

MMWRTM
**MORBIDITY AND MORTALITY
WEEKLY REPORT**

- 845 Outbreak of West Nile-Like Viral Encephalitis — New York, 1999
- 849 Healthier Mothers and Babies
- 857 National Child Health Month — October 1999
- 858 Outbreak of Poliomyelitis — Iraq, 1999
- 859 National Adult Immunization Awareness Week — October 10–16, 1999
- 859 Notice to Readers

Outbreak of West Nile-Like Viral Encephalitis — New York, 1999

An outbreak of arboviral encephalitis was first recognized in New York City in late August and has since been identified in neighboring counties in New York state. Although initially attributed to St. Louis encephalitis (SLE) virus based on positive serologic findings in cerebrospinal fluid (CSF) and serum samples using a virus-specific IgM-capture enzyme-linked immunosorbent assay (ELISA), the cause of the outbreak has been confirmed as a West Nile-like virus based on the identification of virus in human, avian, and mosquito samples.

On August 23, 1999, an infectious disease physician from a hospital in northern Queens contacted the New York City Department of Health (NYCDOH) to report two patients with encephalitis. On investigation, NYCDOH initially identified a cluster of six patients with encephalitis, five of whom had profound muscle weakness (with axonal neuropathy by electromyogram and requiring respiratory support [n=four]). Testing of these initial cases by IgM-capture ELISA for antibodies to the common North American arboviruses was positive for SLE virus on September 3 at CDC. Eight of the earliest case-patients were residents of a 2-by-2-mile area in northern Queens. On the basis of these findings, aerial and ground applications of mosquito adulticides and larvicides were instituted in northern Queens and South Bronx on September 3.

To define the geographic extent of the outbreak, NYCDOH initiated active surveillance on August 30, and the Westchester County Department of Health and the Nassau County Department of Health initiated active surveillance on September 3. Surveillance is also ongoing in surrounding areas. A clinical case is defined as a presumptive diagnosis of viral encephalitis with or without muscle weakness or acute flaccid paralysis, Guillain-Barré syndrome, aseptic meningitis, or presence of the clinical syndrome characterizing the initial cluster of cases in a patient presenting after August 1.

Before and concurrent with this outbreak, local health officials observed increased fatalities among New York City birds, especially crows. During September 7–9, officials of the Bronx Zoo noted the deaths of a cormorant, two captive-bred Chilean flamingoes, and an Asian pheasant. Necropsies performed on these birds at the zoo revealed varying degrees of meningo-encephalitis and severe myocarditis. Tissue specimens from these birds and a crow with pathologic evidence of encephalitis from New York state were sent to the U.S. Department of Agriculture National Veterinary Services Laboratories (NVSL) in Ames, Iowa, on September 10 to be tested for com-

Viral Encephalitis — Continued

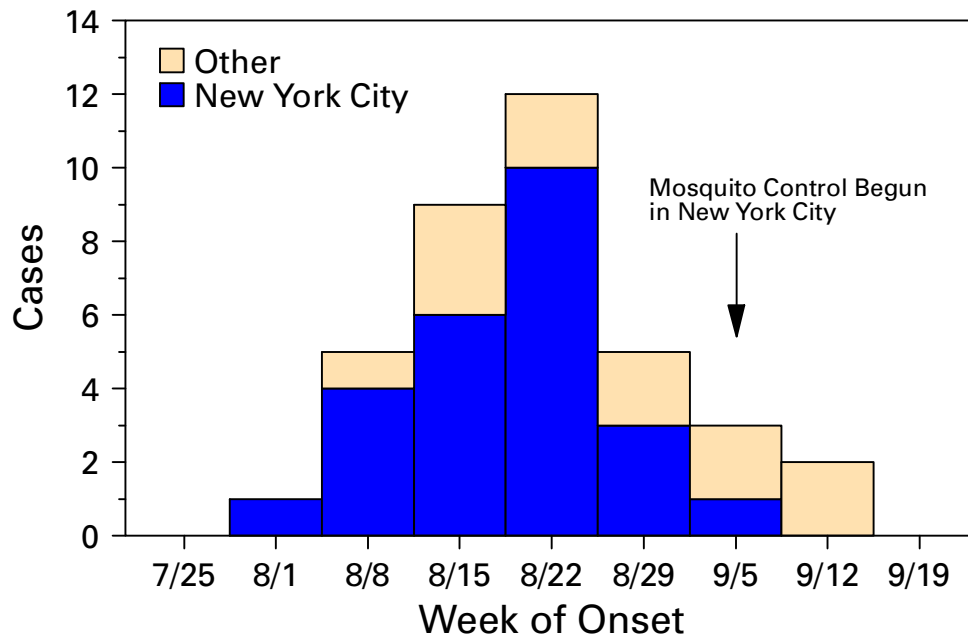
mon avian pathogens and the equine encephalitis viruses; all tests were negative. NVSL isolated viruses from the birds' tissues and forwarded them to CDC on September 20 for identification and characterization.

Testing at CDC on September 23 by polymerase chain reaction (PCR) and DNA sequencing of these isolates indicated that they were closely related to West Nile virus (WNV), which has never been isolated in the western hemisphere. In other tests at CDC, flavivirus antigen was detected in one of the autopsy specimens by immunohistochemistry, and a West Nile-like virus genomic sequence identical to that derived from the bird isolates was observed in a human brain specimen from an encephalitis case. Concurrently, specimens of brain tissue from three human encephalitis cases, forwarded by the New York State Department of Health to the University of California, Irvine, were reported as positive for West Nile-like virus sequence by genomic analysis. All serum/CSF specimens reactive to SLE by IgM ELISA were positive by WNV ELISA with higher positive/negative ratios than to SLE, and an additional 10 borderline and eight negative samples were positive for antibody to WNV.

As of September 28, a total of 17 confirmed and 20 probable human cases (1) and four deaths have been reported from New York City (25 cases) and the surrounding counties of Westchester (eight) and Nassau (four). The four deaths occurred among persons aged ≥ 68 years. One case-patient with onset in late August reported a history of travel to Africa completed in June 1999; none of the remaining case-patients had traveled during the incubation period to areas where WNV is known to be endemic. Two of the Westchester County case-patients had no reported travel history to New York City or other areas in which WNV previously had been detected.

Onset dates ranged from August 5 to September 16 (Figure 1), although no cases had onset in New York City after control measures were extended to the entire city on September 11. The median age of case-patients was 71 years (range: 15–87 years), with the most severe clinical cases and all fatalities occurring among older persons.

FIGURE 1. Seropositive cases of West Nile-like virus, by week of onset — New York, 1999



Viral Encephalitis — Continued

Vector control measures initiated in northern Queens and South Bronx on September 3 were followed by a city-wide pesticide application after laboratory confirmation of encephalitis in a Brooklyn resident with no travel history to Queens and confirmation of an additional two cases in South Bronx. According to the latest ongoing population estimates from a city-wide mosquito surveillance program, the host-seeking adult *Culex pipiens* mosquito population has been reduced substantially by the control operation. Following the confirmation of human cases in Westchester and Nassau counties and detection of virus in adult *Culex pipiens* and *Aedes vexans* mosquitoes and in a deceased bird from a nearby area in Connecticut, insecticide application has been initiated in these areas to reduce the mosquito population. Surveillance of wild birds and/or sentinel chickens was instituted to assess WNV distribution in the region.

Emergency telephone hotlines were established in New York City on September 3 and in Westchester County on September 21 to address public inquiries about the encephalitis outbreak and pesticide application. As of September 28, approximately 130,000 calls have been received by the New York City hotline and 12,000 by the WCDH hotline. Approximately 300,000 cans of DEET-based mosquito repellent were distributed citywide through local firehouses, and 750,000 public health leaflets were distributed with information about personal protection against mosquito bites. Recurring public messages were announced on radio, television, on the New York City and WCDH World-Wide Web sites, and in newspapers, urging personal protection against mosquito bites, including limiting outdoor activity during peak hours of mosquito activity, wearing long-sleeved shirts and long pants, using DEET-based insect repellents, and eliminating any potential mosquito breeding niches. Spraying schedules also were publicized with recommendations for persons to remain indoors while spraying occurred to reduce pesticide exposure. Mosquito surveillance will continue until the first frost in New York City; Westchester, Nassau, Rockland, and Suffolk counties; and Connecticut. Surveillance for new human WNV cases will be conducted until several weeks after the first frost, when mosquito activity is expected to subside.

Reported by: D Asnis, MD, R Conetta, MD, G Waldman, MD, A Teixeira, MD, Flushing Hospital, Queens; New York City acute care hospitals and microbiology laboratories; T McNamara, DVM, Wildlife Conservation Society; A Fine, MD, M Layton, MD, J Miller, MD, D Cimini, MPH, M Camilo Vargas, DVM, A Inglesby, MD, A Labowitz, K Bornschlegel, MPH, B Maldin, E Samoff, MPH, D Haddow, and the New York City Outbreak Investigation Team; S Mullin, MSW, J Gadd, MPP, E Giebelhaus, MPP, L Masuch, MSW, A Sher, M Foggin, BJ Mojica, N Cohen, MD, I Weisfuse, MD, R Bhalla, MD, E Lee, MD, D Malebranche, MD, G Sacajiu, MD, A Sharma, MD, A Ramon, MD, I Poshni, PhD, H Stirling, MPH, A Goldberg, New York City Dept of Health; J Hauer, MHS, Mayor's Office of Emergency Management, New York City; A Huang, MD, A Rosenberg, MD, P Yang-Lewis, MPH, HN Adel, MD, Westchester County Health Dept; K Gaffney, MD, A Greenberg, MD, B Smith, M Sherman, Div of Environmental Health and Disease Control, Nassau County Dept of Health; W Stone, Dept of Environmental Conservation; A Novello, MD, D White, PhD, D Morse, MD, K Spitalny, MD, R Gallo, H Leib, S Wong, MD, L Grady, MD, P Smith, MD, State Epidemiologist, New York State Dept of Health. M Cartter, MD, J Hadler, MD, Connecticut State Health Dept. WI Lipkin, MD, T Briese, PhD, XY Jia, MD, Emerging Diseases Laboratory, Univ of California, Irvine. National Veterinary Svcs Laboratories, Animal and Plant Health Inspection Svc, US Dept of Agriculture, Ames, Iowa. State Br, Div of Applied Public Health Training, Epidemiology Program Office; Meningitis and Special Pathogens Br, Div of Viral and Rickettsial Diseases, and Arbovirus Diseases Br, Div of Vector Borne Infectious Diseases, National Center for Infectious Diseases; and EIS officers, CDC.

Editorial Note: WNV is a flavivirus belonging taxonomically to the Japanese encephalitis subgroup that includes the serologically closely related SLE virus, Kunjin virus,

Viral Encephalitis — Continued

Murray Valley encephalitis virus, and others. WNV was first isolated in the West Nile Province of Uganda in 1937 (2). The first recorded epidemics occurred in Israel during 1950–1954 and in 1957. Epidemics have been reported in Europe in the Rhone delta of France in 1962 and in Romania in 1996 (3–5). The largest recorded epidemic occurred in South Africa in 1974 (6). It is unclear whether the virus that caused this outbreak is a previously identified strain of WNV or a new variant.

The genomic sequences identified to date from a human brain, virus isolates from zoo birds, and viruses isolated from a dead crow and two mosquito pools from Connecticut appear identical. Based on preliminary serologic testing, this outbreak was originally believed to be caused by the SLE virus. SLE and West Nile viruses are antigenically related, and cross reactions are observed with some serologic tests. Results of PCR-based sequencing that identified WNV prompted more specific testing. The IgM-capture ELISA used in testing serum/CSF samples in this outbreak is rapid, sensitive, and quantitative. The limitations of some serologic assays emphasize the importance of isolating the flavivirus from entomologic, clinical, or veterinary material. The availability of virus isolates and genomic sequences from birds and human brain tissue permitted the discovery of this West Nile-like virus in North America. Although it is not known when and how a West Nile-like virus was introduced into North America, international travel of infected persons to New York or transport by imported infected birds may have played a role.

WNV can infect a wide range of vertebrates, but in humans it usually produces either asymptomatic infection or mild febrile disease. Within its normal geographic distribution of Africa, the Middle East, western Asia, and Europe, WNV has not been documented to cause epizootics in birds; crows with antibodies to WNV are common, suggesting that asymptomatic or mild infection usually occurs among crows in those regions. Similarly, substantial bird virulence of SLE virus has not been reported. Therefore, an epizootic producing high mortality in crows and other bird species is unusual for either WNV or SLE virus and may represent introduction to a native bird population or a new virulent strain. For both viruses, migratory birds may play an important role in the natural transmission cycles.

Like SLE virus, WNV is transmitted principally by *Culex* species mosquitoes, but also can be transmitted by *Aedes*, *Anopheles*, and other species. The predominance of urban *Culex* mosquitoes trapped during this outbreak suggests an important role for this species. Enhanced monitoring through surveillance for early detection of this virus outside of the affected area will be crucial to guide extension of control measures.

References

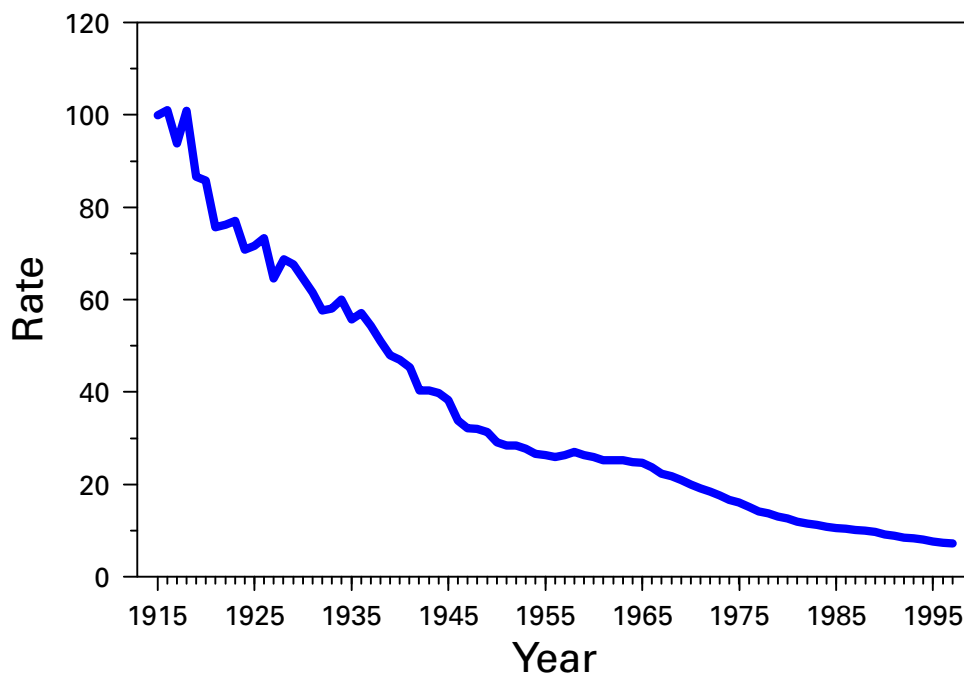
1. CDC. Case definitions for infectious conditions under public health surveillance. MMWR 1997;46(RR-10):12-3.
2. Smithburn KC, Hughes TP, Burke AW, Paul JH. A neurotropic virus isolated from the blood of a native of Uganda. Am J Trop Med Hyg 1940;20:471.
3. Klingberg MA, Jasinka-Klingberg W, Goldblum N. Certain aspects of the epidemiology and distribution of immunity of West Nile virus in Israel. In: Proceeding of the 6th International Congress of Tropical Medicine, 1959;5:132.
4. Panther R, Hannoun C, Beytout D, Mouchet J. Epidemiology of West Nile virus. In: Human Illness: focus on Camargue [French]. Vol 3. Ann Inst Pasteur 1968;115:435.
5. Tsai TF, Popovici F, Cernescu C, Campbell GL, Nedelcu NI. West Nile encephalitis epidemic in southeastern Romania. Lancet 1998;352:767-71.

Viral Encephalitis — Continued

6. McIntosh BM, Jupp PG, Dos Santos I, Meenehan GM. Epidemics of West Nile and Sindbis viruses in South Africa with *Culex (Culex) univittatus* Theobald as vector. *S Afr J Sci* 1976;72:295.

*Achievements in Public Health, 1900–1999***Healthier Mothers and Babies**

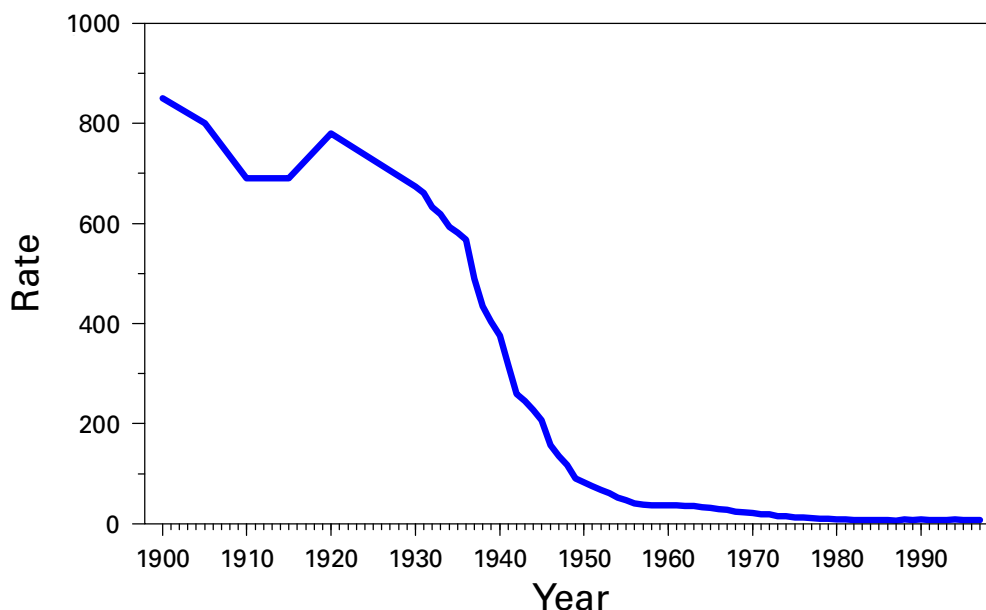
At the beginning of the 20th century, for every 1000 live births, six to nine women in the United States died of pregnancy-related complications, and approximately 100 infants died before age 1 year (1,2). From 1915 through 1997, the infant mortality rate declined >90% to 7.2 per 1000 live births, and from 1900 through 1997, the maternal mortality rate declined almost 99% to <0.1 reported death per 1000 live births (7.7 deaths per 100,000 live births in 1997) (3) (Figures 1 and 2). Environmental interventions, improvements in nutrition, advances in clinical medicine, improvements in access to health care, improvements in surveillance and monitoring of disease, increases in education levels, and improvements in standards of living contributed to this remarkable decline (1). Despite these improvements in maternal and infant mortality rates, significant disparities by race and ethnicity persist. This report summarizes trends in reducing infant and maternal mortality in the United States, factors contributing to these trends, challenges in reducing infant and maternal mortality, and provides suggestions for public health action for the 21st century.

FIGURE 1. Infant mortality rate,* by year — United States, 1915–1997

*Per 1000 live births.

Healthier Mothers and Babies — Continued

FIGURE 2. Maternal mortality rate,* by year — United States, 1900–1997



*Per 100,000 live births.

Infant Mortality

The decline in infant mortality is unparalleled by other mortality reduction this century. If turn-of-the-century infant death rates had continued, then an estimated 500,000 live-born infants during 1997 would have died before age 1 year; instead, 28,045 infants died (3).

In 1900 in some U.S. cities, up to 30% of infants died before reaching their first birthday (1). Efforts to reduce infant mortality focused on improving environmental and living conditions in urban areas (1). Urban environmental interventions (e.g., sewage and refuse disposal and safe drinking water) played key roles in reducing infant mortality. Rising standards of living, including improvements in economic and education levels of families, helped to promote health. Declining fertility rates also contributed to reductions in infant mortality through longer spacing of children, smaller family size, and better nutritional status of mothers and infants (1). Milk pasteurization, first adopted in Chicago in 1908, contributed to the control of milkborne diseases (e.g., gastrointestinal infections) from contaminated milk supplies.

During the first three decades of the century, public health, social welfare, and clinical medicine (pediatrics and obstetrics) collaborated to combat infant mortality (1). This partnership began with milk hygiene but later included other public health issues. In 1912, the Children's Bureau was formed and became the primary government agency to work toward improving maternal and infant welfare until 1946, when its role in maternal and child health diminished; the bureau was eliminated in 1969 (1). A proponent of the Children's Bureau was Martha May Eliot (see box, page 851). The Children's Bureau defined the problem of infant mortality and shaped the debate over programs to ameliorate the problem. The bureau also advocated comprehensive maternal and infant welfare services, including prenatal, natal, and postpartum home vis-

*Healthier Mothers and Babies — Continued***Martha May Eliot, M.D.**

Martha May Eliot (April 7, 1891–February 14, 1978), a pioneer in maternal and child health, was a leading pediatrician and an important architect of postwar programs for maternal and child health. Born into a prominent family in Dorchester, Massachusetts, Eliot graduated from Radcliffe College and afterward worked for 1 year in the Social Service Department at Massachusetts General Hospital. In 1918, she graduated from medical school at Johns Hopkins University. She taught at Yale University's department of pediatrics from 1921 to 1935. For most of these years, Dr. Eliot also directed the National Children's Bureau Division of Child and Maternal Health (1924–1934). She later accepted a full-time position at the bureau, becoming bureau chief in 1951. In 1956, she left the bureau to become department chairman of child and maternal health at Harvard University School of Public Health.



As early as her second year of medical school, Dr. Eliot hoped to become “some kind of social doctor” (1). Her first important research—community studies of rickets in New Haven, Connecticut, and Puerto Rico—explored issues at the heart of social medicine. The studies, undertaken with Edwards A. Park, M.D., and funded by the Children's Bureau, sought to prevent a disease with potentially fatal consequences for both child development and maternal safety. Drs. Eliot and Park established that public health measures (dietary supplementation with vitamin D) could prevent and reverse the early onset of rickets (2–4).

During her tenure at the Children's Bureau, Dr. Eliot helped establish government programs that implemented her ideas about social medicine. In 1934, Dr. Eliot and the Children's Bureau drafted most of the Social Security Act's language dealing with maternal and child health. During World War II, she administered the Emergency Maternity and Infant Care program, which provided maternity care for >1 million servicemen's wives. After the war, she held influential positions in both the World Health Organization and United Nations Children's Fund (UNICEF).

Dr. Eliot's service to public health earned her many honors. She was one of the first women admitted into the American Pediatric Society; she received that organization's top honor, the Howland Medal. In 1947, she became the first woman elected president of the American Public Health Association (APHA); she also was the first woman to receive APHA's Sedgwick Memorial Medal; and in 1964, APHA established the Martha May Eliot Award, an annual prize recognizing achievements in maternal and child health.

References

1. Schmidt WM. Some kind of social doctor: Martha May Eliot, 1891–1978. *Pediatrics* 1979;63:146–9.
2. Eliot M. The control of rickets. *JAMA* 1926;85:656–63.
3. Eliot MM, Park EA. *Rickets*. Hagerstown, Maryland: WF Prior, 1938.
4. Harrison HE. A tribute to the first lady of public health (Martha M. Eliot) vs. the disappearance of rickets. *Am J Public Health* 1966;56:734–7.

Healthier Mothers and Babies — Continued

its by health-care providers. By the 1920s, the integration of these services changed the approach to infant mortality from one that addressed infant health problems to an approach that included infant and mother and prenatal-care programs to educate, monitor, and care for pregnant women.

The discovery and widespread use of antimicrobial agents (e.g., sulfonamide in 1937 and penicillin in the 1940s) and the development of fluid and electrolyte replacement therapy and safe blood transfusions accelerated the declines in infant mortality; from 1930 through 1949, mortality rates declined 52% (4). The percentage decline in postneonatal (age 28–364 days) mortality (66%) was greater than the decline in neonatal (age 0–27 days) mortality (40%). From 1950 through 1964, infant mortality declined more slowly (1). An increasing proportion of infant deaths were attributed to perinatal causes and occurred among high-risk neonates, especially low birth weight (LBW) and preterm babies. Although no reliable data exist, the rapid decline in infant mortality during earlier decades probably was not influenced by decreases in LBW rates because the decrease in mortality was primarily in postneonatal deaths that are less influenced by birthweight. Inadequate programs during the 1950s–1960s to reduce deaths among high-risk neonates led to renewed efforts to improve access to prenatal care, especially for the poor, and to a concentrated effort to establish neonatal intensive-care units and to promote research in maternal and infant health, including research into technologies to improve the survival of LBW and preterm babies.

During the late 1960s, after Medicaid and other federal programs were implemented, infant mortality (primarily postneonatal mortality) declined substantially (5). From 1970 to 1979, neonatal mortality plummeted 41% (Table 1) because of technological advances in neonatal medicine and in the regionalization of perinatal services; postneonatal mortality declined 14%. During the early to mid-1980s, the downward trend in U.S. infant mortality slowed (6). However, during 1989–1991, infant mortality declined slightly faster, probably because of the use of artificial pulmonary surfactant to prevent and treat respiratory distress syndrome in premature infants (7). During 1991–1997, infant mortality continued to decline primarily because of decreases in sudden infant death syndrome (SIDS) and other causes.

TABLE 1. Percentage reduction in infant, neonatal, and postneonatal mortality, by year — United States, 1915–1997*

| Year | Percentage reduction in mortality | | |
|------------------|-----------------------------------|------------------------------|------------------------------------|
| | Infant (aged 0–364 days) | Neonatal (aged 0–27 days) | Postneonatal (aged 28–364 days) |
| 1915–1919 | 13% | 7% | 19% |
| 1920–1929 | 21% | 11% | 31% |
| 1930–1939 | 26% | 18% | 35% |
| 1940–1949 | 33% | 26% | 46% |
| 1950–1959 | 10% | 7% | 15% |
| 1960–1969 | 20% | 17% | 27% |
| 1970–1979 | 35% | 41% | 14% |
| 1980–1989 | 22% | 27% | 12% |
| 1990–1997 | 22% | 17% | 29% |
| 1915–1997 | 93% | 89% | 96% |

*Percentage reduction is calculated as the reduction from the first year of the time period to the last year of the time period.

Healthier Mothers and Babies — Continued

Although improvements in medical care were the main force for declines in infant mortality during the second half of the century, public health actions played a role. During the 1990s, a >50% decline in SIDS rates (attributed to the recommendation that infants be placed to sleep on their backs) has helped to reduce the overall infant mortality rate (8). The reduction in vaccine-preventable diseases (e.g., diphtheria, tetanus, measles, poliomyelitis, and *Haemophilus influenzae* type b meningitis) has reduced infant morbidity and has had a modest effect on infant mortality (9). Advances in prenatal diagnosis of severe central nervous system defects, selective termination of affected pregnancies, and improved surgical treatment and management of other structural anomalies have helped reduce infant mortality attributed to these birth defects (10,11). National efforts to encourage reproductive-aged women to consume foods or supplements containing folic acid could reduce the incidence of neural tube defects by half (12).

Maternal Mortality

Maternal mortality rates were highest in this century during 1900–1930 (2). Poor obstetric education and delivery practices were mainly responsible for the high numbers of maternal deaths, most of which were preventable (2). Obstetrics as a specialty was shunned by many physicians, and obstetric care was provided by poorly trained or untrained medical practitioners. Most births occurred at home with the assistance of midwives or general practitioners. Inappropriate and excessive surgical and obstetric interventions (e.g., induction of labor, use of forceps, episiotomy, and cesarean deliveries) were common and increased during the 1920s. Deliveries, including some surgical interventions, were performed without following the principles of asepsis. As a result, 40% of maternal deaths were caused by sepsis (half following delivery and half associated with illegally induced abortion) with the remaining deaths primarily attributed to hemorrhage and toxemia (2).

The 1933 White House Conference on Child Health Protection, Fetal, Newborn, and Maternal Mortality and Morbidity report (13) demonstrated the link between poor aseptic practice, excessive operative deliveries, and high maternal mortality. This and earlier reports focused attention on the state of maternal health and led to calls for action by state medical associations (13). During the 1930s–1940s, hospital and state maternal mortality review committees were established. During the ensuing years, institutional practice guidelines and guidelines defining physician qualifications needed for hospital delivery privileges were developed. At the same time, a shift from home to hospital deliveries was occurring throughout the country; during 1938–1948, the proportion of infants born in hospitals increased from 55% to 90% (14). However, this shift was slow in rural areas and southern states. Safer deliveries in hospitals under aseptic conditions and improved provision of maternal care for the poor by states or voluntary organizations led to decreases in maternal mortality after 1930. Medical advances (including the use of antibiotics, oxytocin to induce labor, and safe blood transfusion and better management of hypertensive conditions during pregnancy) accelerated declines in maternal mortality. During 1939–1948, maternal mortality decreased by 71% (14). The legalization of induced abortion beginning in the 1960s contributed to an 89% decline in deaths from septic illegal abortions (15) during 1950–1973.

Healthier Mothers and Babies — Continued

Since 1982, maternal mortality has not declined (16). However, more than half of maternal deaths can be prevented with existing interventions (17). In 1997, 327 maternal deaths were reported based on information on death certificates; however, death certificate data underestimate these deaths, and the actual numbers are two to three times greater. The leading causes of maternal death are hemorrhage, including hemorrhage associated with ectopic pregnancy, pregnancy-induced hypertension (toxemia), and embolism (17).

Challenges for the 21st Century

Despite the dramatic decline in infant and maternal mortality during the 20th century, challenges remain. Perhaps the greatest is the persistent difference in maternal and infant health among various racial/ethnic groups, particularly between black and white women and infants. Although overall rates have plummeted, black infants are more than twice as likely to die as white infants; this ratio has increased in recent decades. The higher risk for infant mortality among blacks compared with whites is attributed to higher LBW incidence and preterm births and to a higher risk for death among normal birthweight infants (≥ 5 lbs, 8 oz [≥ 2500 g]) (18). American Indian/Alaska Native infants have higher death rates than white infants because of higher SIDS rates. Hispanics of Puerto Rican origin have higher death rates than white infants because of higher LBW rates (19). The gap in maternal mortality between black and white women has increased since the early 1900s. During the first decades of the 20th century, black women were twice as likely to die of pregnancy-related complications as white women. Today, black women are more than three times as likely to die as white women.

During the last few decades, the key reason for the decline in neonatal mortality has been the improved rates of survival among LBW babies, not the reduction in the incidence of LBW. The long-term effects of LBW include neurologic disorders, learning disabilities, and delayed development (20). During the 1990s, the increased use of assisted reproductive technology has led to an increase in multiple gestations and a concomitant increase in the preterm delivery and LBW rates (21). Therefore, in the coming decades, public health programs will need to address the two leading causes of infant mortality: deaths related to LBW and preterm births and congenital anomalies. Additional substantial decline in neonatal mortality will require effective strategies to reduce LBW and preterm births. This will be especially important in reducing racial/ethnic disparities in the health of infants.

Approximately half of all pregnancies in the United States are unintended, including approximately three quarters among women aged <20 years. Unintended pregnancy is associated with increased morbidity and mortality for the mother and infant. Lifestyle factors (e.g., smoking, drinking alcohol, unsafe sex practices, and poor nutrition) and inadequate intake of foods containing folic acid pose serious health hazards to the mother and fetus and are more common among women with unintended pregnancies. In addition, one fifth of all pregnant women and approximately half of women with unintended pregnancies do not start prenatal care during the first trimester. Effective strategies to reduce unintended pregnancy, to eliminate exposure to unhealthy lifestyle factors, and to ensure that all women begin prenatal care early are important challenges for the next century.

Healthier Mothers and Babies — Continued

Compared with the 1970s, the 1980s and 1990s have seen a lack of decline in maternal mortality and a slower rate of decline in infant mortality. Some experts consider that the United States may be approaching an irreducible minimum in these areas. However, three factors indicate that this is unlikely. First, scientists have believed that infant and maternal mortality was as low as possible at other times during the century, when the rates were much higher than they are now. Second, the United States has higher maternal and infant mortality rates than other developed countries; it ranks 25th in infant mortality (22) and 21st in maternal mortality (23). Third, most of the U.S. population has infant and maternal mortality rates substantially lower than some racial/ethnic subgroups, and no definable biologic reason has been found to indicate that a minimum has been reached.

To develop effective strategies for the 21st century, studies of the underlying factors that contribute to morbidity and mortality should be conducted. These studies should include efforts to understand not only the biologic factors but also the social, economic, psychological, and environmental factors that contribute to maternal and infant deaths. Researchers are examining “fetal programming”—the effect of uterine environment (e.g., maternal stress, nutrition, and infection) on fetal development and its effect on health from childhood to adulthood. Because reproductive tract infections (e.g., bacterial vaginosis) are associated with preterm birth, development of effective screening and treatment strategies may reduce preterm births. Case reviews or audits are being used increasingly to investigate fetal, infant, and maternal deaths; they focus on identifying preventable deaths such as those resulting from health-care system failures and gaps in quality of care and in access to care. Another strategy is to study cases of severe morbidity in which the woman or infant did not die. More clinically focused than reviews or audits, such “near miss” studies may explain why one woman or infant with a serious problem died while another survived.

A thorough review of the quality of health care and access to care for all women and infants is needed to avoid preventable mortality and morbidity and to develop public health programs that can eliminate racial/ethnic disparities in health. Preconception health services for all women of childbearing age, including healthy women who intend to become pregnant, and quality care during pregnancy, delivery, and the postpartum period are critical elements needed to improve maternal and infant outcomes (see box, page 856).

Reported by: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

References

1. Meckel RA. Save the babies: American public health reform and the prevention of infant mortality, 1850–1929. Baltimore, Maryland: The Johns Hopkins University Press, 1990.
2. Loudon I. Death in childbirth: an international study of maternal care and maternal mortality, 1800–1950. New York, New York: Oxford University Press, 1992.
3. Hoyert DL, Kochanek KD, Murphy SL. Deaths: final data for 1997. Hyattsville, Maryland: US Department of Health and Human Services, CDC, National Center for Health Statistics, 1999. (National vital statistics report; vol 47, no. 20).
4. Public Health Service. Vital statistics of the United States, 1950. Vol I. Washington, DC: US Department of Health and Human Services, Public Health Service, 1954:258–9.
5. Pharoah POD, Morris JN. Postneonatal mortality. *Epidemiol Rev* 1979;1:170–83.
6. Kleinman JC. The slowdown in the infant mortality decline. *Pediatr Perinat Epidemiol* 1990;4:373–81.

*Healthier Mothers and Babies — Continued***Opportunities to Reduce Maternal and Infant Mortality**

Prevention measures to reduce maternal and infant mortality and to promote the health of all childbearing-aged women and their newborns should start before conception and continue through the postpartum period. Some of these prevention measures include the following:

Before conception

- Screen women for health risks and pre-existing chronic conditions such as diabetes, hypertension, and sexually transmitted diseases.
- Counsel women about contraception and provide access to effective family planning services (to prevent unintended pregnancies and unnecessary abortions).
- Counsel women about the benefits of good nutrition; encourage women especially to consume adequate amounts of folic acid supplements (to prevent neural tube defects) and iron.
- Advise women to avoid alcohol, tobacco, and illicit drugs.
- Advise women about the value of regular physical exercise.

During pregnancy

- Provide women with early access to high-quality care throughout pregnancy, labor, and delivery. Such care includes risk-appropriate care, treatment for complications, and the use of antenatal corticosteroids when appropriate.
- Monitor and, when appropriate, treat pre-existing chronic conditions.
- Screen for and, when appropriate, treat reproductive tract infections including bacterial vaginosis, group B streptococcus infections, and human immunodeficiency virus.
- Vaccinate women against influenza, if appropriate.
- Continue counseling against use of tobacco, alcohol, and illicit drugs.
- Continue counseling about nutrition and physical exercise.
- Educate women about the early signs of pregnancy-related problems.

During postpartum period

- Vaccinate newborns at age-appropriate times.
- Provide information about well-baby care and benefits of breastfeeding.
- Warn parents about exposing infants to secondhand smoke.
- Counsel parents about placing infants to sleep on their backs.
- Educate parents about how to protect their infants from exposure to infectious diseases and harmful substances.

Healthier Mothers and Babies — Continued

7. Schoendorf KC, Kiely JL. Birth weight and age-specific analysis of the 1990 US infant mortality drop: was it surfactant? *Arch Pediatr Adolesc Med* 1997;151:129–34.
8. Willinger M, Hoffman H, Wu K, et al. Factors associated with the transition to non-prone sleep positions of infants in the United States: the National Infant Sleep Position Study. *JAMA* 1998;280:329–39.
9. CDC. Status report on the Childhood Immunization Initiative: reported cases of selected vaccine-preventable diseases—United States, 1996. *MMWR* 1997;46:667–71.
10. CDC. Trends in infant mortality attributable to birth defects—United States, 1980–1995. *MMWR* 1998;47:773–7.
11. Montana E, Khoury MJ, Cragan JD, et al. Trends and outcomes after prenatal diagnosis of congenital cardiac malformations by fetal echocardiography in a well defined birth population, Atlanta, Georgia, 1990–1994. *J Am Coll Cardiol* 1996;27:1805–9.
12. Johnston RB Jr. Folic acid: new dimensions of an old friendship. In: *Advances in pediatrics*. Vol 44. St. Louis, Missouri: Mosby-Year Book, 1997.
13. Wertz RW, Wertz DC. *Lying-in: a history of childbirth in America*. New Haven, Connecticut: Yale University Press, 1989.
14. Children's Bureau. *Changes in infant, childhood, and maternal mortality over the decade of 1939–1948: a graphic analysis*. Washington, DC: Children's Bureau, Social Security Administration, 1950.
15. National Center for Health Statistics. *Vital statistics of the United States, 1973*. Vol II, mortality, part A. Rockville, Maryland: US Department of Health, Education, and Welfare, 1977.
16. CDC. Maternal mortality—United States, 1982–1996. *MMWR* 1999;47:705–7.
17. Berg CJ, Atrash HK, Koonin LM, Tucker M. Pregnancy-related mortality in the United States, 1987–1990. *Obstet Gynecol* 1996;88:161–7.

National Child Health Month — October 1999

Since 1992, the American Academy of Pediatrics (AAP) has designated October as Child Health Month to increase public awareness of the value of preventive health care for children. This year, Child Health Day is October 4. To promote the health of the approximately 78 million children and teenagers in the United States, CDC recommends the following for children and parents. Children should 1) learn to wash their hands to prevent infections; 2) eat breakfast before going to school; 3) not smoke and avoid the smoke of others; and 4) exercise and play safely and appropriately use protective gear. Parents should 1) read to and be actively involved with their children; 2) get their children vaccinated; 3) get their children health-care insurance; 4) check for health hazards in their home and eliminate them; 5) place children weighing <40 lbs in child safety seats and all others in safety belts in rear seats of automobiles; 6) seek medical advice if their child is slow to learn; and 7) avoid tobacco use and limit alcohol use. In addition, women of child-bearing age should take vitamins with folic acid to prevent certain birth defects.

Additional information about Child Health Month is available from AAP, telephone (847) 981-7871, or on the World-Wide Web at <http://www.aap.org>; <http://www.salud.unm.edu/asthma/chm/Childmo.html>; <http://www.census.gov/population/www/estimates/USpop.html>; and <http://www.hrsa.dhhs.gov/childhealth/outreach.html>.*

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

Healthier Mothers and Babies — Continued

18. Iyasu S, Becerra JE, Rowley DL, Hogue CJR. Impact of very low birthweight on the black-white infant mortality gap. *Am J Prev Med* 1992;8:271-7.
19. MacDorman MF, Atkinson JO. Infant mortality statistics from the 1997 period linked birth/infant death data set. Hyattsville, Maryland: US Department of Health and Human Services, CDC, National Center for Health Statistics, 1999. (National vital statistics reports, vol 47, no. 23).
20. McCormick MC. The contribution of low birth weight to infant mortality and childhood morbidity. *N Engl J Med* 1985;312:80-90.
21. CDC. Impact of multiple births on low birthweight—Massachusetts, 1989-1996. *MMWR* 1999;48:289-92.
22. National Center for Health Statistics. Health, United States, 1998, with socioeconomic status and health chart book. Hyattsville, Maryland: US Department of Health and Human Services, CDC, National Center for Health Statistics, 1998; DHHS publication no. (PHS)98-1232.
23. World Health Organization. WHO revised 1990 estimates of maternal mortality: a new approach by WHO and UNICEF. Geneva, Switzerland: World Health Organization, 1996; report no. WHO/FRH/MSM/96.11.

*Public Health Dispatch***Outbreak of Poliomyelitis — Iraq, 1999**

Since May 1999, 86 cases of acute flaccid paralysis (AFP) have been reported in Iraq. Sixteen cases with onset during May-July have been confirmed as paralytic poliomyelitis by isolation of wild poliovirus type 1; the remaining cases are either negative, pending virus isolation (n=10), or positive for type 1 poliovirus with intratypic differentiation pending (n=nine). The first confirmed case occurred in a person residing in Ninevah governorate in the northern part of the country; subsequently, confirmed cases were reported from nine of the 18 governorates in Iraq, suggesting widespread transmission of poliovirus. Before this outbreak, the last confirmed cases of wild polioviruses occurred in Iraq during April-May 1997.

Nine of the 16 case-patients with confirmed wild poliovirus were members of nomadic cattle-herding families; most cases reported since August occurred among children of resident families. Fourteen case-patients were aged ≤ 2 years, and 11 had not received oral poliovirus vaccine or were incompletely vaccinated.

To ensure prompt reporting of all AFP cases, surveillance has been enhanced at major hospitals and other health facilities most likely to see children with acute paralysis. To control the outbreak and to interrupt poliovirus transmission, Iraq will conduct two rounds of National Immunization Days (NIDs)* in October and November 1999. In addition, two rounds of NIDs will be conducted in the spring of 2000. To assure that all children in high-risk populations are covered, existing NIDs planned at governorate and district levels will be strengthened.

Factors contributing to the outbreak include declining routine vaccination coverage in many areas and insufficient NID coverage in southern and central governorates, especially among high-risk populations. The outbreak presents a challenge to the polio eradication initiative in Iraq and threatens reintroduction of virus into neighboring countries, especially Iran, Jordan, Syria, and Turkey. Iraq is part of a region that in-

*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.

Poliomyelitis — Continued

cludes border areas of Turkey, Syria, and Iran, where poliovirus transmission has been maintained until recently because of civil unrest, insufficient routine health services, and migration of minority populations across national boundaries. Preliminary genomic sequencing results indicate that the polioviruses in Iraq are similar to polioviruses in southeastern Turkey in 1998 and are not related to contemporary polioviruses from Pakistan and southern Asia. These findings indicate that the reason for the outbreak may have been continued undetected wild poliovirus transmission in the border areas of northwest Iraq.

Reported by: Ministry of Health; Country Office, Baghdad, Iraq; Eastern Mediterranean Regional Office, Alexandria, Egypt; Vaccine and Biologicals Dept, World Health Organization, Geneva, Switzerland. National Public Health Institute, Bilthoven, Netherlands. Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

**National Adult Immunization Awareness Week —
October 10–16, 1999**

National Adult Immunization Awareness Week (NAIAW) is October 10–16 this year. NAIAW highlights the influenza vaccination season, which typically begins in early fall of each year. NAIAW emphasizes the need for health-care providers and public health officials to intensify their efforts to vaccinate adults according to recommendations of the Advisory Committee on Immunization Practices. In addition to specifying the appropriate use of influenza and pneumococcal vaccines for adults, the recommendations cover adult vaccination against diphtheria, hepatitis A and B, measles, mumps, rubella, tetanus, and varicella.

Information about NAIAW is available from the National Coalition for Adult Immunization, 4733 Bethesda Ave., Suite 750, Bethesda, MD 20814; telephone (301) 656-0003; fax (301) 907-0878; e-mail adultimm@aol.com; and World-Wide Web site <http://www.nfid.org/ncai>*

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

*Notice to Readers***World's Population to Reach Six Billion**

The United Nations (UN) estimates that the world's population will reach six billion on October 12, 1999 (1). The world's population reached one billion in 1804; subsequently, one billion increases came at intervals of 123, 33, 14, 13, and 12 years. Population growth rates increased over time because of high fertility rates and declines in mortality rates, especially since the early to mid-1900s. The UN projects that it will take 14 years for the world's population to reach 7 billion and another 15 years to reach 8 billion.

During 1995–2000, the world's population has grown at an annual rate of 1.3%. If this rate remains the same, the population will double in 52 years (2). This growth rate

Notice to Readers — Continued

is substantially less than the peak growth rate of 2.0% during 1965–1970 and less than the rate of 1.5% during 1990–1995.

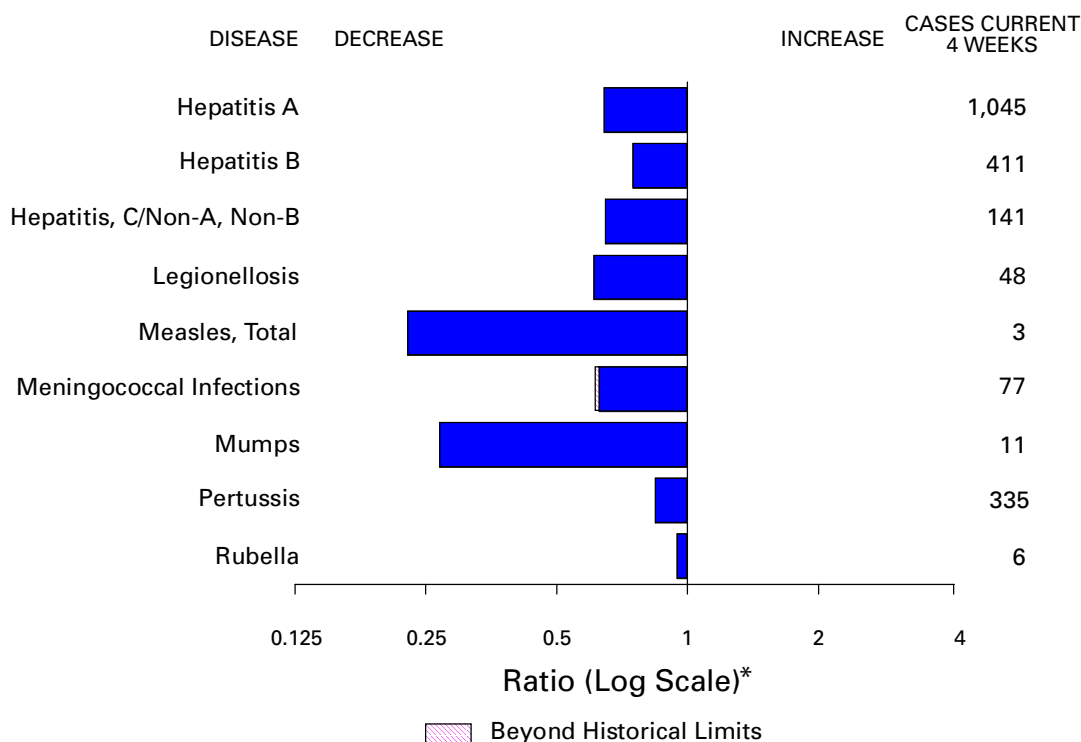
The decline in world population growth rates is a result of substantial declines in fertility in less-developed countries during the past 25 years. Overall, in developing countries, fertility declined by approximately one third between the 1960s and late 1980s, from an average of six children per woman to four per woman. This decline has continued into the 1990s.

Although other factors, such as the age of women at first marriage and induced abortion, help explain the fertility decline, the most important determinant of declining fertility in less developed countries is the increased use of effective contraception (3). An estimated 53% of all women of reproductive age in developed countries who are married or living in a consensual union are using some form of contraception; this rate is referred to as the contraceptive prevalence rate (CPR). In Latin America and the Caribbean, the CPR is 58%. In eastern Asia, excluding Japan but including China, the CPR is 79%. CPR is lowest in sub-Saharan Africa at 12%; however, in Botswana, Kenya, and Zimbabwe, CPR is 25%.

References

1. United Nations. World population prospects—the 1998 revision, Vol. 1: comprehensive tables. New York: United Nations, 1999.
2. Robey B, Rutstein S, Morris L, Blackburn R. The reproductive revolution: new survey findings. Baltimore, Maryland: The Johns Hopkins University Population Reports, 1992 (series M, no. 11).
3. Westoff CF, Moreno L, Goldman N. The demographic impact of changes in contraceptive practice in third world populations. *Pop Dev Rev* 1989;15:91–106.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending September 25, 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 September 25, 1999 (38th Week)

| | Cum. 1999 | | Cum. 1999 |
|---|-----------|---|-----------|
| Anthrax | - | HIV infection, pediatric* ⁵ | 100 |
| Brucellosis* | 33 | Plague | 5 |
| Cholera | 4 | Poliomyelitis, paralytic | - |
| Congenital rubella syndrome | 4 | Psittacosis* | 15 |
| Cyclosporiasis* | 47 | Rabies, human | - |
| Diphtheria | 3 | Rocky Mountain spotted fever (RMSF) | 399 |
| Encephalitis: California* | 23 | Streptococcal disease, invasive Group A | 1,598 |
| eastern equine* | 5 | Streptococcal toxic-shock syndrome* | 29 |
| St. Louis* | 1 | Syphilis, congenital [¶] | 146 |
| western equine* | - | Tetanus | 27 |
| Ehrlichiosis | 112 | Toxic-shock syndrome | 89 |
| human granulocytic (HGE)* | 31 | Trichinosis | 8 |
| human monocytic (HME)* | 67 | Typhoid fever | 235 |
| Hansen Disease* | 16 | Yellow fever | - |
| Hantavirus pulmonary syndrome* [†] | 68 | | |
| Hemolytic uremic syndrome, post-diarrheal* | | | |

-:no reported cases

*Not notifiable in all states.

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

⁵ Updated monthly from reports to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update August 29, 1999.

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 25, 1999, and September 26, 1998 (38th Week)

| Reporting Area | AIDS | | Chlamydia | | Cryptosporidiosis | | <i>Escherichia coli</i> O157:H7* | | | |
|----------------|------------|-----------|-----------|-----------|-------------------|-----------|----------------------------------|-----------|-----------|-----------|
| | Cum. 1999† | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | NETSS | | PHLIS | |
| | | | | | | | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 30,285 | 33,478 | 426,595 | 427,583 | 1,525 | 2,891 | 2,234 | 2,147 | 1,438 | 1,728 |
| NEW ENGLAND | 1,532 | 1,281 | 14,545 | 14,948 | 97 | 122 | 242 | 267 | 228 | 226 |
| Maine | 51 | 24 | 738 | 721 | 19 | 25 | 31 | 31 | - | - |
| N.H. | 36 | 25 | 684 | 714 | 10 | 12 | 25 | 38 | 26 | 40 |
| Vt. | 11 | 17 | 349 | 307 | 29 | 21 | 23 | 14 | 14 | 12 |
| Mass. | 1,005 | 684 | 6,714 | 6,083 | 37 | 58 | 138 | 127 | 115 | 131 |
| R.I. | 73 | 98 | 1,670 | 1,667 | 2 | 6 | 25 | 11 | 6 | 1 |
| Conn. | 356 | 433 | 4,390 | 5,456 | - | - | U | 46 | 67 | 42 |
| MID. ATLANTIC | 7,780 | 9,331 | 48,388 | 44,246 | 245 | 437 | 188 | 235 | 60 | 80 |
| Upstate N.Y. | 890 | 1,100 | N | N | 106 | 260 | 140 | 168 | - | - |
| N.Y. City | 4,062 | 5,232 | 21,963 | 19,200 | 107 | 160 | 6 | 11 | 15 | 12 |
| N.J. | 1,476 | 1,685 | 7,198 | 8,523 | 22 | 17 | 42 | 56 | 32 | 47 |
| Pa. | 1,352 | 1,314 | 19,092 | 16,523 | 10 | N | N | N | 13 | 21 |
| E.N. CENTRAL | 1,980 | 2,518 | 59,708 | 72,348 | 320 | 569 | 425 | 347 | 322 | 293 |
| Ohio | 291 | 509 | 17,240 | 19,157 | 33 | 55 | 139 | 91 | 112 | 56 |
| Ind. | 247 | 412 | 7,243 | 7,873 | 29 | 46 | 68 | 77 | 36 | 40 |
| Ill. | 933 | 986 | 20,697 | 19,538 | 17 | 63 | 136 | 96 | 81 | 68 |
| Mich. | 405 | 466 | 14,528 | 15,736 | 39 | 32 | 82 | 83 | 54 | 56 |
| Wis. | 104 | 145 | U | 10,044 | 202 | 373 | N | N | 39 | 73 |
| W.N. CENTRAL | 678 | 604 | 24,788 | 25,294 | 167 | 228 | 479 | 346 | 265 | 331 |
| Minn. | 114 | 118 | 5,060 | 5,109 | 63 | 79 | 189 | 147 | 137 | 182 |
| Iowa | 62 | 51 | 2,934 | 3,222 | 48 | 59 | 94 | 75 | 57 | 48 |
| Mo. | 340 | 281 | 8,595 | 9,107 | 21 | 20 | 34 | 37 | 48 | 49 |
| N. Dak. | 4 | 4 | 325 | 728 | 14 | 27 | 15 | 10 | 1 | 14 |
| S. Dak. | 13 | 13 | 1,152 | 1,121 | 6 | 19 | 38 | 22 | 13 | 28 |
| Nebr. | 45 | 56 | 2,496 | 1,956 | 14 | 20 | 88 | 30 | - | - |
| Kans. | 100 | 81 | 4,226 | 4,051 | 1 | 4 | 21 | 25 | 9 | 10 |
| S. ATLANTIC | 8,314 | 8,575 | 98,438 | 82,255 | 272 | 224 | 244 | 177 | 130 | 139 |
| Del. | 112 | 104 | 1,968 | 1,851 | - | 3 | 6 | - | 3 | 2 |
| Md. | 889 | 1,176 | 7,552 | 5,487 | 11 | 15 | 17 | 31 | - | 14 |
| D.C. | 321 | 635 | N | N | 8 | 6 | - | 1 | U | U |
| Va. | 508 | 685 | 10,513 | 10,125 | 19 | 13 | 58 | N | 42 | 47 |
| W. Va. | 46 | 65 | 1,204 | 1,749 | 2 | 1 | 9 | 8 | 5 | 8 |
| N.C. | 552 | 636 | 16,375 | 16,030 | 11 | N | 51 | 43 | 46 | 39 |
| S.C. | 764 | 504 | 17,649 | 13,146 | - | - | 19 | 9 | 14 | 8 |
| Ga. | 1,235 | 858 | 21,374 | 16,946 | 111 | 77 | 27 | 60 | - | - |
| Fla. | 3,887 | 3,912 | 21,803 | 16,921 | 110 | 109 | 57 | 25 | 20 | 21 |
| E.S. CENTRAL | 1,363 | 1,407 | 33,530 | 29,517 | 21 | 19 | 94 | 96 | 50 | 53 |
| Ky. | 201 | 219 | 5,230 | 4,659 | 5 | 8 | 27 | 28 | - | - |
| Tenn. | 540 | 489 | 10,305 | 9,804 | 6 | 6 | 43 | 43 | 30 | 34 |
| Ala. | 337 | 394 | 9,356 | 7,178 | 8 | N | 20 | 20 | 16 | 17 |
| Miss. | 285 | 305 | 8,639 | 7,876 | 2 | 5 | 4 | 5 | 4 | 2 |
| W.S. CENTRAL | 3,201 | 4,187 | 61,181 | 65,121 | 64 | 848 | 70 | 75 | 76 | 79 |
| Ark. | 123 | 159 | 4,195 | 2,881 | 1 | 6 | 9 | 8 | 8 | 9 |
| La. | 596 | 704 | 10,879 | 10,721 | 22 | 14 | 9 | 4 | 11 | 4 |
| Okla. | 94 | 238 | 5,853 | 7,298 | 8 | N | 18 | 12 | 12 | 6 |
| Tex. | 2,388 | 3,086 | 40,254 | 44,221 | 33 | 828 | 34 | 51 | 45 | 60 |
| MOUNTAIN | 1,174 | 1,116 | 23,443 | 23,758 | 76 | 109 | 207 | 276 | 87 | 205 |
| Mont. | 7 | 23 | 1,099 | 962 | 10 | 9 | 14 | 14 | - | 5 |
| Idaho | 16 | 19 | 1,233 | 1,445 | 7 | 16 | 26 | 31 | 8 | 22 |
| Wyo. | 6 | 1 | 524 | 500 | 1 | 1 | 11 | 51 | 5 | 54 |
| Colo. | 208 | 230 | 4,656 | 5,882 | 11 | 15 | 80 | 59 | 40 | 47 |
| N. Mex. | 67 | 178 | 2,853 | 2,508 | 32 | 43 | 9 | 17 | 4 | 16 |
| Ariz. | 607 | 398 | 9,238 | 8,402 | 9 | 16 | 24 | 33 | 16 | 25 |
| Utah | 102 | 91 | 1,580 | 1,564 | N | N | 30 | 58 | 12 | 21 |
| Nev. | 161 | 176 | 2,260 | 2,495 | 6 | 9 | 13 | 13 | 2 | 15 |
| PACIFIC | 4,263 | 4,459 | 62,574 | 70,096 | 263 | 335 | 285 | 328 | 220 | 322 |
| Wash. | 250 | 300 | 8,517 | 8,222 | N | N | 114 | 66 | 104 | 95 |
| Oreg. | 136 | 129 | 4,100 | 4,004 | 84 | 55 | 60 | N | 55 | 87 |
| Calif. | 3,803 | 3,882 | 46,569 | 54,663 | 179 | 277 | 104 | 166 | 52 | 127 |
| Alaska | 13 | 17 | 1,402 | 1,380 | - | - | 1 | 4 | - | - |
| Hawaii | 61 | 131 | 1,986 | 1,827 | - | 3 | 6 | - | 9 | 13 |
| Guam | 5 | - | 226 | 298 | - | - | N | N | U | U |
| P.R. | 936 | 1,243 | U | U | - | N | 5 | 5 | U | U |
| V.I. | 25 | 24 | U | U | U | U | U | U | U | U |
| Amer. Samoa | - | - | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | - | U | U | U | U | U | U | 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 August 29, 1999.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending September 25, 1999, and September 26, 1998 (38th 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 | 234,734 | 254,653 | 2,418 | 2,363 | 614 | 942 | 8,086 | 11,933 |
| NEW ENGLAND | 4,343 | 4,424 | 57 | 51 | 49 | 57 | 2,830 | 3,798 |
| Maine | 42 | 49 | 2 | - | 4 | 1 | 22 | 65 |
| N.H. | 82 | 70 | - | - | 5 | 3 | 9 | 34 |
| Vt. | 36 | 27 | 4 | 2 | 11 | 5 | 15 | 10 |
| Mass. | 1,861 | 1,573 | 48 | 46 | 13 | 26 | 850 | 630 |
| R.I. | 419 | 272 | 3 | 3 | 6 | 13 | 350 | 382 |
| Conn. | 1,903 | 2,433 | - | - | 10 | 9 | 1,584 | 2,677 |
| MID. ATLANTIC | 27,738 | 27,340 | 105 | 155 | 120 | 237 | 3,964 | 6,418 |
| Upstate N.Y. | 4,751 | 5,092 | 70 | 80 | 41 | 76 | 2,833 | 3,141 |
| N.Y. City | 9,463 | 8,637 | - | - | 9 | 32 | 27 | 184 |
| N.J. | 4,391 | 5,741 | - | U | 12 | 14 | 390 | 1,266 |
| Pa. | 9,133 | 7,870 | 35 | 75 | 58 | 115 | 714 | 1,827 |
| E.N. CENTRAL | 40,388 | 49,815 | 1,243 | 534 | 170 | 315 | 92 | 627 |
| Ohio | 10,421 | 12,254 | 1 | 7 | 55 | 99 | 58 | 32 |
| Ind. | 3,952 | 4,661 | 1 | 5 | 26 | 57 | 18 | 27 |
| Ill. | 15,616 | 16,241 | 31 | 36 | 10 | 40 | 10 | 12 |
| Mich. | 10,399 | 12,115 | 620 | 366 | 50 | 65 | 1 | 12 |
| Wis. | U | 4,544 | 590 | 120 | 29 | 54 | 5 | 544 |
| W.N. CENTRAL | 10,156 | 12,493 | 92 | 30 | 38 | 52 | 139 | 170 |
| Minn. | 1,938 | 1,927 | 6 | 9 | 6 | 5 | 83 | 129 |
| Iowa | 672 | 1,084 | - | 7 | 14 | 7 | 16 | 22 |
| Mo. | 4,448 | 6,580 | 76 | 10 | 12 | 14 | 17 | 11 |
| N. Dak. | 31 | 60 | - | - | - | - | 1 | - |
| S. Dak. | 131 | 176 | - | - | 2 | 3 | - | - |
| Nebr. | 1,110 | 818 | 4 | 2 | 4 | 16 | 10 | 3 |
| Kans. | 1,826 | 1,848 | 6 | 2 | - | 7 | 12 | 5 |
| S. ATLANTIC | 71,570 | 68,787 | 170 | 77 | 95 | 106 | 821 | 692 |
| Del. | 1,229 | 1,046 | 1 | - | 10 | 11 | 25 | 55 |
| Md. | 6,153 | 6,411 | 37 | 9 | 17 | 27 | 577 | 504 |
| D.C. | 2,822 | 3,278 | 1 | - | 3 | 6 | 3 | 4 |
| Va. | 6,890 | 6,894 | 10 | 11 | 24 | 16 | 94 | 50 |
| W. Va. | 363 | 645 | 16 | 6 | - | N | 14 | 9 |
| N.C. | 14,444 | 13,968 | 32 | 18 | 13 | 8 | 61 | 42 |
| S.C. | 9,935 | 8,442 | 21 | 3 | 7 | 8 | 5 | 3 |
| Ga. | 14,359 | 14,769 | 1 | 9 | - | 8 | - | 5 |
| Fla. | 15,375 | 13,334 | 51 | 21 | 21 | 22 | 42 | 20 |
| E.S. CENTRAL | 26,827 | 28,342 | 198 | 230 | 34 | 54 | 66 | 88 |
| Ky. | 2,313 | 2,686 | 15 | 18 | 17 | 26 | 8 | 20 |
| Tenn. | 8,280 | 8,555 | 83 | 137 | 14 | 16 | 30 | 40 |
| Ala. | 8,364 | 9,313 | 2 | 4 | 3 | 5 | 17 | 15 |
| Miss. | 7,870 | 7,788 | 98 | 71 | - | 7 | 11 | 13 |
| W.S. CENTRAL | 34,543 | 40,026 | 175 | 369 | 6 | 16 | 25 | 18 |
| Ark. | 2,113 | 3,024 | 8 | 14 | - | 1 | 4 | 6 |
| La. | 8,653 | 9,139 | 102 | 33 | 2 | 2 | - | 3 |
| Okla. | 2,877 | 3,958 | 14 | 12 | 3 | 8 | 4 | 2 |
| Tex. | 20,900 | 23,905 | 51 | 310 | 1 | 5 | 17 | 7 |
| MOUNTAIN | 6,791 | 6,582 | 113 | 303 | 37 | 56 | 13 | 12 |
| Mont. | 33 | 31 | 5 | 7 | - | 2 | - | - |
| Idaho | 61 | 131 | 6 | 86 | 1 | 2 | 3 | 3 |
| Wyo. | 20 | 24 | 34 | 70 | - | 1 | 3 | 1 |
| Colo. | 1,684 | 1,516 | 19 | 21 | 10 | 13 | - | - |
| N. Mex. | 589 | 623 | 7 | 75 | 1 | 2 | 1 | 4 |
| Ariz. | 3,330 | 3,016 | 28 | 6 | 5 | 14 | - | - |
| Utah | 156 | 167 | 6 | 19 | 14 | 18 | 4 | - |
| Nev. | 918 | 1,074 | 8 | 19 | 6 | 4 | 2 | 4 |
| PACIFIC | 12,378 | 16,844 | 265 | 614 | 65 | 49 | 136 | 110 |
| Wash. | 1,461 | 1,415 | 13 | 15 | 11 | 9 | 6 | 6 |
| Oreg. | 582 | 584 | 15 | 15 | N | N | 11 | 17 |
| Calif. | 9,826 | 14,239 | 237 | 530 | 53 | 38 | 119 | 86 |
| Alaska | 226 | 238 | - | - | 1 | 1 | - | 1 |
| Hawaii | 283 | 368 | - | 54 | - | 1 | N | N |
| Guam | 32 | 44 | - | 1 | - | 2 | - | 1 |
| P.R. | 215 | 284 | - | - | - | - | N | N |
| V.I. | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | U | U | U | U | U | U | U | U |

N: Not notifiable

U: Unavailable

-: no reported cases

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending September 25, 1999, and September 26, 1998 (38th Week)

| Reporting Area | Malaria | | Rabies, Animal | | Salmonellosis* | | | |
|----------------|--------------|--------------|----------------|--------------|----------------|--------------|--------------|--------------|
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | NETSS | | PHLIS | |
| | | | | | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 913 | 1,073 | 4,298 | 5,600 | 25,403 | 29,663 | 20,240 | 25,434 |
| NEW ENGLAND | 48 | 46 | 659 | 1,118 | 1,232 | 1,841 | 1,361 | 1,760 |
| Maine | 3 | 3 | 121 | 186 | 108 | 132 | 75 | 49 |
| N.H. | 2 | 5 | 44 | 54 | 102 | 145 | 110 | 179 |
| Vt. | 4 | - | 81 | 50 | 71 | 99 | 66 | 76 |
| Mass. | 15 | 16 | 153 | 395 | 871 | 1,028 | 718 | 1,043 |
| R.I. | 4 | 4 | 73 | 71 | 80 | 106 | 52 | 33 |
| Conn. | 20 | 18 | 187 | 362 | U | 331 | 340 | 380 |
| MID. ATLANTIC | 207 | 324 | 801 | 1,208 | 2,953 | 4,857 | 2,887 | 4,623 |
| Upstate N.Y. | 54 | 69 | 592 | 849 | 941 | 1,157 | 860 | 1,093 |
| N.Y. City | 88 | 185 | U | U | 977 | 1,489 | 785 | 1,252 |
| N.J. | 44 | 45 | 136 | 151 | 508 | 1,061 | 535 | 1,040 |
| Pa. | 21 | 25 | 73 | 208 | 527 | 1,150 | 707 | 1,238 |
| E.N. CENTRAL | 87 | 118 | 122 | 92 | 3,678 | 4,773 | 2,448 | 3,631 |
| Ohio | 18 | 11 | 29 | 50 | 838 | 1,131 | 702 | 905 |
| Ind. | 14 | 10 | 12 | 9 | 376 | 523 | 299 | 419 |
| Ill. | 20 | 50 | 9 | N | 1,189 | 1,483 | 399 | 1,109 |
| Mich. | 30 | 38 | 69 | 30 | 712 | 870 | 687 | 797 |
| Wis. | 5 | 9 | 3 | 3 | 563 | 766 | 361 | 401 |
| W.N. CENTRAL | 49 | 71 | 563 | 564 | 1,668 | 1,737 | 1,630 | 1,782 |
| Minn. | 21 | 39 | 83 | 94 | 484 | 410 | 545 | 480 |
| Iowa | 12 | 7 | 131 | 122 | 200 | 297 | 158 | 236 |
| Mo. | 12 | 14 | 12 | 31 | 489 | 487 | 688 | 658 |
| N. Dak. | - | 2 | 119 | 108 | 38 | 48 | 4 | 62 |
| S. Dak. | - | - | 129 | 129 | 72 | 92 | 58 | 97 |
| Nebr. | - | 1 | 2 | 6 | 166 | 128 | - | 30 |
| Kans. | 4 | 8 | 87 | 74 | 219 | 275 | 177 | 219 |
| S. ATLANTIC | 264 | 211 | 1,544 | 1,865 | 6,002 | 5,663 | 3,879 | 4,392 |
| Del. | 1 | 3 | 34 | 34 | 107 | 63 | 120 | 100 |
| Md. | 73 | 63 | 298 | 357 | 638 | 677 | 662 | 668 |
| D.C. | 15 | 14 | - | - | 59 | 56 | U | U |
| Va. | 55 | 41 | 406 | 439 | 987 | 775 | 739 | 688 |
| W. Va. | 1 | 2 | 87 | 62 | 117 | 116 | 113 | 115 |
| N.C. | 23 | 18 | 310 | 471 | 905 | 788 | 947 | 993 |
| S.C. | 12 | 5 | 117 | 111 | 450 | 400 | 323 | 386 |
| Ga. | 21 | 30 | 145 | 242 | 933 | 1,133 | 651 | 1,039 |
| Fla. | 63 | 35 | 147 | 149 | 1,806 | 1,655 | 324 | 403 |
| E.S. CENTRAL | 18 | 25 | 206 | 221 | 1,297 | 1,623 | 747 | 1,202 |
| Ky. | 6 | 5 | 31 | 27 | 304 | 285 | - | 124 |
| Tenn. | 7 | 13 | 75 | 119 | 326 | 431 | 386 | 531 |
| Ala. | 4 | 5 | 100 | 73 | 420 | 498 | 308 | 447 |
| Miss. | 1 | 2 | - | 2 | 247 | 409 | 53 | 100 |
| W.S. CENTRAL | 14 | 29 | 82 | 26 | 2,310 | 3,155 | 2,333 | 2,290 |
| Ark. | 1 | 1 | 14 | 26 | 388 | 381 | 120 | 277 |
| La. | 10 | 11 | - | - | 334 | 424 | 438 | 552 |
| Okla. | 2 | 3 | 68 | N | 287 | 340 | 212 | 160 |
| Tex. | 1 | 14 | - | - | 1,301 | 2,010 | 1,563 | 1,301 |
| MOUNTAIN | 37 | 52 | 151 | 205 | 2,258 | 1,846 | 1,473 | 1,630 |
| Mont. | 4 | 1 | 50 | 46 | 47 | 67 | 1 | 39 |
| Idaho | 3 | 7 | - | N | 71 | 85 | 56 | 75 |
| Wyo. | 1 | - | 36 | 54 | 41 | 52 | 22 | 48 |
| Colo. | 14 | 15 | 1 | 32 | 580 | 434 | 537 | 404 |
| N. Mex. | 2 | 12 | 8 | 5 | 265 | 235 | 202 | 204 |
| Ariz. | 7 | 8 | 45 | 37 | 719 | 551 | 577 | 571 |
| Utah | 3 | 1 | 6 | 25 | 389 | 267 | 25 | 122 |
| Nev. | 3 | 8 | 5 | 6 | 146 | 155 | 53 | 167 |
| PACIFIC | 189 | 197 | 170 | 301 | 4,005 | 4,168 | 3,482 | 4,124 |
| Wash. | 18 | 17 | - | - | 464 | 369 | 617 | 498 |
| Oreg. | 16 | 14 | 1 | 4 | 345 | 230 | 402 | 256 |
| Calif. | 147 | 160 | 162 | 274 | 2,890 | 3,325 | 2,233 | 3,133 |
| Alaska | 1 | 2 | 7 | 23 | 35 | 48 | 6 | 29 |
| Hawaii | 7 | 4 | - | - | 271 | 196 | 224 | 208 |
| Guam | - | 2 | - | - | 20 | 26 | U | U |
| P.R. | - | - | 47 | 37 | 255 | 542 | U | U |
| V.I. | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | U | U | U | U | U | U | U | U |

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 September 25, 1999, and September 26, 1998 (38th 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 | 10,634 | 14,906 | 5,179 | 8,389 | 4,743 | 5,210 | 10,314 | 11,872 |
| NEW ENGLAND | 456 | 341 | 383 | 305 | 40 | 56 | 296 | 325 |
| Maine | 4 | 11 | - | - | - | 1 | 13 | 6 |
| N.H. | 13 | 14 | 12 | 18 | - | 1 | 10 | - |
| Vt. | 5 | 6 | 3 | - | 3 | 4 | 1 | 4 |
| Mass. | 416 | 227 | 315 | 217 | 24 | 34 | 176 | 186 |
| R.I. | 18 | 27 | 9 | 13 | 2 | 1 | 30 | 40 |
| Conn. | U | 56 | 44 | 57 | 11 | 15 | 66 | 89 |
| MID. ATLANTIC | 640 | 1,868 | 370 | 1,448 | 194 | 227 | 1,862 | 2,137 |
| Upstate N.Y. | 211 | 405 | 45 | 141 | 24 | 29 | 224 | 268 |
| N.Y. City | 213 | 578 | 82 | 538 | 67 | 52 | 1,016 | 1,051 |
| N.J. | 144 | 577 | 121 | 543 | 44 | 73 | 375 | 450 |
| Pa. | 72 | 308 | 122 | 226 | 59 | 73 | 247 | 368 |
| E.N. CENTRAL | 1,854 | 2,128 | 1,015 | 1,103 | 830 | 757 | 933 | 1,189 |
| Ohio | 326 | 406 | 92 | 98 | 68 | 104 | 179 | 172 |
| Ind. | 199 | 132 | 54 | 34 | 301 | 147 | 61 | 121 |
| Ill. | 733 | 1,149 | 592 | 919 | 309 | 313 | 412 | 565 |
| Mich. | 311 | 207 | 210 | 4 | 152 | 141 | 209 | 258 |
| Wis. | 285 | 234 | 67 | 48 | U | 52 | 72 | 73 |
| W.N. CENTRAL | 851 | 806 | 552 | 465 | 93 | 102 | 333 | 324 |
| Minn. | 193 | 252 | 190 | 282 | 7 | 6 | 114 | 106 |
| Iowa | 28 | 57 | 23 | 38 | 9 | 1 | 33 | 28 |
| Mo. | 518 | 94 | 300 | 69 | 60 | 79 | 134 | 120 |
| N. Dak. | 2 | 7 | - | 3 | - | - | 6 | 7 |
| S. Dak. | 11 | 30 | 5 | 21 | - | 1 | 12 | 16 |
| Nebr. | 62 | 326 | - | 18 | 7 | 4 | 15 | 11 |
| Kans. | 37 | 40 | 34 | 34 | 10 | 11 | 19 | 36 |
| S. ATLANTIC | 1,808 | 3,120 | 364 | 978 | 1,623 | 1,918 | 2,193 | 2,052 |
| Del. | 12 | 23 | 7 | 21 | 6 | 18 | 12 | 27 |
| Md. | 116 | 156 | 38 | 55 | 272 | 509 | 200 | 230 |
| D.C. | 44 | 21 | U | U | 52 | 62 | 34 | 84 |
| Va. | 94 | 144 | 43 | 72 | 117 | 116 | 168 | 222 |
| W. Va. | 7 | 11 | 3 | 7 | 2 | 2 | 32 | 30 |
| N.C. | 161 | 227 | 71 | 108 | 376 | 571 | 330 | 298 |
| S.C. | 100 | 129 | 50 | 59 | 320 | 232 | 201 | 217 |
| Ga. | 173 | 852 | 37 | 198 | 248 | 204 | 447 | 377 |
| Fla. | 1,101 | 1,557 | 115 | 458 | 230 | 204 | 769 | 567 |
| E.S. CENTRAL | 859 | 656 | 429 | 445 | 858 | 897 | 665 | 859 |
| Ky. | 202 | 96 | - | 45 | 72 | 81 | 133 | 125 |
| Tenn. | 509 | 149 | 374 | 210 | 477 | 419 | 245 | 274 |
| Ala. | 89 | 366 | 47 | 183 | 175 | 213 | 231 | 289 |
| Miss. | 59 | 45 | 8 | 7 | 134 | 184 | 56 | 171 |
| W.S. CENTRAL | 1,626 | 2,913 | 1,502 | 911 | 719 | 771 | 1,140 | 1,728 |
| Ark. | 61 | 147 | 21 | 47 | 45 | 84 | 126 | 98 |
| La. | 118 | 231 | 83 | 209 | 200 | 309 | U | 127 |
| Okla. | 405 | 294 | 128 | 81 | 145 | 56 | 96 | 134 |
| Tex. | 1,042 | 2,241 | 1,270 | 574 | 329 | 322 | 918 | 1,369 |
| MOUNTAIN | 758 | 889 | 409 | 567 | 178 | 195 | 302 | 398 |
| Mont. | 7 | 8 | - | 3 | 1 | - | 10 | 15 |
| Idaho | 17 | 17 | 7 | 12 | 1 | 2 | 14 | 7 |
| Wyo. | 3 | 2 | 1 | 1 | - | 1 | 2 | 4 |
| Colo. | 127 | 152 | 80 | 115 | 2 | 9 | U | 47 |
| N. Mex. | 94 | 218 | 55 | 120 | 9 | 22 | 48 | 47 |
| Ariz. | 394 | 428 | 255 | 281 | 157 | 145 | 163 | 152 |
| Utah | 50 | 35 | 5 | 26 | 2 | 3 | 30 | 45 |
| Nev. | 66 | 29 | 6 | 9 | 6 | 13 | 35 | 81 |
| PACIFIC | 1,782 | 2,185 | 155 | 2,167 | 208 | 287 | 2,590 | 2,860 |
| Wash. | 76 | 143 | 69 | 133 | 48 | 24 | 140 | 187 |
| Oreg. | 64 | 109 | 62 | 102 | 7 | 4 | 78 | 99 |
| Calif. | 1,616 | 1,896 | - | 1,896 | 149 | 256 | 2,207 | 2,403 |
| Alaska | - | 4 | - | 2 | 1 | 1 | 41 | 36 |
| Hawaii | 26 | 33 | 24 | 34 | 3 | 2 | 124 | 135 |
| Guam | 7 | 29 | U | U | 1 | 1 | - | 68 |
| P.R. | 62 | 46 | U | U | 121 | 143 | 41 | 108 |
| V.I. | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | U | U | U | U | U | U | U | U |

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 September 25, 1999, and September 26, 1998 (38th Week)

| Reporting Area | <i>H. influenzae</i> , invasive | | Hepatitis (Viral), by type | | | | Measles (Rubeola) | | | | | |
|----------------|---------------------------------|-----------|----------------------------|-----------|-----------|-----------|-------------------|-----------|-----------|-----------|-----------|-----------|
| | Cum. 1999† | Cum. 1998 | A | | B | | Indigenous | | Imported* | | Total | |
| | | | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | 1999 | Cum. 1999 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 857 | 818 | 11,215 | 16,504 | 4,717 | 7,122 | 1 | 42 | 1 | 21 | 63 | 69 |
| NEW ENGLAND | 65 | 54 | 179 | 218 | 72 | 158 | - | 6 | - | 4 | 10 | 3 |
| Maine | 5 | 2 | 7 | 16 | 1 | 2 | - | - | - | - | - | - |
| N.H. | 16 | 8 | 12 | 9 | 12 | 14 | - | - | - | 1 | 1 | - |
| Vt. | 5 | 5 | 11 | 14 | 2 | 7 | - | - | - | - | - | 1 |
| Mass. | 23 | 33 | 60 | 91 | 30 | 57 | - | 5 | - | 2 | 7 | 2 |
| R.I. | 1 | 5 | 14 | 14 | 27 | 52 | - | - | - | - | - | - |
| Conn. | 15 | 1 | 75 | 74 | - | 26 | - | 1 | - | 1 | 2 | - |
| MID. ATLANTIC | 134 | 133 | 690 | 1,271 | 500 | 926 | - | - | - | 2 | 2 | 14 |
| Upstate N.Y. | 65 | 44 | 189 | 263 | 144 | 179 | - | - | - | 2 | 2 | 2 |
| N.Y. City | 29 | 36 | 195 | 441 | 154 | 326 | - | - | - | - | - | - |
| N.J. | 39 | 46 | 57 | 256 | 40 | 165 | - | - | - | - | - | 8 |
| Pa. | 1 | 7 | 249 | 311 | 162 | 256 | - | - | - | - | - | 4 |
| E.N. CENTRAL | 136 | 143 | 2,065 | 2,613 | 466 | 1,065 | - | 1 | - | 1 | 2 | 15 |
| Ohio | 47 | 43 | 473 | 247 | 70 | 57 | U | - | U | - | - | 1 |
| Ind. | 20 | 36 | 85 | 115 | 35 | 81 | - | 1 | - | - | 1 | 3 |
| Ill. | 58 | 50 | 442 | 603 | 1 | 186 | - | - | - | - | - | - |
| Mich. | 11 | 8 | 1,039 | 1,490 | 359 | 344 | - | - | - | 1 | 1 | 10 |
| Wis. | - | 6 | 26 | 158 | 1 | 397 | - | - | - | - | - | 1 |
| W.N. CENTRAL | 74 | 73 | 590 | 1,130 | 231 | 300 | - | - | - | - | - | - |
| Minn. | 36 | 57 | 58 | 95 | 38 | 33 | - | - | - | - | - | - |
| Iowa | 7 | 2 | 111 | 376 | 28 | 46 | - | - | - | - | - | - |
| Mo. | 22 | 8 | 323 | 531 | 123 | 182 | - | - | - | - | - | - |
| N. Dak. | 1 | - | 2 | 3 | - | 4 | - | - | - | - | - | - |
| S. Dak. | 1 | - | 8 | 21 | 1 | 2 | - | - | - | - | - | - |
| Nebr. | 3 | - | 48 | 22 | 14 | 13 | - | - | - | - | - | - |
| Kans. | 4 | 6 | 40 | 82 | 27 | 20 | U | - | U | - | - | - |
| S. ATLANTIC | 198 | 149 | 1,486 | 1,399 | 914 | 751 | - | 1 | 1 | 5 | 6 | 8 |
| Del. | - | - | 2 | 3 | 1 | 1 | - | - | - | - | - | 1 |
| Md. | 51 | 45 | 274 | 306 | 132 | 108 | - | - | - | - | - | 1 |
| D.C. | 4 | - | 54 | 47 | 20 | 10 | - | - | - | - | - | - |
| Va. | 15 | 15 | 119 | 163 | 69 | 79 | - | 1 | - | 2 | 3 | 2 |
| W. Va. | 6 | 5 | 29 | 4 | 22 | 5 | - | - | - | - | - | - |
| N.C. | 28 | 23 | 118 | 90 | 185 | 168 | - | - | 1 | 1 | 1 | - |
| S.C. | 5 | 3 | 31 | 27 | 59 | 29 | - | - | - | - | - | - |
| Ga. | 53 | 33 | 358 | 425 | 122 | 127 | - | - | - | - | - | 2 |
| Fla. | 36 | 25 | 501 | 334 | 304 | 224 | - | - | - | 2 | 2 | 2 |
| E.S. CENTRAL | 51 | 43 | 288 | 304 | 329 | 363 | - | 2 | - | - | 2 | 2 |
| Ky. | 6 | 7 | 53 | 24 | 31 | 36 | - | 2 | - | - | 2 | - |
| Tenn. | 28 | 24 | 142 | 178 | 172 | 204 | - | - | - | - | - | 1 |
| Ala. | 15 | 10 | 44 | 53 | 68 | 51 | - | - | - | - | - | 1 |
| Miss. | 2 | 2 | 49 | 49 | 58 | 72 | - | - | - | - | - | - |
| W.S. CENTRAL | 42 | 41 | 2,231 | 2,936 | 666 | 1,605 | - | 5 | - | 4 | 9 | - |
| Ark. | 2 | - | 42 | 71 | 35 | 84 | U | - | U | - | - | - |
| La. | 7 | 19 | 73 | 57 | 77 | 74 | U | - | U | - | - | - |
| Okla. | 29 | 20 | 355 | 438 | 101 | 70 | - | - | - | - | - | - |
| Tex. | 4 | 2 | 1,761 | 2,370 | 453 | 1,377 | - | 5 | - | 4 | 9 | - |
| MOUNTAIN | 74 | 90 | 1,003 | 2,509 | 453 | 624 | - | 3 | - | - | 3 | - |
| Mont. | 2 | - | 17 | 79 | 17 | 5 | - | - | - | - | - | - |
| Idaho | 1 | - | 33 | 205 | 22 | 27 | U | - | U | - | - | - |
| Wyo. | 1 | 1 | 6 | 33 | 12 | 5 | - | - | - | - | - | - |
| Colo. | 10 | 19 | 176 | 231 | 71 | 78 | - | - | - | - | - | - |
| N. Mex. | 18 | 5 | 39 | 110 | 144 | 244 | - | - | - | - | - | - |
| Ariz. | 32 | 44 | 587 | 1,523 | 120 | 141 | - | 1 | - | - | 1 | - |
| Utah | 7 | 3 | 37 | 154 | 27 | 56 | - | 2 | - | - | 2 | - |
| Nev. | 3 | 18 | 108 | 174 | 40 | 68 | - | - | - | - | - | - |
| PACIFIC | 83 | 92 | 2,683 | 4,124 | 1,086 | 1,330 | 1 | 24 | - | 5 | 29 | 27 |
| Wash. | 3 | 6 | 242 | 801 | 53 | 69 | - | - | - | - | - | 1 |
| Oreg. | 31 | 36 | 195 | 317 | 63 | 142 | - | 9 | - | - | 9 | - |
| Calif. | 38 | 40 | 2,229 | 2,945 | 948 | 1,098 | 1 | 15 | - | 4 | 19 | 7 |
| Alaska | 5 | 3 | 6 | 16 | 12 | 10 | - | - | - | - | - | 19 |
| Hawaii | 6 | 7 | 11 | 45 | 10 | 11 | - | - | - | 1 | 1 | - |
| Guam | - | - | 2 | 1 | 2 | 2 | U | 1 | U | - | 1 | - |
| P.R. | 1 | 2 | 112 | 50 | 102 | 189 | U | - | U | - | - | - |
| 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. | U | U | U | U | U | U | U | U | U | U | U | U |

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

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

†Of 161 cases among children aged <5 years, serotype was reported for 83 and of those, 22 were type b.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending September 25, 1999, and September 26, 1998 (38th 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 | 1,770 | 2,008 | 3 | 240 | 522 | 100 | 3,977 | 4,504 | 1 | 218 | 333 |
| NEW ENGLAND | 85 | 86 | - | 4 | 6 | 12 | 464 | 752 | - | 7 | 38 |
| Maine | 5 | 5 | - | - | - | - | - | 5 | - | - | - |
| N.H. | 12 | 11 | - | 1 | - | 1 | 74 | 76 | - | - | - |
| Vt. | 4 | 2 | - | 1 | - | 3 | 49 | 66 | - | - | - |
| Mass. | 48 | 40 | - | 2 | 4 | 5 | 303 | 560 | - | 7 | 8 |
| R.I. | 4 | 3 | - | - | - | - | 24 | 9 | - | - | 1 |
| Conn. | 12 | 25 | - | - | 2 | 3 | 14 | 36 | - | - | 29 |
| MID. ATLANTIC | 160 | 207 | 1 | 28 | 172 | 23 | 667 | 469 | - | 22 | 145 |
| Upstate N.Y. | 45 | 52 | 1 | 9 | 3 | 23 | 581 | 236 | - | 18 | 114 |
| N.Y. City | 43 | 24 | - | 3 | 153 | - | 10 | 30 | - | - | 17 |
| N.J. | 39 | 50 | - | - | 6 | - | 12 | 15 | - | 1 | 13 |
| Pa. | 33 | 81 | - | 16 | 10 | - | 64 | 188 | - | 3 | 1 |
| E.N. CENTRAL | 300 | 310 | - | 30 | 63 | 3 | 339 | 555 | - | 2 | - |
| Ohio | 114 | 112 | U | 11 | 23 | U | 156 | 191 | U | - | - |
| Ind. | 42 | 53 | - | 4 | 6 | 2 | 51 | 98 | - | 1 | - |
| Ill. | 84 | 84 | - | 8 | 9 | - | 49 | 66 | - | 1 | - |
| Mich. | 36 | 37 | - | 7 | 23 | 1 | 40 | 50 | - | - | - |
| Wis. | 24 | 24 | - | - | 2 | - | 43 | 150 | - | - | - |
| W.N. CENTRAL | 194 | 174 | 1 | 11 | 26 | 1 | 266 | 382 | - | 123 | 32 |
| Minn. | 41 | 29 | - | 1 | 12 | - | 132 | 201 | - | 5 | - |
| Iowa | 36 | 29 | 1 | 5 | 9 | 1 | 46 | 59 | - | 29 | - |
| Mo. | 74 | 65 | - | 2 | 3 | - | 41 | 28 | - | 2 | 2 |
| N. Dak. | 3 | 5 | - | - | 1 | - | 4 | 3 | - | - | - |
| S. Dak. | 11 | 7 | - | - | - | - | 5 | 8 | - | - | - |
| Nebr. | 11 | 12 | - | - | - | - | 3 | 14 | - | 87 | - |
| Kans. | 18 | 27 | U | 3 | 1 | U | 35 | 69 | U | - | 30 |
| S. ATLANTIC | 315 | 333 | 1 | 41 | 41 | 24 | 313 | 242 | 1 | 36 | 15 |
| Del. | 7 | 2 | - | - | - | - | 4 | 3 | - | - | - |
| Md. | 44 | 24 | - | 3 | - | 6 | 83 | 49 | - | 1 | 1 |
| D.C. | 1 | 1 | - | 2 | - | - | - | 1 | - | - | - |
| Va. | 40 | 28 | - | 8 | 6 | - | 13 | 19 | - | - | - |
| W. Va. | 5 | 13 | - | - | - | - | 2 | 1 | - | - | - |
| N.C. | 35 | 46 | - | 8 | 10 | 10 | 83 | 81 | 1 | 35 | 11 |
| S.C. | 38 | 49 | 1 | 4 | 6 | 1 | 15 | 24 | - | - | - |
| Ga. | 51 | 76 | - | 4 | 1 | 3 | 33 | 21 | - | - | - |
| Fla. | 94 | 94 | - | 12 | 18 | 4 | 80 | 43 | - | - | 3 |
| E.S. CENTRAL | 115 | 154 | - | 11 | 13 | 1 | 66 | 96 | - | 1 | 1 |
| Ky. | 24 | 27 | - | - | - | - | 17 | 39 | - | - | - |
| Tenn. | 45 | 55 | - | - | 1 | - | 28 | 30 | - | - | 1 |
| Ala. | 27 | 41 | - | 8 | 7 | 1 | 17 | 23 | - | 1 | - |
| Miss. | 19 | 31 | - | 3 | 5 | - | 4 | 4 | - | - | - |
| W.S. CENTRAL | 148 | 239 | - | 29 | 52 | 2 | 136 | 292 | - | 7 | 87 |
| Ark. | 31 | 26 | U | - | 10 | U | 17 | 58 | U | - | - |
| La. | 34 | 47 | U | 3 | 6 | U | 3 | 6 | U | - | - |
| Okla. | 25 | 32 | - | 1 | - | - | 12 | 22 | - | - | - |
| Tex. | 58 | 134 | - | 25 | 36 | 2 | 104 | 206 | - | 7 | 87 |
| MOUNTAIN | 106 | 112 | - | 15 | 34 | 6 | 447 | 799 | - | 16 | 5 |
| Mont. | 2 | 4 | - | - | - | - | 2 | 9 | - | - | - |
| Idaho | 8 | 9 | U | 1 | 4 | U | 127 | 198 | U | - | - |
| Wyo. | 4 | 5 | - | - | 1 | - | 2 | 8 | - | - | - |
| Colo. | 29 | 21 | - | 4 | 6 | - | 129 | 186 | - | 1 | - |
| N. Mex. | 13 | 20 | N | N | N | 3 | 97 | 80 | - | - | 1 |
| Ariz. | 30 | 37 | - | - | 6 | 3 | 33 | 163 | - | 13 | 1 |
| Utah | 13 | 10 | - | 5 | 5 | - | 53 | 120 | - | 1 | 2 |
| Nev. | 7 | 6 | - | 5 | 12 | - | 4 | 35 | - | 1 | 1 |
| PACIFIC | 347 | 393 | - | 71 | 115 | 28 | 1,279 | 917 | - | 4 | 10 |
| Wash. | 56 | 54 | - | 2 | 7 | 14 | 571 | 238 | - | - | 5 |
| Oreg. | 60 | 65 | N | N | N | 8 | 41 | 70 | - | - | - |
| Calif. | 222 | 266 | - | 57 | 83 | 6 | 638 | 581 | - | 4 | 3 |
| Alaska | 5 | 3 | - | 1 | 2 | - | 4 | 14 | - | - | - |
| Hawaii | 4 | 5 | - | 11 | 23 | - | 25 | 14 | - | - | 2 |
| Guam | 1 | 2 | U | 1 | 2 | U | 1 | 1 | U | - | - |
| P.R. | 5 | 9 | U | - | 2 | U | 16 | 4 | U | - | 8 |
| 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 | U | U | U | U | U | U | U | U | U | U |

N: Not notifiable

U: Unavailable

-: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending September 25, 1999 (38th Week)

| Reporting Area | All Causes, By Age (Years) | | | | | | P&J† | Total | Reporting Area | All Causes, By Age (Years) | | | | | | P&J† | Total |
|---------------------|----------------------------|-------|-------|-------|------|----|------|-----------------------|---------------------|----------------------------|-------|-------|-------|------|-----|------|-------|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | | | | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | | |
| NEW ENGLAND | 487 | 358 | 90 | 29 | 5 | 5 | 41 | S. ATLANTIC | 1,185 | 742 | 260 | 111 | 48 | 21 | 76 | | |
| Boston, Mass. | 160 | 110 | 32 | 14 | 2 | 2 | 13 | Atlanta, Ga. | U | U | U | U | U | U | U | | |
| Bridgeport, Conn. | 29 | 25 | 4 | - | - | - | 3 | Baltimore, Md. | 304 | 174 | 70 | 36 | 16 | 8 | 22 | | |
| Cambridge, Mass. | 9 | 8 | 1 | - | - | - | - | Charlotte, N.C. | 95 | 63 | 19 | 6 | 2 | 5 | 6 | | |
| Fall River, Mass. | 25 | 22 | 3 | - | - | - | 2 | Jacksonville, Fla. | 177 | 114 | 39 | 14 | 7 | 3 | 5 | | |
| Hartford, Conn. | U | U | U | U | U | U | U | Miami, Fla. | 101 | 59 | 24 | 12 | 6 | - | - | | |
| Lowell, Mass. | 30 | 23 | 5 | 2 | - | - | - | Norfolk, Va. | 52 | 32 | 11 | 6 | 2 | 1 | 3 | | |
| Lynn, Mass. | 12 | 10 | 1 | 1 | - | - | - | Richmond, Va. | 87 | 45 | 27 | 10 | 5 | - | 10 | | |
| New Bedford, Mass. | 30 | 26 | 3 | 1 | - | - | - | Savannah, Ga. | 35 | 25 | 5 | 3 | 1 | 1 | 2 | | |
| New Haven, Conn. | 50 | 34 | 11 | 2 | 1 | 2 | 5 | St. Petersburg, Fla. | 45 | 35 | 8 | 1 | 1 | - | 5 | | |
| Providence, R.I. | 41 | 23 | 14 | 2 | 2 | - | 4 | Tampa, Fla. | 176 | 126 | 28 | 15 | 7 | - | 22 | | |
| Somerville, Mass. | 3 | 1 | - | 2 | - | - | - | Washington, D.C. | 96 | 57 | 27 | 8 | 1 | 3 | 1 | | |
| Springfield, Mass. | 26 | 19 | 6 | - | - | 1 | 3 | Wilmington, Del. | 17 | 12 | 2 | - | - | - | - | | |
| Waterbury, Conn. | 25 | 19 | 4 | 2 | - | - | 2 | E.S. CENTRAL | 794 | 528 | 166 | 54 | 25 | 21 | 41 | | |
| Worcester, Mass. | 47 | 38 | 6 | 3 | - | - | 9 | Birmingham, Ala. | 201 | 131 | 37 | 12 | 7 | 14 | 12 | | |
| MID. ATLANTIC | 2,196 | 1,512 | 438 | 167 | 47 | 31 | 91 | Chattanooga, Tenn. | 53 | 36 | 7 | 5 | 2 | 3 | - | | |
| Albany, N.Y. | 49 | 34 | 8 | 5 | 1 | 1 | 3 | Knoxville, Tenn. | 82 | 50 | 22 | 7 | 3 | - | - | | |
| Allentown, Pa. | U | U | U | U | U | U | U | Lexington, Ky. | 74 | 51 | 13 | 5 | 4 | 1 | 6 | | |
| Buffalo, N.Y. | 73 | 49 | 14 | 8 | 1 | 1 | 2 | Memphis, Tenn. | 165 | 114 | 34 | 13 | 3 | 1 | 13 | | |
| Camden, N.J. | 31 | 22 | 6 | 2 | - | 1 | - | Mobile, Ala. | 36 | 25 | 9 | 2 | - | - | - | | |
| Elizabeth, N.J. | 12 | 8 | 3 | 1 | - | - | - | Montgomery, Ala. | 49 | 34 | 13 | 1 | 1 | - | 5 | | |
| Erie, Pa. | 53 | 46 | 4 | 1 | 1 | 1 | 3 | Nashville, Tenn. | 134 | 87 | 31 | 9 | 5 | 2 | 5 | | |
| Jersey City, N.J. | 40 | 25 | 9 | 4 | 1 | 1 | - | W.S. CENTRAL | 1,447 | 920 | 309 | 136 | 55 | 27 | 127 | | |
| New York City, N.Y. | 1,031 | 706 | 217 | 79 | 20 | 9 | 19 | Austin, Tex. | 74 | 45 | 15 | 10 | 4 | - | - | | |
| Newark, N.J. | 65 | 25 | 21 | 15 | - | 4 | 4 | Baton Rouge, La. | 44 | 33 | 4 | 6 | - | 1 | 1 | | |
| Paterson, N.J. | 27 | 14 | 9 | 4 | - | - | 1 | Corpus Christi, Tex. | 57 | 31 | 18 | 4 | 2 | 2 | 9 | | |
| Philadelphia, Pa. | 406 | 275 | 80 | 30 | 15 | 6 | 24 | Dallas, Tex. | 159 | 94 | 38 | 16 | 9 | 2 | 2 | | |
| Pittsburgh, Pa.‡ | 52 | 35 | 10 | 4 | - | 2 | 7 | El Paso, Tex. | 95 | 63 | 22 | 5 | 4 | 1 | 5 | | |
| Reading, Pa. | 28 | 24 | 3 | - | - | 1 | 2 | Ft. Worth, Tex. | 117 | 73 | 27 | 9 | 2 | 6 | 8 | | |
| Rochester, N.Y. | 135 | 104 | 25 | 3 | 2 | 1 | 11 | Houston, Tex. | 454 | 265 | 105 | 55 | 22 | 7 | 71 | | |
| Schenectady, N.Y. | 18 | 14 | 2 | - | 1 | 1 | 3 | Little Rock, Ark. | 54 | 39 | 8 | 3 | 3 | 1 | 1 | | |
| Scranton, Pa. | 27 | 23 | 2 | 1 | 1 | - | 1 | New Orleans, La. | 155 | 100 | 35 | 16 | 4 | - | 15 | | |
| Syracuse, N.Y. | 105 | 78 | 17 | 5 | 3 | 2 | 7 | San Antonio, Tex. | U | U | U | U | U | U | U | | |
| Trenton, N.J. | 25 | 16 | 6 | 2 | 1 | - | 3 | Shreveport, La. | 96 | 66 | 19 | 4 | 4 | 3 | 7 | | |
| Utica, N.Y. | 19 | 14 | 2 | 3 | - | - | 1 | Tulsa, Okla. | 142 | 111 | 18 | 8 | 1 | 4 | 8 | | |
| Yonkers, N.Y. | U | U | U | U | U | U | U | MOUNTAIN | 931 | 628 | 170 | 86 | 24 | 23 | 64 | | |
| E.N. CENTRAL | 1,855 | 1,259 | 349 | 142 | 46 | 56 | 101 | Albuquerque, N.M. | 123 | 80 | 24 | 13 | 5 | 1 | 3 | | |
| Akron, Ohio | 42 | 30 | 7 | 4 | 1 | - | 3 | Boise, Idaho | 38 | 29 | 6 | 1 | 1 | 1 | 3 | | |
| Canton, Ohio | 41 | 34 | 6 | 1 | - | - | - | Colo. Springs, Colo. | 61 | 45 | 7 | 6 | 1 | 2 | 3 | | |
| Chicago, Ill. | 396 | 241 | 85 | 42 | 12 | 13 | 28 | Denver, Colo. | 157 | 95 | 36 | 17 | 2 | 7 | 17 | | |
| Cincinnati, Ohio | 66 | 37 | 20 | 5 | 1 | 3 | 4 | Las Vegas, Nev. | 179 | 121 | 33 | 19 | 5 | 1 | 6 | | |
| Cleveland, Ohio | 148 | 91 | 32 | 18 | 3 | 4 | 3 | Ogden, Utah | 27 | 22 | 1 | 2 | 2 | - | 2 | | |
| Columbus, Ohio | 186 | 120 | 39 | 10 | 8 | 9 | 10 | Phoenix, Ariz. | 71 | 48 | 11 | 9 | 1 | 2 | 7 | | |
| Dayton, Ohio | 115 | 82 | 20 | 9 | 2 | 2 | 4 | Pueblo, Colo. | 25 | 20 | 5 | - | - | - | 1 | | |
| Detroit, Mich. | U | U | U | U | U | U | U | Salt Lake City, Utah | 113 | 69 | 19 | 11 | 5 | 9 | 14 | | |
| Evansville, Ind. | 47 | 37 | 5 | 4 | 1 | - | 1 | Tucson, Ariz. | 137 | 99 | 28 | 8 | 2 | - | 8 | | |
| Fort Wayne, Ind. | 45 | 32 | 6 | 2 | 1 | 4 | 5 | PACIFIC | 1,555 | 1,125 | 274 | 99 | 25 | 29 | 122 | | |
| Gary, Ind. | 21 | 10 | 5 | 4 | 2 | - | 2 | Berkeley, Calif. | 12 | 7 | 3 | 2 | - | - | - | | |
| Grand Rapids, Mich. | 62 | 43 | 10 | 5 | 1 | 3 | 2 | Fresno, Calif. | 150 | 114 | 25 | 7 | 3 | 1 | 20 | | |
| Indianapolis, Ind. | 223 | 150 | 46 | 17 | 4 | 6 | 9 | Glendale, Calif. | 15 | 12 | 2 | 1 | - | - | 2 | | |
| Lansing, Mich. | 37 | 27 | 4 | 2 | 3 | 1 | 2 | Honolulu, Hawaii | 72 | 59 | 8 | 3 | - | 1 | 5 | | |
| Milwaukee, Wis. | 120 | 91 | 21 | 2 | 1 | 5 | 9 | Long Beach, Calif. | 72 | 53 | 14 | 3 | 1 | 1 | 5 | | |
| Peoria, Ill. | 35 | 30 | 4 | 1 | - | - | 1 | Los Angeles, Calif. | 241 | 177 | 43 | 16 | 1 | 4 | 10 | | |
| Rockford, Ill. | 70 | 53 | 8 | 6 | 1 | 2 | 6 | Pasadena, Calif. | 20 | 16 | 4 | - | - | - | - | | |
| South Bend, Ind. | 54 | 38 | 12 | 3 | 1 | - | 1 | Portland, Oreg. | 137 | 94 | 24 | 8 | 6 | 5 | 10 | | |
| Toledo, Ohio | 88 | 64 | 12 | 5 | 4 | 3 | 9 | Sacramento, Calif. | 206 | 146 | 45 | 9 | 2 | 4 | 25 | | |
| Youngstown, Ohio | 59 | 49 | 7 | 2 | - | 1 | 2 | San Diego, Calif. | 165 | 111 | 29 | 15 | 7 | 1 | 24 | | |
| W.N. CENTRAL | 699 | 488 | 131 | 40 | 18 | 22 | 51 | San Francisco, Calif. | U | U | U | U | U | U | U | | |
| Des Moines, Iowa | 52 | 38 | 8 | 4 | - | 2 | 7 | San Jose, Calif. | 175 | 135 | 26 | 9 | 1 | 4 | 8 | | |
| Duluth, Minn. | 39 | 31 | 6 | 2 | - | - | 7 | Santa Cruz, Calif. | 25 | 18 | 4 | 3 | - | - | 2 | | |
| Kansas City, Kans. | U | U | U | U | U | U | U | Seattle, Wash. | 117 | 74 | 26 | 9 | - | 8 | 4 | | |
| Kansas City, Mo. | 130 | 89 | 27 | 7 | 5 | 2 | 11 | Spokane, Wash. | 52 | 41 | 5 | 5 | 1 | - | 3 | | |
| Lincoln, Nebr. | 34 | 27 | 7 | - | - | - | 3 | Tacoma, Wash. | 96 | 68 | 16 | 9 | 3 | - | 4 | | |
| Minneapolis, Minn. | 170 | 126 | 27 | 9 | 1 | 7 | 10 | TOTAL | 11,149 [§] | 7,560 | 2,187 | 864 | 293 | 235 | 714 | | |
| Omaha, Nebr. | 92 | 66 | 19 | 2 | 1 | 4 | 4 | | | | | | | | | | |
| St. Louis, Mo. | 92 | 44 | 22 | 14 | 8 | 4 | 4 | | | | | | | | | | |
| St. Paul, Minn. | 90 | 67 | 15 | 2 | 3 | 3 | 5 | | | | | | | | | | |
| Wichita, Kans. | U | U | U | U | U | U | U | | | | | | | | | | |

U: Unavailable - : no reported cases

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

†Pneumonia and influenza.

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

§Total includes unknown ages.

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

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

State Support Team

Robert Fagan
Jose Aponte
Paul Gangarosa, M.P.H.
Gerald Jones
David Nitschke
Carol A. Worsham

CDC Operations Team

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

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at <http://www.cdc.gov/> or from CDC's file transfer protocol server at <ftp.cdc.gov>. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

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.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Director, Centers for Disease Control
and Prevention
Jeffrey P. Koplan, M.D., M.P.H.

Acting Deputy Director for Science
and Public Health, Centers for
Disease Control and Prevention
Stephen M. Ostroff, M.D.

Acting Director,
Epidemiology Program Office
Barbara R. Holloway, M.P.H.

Editor, *MMWR* Series
John W. Ward, M.D.

Managing Editor,
MMWR (weekly)
Karen L. Foster, M.A.

Writers-Editors,
MMWR (weekly)
Jill Crane

David C. Johnson
Teresa F. Rutledge
Caran R. Wilbanks

Desktop Publishing
Morie M. Higgins
Peter M. Jenkins