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# *Enterobacter sakazakii* Infections Associated with the Use of Powdered Infant Formula — Tennessee, 2001

*Enterobacter sakazakii*, a gram-negative, rod-shaped bacterium, is a rare cause of invasive infection with high death rates in neonates (*1,2*). This report summarizes the investigation of a fatal infection associated with *E. sakazakii* in a hospitalized neonate, which indicated that the infection was associated with the presence of the organism in commercial powdered formula fed to the infant. The implicated batch of formula has been recalled by the manufacturer. Clinicians should be aware of the potential risk for infection from use of nonsterile enteral formula in the neonatal health-care setting.

In April 2001, a male infant (2 lbs, 13 oz [1,270 grams]) was delivered by cesarean section at 33.5 weeks' gestation and was hospitalized in a neonatal intensive care unit (NICU) because of low birthweight, prematurity, and respiratory distress. The infant had fever, tachycardia, decreased vascular perfusion, and neurologic abnormalities (e.g., suspected seizure activity) at 11 days. Cerebrospinal fluid (CSF) obtained by lumbar puncture was analyzed and revealed a white blood cell count of 32/mm$^3$ [normal=0–0.5/mm$^3$], red blood cell count of 27/mm$^3$ [normal=0], protein of 292 mg/dL [normal=15–45 mg/dL], and glucose of 1 mg/dL [normal=40–70 mg/dL]. Culture of CSF grew *E. sakazakii*. The infant was treated with intravenous antimicrobials for meningitis; however, neurologic damage was progressive, and the infant died 9 days later. Because the organism was a rare cause of neonatal meningitis, hospital personnel, in collaboration with the Tennessee Department of Health and CDC, investigated the source of infection.

During April 10–20, 2001 (i.e., the study period), enhanced case surveillance was performed to determine if other infants in the NICU were either infected or colonized with *E. sakazakii*. Patients were assessed for colonization by stool culture; microbiology laboratory records also were reviewed for reports of *E. sakazakii* growth from clinical specimens during the study period. Confirmed infection was defined as any *E. sakazakii*-positive culture from a normally sterile site. Suspected infection was defined as an *E. sakazakii*-positive culture from a nonsterile site with documented deterioration in clinical status (e.g., increased respiratory rate without other evident cause) in the 24 hours before collection of the specimen for culture. Colonization was defined as an *E. sakazakii*-positive culture from a nonsterile site without documented deterioration in clinical status in the 24 hours before collection of the specimen for culture. A total of 49 infants were screened. Ten *E. sakazakii* infection or colonization events were identified: one confirmed infection in the index patient (culture-positive from CSF), two suspected infections (both culture-positive from tracheal aspirate), and seven colonizations (six culture-positive from stool, one from urine). One patient was colonized at two sites (urine and stool).

A cohort study was performed on the 49 patients who were screened to determine possible risk factors for acquisition of *E. sakazakii* infection or colonization. A case-patient was defined as any NICU patient with *E. sakazakii* infection (confirmed or suspected) or colonization during the study period. Medical records were reviewed to assess possible risk factors

**INSIDE**

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during the study period, including gestational age, birthweight, mechanical ventilator use, humidified incubator use, oral medications, and feeding type (total parenteral nutrition, formula [e.g., powdered or liquid], or breast milk) or method (i.e., continuous or intermittent administration). Of the 49 patients identified in the cohort, nine were case-patients and 40 were noncase-patients. Analysis of risk factors identified only use of a specific powdered infant formula product (Portagen [Mead Johnson Nutritionals, Evansville, Indiana]) to be significantly associated with *E. sakazakii* infection or colonization; all case-patients received Portagen compared with 21 of 40 noncase-patients ($p<0.01$).

To determine the source of infection, microbiologic studies were performed on samples of commercially sterile water used for formula preparation and from samples of formula taken from opened cans of Portagen from the same two batches used in the NICU during the study period. Environmental swab cultures were taken from surfaces on which the product had been prepared. Cultures also were performed on unopened containers of Portagen supplied by the manufacturer with batch codes matching those of opened cans. The water was cultured using membrane filtration. The powdered infant formula was cultured using a modification of a previously described enrichment method (*3*). Specifically, for each culture of formula, 100 grams of Portagen were inoculated in phosphate-buffered peptone water, incubated overnight, subcultured, reincubated, and picked and streaked. Colonies that demonstrated a yellow pigment characteristic of *E. sakazakii* were then picked for identification. Cultures of formula taken from both opened and unopened cans of Portagen from a single batch grew *E. sakazakii*. Water and all environmental cultures were negative. Pulsed-field gel electrophoresis revealed that isolates of *E. sakazakii* from the CSF culture of the neonate with meningitis and from the culture of formula from both opened and unopened containers were indistinguishable.

Hospital personnel reviewed NICU infection-control practices, policies, and procedures for preparation, storage, and administration of powdered infant formula. No breaches in infection control were detected. The product was prepared in the NICU according to manufacturer's instructions. Powdered formula was mixed with sterile water and was immediately refrigerated and used within 24 hours of preparation. The infant with *E. sakazakii* meningitis was given formula by continuous administration; administration or "hang" time (i.e., the amount of time the contents of a formula bag are fed to a patient) did not exceed 8 hours.

To prevent additional infections, the hospital made several policy changes. Principal formula type for NICU patients was changed from powdered formula to a commercially sterile, ready-to-feed liquid formula. Portagen is no longer used; other

powdered formula products are reserved for specific needs and, when necessary, are prepared in a designated formula preparation room in the pharmacy. The amount of allowable administration or "hang" time has been reduced from 8 hours to 4 hours. As of April 10, 2002, no additional episodes of infection or colonization have been detected at the reporting hospital.

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**Editorial Note:** This report describes an association between fatal infection attributed to *E. sakazakii* and use of a commercial powdered infant formula in a NICU. *E. sakazakii* is a rare cause of invasive disease in neonates; however, when meningitis occurs, severe neurologic complications, including cerebral abscess formation, are common, and death occurs in 33%–80% of cases (*1,2*). *E. sakazakii* infection, including sepsis, meningitis, or necrotizing enterocolitis, has been associated with use of powdered infant formula (*4–7*). In previous studies and in this report, the organism was detected in either prepared formula, the environment in which it was prepared, or unopened products. This is the first report of *E. sakazakii* infection associated with infant formula prompting recall of a commercial product in the United States. Portagen is a type of formula recommended by the manufacturer for infants with nutritional malabsorption problems and is to be used under the supervision of a health-care provider. The batch of Portagen implicated in this investigation (coded BMC17) was recalled voluntarily by Mead Johnson Nutritionals on March 29, 2002 (*8*). The manufacturer has disseminated a letter to health-care providers about the risk of powdered infant formulas.

Proper handling and use of infant formula products in the health-care setting is an important patient safety issue. Clinicians should be aware that powdered formulas are not sterile products and might contain opportunistic bacterial pathogens such as those in the family *Enterobacteriacae*, including *E. sakazakii* (*3*). These products commonly are used at many hospitals. A recent survey indicated that of 16 responding facilities, nine used powdered formulas in the NICU setting; four (25%) reported powdered formula as a principal source of patient feeding, and five (31%) reported use of powdered formula along with other formula types for principal feeding (National Association of Children's Hospitals and Related Institutions, unpublished data, 2001).

Risk for infection might depend on several factors, including the number of bacteria present in the product, handling after preparation, and underlying patient characteristics (e.g., immunosuppression, prematurity, or low birthweight). Because powdered formula is not sterile and can provide a good medium for growth, prolonged periods of storage or administration at room temperature might amplify the amount of bacteria already present. Health-care providers might be able to reduce risks for hospitalized neonates by choosing alternatives to powdered forms when possible. Preparation of formula should follow manufacturer's instructions, which might require steps beyond those described on the product label. The American Dietetic Association (ADA) has published guidelines for appropriate formula use, including details concerning proper preparation, storage, and administration (*9*). On the basis of these guidelines and input from ADA and the Food and Drug Administration (FDA), interim recommendations have been proposed concerning preparation of powdered infant formula in the NICU setting [see box]. In addition, FDA has disseminated a letter to health-care providers with further recommendations (*10*).

Health-care providers should report invasive disease attributed to *E. sakazakii* in infants aged <12 months, particularly bloodstream infection or meningitis with onset in the health-care setting, to state health departments and CDC (800-893-0485); adverse events associated with infant formula should be reported to FDA's MedWatch program (800-332-1088 or at http://www.fda.gov/medwatch).

## Summary Interim Recommendations for Preparation of Powdered Infant Formula in the Neonatal Intensive Care Unit Setting

1. Formula products should be selected based on nutritional needs; alternatives to powdered forms should be chosen when possible.
2. Trained personnel should prepare powdered formula under aseptic technique in a designated preparation room.
3. Manufacturer's instructions should be followed; product should be refrigerated immediately and discarded if not used within 24 hours after preparation.
4. The administration or "hang" time for continuous enteral feeding should not exceed 4 hours.
5. Written hospital guidelines should be available in the event of a manufacturer product recall, including notification of health-care providers, a system for reporting and follow-up of specific formula products used, and retention of recall records.

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## Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs — United States, 1995–1999

Cigarette smoking is the leading cause of preventable death in the United States and produces substantial health-related economic costs to society (*1,2*). This report presents the annual estimates of the disease impact of smoking in the United States during 1995–1999. CDC calculated national estimates of annual smoking-attributable mortality (SAM), years of potential life lost (YPLL), smoking-attributable medical expenditures (SAEs) for adults and infants, and productivity costs for adults. Results show that during 1995–1999, smoking caused approximately 440,000 premature deaths in the United States annually and approximately $157 billion in annual health-related economic losses. Implementation of comprehensive tobacco-control programs as recommended by CDC (*3*) could effectively reduce the prevalence, disease impact, and economic costs of smoking.

The disease impact of smoking was estimated by using the Adult and Maternal and Child Health Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) software (*4*). Smoking-attributable deaths were calculated by multiplying estimates of the smoking-attributable fraction (SAF) of preventable deaths by total mortality data for 18 adult and four infant causes of death. For adults, SAFs were derived by using relative risks (RRs) for each cause of death from the American Cancer Society's Cancer Prevention Study-II (CPS-II;1982–1988) (*5*) and current and former cigarette smoking prevalence for two age cohorts: persons aged 35–64 years and persons aged ≥65 years (*4*).* For infants, SAFs were calculated by using RRs of death for infants of women who smoked during pregnancy and maternal smoking rates from birth certificates for 46 states, the District of Columbia, and New York City (birth certificate data for 1995–1999 were not available for California, Indiana, South Dakota, and the remainder of New York) (*4*). Smoking-attributable YPLL and productivity costs were estimated by multiplying age- and sex-specific SAM by remaining life expectancy and lifetime earnings data, respectively. Smoking-attributable fire deaths (*6*) were included in the SAM and YPLL estimates; SAM included lung cancer and heart disease deaths attributable to exposure to secondhand smoke (*7*).

Annual medical costs of smoking for adults aged ≥18 years were estimated by multiplying 1998 personal health-care expenditure data from the Centers for Medicare and Medicaid Services by medical expenditure SAFs for ambulatory, hospital, prescription drugs, nursing home, and other personal health care (*8*). Expenditure SAFs represent the proportions of personal health-care expenditures that could be avoided by eliminating smoking. These SAFs were derived from econometric analyses of national medical expenditure survey data that included information on a person's smoking history, other risk behaviors, socioeconomic status, and demographic characteristics. Nursing home SAFs were based on estimates of

* SAFs for each disease are calculated by using the following equation: $SAF = [(p_0 + p_1(RR_1) + p_2(RR_2)) - 1] / [p_0 + p_1(RR_1) + p_2(RR_2)]$ where $p_0$=percentage of never smokers (persons who have never smoked ≥100 cigarettes), $p_1$=percentage of current smokers (persons who have smoked ≥100 cigarettes and now smoke every day or some days), $p_2$=percentage of former smokers (persons who have smoked ≥100 cigarettes and do not currently smoke), $RR_1$=relative risk for current smokers relative to never smokers, and $RR_2$=relative risk for former smokers relative to never smokers.

the impact of smoking on the probability of admission to a nursing home; multiple admissions and length of stay in the nursing home were not considered. Neonatal medical costs of smoking in 1996 were calculated by using maternal smoking prevalence and health-care use data from the 1995 Pregnancy Risk Assessment Monitoring System (PRAMS) (*4*). Neonatal SAFs and SAEs were derived by applying 1996 private insurance-based costs (obtained from Medstat Group, Inc.) per night to smoking-attributable nights in hospitals and neonatal intensive-care units (*4*).

During 1995–1999, smoking caused an annual average of 264,087 deaths among men and 178,311 deaths among women in the United States (Table 1). Among adults, most smoking-related deaths were attributed to lung cancer (124,813), ischemic heart disease (81,976), and chronic airways obstruction (64,735). Smoking during pregnancy resulted in the death of 599 male and 408 female infants annually. Total annual SAM estimates include the deaths of 589 males and 377 females by residential fire during 1994–1998 (*5*), and the deaths of 15,517 males and 22,536 females from lung cancer and heart disease attributable to exposure to secondhand smoke (*6*).

For men, the average number of annual smoking-attributable cancer deaths during 1995–1999 decreased by approximately 1,100 (to 102,812 deaths) from 1990–1994; the number of cardiovascular disease deaths fell by approximately 28,000 (to 90,906 deaths), and the number of respiratory disease deaths remained stable (53,713 deaths). For women, the average number of annual smoking-attributable cancer deaths during 1995–1999 increased by approximately 5,800 (to 54,664 deaths), the number of respiratory disease deaths increased by approximately 7,300 (to 44,429 deaths), and the number of cardiovascular disease deaths fell by approximately 5,400 (to 57,699 deaths). Compared with 1990–1994, during 1995–1999, the average number of annual smoking-attributable deaths from perinatal conditions fell from 926 to 598 for males and from 666 to 407 for females. Excluding adult deaths from secondhand smoke, each year SAM was responsible for an estimated 3,332,272 YPLL for men and 2,284,113 for women. Adult male and female smokers lost an average of 13.2 and 14.5 years of life, respectively, because they smoked.

During 1995–1999, the average annual mortality-related productivity losses attributable to smoking for adults were $81.9 billion (Table 2). In 1998, smoking-attributable personal health-care medical expenditures were $75.5 billion. For each of the approximately 46.5 million adult smokers in 1999, these costs represent $1,760 in lost productivity and $1,623 in excess medical expenditures. Smoking-attributable neonatal expenditures were $366 million in 1996, or $704 per maternal smoker ($8 per adult smoker). Maternal smoking accounted for 2.3% of total neonatal medical expenditures in 1996. The economic costs of smoking totaled $3,391 per smoker per year.

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**Editorial Note:** During 1995–1999, a total of 442,398 persons in the United States died prematurely each year as a result of smoking. This number, which is higher than previous SAM estimates (*1*), reflects the inclusion of 35,053 secondhand smoking-attributable heart disease deaths and slightly higher smoking-related RRs for cancers, respiratory diseases, and infant conditions. The number of smoking-attributable deaths would have been greater if smoking prevalence among men, women, and pregnant women had not declined since the early 1990s.

Reported annual medical and productivity losses are larger than previous estimates of $53 billion (*7*) and $43 billion (*2*), respectively. Among adults, the medical costs of smoking represented approximately 8% of personal health-care expenditures in 1998, which is consistent with the 6%–14% SAFs in previous studies (*2*). The larger productivity-loss figure reflects increases in the number of smoking-attributable deaths and in average earnings since the mid-1980s.

The findings in this report are subject to at least five limitations. First, the reported SAM figures were derived from smoking rates in the current year, whereas actual smoking-attributable deaths were the result of smoking in previous decades, when smoking rates were higher. Second, RRs were adjusted for the effects of age but not for other potential confounders. However, CPS-II data showed that education, alcohol, and other confounders had negligible additional impact on SAM estimates for lung cancer, chronic obstructive pulmonary disease, ischemic health disease, and cerebrovascular disease (*1*). Third, deaths attributable to cigar smoking, pipe smoking, and smokeless tobacco use were not included. Fourth, productivity losses did not include the value of lost work time from smoking-related disability, absenteeism, excess work breaks, and secondhand smoke-related disease morbidity and mortality. Finally, the neonatal medical costs of maternal smoking understate the probable true costs of smoking-attributable conditions among children because the future medical costs for infants affected by maternal smoking and the current costs of treating newly diagnosed secondhand smoke-related conditions among children aged 1–4 years were not included.

**TABLE 1. Annual deaths, smoking-attributable mortality (SAM), and years of potential life lost (YPLL), by cause of death and sex — United States, 1995–1999**

| Disease category (ICD-9 code)* | Male | | | Female | | |
|---|---|---|---|---|---|---|
| | Total | SAM | YPLL | Total | SAM | YPLL |
| **Neoplasms** | | | | | | |
| Lip, oral cavity, pharynx (140–149) | 5,180 | 3,873 | 64,022 | 2,645 | 1,264 | 21,499 |
| Esophagus (150) | 8,627 | 6,280 | 94,359 | 2,778 | 1,613 | 25,686 |
| Pancreas (157) | 13,429 | 3,065 | 46,112 | 14,339 | 3,415 | 52,481 |
| Larynx (161) | 3,031 | 2,525 | 37,823 | 816 | 602 | 10,793 |
| Trachea, lung, bronchus (162) | 91,295 | 80,571 | 1,106,117 | 61,593 | 44,242 | 763,669 |
| Cervix uteri (180) | — | — | — | 4,138 | 552 | 13,606 |
| Urinary bladder (188) | 7,778 | 3,699 | 40,208 | 3,772 | 1,053 | 13,290 |
| Kidney, other urinary (189) | 7,066 | 2,799 | 41,867 | 4,537 | 236 | 4,172 |
| **Total** | **136,406** | **102,812** | **1,430,507** | **94,618** | **52,949** | **905,194** |
| **Cardiovascular diseases** | | | | | | |
| Hypertension (401–404) | 17,575 | 3,320 | 51,291 | 25,182 | 2,740 | 36,286 |
| Ischemic heart disease (410–414) | | | | | | |
| Aged 35–64 years | 52,977 | 22,059 | 514,926 | 19,381 | 7,069 | 185,580 |
| Aged ≥65 years | 191,172 | 29,312 | 252,380 | 217,962 | 23,536 | 219,813 |
| Other heart diseases† | 98,088 | 18,822 | 243,327 | 117,645 | 10,546 | 127,756 |
| Cerebrovascular disease (430–438) | | | | | | |
| Aged 35–64 years | 9,726 | 3,898 | 93,903 | 8,103 | 3,586 | 101,493 |
| Aged ≥65 years | 51,369 | 4,697 | 37,751 | 88,452 | 5,264 | 47,581 |
| Atherosclerosis (440) | 6,008 | 1,644 | 14,877 | 10,050 | 883 | 7,925 |
| Aortic aneurysm (441) | 9,971 | 6,489 | 76,568 | 6,201 | 3,135 | 39,655 |
| Other arterial disease (442–448) | 4,716 | 665 | 8,535 | 6,183 | 940 | 12,359 |
| **Total** | **441,602** | **90,906** | **1,293,559** | **499,159** | **57,699** | **778,447** |
| **Respiratory diseases** | | | | | | |
| Pneumonia, influenza (480–487) | 38,295 | 8,802 | 84,878 | 47,420 | 6,774 | 71,255 |
| Bronchitis, emphysema (490–492) | 10,935 | 9,944 | 109,011 | 9,585 | 7,752 | 107,365 |
| Chronic airways obstruction (496) | 42,765 | 34,919 | 353,137 | 39,727 | 29,816 | 379,052 |
| **Total** | **91,996** | **53,665** | **547,026** | **96,731** | **44,342** | **557,672** |
| **Perinatal conditions** | | | | | | |
| Short gestation/low birthweight (765) | 2,198 | 227 | 16,685 | 1,768 | 175 | 13,871 |
| Respiratory distress syndrome (769) | 931 | 85 | 6,273 | 639 | 24 | 1,925 |
| Other respiratory-newborn (770) | 912 | 84 | 6,147 | 645 | 33 | 2,646 |
| Sudden infant death syndrome (798.0) | 1,766 | 202 | 14,805 | 1,197 | 175 | 13,872 |
| **Total** | **5,808** | **599** | **43,910** | **4,249** | **408** | **32,314** |
| **Burn deaths§** | — | 589 | 17,270 | — | 377 | 10,486 |
| **Secondhand smoke deaths¶** | | | | | | |
| Lung cancer | — | 1,110 | — | — | 1,890 | — |
| Ischemic heart disease | — | 14,407 | — | — | 20,646 | — |
| **Overall Total** | | **264,087** | **3,332,272** | | **178,311** | **2,284,113** |

* *International Classification of Diseases, Ninth Revision.*
† Other heart diseases include ICD-9 codes 390–398, 415–417, and 420–429. Totals may not equal sums because of rounding.
§ Reference 6.
¶ Reference 7.

Cigarette smoking continues to be the principal cause of premature death in the United States and imposes substantial costs on society. For each of the approximately 22 billion packs sold in the U.S. in 1999, $3.45 was spent on medical care attributable to smoking, and $3.73 in productivity losses were incurred, for a total cost of $7.18 per pack. These costs provide a strong rationale for increasing funding for comprehensive tobacco-use interventions to the levels recommended by CDC. In California, decreases in smoking prevalence have resulted in reduced lung cancer and heart disease death rates (*9,10*). These results offer evidence of the potential benefits of expanding comprehensive tobacco-control programs in an effort to reduce current smoking prevalence by 50% by 2010.

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**TABLE 2. Annual smoking-attributable economic costs for adults and infants — United States, 1995–1999**

| Cost component | Total (in millions) | Per smoker* |
|---|---|---|
| **Adult costs** | | |
| Annual smoking-attributable productivity costs, 1995–1999 | | |
| Men | $55,389 | $2,278 |
| Women | $26,483 | $1,193 |
| **Total** | **$81,872** | **$1,760** |
| Smoking-attributable medical expenditures, 1998† | | |
| Ambulatory care | $27,182 | $584 |
| Hospital care | $17,140 | $368 |
| Prescription drugs | $6,364 | $137 |
| Nursing home | $19,383 | $417 |
| Other care | $5,419 | $116 |
| **Total** | **$75,488** | **$1,623** |
| **Total adult costs** | **$157,360** | **$3,383** |
| **Infant costs** | | |
| Smoking-attributable neonatal medical expenditures, 1996 | $366 | $704 |
| **Total costs** | **$157,726** | **$3,391** |

* Approximately 46.5 million U.S. residents aged ≥18 years smoked in 1999 (24,316,033 men and 22,199,233 women), based on the civilian noninstitutional population and respondents from the 1999 National Health Interview Survey. Smoking-attributable neonatal expenditures are per maternal smoker; average costs per adult smoker were approximately $8. Total productivity costs are weighted averages for men and women. Totals may not equal sum because of rounding.

† Data sources: Expenditure smoking-attributable fractions cited in reference 8 and 1998 personal health-care expenditure data obtained from the Centers for Medicare and Medicaid Services.


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# Traumatic Brain Injury Among American Indians/Alaska Natives — United States, 1992–1996

Traumatic Brain Injury (TBI) is a major cause of morbidity and mortality in the United States, resulting in approximately 52,000 deaths, 230,000 hospitalizations, and 80,000 disabilities annually (*1*). Among American Indians/Alaska Natives (AI/ANs), injuries are the second leading cause of death (2); however, few published reports concern nonfatal injuries in this population, especially for injuries such as TBI. To describe the causes and impact of TBI among AI/ANs, CDC analyzed Indian Health Service (IHS) hospital discharge data. This report summarizes the results of this analysis, which indicate that prevention strategies should focus on the leading causes of TBI hospitalizations, including motor-vehicle crashes, assaults, and falls.

IHS hospitalization data during 1992–1996 were analyzed. These data contain all hospital discharge records of AI/ANs who received services at an IHS, tribal, or contract hospital. Data were coded according to the *International Classification of Diseases, Ninth Revision* (ICD-9-CM) (*3*). TBI cases were selected if at least one of the diagnosis codes listed in CDC's Guidelines for Surveillance of Central Nervous System Injury (*4*) appeared in the diagnostic fields. These included the nature-of-injury diagnosis codes 800.0–801.9, 803.0–804.9, and 850.0–854.1. All TBI cases were E-coded (E800–E999) for the underlying external cause of injury. The underlying causes of TBI-related injuries were categorized as motor-vehicle collisions (E810–E825), falls (E880–E886 and E888), assaults (E960–E969), other (all other E-codes), or unspecified (E928.9 and E988.9). Hospital discharges in this report were limited to single-incident visits. Readmissions (ascertained for each year by matching sex, date of service, state, county, date of birth, and residence codes) were excluded to eliminate duplicate cases. Readmission in a subsequent year was treated as a separate injury event. Data from the California and Portland IHS regions were excluded because these regions do not have IHS or tribal hospitals. Incidence rates were calculated per 100,000 AI/AN residents eligible for services by using AI/AN resident population estimates from the IHS Demographic Statistics Team for each year (IHS, unpublished data, 1992–1996). Rates were age-adjusted to the 2000 U.S. standard population by the direct method. The latest year for which IHS hospital discharge data were available was 1996.

During 1992–1996, IHS, tribal, or contract-care hospitals recorded 4,491 TBI-related hospitalizations among AI/ANs,

resulting in 21,107 hospital days (average length of stay: 4.7 days, range: 1–292 days). The average TBI-related hospitalization rate was 81.7 per 100,000 population (95% confidence interval=79.1–84.4) (Table 1). Of these 4,491 cases, 221 (5%) were fatal. Male TBI rates were 2.5 times greater than female rates. The AI/AN TBI rate was similar to the combined incidence rate of TBI hospitalizations reported by Colorado, Missouri, Oklahoma, and Utah (81.7 versus 84.8 per 100,000 population) (*5*), but lower than national TBI estimates (98.0) (*6*). The annual AI/AN TBI rate declined by 14% during 1992–1996. The major external causes of AI/AN TBI hospitalizations were motor-vehicle collisions (24%), assaults (17%), and falls (16%). Motor-vehicle–related hospitalization rates were highest among AI/ANs aged 15–24 years (34.2 per 100,000 population). For AI/ANs aged 25–34 years and those aged 35–44 years, assaults were the most common cause of TBI (28.2 and 23.6 per 100,000 population, respectively). Five of the assault cases involved firearms. For AI/ANs aged ≤14 years and those aged ≥45 years, falls were the leading cause of injury (17.7 and 19.4 per 100,000 population, respectively). AI/AN TBI-related hospitalization rates differed by geographic region with the highest rates occurring in the Northern Plains states and Alaska. Of the 1,418 records (32%) of TBI-related hospitalizations coded with "unspecified"* E-codes, 1,309 (92%) were from contract health-care providers.

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**Editorial Note:** TBIs among AI/ANs have serious consequences for patients, their families, and health-care delivery systems. These consequences partially are reflected by the number of hospital days for persons sustaining a TBI. Persons with TBI might experience substantial losses in quality of life, including physical, cognitive, and psychosocial impairments that require long-term rehabilitation therapy. Among AI/ANs, motor-vehicle crashes were involved in approximately one fourth of TBI-related hospitalizations. Because motor-vehicle–related injury is a major cause of TBI (*5*,*6*), increases in safety belt and child restraint use, enactment and enforcement of primary-occupant restraint laws, and policies focused on impaired driving are needed to reduce motor-vehicle–related TBI. During 1990–1994, 73% of motor-vehicle crashes resulting in AI/AN fatalities were alcohol-related (*7*). Fatally injured AI/AN drivers and passengers have some of the lowest safety belt use of any racial/ethnic group in the nation (15.2% for drivers and 11.4% for passengers, respectively) (*7*). Enactment and enforcement of a law mandating safety belt use led to increases in safety belt use and a 29% reduction in motor-vehicle–related injury hospitalizations among Navajo Nation residents (*8*).

The proportion of TBIs attributed to nonfirearm assault among AI/ANs is approximately twice that shown in combined TBI data from Colorado, Missouri, Oklahoma, and Utah (17% versus 9%, respectively) (*5*). Falls contribute to TBI incidence among AI/ANs almost as much as assaults. Additional information about the circumstances and risk factors for these assault and fall injuries can assist agencies, tribes,

**TABLE 1. Number of nonfatal traumatic brain injury hospitalizations and rates* among American Indians/Alaska Natives, by selected characteristics — United States†, 1992–1996**

| Characteristics | Number | Rate | (95% CI§) |
|---|---|---|---|
| **Year** | | | |
| 1992 | 944 | 90.3 | ( 83.8– 96.7) |
| 1993 | 820 | 76.9 | ( 71.1– 82.8) |
| 1994 | 959 | 85.9 | ( 79.9– 92.0) |
| 1995 | 881 | 78.4 | ( 72.7– 84.2) |
| 1996 | 887 | 77.7 | ( 72.1– 83.4) |
| **Total** | **4,491** | **81.7** | ( 79.1– 84.4) |
| **Sex** | | | |
| Female | 1,287 | 46.7 | ( 46.2– 49.3) |
| Male | 3,204 | 119.9 | (115.8–124.1) |
| **Age (yrs)** | | | |
| 0–14 | 994 | 54.4 | ( 51.0– 57.8) |
| 15–24 | 1,085 | 112.9 | (106.2–119.6) |
| 25–34 | 1,023 | 111.7 | (104.8–118.5) |
| 35–44 | 645 | 93.9 | ( 86.7–101.2) |
| ≥45 | 744 | 71.8 | ( 66.6– 77.0) |
| **External cause** | | | |
| Motor Vehicles | 1,062 | 19.6 | ( 18.4– 20.8) |
| Assaults | 757 | 14.0 | ( 13.0– 15.0) |
| Falls | 736 | 13.6 | ( 12.6– 14.6) |
| Other | 518 | 9.5 | ( 8.7– 10.4) |
| Unspecified | 1,418 | 26.1 | ( 24.8– 27.5) |
| **Region¶** | | | |
| Alaska | 585 | 117.1 | (106.8–127.4) |
| East | 94 | 27.8 | ( 21.3– 34.2) |
| Northern Plains | 1,348 | 122.6 | (115.5–129.8) |
| Oklahoma | 456 | 32.9 | ( 29.5– 36.3) |
| Southwest | 2,008 | 93.9 | ( 89.3– 98.6) |

* Per 100,000 population; rates adjusted to the 2000 U.S. standard population.
† Excludes data from the California and Portland Indian Health Service regions.
§ Confidence interval.
¶ Alaska, East (Nashville), Northern Plains (Aberdeen, Bemidji, and Billings), Oklahoma, and Southwest (Albuquerque, Navajo, Phoenix, and Tucson)

* 1,279 records were coded to E988.9 (i.e., injury by other and unspecified means, or undetermined whether accidentally or purposely inflicted); 139 records were coded to E928.9 (i.e., unspecified accident).

and community practitioners in planning effective prevention strategies.

Several reasons might account for why the AI/AN TBI-related hospitalization rate is lower than the estimated national TBI-related hospitalization rate. First, the true number of TBI hospitalizations among AI/AN might be underreported because of the use of non-IHS or tribal treatment facilities by AI/AN residents. In Nevada, an estimated 73% of AI/AN injury hospitalizations were entered into the IHS data system (*9*). Second, injured AI/ANs covered under Medicare, Medicaid, or private health insurance might not be captured in the IHS data system (*9*). Third, access to advanced emergency medical care by AI/ANs residing in rural areas might be delayed when an injury occurs because greater travel distance might limit their chances of survival. Finally, risk-taking behaviors such as drinking and driving and not wearing safety belts (*8*) might indicate that AI/ANs are less likely to survive following a motor-vehicle crash, and thus will not be hospitalized and included in the IHS data system.

Although all IHS TBI-related hospitalization records are E-coded, the usefulness of these data is diminished because approximately one third of the records are coded "unspecified." Most (92%) "unspecified" E-codes reported for TBI cases occur among the IHS contract hospitals. Hospital discharge data that are E-coded have been used to evaluate injury trends, establish injury control priorities, and help in evaluating injury-prevention programs (*8*,*10*). Accurate and reliable external cause-of-injury information is needed to target and evaluate TBI injury-prevention programs among AI/ANs. Even a small reduction in TBI-related hospitalization will yield a major impact on the health of AI/ANs.

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## Progress Toward Poliomyelitis Eradication — Egypt, 2001

The 1988 World Health Assembly resolved to eradicate poliomyelitis worldwide by 2000. Since then, the estimated number of polio cases has decreased by >99%. The Americas and the Western Pacific regions of the World Health Organization (WHO) have been certified polio-free (*1,2*), and it is expected that the European Region will be certified this year. Progress also has been made in the Eastern Mediterranean Region (EMR), where polio is endemic in five of 22 countries (Afghanistan, Egypt, Pakistan, Somalia, and Sudan) (*3*). This report summarizes progress toward polio eradication from 1997 through 2001 in Egypt, where several independent chains of wild poliovirus type 1 continue to circulate despite a long history of eradication efforts. The findings indicate the need to improve surveillance and vaccination activities.

Since 1968 in Egypt, routine vaccination coverage of infants with ≥3 doses of oral poliovirus vaccine (OPV) has increased steadily, and has been >90% since 1994. In 2001, the reported routine coverage was >95% nationwide with only five of 245 districts reporting levels <90%*.

Since 1976, Egypt has been conducting OPV supplementary vaccination activities and in 1989 began implementing annual National Immunization Days (NIDs)†. The campaigns have improved substantially since 2000, with house-to-house vaccine delivery extended to urban areas in Upper Egypt and to high-risk areas and slums in Lower Egypt. Microplanning at the local level was implemented during 2001. The Ministry of Health and Population (MOHP) intensified supervision in high-risk areas using monitors from outside MOHP.

* Coverage calculated by using the number of OPV doses administered as the numerator and the number of registered infants as the denominator.
† Mass campaigns over a short period (days) in which 2 doses of OPV are administered to all children in the target group (usually those aged <5 years) regardless of previous vaccination history.

MOHP conducted extensive supplementary vaccination activities in Upper Egypt during 2001, with targeted campaigns in selected districts of seven governorates in July and August, three subnational rounds in all of Upper Egypt in March, April, and September, and three NID rounds in January, November, and December. Thus, high-risk areas in Upper Egypt were covered by eight rounds over a 12-month period in 2001.

Surveillance for acute flaccid paralysis (AFP) was initiated in Egypt in August 1990 (*4*). Surveillance performance has improved during the past 5 years (Table 1). The national target level of sensitivity (≥1 nonpolio AFP case per 100,000 children aged <15 years) has been reached each year since 1998. The 252 AFP cases in 2001 were reported from 23 of the 27 governorates, representing approximately 98% of the population. Three of the four governorates that reported no AFP have small populations. Fifteen governorates achieved nonpolio AFP rates of ≥1.

All stool samples collected from AFP cases were tested at the national polio laboratory (Vacsera), which is accredited by WHO as a regional reference laboratory in the global poliovirus laboratory network. Since 1996, genetic sequence analyses have been performed routinely on all wild poliovirus isolates detected in Egypt. Results indicate that all are closely related to poliovirus lineages that have been indigenous to Egypt for ≥5 years. The genetic sequence data also highlight progress being made, with decreasing genetic diversity of polioviruses and fewer lineages surviving each successive low transmission season.

Even with improved case detection, the number of confirmed cases of polio has decreased from 100 in 1996 to five in 2001. Poliovirus type 2 was last detected in Egypt in 1994; types 1 and 3 were isolated in 2000 and only type 1 was isolated in 2001.

Since late 1999, wild poliovirus detection through AFP surveillance has been localized in a few districts of Upper Egypt. In 2000, four virologically confirmed polio cases were detected in three governorates: Asyut Governorate (one type 1 with January onset and one type 3 with February onset), Qena Governorate (one type 1 with May onset), and Fayoum Governorate (one type 3 with December onset). In 2001, five type 1 virologically confirmed polio cases were reported in Egypt: three from Minya Governorate (one January onset case from Malawi district, and two from Abu Qurqas district with onsets in January and February) and two from Qena Governorate (October and November onsets).

During 1999–2001, 18 patients with virologically confirmed cases were aged 7–19 months. Among 13 patients reported in 1999 and 2000, two had received <3 valid[§] doses of OPV, while the other 10 patients received 4–7 valid doses through either routine or supplementary vaccination. All five patients reported in 2001 received ≥6 valid doses.

In July 2000, MOHP began to supplement AFP surveillance with environmental surveillance (i.e., collecting and testing wastewater samples) for the presence of wild polioviruses. Ten sampling sites were selected in seven governorates of Upper Egypt: Minya, Fayoum, Beni Suef, Asyut, Sohag, Aswan, and Qena. One site was selected from Gharbia Governorate in Lower Egypt.

During September 2000–December 2001, a total of 194 samples were tested; 64 (33%) yielded wild poliovirus type 1. Wild poliovirus was detected in every study governorate. All isolates were characterized further by partial genomic sequencing, which indicated that the viruses from wastewater samples were closely related to the type 1 polioviruses isolated from paralytic cases. The genetic data indicate that a single genotype of poliovirus type 1 virus with multiple lineages has persisted in Egypt ≥6 years.

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**Editorial Note:** Before the eradication initiative, Egypt was one of the most intensely polio-endemic countries in the world. The conditions that contributed to intense transmission, such as extremely high population density and poor sanitation, still exist and pose important challenges to disease eradication efforts. To interrupt transmission, it is essential to

[§] Doses of OPV administered ≥4 weeks apart.

**TABLE 1. Acute Flaccid Paralysis (AFP) surveillance performance — Egypt, 1997–2001**

| Indicators | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|
| Number of persons with AFP | 217 | 295 | 276 | 275 | 257 |
| Number of persons with poliomyelitis | 14 | 35 | 9 | 4 | 5 |
| Rate of persons per 100,000 population aged <15 years reporting AFP | 0.9 | 1.2 | 1.2 | 1.3 | 1.2 |
| Percentage of persons with AFP detected within 1 week of symptom onset | 70% | 68% | 65% | 82% | 83% |
| Percentage of persons with AFP with adequate stool samples (i.e., two samples collected at least 24 hours apart and within 14 days of paralysis onset) | 82% | 81% | 79% | 90% | 91% |
| Percentage of stool samples with nonpolio enterovirus isolates | 10% | 22% | 16% | 9% | 16% |

sustain high-quality surveillance and conduct well-organized vaccination activities.

Case investigations and reports from independent monitors in Upper Egypt have identified several barriers to polio eradication, including delayed or missed birth registrations, delayed routine vaccination doses, difficult-to-reach areas with poor access to health services, and irregular outreach activities. In past years, security concerns resulted in restricted access to some children. In some areas, cold chain problems have threatened the quality of the vaccine being administered. Other barriers identified were an insufficient number of field supervisors during vaccination campaigns and an insufficient number of vaccination teams to conduct a house-to-house vaccination strategy, especially in urban areas. Finally, some surveillance deficiencies were noted at the subnational level, with a lack of active surveillance in some areas.

To reduce these barriers, MOHP, with assistance from WHO, has assessed and rehabilitated the cold chain, introduced Vaccine Vial Monitors for OPV used in both campaigns and routine vaccination, and tested the quality of the OPV being used. MOHP has used community census data to prepare local registers of children for tracking routine vaccination and strengthened the system for tracing children with insufficient vaccination. To improve vaccination coverage, MOHP has included an optional birth dose of OPV for children born in Upper Egypt, implemented high-quality targeted campaigns in Upper Egypt and other high-risk areas, and raised the upper age limit of children targeted for supplemental activities from 4 to 5 years. Finally, MOHP has improved the AFP surveillance system by involving both private and university hospitals and clinics.

Conditions in Egypt are probably particularly favorable for intense poliovirus transmission. The continued transmission of wild poliovirus after many years of intense efforts reflects the need to implement fully in Egypt those strategies that have proved successful in other parts of the world, such as intensified searching for cases and high-quality house-to-house campaigns. The intensified eradication strategies require the full support of all of the agencies and organizations involved.

WHO continues to seek the opinions and support of international experts. Several consultations have been held in the past 3 years. A recently established Technical Advisory Group held its inaugural meeting and review in March 2002. If poliovirus transmission is to be interrupted in Egypt, the eradication effort will require sustained political support of the Egyptian government, high-quality program execution by MOHP, and technical support from WHO and others.

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*Notice to Readers*

## Epidemiology in Action

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "Epidemiology in Action," during April 29–May 10, 2002, at CDC and Emory University campuses. The course is designed for state and local public health professionals.

The course emphasizes the practical application of epidemiology to public health problems and will consist of lectures, workshops, classroom exercises (including actual epidemiologic problems), and roundtable discussions. Topics covered include descriptive epidemiology and biostatistics, analytic epidemiology, epidemic investigations, public health surveillance, surveys and sampling, Epi Info 2000 (Windows version) training, and discussions of selected prevalent diseases. There is a tuition charge. Additional information and applications are available from Emory University, International Health Dept. (PIA), 1518 Clifton Rd. N.E., Rm. 746, Atlanta, GA 30322; telephone 404-727-3485; fax 404-727-4590; or at http://www.sph.emory.edu/Epicourses; or e-mail pvaleri@sph.emory.edu.

*Notice to Readers*

## Epi Info 2000: A Course for Developers of Public Health Information Systems

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "Developing Public Health Software Applications Using Epi Info 2000," during May 14–17, 2002, at Emory University. The course is designed for practitioners of epidemiology and computing with intermediate to advanced computing skills who wish to develop software applications using Epi Info 2000 for Windows 95, 98, NT, and 2000.

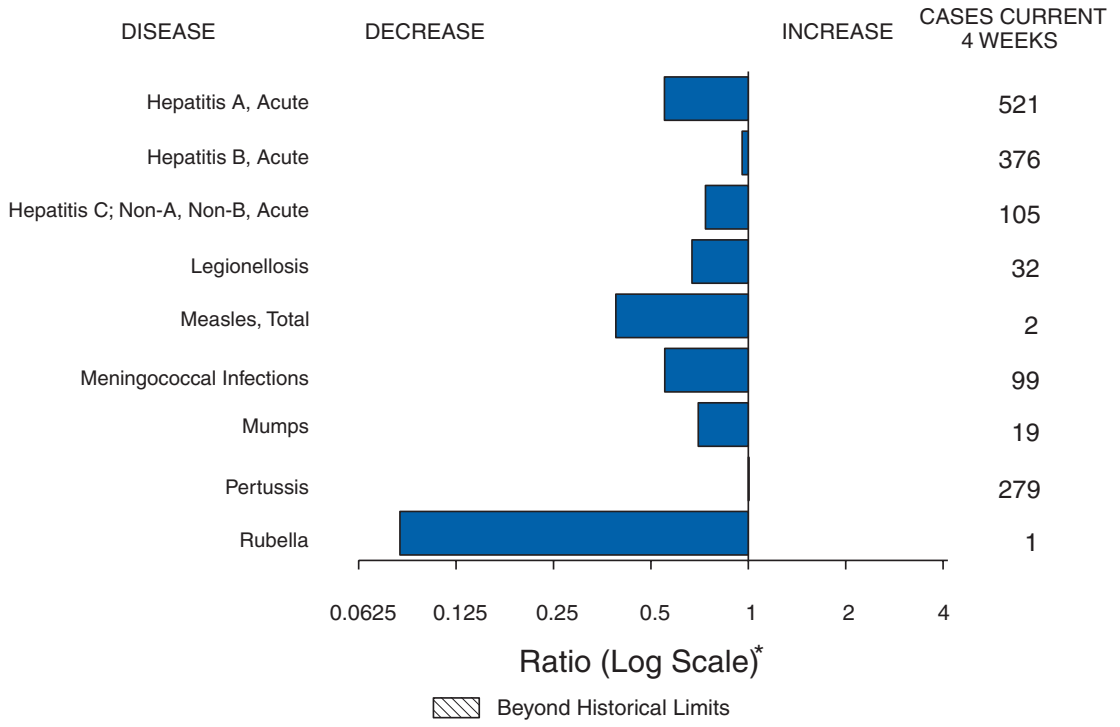
The 4-day course covers hands-on experience with the new Windows version of Epi Info, programming Epi Info software at the intermediate to advanced level, and computerized interactive exercises for developing a public health information system. There is a tuition charge.

Additional information and applications are available from Emory University's Rollins School of Public Health, International Health Dept. (PIA), 1518 Clifton Rd. N.E., Rm. 746, Atlanta, GA 30322; telephone 404-727-3485; fax 404-727-4590; or e-mail pvaleri@sph.emory.edu.

## Errata: Vol 51, No. 13

In the article "Alcohol Use Among Women of Childbearing Age—United States, 1991–1999," two errors occurred in the first paragraph on page 273. The second sentence should read, "One of the national health objectives for 2010 is to increase to 94% the percentage of pregnant women abstaining from alcohol use." The sixth sentence should read, "However, rates of binge drinking (i.e., ≥5 drinks on any one occasion) and frequent drinking (i.e., ≥7 drinks per week or ≥5 drinks on any one occasion) during pregnancy have not declined, and these rates also have not declined among nonpregnant women of childbearing age."

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending April 6, 2002, with historical data**




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

**TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 6, 2002 (14th Week)***

| | | Cum. 2002 | Cum. 2001 | | Cum. 2002 | Cum. 2001 |
|---|---|---|---|---|---|---|
| Anthrax | | 1 | - | Encephalitis: West Nile† | 5 | - |
| Botulism: | foodborne | 5 | 5 | Hansen disease (leprosy)† | 19 | 27 |
| | infant | 11 | 28 | Hantavirus pulmonary syndrome† | - | 2 |
| | other (wound & unspecified) | 6 | 1 | Hemolytic uremic syndrome, postdiarrheal† | 22 | 22 |
| Brucellosis† | | 18 | 18 | HIV infection, pediatric†§ | 31 | 49 |
| Chancroid | | 17 | 9 | Plague | - | - |
| Cholera | | 1 | - | Poliomyelitis, paralytic | - | - |
| Cyclosporiasis† | | 27 | 38 | Psittacosis† | 9 | 3 |
| Diphtheria | | - | - | Q fever† | 6 | 2 |
| Ehrlichiosis: | human granulocytic (HGE)† | 10 | 21 | Rabies, human | - | - |
| | human monocytic (HME)† | 7 | 7 | Streptococcal toxic-shock syndrome† | 13 | 29 |
| | other and unspecified | - | - | Tetanus | 2 | 6 |
| Encephalitis: | California serogroup viral† | 6 | 1 | Toxic-shock syndrome | 32 | 46 |
| | eastern equine† | - | - | Trichinosis | 3 | 7 |
| | Powassan† | - | - | Tularemia† | 6 | 6 |
| | St. Louis† | - | - | Yellow fever | 1 | - |
| | western equine† | - | - | | | |

-:No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update February 24, 2002.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | AIDS | | Chlamydia† | | Cryptosporidiosis | | *Escherichia coli* O157:H7 | | *Escherichia coli* Shiga Toxin Positive, Serogroup non-O157 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 2002§ | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 10,377 | 10,393 | 174,669 | 198,888 | 480 | 465 | 290 | 291 | 15 | 17 |
| NEW ENGLAND | 320 | 309 | 6,778 | 6,139 | 20 | 12 | 22 | 26 | 2 | 7 |
| Maine | 1 | 3 | 372 | 339 | - | - | - | 3 | - | - |
| N.H. | 9 | 12 | 420 | 332 | 5 | - | 1 | 3 | - | 2 |
| Vt. | 5 | 10 | 199 | 156 | 5 | 5 | - | 1 | - | - |
| Mass. | 178 | 191 | 2,898 | 2,454 | 4 | 3 | 13 | 17 | 2 | 1 |
| R.I. | 35 | 33 | 734 | 800 | 3 | 2 | 2 | - | - | - |
| Conn. | 92 | 60 | 2,155 | 2,058 | 3 | 2 | 6 | 2 | - | 4 |
| MID. ATLANTIC | 2,133 | 3,267 | 15,263 | 20,378 | 44 | 68 | 20 | 26 | - | - |
| Upstate N.Y. | 158 | 567 | 1,850 | 3,279 | 9 | 17 | 16 | 14 | - | - |
| N.Y. City | 1,299 | 1,870 | 7,766 | 7,917 | 25 | 30 | - | 1 | - | - |
| N.J. | 403 | 473 | 776 | 2,951 | 1 | 2 | 4 | 11 | - | - |
| Pa. | 273 | 357 | 4,871 | 6,231 | 9 | 19 | N | N | - | - |
| E.N. CENTRAL | 973 | 662 | 28,256 | 38,181 | 129 | 150 | 88 | 70 | - | - |
| Ohio | 197 | 99 | 4,063 | 9,953 | 38 | 27 | 15 | 19 | - | - |
| Ind. | 133 | 64 | 4,479 | 4,343 | 13 | 14 | 6 | 9 | - | - |
| Ill. | 476 | 329 | 7,971 | 11,441 | 15 | 12 | 22 | 12 | - | - |
| Mich. | 117 | 137 | 8,812 | 7,875 | 27 | 31 | 21 | 12 | - | - |
| Wis. | 50 | 33 | 2,931 | 4,569 | 36 | 66 | 24 | 18 | - | - |
| W.N. CENTRAL | 147 | 175 | 8,127 | 10,336 | 38 | 17 | 43 | 26 | 3 | 1 |
| Minn. | 29 | 35 | 2,231 | 2,236 | 15 | - | 19 | 13 | 3 | - |
| Iowa | 34 | 18 | 461 | 1,006 | 5 | 7 | 9 | 3 | - | - |
| Mo. | 48 | 72 | 2,551 | 3,587 | 10 | 6 | 11 | 4 | - | - |
| N. Dak. | - | 1 | 228 | 269 | 2 | - | - | - | - | - |
| S. Dak. | 2 | - | 584 | 497 | 3 | 1 | 1 | 1 | - | 1 |
| Nebr. | 15 | 25 | 314 | 1,003 | - | 3 | - | - | - | - |
| Kans. | 19 | 24 | 1,758 | 1,738 | 3 | - | 3 | 5 | - | - |
| S. ATLANTIC | 3,619 | 2,972 | 36,713 | 38,222 | 115 | 94 | 41 | 35 | 8 | 7 |
| Del. | 58 | 54 | 706 | 829 | 1 | 1 | 1 | - | - | - |
| Md. | 420 | 245 | 3,700 | 4,023 | 3 | 18 | - | 1 | - | - |
| D.C. | 157 | 233 | 799 | 907 | 2 | 3 | - | - | - | - |
| Va. | 235 | 263 | 4,386 | 4,624 | 1 | 5 | 5 | 6 | - | 1 |
| W. Va. | 21 | 17 | 626 | 613 | 1 | - | - | 1 | - | - |
| N.C. | 280 | 116 | 5,431 | 5,819 | 13 | 11 | 6 | 16 | - | - |
| S.C. | 267 | 214 | 3,049 | 4,681 | 2 | 1 | - | 1 | - | - |
| Ga. | 651 | 270 | 8,178 | 8,223 | 62 | 38 | 22 | 5 | 5 | 5 |
| Fla. | 1,530 | 1,560 | 9,838 | 8,503 | 30 | 17 | 7 | 5 | 3 | 1 |
| E.S. CENTRAL | 425 | 482 | 13,448 | 13,485 | 26 | 12 | 7 | 11 | - | - |
| Ky. | 46 | 74 | 2,115 | 2,352 | 1 | 1 | 2 | 1 | - | - |
| Tenn. | 204 | 160 | 4,246 | 4,014 | 10 | 2 | 4 | 5 | - | - |
| Ala. | 85 | 118 | 4,520 | 3,593 | 13 | 4 | - | 4 | - | - |
| Miss. | 90 | 130 | 2,567 | 3,526 | 2 | 5 | 1 | 1 | - | - |
| W.S. CENTRAL | 1,077 | 815 | 26,797 | 28,952 | 5 | 11 | - | 28 | - | - |
| Ark. | 59 | 64 | 1,365 | 2,198 | 2 | 2 | - | - | - | - |
| La. | 269 | 257 | 4,755 | 4,725 | 1 | 4 | - | - | - | - |
| Okla. | 48 | 44 | 2,086 | 2,584 | 2 | 1 | - | 6 | - | - |
| Tex. | 701 | 450 | 18,591 | 19,445 | - | 4 | - | 22 | - | - |
| MOUNTAIN | 328 | 345 | 10,645 | 11,120 | 30 | 34 | 24 | 23 | 1 | - |
| Mont. | 4 | 3 | 548 | 464 | 1 | 1 | 4 | 2 | - | - |
| Idaho | 6 | 5 | 642 | 510 | 9 | 5 | 1 | 3 | - | - |
| Wyo. | 2 | - | 219 | 206 | 1 | - | - | - | 1 | - |
| Colo. | 64 | 82 | 1,137 | 3,238 | 8 | 12 | 2 | 9 | - | - |
| N. Mex. | 11 | 30 | 1,989 | 1,593 | 3 | 8 | 2 | 1 | - | - |
| Ariz. | 148 | 123 | 3,124 | 3,434 | 4 | 1 | 4 | 5 | - | - |
| Utah | 18 | 34 | 1,503 | 279 | 2 | 7 | 5 | 2 | - | - |
| Nev. | 75 | 68 | 1,483 | 1,396 | 2 | - | 6 | 1 | - | - |
| PACIFIC | 1,355 | 1,366 | 28,642 | 32,075 | 73 | 67 | 45 | 46 | 1 | 2 |
| Wash. | 147 | 150 | 3,680 | 3,714 | 15 | U | 7 | 9 | - | - |
| Oreg. | 129 | 52 | 1,798 | 1,961 | 8 | 8 | 15 | 3 | 1 | 2 |
| Calif. | 1,064 | 1,144 | 21,265 | 24,587 | 49 | 59 | 20 | 30 | - | - |
| Alaska | 2 | 8 | 913 | 691 | - | - | - | - | - | - |
| Hawaii | 13 | 12 | 986 | 1,122 | 1 | - | 3 | 4 | - | - |
| Guam | 1 | 6 | - | - | - | - | N | N | - | - |
| P.R. | 273 | 326 | - | 1,171 | - | - | - | - | - | - |
| V.I. | 53 | 1 | - | 53 | - | - | - | - | - | - |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | 2 | U | 37 | U | - | U | - | U | - | U |

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

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 31, 2002.

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | *Escherichia coli* Shiga Toxin Positive, Not Serogrouped | | Giardiasis | Gonorrhea | | *Haemophilus influenzae*, Invasive | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | All Ages, All Serotypes | | Age <5 Years Serotype B | |
| | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 1 | 3 | 3,046 | 76,358 | 90,935 | 423 | 461 | 3 | 7 |
| NEW ENGLAND | - | - | 344 | 2,062 | 1,641 | 32 | 15 | - | 1 |
| Maine | - | - | 44 | 20 | 43 | 1 | 1 | - | - |
| N.H. | - | - | 16 | 34 | 34 | 4 | - | - | - |
| Vt. | - | - | 26 | 25 | 24 | 3 | - | - | - |
| Mass. | - | - | 147 | 976 | 725 | 16 | 13 | - | 1 |
| R.I. | - | - | 18 | 255 | 201 | - | - | - | - |
| Conn. | - | - | 93 | 752 | 614 | 8 | 1 | - | - |
| MID. ATLANTIC | - | - | 494 | 6,677 | 9,678 | 53 | 67 | 1 | - |
| Upstate N.Y. | - | - | 115 | 988 | 1,946 | 20 | 12 | 1 | - |
| N.Y. City | - | - | 249 | 3,202 | 3,336 | 20 | 20 | - | - |
| N.J. | - | - | - | 560 | 1,307 | 9 | 29 | - | - |
| Pa. | - | - | 130 | 1,927 | 3,089 | 4 | 6 | - | - |
| E.N. CENTRAL | 1 | 2 | 595 | 13,539 | 19,131 | 61 | 71 | 1 | 1 |
| Ohio | 1 | 2 | 229 | 2,277 | 5,268 | 36 | 24 | - | 1 |
| Ind. | - | - | - | 2,035 | 1,843 | 14 | 10 | - | - |
| Ill. | - | - | 94 | 4,501 | 5,978 | - | 27 | - | - |
| Mich. | - | - | 196 | 3,879 | 4,457 | 6 | 3 | 1 | - |
| Wis. | - | - | 76 | 847 | 1,585 | 5 | 7 | - | - |
| W.N. CENTRAL | - | - | 379 | 3,621 | 4,276 | 14 | 14 | - | - |
| Minn. | - | - | 163 | 708 | 712 | 11 | 8 | - | - |
| Iowa | - | - | 61 | 134 | 289 | 1 | - | - | - |
| Mo. | - | - | 102 | 1,859 | 2,067 | 2 | 6 | - | - |
| N. Dak. | - | - | 3 | 12 | 8 | - | - | - | - |
| S. Dak. | - | - | 17 | 72 | 56 | - | - | - | - |
| Nebr. | - | - | - | 118 | 378 | - | - | - | - |
| Kans. | - | - | 33 | 718 | 766 | - | - | - | - |
| S. ATLANTIC | - | - | 615 | 22,016 | 23,691 | 121 | 147 | - | 1 |
| Del. | - | - | 12 | 447 | 439 | - | - | - | - |
| Md. | - | - | 28 | 2,061 | 2,285 | 27 | 35 | - | - |
| D.C. | - | - | 12 | 681 | 856 | - | - | - | - |
| Va. | - | - | 36 | 2,857 | 2,489 | 8 | 9 | - | - |
| W. Va. | - | - | 8 | 257 | 131 | 1 | 4 | - | 1 |
| N.C. | - | - | - | 4,379 | 4,644 | 11 | 20 | - | - |
| S.C. | - | - | 6 | 1,761 | 3,584 | 5 | 2 | - | - |
| Ga. | - | - | 226 | 4,337 | 4,513 | 43 | 40 | - | - |
| Fla. | - | - | 287 | 5,236 | 4,750 | 26 | 37 | - | - |
| E.S. CENTRAL | - | 1 | 78 | 7,628 | 8,671 | 18 | 24 | 1 | - |
| Ky. | - | 1 | - | 835 | 932 | 2 | 1 | - | - |
| Tenn. | - | - | 33 | 2,332 | 2,636 | 10 | 10 | - | - |
| Ala. | - | - | 45 | 2,888 | 2,947 | 5 | 12 | 1 | - |
| Miss. | - | - | - | 1,573 | 2,156 | 1 | 1 | - | - |
| W.S. CENTRAL | - | - | 14 | 12,060 | 14,035 | 21 | 10 | - | 1 |
| Ark. | - | - | 14 | 873 | 1,458 | 1 | - | - | - |
| La. | - | - | - | 3,020 | 3,206 | 1 | 2 | - | - |
| Okla. | - | - | - | 936 | 1,230 | 19 | 7 | - | - |
| Tex. | - | - | - | 7,231 | 8,141 | - | 1 | - | 1 |
| MOUNTAIN | - | - | 302 | 2,576 | 2,687 | 58 | 70 | - | 2 |
| Mont. | - | - | 17 | 33 | 25 | - | - | - | - |
| Idaho | - | - | 9 | 28 | 26 | 1 | 1 | - | - |
| Wyo. | - | - | 2 | 16 | 16 | 1 | - | - | - |
| Colo. | - | - | 111 | 766 | 899 | 14 | 14 | - | - |
| N. Mex. | - | - | 34 | 368 | 266 | 13 | 10 | - | - |
| Ariz. | - | - | 46 | 782 | 924 | 19 | 37 | - | 1 |
| Utah | - | - | 50 | 117 | 26 | 8 | 1 | - | - |
| Nev. | - | - | 33 | 466 | 505 | 2 | 7 | - | 1 |
| PACIFIC | - | - | 225 | 6,179 | 7,125 | 45 | 43 | - | 1 |
| Wash. | - | - | 59 | 830 | 835 | - | 1 | - | - |
| Oreg. | - | - | 115 | 245 | 337 | 27 | 4 | - | - |
| Calif. | - | - | - | 4,814 | 5,689 | 6 | 24 | - | 1 |
| Alaska | - | - | 21 | 161 | 85 | 1 | 1 | - | - |
| Hawaii | - | - | 30 | 129 | 179 | 11 | 13 | - | - |
| Guam | - | - | - | - | - | - | - | - | - |
| P.R. | - | - | - | - | 291 | - | - | - | - |
| V.I. | - | - | - | - | 6 | - | - | - | - |
| Amer. Samoa | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | U | - | 3 | U | - | U | - | U |

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | *Haemophilus influenzae*, Invasive | | | | Hepatitis (Viral, Acute), By Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Age <5 Years | | | | | | | | | |
| | Non-Serotype B | | Unknown Serotype | | A | | B | | C; Non-A, Non-B | |
| | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 74 | 83 | 4 | 8 | 2,205 | 3,287 | 1,493 | 1,902 | 399 | 1,337 |
| NEW ENGLAND | 5 | 4 | - | - | 98 | 110 | 49 | 34 | 7 | 19 |
| Maine | - | - | - | - | 4 | 1 | 1 | 1 | - | - |
| N.H. | - | - | - | - | 6 | 4 | 5 | 5 | - | - |
| Vt. | - | - | - | - | - | 2 | 2 | 2 | 4 | 5 |
| Mass. | 3 | 4 | - | - | 48 | 40 | 28 | 5 | 3 | 14 |
| R.I. | - | - | - | - | 4 | 4 | 1 | 6 | - | - |
| Conn. | 2 | - | - | - | 36 | 59 | 12 | 15 | - | - |
| MID. ATLANTIC | 8 | 11 | - | - | 239 | 374 | 306 | 413 | 109 | 627 |
| Upstate N.Y. | 4 | - | - | - | 21 | 56 | 19 | 29 | 5 | 9 |
| N.Y. City | 3 | 4 | - | - | 114 | 105 | 175 | 172 | - | - |
| N.J. | 1 | 3 | - | - | 36 | 161 | 59 | 135 | 101 | 599 |
| Pa. | - | 4 | - | - | 68 | 52 | 53 | 77 | 3 | 19 |
| E.N. CENTRAL | 9 | 15 | - | - | 275 | 719 | 230 | 176 | 30 | 79 |
| Ohio | 4 | 3 | - | - | 86 | 75 | 29 | 33 | 4 | 4 |
| Ind. | 4 | 3 | - | - | 13 | 24 | 6 | 4 | - | - |
| Ill. | - | 7 | - | - | 83 | 492 | 20 | 14 | 3 | 20 |
| Mich. | - | - | - | - | 64 | 102 | 175 | 125 | 23 | 55 |
| Wis. | 1 | 2 | - | - | 29 | 26 | - | - | - | - |
| W.N. CENTRAL | 1 | 1 | 2 | 1 | 99 | 127 | 54 | 56 | 117 | 350 |
| Minn. | 1 | 1 | 1 | - | 14 | 7 | 2 | 4 | - | - |
| Iowa | - | - | - | - | 26 | 10 | 6 | 6 | 1 | - |
| Mo. | - | - | 1 | 1 | 19 | 40 | 38 | 34 | 116 | 347 |
| N. Dak. | - | - | - | - | - | - | - | - | - | - |
| S. Dak. | - | - | - | - | 3 | 1 | - | 1 | - | - |
| Nebr. | - | - | - | - | - | 17 | - | 5 | - | 1 |
| Kans. | - | - | - | - | 37 | 52 | 8 | 6 | - | 2 |
| S. ATLANTIC | 19 | 24 | - | 4 | 739 | 561 | 420 | 442 | 36 | 29 |
| Del. | - | - | - | - | 2 | 2 | 1 | 4 | 3 | 1 |
| Md. | - | 3 | - | - | 86 | 67 | 34 | 39 | 6 | 7 |
| D.C. | - | - | - | - | 29 | 13 | 5 | 3 | - | - |
| Va. | 2 | 4 | - | - | 24 | 38 | 54 | 36 | - | - |
| W. Va. | - | - | - | - | 6 | 1 | 7 | 3 | - | 1 |
| N.C. | 1 | 1 | - | 4 | 91 | 34 | 46 | 79 | 6 | 7 |
| S.C. | 1 | - | - | - | 15 | 17 | 17 | 1 | 3 | 2 |
| Ga. | 9 | 10 | - | - | 176 | 242 | 152 | 189 | 2 | 1 |
| Fla. | 6 | 6 | - | - | 310 | 147 | 104 | 88 | 16 | 10 |
| E.S. CENTRAL | 4 | 4 | - | 1 | 48 | 80 | 44 | 113 | 49 | 24 |
| Ky. | - | - | - | - | 22 | 10 | 11 | 18 | 1 | 3 |
| Tenn. | 2 | 1 | - | - | - | 35 | - | 38 | 10 | 16 |
| Ala. | 2 | 2 | - | 1 | 8 | 30 | 15 | 29 | 2 | 1 |
| Miss. | - | 1 | - | - | 18 | 5 | 18 | 28 | 36 | 4 |
| W.S. CENTRAL | 4 | 1 | - | - | 30 | 548 | 94 | 216 | 3 | 158 |
| Ark. | - | - | - | - | 11 | 16 | 26 | 25 | - | 2 |
| La. | - | - | - | - | 6 | 27 | 5 | 29 | 3 | 74 |
| Okla. | 4 | 1 | - | - | 12 | 51 | 1 | 24 | - | 1 |
| Tex. | - | - | - | - | 1 | 454 | 62 | 138 | - | 81 |
| MOUNTAIN | 15 | 8 | 1 | 1 | 173 | 228 | 106 | 137 | 20 | 20 |
| Mont. | - | - | - | - | 5 | 4 | 2 | 1 | - | - |
| Idaho | - | - | - | - | - | 25 | - | 4 | - | 1 |
| Wyo. | - | - | - | - | 3 | 1 | 6 | - | 4 | 3 |
| Colo. | 2 | - | - | - | 29 | 24 | 27 | 29 | 11 | 4 |
| N. Mex. | 4 | 4 | - | 1 | 4 | 7 | 11 | 35 | - | 8 |
| Ariz. | 5 | 4 | - | - | 91 | 114 | 40 | 50 | - | 1 |
| Utah | 3 | - | - | - | 19 | 20 | 10 | 5 | - | - |
| Nev. | 1 | - | 1 | - | 22 | 33 | 10 | 13 | 5 | 3 |
| PACIFIC | 9 | 15 | 1 | 1 | 504 | 540 | 190 | 315 | 28 | 31 |
| Wash. | - | - | - | 1 | 38 | 20 | 11 | 21 | 3 | 9 |
| Oreg. | 4 | - | - | - | 34 | 11 | 34 | 12 | 7 | 2 |
| Calif. | 3 | 14 | 1 | - | 426 | 498 | 141 | 272 | 18 | 20 |
| Alaska | 1 | - | - | - | 6 | 10 | 2 | 3 | - | - |
| Hawaii | 1 | 1 | - | - | - | 1 | 2 | 7 | - | - |
| Guam | - | - | - | - | - | - | - | - | - | - |
| P.R. | - | - | - | - | 24 | 28 | 14 | 57 | - | 1 |
| V.I. | - | - | - | - | - | - | - | - | - | - |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | U | - | U | - | U | 4 | U | - | U |

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | Legionellosis | | Listeriosis | | Lyme Disease | | Malaria | | Measles Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 150 | 228 | 88 | 113 | 697 | 1,120 | 232 | 298 | 1† | 39§ |
| NEW ENGLAND | 6 | 7 | 10 | 10 | 46 | 177 | 13 | 25 | - | 5 |
| Maine | 1 | - | 2 | - | - | - | 1 | 1 | - | - |
| N.H. | 1 | 1 | 2 | - | 14 | 2 | 4 | 1 | - | - |
| Vt. | - | 3 | - | - | 1 | 1 | - | - | - | 1 |
| Mass. | 2 | 2 | 4 | 6 | 28 | 60 | 3 | 11 | - | 3 |
| R.I. | - | - | - | - | 3 | - | - | - | - | - |
| Conn. | 2 | 1 | 2 | 4 | - | 114 | 5 | 12 | - | 1 |
| MID. ATLANTIC | 22 | 54 | 13 | 21 | 496 | 746 | 43 | 73 | - | 5 |
| Upstate N.Y. | 3 | 11 | 6 | 3 | 299 | 183 | 7 | 10 | - | 4 |
| N.Y. City | 6 | 4 | 3 | 4 | 22 | 10 | 26 | 39 | - | - |
| N.J. | 1 | 8 | - | 10 | 32 | 133 | 6 | 16 | - | - |
| Pa. | 12 | 31 | 4 | 4 | 143 | 420 | 4 | 8 | - | 1 |
| E.N. CENTRAL | 53 | 64 | 14 | 13 | 9 | 34 | 29 | 47 | - | 7 |
| Ohio | 31 | 28 | 8 | 1 | 8 | 5 | 7 | 5 | - | 2 |
| Ind. | 3 | 4 | - | 1 | 1 | - | 1 | 8 | - | 2 |
| Ill. | - | 8 | - | 4 | - | 4 | 4 | 14 | - | 3 |
| Mich. | 15 | 14 | 4 | 5 | - | - | 13 | 13 | - | - |
| Wis. | 4 | 10 | 2 | 2 | U | 25 | 4 | 7 | - | - |
| W.N. CENTRAL | 7 | 12 | 4 | 2 | 11 | 16 | 17 | 7 | - | 3 |
| Minn. | 1 | 1 | - | - | 5 | 10 | 7 | 1 | - | 1 |
| Iowa | - | 3 | 1 | - | 3 | 1 | 2 | 1 | - | - |
| Mo. | 5 | 5 | 1 | 1 | 3 | 4 | 5 | 3 | - | 2 |
| N. Dak. | - | - | 1 | - | - | - | - | - | - | - |
| S. Dak. | 1 | - | - | - | - | - | - | - | - | - |
| Nebr. | - | 2 | - | - | - | - | - | 1 | - | - |
| Kans. | - | 1 | 1 | 1 | - | 1 | 3 | 1 | - | - |
| S. ATLANTIC | 33 | 26 | 13 | 14 | 99 | 101 | 82 | 75 | 1 | 3 |
| Del. | 3 | - | - | - | 5 | 6 | 1 | 1 | - | - |
| Md. | 4 | 7 | 3 | 2 | 56 | 82 | 21 | 25 | - | 3 |
| D.C. | - | 1 | - | - | 5 | 6 | 2 | 4 | - | - |
| Va. | 2 | 4 | 1 | 2 | 1 | 4 | 5 | 11 | - | - |
| W. Va. | N | N | - | 1 | - | 1 | - | - | - | - |
| N.C. | 3 | 2 | 1 | - | 11 | 2 | 7 | 1 | - | - |
| S.C. | 3 | - | 2 | - | 1 | - | 2 | 2 | - | - |
| Ga. | 3 | 3 | 3 | 3 | - | - | 33 | 20 | - | - |
| Fla. | 15 | 9 | 3 | 6 | 20 | - | 11 | 11 | 1 | - |
| E.S. CENTRAL | 5 | 20 | 5 | 7 | 2 | 2 | 3 | 8 | - | - |
| Ky. | 3 | 6 | 1 | 1 | 1 | 2 | - | 2 | - | - |
| Tenn. | - | 7 | 2 | 3 | 1 | - | 1 | 3 | - | - |
| Ala. | 2 | 3 | 2 | 3 | - | - | 1 | 3 | - | - |
| Miss. | - | 4 | - | - | - | - | 1 | - | - | - |
| W.S. CENTRAL | 1 | 4 | 3 | 12 | 2 | 24 | 2 | 3 | - | 1 |
| Ark. | - | - | - | 1 | - | - | - | - | - | - |
| La. | - | 2 | - | - | 1 | 2 | 2 | 1 | - | - |
| Okla. | 1 | 1 | 3 | - | - | - | - | 1 | - | - |
| Tex. | - | 1 | - | 11 | 1 | 22 | - | 1 | - | 1 |
| MOUNTAIN | 11 | 12 | 8 | 7 | 6 | 1 | 9 | 17 | - | 1 |
| Mont. | 1 | - | - | - | - | - | - | 1 | - | - |
| Idaho | - | - | - | - | 1 | - | - | 1 | - | 1 |
| Wyo. | 3 | 1 | - | - | - | - | - | - | - | - |
| Colo. | 4 | 4 | 2 | 1 | 2 | - | 4 | 9 | - | - |
| N. Mex. | 1 | 1 | - | 2 | 1 | - | - | 1 | - | - |
| Ariz. | - | 4 | 4 | 1 | 1 | - | 2 | 1 | - | - |
| Utah | 2 | - | 2 | 1 | 1 | - | 2 | 2 | - | - |
| Nev. | - | 2 | - | 2 | - | 1 | 1 | 2 | - | - |
| PACIFIC | 12 | 29 | 18 | 27 | 26 | 19 | 34 | 43 | - | 14 |
| Wash. | 1 | 5 | 1 | 1 | - | 1 | 2 | 1 | - | - |
| Oreg. | N | N | 1 | 3 | 1 | 1 | 1 | 2 | - | 2 |
| Calif. | 11 | 20 | 16 | 23 | 25 | 17 | 28 | 37 | - | 10 |
| Alaska | - | 1 | - | - | - | - | 1 | 1 | - | - |
| Hawaii | - | 3 | - | - | N | N | 2 | 2 | - | 2 |
| Guam | - | - | - | - | - | - | - | - | - | - |
| P.R. | - | 2 | - | - | N | N | - | 1 | - | - |
| V.I. | - | - | - | - | - | - | - | - | - | - |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | U | - | U | - | U | - | U | - | U |

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Of one case reported, zero was indigenous and one was imported from another country.
§ Of 39 cases reported, 16 were indigenous and 23 were imported from another country.

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | Meningococcal Disease | | Mumps | | Pertussis | | Rabies, Animal | |
|---|---|---|---|---|---|---|---|---|
| | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 446 | 961 | 74 | 46 | 1,151 | 1,470 | 994 | 1,547 |
| NEW ENGLAND | 38 | 51 | 4 | - | 189 | 164 | 189 | 134 |
| Maine | 2 | - | - | - | 3 | - | 12 | 18 |
| N.H. | 4 | 4 | 3 | - | 2 | 16 | 2 | 4 |
| Vt. | 3 | 4 | - | - | 31 | 22 | 39 | 26 |
| Mass. | 20 | 29 | 1 | - | 149 | 120 | 64 | 37 |
| R.I. | 2 | 1 | - | - | - | - | 4 | 14 |
| Conn. | 7 | 13 | - | - | 4 | 6 | 68 | 35 |
| MID. ATLANTIC | 33 | 113 | 9 | 3 | 46 | 108 | 83 | 89 |
| Upstate N.Y. | 9 | 28 | 1 | 1 | 21 | 67 | 43 | - |
| N.Y. City | 4 | 19 | 1 | 2 | 5 | 11 | 7 | 1 |
| N.J. | 6 | 42 | 1 | - | - | 2 | - | 31 |
| Pa. | 14 | 24 | 6 | - | 20 | 28 | 33 | 57 |
| E.N. CENTRAL | 64 | 114 | 9 | 5 | 190 | 160 | 3 | 8 |
| Ohio | 30 | 34 | 2 | 1 | 117 | 104 | 1 | - |
| Ind. | 11 | 4 | - | - | 15 | 5 | 1 | 1 |
| Ill. | - | 32 | 2 | 4 | 28 | 14 | 1 | - |
| Mich. | 15 | 27 | 5 | - | 22 | 17 | - | 3 |
| Wis. | 8 | 17 | - | - | 8 | 20 | - | 4 |
| W.N. CENTRAL | 44 | 54 | 6 | 2 | 150 | 44 | 78 | 90 |
| Minn. | 10 | 6 | - | - | 46 | - | 7 | 15 |
| Iowa | 5 | 11 | - | - | 48 | 7 | 9 | 14 |
| Mo. | 23 | 23 | 3 | - | 35 | 24 | 4 | 5 |
| N. Dak. | - | 2 | - | - | - | - | 1 | 14 |
| S. Dak. | 2 | 2 | - | - | 5 | 2 | 16 | 13 |
| Nebr. | - | 2 | - | - | - | 1 | - | - |
| Kans. | 4 | 8 | 3 | 2 | 16 | 10 | 41 | 29 |
| S. ATLANTIC | 94 | 162 | 12 | 4 | 98 | 66 | 489 | 532 |
| Del. | 3 | - | - | - | 1 | - | 3 | 10 |
| Md. | 3 | 21 | 2 | 2 | 12 | 10 | 75 | 88 |
| D.C. | - | - | - | - | - | - | - | - |
| Va. | 14 | 17 | 2 | 1 | 31 | 8 | 144 | 96 |
| W. Va. | - | 4 | - | - | 1 | 1 | 40 | 36 |
| N.C. | 11 | 39 | 1 | - | 13 | 23 | 146 | 143 |
| S.C. | 11 | 13 | 1 | 1 | 21 | 8 | 20 | 27 |
| Ga. | 14 | 27 | 2 | - | 10 | 9 | 59 | 85 |
| Fla. | 38 | 41 | 4 | - | 9 | 7 | 2 | 47 |
| E.S. CENTRAL | 21 | 60 | 4 | - | 40 | 31 | 34 | 115 |
| Ky. | 3 | 10 | 1 | - | 14 | 9 | 6 | 5 |
| Tenn. | 7 | 21 | 1 | - | 23 | 14 | 22 | 106 |
| Ala. | 9 | 22 | 1 | - | 3 | 5 | 6 | 4 |
| Miss. | 2 | 7 | 1 | - | - | 3 | - | - |
| W.S. CENTRAL | 17 | 204 | 4 | 7 | 122 | 71 | 26 | 410 |
| Ark. | 7 | 9 | - | 1 | 5 | 4 | - | - |
| La. | 3 | 40 | - | 2 | - | 1 | - | 2 |
| Okla. | 6 | 13 | - | - | 12 | 2 | 26 | 21 |
| Tex. | 1 | 142 | 4 | 4 | 105 | 64 | - | 387 |
| MOUNTAIN | 39 | 44 | 3 | 4 | 168 | 610 | 36 | 62 |
| Mont. | 1 | - | - | - | 2 | 3 | 4 | 5 |
| Idaho | 1 | 3 | 1 | - | 22 | 151 | - | - |
| Wyo. | - | - | - | 1 | 3 | - | 1 | 16 |
| Colo. | 13 | 17 | - | 1 | 86 | 133 | - | - |
| N. Mex. | 1 | 7 | - | 2 | 22 | 39 | - | 1 |
| Ariz. | 12 | 9 | - | - | 19 | 274 | 31 | 40 |
| Utah | 4 | 5 | 2 | - | 10 | 9 | - | - |
| Nev. | 7 | 3 | - | - | 4 | 1 | - | - |
| PACIFIC | 96 | 159 | 23 | 21 | 148 | 216 | 56 | 107 |
| Wash. | 15 | 25 | - | - | 79 | 27 | - | - |
| Oreg. | 17 | 6 | N | N | 14 | 5 | - | - |
| Calif. | 60 | 121 | 18 | 12 | 49 | 175 | 34 | 76 |
| Alaska | 1 | 1 | - | 1 | 3 | - | 22 | 31 |
| Hawaii | 3 | 6 | 5 | 8 | 3 | 9 | - | - |
| Guam | - | - | - | - | - | - | - | - |
| P.R. | 1 | 1 | - | - | - | 2 | 18 | 32 |
| V.I. | - | - | - | - | - | - | - | - |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | U | - | U | - | U | - | U |

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | Rocky Mountain Spotted Fever | | Rubella | | | | Salmonellosis | |
|---|---|---|---|---|---|---|---|---|
| | | | Rubella | | Congenital Rubella | | | |
| | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 76 | 22 | 1 | 5 | 1 | - | 5,816 | 6,590 |
| NEW ENGLAND | - | - | - | - | - | - | 343 | 446 |
| Maine | - | - | - | - | - | - | 46 | 27 |
| N.H. | - | - | - | - | - | - | 15 | 32 |
| Vt. | - | - | - | - | - | - | 16 | 20 |
| Mass. | - | - | - | - | - | - | 181 | 273 |
| R.I. | - | - | - | - | - | - | 5 | 21 |
| Conn. | - | - | - | - | - | - | 80 | 73 |
| MID. ATLANTIC | 6 | 1 | - | 3 | - | - | 608 | 1,038 |
| Upstate N.Y. | 1 | - | - | 1 | - | - | 154 | 172 |
| N.Y. City | - | - | - | 2 | - | - | 234 | 223 |
| N.J. | - | - | - | - | - | - | 76 | 389 |
| Pa. | 5 | 1 | - | - | - | - | 144 | 254 |
| E.N. CENTRAL | 3 | 2 | - | 1 | - | - | 990 | 906 |
| Ohio | 3 | - | - | - | - | - | 301 | 284 |
| Ind. | - | 1 | - | - | - | - | 50 | 61 |
| Ill. | - | 1 | - | 1 | - | - | 322 | 256 |
| Mich. | - | - | - | - | - | - | 206 | 157 |
| Wis. | - | - | - | - | - | - | 111 | 148 |
| W.N. CENTRAL | 8 | 3 | - | - | - | - | 460 | 387 |
| Minn. | - | - | - | - | - | - | 98 | 126 |
| Iowa | - | - | - | - | - | - | 67 | 56 |
| Mo. | 8 | 3 | - | - | - | - | 212 | 97 |
| N. Dak. | - | - | - | - | - | - | 5 | 1 |
| S. Dak. | - | - | - | - | - | - | 20 | 23 |
| Nebr. | - | - | - | - | - | - | - | 32 |
| Kans. | - | - | - | - | - | - | 58 | 52 |
| S. ATLANTIC | 53 | 12 | 1 | - | - | - | 1,658 | 1,477 |
| Del. | - | - | - | - | - | - | 11 | 20 |
| Md. | 5 | 2 | 1 | - | - | - | 140 | 141 |
| D.C. | - | - | - | - | - | - | 19 | 18 |
| Va. | 1 | - | - | - | - | - | 143 | 150 |
| W. Va. | - | - | - | - | - | - | 10 | 9 |
| N.C. | 31 | 7 | - | - | - | - | 233 | 258 |
| S.C. | 6 | 1 | - | - | - | - | 77 | 146 |
| Ga. | 9 | - | - | - | - | - | 460 | 391 |
| Fla. | 1 | 2 | - | - | - | - | 565 | 344 |
| E.S. CENTRAL | 5 | 3 | - | - | - | - | 332 | 349 |
| Ky. | - | - | - | - | - | - | 46 | 63 |
| Tenn. | 4 | 2 | - | - | - | - | 102 | 93 |
| Ala. | 1 | 1 | - | - | - | - | 109 | 130 |
| Miss. | - | - | - | - | - | - | 75 | 63 |
| W.S. CENTRAL | - | - | - | - | - | - | 124 | 686 |
| Ark. | - | - | - | - | - | - | 49 | 55 |
| La. | - | - | - | - | - | - | 13 | 147 |
| Okla. | - | - | - | - | - | - | 60 | 29 |
| Tex. | - | - | - | - | - | - | 2 | 455 |
| MOUNTAIN | 1 | 1 | - | - | - | - | 409 | 395 |
| Mont. | - | - | - | - | - | - | 10 | 12 |
| Idaho | - | 1 | - | - | - | - | 23 | 18 |
| Wyo. | - | - | - | - | - | - | 11 | 20 |
| Colo. | - | - | - | - | - | - | 117 | 106 |
| N. Mex. | - | - | - | - | - | - | 61 | 51 |
| Ariz. | - | - | - | - | - | - | 100 | 123 |
| Utah | - | - | - | - | - | - | 38 | 41 |
| Nev. | 1 | - | - | - | - | - | 49 | 24 |
| PACIFIC | - | - | - | 1 | 1 | - | 892 | 906 |
| Wash. | - | - | - | - | - | - | 41 | 84 |
| Oreg. | - | - | - | - | - | - | 63 | 20 |
| Calif. | - | - | - | - | - | - | 725 | 713 |
| Alaska | - | - | - | - | - | - | 15 | 10 |
| Hawaii | - | - | - | 1 | 1 | - | 48 | 79 |
| Guam | - | - | - | - | - | - | - | - |
| P.R. | - | - | - | - | - | - | 41 | 193 |
| V.I. | - | - | - | - | - | - | - | - |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | U | - | U | - | U | 2 | U |

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | Shigellosis | | Streptococcal Disease, Invasive, Group A | | *Streptococcus pneumoniae*, Drug Resistant, Invasive | | *Streptococcus pneumoniae*, Invasive (<5 Years) | |
|---|---|---|---|---|---|---|---|---|
| | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 3,015 | 3,364 | 1,051 | 1,281 | 788 | 1,027 | 38 | 41 |
| NEW ENGLAND | 60 | 56 | 50 | 45 | 1 | 4 | 1 | 1 |
| Maine | 2 | 1 | 14 | 7 | - | - | - | - |
| N.H. | 3 | 1 | 16 | 5 | - | - | - | - |
| Vt. | - | 1 | 2 | 6 | 1 | 4 | 1 | - |
| Mass. | 42 | 41 | 18 | 25 | - | - | - | - |
| R.I. | - | 2 | - | 2 | - | - | - | 1 |
| Conn. | 13 | 10 | - | - | - | - | - | - |
| MID. ATLANTIC | 128 | 433 | 123 | 208 | 14 | 54 | 11 | 34 |
| Upstate N.Y. | 22 | 116 | 54 | 79 | 14 | 53 | 11 | 34 |
| N.Y. City | 67 | 110 | 34 | 72 | U | U | - | - |
| N.J. | 13 | 129 | 22 | 46 | - | - | - | - |
| Pa. | 26 | 78 | 13 | 11 | - | 1 | - | - |
| E.N. CENTRAL | 392 | 478 | 160 | 307 | 49 | 69 | 9 | 5 |
| Ohio | 237 | 115 | 64 | 73 | - | - | 1 | - |
| Ind. | 14 | 69 | 7 | 7 | 49 | 69 | 8 | 5 |
| Ill. | 72 | 147 | 1 | 119 | - | - | - | - |
| Mich. | 44 | 89 | 88 | 87 | - | - | - | - |
| Wis. | 25 | 58 | - | 21 | - | - | - | - |
| W.N. CENTRAL | 260 | 357 | 81 | 119 | 185 | 15 | 14 | 1 |
| Minn. | 44 | 155 | 42 | 44 | 138 | - | 14 | - |
| Iowa | 26 | 59 | - | - | - | - | - | - |
| Mo. | 38 | 69 | 22 | 28 | 4 | 5 | - | - |
| N. Dak. | - | 9 | - | 4 | - | 1 | - | 1 |
| S. Dak. | 114 | 15 | 3 | 2 | 1 | - | - | - |
| Nebr. | - | 21 | - | 12 | - | 3 | - | - |
| Kans. | 38 | 29 | 14 | 29 | 42 | 6 | - | - |
| S. ATLANTIC | 1,306 | 486 | 245 | 249 | 454 | 720 | 3 | - |
| Del. | 3 | 3 | - | 1 | 3 | - | - | - |
| Md. | 151 | 29 | 32 | 19 | - | - | - | - |
| D.C. | 17 | 16 | 3 | - | 26 | 2 | 1 | - |
| Va. | 264 | 30 | 27 | 45 | - | - | - | - |
| W. Va. | 2 | 4 | 2 | 8 | 15 | 14 | - | - |
| N.C. | 68 | 102 | 51 | 42 | - | - | - | - |
| S.C. | 14 | 29 | 17 | 2 | 66 | 113 | 2 | - |
| Ga. | 515 | 120 | 68 | 91 | 132 | 274 | - | - |
| Fla. | 272 | 153 | 45 | 41 | 212 | 317 | - | - |
| E.S. CENTRAL | 255 | 264 | 39 | 29 | 56 | 102 | - | - |
| Ky. | 45 | 94 | 5 | 13 | 5 | 10 | - | - |
| Tenn. | 16 | 26 | 34 | 16 | 51 | 91 | - | - |
| Ala. | 108 | 59 | - | - | - | 1 | - | - |
| Miss. | 86 | 85 | - | - | - | - | - | - |
| W.S. CENTRAL | 94 | 623 | 12 | 132 | 11 | 42 | - | - |
| Ark. | 24 | 139 | - | - | 2 | 10 | - | - |
| La. | 11 | 60 | - | - | 9 | 32 | - | - |
| Okla. | 58 | 4 | 11 | 20 | - | - | - | - |
| Tex. | 1 | 420 | 1 | 112 | - | - | - | - |
| MOUNTAIN | 113 | 175 | 179 | 128 | 18 | 20 | - | - |
| Mont. | - | - | - | - | - | - | - | - |
| Idaho | 2 | 5 | 3 | 2 | - | - | - | - |
| Wyo. | 1 | - | 3 | 2 | 7 | 2 | - | - |
| Colo. | 31 | 36 | 94 | 57 | - | - | - | - |
| N. Mex. | 17 | 35 | 35 | 30 | 10 | 18 | - | - |
| Ariz. | 45 | 76 | 44 | 35 | 1 | - | - | - |
| Utah | 10 | 9 | - | 2 | - | - | - | - |
| Nev. | 7 | 14 | - | - | - | - | - | - |
| PACIFIC | 407 | 492 | 162 | 64 | - | 1 | - | - |
| Wash. | 15 | 49 | 26 | - | - | - | - | - |
| Oreg. | 30 | 8 | - | - | - | - | - | - |
| Calif. | 346 | 421 | 120 | 49 | - | - | - | - |
| Alaska | 1 | 2 | - | - | - | - | - | - |
| Hawaii | 15 | 12 | 16 | 15 | - | 1 | - | - |
| Guam | - | - | - | - | - | - | - | - |
| P.R. | 1 | 6 | - | - | - | - | - | - |
| V.I. | - | - | - | - | - | - | - | - |
| Amer. Samoa | U | U | U | U | - | - | U | U |
| C.N.M.I. | - | U | - | U | - | - | - | U |

N: Not notifiable. U: Unavailable. - : No reported cases.
*Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

**TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending April 6, 2002, and April 7, 2001 (14th Week)***

| Reporting Area | Syphilis | | | | Tuberculosis | | Typhoid Fever | |
|---|---|---|---|---|---|---|---|---|
| | Primary & Secondary | | Congenital† | | | | | |
| | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 | Cum. 2002 | Cum. 2001 |
| UNITED STATES | 1,441 | 1,479 | 18 | 128 | 1,756 | 2,687 | 57 | 72 |
| NEW ENGLAND | 22 | 9 | - | 1 | 82 | 90 | 6 | 4 |
| Maine | - | - | - | - | - | - | - | - |
| N.H. | - | - | - | - | 4 | 7 | - | - |
| Vt. | - | - | - | - | - | 2 | - | - |
| Mass. | 13 | 6 | - | 1 | 38 | 47 | 5 | 4 |
| R.I. | 2 | - | - | - | 11 | 9 | - | - |
| Conn. | 7 | 3 | - | - | 29 | 25 | 1 | - |
| MID. ATLANTIC | 147 | 114 | 2 | 21 | 358 | 417 | 14 | 29 |
| Upstate N.Y. | 4 | 4 | 1 | 13 | 39 | - | 3 | 4 |
| N.Y. City | 91 | 68 | - | - | 246 | 239 | 8 | 4 |
| N.J. | 33 | 18 | 1 | 5 | 12 | 110 | 3 | 21 |
| Pa. | 19 | 24 | - | 3 | 61 | 68 | - | - |
| E.N. CENTRAL | 295 | 245 | - | 23 | 241 | 242 | 9 | 4 |
| Ohio | 41 | 21 | - | 1 | 43 | 54 | 4 | 1 |
| Ind. | 16 | 45 | - | 3 | 29 | 21 | 1 | - |
| Ill. | 73 | 80 | - | 17 | 119 | 116 | - | 1 |
| Mich. | 160 | 92 | - | 2 | 44 | 33 | 3 | 1 |
| Wis. | 5 | 7 | - | - | 6 | 18 | 1 | 1 |
| W.N. CENTRAL | 13 | 22 | - | 3 | 96 | 100 | 1 | 4 |
| Minn. | 3 | 12 | - | - | 51 | 53 | - | - |
| Iowa | - | - | - | - | - | 9 | - | - |
| Mo. | 5 | 5 | - | 1 | 37 | 23 | 1 | 4 |
| N. Dak. | - | - | - | - | - | - | - | - |
| S. Dak. | - | - | - | - | 5 | 2 | - | - |
| Nebr. | 3 | - | - | - | - | 13 | - | - |
| Kans. | 2 | 5 | - | 2 | 3 | - | - | - |
| S. ATLANTIC | 384 | 552 | 2 | 32 | 373 | 522 | 10 | 10 |
| Del. | 5 | 4 | - | - | - | - | - | - |
| Md. | 31 | 73 | - | 1 | 36 | 41 | 1 | 3 |
| D.C. | 18 | 11 | - | 1 | - | 22 | - | - |
| Va. | 8 | 39 | - | 1 | 26 | 51 | - | 1 |
| W. Va. | - | - | - | - | 8 | 9 | - | - |
| N.C. | 91 | 135 | - | 2 | 68 | 68 | - | 1 |
| S.C. | 33 | 79 | - | 8 | 27 | 48 | - | - |
| Ga. | 56 | 75 | - | 8 | 42 | 96 | 6 | 3 |
| Fla. | 142 | 136 | 2 | 11 | 166 | 187 | 3 | 2 |
| E.S. CENTRAL | 169 | 151 | 1 | 7 | 178 | 189 | 1 | - |
| Ky. | 19 | 12 | - | - | 26 | 19 | 1 | - |
| Tenn. | 67 | 83 | - | 4 | 76 | 63 | - | - |
| Ala. | 63 | 26 | 1 | 2 | 53 | 74 | - | - |
| Miss. | 20 | 30 | - | 1 | 23 | 33 | - | - |
| W.S. CENTRAL | 182 | 193 | 13 | 22 | 56 | 418 | - | 4 |
| Ark. | 6 | 14 | - | 2 | 19 | 34 | - | - |
| La. | 35 | 38 | - | - | - | - | - | - |
| Okla. | 14 | 23 | - | 1 | 37 | 18 | - | - |
| Tex. | 127 | 118 | 13 | 19 | - | 366 | - | 4 |
| MOUNTAIN | 66 | 49 | - | 5 | 43 | 105 | 4 | 2 |
| Mont. | - | - | - | - | - | - | - | 1 |
| Idaho | 1 | - | - | - | - | 4 | - | - |
| Wyo. | - | - | - | - | 1 | - | - | - |
| Colo. | - | 5 | - | - | 11 | 25 | 2 | - |
| N. Mex. | 13 | 4 | - | - | 7 | 14 | - | - |
| Ariz. | 46 | 32 | - | 5 | 17 | 36 | - | - |
| Utah | 5 | 6 | - | - | 5 | 5 | 1 | - |
| Nev. | 1 | 2 | - | - | 2 | 21 | 1 | 1 |
| PACIFIC | 163 | 144 | - | 14 | 329 | 604 | 12 | 15 |
| Wash. | 16 | 19 | - | - | 55 | 46 | - | 1 |
| Oreg. | 4 | 3 | - | - | 19 | 22 | 2 | - |
| Calif. | 142 | 119 | - | 14 | 204 | 483 | 10 | 13 |
| Alaska | - | - | - | - | 19 | 13 | - | - |
| Hawaii | 1 | 3 | - | - | 32 | 40 | - | 1 |
| Guam | - | - | - | - | - | - | - | - |
| P.R. | - | 111 | - | 4 | 8 | 23 | - | - |
| V.I. | - | - | - | - | - | - | - | - |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | 2 | U | - | U | 11 | U | - | U |

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Updated from reports to the Division of STD Prevention, NCHSTP.

**TABLE III. Deaths in 122 U.S. cities,* week ending April 6, 2002 (14th Week)**

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | ≥65 | 45-64 | 25-44 | 1-24 | <1 | |
| NEW ENGLAND | 400 | 288 | 80 | 22 | 6 | 4 | 8 |
| Boston, Mass. | U | U | U | U | U | U | U |
| Bridgeport, Conn. | 35 | 24 | 8 | 2 | - | 1 | 2 |
| Cambridge, Mass. | 9 | 6 | 3 | - | - | - | - |
| Fall River, Mass. | 33 | 25 | 7 | 1 | - | - | 5 |
| Hartford, Conn. | 44 | 29 | 12 | 2 | 1 | - | 5 |
| Lowell, Mass. | 25 | 18 | 3 | 3 | - | 1 | 4 |
| Lynn, Mass. | 16 | 13 | 2 | 1 | - | - | 1 |
| New Bedford, Mass. | 35 | 30 | 4 | - | 1 | - | 4 |
| New Haven, Conn. | 42 | 27 | 9 | 4 | 1 | 1 | 3 |
| Providence, R.I. | U | U | U | U | U | U | U |
| Somerville, Mass. | 6 | 4 | 1 | 1 | - | - | - |
| Springfield, Mass. | 48 | 33 | 10 | 3 | 2 | - | 9 |
| Waterbury, Conn. | 27 | 18 | 7 | 1 | 1 | - | 6 |
| Worcester, Mass. | 80 | 61 | 14 | 4 | - | 1 | 9 |
| MID. ATLANTIC | 2,224 | 1,554 | 444 | 145 | 37 | 43 | 102 |
| Albany, N.Y. | 42 | 36 | 5 | 1 | - | - | 3 |
| Allentown, Pa. | 16 | 12 | 4 | - | - | - | - |
| Buffalo, N.Y. | 92 | 72 | 12 | 4 | 2 | 2 | 13 |
| Camden, N.J. | 32 | 16 | 9 | 2 | 1 | 4 | 3 |
| Elizabeth, N.J. | 23 | 16 | 5 | 1 | - | 1 | 1 |
| Erie, Pa. | 44 | 33 | 10 | 1 | - | - | 2 |
| Jersey City, N.J. | 45 | 23 | 13 | 2 | 1 | 6 | - |
| New York City, N.Y. | 1,136 | 781 | 235 | 83 | 21 | 15 | 32 |
| Newark, N.J. | 60 | 28 | 19 | 8 | 1 | 4 | 3 |
| Paterson, N.J. | 16 | 10 | 3 | 3 | - | - | - |
| Philadelphia, Pa. | 317 | 219 | 66 | 25 | 6 | 1 | 7 |
| Pittsburgh, Pa.§ | 28 | 26 | 1 | - | - | 1 | 3 |
| Reading, Pa. | 19 | 13 | 4 | 2 | - | - | 3 |
| Rochester, N.Y. | 142 | 113 | 16 | 8 | 1 | 4 | 14 |
| Schenectady, N.Y. | 21 | 16 | 3 | 1 | - | 1 | 3 |
| Scranton, Pa. | 49 | 41 | 4 | 3 | 1 | - | 4 |
| Syracuse, N.Y. | 87 | 62 | 20 | 1 | 3 | 1 | 11 |
| Trenton, N.J. | 35 | 24 | 8 | - | - | 3 | - |
| Utica, N.Y. | 20 | 13 | 7 | - | - | - | - |
| Yonkers, N.Y. | U | U | U | U | U | U | U |
| E.N. CENTRAL | 1,789 | 1,262 | 331 | 112 | 45 | 39 | 142 |
| Akron, Ohio | U | U | U | U | U | U | U |
| Canton, Ohio | 41 | 33 | 6 | 2 | - | - | 9 |
| Chicago, Ill. | U | U | U | U | U | U | U |
| Cincinnati, Ohio | 111 | 86 | 14 | 3 | 4 | 4 | 17 |
| Cleveland, Ohio | 178 | 119 | 38 | 10 | 5 | 6 | 9 |
| Columbus, Ohio | 180 | 127 | 38 | 10 | 3 | 2 | 15 |
| Dayton, Ohio | 134 | 102 | 20 | 9 | - | 3 | 14 |
| Detroit, Mich. | 173 | 90 | 48 | 22 | 9 | 4 | 11 |
| Evansville, Ind. | 53 | 40 | 10 | 2 | 1 | - | 3 |
| Fort Wayne, Ind. | 71 | 58 | 10 | - | 1 | 2 | 8 |
| Gary, Ind. | 17 | 11 | 3 | 1 | 2 | - | 1 |
| Grand Rapids, Mich. | 78 | 56 | 11 | 4 | 3 | 4 | 13 |
| Indianapolis, Ind. | 189 | 115 | 49 | 17 | 5 | 3 | 8 |
| Lansing, Mich. | 38 | 30 | 3 | 5 | - | - | 5 |
| Milwaukee, Wis. | 137 | 105 | 20 | 6 | 3 | 3 | 11 |
| Peoria, Ill. | 58 | 44 | 6 | 2 | 4 | 2 | 7 |
| Rockford, Ill. | 54 | 38 | 14 | 1 | 1 | - | - |
| South Bend, Ind. | 84 | 57 | 18 | 6 | 1 | 2 | 3 |
| Toledo, Ohio | 110 | 86 | 11 | 7 | 2 | 4 | 6 |
| Youngstown, Ohio | 83 | 65 | 12 | 5 | 1 | - | 2 |
| W.N. CENTRAL | 694 | 514 | 123 | 30 | 12 | 15 | 71 |
| Des Moines, Iowa | 145 | 117 | 22 | 5 | 1 | - | 32 |
| Duluth, Minn. | 39 | 30 | 9 | - | - | - | 4 |
| Kansas City, Kans. | U | U | U | U | U | U | U |
| Kansas City, Mo. | 85 | 63 | 17 | 4 | - | 1 | 8 |
| Lincoln, Nebr. | 48 | 40 | 6 | 2 | - | - | 3 |
| Minneapolis, Minn. | 89 | 60 | 19 | 6 | 3 | 1 | 10 |
| Omaha, Nebr. | 93 | 74 | 10 | 4 | 2 | 3 | 8 |
| St. Louis, Mo. | 111 | 64 | 29 | 5 | 3 | 10 | - |
| St. Paul, Minn. | 84 | 66 | 11 | 4 | 3 | - | 6 |
| Wichita, Kans. | U | U | U | U | U | U | U |
| S. ATLANTIC | 1,459 | 920 | 338 | 122 | 47 | 31 | 112 |
| Atlanta, Ga. | 210 | 109 | 61 | 25 | 5 | 10 | 16 |
| Baltimore, Md. | 187 | 106 | 51 | 18 | 9 | 3 | 19 |
| Charlotte, N.C. | 127 | 92 | 20 | 8 | 3 | 4 | 17 |
| Jacksonville, Fla. | 161 | 111 | 31 | 10 | 6 | 3 | 14 |
| Miami, Fla. | 103 | 65 | 23 | 13 | 2 | - | 11 |
| Norfolk, Va. | 52 | 38 | 9 | 2 | 1 | 2 | 1 |
| Richmond, Va. | 54 | 29 | 17 | 6 | 2 | - | 3 |
| Savannah, Ga. | 48 | 32 | 12 | 2 | 1 | 1 | 10 |
| St. Petersburg, Fla. | 101 | 76 | 16 | 4 | 2 | 3 | 3 |
| Tampa, Fla. | 202 | 131 | 47 | 17 | 5 | 2 | 15 |
| Washington, D.C. | 200 | 122 | 51 | 17 | 6 | 3 | 3 |
| Wilmington, Del. | 14 | 9 | - | - | 5 | - | - |
| E.S. CENTRAL | 1,053 | 706 | 220 | 82 | 20 | 25 | 78 |
| Birmingham, Ala. | 173 | 119 | 39 | 4 | 6 | 5 | 11 |
| Chattanooga, Tenn. | 120 | 85 | 26 | 5 | 1 | 3 | 9 |
| Knoxville, Tenn. | 125 | 86 | 34 | 4 | 1 | - | 6 |
| Lexington, Ky. | 102 | 64 | 24 | 7 | 1 | 6 | 9 |
| Memphis, Tenn. | 243 | 163 | 39 | 30 | 6 | 5 | 13 |
| Mobile, Ala. | 77 | 50 | 16 | 11 | - | - | 4 |
| Montgomery, Ala. | 69 | 52 | 10 | 4 | 2 | 1 | 16 |
| Nashville, Tenn. | 144 | 87 | 32 | 17 | 3 | 5 | 10 |
| W.S. CENTRAL | 1,325 | 875 | 265 | 118 | 42 | 25 | 108 |
| Austin, Tex. | 76 | 52 | 16 | 4 | 1 | 3 | 9 |
| Baton Rouge, La. | 21 | 12 | 6 | 3 | - | - | - |
| Corpus Christi, Tex. | U | U | U | U | U | U | U |
| Dallas, Tex. | 250 | 145 | 59 | 28 | 10 | 8 | 26 |
| El Paso, Tex. | 100 | 70 | 17 | 10 | 2 | 1 | 6 |
| Ft. Worth, Tex. | U | U | U | U | U | U | U |
| Houston, Tex. | 375 | 234 | 82 | 37 | 15 | 7 | 25 |
| Little Rock, Ark. | U | U | U | U | U | U | U |
| New Orleans, La. | 60 | 38 | 11 | 7 | 4 | - | - |
| San Antonio, Tex. | 253 | 184 | 40 | 18 | 6 | 5 | 12 |
| Shreveport, La. | 60 | 37 | 18 | 3 | 1 | 1 | 2 |
| Tulsa, Okla. | 130 | 103 | 16 | 8 | 3 | - | 28 |
| MOUNTAIN | 975 | 716 | 152 | 56 | 27 | 24 | 78 |
| Albuquerque, N.M. | 153 | 109 | 29 | 8 | 6 | 1 | 7 |
| Boise, Idaho | 50 | 36 | 6 | 4 | 1 | 3 | 6 |
| Colo. Springs, Colo. | 68 | 58 | 5 | 4 | 1 | - | 1 |
| Denver, Colo. | 123 | 80 | 24 | 10 | 3 | 6 | 10 |
| Las Vegas, Nev. | 251 | 190 | 43 | 11 | 3 | 4 | 22 |
| Ogden, Utah | 27 | 21 | 5 | 1 | - | - | 2 |
| Phoenix, Ariz. | U | U | U | U | U | U | U |
| Pueblo, Colo. | 30 | 22 | 7 | 1 | - | - | 2 |
| Salt Lake City, Utah | 122 | 85 | 13 | 10 | 7 | 7 | 20 |
| Tucson, Ariz. | 151 | 115 | 20 | 7 | 6 | 3 | 8 |
| PACIFIC | 1,349 | 978 | 237 | 81 | 34 | 19 | 143 |
| Berkeley, Calif. | 12 | 10 | 2 | - | - | - | 1 |
| Fresno, Calif. | 56 | 41 | 7 | 4 | 3 | 1 | 6 |
| Glendale, Calif. | 16 | 11 | 4 | - | - | 1 | - |
| Honolulu, Hawaii | 91 | 67 | 16 | 5 | - | 3 | 7 |
| Long Beach, Calif. | 65 | 46 | 15 | 2 | - | 2 | 14 |
| Los Angeles, Calif. | 248 | 166 | 50 | 24 | 7 | 1 | 2 |
| Pasadena, Calif. | 24 | 19 | 4 | 1 | - | - | 10 |
| Portland, Oreg. | 17 | 12 | 4 | 1 | - | - | 1 |
| Sacramento, Calif. | 231 | 167 | 39 | 10 | 9 | 6 | 36 |
| San Diego, Calif. | 174 | 137 | 20 | 11 | 3 | 3 | 18 |
| San Francisco, Calif. | U | U | U | U | U | U | U |
| San Jose, Calif. | 188 | 144 | 31 | 10 | 2 | 1 | 24 |
| Santa Cruz, Calif. | 28 | 21 | 2 | 3 | 2 | - | 3 |
| Seattle, Wash. | 143 | 100 | 28 | 7 | 7 | 1 | 15 |
| Spokane, Wash. | 56 | 37 | 15 | 3 | 1 | - | 6 |
| Tacoma, Wash. | U | U | U | U | U | U | U |
| TOTAL | 11,268¶ | 7,813 | 2,190 | 768 | 270 | 225 | 882 |

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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