29	35	71	20	38
N.Y. City	1,028	1,931	10,071	11,168	25	76	1	7	1	3
N.J.	635	722	2,933	5,036	2	4	7	19	10	17
Pa.	494	444	7,670	9,472	1	6	N	N	-	17
E.N. CENTRAL	926	1,563	34,917	47,772	181	122	100	122	51	80
Ohio	167	174	4,145	12,358	45	20	32	23	23	14
Ind.	85	146	5,849	5,167	25	8	21	12	9	13
Ill.	433	1,003	9,579	13,863	1	17	13	38	7	28
Mich.	189	185	11,748	9,621	46	16	18	20	-	17
Wis.	52	55	3,596	6,763	64	61	16	29	12	8
W.N. CENTRAL	243	309	12,695	15,523	27	39	49	93	50	84
Minn.	47	47	2,497	3,239	-	10	16	23	21	32
Iowa	24	24	1,490	2,054	15	11	7	14	6	8
Mo.	117	149	4,281	5,163	6	6	10	28	12	21
N. Dak.	1	-	352	362	-	2	-	5	3	6
S. Dak.	-	3	754	710	3	3	4	2	4	3
Nebr.	16	19	910	1,506	3	4	4	14	-	10
Kans.	38	67	2,411	2,489	-	3	8	7	4	4
S. ATLANTIC	3,720	3,928	51,298	49,992	119	97	50	54	23	45
Del.	72	76	1,138	1,209	1	2	-	1	-	-
Md.	436	450	4,884	5,063	25	6	3	8	-	1
D.C.	297	265	1,408	1,335	7	2	-	-	U	U
Va.	270	259	6,738	6,224	7	4	12	12	8	13
W. Va.	28	26	912	833	-	3	1	2	-	2
N.C.	190	255	7,516	8,302	14	8	21	9	9	6
S.C.	250	294	5,239	3,910	-	-	2	3	2	3
Ga.	392	358	10,321	10,184	41	53	4	5	2	10
Fla.	1,785	1,945	13,142	12,932	24	19	7	14	2	10
E.S. CENTRAL	682	768	18,234	20,162	14	19	21	33	14	23
Ky.	121	99	3,532	3,216	1	1	5	10	5	10
Tenn.	220	314	5,654	5,780	2	3	11	14	8	11
Ala.	174	206	4,433	6,359	5	8	5	1	-	-
Miss.	167	149	4,615	4,807	6	7	-	8	1	2
W.S. CENTRAL	1,296	1,423	38,972	42,007	7	30	24	34	29	52
Ark.	81	92	3,145	2,525	2	1	1	4	-	4
La.	331	214	6,730	7,647	3	6	1	3	13	13
Okla.	67	112	3,872	3,760	2	2	8	7	8	3
Tex.	817	1,005	25,225	28,075	-	21	14	20	8	32
MOUNTAIN	510	515	13,134	16,332	44	31	49	53	31	32
Mont.	11	7	862	601	3	4	3	9	-	-
Idaho	7	11	703	765	5	3	6	9	-	4
Wyo.	1	2	260	310	-	3	1	3	-	2
Colo.	109	129	1,116	4,955	15	8	23	16	16	7
N. Mex.	40	50	2,090	2,024	8	1	3	2	2	3
Ariz.	202	142	5,717	5,126	1	2	7	12	7	13
Utah	48	57	447	1,027	10	8	3	1	5	1
Nev.	92	117	1,939	1,524	2	2	3	1	1	2
PACIFIC	1,821	1,807	44,685	48,417	85	104	61	99	49	77
Wash.	201	196	5,599	5,272	N	U	15	25	13	37
Oreg.	69	86	981	2,771	3	3	10	12	7	18
Calif.	1,526	1,457	36,912	37,927	81	101	34	54	27	14
Alaska	9	5	1,067	1,022	-	-	1	1	-	1
Hawaii	16	63	126	1,425	1	-	1	7	2	7
Guam	9	13	-	218	-	-	N	N	U	U
P.R.	408	284	2,090	U	-	-	-	3	U	U
V.I.	2	18	53	-	-	-	-	-	U	U
Amer. Samoa	-	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	50	U	-	U	-	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

† Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update April 24, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2001, and May 27, 2000 (21st Week)

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Listeriosis	Lyme Disease	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	113,748	135,840	888	10,102	251	268	143	925	2,189
NEW ENGLAND	2,447	2,589	12	11	15	19	14	305	409
Maine	56	32	-	-	-	2	-	-	-
N.H.	54	38	-	-	4	2	-	45	31
Vt.	31	26	5	3	4	1	-	1	7
Mass.	1,197	1,028	7	5	4	9	8	61	148
R.I.	274	260	-	3	1	2	1	15	-
Conn.	835	1,205	-	-	2	3	5	183	223
MID. ATLANTIC	11,928	14,511	30	283	27	66	23	362	1,394
Upstate N.Y.	3,036	2,451	20	11	17	20	10	285	423
N.Y. City	4,255	4,631	-	-	4	9	4	1	52
N.J.	1,027	2,838	-	254	4	6	6	7	428
Pa.	3,610	4,591	10	18	2	31	3	69	491
E.N. CENTRAL	19,123	27,348	92	105	69	73	19	21	90
Ohio	2,816	6,914	5	3	38	32	4	20	11
Ind.	2,414	2,373	1	-	6	9	3	1	1
Ill.	5,915	8,385	10	10	-	7	-	-	7
Mich.	6,818	6,838	76	92	18	14	11	-	4
Wis.	1,160	2,838	-	-	7	11	1	U	67
W.N. CENTRAL	5,256	6,582	288	223	18	14	3	34	35
Minn.	785	1,273	-	4	1	1	-	21	13
Iowa	392	422	-	1	4	3	-	3	-
Mo.	2,662	3,173	284	212	9	7	1	7	12
N. Dak.	13	25	-	-	-	-	-	-	-
S. Dak.	103	105	-	-	-	1	-	-	-
Nebr.	271	548	1	2	3	-	1	1	1
Kans.	1,030	1,036	3	4	1	2	1	2	9
S. ATLANTIC	31,034	34,917	47	32	42	44	25	149	202
Del.	613	678	-	2	-	4	-	-	34
Md.	2,798	3,456	11	2	8	10	2	104	127
D.C.	1,190	931	-	-	2	-	-	7	1
Va.	3,311	4,042	-	1	6	3	4	27	18
W. Va.	224	264	5	4	N	N	3	1	8
N.C.	6,106	6,877	8	12	4	6	-	5	8
S.C.	3,798	3,478	3	-	1	2	2	1	2
Ga.	5,610	6,241	-	1	2	4	7	-	-
Fla.	7,384	8,950	20	10	19	15	7	4	4
E.S. CENTRAL	11,430	14,247	91	190	23	8	8	4	9
Ky.	1,376	1,344	3	16	6	5	2	2	2
Tenn.	3,638	4,430	28	41	9	1	3	2	5
Ala.	3,516	4,833	2	6	6	1	3	-	1
Miss.	2,900	3,640	58	127	2	1	-	-	1
W.S. CENTRAL	18,755	21,679	151	9,162	4	11	4	7	18
Ark.	1,939	1,341	3	2	-	-	1	-	-
La.	4,606	5,403	64	227	2	5	-	1	1
Okla.	1,791	1,658	3	2	2	1	-	-	-
Tex.	10,419	13,277	81	8,931	-	5	3	6	17
MOUNTAIN	4,027	4,187	128	27	20	15	15	4	1
Mont.	43	20	-	1	-	-	-	-	-
Idaho	33	36	1	-	-	2	1	2	-
Wyo.	17	27	101	1	1	-	-	1	1
Colo.	1,240	1,337	10	5	6	6	2	-	-
N. Mex.	347	426	9	6	1	1	3	-	-
Ariz.	1,595	1,678	4	10	6	2	3	-	-
Utah	41	110	-	-	4	4	1	-	-
Nev.	711	553	3	4	2	-	5	1	-
PACIFIC	9,748	9,780	49	69	33	18	32	39	31
Wash.	1,199	916	12	9	6	8	2	2	-
Oreg.	155	362	7	14	N	N	1	3	3
Calif.	8,236	8,193	30	46	27	10	29	34	27
Alaska	128	124	-	-	-	-	-	-	1
Hawaii	30	185	-	-	-	-	-	N	N
Guam	-	22	-	1	-	-	-	-	-
P.R.	653	230	-	1	2	-	-	N	N
V.I.	6	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	-	U	U
C.N.M.I.	3	U	-	U	-	U	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2001, and May 27, 2000 (21st Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
					NETSS		PHLIS	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	338	442	2,284	2,500	9,218	11,029	7,345	10,711
NEW ENGLAND	26	18	241	282	747	649	666	692
Maine	3	2	30	60	88	48	70	33
N.H.	2	1	7	3	55	45	42	46
Vt.	-	2	34	22	32	45	32	53
Mass.	6	8	74	90	421	377	320	374
R.I.	3	3	26	19	42	25	55	51
Conn.	12	2	70	88	109	109	147	135
MID. ATLANTIC	62	88	301	378	927	1,603	1,144	1,828
Upstate N.Y.	16	20	231	261	341	350	322	480
N.Y. City	33	42	5	3	301	455	362	476
N.J.	8	13	63	60	204	447	218	347
Pa.	5	13	2	54	81	351	242	525
E.N. CENTRAL	41	56	14	25	1,280	1,642	1,047	1,564
Ohio	9	5	2	4	472	373	408	372
Ind.	9	2	1	-	136	167	112	186
Ill.	1	33	2	1	281	519	179	555
Mich.	15	10	9	13	244	317	226	340
Wis.	7	6	-	7	147	266	122	111
W.N. CENTRAL	14	22	128	227	552	608	598	785
Minn.	6	7	15	32	158	66	207	226
Iowa	1	1	22	33	85	80	89	88
Mo.	3	3	13	10	147	227	194	267
N. Dak.	-	2	17	57	1	15	18	26
S. Dak.	-	-	15	48	40	25	31	39
Nebr.	2	3	1	-	44	71	-	48
Kans.	2	6	45	47	77	124	59	91
S. ATLANTIC	89	93	818	865	2,320	1,861	1,436	1,586
Del.	1	2	12	18	25	35	27	39
Md.	35	35	97	165	240	257	255	290
D.C.	4	1	-	-	26	19	U	U
Va.	20	23	168	220	391	243	314	252
W. Va.	1	-	54	51	33	46	33	42
N.C.	2	9	239	217	373	274	194	232
S.C.	4	1	50	49	269	154	239	133
Ga.	3	4	110	91	319	308	301	447
Fla.	19	18	88	54	644	525	73	151
E.S. CENTRAL	10	15	79	74	528	529	315	431
Ky.	2	2	10	10	97	113	67	81
Tenn.	5	5	57	45	143	131	115	195
Ala.	3	7	12	19	192	156	109	129
Miss.	-	1	-	-	96	129	24	26
W.S. CENTRAL	5	23	479	436	896	1,220	498	733
Ark.	2	1	-	-	122	116	79	83
La.	1	4	-	-	208	211	168	155
Okla.	1	1	37	30	75	104	53	89
Tex.	1	17	442	406	491	789	198	406
MOUNTAIN	19	19	90	93	636	928	524	862
Mont.	2	1	14	24	25	40	-	-
Idaho	2	-	-	1	32	49	4	47
Wyo.	-	-	16	27	25	21	16	18
Colo.	9	10	-	-	187	288	189	272
N. Mex.	1	-	3	6	84	82	66	73
Ariz.	1	2	57	34	169	210	158	225
Utah	2	3	-	1	68	141	68	134
Nev.	2	3	-	-	46	97	23	93
PACIFIC	72	108	134	120	1,332	1,989	1,117	2,230
Wash.	2	7	-	-	148	150	205	243
Oreg.	4	21	-	-	62	126	92	161
Calif.	62	77	101	97	1,070	1,623	704	1,741
Alaska	1	-	33	23	16	22	2	19
Hawaii	3	3	-	-	36	68	114	66
Guam	-	-	-	-	-	9	U	U
P.R.	-	3	61	25	104	142	U	U
V.I.	-	-	-	-	-	-	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	3	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2001, and May 27, 2000 (21st Week)

Reporting Area	Shigellosis* NETSS Cum. 2001	Shigellosis* NETSS Cum. 2000	Shigellosis* PHLIS Cum. 2001	Shigellosis* PHLIS Cum. 2000	Syphilis (Primary & Secondary) Cum. 2001	Syphilis (Primary & Secondary) Cum. 2000	Tuberculosis Cum. 2001	Tuberculosis Cum. 2000
UNITED STATES	4,448	6,970	2,147	4,427	1,979	2,564	4,036	5,015
NEW ENGLAND	71	117	67	97	18	31	150	144
Maine	3	4	1	-	-	1	5	3
N.H.	1	1	1	4	1	1	7	3
Vt.	3	1	1	-	1	-	2	2
Mass.	47	79	39	62	11	23	90	88
R.I.	6	10	9	10	1	1	13	12
Conn.	11	22	16	21	4	5	33	36
MID. ATLANTIC	364	1,055	320	646	137	117	817	852
Upstate N.Y.	162	355	14	143	4	5	117	110
N.Y. City	125	503	174	321	85	50	433	471
N.J.	40	120	67	93	29	26	188	198
Pa.	37	77	65	89	19	36	79	73
E.N. CENTRAL	636	1,205	330	759	294	555	439	506
Ohio	235	88	130	74	29	28	65	114
Ind.	106	249	17	42	70	187	28	51
Ill.	141	390	84	318	82	195	237	232
Mich.	124	329	86	297	104	119	79	73
Wis.	30	149	13	28	9	26	30	36
W.N. CENTRAL	513	531	398	462	24	38	161	199
Minn.	181	91	199	144	12	4	88	66
Iowa	92	132	79	128	1	10	9	13
Mo.	114	243	69	151	6	19	43	76
N. Dak.	9	2	1	1	-	-	-	-
S. Dak.	49	2	33	1	-	-	6	9
Nebr.	29	23	-	11	-	2	15	9
Kans.	39	38	17	26	5	3	-	26
S. ATLANTIC	718	782	219	306	795	838	753	841
Del.	4	5	4	5	4	4	-	2
Md.	45	37	23	13	92	130	74	91
D.C.	21	8	U	U	16	19	15	1
Va.	53	66	26	85	55	54	83	106
W. Va.	4	3	6	2	-	1	11	15
N.C.	151	49	70	26	192	240	103	119
S.C.	67	27	35	43	109	89	37	30
Ga.	86	97	51	81	109	146	163	192
Fla.	287	490	4	51	218	155	267	285
E.S. CENTRAL	408	332	164	241	223	380	256	363
Ky.	144	76	50	36	18	42	38	41
Tenn.	39	161	28	185	126	239	69	138
Ala.	108	15	78	17	38	46	116	120
Miss.	117	80	8	3	41	53	33	64
W.S. CENTRAL	785	1,228	349	371	261	350	489	805
Ark.	235	77	144	24	18	45	51	73
La.	87	110	71	58	55	81	-	64
Okla.	13	23	2	14	32	61	51	50
Tex.	450	1,018	132	275	156	163	387	618
MOUNTAIN	278	364	172	231	83	84	151	189
Mont.	-	3	-	-	-	-	-	6
Idaho	14	28	-	19	-	-	4	4
Wyo.	-	2	-	2	-	1	-	1
Colo.	60	69	49	30	15	5	45	24
N. Mex.	49	36	29	21	6	8	11	21
Ariz.	117	128	69	77	52	68	54	69
Utah	18	32	17	35	6	-	6	20
Nev.	20	66	8	47	4	2	31	44
PACIFIC	675	1,356	128	1,314	144	171	820	1,116
Wash.	67	293	76	278	23	23	82	92
Oreg.	21	92	36	56	2	6	35	33
Calif.	580	950	-	965	118	141	680	906
Alaska	2	6	1	3	-	-	17	37
Hawaii	5	15	15	12	1	1	6	48
Guam	-	18	U	U	-	2	-	26
P.R.	7	14	U	U	136	78	58	61
V.I.	-	-	U	U	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	4	U	U	U	-	U	15	U

N: Not notifiable. U: Unavailable. -: No reported cases.

*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 26, 2001, and May 27, 2000 (21st Week)

Reporting Area	*H. influenzae*, Invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
			A		B		Indigenous		Imported*		Total	
	Cum. 2001†	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	572	560	3,617	5,260	2,382	2,666	-	24	-	20	44	32
NEW ENGLAND	19	44	170	127	39	44	-	3	-	1	4	-
Maine	1	1	5	7	4	5	U	-	U	-	-	-
N.H.	-	6	5	11	9	8	-	-	-	-	-	-
Vt.	1	3	3	3	2	3	-	1	-	-	1	-
Mass.	16	26	48	51	3	2	-	2	-	1	3	-
R.I.	1	1	8	6	9	9	-	-	-	-	-	-
Conn.	-	7	101	49	12	17	-	-	-	-	-	-
MID. ATLANTIC	70	86	326	494	331	481	-	2	-	5	7	10
Upstate N.Y.	27	32	103	94	56	50	-	1	-	4	5	-
N.Y. City	23	27	133	201	182	231	-	-	-	-	-	10
N.J.	19	22	70	82	64	86	-	-	-	1	1	-
Pa.	1	5	20	117	29	114	U	1	U	-	1	-
E.N. CENTRAL	74	87	418	697	294	282	-	-	-	10	10	3
Ohio	37	27	100	127	53	46	-	-	-	3	3	2
Ind.	19	10	39	18	12	20	-	-	-	4	4	-
Ill.	10	31	121	295	24	36	-	-	-	3	3	-
Mich.	4	7	143	214	205	167	-	-	-	-	-	1
Wis.	4	12	15	43	-	13	U	-	U	-	-	-
W.N. CENTRAL	22	27	163	392	87	113	-	4	-	-	4	-
Minn.	11	15	12	103	10	14	-	2	-	-	2	-
Iowa	-	-	16	38	9	14	-	-	-	-	-	-
Mo.	9	8	44	180	47	57	-	2	-	-	2	-
N. Dak.	-	1	-	-	-	2	U	-	U	-	-	-
S. Dak.	-	-	1	-	1	-	-	-	-	-	-	-
Nebr.	1	2	21	17	9	18	-	-	-	-	-	-
Kans.	1	1	69	54	11	8	-	-	-	-	-	-
S. ATLANTIC	190	132	732	509	521	436	-	3	-	1	4	-
Del.	-	-	-	8	-	7	U	-	U	-	-	-
Md.	43	33	105	57	59	57	-	2	-	1	3	-
D.C.	-	-	18	3	3	5	-	-	-	-	-	-
Va.	14	27	55	64	54	60	-	-	-	-	-	-
W. Va.	4	4	2	38	12	4	-	-	-	-	-	-
N.C.	23	10	49	84	99	109	-	-	-	-	-	-
S.C.	5	3	23	16	6	3	-	-	-	-	-	-
Ga.	50	38	273	74	136	75	-	1	-	-	1	-
Fla.	51	17	207	165	152	116	-	-	-	-	-	-
E.S. CENTRAL	45	27	131	216	151	187	-	2	-	-	2	-
Ky.	2	10	19	22	17	38	-	2	-	-	2	-
Tenn.	20	11	59	81	58	79	-	-	-	-	-	-
Ala.	22	4	47	26	39	23	-	-	-	-	-	-
Miss.	1	2	6	87	37	47	U	-	U	-	-	-
W.S. CENTRAL	22	31	549	970	280	395	-	1	-	-	1	-
Ark.	-	-	29	79	44	42	-	-	-	-	-	-
La.	2	10	42	41	22	66	-	-	-	-	-	-
Okla.	20	20	73	129	36	54	-	-	-	-	-	-
Tex.	-	1	405	721	178	233	U	1	U	-	1	-
MOUNTAIN	91	61	311	351	231	193	-	-	-	1	1	9
Mont.	-	-	4	1	1	3	U	-	U	-	-	-
Idaho	1	2	28	13	6	4	-	-	-	1	1	-
Wyo.	4	-	15	3	16	-	U	-	U	-	-	-
Colo.	21	11	30	75	48	35	-	-	-	-	-	2
N. Mex.	12	14	10	38	63	57	-	-	-	-	-	-
Ariz.	43	28	162	165	69	66	-	-	-	-	-	-
Utah	3	4	27	26	11	10	-	-	-	-	-	3
Nev.	7	2	35	30	17	18	-	-	-	-	-	4
PACIFIC	39	65	817	1,504	448	535	-	9	-	2	11	10
Wash.	1	3	34	127	42	27	-	-	-	-	-	3
Oreg.	11	20	28	101	18	43	-	1	-	-	1	-
Calif.	24	25	743	1,259	385	456	U	7	U	1	8	5
Alaska	2	1	12	6	3	3	-	-	-	-	-	1
Hawaii	1	16	-	11	-	6	-	1	-	1	2	1
Guam	-	-	-	1	-	8	U	-	U	-	-	-
P.R.	-	2	41	140	28	104	U	-	U	-	-	-
V.I.	-	-	-	-	-	-	U	-	U	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	17	U	U	-	U	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
*For imported measles, cases include only those resulting from importation from other countries.
† Of 122 cases among children aged <5 years, serotype was reported for 57, and of those, eight were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 26, 2001, and May 27, 2000 (21st Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000
UNITED STATES	1,111	1,100	3	72	169	64	1,717	2,130	1	6	65
NEW ENGLAND	68	60	-	-	2	1	180	561	-	-	10
Maine	1	5	U	-	-	U	-	12	U	-	-
N.H.	7	4	-	-	-	-	16	54	-	-	1
Vt.	5	2	-	-	-	-	22	104	-	-	-
Mass.	38	37	-	-	-	-	133	361	-	-	8
R.I.	2	3	-	-	1	-	1	7	-	-	-
Conn.	15	9	-	-	1	1	8	23	-	-	1
MID. ATLANTIC	83	104	-	2	11	4	105	198	-	1	5
Upstate N.Y.	35	27	-	1	5	4	89	95	-	1	1
N.Y. City	20	26	-	1	3	-	6	35	-	-	4
N.J.	23	22	-	-	-	-	2	-	-	-	-
Pa.	5	29	U	-	3	U	8	68	U	-	-
E.N. CENTRAL	141	196	-	9	16	6	206	268	-	3	-
Ohio	51	40	-	1	7	4	127	155	-	-	-
Ind.	24	21	-	1	-	1	19	22	-	1	-
Ill.	20	50	-	6	4	1	23	22	-	2	-
Mich.	25	62	-	1	4	-	19	19	-	-	-
Wis.	21	23	U	-	1	U	18	50	U	-	-
W.N. CENTRAL	74	69	-	4	10	2	82	86	-	1	1
Minn.	10	7	-	1	-	-	17	46	-	-	-
Iowa	18	16	-	-	5	-	10	8	-	1	-
Mo.	25	33	-	-	2	2	38	14	-	-	-
N. Dak.	3	1	U	-	-	U	-	1	U	-	-
S. Dak.	4	4	-	-	-	-	3	1	-	-	-
Nebr.	5	4	-	1	1	-	2	3	-	-	1
Kans.	9	4	-	2	2	-	12	13	-	-	-
S. ATLANTIC	209	156	2	17	24	4	91	157	1	1	28
Del.	-	-	U	-	-	U	-	4	U	-	-
Md.	27	16	-	4	5	-	13	42	-	-	-
D.C.	-	-	-	-	-	-	1	-	-	-	-
Va.	21	28	-	2	4	-	10	15	-	-	-
W. Va.	4	7	-	-	-	-	1	-	-	-	-
N.C.	45	27	1	1	3	3	33	39	-	-	20
S.C.	21	13	-	1	7	-	19	16	-	-	6
Ga.	30	26	-	7	2	-	3	19	-	-	-
Fla.	61	39	1	2	3	1	11	22	1	1	2
E.S. CENTRAL	79	77	-	1	4	1	40	43	-	-	4
Ky.	13	15	-	1	-	-	11	25	-	-	1
Tenn.	29	34	-	-	2	-	17	7	-	-	-
Ala.	30	22	-	-	2	1	9	8	-	-	3
Miss.	7	6	U	-	-	U	3	3	U	-	-
W.S. CENTRAL	160	128	-	7	20	-	53	85	-	-	6
Ark.	10	6	-	1	1	-	3	10	-	-	1
La.	52	33	-	2	4	-	1	6	-	-	1
Okla.	18	19	-	-	-	-	1	9	-	-	-
Tex.	80	70	U	4	15	U	48	60	U	-	4
MOUNTAIN	57	52	1	7	13	44	828	331	-	-	1
Mont.	-	1	U	-	1	U	6	7	U	-	-
Idaho	5	6	-	1	-	1	161	39	-	-	-
Wyo.	1	-	U	1	1	U	1	-	U	-	-
Colo.	23	14	-	1	-	5	140	188	-	-	1
N. Mex.	8	6	-	2	1	-	49	54	-	-	-
Ariz.	11	17	1	1	3	38	453	30	-	-	-
Utah	5	6	-	-	4	-	13	9	-	-	-
Nev.	4	2	-	1	3	-	5	4	-	-	-
PACIFIC	240	258	-	25	69	2	132	401	-	-	10
Wash.	38	23	-	-	2	-	40	116	-	-	7
Oreg.	17	29	N	N	N	2	9	38	-	-	-
Calif.	181	195	U	20	58	U	83	222	U	-	3
Alaska	2	3	-	1	4	-	-	5	-	-	-
Hawaii	2	8	-	4	5	-	-	20	-	-	-
Guam	-	-	U	-	3	U	-	2	U	-	1
P.R.	1	5	U	-	-	U	-	1	U	-	-
V.I.	-	-	U	-	-	U	-	-	U	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	U	-	U	U	-	U	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

TABLE IV. Deaths in 122 U.S. cities,* week ending May 26, 2001 (21st Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	615	450	103	42	9	9	54
Boston, Mass.	167	101	45	17	2	2	9
Bridgeport, Conn.	41	29	5	6	-	1	2
Cambridge, Mass.	20	15	5	-	-	-	3
Fall River, Mass.	24	21	2	1	-	-	3
Hartford, Conn.	52	34	12	2	3	-	7
Lowell, Mass.	30	26	2	1	1	-	2
Lynn, Mass.	8	6	1	1	-	-	-
New Bedford, Mass.	29	25	1	3	-	-	1
New Haven, Conn.	37	26	8	1	-	2	2
Providence, R.I.	62	52	7	1	1	1	7
Somerville, Mass.	-	-	-	-	-	-	-
Springfield, Mass.	41	31	4	4	1	1	3
Waterbury, Conn.	39	34	4	1	-	-	3
Worcester, Mass.	64	50	7	4	1	2	12
MID. ATLANTIC	1,998	1,373	409	137	37	39	100
Albany, N.Y.	50	38	10	1	1	-	3
Allentown, Pa.	27	25	2	-	-	-	-
Buffalo, N.Y.	83	58	11	6	4	4	12
Camden, N.J.	27	17	6	1	-	3	1
Elizabeth, N.J.	U	U	U	U	U	U	U
Erie, Pa.§	38	30	6	1	-	1	1
Jersey City, N.J.	35	27	5	2	1	-	-
New York City, N.Y.	1,068	706	234	89	19	17	44
Newark, N.J.	U	U	U	U	U	U	U
Paterson, N.J.	15	7	4	4	-	-	-
Philadelphia, Pa.	324	212	77	23	8	4	18
Pittsburgh, Pa.§	33	20	7	2	1	3	3
Reading, Pa.	22	17	2	1	1	1	3
Rochester, N.Y.	117	90	21	1	2	3	7
Schenectady, N.Y.	23	20	3	-	-	-	1
Scranton, Pa.§	39	26	12	1	-	-	2
Syracuse, N.Y.	78	63	8	4	-	3	5
Trenton, N.J.	U	U	U	U	U	U	U
Utica, N.Y.	19	17	1	1	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,563	1,076	300	106	38	43	108
Akron, Ohio	60	46	6	5	1	2	7
Canton, Ohio	48	35	7	4	1	1	3
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	101	56	23	13	3	6	6
Cleveland, Ohio	156	102	39	10	4	1	9
Columbus, Ohio	185	129	37	11	5	3	12
Dayton, Ohio	97	74	17	4	1	1	6
Detroit, Mich.	211	122	51	24	5	9	11
Evansville, Ind.	U	U	U	U	U	U	U
Fort Wayne, Ind.	69	49	12	5	3	-	5
Gary, Ind.	18	10	5	-	-	3	-
Grand Rapids, Mich.	42	34	6	1	-	1	6
Indianapolis, Ind.	149	98	34	9	3	5	10
Lansing, Mich.	34	23	9	1	1	-	6
Milwaukee, Wis.	104	79	14	3	5	3	9
Peoria, Ill.	43	35	4	2	1	1	1
Rockford, Ill.	45	32	10	2	-	1	5
South Bend, Ind.	42	37	4	-	-	1	6
Toledo, Ohio	88	63	13	8	1	3	5
Youngstown, Ohio	71	52	9	4	4	2	1
W.N. CENTRAL	674	472	115	48	23	16	47
Des Moines, Iowa	56	46	6	3	1	-	6
Duluth, Minn.	29	23	4	1	-	1	2
Kansas City, Kans.	10	6	3	-	-	1	-
Kansas City, Mo.	117	71	24	12	5	5	7
Lincoln, Nebr.	34	29	4	1	-	-	5
Minneapolis, Minn.	173	131	29	7	2	4	16
Omaha, Nebr.	86	67	13	1	4	1	8
St. Louis, Mo.	105	61	23	13	8	-	-
St. Paul, Minn.	U	U	U	U	U	U	U
Wichita, Kans.	64	38	9	10	3	4	3
S. ATLANTIC	1,164	734	264	112	34	20	81
Atlanta, Ga.	191	104	58	23	6	-	4
Baltimore, Md.	254	158	56	30	7	3	21
Charlotte, N.C.	93	58	25	7	2	1	11
Jacksonville, Fla.	U	U	U	U	U	U	U
Miami, Fla.	268	176	54	24	7	7	24
Norfolk, Va.	46	26	12	4	1	3	5
Richmond, Va.	65	39	15	9	1	1	4
Savannah, Ga.	U	U	U	U	U	U	U
St. Petersburg, Fla.	44	35	5	1	-	3	4
Tampa, Fla.	203	138	39	14	10	2	8
Washington, D.C.	U	U	U	U	U	U	U
Wilmington, Del.	U	U	U	U	U	U	U
E.S. CENTRAL	734	491	169	45	13	14	67
Birmingham, Ala.	182	128	36	10	2	4	29
Chattanooga, Tenn.	115	84	24	4	2	1	12
Knoxville, Tenn.	79	51	25	1	2	-	3
Lexington, Ky.	73	47	21	4	1	-	6
Memphis, Tenn.	172	109	39	15	2	7	12
Mobile, Ala.	84	54	17	7	4	2	4
Montgomery, Ala.	29	18	7	4	-	-	1
Nashville, Tenn.	U	U	U	U	U	U	U
W.S. CENTRAL	1,101	752	208	70	32	39	70
Austin, Tex.	82	53	17	10	1	1	7
Baton Rouge, La.	72	50	11	6	3	2	2
Corpus Christi, Tex.	54	39	11	1	1	2	11
Dallas, Tex.	216	136	44	18	9	9	11
El Paso, Tex.	86	67	13	3	2	1	3
Ft. Worth, Tex.	96	70	13	3	-	10	-
Houston, Tex.	U	U	U	U	U	U	U
Little Rock, Ark.	62	41	16	4	-	1	1
New Orleans, La.	61	36	17	2	3	3	4
San Antonio, Tex.	242	173	40	15	8	6	17
Shreveport, La.	U	U	U	U	U	U	U
Tulsa, Okla.	130	87	26	8	5	4	14
MOUNTAIN	1,007	696	168	69	42	32	96
Albuquerque, N.M.	105	75	18	7	3	2	23
Boise, Idaho	39	31	5	-	2	1	5
Colo. Springs, Colo.	66	45	13	3	3	2	10
Denver, Colo.	116	79	19	10	3	5	6
Las Vegas, Nev.	211	150	38	13	7	3	16
Ogden, Utah	24	19	4	-	-	1	2
Phoenix, Ariz.	168	93	34	17	18	6	10
Pueblo, Colo.	30	23	4	3	-	-	4
Salt Lake City, Utah	98	72	16	4	3	3	13
Tucson, Ariz.	150	109	17	12	3	9	7
PACIFIC	2,186	1,546	408	152	41	35	172
Berkeley, Calif.	21	15	3	1	-	2	1
Fresno, Calif.	114	89	22	3	-	-	12
Glendale, Calif.	53	43	8	2	-	-	4
Honolulu, Hawaii	70	50	14	3	1	2	8
Long Beach, Calif.	U	U	U	U	U	U	U
Los Angeles, Calif.	982	689	185	75	19	14	68
Pasadena, Calif.	28	18	8	1	1	-	5
Portland, Oreg.	186	121	41	15	5	4	16
Sacramento, Calif.	223	146	44	21	7	5	16
San Diego, Calif.	166	121	26	12	2	5	17
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	U	U	U	U	U	U	U
Santa Cruz, Calif.	27	21	5	1	-	-	5
Seattle, Wash.	144	104	24	10	4	2	11
Spokane, Wash.	66	49	11	4	1	1	3
Tacoma, Wash.	106	80	17	4	1	-	6
TOTAL	11,042¶	7,590	2,144	781	269	247	795

U: Unavailable. -:No reported cases.
*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
†Pneumonia and influenza.
§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
¶Total includes unknown ages.

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