

MMWRTM
**MORBIDITY AND MORTALITY
WEEKLY REPORT**

- 509 Anonymous or Confidential HIV Counseling and Voluntary Testing
- 513 Progress Toward Poliomyelitis Eradication — African Region
- 518 Renal Insufficiency and Failure Associated with IGIV Therapy
- 521 Update: Hantavirus Pulmonary Syndrome — United States, 1999
- 525 Notice to Readers

**Anonymous or Confidential HIV Counseling and Voluntary Testing
in Federally Funded Testing Sites — United States, 1995–1997**

Human immunodeficiency virus (HIV) counseling and voluntary testing (CT) programs have been an important part of national HIV prevention efforts since the first HIV antibody tests became available in 1985 (1). In 1995, these programs accounted for approximately 15% of annual HIV antibody testing in the United States, excluding testing for blood donation (1). CT opportunities are offered to persons at risk for HIV infection at approximately 11,000 sites, including dedicated HIV CT sites, sexually transmitted disease (STD) clinics, drug-treatment centers, hospitals, and prisons. In 39 states, testing can be obtained anonymously, where persons do not have to give their name to get tested. All states provide confidential testing (by name) and have confidentiality laws and regulations to protect this information. This report compares patterns of anonymous and confidential testing in all federally funded CT programs from 1995 through 1997 and documents the importance of both types of testing opportunities.

In CT programs, demographic and HIV risk information is collected, combined with laboratory test results, and reported to CDC after removal of personal identifying information. Federally funded CT programs provided 2.5 million tests (40,605 HIV-positive) in 1995, 2.6 million (39,119 HIV-positive) in 1996, and 2.3 million (34,875 HIV-positive) in 1997. Of the 7.4 million federally funded HIV tests performed during 1995–1997, client information on 6.3 million tests was available for analysis. Because some persons had more than one HIV test in a year, the proportion of persons tested who had positive results could not be calculated. Thus, the proportion positive reflects the number of positive tests divided by the number of tests provided.

From 1995 to 1997, the number of anonymous tests declined 26.6% (from 636,069 to 466,560), and the number of confidential tests increased 2.9% (from 1,394,921 to 1,434,709). Although more tests were provided to women than men each year, more anonymous tests were provided to men than women. In each year, the highest numbers of positive anonymous tests were among white and black men, and the highest number of positive confidential tests were among blacks.

In 1997, the most recent year for which complete data were available, STD clinics provided more tests overall (551,838) and more confidential tests (494,414) than other sites, and dedicated HIV CT sites provided the largest number of anonymous tests (302,273). Overall, most HIV-positive tests were reported from specially designated

HIV Tests — Continued

HIV CT sites (10,523 [2.0%] of 538,574), STD clinics (8390 [1.5%] of 551,838), prisons (3120 [3.5%] of 88,183), community health centers (2941 [2.1%] of 139,331), and drug-treatment centers (2574 [2.4%] of 109,037).

In 1997, of tests provided to men who have sex with men (MSM), 55.3% were anonymous. Most anonymous tests were among MSM who were injecting-drug users (IDUs) (37.3%), followed by men whose only risk was heterosexual contact (24.7%) and male IDUs (22.1%).

Among men, the highest proportion of tests that were anonymous were among Asians/Pacific Islander (A/PI) MSM (71.6%) and among white MSM (61.9%) (Table 1). A lower proportion of anonymous tests were for American Indian/Alaskan Native (AI/AN) MSM (55.4%), Hispanic MSM (47.9%), and black MSM (32.5%).

Among women, the highest proportion of anonymous tests was among A/PI IDU (40.0%), A/PI with heterosexual contact (35.9%), whites with heterosexual contact (30.8%), AI/AN with heterosexual contact (29.7%), and AI/AN IDUs (29.2%) (Table 2).

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

Editorial Note: The benefits of early HIV CT are greater now than at any time during the epidemic. For HIV-infected persons, highly active antiretroviral therapy (HAART) has improved dramatically the quality and duration of life (2). For public health, reduced HIV transmission may occur because many infected persons probably will reduce sexual risk behavior after HIV-infection diagnosis (3). In addition, HAART may reduce the risk for transmission by reducing the amount of infectious virus in body fluids of HIV-infected persons (4,5). For these reasons, public health programs should work to diagnose HIV infection in each of the approximately 200,000 infected persons (6) who do not know their HIV status, link them to care and prevention services, and assist them in adhering to treatment regimens and in sustaining risk-reduction behavior.

Both anonymous and confidential testing opportunities help to facilitate test seeking among persons at risk for HIV infection. The findings in this report indicate a decline in anonymous tests from 1995 through 1997. Reasons for this decline are unclear but may reflect changes in the characteristics of persons counseled and tested for HIV, a perception that HIV-infection is a treatable and less stigmatizing disease, and the impact of new laws (7) and regulations on the risk for confidentiality violations and other factors. However, anonymous testing continues to be of value; anonymous testing has been associated with entry into medical care earlier in disease (8). Among groups at risk for HIV infection, MSM—particularly A/PI and white MSM—most frequently choose anonymous testing over confidential in publicly funded facilities. These data are consistent with other studies indicating that MSM have high levels of concern about the confidentiality of their HIV test results (9). Because of the potential benefits of anonymous testing, CDC encourages states to include anonymous testing as an integral component of CT programs.

The low proportion of women and black men who choose anonymous testing may reflect a lack of awareness that these services exist, a greater willingness to test confidentially, preferentially receiving care in settings where provider practices favor confidential testing, or being tested because of the presence of HIV-related symptoms. A better understanding of the factors that contribute to differences in testing patterns may improve the effectiveness of voluntary testing programs. On the basis of recent

HIV Tests — Continued

TABLE 1. Number of men receiving federally funded anonymous or confidential HIV tests and number and percentage of positive tests, by race/ethnicity and mode of HIV transmission — United States, 1997

| Characteristic | Anonymous | | | Confidential | | | Total |
|--|-------------|----------|--------|--------------|----------|--------|----------------|
| | No. tested* | Positive | | No. tested* | Positive | | |
| | | No. | (%) | | No. | (%) | |
| White | | | | | | | |
| Men who have sex with men (MSM) | 50,529 | 1,951 | (3.9) | 27,313 | 1,727 | (6.3) | 81,679 |
| MSM-injecting-drug user (IDU) | 2,618 | 172 | (6.6) | 3,416 | 278 | (8.1) | 6,319 |
| IDU | 9,666 | 147 | (1.5) | 29,313 | 492 | (1.7) | 40,884 |
| Heterosexual | 81,670 | 283 | (0.3) | 144,424 | 594 | (0.4) | 234,084 |
| Other | 8,438 | 73 | (0.9) | 26,833 | 466 | (1.7) | 40,158 |
| Black | | | | | | | |
| MSM | 6,215 | 817 | (13.1) | 12,606 | 1,998 | (15.8) | 19,136 |
| MSM-IDU | 479 | 61 | (12.7) | 1,337 | 203 | (15.2) | 1,852 |
| IDU | 3,832 | 300 | (7.8) | 13,282 | 1,386 | (10.4) | 17,436 |
| Heterosexual | 33,587 | 733 | (2.2) | 191,393 | 4,017 | (2.1) | 230,279 |
| Other | 1,894 | 78 | (4.1) | 27,708 | 747 | (2.7) | 30,313 |
| Hispanic | | | | | | | |
| MSM | 9,580 | 655 | (6.8) | 10,077 | 932 | (9.2) | 20,006 |
| MSM-IDU | 538 | 36 | (6.7) | 1,070 | 125 | (11.7) | 1,640 |
| IDU | 3,000 | 89 | (3.0) | 13,667 | 1,042 | (7.6) | 16,880 |
| Heterosexual | 20,871 | 265 | (1.3) | 73,521 | 1,180 | (1.6) | 95,812 |
| Other | 2,445 | 38 | (1.6) | 10,529 | 271 | (2.6) | 13,943 |
| Asian/ Pacific Islander | | | | | | | |
| MSM | 1,850 | 55 | (3.0) | 629 | 19 | (3.0) | 2,584 |
| MSM-IDU | 32 | 2 | (6.3) | 27 | 3 | (11.1) | 62 |
| IDU | 119 | 3 | (2.5) | 175 | 3 | (1.7) | 306 |
| Heterosexual | 2,996 | 8 | (0.3) | 3,875 | 19 | (0.5) | 7,056 |
| Other | 281 | 1 | (0.4) | 985 | 15 | (1.5) | 1,374 |
| American Indian/ Alaskan Native | | | | | | | |
| MSM | 410 | 19 | (4.6) | 266 | 23 | (8.6) | 740 |
| MSM-IDU | 60 | 4 | (6.7) | 74 | 9 | (12.2) | 151 |
| IDU | 193 | 7 | (3.6) | 470 | 5 | (1.1) | 801 |
| Heterosexual | 875 | 4 | (0.5) | 1,659 | 11 | (0.7) | 2,924 |
| Other | 289 | 0 | — | 257 | 2 | (0.8) | 835 |

*Numbers may not add to total because of missing data.

trends, HIV-infection programs should assure the provision of voluntary HIV CT in settings that serve at-risk women and black men.

From 1995 through 1997, the number of federally funded confidential tests increased. Three quarters of publicly funded testing is confidential and accounts for nearly 25,000 positive tests each year. Confidential testing is offered in HIV CT sites,

HIV Tests — Continued

TABLE 2. Number of women receiving federally funded anonymous or confidential HIV tests and number and percentage of positive tests, by race/ethnicity and mode of HIV transmission — United States, 1997

| Characteristic | Anonymous | | | Confidential | | | Total |
|---------------------------------------|-------------|----------|-----|--------------|----------|-----|----------------|
| | No. tested* | Positive | | No. tested* | Positive | | |
| | | No. | (%) | | No. | (%) | |
| White | | | | | | | |
| Injecting-drug user (IDU) | 7,950 | 94 | 1.2 | 21,530 | 388 | 1.8 | 31,098 |
| Heterosexual | 114,383 | 309 | 0.3 | 243,806 | 810 | 0.3 | 371,506 |
| Other | 16,366 | 37 | 0.2 | 64,734 | 177 | 0.3 | 88,503 |
| Black | | | | | | | |
| IDU | 2,064 | 171 | 8.3 | 7,646 | 712 | 9.3 | 9,940 |
| Heterosexual | 34,729 | 716 | 2.1 | 237,105 | 4,065 | 1.7 | 276,190 |
| Other | 4,297 | 62 | 1.4 | 52,966 | 688 | 1.3 | 58,250 |
| Hispanic | | | | | | | |
| IDU | 1,481 | 40 | 2.7 | 5,132 | 409 | 8.0 | 6,784 |
| Heterosexual | 24,324 | 215 | 0.9 | 139,933 | 1,297 | 0.9 | 166,184 |
| Other | 2,865 | 28 | 1.0 | 29,809 | 175 | 0.6 | 34,391 |
| Asian/Pacific Islander | | | | | | | |
| IDU | 106 | 0 | — | 145 | 1 | 0.7 | 265 |
| Heterosexual | 4,628 | 12 | 0.3 | 7,942 | 21 | 0.3 | 12,882 |
| Other | 612 | 2 | 0.3 | 2,818 | 3 | 0.1 | 3,708 |
| American Indian/Alaskan Native | | | | | | | |
| IDU | 236 | 7 | 3.0 | 389 | 9 | 2.3 | 808 |
| Heterosexual | 1,498 | 10 | 0.7 | 2,652 | 16 | 0.6 | 5,043 |
| Other | 264 | 0 | — | 786 | 0 | — | 1,330 |

*Numbers may not add to total because of missing data.

prisons, and medical settings (e.g., clinics, community health centers, and hospitals). More than half of positive confidential tests were in federally funded clinical-care settings (e.g., STD, drug-treatment, and tuberculosis and community health centers). Data from emergency departments in hospitals in areas where the prevalence of HIV infection is high indicate that half of infected persons are unaware of their HIV infection (CDC, unpublished data, 1999). To increase the number of infected persons who are aware of their HIV status, voluntary testing will need to be increased in settings where persons at risk for HIV infection seek care for non-HIV-related conditions.

The findings in this report are subject to at least three limitations. First, the data are not representative of all persons tested for HIV during the observation period; the data include approximately 15% of annual nonblood donation tests in the United States. Second, the proportion of positive tests is not the same as the proportion of persons who tested positive. Some persons were tested multiple times; therefore, the proportion of persons who tested positive was not available. Finally, some test sites report summary data, which could not be used in this analysis, rather than individual client

HIV Tests — Continued

test records; the analyzed individual client record data represent 87% of all federally funded tests provided in 1997.

CDC encourages every adult and adolescent to assess their risk for HIV infection based on past behavior. Persons who believe they might have been exposed to HIV but who have not been tested should seek CT for HIV. Additional information about HIV CT is available on the World-Wide Web at <http://www.hivtest.org>* or from the National AIDS Hotline, telephone (800) 342-2437.

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*References to sites of nonfederal organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

Progress Toward Poliomyelitis Eradication — African Region, 1998–April 1999

In 1988, the World Health Assembly resolved to eradicate poliomyelitis globally by 2000 (1). To achieve this goal, the African Region (AFRO) of the World Health Organization (WHO) has accelerated polio eradication strategies (2,3), but the region remains one of the two major reservoirs for wild poliovirus transmission (4,5). This report summarizes progress toward polio eradication from 1998 through April 1999 in AFRO, highlights supplementary vaccination activities (National Immunization Days [NIDs])* and acute flaccid paralysis (AFP) surveillance conducted in the region, and

*Nationwide mass campaigns over a period (days to weeks), in which two doses of oral poliovirus vaccine (OPV) are administered to all children in the target age group (usually aged <5 years), regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

Poliomyelitis Eradication — Continued

describes plans for program acceleration (intensified NIDs and mopping-up vaccinations[†]) to meet the 2000 eradication target.

Supplementary Vaccination Activities

From 1998 through April 1999, two rounds of NIDs or Subnational Immunization Days (SNIDs) were conducted in 34 countries where polio is endemic or was recently endemic in AFRO except in Sierra Leone (one round) and Guinea-Bissau (no rounds). Approximately 88 million children received two doses each of supplemental oral poliovirus vaccine (OPV) in 1998. Two countries reported NID coverage of <80% (Sierra Leone, 78%, and Gambia, 79%). Eighty-two percent of NID rounds had coverage of >90%. In the Democratic Republic of Congo (DR Congo), two rounds of supplemental vaccination (first round December 1998, second round January 1999) were conducted. The first round was in 125 of 307 health zones with 91% coverage. The second round was in 176 of 307 health zones with 92% coverage. In Angola in 1998, SNIDs were not conducted in 42 of 164 districts. However, coverage for the 122 districts reached by SNIDs was 91%.

Acute Flaccid Paralysis Surveillance

The number of reported AFP cases increased from 505 in 1997 to 1754 in 1998 (Table 1). In 1998, the nonpolio AFP rate was 0.3 cases per 100,000 children aged <15 years. Wild poliovirus was isolated from 96 AFP cases from many countries of central and western Africa and Angola (Figure 1). The largest number of wild poliovirus cases were in western Africa (Nigeria [n=42], Ghana [n=18], and Côte d'Ivoire [n=11]). Partial genomic sequencing of the viruses indicated intense transmission and rapid movement of polioviruses across countries in western and central Africa. A large outbreak of wild poliovirus type 3 is being investigated in Luanda, Angola (953 cases reported as of May 18, 1999) (6).

In 1998, no wild poliovirus was isolated from stool specimens from 209 of the 305 AFP cases in southern Africa and 235 of the 399 AFP cases in eastern Africa. Nonpolio AFP rates and/or adequate stool collection remained low (<0.5 per 100,000 children aged <15 years or <80% of AFP cases with two stool specimens collected within 14 days of onset of paralysis) in Kenya, Madagascar, Malawi, Mozambique, South Africa, Uganda, and Zambia. However, in 1999, AFP rates in Kenya, Uganda, and Zambia have increased considerably. No wild poliovirus was isolated from specimens submitted from Ethiopia and Mozambique, but in both countries the nonpolio AFP rate was ≤0.1.

Program Acceleration

To reach the 2000 target, AFRO recommends that Angola, Chad, DR Congo, Guinea-Bissau, Liberia, Niger, Nigeria, and Sierra Leone conduct intensified NIDs during 1999. Intensified NIDs occur when the vaccines are administered to all target-aged children in house-to-house outreach efforts and sometimes include a third round. DR Congo will be conducting three rounds from July through September 1999. Angola will be conducting three rounds, mostly house-to-house, from July through September 1999.

In 1999, mopping-up vaccinations already have been conducted in Bangui, Central African Republic, and have been conducted in Ougadougou, Burkina Faso, in May and

[†]Focal mass campaigns in high-risk areas during a period (days to weeks) in which two doses of OPV are administered during house-to-house visits to all children in the target age groups, regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

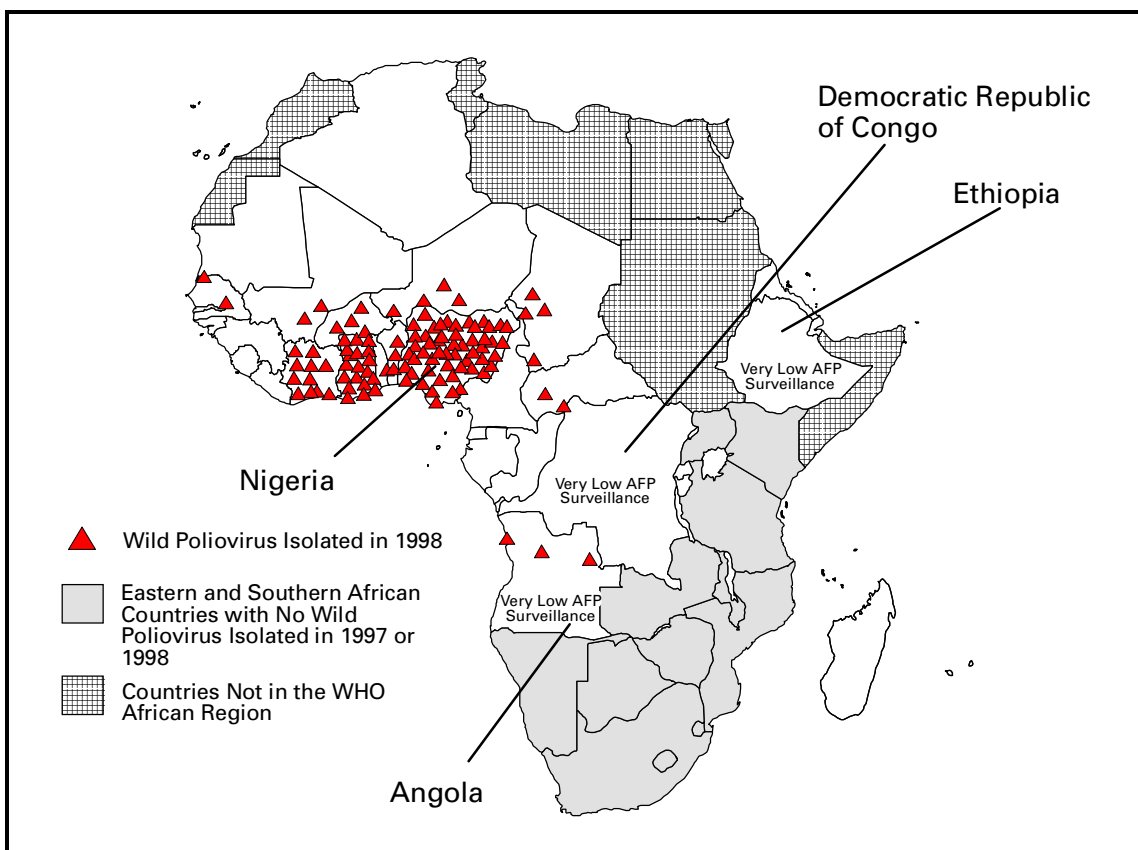
Poliomyelitis Eradication — Continued

TABLE 1. Performance indicators for acute flaccid paralysis (AFP) surveillance, by country — African Region of the World Health Organization, 1997–1998

| Region/Country | 1997 | | | | 1998 | | | |
|------------------------------|------------------------|--------------------|--------------------------------------|------------------------------|------------------------|-------------------|-------------------------------------|------------------------------|
| | No. reported AFP cases | Nonpolio AFP rate* | % AFP cases with adequate specimens† | Confirmed polio (wild virus) | No. reported AFP cases | Nonpolio AFP rate | % AFP cases with adequate specimens | Confirmed polio (wild virus) |
| Central | | | | | | | | |
| Angola | 15 | 0.24 | 0 | 15 (0) | 16 | 0.10 | 56% | 7 (3) |
| Cameroon | 11 | 0.17 | 18% | 21 (0) | 40 | 0.40 | 60% | 16 (0) |
| Central African Republic | 12 | 0.19 | 18% | 10 (8) | 59 | 3.30 | 41% | 6 (2) |
| Congo | 0 | — | — | — | 0 | — | — | — |
| Democratic Republic of Congo | 24 | 0.11 | 50% | 82 (3) | 21 | 0.10 | 52% | 10 (0) |
| Equatorial Guinea | 0 | — | — | — | 0 | — | — | — |
| Gabon | 0 | — | — | — | 1 | 0.20 | 100% | 0 (0) |
| Western | | | | | | | | |
| Algeria | 65 | 0.50 | 0 | 0 (0) | 88 | 0.83 | 75% | 0 (0) |
| Benin | 4 | 0.08 | 75% | 3 (2) | 15 | 0.30 | 67% | 8 (3) |
| Burkina Faso | 12 | 0.19 | 25% | 3 (2) | 12 | 0.10 | 50% | 8 (4) |
| Chad | 4 | 0.07 | 75% | 326 (2) | 12 | 0.30 | 83% | 4 (4) |
| Gambia | 1 | 0.20 | 0 | 1 (0) | 0 | — | — | — |
| Ghana | 35 | 0.42 | 46% | 17 (2) | 154 | 0.50 | 30% | 112 (18) |
| Guinea | 3 | 0.09 | 33% | 2 (0) | 7 | 0.10 | 43% | 4 (0) |
| Guinea-Bissau | 1 | 0.20 | 100% | 1 (0) | 0 | — | — | — |
| Côte d'Ivoire | 11 | 0.11 | 36% | 6 (3) | 71 | 0.40 | 42% | 38 (11) |
| Liberia | 0 | — | — | — | 0 | — | — | — |
| Mali | 3 | 0 | 0 | 2 (0) | 23 | 0.20 | 30% | 14 (2) |
| Mauritania | 5 | 0.50 | 0 | 5 (0) | 0 | — | — | — |
| Niger | 12 | 0.14 | 33% | 56 (5) | 12 | 0.10 | 50% | 8 (4) |
| Nigeria | 5 | 0.01 | 20% | 383 (1) | 489 | 0.40 | 39% | 312 (42) |
| Senegal | 12 | 0.19 | 44% | 5 (1) | 17 | 0.20 | 53% | 10 (2) |
| Sierra Leone | 0 | — | — | — | 3 | <0.10 | 0 | 3 (0) |
| Togo | 4 | 0.13 | 75% | 2 (1) | 10 | 0.20 | 60% | 5 (1) |
| Southern | | | | | | | | |
| Botswana | 4 | 0.57 | 75% | 3 (0) | 5 | 0.70 | 80% | 0 (0) |
| Lesotho | 1 | 0.11 | 100% | 0 (0) | 5 | 0.20 | 40% | 3 (0) |
| Madagascar | 12 | 0.17 | 25% | 10 (1) | 17 | 0.20 | 53% | 6 (0) |
| Malawi | 10 | 0.20 | 60% | 2 (0) | 28 | 0.50 | 79% | 5 (0) |
| Mozambique | 4 | 0.05 | 0 | 4 (0) | 16 | 0.10 | 56% | 7 (0) |
| Namibia | 5 | 0.71 | 60% | 2 (0) | 11 | 1.30 | 64% | 2 (0) |
| South Africa | 63 | 0.28 | 55% | 0 (0) | 167 | 0.40 | 13% | 104 (0) |
| Swaziland | 2 | 0.50 | 100% | 0 (0) | 5 | 1.30 | 60% | 0 (0) |
| Zimbabwe | 42 | 0.82 | 21% | 3 (0) | 51 | 0.70 | 43% | 17 (0) |
| Eastern | | | | | | | | |
| Burundi | 0 | — | — | — | 0 | — | — | — |
| Eritrea | 0 | — | — | 41 (0) | 0 | — | — | — |
| Ethiopia | 13 | 0.05 | 23% | 19 (0) | 63 | <0.10 | 13% | 55 (0) |
| Kenya | 22 | 0.16 | 36% | 14 (0) | 123 | 0.10 | 8% | 109 (0) |
| Rwanda | 1 | 0.03 | 0 | 0 (0) | 2 | <0.10 | 0 | 2 (0) |
| Tanzania | 20 | 0.13 | 50% | 10 (0) | 127 | 0.40 | 48% | 66 (0) |
| Uganda | 60 | 0.48 | 29% | 35 (0) | 61 | 0.10 | 23% | 46 (0) |
| Zambia | 7 | 0.13 | 43% | 5 (0) | 23 | 0.40 | 39% | 6 (0) |
| Total | 505 | 0.16 | 24% | 1088 (31) | 1754 | 0.30 | 39% | 993 (96) |

* Per 100,000 children aged <15 years.

† Two stool specimens collected at an interval of at least 24 hours within 14 days of onset of paralysis and adequately shipped to the laboratory.

*Poliomyelitis Eradication — Continued***FIGURE 1. Acute flaccid paralysis (AFP) cases with wild poliovirus isolated — African Region of the World Health Organization (WHO), 1998**

June. In Nigeria, 13 million children in 15 of 37 states were targeted to receive OPV during house-to-house vaccination campaigns from April through May. Preliminary data from the first round indicate that house-to-house vaccination is reaching 10%–40% more children than the previous NIDs (7). For 1999, AFRO is recommending that mopping-up vaccinations be conducted in one to four surrounding provinces if a single wild poliovirus is isolated in 1999 >60 days after the second round of the NIDs.

Reported by: Expanded Program on Immunization, Regional Office for Africa, World Health Organization, Harare, Zimbabwe. Vaccines and Other Biologicals Dept, World Health Organization, Geneva, Switzerland. Respiratory and Enteric Virus Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

Editorial Note: During the past 12 months, accelerated efforts to achieve polio eradication have occurred in Africa. These efforts include the first attempt at large-scale urban and rural supplementary vaccination in DR Congo, the first NIDs with nationwide coverage of >80% for both rounds in Nigeria, and NIDs in all countries where polio is endemic except Guinea-Bissau. In addition, the number of reported AFP cases increased approximately 400% in 1998 over 1997, reflecting improved surveillance.

Intense wild poliovirus transmission continues to occur in Angola, DR Congo, and western and central Africa. Because high-quality house-to-house vaccination cam-

Poliomyelitis Eradication — Continued

paigns helped eliminate wild poliovirus transmission quickly in other WHO regions, AFRO is recommending more house-to-house NIDs and SNIDs in countries where wild poliovirus transmission persists. In DR Congo, three rounds of NIDs are planned during a cease-fire negotiated by the United Nations. In Nigeria, mopping-up vaccination efforts in April and May 1999 are substantially larger than the house-to-house vaccinations that were conducted in the Americas or Western Pacific Region. Most ministries of health have accepted WHO's recommendation for a more aggressive supplemental vaccination with house-to-house NIDs, mopping up, and extra rounds.

Indigenous wild poliovirus is virtually absent in southern and eastern Africa. The last wild poliovirus isolated in southern Africa was in 1993. The last wild polioviruses isolated in eastern Africa were in July 1996 in Tanzania, October 1996 in Uganda, and December 1995 in Zambia. AFP surveillance in Ethiopia and Mozambique is inadequate to determine wild poliovirus transmission. Although surveillance has improved within the last year, substantial progress is needed to increase the nonpolio AFP rate from 0.3 to the standard threshold rate of 1.0. Active surveillance methods are necessary for adequate surveillance, and infrastructure improvements in transportation and communications are necessary for better active surveillance. Ensuring adequate personnel and transport for the active surveillance teams in the remaining reservoir countries are essential to reach the target by 2000.

Civil conflict, economic decline, and the high burden of diseases related to human immunodeficiency virus in many countries have strained public health infrastructures, resulting in some countries in declining routine vaccination coverage and low health staff morale. In Angola, Chad, and DR Congo, poor roadways make house-to-house vaccination and surveillance difficult. In addition, low routine vaccination has resulted in low population immunity to poliovirus in Angola, DR Congo, Nigeria, and countries of western and central Africa. Establishing and maintaining AFP surveillance in Angola and DR Congo — countries in ongoing conflict — are especially difficult challenges. Unlike carrying out NIDs for which cease-fires have been negotiated for a week at a time twice a year, surveillance must take place throughout the year for several years. Despite these obstacles, an intensely focused effort to eliminate the last remaining reservoirs in Africa with extra rounds, house-to-house vaccination, and good surveillance, if adequately supported⁵, can reach the goal of polio eradication by 2000.

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⁵The polio eradication efforts in AFRO are supported by member countries and a coalition of partners, including WHO; United Nations Children's Fund (UNICEF); Rotary International; U.S. Agency for International Development; CDC; United Nations Foundation; and the governments of Canada, Japan, and the United Kingdom.

Poliomyelitis Eradication — Continued

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Renal Insufficiency and Failure Associated with Immune Globulin Intravenous Therapy — United States, 1985–1998

Immune globulin intravenous (IGIV) is a sterile, highly purified immunoglobulin G (IgG) preparation made from pooled human plasma stabilized with glucose, maltose, glycine, sucrose, sorbitol, or albumin and is used as prophylaxis or therapy for various medical disorders. The Food and Drug Administration (FDA) first licensed IGIV in 1981 and has approved its use for six conditions: primary immunodeficiencies, immune-mediated thrombocytopenia, Kawasaki syndrome, recent bone marrow transplantation in patients aged ≥ 20 years, chronic B-cell lymphocytic leukemia, and pediatric human immunodeficiency virus type 1 (HIV-1) infection (Table 1). In clinical practice, IGIV has been known to be used to treat 50–60 unapproved conditions, including acute lymphoblastic leukemia, adult HIV infection, multiple sclerosis, Guillain-Barré syndrome, and chronic inflammatory demyelinating polyneuropathy (1). During June 1985–November 1998, FDA received approximately 120 reports worldwide of renal adverse events (RAEs) (i.e., acute renal failure or insufficiency) following IGIV administration. This report describes the epidemiology of IGIV-associated RAEs in the United States and emphasizes the importance of reviewing indications for IGIV use and implementing precautions during its administration.

In the United States, FDA received 88 reports of cases with clinical and/or laboratory findings consistent with a RAE (i.e., increased serum creatinine, oliguria, and acute renal failure) as determined by the treating health-care provider after IGIV administration. Among the 88 case-patients, the median age was 60.5 years (range: 3–91 years); 48 (55%) were male. Of the 54 case-patients that were reported with conditions associated with acute renal failure, 35 (65%) were aged >65 years, 30 (56%) had diabetes mellitus, and 14 (26%) had prior renal insufficiency; 32 (59%) case-patients had one of these conditions, 19 (35%) had two, and three (6%) had three. Indications for IGIV use were reported in 85 (97%) case-patients and included 39 (46%) hematologic, 20 (23%) immunologic, 17 (20%) neurologic, and nine (11%) infectious diseases. Seventy-nine (90%) case-patients received sucrose-containing IGIV products, seven received IGIV with maltose or glucose, and two received IGIV in which the stabilizer was undetermined.

Of the 33 (38%) case-patients for whom time of RAE onset was available, all occurred <7 days following IGIV administration. Baseline serum creatinine levels ranged from 0.3 mg/dL to 5.4 mg/dL (normal: <1.5 mg/dL; mean baseline: 1.6 mg/dL). Peak levels (range: 1.4 mg/dL to 14.3 mg/dL; mean peak: 6.2 mg/dL) of serum creatinine were reached on the fifth day (range: 3–8 days). Approximately 35 (40%) patients had severe symptoms requiring dialysis; no significant differences in baseline serum creatinines or other underlying risk factors were found between patients requiring and not requiring dialysis. The mean recovery time of renal function, with or without dialysis, was 10 days (range: 2–38 days) after RAE onset; however, 13 (15%) of the 88 pa-

TABLE 1. Number of reported cases of renal adverse events (RAE) associated with immune globulin intravenous (IGIV) preparations — United States, 1985–1999

| No. (%) reported of RAE | Grams sucrose per gram of IgG | Stabilizing substance | Manufacturer* | Distributor | Product | Approved indications |
|-------------------------------|--|------------------------------------|--|----------------------------------|--|---|
| 59 (67%) | 1.7 | Sucrose | Central Laboratory, Blood Transfusion Service, Swiss Red Cross | Novartis Pharmaceuticals | Sandoglobulin ^{®†} | PID [§] or ITP [¶] |
| 19 (22%) | 1.0 | Sucrose or albumin | Centeon L.L.C. | Centeon L.L.C. | Gammar [®] -P I.V. and Gammar I.V.** | PID |
| 4 (5%) | 0 | Maltose or glycine | Bayer Corporation | Bayer Corporation | Gamimune-N | PID, ITP, adult BMT ^{††} , or pediatric HIV |
| 3 (3%) | 0 | Glucose, albumin, or glycine | Baxter Healthcare Corporation | Baxter | Gammagard S/D ^{®§§} | PID, ITP, or chronic B-cell lymphoblastic leukemia |
| 2 (2%) | | | Undetermined ^{¶¶} | | | |
| 1 (1%) | 1.7 | Sucrose | Central Laboratory, Blood Transfusion Service, Swiss Red Cross | American Red Cross | Panglobulin ^{®†} | PID or ITP |
| 0 (0) | 0 | Sorbitol or aluminum | Alpha Therapeutic Corporation | Alpha Therapeutic Corporation | Venoglobulin-s [®] and Venoglobulin-l [®] | PID, ITP, or Kawasaki syndrome |
| 0 (0) | 0 | Glucose, albumin, or glycine | Baxter Healthcare Corporation | American Red Cross | Polygam S/D ^{®§§} | PID, ITP, or chronic B-cell lymphoblastic leukemia |
| 0 (0) | 0 | Glucose | Oesterreichisches Institut fuer Haemoderivative Ges.m.b.H (O.I.H.) | Immuno U.S. Inc. | Iveegam [®] | PID or Kawasaki syndrome |

* Use of trade names and commercial sources is for identification only and does not imply endorsement by U.S. Department of Health and Human Services or CDC.

† Sandoglobulin[®] and Panglobulin[®] use the same formulation.

§ Primary immunodeficiency.

¶ Immune-mediated thrombocytopenia.

** Gammar I.V. was withdrawn from the market after the introduction of Gammar-P I.V.

†† Bone marrow transplantation.

§§ Gammagard S/D[®] and Polygam S/D[®] use the same formulation.

¶¶ Two reactions were associated with unspecified IGIV.

Renal Adverse Events — Continued

tients died despite therapy. These patients had severe underlying conditions (i.e., cardiac insufficiency, pneumonia, or systemic lupus erythematosus), and the extent to which RAEs contributed to their deaths was undetermined. In seven (47%) for whom data were available, renal histology indicated extensive vacuolization of the proximal tubules, with swelling and narrowing of the tubular lumina consistent with osmotic injury; six of these case-patients received sucrose-containing IGIV preparations. In the remaining eight, the histology findings did not indicate a pattern. In three additional case-patients, vacuolated renal tubular epithelial cells were detected on urinalysis, suggesting possible injury to the kidneys.

Reported by: A Gaines, PhD, F Varricchio, MD, R Kapit, MD, Div of Biostatistics and Epidemiology, Center for Biologics Research and Review, Food and Drug Administration; LR Pierce, MD, D Scott, MD, J Finlayson, PhD, Office of Blood Research and Review, Center for Biologics Research and Review, Food and Drug Administration. Hospital Infections Program, National Center for Infectious Diseases; and an EIS Officer, CDC.

Editorial Note: During 1985–1998, reports of RAEs associated with IGIV were infrequent; however, these events resulted in severe morbidity and mortality. Approximately 40% of the affected patients required dialysis, and the RAEs might have contributed to the death of 15% of patients who died despite therapy. Thus, health-care providers need to be aware of these events as they develop treatment plans for their patients.

The incidence of adverse events that occur during IGIV administration is usually reported as $\leq 5\%$ but ranges from 1% to 15% (1). Reactions (e.g., fever, headache, myalgia, chills, nausea, and vomiting) often are related to the rate of IGIV infusion and tend to be mild to moderate and self-limited (2). The cause of these reactions may in some cases involve formation of IgG aggregates during manufacture or storage of IGIV preparations. To avoid aggregation, the purified Ig product is stabilized with glucose, maltose, glycine, sucrose, sorbitol, or albumin. Less common and more severe reactions include hypersensitivity and anaphylactoid reactions, thromboembolic events, and aseptic meningitis syndrome; the causes of these reactions are unknown.

Several mechanisms have been proposed for RAEs associated with IGIV administration. As early as 1940, studies documented the development of renal lesions, similar to those in the case-patients in this report, that resulted from intravenous administration of sucrose (3). Similar renal lesions can occur with parenteral mannitol, sorbitol, dextran, or hydroxyethyl starches (4). Additional mechanisms have been proposed (5); however, the exact pathophysiology of RAE development following administration of various IGIV preparations remains unclear.

The findings in this report have several limitations. First, the incidence of IGIV-associated RAEs cannot be determined. The extent of underreporting of these events is unknown, and nonproprietary data were unavailable to estimate the number of IGIV recipients during 1985–1998; however, thousands of persons probably receive IGIV annually, and the number of reported cases suggests that the incidence of RAEs is low. Second, reports of an association between RAEs and IGIV therapy are not sufficient evidence to prove that IGIV was the cause of the renal insufficiency or renal failure in these patients; however, the timing and biologic plausibility of a causal association are cause for concern. Additional studies are necessary to further evaluate this relation.

Although 90% of IGIV-associated RAEs in the United States have occurred with sucrose-containing IGIV preparations, caution is advised during administration of any IGIV product. All patients receiving IGIV therapy, particularly high-risk patients with

Renal Adverse Events — Continued

pre-existing renal disease, diabetes mellitus, hypovolemia, sepsis, concomitant therapy with nephrotoxic agents, or aged ≥ 65 years, should be monitored carefully for RAEs during and after IGIV administration. To decrease the risk for RAEs, renal function should be assessed before IGIV therapy is initiated and periodically thereafter. Manufacturer-recommended IGIV doses, concentrations, and infusion rates should not be exceeded and approved indications for IGIV therapy should be reviewed. IGIV infusions should be discontinued if renal function deteriorates. In addition, IGIV should be used judiciously and alternatives used when appropriate because of recent shortages (6).

To alert health-care providers to the risk for RAEs associated with IGIV, FDA has posted an advisory on MedWatch and on the Center for Biologics Research and Review's (CBER) World-Wide Web sites, and FDA has published a drug warning in its summer 1999 issue of *FDA Medical Bulletin*. Manufacturers are revising package inserts with new dosing recommendations and a warning of the risk involved in IGIV administration. Health-care providers are encouraged to report any RAE associated with the use of IGIV to the manufacturer or to MedWatch, HF-2, FDA, 5600 Fishers Lane, Rockville, MD, 20852-9787; telephone (800) 322-1088; fax (800) 322-0178; World-Wide Web site <http://www.fda.gov/medwatch>, or to CDC's Hospital Infections Program, National Center for Infectious Diseases, (404) 639-6413.

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Update: Hantavirus Pulmonary Syndrome — United States, 1999

Hantavirus pulmonary syndrome (HPS) is a rodentborne viral disease characterized by severe pulmonary illness and a case-fatality ratio of 43%. Sin Nombre virus is the primary hantavirus that causes HPS in the United States, and the deer mouse (*Peromyscus maniculatus*) is its predominant carrier. CDC-sponsored studies of rodent populations since 1994 have yielded data that suggest an increased risk for infection for humans in some areas of the southwestern United States during the summer of 1999. This report describes increases in human cases during January–May 1999, current hantavirus prevalence in rodent populations, the need for renewed attention to reduce the risk for hantavirus exposure, and the importance of physician awareness and early detection in the treatment of HPS.

*Hantavirus Pulmonary Syndrome — Continued***Human HPS**

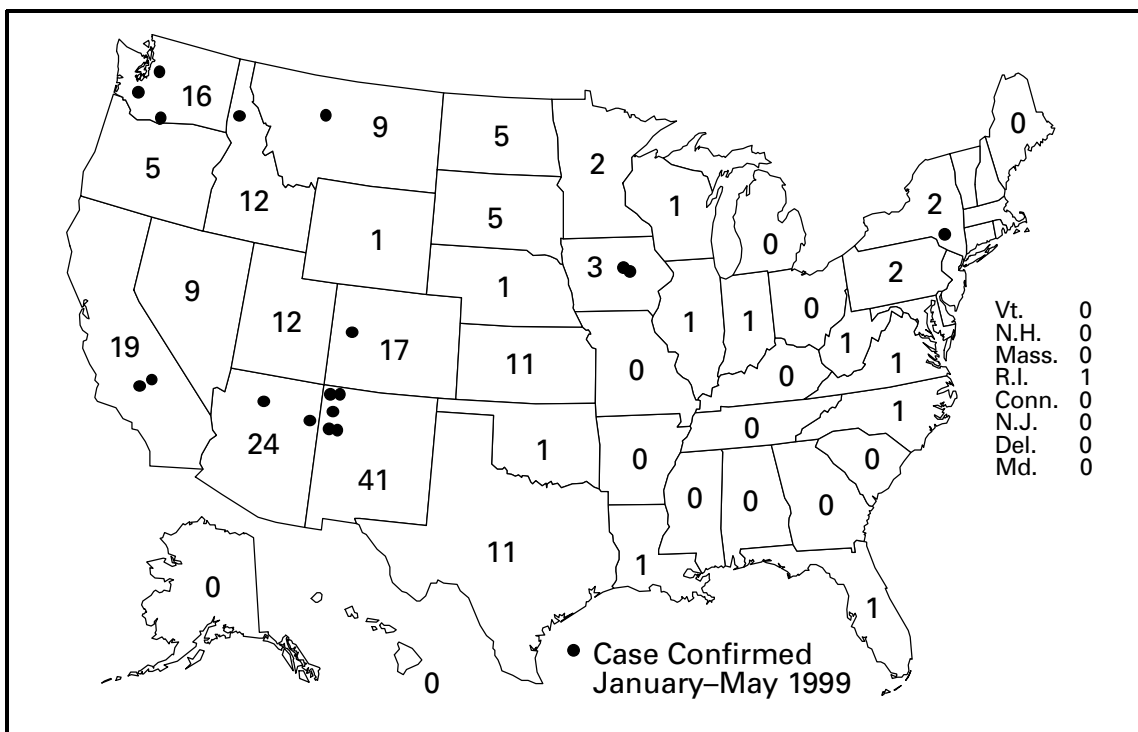
HPS is clinically defined as a febrile illness and the presence on a chest radiograph of bilateral infiltrates resembling acute respiratory distress syndrome (1). As of May 28, 1999, CDC had confirmed 217 cases of HPS in 30 states (Figure 1). From January through May 1999, seven cases of HPS were confirmed in Colorado, New Mexico, New York, and Washington. An additional 11 suspected cases with preliminary clinical and serologic evidence of HPS were reported in Arizona, California, Idaho, Iowa, Montana, New Mexico, and Washington. Eight of the confirmed and suspected cases are from Arizona, Colorado, and New Mexico. In the same 5-month period during each year from 1995 through 1998, this area averaged approximately two cases each year.

Rodent Monitoring

Since 1994, CDC has sponsored continuous monitoring studies of rodent populations at nine sites in Arizona, Colorado, and New Mexico (2). Population densities of deer mice at New Mexico monitoring sites during January–May 1999 were lower compared with densities during spring 1998; however, densities at one site in Colorado in May 1999 were >50% higher than 1 year earlier.

Hantavirus antibody prevalences in deer mouse populations surveyed during spring 1999 were 35%–45% in some populations in New Mexico and up to 40% in Colorado. In comparison, prevalences during the population peaks of spring 1998 were <10% in New Mexico and approximately 20% in Colorado. These figures were comparable with a prevalence of 10%–15% in deer mouse populations sampled throughout the United States since 1993; during the 1993 outbreak, prevalences of 30% were detected (3).

FIGURE 1. Total number of confirmed cases of hantavirus pulmonary syndrome ever identified, and location of cases identified during January–May 1999, by state — United States



Hantavirus Pulmonary Syndrome — Continued

Reported by: M Leslie, DVM, Arizona Dept of Health Svcs. C Fritz, DVM, California Dept of Health Svcs. C Calisher, PhD, B Beaty, PhD, Arthropod Borne and Infectious Diseases Laboratory, Colorado State Univ, Ft. Collins; J Pape, Colorado Dept of Public Health and Environment. L Tengelsen, DVM, C Hahn, MD, Idaho Dept of Health and Welfare. K Buechler, Iowa Dept of Public Health. J Murphy, DrPH, Montana Dept of Public Health and Human Svcs. T Yates, PhD, Museum of Southwest Biology and Dept of Biology, Univ of New Mexico, Albuquerque; P Ettestad, DVM, New Mexico Dept of Health. D White, PhD, New York State Dept of Health. A Weltman, MD, Pennsylvania Dept of Health. M Goldoft, MD, J Grendon, DVM, Washington Dept of Health. J Cheek, MD, Indian Health Svc. Special Pathogens Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; and an EIS Officer, CDC.

Editorial Note: Hantavirus infection can occur after inhaling infectious aerosols from rodent saliva or excreta. HPS typically begins as a prodrome of headache, fever, and myalgia soon followed by pulmonary edema, which often leads to severe respiratory compromise. Thrombocytopenia, presence of immunoblasts, and hemoconcentration are characteristic laboratory findings. Other than supportive care, no treatment exists for hantavirus infection. The probability of surviving HPS increases with early recognition, hospitalization, and aggressive pulmonary and hemodynamic support (4). The highest concentration of HPS cases has occurred in the western United States, and CDC rodent monitoring has focused on this area. However, hantavirus reservoir species occur throughout the United States, and cases of HPS have occurred nationwide. All primary health-care providers are strongly encouraged to become familiar with the signs and symptoms of HPS (5) and to immediately report suspected cases to their state health departments.

Risk for human disease is proportional to the frequency with which persons come into contact with infectious rodents, and rodent population density and the prevalence of infection in rodents may help to quantify risk for communities. Both population densities and prevalences vary from site to site and can change markedly from season to season and from year to year. Population densities may vary 10-fold within 2 or 3 months. Prevalences of hantavirus infection in deer mouse populations occasionally have been >60% at specific sites in the southwestern United States, California (6), and Montana. Infrequently, environmental conditions result in the simultaneous occurrence of high rodent population densities and a high prevalence of hantavirus infection among rodents. This combination, which appears to be occurring this year in some rodent populations in the southwestern United States, results in a greater number of infected mice and leads to a higher risk for transmission to humans. The increased number of HPS cases reported in the southwest this year supports this interpretation. Although increased physician awareness of HPS cannot be ruled out, the number of confirmed cases this year exceeds the average number identified during the same periods in 1995 through 1998 and suggests that the increase is real.

The importance of adherence to risk-reduction measures should be emphasized by increased efforts to educate the public, especially among residents of rural areas of the southwestern United States. The most effective way to decrease the risk for HPS is to limit exposure to rodents and their excreta. Most persons with HPS who had high-risk exposures are thought to have been infected in and around their homes; therefore, limiting opportunities for peridomestic exposure is particularly important. Measures to prevent HPS can be divided into four areas: eliminating rodent harborage (7), controlling rodent populations, properly cleaning up rodent infestation, and avoiding rodents in outdoor settings (see box).

*Hantavirus Pulmonary Syndrome — Continued***Recommendations for Preventing Hantavirus Pulmonary Syndrome**

1. Eliminate rodent harborage
 - Keep cooking, eating, and food storage areas clean
 - Cover human food and animal feed
 - Contain and elevate garbage
 - Seal holes and cracks in dwellings to prevent entrance by rodents
 - Clear brush and trash from around homes and outbuildings
2. Control rodent populations by maintaining snap traps and/or using rodenticides; in areas where plague occurs, control fleas with insecticides
3. Safely clean up rodent-infested areas
 - Air out infested spaces before cleanup
 - Spray areas of infestation and all excreta, nesting, and other materials with household disinfectant or 10% bleach solution, then clean up, seal in bags, and dispose
 - Avoid sweeping, vacuuming, or stirring dust until the area is thoroughly wet with disinfectant
 - Wear rubber gloves; disinfect gloves before removal, and wash hands afterwards
 - In areas where plague occurs, spray insecticide on trapped rodents and nesting materials to prevent fleas from abandoning rodents to find new hosts
4. Avoid rodents when outdoors
 - Do not disturb rodent droppings or camp or sleep near burrows or areas where trash is present
 - Avoid feeding or handling rodents, even if they appear friendly

No restriction of travel to areas where HPS has been reported is necessary. However, activities that may disrupt rodent burrows or result in contact with rodents or aerosolization of rodent excreta should be avoided.

Clinical principles of recognition and support for HPS were reviewed in a video conference in May 1999; a videotape of this conference is available through CDC's Special Pathogens Branch, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, (404) 639-1510. Additional information on HPS is available from local or state health departments; through the hantavirus hotline, telephone (877) 232-3322; on the World-Wide Web at the "All About Hantavirus" web site, <http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm>; and by mail to CDC's Special Pathogens Branch, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, Mailstop A-26, 1600 Clifton Road, N.E., Atlanta, GA 30333.

*Hantavirus Pulmonary Syndrome — Continued**References*

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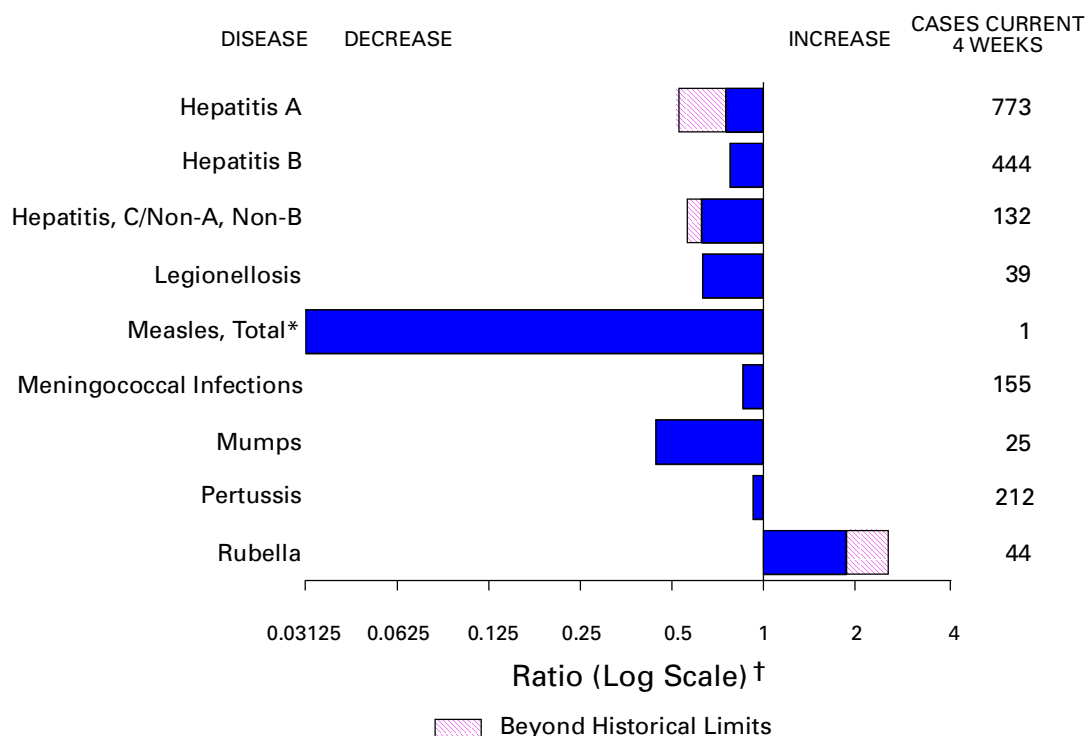
*Notice to Readers***Availability of Applications for Public Health Leadership Institute**

The CDC/University of California Public Health Leadership Institute (PHLI) is a 1-year scholars' program that includes an intensive on-site week, scheduled for March 11–17, 2000. The PHLI is conducted under a cooperative agreement between CDC's Public Health Practice Program Office and the University of California at Los Angeles. The purpose of the PHLI is to strengthen the nation's public health system by enhancing the leadership capacities of senior city, county, state, federal, and international public health officials.

The ninth year of the PHLI will begin on November 6, 1999, with an orientation for scholars at the American Public Health Association Annual Meeting in Washington, D.C. Approximately 35 senior public health officials from city, county, state, federal, or international health agencies will be selected to participate in the institute.

Senior state and local health officials, including "deputy" level staff nominated by state health directors or local health directors with a service population of >200,000, are eligible to apply. Applications must be submitted by August 10, 1999. Selections will be made and the scholars notified during the week of September 27, 1999. Additional information and applications are available from the Director, PHLI, telephone (510) 986-0140.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending June 19, 1999, with historical data — United States



*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline. (Ratio [log scale] for week 24 measles [total] is 0.024077.)

† 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 — provisional cases of selected notifiable diseases, United States, cumulative, week ending June 19, 1999 (24th Week)

| | Cum. 1999 | | Cum. 1999 |
|---|-----------|---|-----------|
| Anthrax | - | HIV infection, pediatric* ⁵ | 73 |
| Brucellosis* | 16 | Plague | 1 |
| Cholera | 2 | Poliomyelitis, paralytic | - |
| Congenital rubella syndrome | 3 | Psittacosis* | 15 |
| Cyclosporiasis* | 8 | Rabies, human | - |
| Diphtheria | - | Rocky Mountain spotted fever (RMSF) | 96 |
| Encephalitis: California* | 2 | Streptococcal disease, invasive Group A | 1,084 |
| eastern equine* | 2 | Streptococcal toxic-shock syndrome* | 21 |
| St. Louis* | - | Syphilis, congenital [¶] | 67 |
| western equine* | 1 | Tetanus | 9 |
| Ehrlichiosis | 30 | Toxic-shock syndrome | 57 |
| human granulocytic (HGE)* | 5 | Trichinosis | 5 |
| human monocytic (HME)* | 38 | Typhoid fever | 130 |
| Hansen Disease* | 7 | Yellow fever | - |
| Hantavirus pulmonary syndrome* [†] | 17 | | |
| Hemolytic uremic syndrome, post-diarrheal* | | | |

-:no reported cases

*Not notifiable in all states.

† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

⁵ 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 May 23, 1999.

[¶] Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 19, 1999, and June 20, 1998 (24th Week)

| Reporting Area | AIDS | | Chlamydia | | Cryptosporidiosis | | <i>Escherichia coli</i> O157:H7* | | | |
|----------------|------------|-----------|-----------|-----------|-------------------|-----------|----------------------------------|-----------|-----------|-----------|
| | Cum. 1999† | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | NETSS | | PHLIS | |
| | | | | | | | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 18,649 | 21,341 | 256,170 | 265,691 | 624 | 891 | 632 | 635 | 330 | 548 |
| NEW ENGLAND | 953 | 688 | 8,895 | 9,397 | 33 | 67 | 94 | 93 | 72 | 85 |
| Maine | 22 | 13 | 193 | 413 | 10 | 15 | 6 | 6 | - | - |
| N.H. | 24 | 15 | 438 | 450 | 5 | 3 | 12 | 12 | 7 | 17 |
| Vt. | 6 | 10 | 230 | 179 | 6 | 8 | 9 | 3 | 2 | 4 |
| Mass. | 627 | 266 | 4,127 | 3,849 | 12 | 37 | 40 | 53 | 36 | 46 |
| R.I. | 60 | 60 | 1,082 | 1,153 | - | 4 | 6 | 3 | 6 | 1 |
| Conn. | 214 | 324 | 2,825 | 3,353 | - | - | 21 | 16 | 21 | 17 |
| MID. ATLANTIC | 4,463 | 5,952 | 32,246 | 27,889 | 93 | 275 | 37 | 63 | 8 | 20 |
| Upstate N.Y. | 531 | 845 | N | N | 52 | 171 | 31 | 36 | - | - |
| N.Y. City | 2,110 | 3,168 | 16,966 | 12,313 | 22 | 94 | - | 7 | 3 | 6 |
| N.J. | 967 | 1,058 | 4,263 | 5,376 | 9 | 10 | 6 | 20 | 5 | 11 |
| Pa. | 855 | 881 | 11,017 | 10,200 | 10 | - | N | N | - | 3 |
| E.N. CENTRAL | 1,289 | 1,619 | 38,048 | 45,168 | 53 | 97 | 110 | 129 | 55 | 114 |
| Ohio | 209 | 338 | 10,223 | 12,306 | 16 | 37 | 41 | 25 | 8 | 20 |
| Ind. | 169 | 292 | 4,679 | 4,933 | 9 | 20 | 17 | 30 | 11 | 24 |
| Ill. | 594 | 599 | 12,979 | 11,863 | 11 | 26 | 28 | 47 | 12 | 25 |
| Mich. | 252 | 305 | 10,167 | 9,898 | 17 | 14 | 24 | 27 | 14 | 21 |
| Wis. | 65 | 85 | U | 6,168 | - | - | N | N | 10 | 24 |
| W.N. CENTRAL | 389 | 368 | 13,983 | 15,837 | 46 | 88 | 120 | 73 | 48 | 65 |
| Minn. | 69 | 63 | 3,022 | 3,211 | 14 | 29 | 37 | 25 | 27 | 25 |
| Iowa | 44 | 20 | 1,225 | 2,013 | 9 | 18 | 15 | 16 | 4 | 13 |
| Mo. | 154 | 177 | 5,099 | 5,530 | 6 | 7 | 14 | 12 | 12 | 20 |
| N. Dak. | 4 | 4 | 325 | 466 | 4 | 11 | 3 | 1 | - | 3 |
| S. Dak. | 11 | 9 | 755 | 755 | 3 | 10 | 4 | 1 | 4 | 2 |
| Nebr. | 34 | 34 | 1,244 | 1,352 | 9 | 12 | 39 | 9 | - | - |
| Kans. | 73 | 61 | 2,313 | 2,510 | 1 | 1 | 8 | 9 | 1 | 2 |
| S. ATLANTIC | 5,239 | 5,462 | 59,188 | 50,371 | 142 | 83 | 82 | 33 | 41 | 49 |
| Del. | 72 | 57 | 1,292 | 1,172 | - | - | 2 | - | - | 1 |
| Md. | 560 | 716 | 4,620 | 3,796 | 6 | 8 | 6 | 11 | - | 6 |
| D.C. | 208 | 415 | N | N | 4 | 3 | - | - | - | - |
| Va. | 266 | 424 | 6,963 | 4,721 | 6 | 1 | 24 | - | 16 | 22 |
| W. Va. | 26 | 44 | 955 | 1,103 | - | 1 | 4 | 1 | 1 | 2 |
| N.C. | 356 | 334 | 10,263 | 10,322 | 4 | - | 16 | 11 | 12 | 10 |
| S.C. | 485 | 352 | 8,467 | 8,652 | - | - | 10 | 1 | 3 | - |
| Ga. | 826 | 611 | 13,887 | 11,202 | 75 | 24 | 6 | 4 | - | - |
| Fla. | 2,440 | 2,509 | 12,741 | 9,403 | 47 | 46 | 14 | 5 | 9 | 8 |
| E.S. CENTRAL | 844 | 876 | 18,222 | 18,165 | 8 | 15 | 50 | 44 | 19 | 29 |
| Ky. | 128 | 101 | 3,333 | 2,833 | 2 | 5 | 14 | 12 | - | - |
| Tenn. | 339 | 299 | 6,455 | 5,933 | 4 | 6 | 22 | 20 | 12 | 19 |
| Ala. | 214 | 274 | 4,526 | 4,691 | 1 | - | 11 | 9 | 6 | 9 |
| Miss. | 163 | 202 | 3,908 | 4,708 | 1 | 4 | 3 | 3 | 1 | 1 |
| W.S. CENTRAL | 2,091 | 2,814 | 32,752 | 39,685 | 32 | 15 | 20 | 21 | 11 | 37 |
| Ark. | 70 | 104 | 2,534 | 1,643 | - | 3 | 5 | 1 | 3 | 4 |
| La. | 410 | 432 | 7,726 | 6,120 | 21 | 6 | 3 | - | 3 | 1 |
| Okla. | 54 | 170 | 3,388 | 4,631 | 2 | 3 | 7 | 5 | 5 | 4 |
| Tex. | 1,557 | 2,108 | 19,104 | 27,291 | 9 | 3 | 5 | 15 | - | 28 |
| MOUNTAIN | 723 | 771 | 14,807 | 14,677 | 37 | 62 | 46 | 69 | 24 | 47 |
| Mont. | 4 | 15 | 654 | 556 | 7 | 3 | 3 | 4 | - | - |
| Idaho | 11 | 14 | 589 | 874 | 2 | 14 | 1 | 6 | 2 | 1 |
| Wyo. | 3 | 1 | 333 | 301 | - | - | 3 | 1 | 4 | 2 |
| Colo. | 144 | 146 | 3,547 | 3,807 | 4 | 2 | 20 | 19 | 9 | 12 |
| N. Mex. | 37 | 129 | 1,731 | 1,772 | 15 | 26 | 2 | 9 | 1 | 6 |
| Ariz. | 355 | 284 | 5,776 | 4,950 | 7 | 10 | 7 | 10 | 4 | 10 |
| Utah | 70 | 65 | 855 | 1,040 | - | 1 | 8 | 14 | 2 | 10 |
| Nev. | 99 | 117 | 1,322 | 1,377 | 2 | 6 | 2 | 6 | 2 | 6 |
| PACIFIC | 2,658 | 2,791 | 38,029 | 44,502 | 180 | 189 | 73 | 110 | 52 | 102 |
| Wash. | 153 | 196 | 5,481 | 4,965 | - | - | 24 | 23 | 26 | 34 |
| Oreg. | 63 | 87 | 2,690 | 2,352 | 73 | 19 | 18 | 27 | 12 | 27 |
| Calif. | 2,394 | 2,429 | 27,987 | 35,212 | 107 | 169 | 31 | 58 | 13 | 38 |
| Alaska | 6 | 12 | 873 | 897 | - | - | - | 2 | - | - |
| Hawaii | 42 | 67 | 998 | 1,076 | - | 1 | - | - | 1 | 3 |
| Guam | 1 | - | 149 | 168 | - | - | N | N | - | - |
| P.R. | 625 | 921 | U | U | - | - | 6 | 4 | U | U |
| V.I. | 13 | 17 | N | N | - | - | N | N | U | U |
| Amer. Samoa | - | - | U | U | - | - | N | N | U | U |
| C.N.M.I. | - | - | N | N | - | - | N | N | U | U |

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

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

†Updated monthly from reports to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update May 23, 1999.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending June 19, 1999, and June 20, 1998 (24th Week)

| Reporting Area | Gonorrhea | | Hepatitis C/NA,NB | | Legionellosis | | Lyme Disease | |
|----------------|-----------|-----------|-------------------|-----------|---------------|-----------|--------------|-----------|
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 136,923 | 152,310 | 1,170 | 1,831 | 421 | 508 | 2,286 | 2,762 |
| NEW ENGLAND | 2,682 | 2,612 | 75 | 39 | 28 | 25 | 434 | 825 |
| Maine | 15 | 22 | 1 | - | 4 | 1 | - | 11 |
| N.H. | 34 | 44 | - | - | 3 | 2 | - | 12 |
| Vt. | 26 | 13 | 2 | 2 | 3 | 1 | - | 3 |
| Mass. | 1,167 | 909 | 69 | 36 | 9 | 11 | 254 | 221 |
| R.I. | 277 | 172 | 3 | 1 | 3 | 4 | 42 | 30 |
| Conn. | 1,163 | 1,452 | - | - | 6 | 6 | 138 | 548 |
| MID. ATLANTIC | 17,544 | 16,511 | 77 | 106 | 90 | 112 | 1,383 | 1,474 |
| Upstate N.Y. | 2,696 | 3,063 | 48 | 50 | 25 | 28 | 607 | 649 |
| N.Y. City | 7,165 | 5,551 | - | - | 7 | 24 | 6 | 61 |
| N.J. | 2,315 | 3,246 | - | - | 5 | 4 | 118 | 242 |
| Pa. | 5,368 | 4,651 | 29 | 56 | 53 | 56 | 652 | 522 |
| E.N. CENTRAL | 24,992 | 29,897 | 355 | 260 | 113 | 180 | 47 | 140 |
| Ohio | 6,066 | 7,465 | - | 6 | 35 | 63 | 27 | 19 |
| Ind. | 2,763 | 2,890 | - | 4 | 35 | 31 | 17 | 8 |
| Ill. | 9,121 | 9,661 | 10 | 26 | 10 | 24 | 2 | 5 |
| Mich. | 7,042 | 7,324 | 345 | 224 | 30 | 30 | 1 | 7 |
| Wis. | U | 2,557 | - | - | 3 | 32 | U | 101 |
| W.N. CENTRAL | 5,673 | 7,430 | 62 | 17 | 22 | 29 | 38 | 27 |
| Minn. | 1,132 | 1,123 | 2 | 5 | 1 | 3 | 13 | 9 |
| Iowa | 306 | 639 | - | 5 | 11 | 5 | 11 | 10 |
| Mo. | 2,625 | 3,954 | 53 | 5 | 7 | 8 | - | 4 |
| N. Dak. | 31 | 40 | - | - | - | - | 1 | - |
| S. Dak. | 72 | 123 | - | - | 1 | - | - | - |
| Nebr. | 552 | 515 | 3 | 2 | 2 | 11 | 6 | 2 |
| Kans. | 955 | 1,036 | 4 | - | - | 2 | 7 | 2 |
| S. ATLANTIC | 42,082 | 40,636 | 115 | 53 | 48 | 58 | 257 | 218 |
| Del. | 758 | 637 | - | - | 4 | 7 | 9 | 12 |
| Md. | 4,092 | 4,357 | 27 | 5 | 5 | 12 | 177 | 167 |
| D.C. | 1,042 | 1,629 | - | - | - | 4 | 1 | 4 |
| Va. | 4,498 | 2,789 | 9 | 5 | 11 | 5 | 17 | 14 |
| W. Va. | 258 | 378 | 12 | 4 | N | N | 7 | 5 |
| N.C. | 8,742 | 8,625 | 23 | 12 | 8 | 6 | 28 | 9 |
| S.C. | 4,553 | 5,586 | 12 | 1 | 7 | 5 | 3 | 1 |
| Ga. | 9,109 | 9,107 | 1 | 9 | - | 2 | - | 2 |
| Fla. | 9,030 | 7,528 | 31 | 17 | 13 | 16 | 15 | 4 |
| E.S. CENTRAL | 14,286 | 17,146 | 118 | 72 | 55 | 26 | 44 | 25 |
| Ky. | 1,494 | 1,610 | 7 | 12 | 44 | 14 | 19 | 9 |
| Tenn. | 5,035 | 5,003 | 43 | 57 | 9 | 5 | 13 | 7 |
| Ala. | 4,114 | 5,953 | 1 | 3 | 2 | 3 | 6 | 9 |
| Miss. | 3,643 | 4,580 | 67 | - | - | 4 | 6 | - |
| W.S. CENTRAL | 18,456 | 23,649 | 123 | 270 | 1 | 10 | 2 | 8 |
| Ark. | 1,216 | 1,812 | 2 | 10 | - | 1 | - | 5 |
| La. | 6,054 | 5,029 | 100 | 9 | 1 | 1 | - | - |
| Okla. | 1,717 | 2,513 | 2 | 2 | - | 6 | 2 | - |
| Tex. | 9,469 | 14,295 | 19 | 249 | - | 2 | - | 3 |
| MOUNTAIN | 4,052 | 3,842 | 71 | 246 | 25 | 29 | 5 | 3 |
| Mont. | 21 | 23 | 4 | 4 | - | 1 | - | - |
| Idaho | 29 | 78 | 4 | 84 | - | - | 1 | 1 |
| Wyo. | 11 | 15 | 24 | 58 | - | 1 | 1 | 1 |
| Colo. | 978 | 958 | 14 | 12 | 5 | 5 | - | - |
| N. Mex. | 311 | 347 | 4 | 51 | 1 | 2 | 1 | - |
| Ariz. | 2,117 | 1,792 | 16 | 4 | 3 | 3 | - | - |
| Utah | 80 | 101 | 2 | 17 | 10 | 15 | 1 | - |
| Nev. | 505 | 528 | 3 | 16 | 6 | 2 | 1 | 1 |
| PACIFIC | 7,156 | 10,587 | 174 | 768 | 39 | 39 | 76 | 42 |
| Wash. | 964 | 858 | 8 | 10 | 8 | 4 | 1 | 1 |
| Oreg. | 377 | 319 | 7 | 10 | N | N | 2 | 8 |
| Calif. | 5,540 | 9,040 | 159 | 693 | 30 | 34 | 73 | 33 |
| Alaska | 147 | 155 | - | 1 | 1 | - | - | - |
| Hawaii | 128 | 215 | - | 54 | - | 1 | - | - |
| Guam | 22 | 20 | - | - | - | 2 | - | - |
| P.R. | 141 | 181 | - | - | - | - | - | - |
| V.I. | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | 16 | - | - | - | - | - | - |

N: Not notifiable

U: Unavailable

-: no reported cases

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending June 19, 1999, and June 20, 1998 (24th Week)

| Reporting Area | Malaria | | Rabies, Animal | | Salmonellosis* | | | |
|----------------|--------------|--------------|----------------|--------------|----------------|--------------|--------------|--------------|
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | NETSS | | PHLIS | |
| | | | | | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 487 | 542 | 2,424 | 3,430 | 11,819 | 13,539 | 8,636 | 12,423 |
| NEW ENGLAND | 20 | 21 | 381 | 635 | 746 | 903 | 626 | 823 |
| Maine | 2 | 2 | 72 | 115 | 55 | 67 | 32 | 26 |
| N.H. | - | 3 | 26 | 33 | 38 | 58 | 21 | 88 |
| Vt. | 1 | - | 58 | 30 | 26 | 36 | 26 | 26 |
| Mass. | 9 | 14 | 80 | 201 | 438 | 484 | 351 | 467 |
| R.I. | - | 2 | 46 | 35 | 38 | 53 | 48 | 37 |
| Conn. | 8 | - | 99 | 221 | 151 | 205 | 148 | 179 |
| MID. ATLANTIC | 117 | 157 | 435 | 710 | 1,542 | 2,301 | 1,005 | 2,184 |
| Upstate N.Y. | 34 | 32 | 286 | 488 | 404 | 505 | 425 | 462 |
| N.Y. City | 38 | 90 | U | U | 377 | 755 | 368 | 703 |
| N.J. | 27 | 20 | 85 | 86 | 307 | 488 | 212 | 390 |
| Pa. | 18 | 15 | 64 | 136 | 454 | 553 | - | 629 |
| E.N. CENTRAL | 52 | 55 | 34 | 50 | 1,508 | 2,414 | 1,170 | 1,614 |
| Ohio | 9 | 3 | 10 | 34 | 349 | 539 | 117 | 441 |
| Ind. | 8 | 2 | - | 4 | 166 | 269 | 106 | 253 |
| Ill. | 18 | 23 | - | 4 | 558 | 736 | 399 | 348 |
| Mich. | 15 | 24 | 22 | 6 | 397 | 478 | 380 | 353 |
| Wis. | 2 | 3 | 2 | 2 | 38 | 392 | 168 | 219 |
| W.N. CENTRAL | 21 | 32 | 289 | 359 | 773 | 814 | 657 | 913 |
| Minn. | 5 | 13 | 47 | 62 | 219 | 216 | 222 | 257 |
| Iowa | 6 | 3 | 65 | 73 | 88 | 142 | 58 | 125 |
| Mo. | 9 | 10 | 9 | 19 | 236 | 221 | 279 | 318 |
| N. Dak. | - | 2 | 76 | 62 | 15 | 19 | - | 40 |
| S. Dak. | - | - | 44 | 87 | 43 | 28 | 26 | 46 |
| Nebr. | - | 1 | 2 | 2 | 86 | 71 | - | 17 |
| Kans. | 1 | 3 | 46 | 54 | 86 | 117 | 72 | 110 |
| S. ATLANTIC | 137 | 112 | 934 | 1,166 | 2,592 | 2,260 | 1,747 | 1,833 |
| Del. | 1 | 1 | 29 | 17 | 43 | 28 | 51 | 42 |
| Md. | 42 | 41 | 198 | 245 | 306 | 315 | 276 | 348 |
| D.C. | 9 | 7 | - | - | 35 | 43 | - | - |
| Va. | 22 | 19 | 240 | 317 | 458 | 348 | 318 | 340 |
| W. Va. | 1 | - | 52 | 41 | 43 | 60 | 37 | 60 |
| N.C. | 10 | 8 | 191 | 302 | 404 | 340 | 364 | 372 |
| S.C. | 1 | 4 | 70 | 72 | 143 | 142 | 130 | 128 |
| Ga. | 12 | 15 | 71 | 82 | 385 | 341 | 419 | 369 |
| Fla. | 39 | 17 | 83 | 90 | 775 | 643 | 152 | 174 |
| E.S. CENTRAL | 9 | 15 | 130 | 135 | 633 | 621 | 263 | 547 |
| Ky. | 2 | 1 | 22 | 18 | 151 | 141 | - | 77 |
| Tenn. | 4 | 8 | 44 | 76 | 165 | 186 | 139 | 294 |
| Ala. | 2 | 4 | 64 | 39 | 193 | 163 | 107 | 144 |
| Miss. | 1 | 2 | - | 2 | 124 | 131 | 17 | 32 |
| W.S. CENTRAL | 8 | 11 | 49 | 101 | 815 | 1,082 | 643 | 1,356 |
| Ark. | - | 1 | - | 19 | 128 | 107 | 75 | 82 |
| La. | 6 | 4 | - | - | 159 | 190 | 66 | 256 |
| Okla. | 1 | 1 | 49 | 82 | 119 | 130 | 79 | 58 |
| Tex. | 1 | 5 | - | - | 409 | 655 | 423 | 960 |
| MOUNTAIN | 22 | 29 | 85 | 87 | 1,132 | 831 | 767 | 794 |
| Mont. | 3 | - | 32 | 26 | 25 | 37 | 1 | 19 |
| Idaho | 1 | 3 | - | - | 39 | 48 | 35 | 38 |
| Wyo. | 1 | - | 27 | 39 | 11 | 31 | 17 | 27 |
| Colo. | 8 | 7 | 1 | 2 | 354 | 210 | 332 | 207 |
| N. Mex. | 2 | 9 | 2 | - | 132 | 76 | 79 | 73 |
| Ariz. | 5 | 4 | 23 | 19 | 335 | 227 | 250 | 235 |
| Utah | 1 | 1 | - | 1 | 166 | 131 | - | 120 |
| Nev. | 1 | 5 | - | - | 70 | 71 | 53 | 75 |
| PACIFIC | 101 | 110 | 87 | 187 | 2,078 | 2,313 | 1,758 | 2,359 |
| Wash. | 5 | 9 | - | - | 190 | 169 | 279 | 279 |
| Oreg. | 13 | 9 | 1 | - | 149 | 131 | 189 | 169 |
| Calif. | 78 | 90 | 80 | 170 | 1,563 | 1,905 | 1,169 | 1,797 |
| Alaska | - | - | 6 | 17 | 18 | 16 | 6 | 12 |
| Hawaii | 5 | 2 | - | - | 158 | 92 | 115 | 102 |
| Guam | - | 1 | - | - | 18 | 11 | - | - |
| P.R. | - | - | 37 | 26 | 176 | 269 | - | - |
| V.I. | U | U | U | U | - | - | - | - |
| Amer. Samoa | U | U | U | U | - | - | - | - |
| C.N.M.I. | - | - | - | - | - | 10 | - | - |

N: Not notifiable U: Unavailable -: no reported cases

*Individual cases may 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 June 19, 1999, and June 20, 1998 (24th Week)

| Reporting Area | Shigellosis* | | | | Syphilis (Primary & Secondary) | | Tuberculosis | |
|----------------|--------------|--------------|--------------|--------------|-----------------------------------|--------------|---------------|---------------|
| | NETSS | | PHLIS | | Cum. 1999 | Cum. 1998 | Cum. 1999† | Cum. 1998† |
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | | | | |
| UNITED STATES | 5,315 | 7,909 | 1,908 | 4,863 | 2,837 | 3,165 | 3,349 | 4,038 |
| NEW ENGLAND | 144 | 202 | 113 | 181 | 28 | 36 | 169 | 207 |
| Maine | 2 | 6 | - | - | - | 1 | 8 | 3 |
| N.H. | 7 | 7 | 5 | 8 | - | 1 | 3 | 2 |
| Vt. | 4 | 4 | 3 | - | 2 | 3 | - | 1 |
| Mass. | 90 | 124 | 70 | 121 | 17 | 22 | 92 | 116 |
| R.I. | 14 | 15 | 9 | 12 | 1 | - | 19 | 24 |
| Conn. | 27 | 46 | 26 | 40 | 8 | 9 | 47 | 61 |
| MID. ATLANTIC | 363 | 1,223 | 167 | 1,026 | 113 | 105 | 899 | 1,008 |
| Upstate N.Y. | 96 | 220 | 30 | 64 | 15 | 16 | 131 | 134 |
| N.Y. City | 98 | 400 | 81 | 439 | 50 | 23 | 596 | 610 |
| N.J. | 103 | 387 | 56 | 356 | 13 | 50 | 172 | 264 |
| Pa. | 66 | 216 | - | 167 | 35 | 16 | U | U |
| E.N. CENTRAL | 797 | 1,190 | 332 | 609 | 560 | 489 | 158 | 199 |
| Ohio | 249 | 276 | 14 | 66 | 41 | 72 | U | U |
| Ind. | 39 | 78 | 10 | 22 | 157 | 86 | U | U |
| Ill. | 312 | 620 | 218 | 501 | 267 | 204 | U | U |
| Mich. | 149 | 119 | 73 | 4 | 95 | 89 | 123 | 149 |
| Wis. | 48 | 97 | 17 | 16 | U | 38 | 35 | 50 |
| W.N. CENTRAL | 459 | 406 | 270 | 180 | 52 | 74 | 229 | 182 |
| Minn. | 76 | 75 | 53 | 78 | 5 | 5 | 88 | 60 |
| Iowa | 7 | 28 | 8 | 26 | 5 | - | 26 | 2 |
| Mo. | 322 | 46 | 191 | 36 | 34 | 56 | 82 | 78 |
| N. Dak. | 2 | 4 | - | 2 | - | - | 2 | 3 |
| S. Dak. | 8 | 19 | 4 | 15 | - | 1 | 3 | 13 |
| Nebr. | 25 | 220 | - | 13 | 4 | 4 | 9 | 5 |
| Kans. | 19 | 14 | 14 | 10 | 4 | 8 | 19 | 21 |
| S. ATLANTIC | 1,030 | 1,436 | 226 | 483 | 920 | 1,216 | 637 | 734 |
| Del. | 7 | 7 | 2 | 2 | 4 | 15 | 12 | 16 |
| Md. | 58 | 90 | 15 | 29 | 187 | 342 | U | U |
| D.C. | 25 | 10 | - | - | 14 | 36 | 19 | 53 |
| Va. | 36 | 66 | 8 | 24 | 75 | 84 | 104 | 118 |
| W. Va. | 5 | 7 | 2 | 5 | 2 | 2 | 19 | 24 |
| N.C. | 107 | 124 | 51 | 78 | 236 | 340 | 187 | 193 |
| S.C. | 47 | 71 | 17 | 29 | 123 | 148 | 124 | 138 |
| Ga. | 95 | 373 | 27 | 115 | 136 | 133 | 172 | 192 |
| Fla. | 650 | 688 | 104 | 201 | 143 | 116 | U | U |
| E.S. CENTRAL | 551 | 393 | 217 | 236 | 532 | 547 | 223 | 369 |
| Ky. | 100 | 76 | - | 38 | 46 | 58 | 31 | 89 |
| Tenn. | 361 | 63 | 197 | 84 | 301 | 265 | U | U |
| Ala. | 51 | 225 | 19 | 112 | 125 | 124 | 136 | 173 |
| Miss. | 39 | 29 | 1 | 2 | 60 | 100 | 56 | 107 |
| W.S. CENTRAL | 744 | 1,583 | 332 | 1,731 | 400 | 416 | 740 | 963 |
| Ark. | 44 | 73 | 21 | 16 | 27 | 58 | 71 | 53 |
| La. | 76 | 128 | 29 | 144 | 121 | 134 | U | U |
| Okla. | 219 | 104 | 70 | 30 | 95 | 24 | 60 | 55 |
| Tex. | 405 | 1,278 | 212 | 1,541 | 157 | 200 | 609 | 855 |
| MOUNTAIN | 316 | 494 | 152 | 285 | 96 | 106 | 62 | 102 |
| Mont. | 6 | 3 | - | 3 | - | - | 5 | 12 |
| Idaho | 6 | 11 | 3 | 6 | - | - | - | 4 |
| Wyo. | 2 | 1 | 1 | - | - | 1 | 1 | 2 |
| Colo. | 50 | 62 | 37 | 47 | 1 | 7 | U | U |
| N. Mex. | 40 | 114 | 13 | 44 | - | 12 | 23 | 27 |
| Ariz. | 168 | 268 | 92 | 165 | 89 | 74 | U | U |
| Utah | 24 | 16 | - | 13 | 2 | 3 | 18 | 28 |
| Nev. | 20 | 19 | 6 | 7 | 4 | 9 | 15 | 29 |
| PACIFIC | 911 | 982 | 99 | 132 | 136 | 176 | 232 | 274 |
| Wash. | 47 | 52 | 51 | 55 | 35 | 9 | 74 | 115 |
| Oreg. | 34 | 57 | 29 | 55 | 2 | 1 | 53 | 53 |
| Calif. | 808 | 853 | - | - | 96 | 166 | U | U |
| Alaska | - | 3 | - | 2 | 1 | - | 29 | 23 |
| Hawaii | 22 | 17 | 19 | 20 | 2 | - | 76 | 83 |
| Guam | 3 | 19 | - | - | - | - | - | 37 |
| P.R. | 22 | 26 | - | - | 82 | 109 | 41 | 65 |
| V.I. | - | - | - | - | U | U | U | U |
| Amer. Samoa | - | - | - | - | U | U | U | U |
| C.N.M.I. | - | 11 | - | - | - | 127 | - | 55 |

N: Not notifiable U: Unavailable -: no reported cases

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

†Cumulative reports of provisional tuberculosis cases for 1998 and 1999 are unavailable ("U") for some areas using the Tuberculosis Information System (TIMS)

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 19, 1999, and June 20, 1998 (24th Week)

| Reporting Area | <i>H. influenzae</i> , invasive | | Hepatitis (Viral), by type | | | | Measles (Rubeola) | | | | | |
|----------------|---------------------------------|-----------|----------------------------|-----------|-----------|-----------|-------------------|-----------|-----------|-----------|-----------|-----------|
| | Cum. 1999† | Cum. 1998 | A | | B | | Indigenous | | Imported* | | Total | |
| | | | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | 1999 | Cum. 1999 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 563 | 571 | 7,227 | 10,528 | 2,906 | 3,771 | - | 27 | - | 13 | 40 | 38 |
| NEW ENGLAND | 41 | 41 | 91 | 142 | 46 | 82 | - | 5 | - | 4 | 9 | 2 |
| Maine | 5 | 2 | 4 | 13 | - | - | - | - | - | - | - | - |
| N.H. | 7 | 6 | 7 | 7 | 7 | 9 | - | - | - | 1 | 1 | - |
| Vt. | 4 | 2 | 3 | 11 | 1 | 3 | - | - | - | - | - | - |
| Mass. | 18 | 29 | 30 | 46 | 22 | 32 | - | 4 | - | 2 | 6 | 2 |
| R.I. | - | 2 | 9 | 9 | 16 | 20 | - | - | - | - | - | - |
| Conn. | 7 | - | 38 | 56 | - | 18 | U | 1 | U | 1 | 2 | - |
| MID. ATLANTIC | 75 | 81 | 481 | 786 | 370 | 588 | - | - | - | 2 | 2 | 11 |
| Upstate N.Y. | 43 | 25 | 111 | 152 | 92 | 112 | - | - | - | 2 | 2 | 2 |
| N.Y. City | 11 | 24 | 80 | 293 | 89 | 200 | - | - | - | - | - | - |
| N.J. | 21 | 27 | 57 | 145 | 40 | 102 | U | - | U | - | - | 8 |
| Pa. | - | 5 | 233 | 196 | 149 | 174 | - | - | - | - | - | 1 |
| E.N. CENTRAL | 76 | 92 | 1,451 | 1,440 | 277 | 460 | - | 1 | - | - | 1 | 14 |
| Ohio | 29 | 34 | 345 | 159 | 44 | 33 | - | - | - | - | - | 1 |
| Ind. | 13 | 21 | 94 | 87 | 23 | 50 | - | 1 | - | - | 1 | 3 |
| Ill. | 27 | 33 | 220 | 361 | - | 121 | - | - | - | - | - | - |
| Mich. | 7 | - | 766 | 720 | 209 | 212 | - | - | - | - | - | 10 |
| Wis. | - | 4 | 26 | 113 | 1 | 44 | U | - | U | - | - | - |
| W.N. CENTRAL | 47 | 39 | 347 | 818 | 245 | 193 | - | - | - | - | - | - |
| Minn. | 12 | 25 | 33 | 60 | 19 | 16 | - | - | - | - | - | - |
| Iowa | 13 | 1 | 75 | 347 | 112 | 29 | - | - | - | - | - | - |
| Mo. | 16 | 8 | 182 | 338 | 88 | 121 | - | - | - | - | - | - |
| N. Dak. | - | - | 1 | 3 | - | 4 | U | - | U | - | - | - |
| S. Dak. | 1 | - | 8 | 8 | 1 | 1 | - | - | - | - | - | - |
| Nebr. | 3 | - | 28 | 12 | 10 | 9 | - | - | - | - | - | - |
| Kans. | 2 | 5 | 20 | 50 | 15 | 13 | - | - | - | - | - | - |
| S. ATLANTIC | 130 | 104 | 851 | 763 | 513 | 390 | - | 1 | - | 3 | 4 | 6 |
| Del. | - | - | 2 | 3 | - | - | - | - | - | - | - | 1 |
| Md. | 31 | 35 | 147 | 159 | 74 | 83 | - | - | - | - | - | 1 |
| D.C. | 3 | - | 32 | 28 | 11 | 6 | U | - | U | - | - | - |
| Va. | 12 | 12 | 68 | 124 | 45 | 51 | - | 1 | - | 2 | 3 | 2 |
| W. Va. | 4 | 4 | 15 | 1 | 11 | 3 | - | - | - | - | - | - |
| N.C. | 21 | 13 | 58 | 48 | 100 | 81 | - | - | - | - | - | - |
| S.C. | 2 | 3 | 17 | 16 | 38 | 3 | - | - | - | - | - | - |
| Ga. | 30 | 21 | 217 | 230 | 60 | 80 | - | - | - | - | - | 1 |
| Fla. | 27 | 16 | 295 | 154 | 174 | 83 | - | - | - | 1 | 1 | 1 |
| E.S. CENTRAL | 45 | 36 | 225 | 201 | 212 | 190 | - | - | - | - | - | - |
| Ky. | 6 | 5 | 36 | 12 | 24 | 23 | - | - | - | - | - | - |
| Tenn. | 24 | 22 | 114 | 114 | 96 | 133 | - | - | - | - | - | - |
| Ala. | 13 | 7 | 36 | 44 | 47 | 34 | - | - | - | - | - | - |
| Miss. | 2 | 2 | 39 | 31 | 45 | - | U | - | U | - | - | - |
| W.S. CENTRAL | 33 | 29 | 1,299 | 1,907 | 266 | 633 | - | 1 | - | 2 | 3 | - |
| Ark. | 1 | - | 25 | 39 | 21 | 38 | U | - | U | - | - | - |
| La. | 7 | 13 | 59 | 40 | 72 | 47 | - | - | - | - | - | - |
| Okla. | 23 | 14 | 244 | 269 | 58 | 31 | - | - | - | - | - | - |
| Tex. | 2 | 2 | 971 | 1,559 | 115 | 517 | U | 1 | U | 2 | 3 | - |
| MOUNTAIN | 56 | 76 | 712 | 1,599 | 301 | 386 | - | 1 | - | - | 1 | - |
| Mont. | 1 | - | 12 | 51 | 15 | 3 | - | - | - | - | - | - |
| Idaho | 1 | - | 27 | 125 | 15 | 16 | - | - | - | - | - | - |
| Wyo. | 1 | - | 4 | 23 | 5 | 2 | U | - | U | - | - | - |
| Colo. | 6 | 14 | 122 | 120 | 43 | 46 | - | - | - | - | - | - |
| N. Mex. | 11 | 4 | 26 | 82 | 105 | 147 | - | - | - | - | - | - |
| Ariz. | 30 | 38 | 443 | 981 | 78 | 95 | - | 1 | - | - | 1 | - |
| Utah | 4 | 3 | 25 | 106 | 15 | 37 | - | - | - | - | - | - |
| Nev. | 2 | 17 | 53 | 111 | 25 | 40 | U | - | U | - | - | - |
| PACIFIC | 60 | 73 | 1,770 | 2,872 | 676 | 849 | - | 18 | - | 2 | 20 | 5 |
| Wash. | 1 | 3 | 141 | 553 | 31 | 50 | - | - | - | - | - | 1 |
| Oreg. | 24 | 30 | 131 | 225 | 43 | 83 | - | 8 | - | - | 8 | - |
| Calif. | 29 | 33 | 1,488 | 2,053 | 587 | 702 | - | 10 | - | 2 | 12 | 4 |
| Alaska | 4 | 1 | 3 | 12 | 9 | 7 | - | - | - | - | - | - |
| Hawaii | 2 | 6 | 7 | 29 | 6 | 7 | - | - | - | - | - | - |
| Guam | - | - | 2 | - | 2 | 1 | U | 1 | U | - | 1 | - |
| P.R. | 1 | 2 | 79 | 29 | 73 | 272 | - | - | - | - | - | - |
| V.I. | U | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | - | - | 1 | - | 31 | U | - | U | - | - | - |

N: Not notifiable U: Unavailable -: no reported cases

*For imported measles, cases include only those resulting from importation from other countries.

†Of 118 cases among children aged <5 years, serotype was reported for 52 and of those, 12 were type b.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 19, 1999, and June 20, 1998 (24th Week)

| Reporting Area | Meningococcal Disease | | Mumps | | | Pertussis | | | Rubella | | |
|----------------|-----------------------|-----------|-------|-----------|-----------|-----------|-----------|-----------|---------|-----------|-----------|
| | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 1,258 | 1,507 | 5 | 171 | 390 | 30 | 2,372 | 2,124 | 13 | 130 | 282 |
| NEW ENGLAND | 69 | 68 | - | 3 | 1 | - | 253 | 395 | - | 5 | 36 |
| Maine | 4 | 4 | - | - | - | - | - | 5 | - | - | - |
| N.H. | 9 | 8 | - | 1 | - | - | 53 | 28 | - | - | - |
| Vt. | 4 | 1 | - | - | - | - | 10 | 32 | - | - | - |
| Mass. | 43 | 29 | - | 2 | 1 | - | 179 | 314 | - | 5 | 8 |
| R.I. | 2 | 3 | - | - | - | - | 3 | 3 | - | - | - |
| Conn. | 7 | 23 | U | - | - | U | 8 | 13 | U | - | 28 |
| MID. ATLANTIC | 112 | 155 | 1 | 21 | 167 | 6 | 552 | 269 | 1 | 14 | 129 |
| Upstate N.Y. | 33 | 39 | - | 5 | 2 | 4 | 491 | 128 | 1 | 11 | 107 |
| N.Y. City | 27 | 18 | - | 3 | 153 | - | 10 | 13 | - | - | 9 |
| N.J. | 23 | 36 | U | - | 5 | U | - | 8 | U | - | 12 |
| Pa. | 29 | 62 | 1 | 13 | 7 | 2 | 51 | 120 | - | 3 | 1 |
| E.N. CENTRAL | 195 | 244 | 1 | 22 | 46 | 3 | 167 | 207 | - | - | - |
| Ohio | 83 | 82 | 1 | 7 | 19 | 2 | 101 | 71 | - | - | - |
| Ind. | 36 | 42 | - | 2 | 4 | 1 | 11 | 49 | - | - | - |
| Ill. | 50 | 70 | - | 6 | 6 | - | 35 | 17 | - | - | - |
| Mich. | 25 | 26 | - | 7 | 17 | - | 20 | 32 | - | - | - |
| Wis. | 1 | 24 | U | - | - | U | - | 38 | U | - | - |
| W.N. CENTRAL | 145 | 123 | - | 5 | 20 | 3 | 61 | 158 | 12 | 71 | 27 |
| Minn. | 28 | 19 | - | 1 | 10 | - | 25 | 86 | - | - | - |
| Iowa | 28 | 17 | - | 3 | 6 | 1 | 18 | 42 | 3 | 21 | - |
| Mo. | 57 | 52 | - | 1 | 3 | 2 | 15 | 12 | 2 | 2 | 2 |
| N. Dak. | 3 | - | U | - | 1 | U | - | - | U | - | - |
| S. Dak. | 8 | 6 | - | - | - | - | 2 | 4 | - | - | - |
| Nebr. | 9 | 6 | - | - | - | - | 1 | 6 | 7 | 48 | - |
| Kans. | 12 | 23 | - | - | - | - | - | 8 | - | - | 25 |
| S. ATLANTIC | 214 | 226 | 2 | 34 | 24 | 11 | 136 | 114 | - | 17 | 4 |
| Del. | 3 | 1 | - | - | - | - | - | 1 | - | - | - |
| Md. | 33 | 22 | - | 3 | - | - | 36 | 25 | - | 1 | - |
| D.C. | 1 | - | U | 2 | - | U | - | 1 | U | - | - |
| Va. | 26 | 22 | - | 8 | 4 | - | 13 | 6 | - | - | - |
| W. Va. | 4 | 7 | - | - | - | - | 1 | 1 | - | - | - |
| N.C. | 25 | 33 | 2 | 7 | 7 | 5 | 33 | 42 | - | 16 | 3 |
| S.C. | 25 | 35 | - | 3 | 4 | 1 | 9 | 13 | - | - | - |
| Ga. | 36 | 53 | - | 1 | 1 | - | 16 | 5 | - | - | - |
| Fla. | 61 | 53 | - | 10 | 8 | 5 | 28 | 20 | - | - | 1 |
| E.S. CENTRAL | 104 | 112 | - | 1 | 8 | 1 | 43 | 50 | - | 1 | - |
| Ky. | 29 | 16 | - | - | - | - | 3 | 18 | - | - | - |
| Tenn. | 34 | 40 | - | - | 1 | - | 25 | 16 | - | - | - |
| Ala. | 24 | 37 | - | 1 | 4 | 1 | 11 | 14 | - | 1 | - |
| Miss. | 17 | 19 | U | - | 3 | U | 4 | 2 | U | - | - |
| W.S. CENTRAL | 92 | 183 | - | 21 | 31 | - | 59 | 134 | - | 5 | 68 |
| Ark. | 19 | 22 | U | - | - | U | 4 | 14 | U | - | - |
| La. | 34 | 35 | - | 3 | 2 | - | 3 | 1 | - | - | - |
| Okla. | 16 | 26 | - | 1 | - | - | 7 | 15 | - | - | - |
| Tex. | 23 | 100 | U | 17 | 29 | U | 45 | 104 | U | 5 | 68 |
| MOUNTAIN | 87 | 81 | - | 12 | 23 | 4 | 242 | 422 | - | 14 | 5 |
| Mont. | 2 | 2 | - | - | - | - | 2 | 1 | - | - | - |
| Idaho | 8 | 4 | - | 1 | 3 | 1 | 93 | 135 | - | - | - |
| Wyo. | 3 | 3 | U | - | 1 | U | 2 | 7 | U | - | - |
| Colo. | 23 | 17 | - | 3 | 3 | 2 | 60 | 106 | - | - | - |
| N. Mex. | 10 | 15 | N | N | N | 1 | 21 | 64 | - | - | 1 |
| Ariz. | 28 | 28 | - | - | 4 | - | 29 | 69 | - | 13 | 1 |
| Utah | 8 | 8 | - | 5 | 3 | - | 33 | 22 | - | - | 2 |
| Nev. | 5 | 4 | U | 3 | 9 | U | 2 | 18 | U | 1 | 1 |
| PACIFIC | 240 | 315 | 1 | 52 | 70 | 2 | 859 | 375 | - | 3 | 13 |
| Wash. | 37 | 38 | - | 2 | 5 | - | 479 | 136 | - | - | 9 |
| Oreg. | 40 | 54 | N | N | N | - | 17 | 27 | - | - | - |
| Calif. | 155 | 218 | 1 | 44 | 49 | 2 | 353 | 205 | - | 3 | 2 |
| Alaska | 4 | 1 | - | 1 | 2 | - | 3 | 2 | - | - | - |
| Hawaii | 4 | 4 | - | 5 | 14 | - | 7 | 5 | - | - | 2 |
| Guam | - | 2 | U | 1 | 2 | U | 1 | - | U | - | - |
| P.R. | 5 | 6 | - | - | 1 | - | 8 | 2 | - | - | - |
| V.I. | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | - | U | - | 2 | U | - | 1 | U | - | - |

N: Not notifiable

U: Unavailable

-: no reported cases

**TABLE IV. Deaths in 122 U.S. cities,* week ending
June 19, 1999 (24th Week)**

| Reporting Area | All Causes, By Age (Years) | | | | | | P&J† | Total | Reporting Area | All Causes, By Age (Years) | | | | | | P&J† | Total |
|---------------------|----------------------------|-------|-------|-------|------|----|------|-----------------------|----------------|----------------------------|-------|-------|-------|------|-----|------|-------|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | | | | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | | |
| NEW ENGLAND | 518 | 370 | 87 | 36 | 8 | 17 | 38 | S. ATLANTIC | 1,061 | 692 | 209 | 95 | 37 | 28 | 69 | | |
| Boston, Mass. | 129 | 82 | 28 | 10 | 1 | 8 | 15 | Atlanta, Ga. | U | U | U | U | U | U | U | | |
| Bridgeport, Conn. | 37 | 27 | 5 | 4 | 1 | - | 2 | Baltimore, Md. | 150 | 82 | 39 | 22 | 5 | 2 | 13 | | |
| Cambridge, Mass. | 11 | 8 | 2 | 1 | - | - | 1 | Charlotte, N.C. | 88 | 67 | 12 | 4 | 2 | 3 | 6 | | |
| Fall River, Mass. | 31 | 24 | 5 | 2 | - | - | 2 | Jacksonville, Fla. | 179 | 110 | 44 | 13 | 4 | 8 | 7 | | |
| Hartford, Conn. | U | U | U | U | U | U | U | Miami, Fla. | 102 | 70 | 19 | 9 | 2 | 2 | - | | |
| Lowell, Mass. | 19 | 15 | 1 | 2 | 1 | - | - | Norfolk, Va. | 48 | 30 | 11 | 4 | 2 | 1 | 8 | | |
| Lynn, Mass. | 14 | 11 | 2 | 1 | - | - | 1 | Richmond, Va. | 64 | 43 | 8 | 6 | 4 | 3 | 1 | | |
| New Bedford, Mass. | 22 | 19 | 2 | 1 | - | - | 1 | Savannah, Ga. | 53 | 38 | 10 | 1 | 4 | - | 5 | | |
| New Haven, Conn. | 34 | 23 | 6 | 5 | - | - | 2 | St. Petersburg, Fla. | 69 | 48 | 8 | 7 | 2 | 4 | 5 | | |
| Providence, R.I. | 57 | 42 | 11 | 2 | 1 | 1 | - | Tampa, Fla. | 185 | 128 | 29 | 19 | 6 | 3 | 17 | | |
| Somerville, Mass. | 2 | 2 | - | - | - | - | - | Washington, D.C. | 102 | 56 | 28 | 10 | 6 | 2 | 7 | | |
| Springfield, Mass. | 65 | 42 | 13 | 3 | 2 | 5 | 3 | Wilmington, Del. | 21 | 20 | 1 | - | - | - | - | | |
| Waterbury, Conn. | 31 | 23 | 4 | 2 | 1 | 1 | 2 | E.S. CENTRAL | 898 | 585 | 173 | 83 | 31 | 24 | 58 | | |
| Worcester, Mass. | 66 | 52 | 8 | 3 | 1 | 2 | 9 | Birmingham, Ala. | 202 | 134 | 31 | 19 | 5 | 11 | 11 | | |
| MID. ATLANTIC | 2,050 | 1,427 | 395 | 146 | 41 | 41 | 64 | Chattanooga, Tenn. | 62 | 40 | 13 | 6 | 2 | 1 | 5 | | |
| Albany, N.Y. | 46 | 31 | 7 | 5 | 2 | 1 | 2 | Knoxville, Tenn. | 62 | 38 | 15 | 7 | 1 | 1 | 2 | | |
| Allentown, Pa. | U | U | U | U | U | U | U | Lexington, Ky. | 79 | 49 | 23 | 5 | 2 | - | 12 | | |
| Buffalo, N.Y. | 91 | 71 | 16 | 4 | - | - | 3 | Memphis, Tenn. | 213 | 143 | 36 | 20 | 7 | 7 | 20 | | |
| Camden, N.J. | 42 | 21 | 17 | 2 | 2 | - | 4 | Mobile, Ala. | 71 | 45 | 15 | 7 | 2 | 2 | 2 | | |
| Elizabeth, N.J. | U | U | U | U | U | U | U | Montgomery, Ala. | 62 | 43 | 12 | 4 | 3 | - | 4 | | |
| Erie, Pa. | 45 | 36 | 5 | 3 | - | 1 | 1 | Nashville, Tenn. | 147 | 93 | 28 | 15 | 9 | 2 | 2 | | |
| Jersey City, N.J. | 56 | 39 | 8 | 7 | 1 | 1 | - | W.S. CENTRAL | 1,450 | 986 | 280 | 109 | 45 | 30 | 92 | | |
| New York City, N.Y. | 1,043 | 727 | 200 | 78 | 23 | 15 | 18 | Austin, Tex. | 76 | 50 | 16 | 5 | 3 | 2 | 2 | | |
| Newark, N.J. | U | U | U | U | U | U | U | Baton Rouge, La. | 64 | 42 | 12 | 6 | 4 | - | 1 | | |
| Paterson, N.J. | 25 | 16 | 8 | 1 | - | - | - | Corpus Christi, Tex. | 64 | 47 | 11 | 3 | 2 | 1 | 6 | | |
| Philadelphia, Pa. | 331 | 211 | 75 | 28 | 6 | 11 | 15 | Dallas, Tex. | 198 | 137 | 30 | 23 | 5 | 3 | 4 | | |
| Pittsburgh, Pa.‡ | 77 | 55 | 10 | 3 | 3 | 6 | 5 | El Paso, Tex. | 81 | 48 | 15 | 11 | 1 | 6 | 5 | | |
| Reading, Pa. | 29 | 23 | 3 | 2 | - | 1 | 1 | Ft. Worth, Tex. | 92 | 55 | 25 | 8 | 2 | 2 | 6 | | |
| Rochester, N.Y. | 120 | 91 | 21 | 4 | 3 | 1 | 10 | Houston, Tex. | 355 | 227 | 80 | 30 | 13 | 5 | 27 | | |
| Schenectady, N.Y. | U | U | U | U | U | U | U | Little Rock, Ark. | 84 | 60 | 13 | 6 | 1 | 4 | 9 | | |
| Scranton, Pa. | 18 | 16 | 2 | - | - | - | 1 | New Orleans, La. | 63 | 38 | 20 | 2 | 2 | 1 | 7 | | |
| Syracuse, N.Y. | 92 | 66 | 15 | 6 | 1 | 4 | 3 | San Antonio, Tex. | 212 | 157 | 36 | 5 | 11 | 3 | 19 | | |
| Trenton, N.J. | 18 | 8 | 7 | 3 | - | - | 1 | Shreveport, La. | 17 | 15 | 2 | - | - | - | 2 | | |
| Utica, N.Y. | 17 | 16 | 1 | - | - | - | - | Tulsa, Okla. | 144 | 110 | 20 | 10 | 1 | 3 | 4 | | |
| Yonkers, N.Y. | U | U | U | U | U | U | U | MOUNTAIN | 882 | 596 | 172 | 74 | 17 | 23 | 57 | | |
| E.N. CENTRAL | 1,996 | 1,358 | 389 | 153 | 44 | 50 | 127 | Albuquerque, N.M. | 141 | 89 | 31 | 16 | 4 | 1 | 4 | | |
| Akron, Ohio | 44 | 32 | 4 | 5 | - | 3 | - | Boise, Idaho | 40 | 28 | 9 | 3 | - | - | 4 | | |
| Canton, Ohio | 45 | 38 | 6 | - | 1 | - | 1 | Colo. Springs, Colo. | 47 | 37 | 5 | 3 | - | 2 | 3 | | |
| Chicago, Ill. | 408 | 244 | 94 | 49 | 15 | 5 | 35 | Denver, Colo. | 88 | 53 | 20 | 8 | 1 | 6 | 7 | | |
| Cincinnati, Ohio | 145 | 108 | 24 | 8 | 5 | - | 14 | Las Vegas, Nev. | 200 | 126 | 50 | 16 | 3 | 5 | 9 | | |
| Cleveland, Ohio | 136 | 88 | 22 | 21 | 2 | 3 | 3 | Ogden, Utah | 18 | 10 | 7 | - | 1 | - | 2 | | |
| Columbus, Ohio | 215 | 152 | 44 | 10 | 4 | 5 | 16 | Phoenix, Ariz. | 62 | 46 | 7 | 5 | 2 | 2 | 2 | | |
| Dayton, Ohio | 104 | 81 | 21 | 2 | - | - | 11 | Pueblo, Colo. | 24 | 19 | 3 | 2 | - | - | 2 | | |
| Detroit, Mich. | 196 | 115 | 36 | 24 | 7 | 14 | 4 | Salt Lake City, Utah | 96 | 61 | 17 | 8 | 5 | 5 | 12 | | |
| Evansville, Ind. | 28 | 24 | 3 | - | - | 1 | 1 | Tucson, Ariz. | 166 | 127 | 23 | 13 | 1 | 2 | 12 | | |
| Fort Wayne, Ind. | 67 | 47 | 16 | 2 | - | 1 | 2 | PACIFIC | 1,690 | 1,230 | 283 | 96 | 36 | 41 | 132 | | |
| Gary, Ind. | 16 | 8 | 3 | 2 | 1 | 2 | 1 | Berkeley, Calif. | 16 | 11 | 4 | - | - | 1 | 1 | | |
| Grand Rapids, Mich. | 68 | 50 | 9 | 4 | 2 | 3 | 5 | Fresno, Calif. | 111 | 80 | 22 | 5 | 1 | 3 | 9 | | |
| Indianapolis, Ind. | 176 | 121 | 36 | 11 | 3 | 5 | 11 | Glendale, Calif. | 28 | 21 | 4 | 3 | - | - | 3 | | |
| Lansing, Mich. | 36 | 18 | 11 | 5 | 1 | 1 | 2 | Honolulu, Hawaii | 75 | 58 | 14 | 3 | - | - | 6 | | |
| Milwaukee, Wis. | 104 | 80 | 20 | 2 | 1 | 1 | 13 | Long Beach, Calif. | 58 | 49 | 4 | 4 | - | 1 | 10 | | |
| Peoria, Ill. | 48 | 36 | 9 | - | - | 3 | 1 | Los Angeles, Calif. | 371 | 270 | 59 | 26 | 8 | 8 | 29 | | |
| Rockford, Ill. | 38 | 24 | 10 | 2 | - | 2 | - | Pasadena, Calif. | 24 | 20 | 3 | - | - | 1 | 3 | | |
| South Bend, Ind. | U | U | U | U | U | U | U | Portland, Oreg. | 110 | 84 | 12 | 4 | 5 | 5 | 2 | | |
| Toledo, Ohio | 70 | 52 | 14 | 2 | 1 | 1 | 3 | Sacramento, Calif. | 181 | 131 | 28 | 12 | 3 | 7 | 17 | | |
| Youngstown, Ohio | 52 | 40 | 7 | 4 | 1 | - | 4 | San Diego, Calif. | 194 | 141 | 31 | 14 | 5 | 3 | 20 | | |
| W.N. CENTRAL | 718 | 545 | 114 | 34 | 12 | 13 | 41 | San Francisco, Calif. | U | U | U | U | U | U | U | | |
| Des Moines, Iowa | 50 | 38 | 7 | 2 | 1 | 2 | 5 | San Jose, Calif. | 185 | 129 | 36 | 12 | 3 | 5 | 12 | | |
| Duluth, Minn. | 24 | 23 | 1 | - | - | - | - | Santa Cruz, Calif. | 35 | 25 | 9 | - | - | 1 | 6 | | |
| Kansas City, Kans. | U | U | U | U | U | U | U | Seattle, Wash. | 150 | 96 | 35 | 7 | 8 | 4 | 5 | | |
| Kansas City, Mo. | 98 | 65 | 21 | 8 | 2 | 2 | 7 | Spokane, Wash. | 53 | 40 | 7 | 3 | 1 | 2 | 4 | | |
| Lincoln, Nebr. | 37 | 27 | 6 | 3 | 1 | - | 4 | Tacoma, Wash. | 99 | 75 | 15 | 3 | 2 | - | 5 | | |
| Minneapolis, Minn. | 211 | 172 | 29 | 7 | 1 | 2 | 13 | TOTAL | 11,263‡ | 7,789 | 2,102 | 826 | 271 | 267 | 678 | | |
| Omaha, Nebr. | 95 | 70 | 16 | 4 | 3 | 2 | 9 | | | | | | | | | | |
| St. Louis, Mo. | 103 | 71 | 19 | 7 | 3 | 3 | - | | | | | | | | | | |
| St. Paul, Minn. | 100 | 79 | 15 | 3 | 1 | 2 | 3 | | | | | | | | | | |
| Wichita, Kans. | U | U | U | U | U | U | U | | | | | | | | | | |

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 or more. 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.

**Contributors to the Production of the *MMWR* (Weekly)
Weekly Notifiable Disease Morbidity Data and 122 Cities Mortality Data**

Samuel L. Groseclose, D.V.M., M.P.H.

State Support Team

Robert Fagan
Jose Aponte
Gerald Jones
David Nitschke
Carol A. Worsham

CDC Operations Team

Carol M. Knowles
Deborah A. Adams
Willie J. Anderson
Patsy A. Hall
Kathryn Snaveley

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Director, Centers for Disease Control
and Prevention
Jeffrey P. Koplan, M.D., M.P.H.
Deputy Director, Centers for Disease
Control and Prevention
Claire V. Broome, M.D.

Director, Epidemiology Program Office
Stephen B. Thacker, M.D., M.Sc.
Editor, *MMWR* Series
John W. Ward, M.D.
Managing Editor,
MMWR (weekly)
Karen L. Foster, M.A.

Writers-Editors,
MMWR (weekly)
Jill Crane
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