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## Epidemiology of Measles — United States, 1998

During 1998, a provisional total of 100 confirmed measles cases was reported to CDC by state and local health departments, representing a record low number of cases and 28% fewer than the 138 cases reported in 1997 (*1*). This report describes the epidemiology of measles during 1998, which suggests that measles is no longer an indigenous disease in the United States.

### Case Classification

Measles cases among persons who were infected outside the United States are classified as internationally imported cases. Cases among persons who were infected in the United States are classified as indigenous measles cases. Indigenous cases are subclassified into three groups: cases epidemiologically (epi)-linked to importation (a chain of transmission caused by an internationally imported case); imported virus cases (a chain of transmission from which an imported measles virus strain was isolated but a link to an internationally imported case was not identified) (*2*); and not importation-associated cases (no epidemiologic or virologic association to importation was detected). Internationally imported cases, cases epi-linked to importation, and imported virus cases are all considered importation-associated cases.

Of the 100 cases reported, 26 were internationally imported, and 74 were indigenous. Of the 74 indigenous cases, 45 were importation-associated, and 29 were not importation-associated. The proportion of cases not associated with importation has declined from 85% in 1995, 72% in 1996, 41% in 1997, to 29% in 1998. The 45 importation-associated indigenous cases included 13 epi-linked cases and 32 imported virus cases.

All 32 imported virus cases occurred in an outbreak in Alaska, which started 4 weeks after an imported case of measles was diagnosed in a visitor from Japan. Measles virus isolated from cases in this outbreak was nearly identical to virus circulating in Japan, although no virus was cultured from the imported case and no epidemiologic link between the imported case and the outbreak was detected (*3*). In addition to the strain isolated from the Alaska outbreak, viral genomic sequencing of specimens from epi-linked cases allowed genotype classification of measles virus strains from six chains of transmission epidemiologically linked to internationally imported cases. Virus strains isolated from cases in New York, Vermont, California, Massachusetts, and Washington matched viral genotypes from Germany, Cyprus, Japan,

*Epidemiology of Measles — Continued*

China, and Croatia, respectively. Measles virus was isolated from the Indiana outbreak but genotype information was unavailable from Zimbabwe, the source country of the imported case.

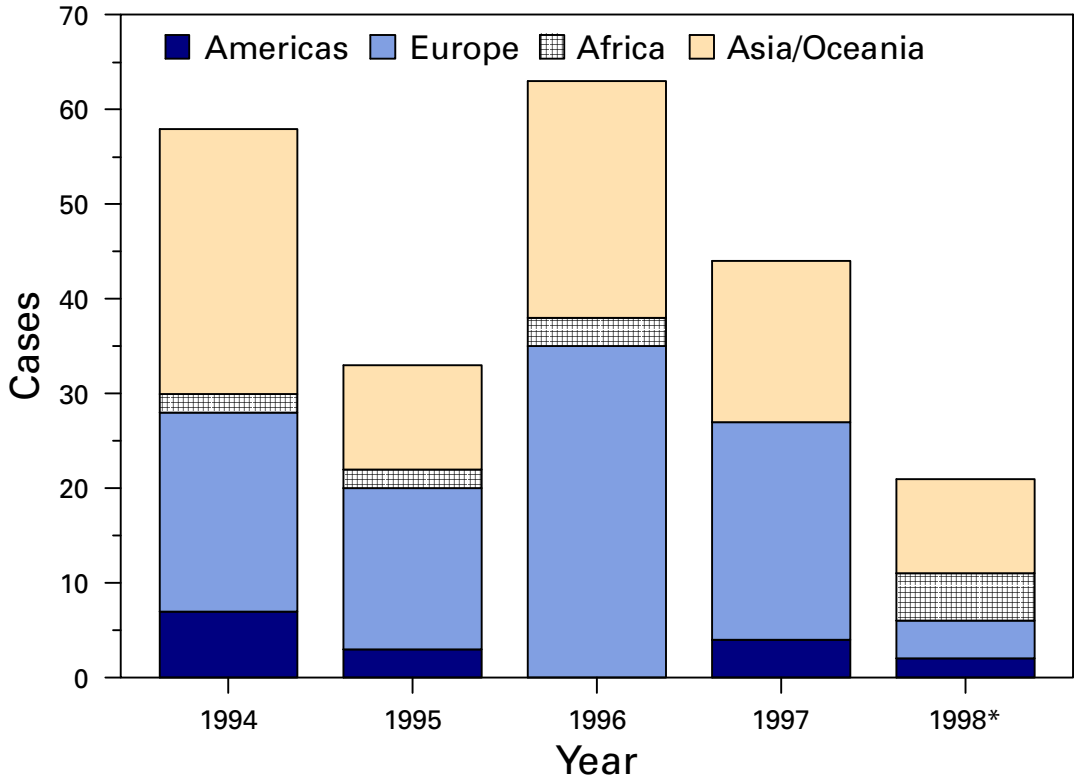
**Internationally Imported Measles Cases**

The 26 internationally imported cases reported in 1998 represent the lowest number of imported cases since the recording of importation status began in 1983. Imported cases from the Americas remained at very low levels, and imported cases from Europe and Asia declined compared with the previous 4 years (Figure 1). India, Japan, Kenya, Pakistan, and Saudi Arabia each were the source of two imported cases. One importation was reported from each of the other countries. Of 26 imported cases, 14 occurred among international visitors and 12 occurred among U.S. residents exposed to measles while traveling abroad.

**Geographic Distribution**

During 1998, 28 states and the District of Columbia reported no confirmed measles cases, compared with 21 states in 1997. Eight states accounted for 82% of cases: Alaska (33 cases), Arizona (11), Michigan (10), California (nine), New Jersey (eight), New York (four), Pennsylvania (four), and Indiana (three). In the remaining 14 states, two or fewer cases were reported. Eight states reported indigenous measles cases not associated with importation.

**FIGURE 1. Measles cases, by source of importation and year — United States, 1994–1998**




*Data are provisional.

*Epidemiology of Measles — Continued*

**Temporal Patterns of Transmission**

The median number of cases per week was one (range: 0–11). During 35 weeks, all reported measles cases were importation-associated, including 21 consecutive weeks (weeks 25–45) (Figure 2). Half of the indigenous cases that were not importation-associated occurred in two outbreaks: in New Jersey (weeks 13–16) and in Michigan (weeks 20–23).

**Age and Vaccination Status**

The age distribution and vaccination status of U.S. residents with measles differed from those of international visitors. Most U.S. residents with measles had been vaccinated with one or more doses of measles vaccine (53%), and 86% of international visitors with measles were unvaccinated.

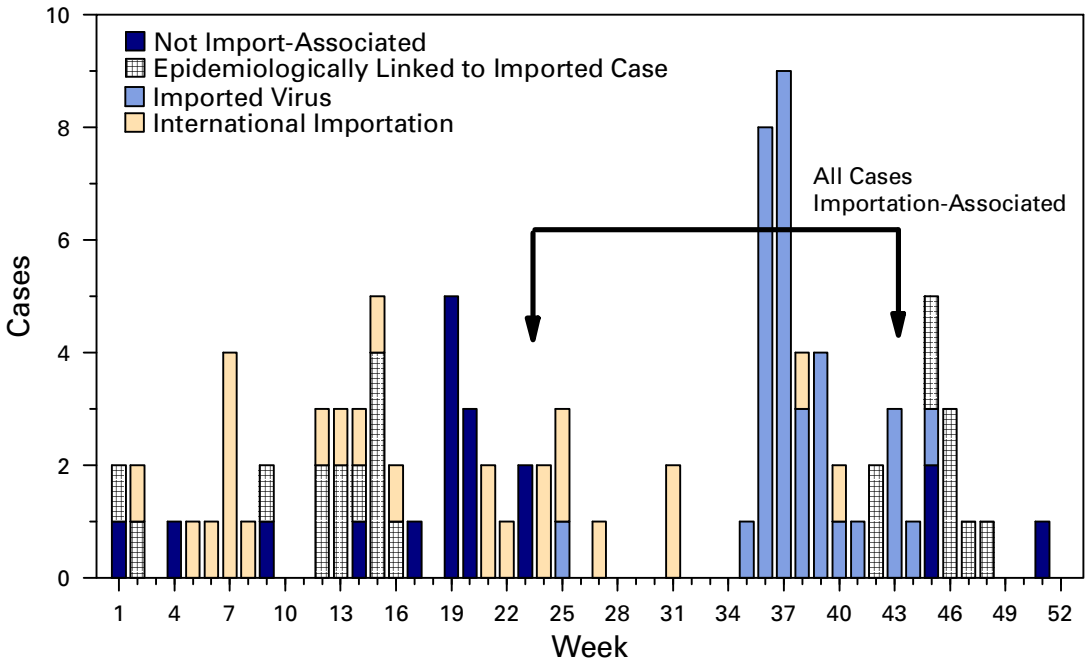
**Outbreaks**

Six measles outbreaks* were reported in 1998, the fewest ever reported to CDC. Outbreaks occurred in Alaska (33 cases), Arizona (11), Michigan (nine), New Jersey (six), Indiana (three), and Pennsylvania (three). The 65 measles cases reported from these outbreaks represented 65% of all cases reported during 1998. The ages of persons with outbreak-associated cases ranged from 5 months to 44 years (median: 15 years).

The largest measles outbreak reported since 1996 occurred in a high school in Anchorage, Alaska; 30 of the 33 cases had received one dose of measles vaccine. A 4-year-old unvaccinated Japanese child visiting Anchorage had measles diagnosed 4 weeks before the other cases in the outbreak. No epi-link was reported between this

*Three or more cases in a single chain of transmission.

**FIGURE 2. Measles cases, by importation status and week of rash onset — United States, 1998**



*Epidemiology of Measles — Continued*

case and subsequent cases. However, the genotype of viral RNA collected from outbreak cases was nearly identical to virus circulating in Japan. The interval from the onset of rash in the imported case to the end of the outbreak was 15 weeks (August 10 to November 19, the longest interval of transmission in 1998). As a result of the outbreak, the Alaskan Health Department now requires two doses of measles vaccine for all students in grades K-12 (*3*).Three outbreaks (Arizona, Indiana, and Pennsylvania) were epi-linked to an imported measles case, and two outbreaks (Michigan and New Jersey) were not importation-associated.

*Reported by: State and local health depts. Measles Virus Section, Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Measles Elimination Activity, Child Vaccine Preventable Diseases Br, Epidemiology and Surveillance Div, National Immunization Program; and an EIS Officer, CDC.*

**Editorial Note:** Analysis of epidemiologic data for 1998 suggests measles is no longer an indigenous disease in the United States. Most cases reported in 1998 were associated with importation, including the short chains of indigenous transmission of measles that occurred following international importation of measles.

Cases not associated with importation were insufficient to represent a continuous indigenous chain of measles transmission and probably were misclassifications (not measles), associated with undetected imported measles cases, or linked to known imported cases through chains of transmission not detected by the surveillance system. Misclassifications resulting from false-positive laboratory tests are an expected result of intensive investigation for a rare disease using a laboratory test that is not 100% specific.

Some cases may spread from undetected imported cases of measles. Detecting imported cases is difficult. International visitors with measles may leave the country before the rash appears or before they seek medical care. Even when the imported case is detected, it is difficult to detect every case in the chain of transmission, as was seen in the outbreak in Alaska. This highlights the need to obtain viral specimens from every chain of transmission to supplement epidemiologic information.

The largest outbreak in 1998 occurred in a high school without a second dose measles vaccine requirement (*3*). As of the 1998–99 school year, 55% of U.S. students were required by their states to have two doses of measles vaccine (CDC, unpublished data, 1998). Vaccination of all students with two doses of measles vaccine by 2001, as recommended by the American Academy of Pediatrics (*4*) and CDC's Advisory Committee on Immunization Practices (*5*), will reduce future school outbreaks. Completion of this strategy should further decrease the risk for indigenous transmission of measles following importation of the measles virus.

The United States appears to have eliminated measles as an indigenous disease. High measles vaccination coverage and strong surveillance remain critical to preventing international imported measles cases from causing a resurgence of measles in the United States.

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*Epidemiology of Measles — Continued*

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## Water Fluoridation and Costs of Medicaid Treatment for Dental Decay — Louisiana, 1995–1996

Treatment costs for dental decay in young children can be substantial, especially if extensive dental procedures and general anesthesia in a hospital operating room (OR) are needed. Because caries in the primary dentition disproportionately affect children from low-income households (*1,2*), the cost for care frequently is reimbursed by state Medicaid programs. To determine whether the average treatment cost for Medicaid-eligible children in Louisiana differed by community fluoridation status, the Louisiana Department of Health and Hospitals (LDHH) and CDC analyzed Medicaid dental reimbursements and Medicaid eligibility records from July 1995 through June 1996 for children aged 1–5 years. Findings suggest that Medicaid-eligible children in communities without fluoridated water were three times more likely than Medicaid-eligible children in communities with fluoridated water to receive dental treatment in a hospital OR, and the cost of dental treatment per eligible child was approximately twice as high.

The Louisiana Bureau of Health Financing provided data on Medicaid dental reimbursements and Medicaid eligibility from July 1995 through June 1996 for children aged 1–5 years and the number of dentists practicing in each parish (county) in 1995. Demographic data for each parish were obtained from the Bureau of the Census (*3*). The proportion of the population that received optimally fluoridated water in each parish was estimated based on CDC's 1992 fluoridation census (*4*) and a study by LDHH (LDHH, unpublished data, 1996). A parish was designated as optimally fluoridated (F) if 100% of its population received fluoridated water (optimal level: ≥0.7 ppm) in both 1992 and 1996, and nonfluoridated (NF) if 0% received fluoridated water in both years. Of 64 parishes, five F parishes with 38,162 Medicaid-eligible preschoolers and 14 NF parishes with 16,444 Medicaid-eligible preschoolers were included in this analysis. All analyses were conducted at the parish level.

For each F and NF parish, the percentage of Medicaid-eligible children aged 1–5 years who, during the study period, received one or more of the following types of services was calculated: 1) caries-related services (e.g., fillings, crowns, and pulpotomies); 2) examinations or preventive care (topical fluoride or prophylaxis) but no caries-related services; 3) topical fluoride application (with or without caries-related care); and 4) dental care in a hospital OR. The mean value for each of these measures was calculated for F and NF parishes for each of the five ages.

Medicaid reimbursements for dental procedures likely to be associated with treatment for dental caries were totaled for each parish for each age group. If dental care was provided in a hospital, a payment of $650 (based on estimates from the Louisiana Bureau of Health Financing) was added for OR use and general anesthesia. The average caries-related cost per Medicaid-eligible child in each parish was obtained by di-

*Dental Decay — Continued*

viding parish Medicaid reimbursements by the number of Medicaid-eligible children in the parish in each age group.

For each age group, linear regression was used to examine the association between parish average caries-related cost per Medicaid-eligible child and fluoridation status of the parish. In addition to fluoridation status, per capita income, population, and dentists per 1000 residents were included in the model as dichotomous variables. Independent variables that added no explanatory power were eliminated through backward elimination to obtain the reduced model (*5*).

Children residing in F parishes were slightly more likely to have received only examinations or preventive services (Table 1). The proportions of children who received topical fluoride were similar, with younger children in F and older children in NF slightly more likely to have received the procedure. For all age groups, the percentage of Medicaid-eligible children who received one or more caries-related procedures was higher in NF parishes.

The difference in treatment costs per Medicaid-eligible child residing in F parishes compared with those residing in NF parishes ranged from $14.68 for 1-year-olds to $58.91 for 3-year-olds (Table 2); at all ages, costs were higher in NF than in F parishes. Louisiana Medicaid-eligible children were distributed uniformly by age; the mean difference in treatment costs per eligible preschooler was $36.28 (95% confidence interval=$9.69–$62.87).

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**Editorial Note:** In this analysis of Medicaid claims, more Medicaid-eligible children in NF parishes received caries-related dental treatment and OR-based care at greater cost than did Medicaid-eligible children in F parishes. In 1998, 1.3 million Louisianans received nonfluoridated water from public water systems that served approximately 10,000 customers (S. Hoffman, Office of Public Health Engineering Services, personal communication, 1999), and 3% of the state population were Medicaid-eligible children aged 1–5 years (*3*). These data suggest that at least 39,000 preschoolers in Louisiana could potentially benefit from water fluoridation; the expected annual reduction in their dental treatment costs is $1.4 million.

The findings in this report are subject to at least four limitations. First, although the analysis showed an association between lower caries-related costs and residence in one of the five F parishes, the analysis did not measure the length or magnitude of the children's exposure to fluoride. Some children classified as residing in NF parishes once may have resided in F parishes and vice versa. It also did not verify that the water systems serving the five F parishes maintained fluoride concentration at the optimal level. However, misclassification of exposure status would be more likely to reduce the observed effect of fluoridation. Second, if access to dental care were better in NF than in F parishes, children with decay who resided in F parishes would be less likely to seek restorative care, resulting in an underestimate of treatment costs in F parishes and an overstatement of water fluoridation's benefits. The observed rates for preventive care in F and NF parishes suggest similar rather than differential access. Furthermore, this analysis controlled for differences in access to dental care. Third, the difference in treatment costs attributable to water fluoridation would be overstated if

**TABLE 1. Mean percentage of Medicaid-eligible children aged 1–5 years who received various dental procedures from July 1995 through June 1996 and the mean caries-related cost per eligible child, by age and fluoridation status in parish of residence — Louisiana**

| | Mean percentage of Medicaid-eligible children who received procedures | | | | | | | | | | | | | | Mean caries-related cost per eligible child | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Caries-related procedure | | | | Examination or preventive procedure | | | | Topical fluoride application | | | | Hospitalized for treatment | | | | | |
| | F* (n=5) | | NF† (n=14) | | F* (n=5) | | NF† (n=14) | | F* (n=5) | | NF† (n=14) | | F* (n=5) | | NF† (n=14) | | F* (n=5) | | NF† (n=14) | |
| Age (yrs) | % | (SD§) | % | (SD) | % | (SD) | % | (SD) | % | (SD) | % | (SD) | % | (SD) | % | (SD) | % | (SD) | % | (SD) |
| 1 | 3.3 | (1.2) | 4.4 | ( 2.4) | 8.2 | ( 7.1) | 6.3 | (6.2) | 7.5 | ( 5.3) | 5.8 | ( 5.3) | 0.2 | (0.3) | 1.0 | (0.9) | $ 7.4 | ($ 5.0) | 16.9 | ($13.1) |
| 2 | 11.0 | (3.3) | 15.9 | ( 5.8) | 17.8 | (10.8) | 16.3 | (8.1) | 19.2 | (11.2) | 17.5 | ( 9.5) | 1.2 | (1.1) | 4.0 | (2.0) | $35.3 | ($18.8) | $ 75.5 | ($29.9) |
| 3 | 19.6 | (4.0) | 31.6 | (10.9) | 34.0 | ( 7.9) | 30.9 | (9.2) | 38.2 | (15.1) | 40.9 | (13.2) | 1.4 | (1.1) | 5.0 | (2.6) | $53.8 | ($19.0) | $117.9 | ($42.1) |
| 4 | 27.3 | (5.0) | 34.5 | ( 9.4) | 33.2 | ( 6.2) | 32.3 | (4.8) | 44.6 | ( 9.5) | 48.6 | (12.3) | 0.9 | (1.3) | 3.4 | (2.3) | $52.1 | ($22.7) | $ 92.3 | ($25.2) |
| 5 | 28.6 | (5.4) | 34.1 | (10.2) | 28.0 | ( 6.2) | 25.8 | (4.5) | 44.8 | ( 6.4) | 43.7 | (11.6) | 0.2 | (0.2) | 1.7 | (1.1) | $39.5 | ($10.0) | $ 71.0 | ($30.6) |

* Fluoridated parishes. Total number of Medicaid-eligible children aged 1–5 years residing in F parishes was 38,162.
† Nonfluoridated parishes. Total number of Medicaid-eligible children aged 1–5 years residing in NF parishes was 16,444.
§ Standard deviation.

*Dental Decay — Continued*

**TABLE 2. Results of multivariate regression* analysis: adjusted $R^2$ and estimated treatment cost savings associated with water fluoridation for Medicaid-eligible children aged 1–5 years residing in fluoridated and nonfluoridated parishes, by age — Louisiana, July 1995–June 1996**

| Age (yrs) | Adjusted $R^2$ | Estimated treatment cost savings associated with water fluoridation | (95% CI§) |
|---|---|---|---|
| 1 | 0.59 | $14.68 | $ 5.58–$23.77 |
| 2 | 0.27 | $40.17 | $ 9.81–$70.53 |
| 3 | 0.42 | $58.91 | $19.45–$98.37 |
| 4 | 0.47 | $36.08 | $11.81–$60.35 |
| 5 | 0.18 | $31.55 | $ 1.79–$61.31 |
| All age groups† | | $36.28 | $ 9.69–$62.87 |

*Controlling for the parish variables of per capita income, population, and number of dentists per 1000 population.
†Assumes children are distributed uniformly by age.
§Confidence interval.

children in F parishes had more exposure to other sources of fluoride (e.g., toothpaste or topical application in a dental office). Although fluoride toothpaste use could not be determined, toothpastes containing fluoride accounted for >94% of the market in 1984 (*6*). Different uses of topical applications was probably not a substantial factor because children in F and NF parishes received topical fluoride in the dental office at similar rates. Finally, lower treatment costs associated with water fluoridation should not be generalized to preschoolers from high- and middle-income families because of their lower prevalence of dental caries in primary teeth (*1,2*).

The lower treatment costs associated with residence in F parishes is a conservative estimate of benefits because the analysis did not consider benefits that accrue to populations other than Medicaid-eligible preschoolers. For this group, however, treatment cost savings associated with fluoridating the 39 NF water systems that serve populations of ≥10,000 could be substantial.

In 1996, approximately 50% of Louisiana's population using public water supplies received fluoridated water, a percentage well below the 2000 objective of 75% (objective 13.9) (*7*). The 1996 assessment of community water fluoridation in Louisiana also found that of 73 water systems adjusting fluoride content in 1986, only 45 were still doing so in 1996 (*8*). This decline prompted passage of state legislation in 1997 that 1) established a water fluoridation program within LDHH; 2) encouraged fluoridation of public water systems serving at least 5000 households (because the average number of persons per U.S. household in 1996 was 2.66, this equals approximately 13,000 persons [*3*]); and 3) created a Fluoride Advisory Board to assist in locating public and private funding to cover the costs of initiating water fluoridation in these locations. In addition, LDHH is planning an early intervention program to ensure that infants and toddlers at high risk for early childhood caries are screened and referred for clinical preventive services (e.g., topical fluoride application), prompt treatment of incipient disease, and education of the parent or caregiver.

*Dental Decay — Continued*

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## Congenital Syphilis — United States, 1998

Congenital syphilis (CS) occurs when the spirochete *Treponema pallidum* is transmitted from a pregnant woman with syphilis to her fetus. A multiorgan infection, CS may result in a neurologic or musculoskeletal handicap or death in the fetus when not properly treated. Trends in CS rates in women of childbearing age follow by approximately 1 year the rates of primary and secondary syphilis (*1*). The last national syphilis epidemic, which was followed by a CS epidemic, occurred during the late 1980s and early 1990s. The syphilis rate began to decline in 1991 (*2*); the CS rate began to decline in 1992 (*1*). To evaluate CS epidemiology since this decline, CDC analyzed 1998 CS notifiable disease data and assessed rate changes during 1992–1998. This report summarizes the results, which indicate that the CS rate declined 78.2% from 1992 to 1998, and that rates remained disproportionately high in the southeastern United States and among minority racial/ethnic populations.

CS surveillance data were reported to CDC from the 50 states and District of Columbia. For the purpose of public health surveillance, CS is defined as 1) infants manifesting typical signs of CS or in whom *T. pallidum* is identified from lesions, placenta, umbilical cord, or autopsy specimens; 2) infants whose mothers have a syphilitic lesion at delivery; 3) infants born to women with untreated or inadequately treated syphilis before or during pregnancy, and to women whose serologic response to penicillin therapy was not documented, and either a) no examination of the infant was performed radiographically and by cerebrospinal fluid (CSF), or b) one or more radiologic or CSF tests were consistent with CS.* CS rates per 100,000 live births were determined from state natality data.†

*Congenital Syphilis Case Investigation and Report Form 73.126.
†From the National Center for Health Statistics, Vital Statistics: Natality Tapes 1989–1996.

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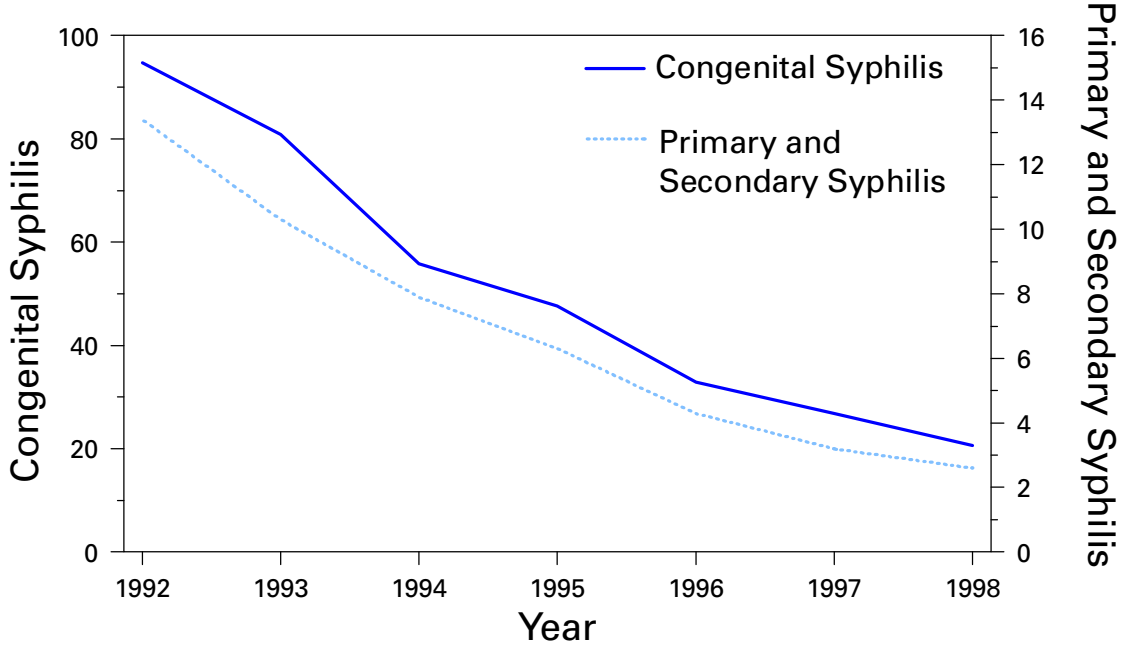
In 1998, 801 CS cases were reported for a rate of 20.6 per 100,000 live births (Figure 1). The median state-specific rate of CS was substantially higher in the South (23.0) compared with a median of zero in the Midwest, Northeast, and West[§]. Forty-seven states reported rates below the 2000 goal of 40 per 100,000 (objective 19.4) (*3*) (Table 1); 22 states reported no cases.

Persons of minority race/ethnicity accounted for the highest rates of CS in 1998. Blacks had the highest rate (87.0), followed by Hispanics (27.9), American Indians/Alaska Natives (14.0), Asians/Pacific Islanders (4.9), and non-Hispanic whites (2.9). For 16 persons, race was unknown or categorized "other." CS rates declined for all racial and ethnic groups during 1992–1998 following the decline in primary and secondary syphilis (Figure 1). Asians/Pacific Islanders (82.4%) had the largest percentage decline, followed by blacks (79.5%), Hispanics (78.5%), whites (56.9%), and American Indians/Alaska Natives (11.9%).

In 1998, 73.4% of mothers of infants with CS were aged 20–34 years (median: 27 years). The CS rate was highest for women aged 45–49 years (65.7) and lowest for

[§] *Northeast*=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; *Midwest*=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; and *West*=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

**FIGURE 1. Congenital syphilis*, primary and secondary syphilis rates†, by year — United States, 1992–1998**




*Per 100,000 live births.
†Per 100,000 population.

*Congenital Syphilis — Continued*

**TABLE 1. Congenital syphilis cases and rates,* by mother's state of residence — United States, 1998**

| State | Cases | Rate | State | Cases | Rate |
|---|---|---|---|---|---|
| Alabama | 9 | 14.9 | Montana | 0 | 0 |
| Alaska | 0 | 0 | Nebraska | 0 | 0 |
| Arizona | 25 | 33.2 | Nevada | 0 | 0 |
| Arkansas | 30 | 82.5 | New Hampshire | 0 | 0 |
| California | 119 | 22.1 | New Jersey | 86 | 75.2 |
| Colorado | 1 | 1.8 | New Mexico | 0 | 0 |
| Connecticut | 0 | 0 | New York | 56 | 21.2 |
| Delaware | 0 | 0 | North Carolina | 24 | 23.0 |
| District of Columbia | 8 | 95.4 | North Dakota | 0 | 0 |
| Florida | 71 | 37.5 | Ohio | 4 | 2.6 |
| Georgia | 14 | 12.3 | Oklahoma | 15 | 32.5 |
| Hawaii | 0 | 0 | Oregon | 0 | 0 |
| Idaho | 0 | 0 | Pennsylvania | 21 | 14.2 |
| Illinois | 71 | 38.8 | Rhode Island | 0 | 0 |
| Indiana | 0 | 0 | South Carolina | 19 | 37.2 |
| Iowa | 0 | 0 | South Dakota | 0 | 0 |
| Kansas | 0 | 0 | Tennessee | 9 | 12.2 |
| Kentucky | 5 | 9.5 | Texas | 102 | 30.9 |
| Louisiana | 8 | 12.3 | Utah | 1 | 2.4 |
| Maine | 0 | 0 | Vermont | 0 | 0 |
| Maryland | 44 | 61.5 | Virginia | 4 | 4.3 |
| Massachusetts | 2 | 2.5 | Washington | 1 | 1.3 |
| Michigan | 16 | 12.0 | West Virginia | 0 | 0 |
| Minnesota | 0 | 0 | Wisconsin | 6 | 8.9 |
| Mississippi | 15 | 36.6 | Wyoming | 0 | 0 |
| Missouri | 15 | 20.3 | **Total** | **801** | **20.6** |

*Per 100,000 live births.

women aged 10–14 years (17.9) (age was unknown for two persons). Women aged 35–49 years had a slightly higher rate (23.2) than women aged 10–34 years (20.2).

Of the 801 reported cases, 651 (81.3%) occurred because the mother received no penicillin treatment or inadequate treatment before or during pregnancy; in 233 (35.8%) of these cases, the mother received no prenatal care. Infants of mothers who had an unknown or equivocal response to therapy accounted for 91 (11.4%) of all cases; in 30 of these cases, the infant was evaluated and found to have evidence of CS radiographically or by examination of CSF. The remaining 59 (7.4%) infants were reported to have CS because of inappropriate serologic response to therapy in the mother (*4*), evidence of treatment failure or reinfection, or other reasons. Of the reported 801 infants, 748 (93.4%) were live born, 45 (5.6%) were stillborn; eight (1.0%) of those born alive were reported to have died, six within the first 2 days of life.

*Reported by: State and local health depts. Div of Sexually Transmitted Diseases Prevention, National Center for HIV, STD, and TB Prevention, CDC.*

**Editorial Note:** In 1998, CS rates continued a downward trend parallel to the decreased rates for primary and secondary syphilis. Although the South leads other regions in CS reports, the median state-specific rate in this region declined 68.6% since 1992. Historically, the South has had the highest syphilis and CS rates. Factors associated with syphilis include inadequate access to sexually transmitted disease (STD) clinics

*Congenital Syphilis — Continued*

and STD outreach activities, poor interagency coordination, lack of employment opportunities, and discomfort with discussing STDs (*5*).

Racial/ethnic minorities continue to be affected disproportionally by CS. No biologic association exists between race and the risk for delivering an infant with CS; race serves as a marker for other factors, such as poverty and access to health care, in communities with high syphilis rates (*5–7*). Individual factors, such as illicit drug use and the wantedness of pregnancy, also influence the chances of a mother delivering an infant with CS.

The findings in this report are subject to at least three limitations. First, the analysis includes inconsistent application of the case definition in some areas. Second, maternal treatment history and infant laboratory data reporting were incomplete at times. Third, the case report form does not include questions about important risk information (e.g., drug use, health insurance, and wantedness of pregnancy), although studies that have collected these data have suggested their importance (*8,9*).

CS surveillance is complicated by difficulty in establishing the diagnosis. Most infants born with CS have no signs of the disease at birth. If untreated, symptoms may begin within 3 months after birth and may include anemia, skin rash, hepatosplenomegaly, and nasal discharge. CS is almost entirely preventable with early prenatal screening and treatment (*9*). The primary reason that infants were born with CS in 1998 is because mothers with syphilis during pregnancy either received no prenatal care, syphilis serologic testing was performed too late in pregnancy, or mothers were tested but received late or no follow-up.

Community-based organizations, maternal- and child-health programs, and substance abuse agencies can assist in preventing CS by collaborating with health-care providers to encourage pregnant women to obtain prenatal care the first trimester. Health-care providers who perform pregnancy testing where syphilis rates are high also should perform the rapid plasma reagin card test on-site when a woman has a positive pregnancy test and again the third trimester so that results and treatment can be provided immediately. Health-care providers should treat a pregnant woman with syphilis as a medical emergency. Data reported in this study indicate the need to train prenatal health-care providers in recognizing, treating, and preventing CS, and the need to address social problems associated with syphilis as part of the renewed efforts toward its elimination in the United States (*10*).

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## *Public Health Dispatch*

### Multiple Human Exposures to a Rabid Bear Cub at a Petting Zoo and Barnwarming — Iowa, August 1999

On August 27, 1999, a black bear cub, approximately 5–6 months old, died after several hours of acute central nervous system symptoms; preliminary test results available on August 28 indicated the bear had rabies. The bear was part of the Swenson's Wild Midwest Exotic Petting Zoo in Clermont, Iowa (northeastern Iowa). At the petting zoo, visitors fed, wrestled, and may have been nipped by the bear. The bear also was taken to an August 14 barnwarming at the Tharp barn in Holy Cross, Iowa (eastern Iowa), where it reportedly nipped people. An estimated 400 people from 10 states (Arizona, California, Florida, Illinois, Iowa, Minnesota, New Mexico, New York, Ohio, and Wisconsin) and Australia had contact with the bear cub at either the petting zoo or the barnwarming during the 28 days before its death, during which the bear may have transmitted rabies virus.

On the basis of telephone calls to petting zoo visitors who signed the guest register and provided contact information, approximately 150 of the 400 persons were exposed to the bear's saliva and need to obtain vaccine and rabies immune globulin. Public health authorities are attempting to contact petting zoo visitors by telephone and the Internet. However, because not all petting zoo visitors signed the register or provided sufficient information to enable health authorities to locate them, state and local health departments are encouraged to ensure local media coverage to alert persons who had contact with the bear after July 30 to the need for exposure assessment. Persons who attended the barnwarming also need to be assessed for prophylaxis.

Information is available from the emergency telephone number of the Iowa Department of Public Health: (515) 323-4360.

*Reported by: Center for Acute Disease Epidemiology, Iowa Dept of Public Health.*

## *Public Health Dispatch*

### Outbreak of Poliomyelitis — Kunduz, Afghanistan, 1999

Since May 10, 1999, 26 cases of acute flaccid paralysis (AFP), including five cases with isolation of wild poliovirus type 1 and one with type 3, have been reported from Kunduz province in northern Afghanistan. Fifteen (54%) case-patients resided in Kunduz city, and the remaining patients resided in the districts surrounding Kunduz. Although the exact causes for the outbreak are not known, the discontinuation of polio

*Public Health Dispatch — Continued*

vaccination activities in mid-1997 in northern Afghanistan because of ongoing civil conflict may have facilitated the outbreak.

AFP surveillance was established in northern Afghanistan in early May 1999 and was instrumental in detecting and reporting AFP cases and collecting stool specimens for virus isolation in the World Health Organization network laboratory in Pakistan. To determine the extent of the outbreak, health facilities and nongovernmental organizations providing health care in northern Afghanistan have been asked to immediately report all suspected AFP cases to the Ministry of Public Health. To control the outbreak, a large-scale house-to-house vaccination campaign with oral poliovirus vaccine (OPV), targeting the >130,000 children aged <5 years in the province, was conducted during August 7–12, 1999. A second round is scheduled for September 7–12, 1999.

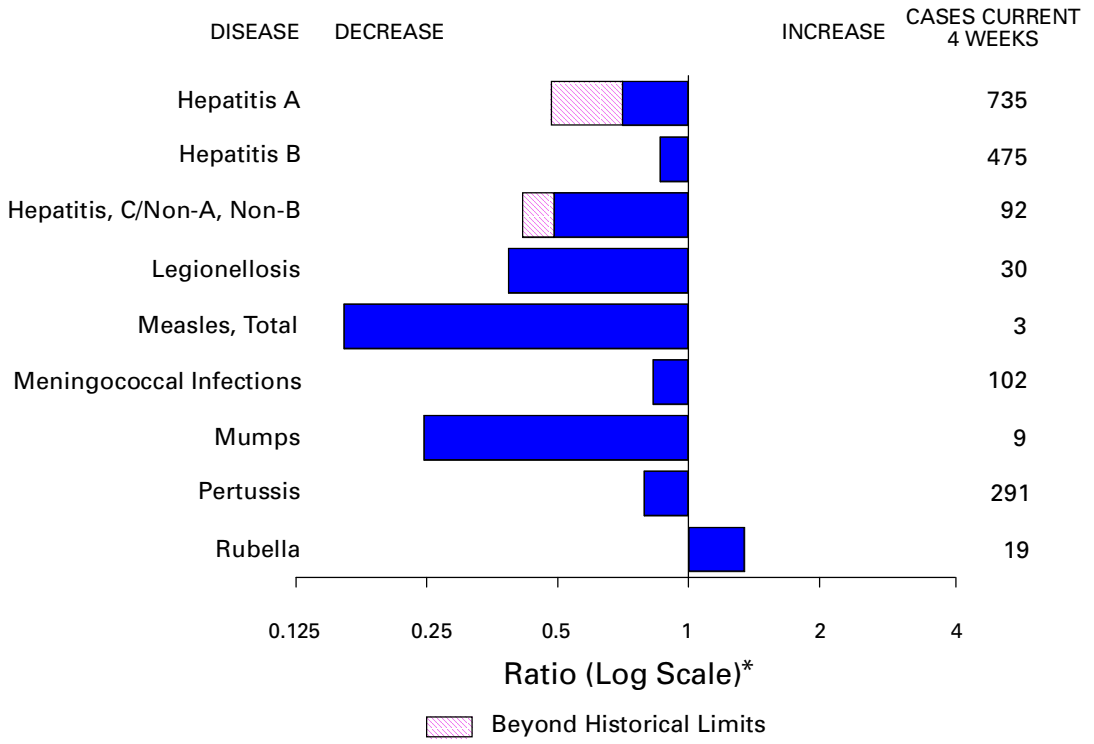
During 1997–1999, Afghanistan conducted three National Immunization Days (NIDs)*, providing an additional six doses of OPV to most children aged <5 years; however, none of these NIDs covered every district. Because of the conflict, the 1998 NIDs were not conducted in Kunduz and other areas of northern Afghanistan. In 1999, NIDs were conducted in May (round 1) and June (round 2) in all areas of the country and are scheduled again for October (round 3) and November (round 4). These scheduled NIDS will attempt to ensure complete coverage of the country.

Control of the outbreak is complicated by the several thousand internally displaced persons who are now moving into the Kunduz area, following renewed fighting north of Kabul. Efforts are under way to provide OPV vaccine to the children of these displaced families. Two rounds of mopping-up vaccination with OPV in the border districts of Tajikistan and Uzbekistan will be conducted in October and November to minimize any risk for poliovirus importation to these neighboring countries.

*Reported by: Ministry of Public Health, Kabul, Afghanistan; Afghanistan Country Office, World Health Organization, Islamabad, Pakistan. Eastern Mediterranean Regional Office, World Health Organization, Alexandria, Egypt. Vaccines and Other Biologicals Department, World Health Organization, Geneva, Switzerland. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.*

*Mass campaigns over a short period (days to weeks) in which two doses of oral poliovirus vaccine are administered to all children in the target group (usually aged 0–4 years) regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

**FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending August 28, 1999, with historical data — United States**




*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 August 28, 1999 (34th Week)**

| | Cum. 1999 | | Cum. 1999 |
|---|---|---|---|
| Anthrax | - | HIV infection, pediatric*§ | 86 |
| Brucellosis* | 31 | Plague | 3 |
| Cholera | 4 | Poliomyelitis, paralytic | - |
| Congenital rubella syndrome | 3 | Psittacosis* | 15 |
| Cyclosporiasis* | 38 | Rabies, human | - |
| Diphtheria | 2 | Rocky Mountain spotted fever (RMSF) | 348 |
| Encephalitis: California* | 15 | Streptococcal disease, invasive Group A | 1,464 |
| eastern equine* | 2 | Streptococcal toxic-shock syndrome* | 28 |
| St. Louis* | - | Syphilis, congenital¶ | 118 |
| western equine* | - | Tetanus | 19 |
| Ehrlichiosis human granulocytic (HGE)* | 95 | Toxic-shock syndrome | 78 |
| human monocytic (HME)* | 23 | Trichinosis | 6 |
| Hansen Disease* | 57 | Typhoid fever | 198 |
| Hantavirus pulmonary syndrome*† | 14 | Yellow fever | - |
| Hemolytic uremic syndrome, post-diarrheal* | 51 | | |

-: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).
§ 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 July 25, 1999.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

## TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 1999, and August 29, 1998 (34th Week)

| Reporting Area | AIDS | | Chlamydia | | Cryptosporidiosis | | *Escherichia coli* O157:H7* | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | NETSS | | PHLIS | |
| | Cum. 1999† | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 26,427 | 30,497 | 371,677 | 378,852 | 1,015 | 2,467 | 1,623 | 1,726 | 1,107 | 1,428 |
| NEW ENGLAND | 1,298 | 1,094 | 12,455 | 13,264 | 63 | 108 | 182 | 231 | 193 | 195 |
| Maine | 43 | 22 | 193 | 644 | 17 | 24 | 18 | 25 | - | - |
| N.H. | 31 | 25 | 615 | 631 | 8 | 12 | 23 | 31 | 23 | 36 |
| Vt. | 6 | 17 | 310 | 271 | 18 | 18 | 20 | 10 | 12 | 7 |
| Mass. | 842 | 506 | 6,053 | 5,453 | 20 | 49 | 102 | 111 | 98 | 111 |
| R.I. | 70 | 92 | 1,504 | 1,520 | - | 5 | 19 | 8 | 6 | 1 |
| Conn. | 306 | 432 | 3,780 | 4,745 | - | - | U | 46 | 54 | 40 |
| MID. ATLANTIC | 6,746 | 8,609 | 44,532 | 39,467 | 204 | 374 | 94 | 186 | 37 | 67 |
| Upstate N.Y. | 846 | 1,008 | N | N | 78 | 217 | 83 | 128 | - | - |
| N.Y. City | 3,592 | 4,821 | 21,963 | 17,321 | 107 | 142 | 5 | 11 | 13 | 12 |
| N.J. | 1,278 | 1,563 | 6,456 | 7,638 | 9 | 15 | 6 | 47 | 23 | 42 |
| Pa. | 1,030 | 1,217 | 16,113 | 14,508 | 10 | - | N | N | 1 | 13 |
| E.N. CENTRAL | 1,719 | 2,238 | 55,241 | 63,970 | 96 | 462 | 328 | 290 | 231 | 246 |
| Ohio | 262 | 459 | 16,106 | 17,341 | 30 | 50 | 129 | 79 | 96 | 49 |
| Ind. | 224 | 376 | 6,667 | 6,839 | 18 | 41 | 42 | 64 | 27 | 38 |
| Ill. | 783 | 880 | 18,617 | 17,307 | 17 | 50 | 93 | 83 | 33 | 54 |
| Mich. | 360 | 389 | 13,851 | 13,590 | 31 | 24 | 64 | 64 | 41 | 44 |
| Wis. | 90 | 134 | U | 8,893 | - | 297 | N | N | 34 | 61 |
| W.N. CENTRAL | 611 | 579 | 21,373 | 22,306 | 88 | 185 | 355 | 255 | 195 | 235 |
| Minn. | 105 | 102 | 4,434 | 4,529 | 14 | 62 | 133 | 98 | 103 | 108 |
| Iowa | 55 | 51 | 1,615 | 2,601 | 29 | 43 | 68 | 62 | 37 | 42 |
| Mo. | 295 | 280 | 8,595 | 8,085 | 17 | 17 | 29 | 31 | 36 | 44 |
| N. Dak. | 4 | 4 | 325 | 646 | 12 | 22 | 8 | 7 | 1 | 13 |
| S. Dak. | 13 | 13 | 1,035 | 1,027 | 5 | 19 | 34 | 17 | 13 | 21 |
| Nebr. | 45 | 56 | 2,060 | 1,821 | 10 | 18 | 69 | 23 | - | - |
| Kans. | 94 | 73 | 3,309 | 3,597 | 1 | 4 | 14 | 17 | 5 | 7 |
| S. ATLANTIC | 7,281 | 7,496 | 80,700 | 72,803 | 216 | 172 | 194 | 137 | 115 | 117 |
| Del. | 95 | 104 | 1,779 | 1,655 | - | 2 | 5 | - | 3 | 1 |
| Md. | 793 | 899 | 6,918 | 5,126 | 11 | 12 | 11 | 20 | - | 12 |
| D.C. | 274 | 568 | N | N | 7 | 4 | - | 1 | - | - |
| Va. | 372 | 617 | 9,666 | 8,313 | 12 | 6 | 45 | - | 37 | 42 |
| W. Va. | 40 | 60 | 1,148 | 1,558 | - | 1 | 8 | 7 | 4 | 5 |
| N.C. | 482 | 535 | 14,812 | 14,528 | 6 | - | 40 | 38 | 38 | 35 |
| S.C. | 683 | 501 | 6,968 | 12,049 | - | - | 17 | 5 | 13 | 5 |
| Ga. | 1,091 | 730 | 19,477 | 14,876 | 95 | 65 | 18 | 50 | - | - |
| Fla. | 3,451 | 3,482 | 19,932 | 14,698 | 85 | 82 | 50 | 16 | 20 | 17 |
| E.S. CENTRAL | 1,145 | 1,267 | 27,658 | 26,360 | 17 | 19 | 83 | 85 | 42 | 49 |
| Ky. | 176 | 192 | 4,631 | 4,137 | 5 | 8 | 21 | 26 | - | - |
| Tenn. | 442 | 431 | 9,133 | 8,612 | 6 | 6 | 41 | 35 | 26 | 30 |
| Ala. | 287 | 372 | 8,221 | 6,609 | 4 | - | 17 | 19 | 13 | 17 |
| Miss. | 240 | 272 | 5,673 | 7,002 | 2 | 5 | 4 | 5 | 3 | 2 |
| W.S. CENTRAL | 2,858 | 3,787 | 52,519 | 57,403 | 41 | 781 | 52 | 61 | 64 | 73 |
| Ark. | 107 | 136 | 3,915 | 2,473 | 1 | 6 | 9 | 7 | 7 | 8 |
| La. | 541 | 651 | 7,726 | 9,299 | 21 | 11 | 3 | 3 | 11 | 4 |
| Okla. | 74 | 224 | 5,418 | 6,477 | 4 | - | 15 | 11 | 9 | 5 |
| Tex. | 2,136 | 2,776 | 35,460 | 39,154 | 15 | 764 | 25 | 40 | 37 | 56 |
| MOUNTAIN | 1,021 | 1,028 | 20,193 | 21,205 | 64 | 91 | 147 | 234 | 75 | 185 |
| Mont. | 5 | 20 | 975 | 793 | 10 | 8 | 8 | 12 | - | 4 |
| Idaho | 16 | 19 | 1,101 | 1,277 | 7 | 16 | 18 | 26 | 8 | 17 |
| Wyo. | 4 | 1 | 445 | 428 | - | - | 5 | 49 | 5 | 53 |
| Colo. | 197 | 209 | 4,411 | 5,236 | 8 | 11 | 50 | 43 | 35 | 39 |
| N. Mex. | 65 | 166 | 1,748 | 2,337 | 25 | 35 | 7 | 17 | 3 | 15 |
| Ariz. | 518 | 384 | 8,338 | 7,460 | 9 | 14 | 23 | 31 | 14 | 23 |
| Utah | 84 | 70 | 1,281 | 1,471 | - | - | 25 | 45 | 8 | 21 |
| Nev. | 132 | 159 | 1,894 | 2,203 | 5 | 7 | 11 | 11 | 2 | 13 |
| PACIFIC | 3,748 | 4,399 | 57,006 | 62,074 | 226 | 275 | 188 | 247 | 155 | 261 |
| Wash. | 218 | 267 | 7,718 | 7,258 | - | - | 59 | 42 | 64 | 74 |
| Oreg. | 118 | 129 | 3,779 | 3,478 | 79 | 31 | 41 | 70 | 37 | 73 |
| Calif. | 3,348 | 3,876 | 42,559 | 48,520 | 147 | 241 | 85 | 132 | 47 | 103 |
| Alaska | 13 | 17 | 1,217 | 1,240 | - | - | - | 3 | - | - |
| Hawaii | 51 | 110 | 1,733 | 1,578 | - | 3 | 3 | - | 7 | 11 |
| Guam | 5 | - | 226 | 261 | - | - | N | N | - | - |
| P.R. | 821 | 1,243 | U | U | - | - | 5 | 3 | U | U |
| V.I. | 19 | 19 | 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 July 25, 1999.

## TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 1999, and August 29, 1998 (34th 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 | 200,535 | 224,572 | 2,225 | 2,124 | 515 | 845 | 5,933 | 9,429 |
| NEW ENGLAND | 3,788 | 3,855 | 59 | 47 | 41 | 49 | 1,789 | 2,936 |
| Maine | 15 | 41 | 2 | - | 4 | 1 | 22 | 56 |
| N.H. | 64 | 58 | - | - | 4 | 3 | 5 | 28 |
| Vt. | 34 | 24 | 4 | 2 | 8 | 4 | 9 | 9 |
| Mass. | 1,680 | 1,384 | 50 | 42 | 16 | 24 | 678 | 595 |
| R.I. | 382 | 238 | 3 | 3 | 3 | 8 | 284 | 308 |
| Conn. | 1,613 | 2,110 | - | - | 6 | 9 | 791 | 1,940 |
| MID. ATLANTIC | 24,548 | 24,154 | 97 | 148 | 105 | 211 | 3,069 | 4,996 |
| Upstate N.Y. | 3,837 | 4,616 | 62 | 75 | 33 | 69 | 2,206 | 2,641 |
| N.Y. City | 9,463 | 7,717 | - | - | 9 | 29 | 25 | 156 |
| N.J. | 3,621 | 4,998 | - | - | 5 | 13 | 124 | 864 |
| Pa. | 7,627 | 6,823 | 35 | 73 | 58 | 100 | 714 | 1,335 |
| E.N. CENTRAL | 36,849 | 43,727 | 1,157 | 477 | 131 | 287 | 78 | 568 |
| Ohio | 9,798 | 11,073 | 1 | 7 | 55 | 95 | 53 | 27 |
| Ind. | 3,676 | 4,038 | 1 | 5 | 21 | 54 | 14 | 24 |
| Ill. | 13,383 | 14,287 | 25 | 34 | 10 | 35 | 10 | 11 |
| Mich. | 9,992 | 10,371 | 548 | 320 | 42 | 55 | 1 | 12 |
| Wis. | U | 3,958 | 582 | 111 | 3 | 48 | U | 494 |
| W.N. CENTRAL | 9,089 | 10,817 | 85 | 26 | 31 | 43 | 89 | 133 |
| Minn. | 1,664 | 1,686 | 4 | 7 | 4 | 3 | 45 | 96 |
| Iowa | 452 | 860 | - | 7 | 11 | 5 | 10 | 21 |
| Mo. | 4,448 | 5,716 | 72 | 9 | 11 | 11 | 16 | 9 |
| N. Dak. | 31 | 51 | - | - | - | - | 1 | - |
| S. Dak. | 120 | 158 | - | - | 2 | 3 | - | - |
| Nebr. | 939 | 742 | 3 | 2 | 3 | 15 | 6 | 3 |
| Kans. | 1,435 | 1,604 | 6 | 1 | - | 6 | 11 | 4 |
| S. ATLANTIC | 58,696 | 60,667 | 146 | 70 | 80 | 100 | 690 | 613 |
| Del. | 1,110 | 909 | 1 | - | 8 | 9 | 19 | 50 |
| Md. | 5,886 | 5,741 | 34 | 8 | 16 | 27 | 492 | 439 |
| D.C. | 1,259 | 2,941 | - | - | 1 | 6 | 3 | 4 |
| Va. | 6,327 | 5,506 | 10 | 10 | 17 | 16 | 76 | 43 |
| W. Va. | 311 | 557 | 13 | 4 | N | N | 14 | 8 |
| N.C. | 12,942 | 12,580 | 29 | 17 | 13 | 8 | 52 | 41 |
| S.C. | 3,700 | 7,587 | 15 | 3 | 7 | 7 | 5 | 3 |
| Ga. | 13,070 | 13,117 | 1 | 9 | - | 7 | - | 5 |
| Fla. | 14,091 | 11,729 | 43 | 19 | 18 | 20 | 29 | 20 |
| E.S. CENTRAL | 22,229 | 25,224 | 194 | 186 | 31 | 47 | 69 | 68 |
| Ky. | 2,030 | 2,402 | 12 | 16 | 14 | 23 | 6 | 16 |
| Tenn. | 7,380 | 7,504 | 83 | 104 | 14 | 12 | 36 | 29 |
| Ala. | 7,315 | 8,472 | 1 | 4 | 3 | 5 | 16 | 13 |
| Miss. | 5,504 | 6,846 | 98 | 62 | - | 7 | 11 | 10 |
| W.S. CENTRAL | 28,868 | 35,317 | 144 | 328 | 3 | 14 | 21 | 17 |
| Ark. | 2,002 | 2,646 | 8 | 13 | - | 1 | 3 | 6 |
| La. | 6,054 | 8,053 | 100 | 21 | 1 | 2 | - | 3 |
| Okla. | 2,665 | 3,530 | 12 | 8 | 2 | 8 | 4 | 2 |
| Tex. | 18,147 | 21,088 | 24 | 286 | - | 3 | 14 | 6 |
| MOUNTAIN | 5,806 | 5,869 | 98 | 288 | 33 | 47 | 11 | 9 |
| Mont. | 26 | 29 | 4 | 7 | - | 2 | - | - |
| Idaho | 52 | 120 | 6 | 85 | - | 2 | 2 | 3 |
| Wyo. | 14 | 18 | 31 | 68 | - | 1 | 3 | 1 |
| Colo. | 1,473 | 1,323 | 16 | 18 | 9 | 12 | - | - |
| N. Mex. | 379 | 578 | 7 | 69 | 1 | 2 | 1 | 2 |
| Ariz. | 2,982 | 2,708 | 21 | 4 | 5 | 9 | - | - |
| Utah | 121 | 157 | 5 | 19 | 12 | 16 | 3 | - |
| Nev. | 759 | 936 | 8 | 18 | 6 | 3 | 2 | 3 |
| PACIFIC | 10,662 | 14,942 | 245 | 554 | 60 | 47 | 117 | 89 |
| Wash. | 1,330 | 1,247 | 12 | 13 | 10 | 9 | 4 | 5 |
| Oreg. | 525 | 518 | 15 | 13 | N | N | 10 | 12 |
| Calif. | 8,369 | 12,635 | 218 | 474 | 49 | 36 | 103 | 71 |
| Alaska | 201 | 213 | - | - | 1 | 1 | - | 1 |
| Hawaii | 237 | 329 | - | 54 | - | 1 | - | - |
| Guam | 32 | 38 | - | - | - | 2 | - | - |
| P.R. | 182 | 264 | - | - | - | - | - | - |
| V.I. | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | 26 | - | - | - | - | - | - |

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

## TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending August 28, 1999, and August 29, 1998 (34th Week)

| Reporting Area | Malaria | | Rabies, Animal | | Salmonellosis* | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NETSS | | PHLIS | |
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 789 | 895 | 3,699 | 4,917 | 20,641 | 24,678 | 17,161 | 21,746 |
| NEW ENGLAND | 30 | 42 | 537 | 945 | 1,054 | 1,623 | 1,220 | 1,525 |
| Maine | 2 | 3 | 100 | 150 | 87 | 116 | 60 | 43 |
| N.H. | 2 | 3 | 32 | 52 | 89 | 122 | 96 | 166 |
| Vt. | 3 | - | 70 | 42 | 60 | 83 | 51 | 68 |
| Mass. | 12 | 16 | 120 | 324 | 753 | 890 | 677 | 900 |
| R.I. | 3 | 2 | 68 | 60 | 65 | 85 | 48 | 31 |
| Conn. | 8 | 18 | 147 | 317 | U | 327 | 288 | 317 |
| MID. ATLANTIC | 174 | 262 | 683 | 1,087 | 2,407 | 4,179 | 2,202 | 4,045 |
| Upstate N.Y. | 47 | 55 | 492 | 757 | 727 | 1,004 | 714 | 933 |
| N.Y. City | 77 | 152 | U | U | 821 | 1,320 | 637 | 1,141 |
| N.J. | 29 | 31 | 118 | 136 | 332 | 867 | 442 | 888 |
| Pa. | 21 | 24 | 73 | 194 | 527 | 988 | 409 | 1,083 |
| E.N. CENTRAL | 74 | 102 | 81 | 82 | 2,761 | 4,142 | 2,145 | 3,097 |
| Ohio | 17 | 9 | 27 | 45 | 760 | 992 | 561 | 804 |
| Ind. | 10 | 10 | - | 7 | 300 | 463 | 264 | 375 |
| Ill. | 19 | 43 | 5 | - | 1,036 | 1,271 | 399 | 878 |
| Mich. | 26 | 33 | 46 | 27 | 627 | 770 | 600 | 688 |
| Wis. | 2 | 7 | 3 | 3 | 38 | 646 | 321 | 352 |
| W.N. CENTRAL | 49 | 58 | 488 | 532 | 1,445 | 1,477 | 1,369 | 1,541 |
| Minn. | 21 | 29 | 77 | 89 | 418 | 355 | 469 | 413 |
| Iowa | 12 | 7 | 102 | 116 | 170 | 254 | 121 | 204 |
| Mo. | 12 | 12 | 10 | 28 | 431 | 421 | 573 | 573 |
| N. Dak. | - | 2 | 104 | 102 | 32 | 43 | 4 | 54 |
| S. Dak. | - | - | 117 | 121 | 68 | 65 | 58 | 81 |
| Nebr. | - | 1 | 2 | 6 | 131 | 118 | - | 28 |
| Kans. | 4 | 7 | 76 | 70 | 195 | 221 | 144 | 188 |
| S. ATLANTIC | 233 | 177 | 1,362 | 1,633 | 4,859 | 4,544 | 3,366 | 3,620 |
| Del. | 1 | 1 | 30 | 29 | 90 | 47 | 110 | 88 |
| Md. | 67 | 55 | 271 | 326 | 545 | 566 | 542 | 558 |
| D.C. | 13 | 12 | - | - | 53 | 49 | - | - |
| Va. | 51 | 37 | 344 | 396 | 851 | 650 | 638 | 584 |
| W. Va. | 1 | 1 | 79 | 59 | 105 | 106 | 105 | 104 |
| N.C. | 15 | 14 | 284 | 428 | 721 | 643 | 770 | 808 |
| S.C. | 8 | 4 | 102 | 98 | 321 | 298 | 262 | 308 |
| Ga. | 21 | 22 | 122 | 166 | 684 | 841 | 651 | 849 |
| Fla. | 56 | 31 | 130 | 131 | 1,489 | 1,344 | 288 | 321 |
| E.S. CENTRAL | 18 | 20 | 189 | 196 | 1,161 | 1,333 | 620 | 1,055 |
| Ky. | 6 | 4 | 31 | 27 | 268 | 257 | - | 124 |
| Tenn. | 7 | 10 | 64 | 107 | 319 | 364 | 325 | 481 |
| Ala. | 4 | 4 | 94 | 60 | 360 | 422 | 242 | 372 |
| Miss. | 1 | 2 | - | 2 | 214 | 290 | 53 | 78 |
| W.S. CENTRAL | 10 | 18 | 77 | 25 | 1,414 | 2,246 | 1,674 | 1,894 |
| Ark. | 1 | 1 | 14 | 25 | 305 | 292 | 116 | 232 |
| La. | 6 | 6 | - | - | 159 | 262 | 370 | 458 |
| Okla. | 2 | 2 | 63 | - | 228 | 277 | 130 | 121 |
| Tex. | 1 | 9 | - | - | 722 | 1,415 | 1,058 | 1,083 |
| MOUNTAIN | 29 | 44 | 130 | 153 | 1,950 | 1,571 | 1,333 | 1,411 |
| Mont. | 4 | - | 46 | 35 | 39 | 60 | 1 | 37 |
| Idaho | 3 | 7 | - | - | 66 | 76 | 56 | 65 |
| Wyo. | 1 | - | 32 | 49 | 29 | 42 | 22 | 39 |
| Colo. | 11 | 12 | 1 | 22 | 513 | 380 | 519 | 363 |
| N. Mex. | 2 | 11 | 6 | 4 | 238 | 194 | 174 | 174 |
| Ariz. | 5 | 8 | 39 | 31 | 601 | 480 | 508 | 484 |
| Utah | 2 | 1 | 4 | 9 | 346 | 210 | - | 121 |
| Nev. | 1 | 5 | 2 | 3 | 118 | 129 | 53 | 128 |
| PACIFIC | 172 | 172 | 152 | 264 | 3,590 | 3,563 | 3,232 | 3,558 |
| Wash. | 17 | 16 | - | - | 430 | 292 | 576 | 447 |
| Oreg. | 15 | 13 | 1 | 1 | 312 | 201 | 371 | 239 |
| Calif. | 132 | 137 | 144 | 240 | 2,579 | 2,894 | 2,075 | 2,671 |
| Alaska | 1 | 2 | 7 | 23 | 32 | 31 | 6 | 19 |
| Hawaii | 7 | 4 | - | - | 237 | 145 | 204 | 182 |
| Guam | - | 2 | - | - | 20 | 21 | - | - |
| P.R. | - | - | 45 | 34 | 251 | 466 | - | - |
| V.I. | U | U | U | U | - | - | - | - |
| Amer. Samoa | U | U | U | U | - | - | - | - |
| C.N.M.I. | - | - | - | - | - | 23 | - | - |

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 August 28, 1999, and August 29, 1998 (34th 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 | 8,448 | 12,541 | 3,792 | 7,108 | 4,012 | 4,588 | 9,059 | 10,559 |
| NEW ENGLAND | 352 | 301 | 280 | 267 | 34 | 48 | 264 | 272 |
| Maine | 4 | 10 | - | - | - | 1 | 12 | 6 |
| N.H. | 11 | 10 | 8 | 15 | - | 1 | 12 | - |
| Vt. | 4 | 5 | 3 | - | 3 | 4 | 1 | 3 |
| Mass. | 316 | 198 | 221 | 187 | 22 | 30 | 155 | 149 |
| R.I. | 17 | 22 | 9 | 12 | 1 | 1 | 28 | 36 |
| Conn. | U | 56 | 39 | 53 | 8 | 11 | 56 | 78 |
| MID. ATLANTIC | 517 | 1,658 | 280 | 1,352 | 142 | 200 | 1,592 | 1,885 |
| Upstate N.Y. | 163 | 353 | 42 | 111 | 22 | 28 | 181 | 232 |
| N.Y. City | 179 | 529 | 82 | 516 | 67 | 41 | 864 | 915 |
| N.J. | 103 | 495 | 98 | 511 | 32 | 68 | 339 | 399 |
| Pa. | 72 | 281 | 58 | 214 | 21 | 63 | 208 | 339 |
| E.N. CENTRAL | 1,375 | 1,842 | 704 | 961 | 749 | 677 | 801 | 1,077 |
| Ohio | 314 | 364 | 78 | 85 | 66 | 93 | 164 | 161 |
| Ind. | 141 | 115 | 42 | 33 | 258 | 125 | 34 | 104 |
| Ill. | 614 | 992 | 354 | 800 | 296 | 280 | 377 | 517 |
| Mich. | 258 | 174 | 165 | 4 | 129 | 130 | 187 | 223 |
| Wis. | 48 | 197 | 65 | 39 | U | 49 | 39 | 72 |
| W.N. CENTRAL | 745 | 695 | 494 | 416 | 89 | 92 | 286 | 294 |
| Minn. | 158 | 207 | 177 | 264 | 6 | 6 | 98 | 98 |
| Iowa | 20 | 50 | 16 | 35 | 7 | - | 29 | 24 |
| Mo. | 485 | 80 | 268 | 57 | 60 | 73 | 117 | 106 |
| N. Dak. | 2 | 6 | - | 3 | - | - | 2 | 6 |
| S. Dak. | 10 | 29 | 5 | 20 | - | 1 | 9 | 14 |
| Nebr. | 38 | 299 | - | 16 | 6 | 4 | 12 | 11 |
| Kans. | 32 | 24 | 28 | 21 | 10 | 8 | 19 | 35 |
| S. ATLANTIC | 1,550 | 2,734 | 325 | 856 | 1,338 | 1,681 | 1,920 | 1,818 |
| Del. | 10 | 15 | 5 | 18 | 6 | 17 | 12 | 26 |
| Md. | 96 | 131 | 25 | 46 | 247 | 470 | 171 | 196 |
| D.C. | 38 | 15 | - | - | 33 | 59 | 32 | 72 |
| Va. | 75 | 128 | 35 | 62 | 113 | 104 | 131 | 187 |
| W. Va. | 7 | 11 | 3 | 7 | 2 | 2 | 30 | 29 |
| N.C. | 144 | 214 | 63 | 100 | 341 | 473 | 299 | 271 |
| S.C. | 86 | 107 | 42 | 41 | 159 | 195 | 194 | 202 |
| Ga. | 135 | 764 | 37 | 191 | 225 | 185 | 405 | 325 |
| Fla. | 959 | 1,349 | 115 | 391 | 212 | 176 | 646 | 510 |
| E.S. CENTRAL | 814 | 568 | 390 | 375 | 744 | 789 | 597 | 764 |
| Ky. | 180 | 86 | - | 45 | 63 | 73 | 111 | 113 |
| Tenn. | 505 | 107 | 345 | 158 | 425 | 376 | 228 | 243 |
| Ala. | 74 | 337 | 40 | 168 | 152 | 179 | 202 | 264 |
| Miss. | 55 | 38 | 5 | 4 | 104 | 161 | 56 | 144 |
| W.S. CENTRAL | 1,114 | 2,375 | 868 | 761 | 571 | 677 | 1,004 | 1,538 |
| Ark. | 57 | 133 | 21 | 35 | 40 | 81 | 110 | 76 |
| La. | 76 | 151 | 72 | 193 | 121 | 276 | U | 127 |
| Okla. | 357 | 214 | 102 | 56 | 136 | 34 | 86 | 117 |
| Tex. | 624 | 1,877 | 673 | 477 | 274 | 286 | 808 | 1,218 |
| MOUNTAIN | 566 | 747 | 311 | 485 | 153 | 164 | 271 | 358 |
| Mont. | 7 | 8 | - | 3 | - | - | 10 | 15 |
| Idaho | 17 | 13 | 7 | 11 | 1 | 1 | 14 | 7 |
| Wyo. | 2 | 1 | 1 | - | - | 1 | 1 | 4 |
| Colo. | 99 | 118 | 73 | 100 | 1 | 8 | U | 41 |
| N. Mex. | 80 | 187 | 40 | 91 | 10 | 19 | 42 | 41 |
| Ariz. | 281 | 372 | 184 | 250 | 133 | 120 | 150 | 135 |
| Utah | 38 | 28 | - | 22 | 2 | 3 | 27 | 42 |
| Nev. | 42 | 20 | 6 | 8 | 6 | 12 | 27 | 73 |
| PACIFIC | 1,415 | 1,621 | 140 | 1,635 | 192 | 260 | 2,324 | 2,553 |
| Wash. | 68 | 86 | 65 | 103 | 48 | 23 | 126 | 170 |
| Oreg. | 53 | 93 | 53 | 88 | 6 | 3 | 64 | 83 |
| Calif. | 1,269 | 1,411 | - | 1,411 | 135 | 232 | 1,985 | 2,148 |
| Alaska | - | 4 | - | 2 | 1 | 1 | 39 | 35 |
| Hawaii | 25 | 27 | 22 | 31 | 2 | 1 | 110 | 117 |
| Guam | 7 | 29 | - | - | 1 | 1 | - | 59 |
| P.R. | 59 | 43 | - | - | 107 | 132 | 41 | 88 |
| V.I. | - | - | - | - | U | U | U | U |
| Amer. Samoa | - | - | - | - | U | U | U | U |
| C.N.M.I. | - | 16 | - | - | - | 161 | - | 74 |

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 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 August 28, 1999, and August 29, 1998 (34th Week)

| Reporting Area | *H. influenzae*, invasive | | Hepatitis (Viral), by type | | | | Measles (Rubeola) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | | B | | Indigenous | | Imported* | | Total | |
| | Cum. 1999† | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | 1999 | Cum. 1999 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 793 | 761 | 9,701 | 14,738 | 4,174 | 6,375 | - | 37 | 1 | 18 | 55 | 50 |
| NEW ENGLAND | 59 | 49 | 142 | 197 | 67 | 131 | - | 6 | - | 4 | 10 | 3 |
| Maine | 5 | 2 | 5 | 15 | 1 | 2 | U | - | U | - | - | - |
| N.H. | 14 | 8 | 10 | 9 | 10 | 11 | - | - | - | 1 | 1 | - |
| Vt. | 5 | 5 | 6 | 13 | 2 | 4 | - | - | - | - | - | 1 |
| Mass. | 22 | 31 | 54 | 80 | 31 | 50 | - | 5 | - | 2 | 7 | 2 |
| R.I. | 1 | 2 | 13 | 11 | 23 | 43 | - | - | - | - | - | - |
| Conn. | 12 | 1 | 54 | 69 | - | 21 | U | 1 | U | 1 | 2 | - |
| MID. ATLANTIC | 125 | 119 | 634 | 1,143 | 471 | 846 | - | - | - | 2 | 2 | 13 |
| Upstate N.Y. | 61 | 39 | 166 | 232 | 130 | 163 | U | - | U | 2 | 2 | 2 |
| N.Y. City | 28 | 35 | 162 | 396 | 139 | 292 | - | - | - | - | - | - |
| N.J. | 35 | 38 | 57 | 229 | 40 | 152 | U | - | U | - | - | 8 |
| Pa. | 1 | 7 | 249 | 286 | 162 | 239 | U | - | U | - | - | 3 |
| E.N. CENTRAL | 126 | 131 | 1,860 | 2,256 | 415 | 939 | - | 1 | - | 1 | 2 | 15 |
| Ohio | 46 | 42 | 453 | 228 | 66 | 53 | - | - | - | - | - | 1 |
| Ind. | 20 | 31 | 74 | 105 | 32 | 76 | U | 1 | U | - | 1 | 3 |
| Ill. | 51 | 48 | 340 | 528 | - | 162 | - | - | - | - | - | - |
| Mich. | 9 | 5 | 967 | 1,246 | 316 | 285 | - | - | - | 1 | 1 | 10 |
| Wis. | - | 5 | 26 | 149 | 1 | 363 | U | - | U | - | - | 1 |
| W.N. CENTRAL | 59 | 69 | 502 | 1,063 | 217 | 268 | - | - | - | - | - | - |
| Minn. | 24 | 54 | 45 | 90 | 30 | 30 | - | - | - | - | - | - |
| Iowa | 6 | 2 | 92 | 368 | 27 | 45 | - | - | - | - | - | - |
| Mo. | 21 | 8 | 282 | 483 | 123 | 158 | - | - | - | - | - | - |
| N. Dak. | - | - | 1 | 3 | - | 4 | U | - | U | - | - | - |
| S. Dak. | 1 | - | 8 | 21 | 1 | 1 | - | - | - | - | - | - |
| Nebr. | 3 | - | 40 | 20 | 11 | 11 | - | - | - | - | - | - |
| Kans. | 4 | 5 | 34 | 78 | 25 | 19 | - | - | - | - | - | - |
| S. ATLANTIC | 187 | 139 | 1,292 | 1,226 | 798 | 667 | - | 1 | 1 | 4 | 5 | 8 |
| Del. | - | - | 2 | 3 | - | - | - | - | - | - | - | 1 |
| Md. | 48 | 43 | 243 | 267 | 118 | 97 | - | - | - | - | - | 1 |
| D.C. | 4 | - | 37 | 42 | 14 | 9 | U | - | U | - | - | - |
| Va. | 14 | 13 | 103 | 153 | 63 | 72 | - | 1 | - | 2 | 3 | 2 |
| W. Va. | 6 | 5 | 26 | 3 | 17 | 5 | - | - | - | - | - | - |
| N.C. | 28 | 22 | 103 | 74 | 147 | 149 | - | - | - | - | - | - |
| S.C. | 3 | 3 | 28 | 22 | 53 | 25 | U | - | U | - | - | - |
| Ga. | 49 | 30 | 314 | 356 | 105 | 122 | U | - | U | - | - | 2 |
| Fla. | 35 | 23 | 436 | 306 | 281 | 188 | - | - | 1 | 2 | 2 | 2 |
| E.S. CENTRAL | 51 | 42 | 280 | 274 | 312 | 333 | - | - | - | - | - | 2 |
| Ky. | 5 | 7 | 50 | 22 | 29 | 33 | - | - | - | - | - | - |
| Tenn. | 29 | 23 | 142 | 157 | 169 | 186 | - | - | - | - | - | 1 |
| Ala. | 15 | 10 | 39 | 50 | 56 | 47 | - | - | - | - | - | 1 |
| Miss. | 2 | 2 | 49 | 45 | 58 | 67 | - | - | - | - | - | - |
| W.S. CENTRAL | 41 | 39 | 1,648 | 2,606 | 491 | 1,416 | - | 5 | - | 3 | 8 | - |
| Ark. | 2 | - | 37 | 65 | 33 | 66 | - | - | - | - | - | - |
| La. | 7 | 17 | 59 | 45 | 72 | 65 | U | - | U | - | - | - |
| Okla. | 28 | 20 | 336 | 385 | 94 | 59 | - | - | - | - | - | - |
| Tex. | 4 | 2 | 1,216 | 2,111 | 292 | 1,226 | - | 5 | - | 3 | 8 | - |
| MOUNTAIN | 69 | 85 | 905 | 2,222 | 416 | 565 | - | 2 | - | - | 2 | - |
| Mont. | 1 | - | 16 | 72 | 16 | 5 | - | - | - | - | - | - |
| Idaho | 1 | - | 31 | 186 | 20 | 23 | - | - | - | - | - | - |
| Wyo. | 1 | 1 | 4 | 27 | 9 | 3 | U | - | U | - | - | - |
| Colo. | 10 | 17 | 156 | 186 | 62 | 69 | - | - | - | - | - | - |
| N. Mex. | 18 | 4 | 33 | 108 | 136 | 221 | - | - | - | - | - | - |
| Ariz. | 30 | 42 | 544 | 1,354 | 112 | 133 | - | 1 | - | - | 1 | - |
| Utah | 6 | 3 | 35 | 138 | 24 | 51 | - | 1 | - | - | 1 | - |
| Nev. | 2 | 18 | 86 | 151 | 37 | 60 | - | - | - | - | - | - |
| PACIFIC | 76 | 88 | 2,438 | 3,751 | 987 | 1,210 | - | 22 | - | 4 | 26 | 9 |
| Wash. | 3 | 6 | 217 | 742 | 44 | 65 | - | - | - | - | - | 1 |
| Oreg. | 30 | 36 | 174 | 290 | 58 | 127 | - | 9 | - | - | 9 | - |
| Calif. | 35 | 38 | 2,032 | 2,666 | 863 | 999 | - | 12 | - | 4 | 16 | 7 |
| Alaska | 5 | 1 | 5 | 15 | 12 | 10 | - | - | - | - | - | 1 |
| Hawaii | 3 | 7 | 10 | 38 | 10 | 9 | - | 1 | - | - | 1 | - |
| Guam | - | - | 2 | 1 | 2 | 2 | U | 1 | U | - | 1 | - |
| P.R. | 1 | 2 | 107 | 46 | 100 | 173 | - | - | - | - | - | - |
| 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. | - | - | - | 3 | - | 45 | U | - | U | - | - | - |

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

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

†Of 155 cases among children aged <5 years, serotype was reported for 77 and of those, 19 were type b.

## TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 28, 1999, and August 29, 1998 (34th 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 | 1,654 | 1,868 | 2 | 218 | 476 | 73 | 3,381 | 3,730 | 2 | 188 | 329 |
| NEW ENGLAND | 84 | 82 | - | 4 | 4 | 9 | 404 | 649 | - | 7 | 38 |
| Maine | 5 | 5 | U | - | - | U | - | 5 | U | - | - |
| N.H. | 12 | 10 | - | 1 | - | 2 | 69 | 51 | - | - | - |
| Vt. | 4 | 1 | - | 1 | - | 2 | 38 | 59 | - | - | - |
| Mass. | 47 | 38 | - | 2 | 3 | 5 | 266 | 496 | - | 7 | 8 |
| R.I. | 4 | 3 | - | - | - | - | 20 | 7 | - | - | 1 |
| Conn. | 12 | 25 | U | - | 1 | U | 11 | 31 | U | - | 29 |
| MID. ATLANTIC | 154 | 197 | - | 25 | 171 | - | 613 | 393 | - | 21 | 143 |
| Upstate N.Y. | 40 | 51 | U | 6 | 3 | U | 527 | 206 | U | 17 | 113 |
| N.Y. City | 42 | 24 | - | 3 | 153 | - | 10 | 23 | - | - | 16 |
| N.J. | 39 | 47 | U | - | 6 | U | 12 | 11 | U | 1 | 13 |
| Pa. | 33 | 75 | U | 16 | 9 | U | 64 | 153 | U | 3 | 1 |
| E.N. CENTRAL | 259 | 300 | - | 27 | 59 | 1 | 292 | 463 | - | 2 | - |
| Ohio | 111 | 107 | - | 11 | 21 | 1 | 149 | 169 | - | - | - |
| Ind. | 37 | 52 | U | 3 | 5 | U | 37 | 71 | U | 1 | - |
| Ill. | 76 | 80 | - | 6 | 9 | - | 46 | 47 | - | 1 | - |
| Mich. | 34 | 37 | - | 7 | 22 | - | 33 | 45 | - | - | - |
| Wis. | 1 | 24 | U | - | 2 | U | 27 | 131 | U | - | - |
| W.N. CENTRAL | 179 | 162 | - | 10 | 24 | 17 | 171 | 290 | - | 83 | 32 |
| Minn. | 38 | 28 | - | 1 | 12 | 16 | 78 | 168 | - | 5 | - |
| Iowa | 32 | 27 | - | 4 | 8 | 1 | 26 | 57 | - | 28 | - |
| Mo. | 69 | 60 | - | 2 | 3 | - | 36 | 22 | - | 2 | 2 |
| N. Dak. | 3 | 3 | U | - | 1 | U | 4 | 3 | U | - | - |
| S. Dak. | 10 | 6 | - | - | - | - | 5 | 8 | - | - | - |
| Nebr. | 9 | 11 | - | - | - | - | 1 | 10 | - | 48 | - |
| Kans. | 18 | 27 | - | 3 | - | - | 21 | 22 | - | - | 30 |
| S. ATLANTIC | 291 | 305 | 1 | 38 | 32 | 11 | 261 | 186 | 1 | 32 | 13 |
| Del. | 6 | 1 | - | - | - | - | 4 | 3 | - | - | - |
| Md. | 43 | 24 | - | 3 | - | - | 70 | 32 | - | 1 | 1 |
| D.C. | 1 | - | U | 2 | - | U | - | 1 | U | - | - |
| Va. | 35 | 26 | - | 8 | 5 | - | 13 | 9 | - | - | - |
| W. Va. | 4 | 12 | - | - | - | - | 2 | 1 | - | - | - |
| N.C. | 32 | 46 | - | 8 | 9 | - | 63 | 74 | 1 | 31 | 9 |
| S.C. | 33 | 45 | U | 3 | 5 | U | 13 | 22 | U | - | - |
| Ga. | 49 | 68 | U | 3 | 1 | U | 25 | 10 | U | - | - |
| Fla. | 88 | 83 | 1 | 11 | 12 | 11 | 71 | 34 | - | - | 3 |
| E.S. CENTRAL | 115 | 131 | - | 8 | 13 | 2 | 64 | 86 | - | 1 | 1 |
| Ky. | 22 | 22 | - | - | - | - | 16 | 36 | - | - | - |
| Tenn. | 47 | 48 | - | - | 1 | 2 | 29 | 26 | - | - | 1 |
| Ala. | 27 | 38 | - | 7 | 7 | - | 15 | 20 | - | 1 | - |
| Miss. | 19 | 23 | - | 1 | 5 | - | 4 | 4 | - | - | - |
| W.S. CENTRAL | 143 | 215 | 1 | 29 | 44 | 8 | 120 | 233 | - | 7 | 87 |
| Ark. | 30 | 26 | - | - | 7 | - | 14 | 42 | - | - | - |
| La. | 34 | 42 | U | 3 | 5 | U | 3 | 3 | U | - | - |
| Okla. | 25 | 30 | - | 1 | - | - | 12 | 20 | - | - | - |
| Tex. | 54 | 117 | 1 | 25 | 32 | 8 | 91 | 168 | - | 7 | 87 |
| MOUNTAIN | 101 | 105 | - | 12 | 30 | 24 | 384 | 647 | - | 16 | 5 |
| Mont. | 2 | 4 | - | - | - | - | 2 | 5 | - | - | - |
| Idaho | 8 | 7 | - | 1 | 4 | - | 93 | 168 | - | - | - |
| Wyo. | 3 | 5 | U | - | 1 | U | 2 | 8 | U | - | - |
| Colo. | 27 | 21 | - | 3 | 6 | 3 | 122 | 172 | - | 1 | - |
| N. Mex. | 13 | 17 | N | N | N | 18 | 80 | 76 | - | - | 1 |
| Ariz. | 29 | 35 | - | - | 5 | - | 30 | 140 | - | 13 | 1 |
| Utah | 13 | 10 | - | 5 | 4 | 3 | 52 | 46 | - | 1 | 2 |
| Nev. | 6 | 6 | - | 3 | 10 | - | 3 | 32 | - | 1 | 1 |
| PACIFIC | 328 | 371 | - | 65 | 99 | 1 | 1,072 | 783 | 1 | 19 | 10 |
| Wash. | 51 | 51 | - | 2 | 7 | 1 | 540 | 221 | - | - | 5 |
| Oreg. | 57 | 62 | N | N | N | - | 27 | 57 | - | - | - |
| Calif. | 211 | 252 | - | 52 | 72 | - | 479 | 480 | - | 4 | 3 |
| Alaska | 5 | 2 | - | 1 | 2 | - | 4 | 12 | - | - | - |
| Hawaii | 4 | 4 | - | 10 | 18 | - | 22 | 13 | 1 | 15 | 2 |
| Guam | 1 | 2 | U | 1 | 2 | U | 1 | - | U | - | - |
| P.R. | 5 | 9 | - | - | 2 | - | 16 | 4 | - | - | - |
| 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 August 28, 1999 (34th Week)

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | |
| NEW ENGLAND | 458 | 320 | 82 | 35 | 11 | 10 | 30 |
| Boston, Mass. | 132 | 80 | 28 | 13 | 6 | 5 | 8 |
| Bridgeport, Conn. | 38 | 26 | 7 | 4 | 1 | - | 1 |
| Cambridge, Mass. | 11 | 8 | 2 | 1 | - | - | - |
| Fall River, Mass. | 23 | 20 | 3 | - | - | - | 1 |
| Hartford, Conn. | U | U | U | U | U | U | U |
| Lowell, Mass. | 22 | 17 | 3 | 2 | - | - | 2 |
| Lynn, Mass. | 12 | 10 | 2 | - | - | - | 1 |
| New Bedford, Mass. | 22 | 20 | - | 1 | 1 | - | 1 |
| New Haven, Conn. | 35 | 23 | 8 | 2 | 1 | 1 | 1 |
| Providence, R.I. | 60 | 48 | 8 | - | - | 4 | 5 |
| Somerville, Mass. | 8 | 5 | 3 | - | - | - | - |
| Springfield, Mass. | 26 | 13 | 9 | 3 | 1 | - | 1 |
| Waterbury, Conn. | 19 | 12 | 3 | 3 | 1 | - | - |
| Worcester, Mass. | 50 | 38 | 6 | 6 | - | - | 9 |
| MID. ATLANTIC | 2,111 | 1,441 | 404 | 173 | 50 | 41 | 73 |
| Albany, N.Y. | 49 | 35 | 9 | 2 | 2 | 1 | 1 |
| Allentown, Pa. | U | U | U | U | U | U | U |
| Buffalo, N.Y. | U | U | U | U | U | U | U |
| Camden, N.J. | 38 | 23 | 6 | 5 | 2 | 2 | 2 |
| Elizabeth, N.J. | 11 | 5 | 3 | 3 | - | - | - |
| Erie, Pa. | 40 | 32 | 3 | 1 | 3 | 1 | 5 |
| Jersey City, N.J. | 55 | 29 | 8 | 5 | 2 | 11 | - |
| New York City, N.Y. | 1,042 | 700 | 218 | 87 | 21 | 15 | 23 |
| Newark, N.J. | U | U | U | U | U | U | U |
| Paterson, N.J. | 19 | 14 | 1 | 3 | - | 1 | - |
| Philadelphia, Pa. | 484 | 336 | 82 | 47 | 13 | 6 | 20 |
| Pittsburgh, Pa.§ | 37 | 24 | 8 | 3 | 1 | 1 | 1 |
| Reading, Pa. | 28 | 21 | 4 | 3 | - | - | 1 |
| Rochester, N.Y. | 129 | 95 | 25 | 7 | 2 | - | 6 |
| Schenectady, N.Y. | U | U | U | U | U | U | U |
| Scranton, Pa. | 35 | 28 | 5 | - | 1 | - | 1 |
| Syracuse, N.Y. | 99 | 72 | 17 | 4 | 3 | 3 | 8 |
| Trenton, N.J. | 32 | 18 | 11 | 3 | - | - | 5 |
| Utica, N.Y. | 13 | 9 | 4 | - | - | - | - |
| Yonkers, N.Y. | U | U | U | U | U | U | U |
| E.N. CENTRAL | 1,340 | 938 | 250 | 83 | 31 | 38 | 73 |
| Akron, Ohio | 44 | 30 | 10 | 3 | - | 1 | - |
| Canton, Ohio | 44 | 31 | 9 | 1 | 1 | 2 | 4 |
| Chicago, Ill. | U | U | U | U | U | U | U |
| Cincinnati, Ohio | 128 | 85 | 30 | 2 | 2 | 9 | 12 |
| Cleveland, Ohio | 122 | 74 | 31 | 11 | 3 | 3 | 2 |
| Columbus, Ohio | 174 | 122 | 31 | 14 | 5 | 2 | 10 |
| Dayton, Ohio | 109 | 76 | 18 | 9 | 3 | 3 | 5 |
| Detroit, Mich. | U | U | U | U | U | U | U |
| Evansville, Ind. | 34 | 25 | 6 | 2 | 1 | - | - |
| Fort Wayne, Ind. | 70 | 48 | 10 | 7 | 3 | 2 | 4 |
| Gary, Ind. | 20 | 14 | 2 | 3 | 1 | - | 1 |
| Grand Rapids, Mich. | 45 | 32 | 9 | 2 | 1 | 1 | 3 |
| Indianapolis, Ind. | 131 | 87 | 26 | 9 | 3 | 6 | 4 |
| Lansing, Mich. | 28 | 20 | 5 | 2 | 1 | - | 1 |
| Milwaukee, Wis. | 116 | 89 | 20 | 3 | 2 | 2 | 13 |
| Peoria, Ill. | 47 | 31 | 11 | 4 | 1 | - | 2 |
| Rockford, Ill. | 59 | 36 | 14 | 4 | 2 | 3 | 2 |
| South Bend, Ind. | 48 | 39 | 4 | 2 | 2 | 1 | 1 |
| Toledo, Ohio | 69 | 55 | 8 | 4 | - | 2 | 7 |
| Youngstown, Ohio | 52 | 44 | 6 | 1 | - | 1 | 2 |
| W.N. CENTRAL | 575 | 412 | 109 | 30 | 14 | 9 | 38 |
| Des Moines, Iowa | 49 | 33 | 10 | 3 | 2 | 1 | 4 |
| Duluth, Minn. | 20 | 16 | 1 | 2 | - | 1 | 1 |
| Kansas City, Kans. | U | U | U | U | U | U | U |
| Kansas City, Mo. | 114 | 83 | 20 | 6 | 2 | 2 | 9 |
| Lincoln, Nebr. | 43 | 29 | 11 | 3 | - | - | - |
| Minneapolis, Minn. | 176 | 127 | 33 | 10 | 4 | 2 | 12 |
| Omaha, Nebr. | 89 | 63 | 18 | 5 | 2 | 1 | 4 |
| St. Louis, Mo. | U | U | U | U | U | U | U |
| St. Paul, Minn. | 84 | 61 | 16 | 1 | 4 | 2 | 8 |
| Wichita, Kans. | U | U | U | U | U | U | U |
| S. ATLANTIC | 888 | 571 | 199 | 69 | 23 | 26 | 40 |
| Atlanta, Ga. | U | U | U | U | U | U | U |
| Baltimore, Md. | 130 | 76 | 34 | 13 | 4 | 3 | 8 |
| Charlotte, N.C. | 97 | 52 | 26 | 13 | 4 | 2 | 5 |
| Jacksonville, Fla. | 149 | 105 | 28 | 9 | 3 | 4 | 8 |
| Miami, Fla. | U | U | U | U | U | U | U |
| Norfolk, Va. | 36 | 27 | 5 | 2 | - | 2 | 1 |
| Richmond, Va. | 68 | 46 | 16 | 2 | 2 | 2 | 5 |
| Savannah, Ga. | 48 | 31 | 9 | 4 | 1 | 3 | - |
| St. Petersburg, Fla. | 88 | 66 | 15 | 1 | - | 6 | 4 |
| Tampa, Fla. | 174 | 115 | 34 | 17 | 7 | 1 | 8 |
| Washington, D.C. | 98 | 53 | 32 | 8 | 2 | 3 | 1 |
| Wilmington, Del. | U | U | U | U | U | U | U |
| E.S. CENTRAL | 651 | 426 | 141 | 53 | 21 | 6 | 29 |
| Birmingham, Ala. | 177 | 115 | 40 | 13 | 6 | - | 7 |
| Chattanooga, Tenn. | 97 | 67 | 17 | 6 | 5 | 1 | 4 |
| Knoxville, Tenn. | 71 | 48 | 14 | 7 | 1 | 1 | - |
| Lexington, Ky. | 58 | 33 | 16 | 4 | 1 | 4 | 3 |
| Memphis, Tenn. | U | U | U | U | U | U | U |
| Mobile, Ala. | 89 | 59 | 19 | 7 | 4 | - | 2 |
| Montgomery, Ala. | 44 | 31 | 9 | 4 | - | - | 3 |
| Nashville, Tenn. | 115 | 73 | 26 | 12 | 4 | - | 10 |
| W.S. CENTRAL | 1,506 | 989 | 305 | 120 | 49 | 43 | 61 |
| Austin, Tex. | 72 | 50 | 17 | 1 | 1 | 3 | 2 |
| Baton Rouge, La. | 51 | 34 | 9 | 5 | 1 | 2 | 1 |
| Corpus Christi, Tex. | 34 | 25 | 5 | 4 | - | - | 2 |
| Dallas, Tex. | 242 | 140 | 53 | 32 | 6 | 11 | 2 |
| El Paso, Tex. | 55 | 42 | 9 | 4 | - | - | 4 |
| Ft. Worth, Tex. | 106 | 72 | 15 | 11 | 1 | 7 | - |
| Houston, Tex. | 326 | 211 | 78 | 23 | 8 | 6 | 19 |
| Little Rock, Ark. | 72 | 40 | 22 | 4 | 2 | 4 | 2 |
| New Orleans, La. | 142 | 83 | 27 | 15 | 13 | 4 | 8 |
| San Antonio, Tex. | 241 | 169 | 40 | 17 | 11 | 4 | 13 |
| Shreveport, La. | 50 | 36 | 9 | 2 | 2 | 1 | - |
| Tulsa, Okla. | 115 | 87 | 21 | 2 | 4 | 1 | 8 |
| MOUNTAIN | 835 | 540 | 164 | 84 | 24 | 22 | 43 |
| Albuquerque, N.M. | 105 | 67 | 24 | 10 | 4 | - | 2 |
| Boise, Idaho | U | U | U | U | U | U | U |
| Colo. Springs, Colo. | 58 | 36 | 11 | 5 | 3 | 3 | 2 |
| Denver, Colo. | 99 | 70 | 16 | 9 | 2 | 2 | 10 |
| Las Vegas, Nev. | 213 | 121 | 57 | 21 | 7 | 6 | 13 |
| Ogden, Utah | 28 | 21 | 2 | 3 | - | 2 | 2 |
| Phoenix, Ariz. | 77 | 49 | 12 | 10 | 3 | 3 | - |
| Pueblo, Colo. | 20 | 16 | 3 | - | - | 1 | 2 |
| Salt Lake City, Utah | 94 | 62 | 16 | 13 | 2 | 1 | 8 |
| Tucson, Ariz. | 141 | 98 | 23 | 13 | 3 | 4 | 4 |
| PACIFIC | 1,233 | 873 | 227 | 81 | 24 | 28 | 81 |
| Berkeley, Calif. | 10 | 8 | 1 | 1 | - | - | 1 |
| Fresno, Calif. | 80 | 57 | 15 | 6 | - | 2 | 7 |
| Glendale, Calif. | 20 | 16 | 4 | - | - | - | 1 |
| Honolulu, Hawaii | 72 | 54 | 17 | - | 1 | - | 3 |
| Long Beach, Calif. | 74 | 49 | 12 | 7 | 4 | 2 | 8 |
| Los Angeles, Calif. | 313 | 229 | 53 | 19 | 5 | 7 | 23 |
| Pasadena, Calif. | 17 | 11 | 6 | - | - | - | 4 |
| Portland, Oreg. | 119 | 83 | 19 | 13 | 2 | 2 | 4 |
| Sacramento, Calif. | U | U | U | U | U | U | U |
| San Diego, Calif. | 122 | 80 | 22 | 9 | 4 | 7 | 9 |
| San Francisco, Calif. | U | U | U | U | U | U | U |
| San Jose, Calif. | 125 | 96 | 14 | 11 | - | 4 | 8 |
| Santa Cruz, Calif. | 27 | 24 | 3 | - | - | - | 2 |
| Seattle, Wash. | 116 | 80 | 26 | 7 | 2 | 1 | 2 |
| Spokane, Wash. | 58 | 36 | 15 | 3 | 2 | 2 | 5 |
| Tacoma, Wash. | 80 | 50 | 20 | 5 | 4 | 1 | 4 |
| TOTAL | 9,597¶ | 6,510 | 1,881 | 728 | 247 | 223 | 468 |

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.

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**Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (888) 232-3228.**





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