MMWR™
Morbidity and Mortality Weekly Report
www.cdc.gov/mmwr

Weekly February 29, 2008 / Vol. 57 / No. 8

Human Rabies — Alberta, Canada, 2007

On April 26, 2007, a patient from Alberta, Canada, died after 9 weeks in an intensive care unit (ICU) from encephalitis caused by a rabies virus variant associated with silver-haired bats. This report summarizes the clinical course of disease in that patient, who was treated using the Milwaukee Protocol, an experimental treatment protocol similar to one used for the rabies survivor described in 2005 (*1*). This report also describes the subsequent epidemiologic investigations by three regional public health departments in Alberta. Rabies continues to be a cause of human death in the developed and developing world. The findings in this report underscore the need for continued public education that promotes rabies prevention and postexposure prophylaxis while emphasizing the importance of bat exposure in rabies transmission.

Case Report

During August 2006, a man aged 73 years was bitten by a bat on his left shoulder while sleeping at home in rural Alberta. He killed and disposed of the bat and did not seek medical attention. The patient had no history of previous rabies vaccination and became ill on February 14, 2007, when he had onset of left shoulder pain. The pain was radicular, severe, and progressive and evolved to include left hand weakness during the next few days. The man sought care at a local emergency department on February 15, 17, and 19, and was administered analgesics.

On February 21 (the seventh day of clinical illness), the patient was admitted to the local hospital with general weakness, anorexia, and dysphagia. His family described the patient as irritable and not himself. Forty-eight hours after admission, the patient had left arm myoclonus and gasping respirations, suggestive of inspiratory spasms. His illness progressed with high fever, hypoxia, hypersalivation, and a decreased level of consciousness. He required intubation and was transferred to a tertiary-care hospital ICU on February 23 (the ninth day of clinical illness) with a presumptive diagnosis of aspiration pneumonia and sepsis. The history of a previous bat bite was not obtained at that time.

A computerized tomography scan of the head on admission to the tertiary-care hospital was unremarkable. A lumbar puncture was performed, and analysis of cerebrospinal fluid (CSF) indicated no white blood cells, normal glucose, and marginally elevated protein. A chest radiograph revealed a right lower lobe infiltrate, and treatment for presumed pneumonia with broad-spectrum antibiotics was initiated. The patient continued to deteriorate with cardiac dysrhythmias, profound hemodynamic lability, opisthotonic posturing, hypersalivation, and diffuse spasticity. Because of this evolution of the patient's symptoms, rabies was considered as a possible diagnosis on February 26 (the 12th day of clinical illness). When asked about bites or other exposures, the patient's family recalled that the patient had been bitten by a bat approximately 6 months before.

A nuchal biopsy specimen and saliva sample were sent to the Canadian Food Inspection Agency in Ottawa, Ontario, where the rabies diagnosis was confirmed on March 1 (the 15th day of clinical illness). Presence of viral antigen and viral RNA was detected by direct fluorescent antibody test (DFA) and reverse transcription polymerase chain reaction (RT-PCR), respectively. Subsequently, the rabies

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

The *MMWR* series of publications is published by the Coordinating Center for Health Information and Service, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

Suggested Citation: Centers for Disease Control and Prevention. [Article title]. MMWR 2008;57:[inclusive page numbers].

virus RNA was typed as a variant associated with silver-haired bats (*Lasionycteris noctivagans*).

Rabies immune globulin was administered (1,200 units intramuscularly) on March 1. After discussion with the family regarding the diagnosis, the poor prognosis, and possible management strategies, a decision was made to initiate the Milwaukee Protocol, a recently described experimental therapy for rabies (*1*). This regimen involves 1) induction of therapeutic coma, 2) waiting for an adaptive immune response to evolve and neutralize and clear virus from the central nervous system and periphery, and 3) supportive antiviral and metabolic therapies. In 2004, this protocol resulted in survival and good neurologic outcome for an unvaccinated female patient aged 14 years in Milwaukee, Wisconsin (*1*). On March 2 (the 16th day of clinical illness), the treating physicians initiated the Milwaukee Protocol, including parenteral ketamine infusion (2 mg/kg), midazolam infusion (0–20 mg/hour), ribavirin (560 μg every 8 hours), and amantadine (200 mg once daily); the protocol was modified to include L-arginine (35 g every 24 hours), enteral administration of tetrahydrobiopterin (150 mg every 8 hours), and vitamin C (500 mg once daily) to supplement possible deficiencies and to improve cerebral blood flow autoregulation. The immunologic response and peripheral viral clearance were monitored via detection of viral RNA in saliva by quantitative RT-PCR and titration of rabies virus neutralizing antibodies in sera and CSF using a rapid fluorescent focus inhibition test.

The patient's severe hemodynamic lability improved gradually on ventilatory and low-dose pressor support. Rabies immunoglobulin G (IgG) and immunoglobulin M (IgM) were detected in serum on March 6 and in CSF on March 11, a total of 20 and 25 days, respectively, after onset of neurologic symptoms. Baseline serum and CSF tested negative for the presence of IgM and IgG against rabies virus, and subsequent development of an IgM response was thought to represent an immune response to the infection. The patient was weaned from sedation and, on April 1 (the 46th day of clinical illness), sedation was removed completely. However, no neurologic recovery occurred despite detection of low titers of virus-neutralizing antibodies (0.46–1.16 IU/mL) in CSF and normal cerebral perfusion.

Levels of virus-neutralizing antibodies in serum increased slowly and reached 0.9 IU/mL on April 24 (the 69th day of clinical illness). During the disease course, detectable rabies virus decreased markedly in the peripheral tissues, with a negative DFA on the skin biopsy and a small amount of viral RNA detected by PCR in saliva. During the same

period, the patient had cardiac arrhythmias, autonomic instability, syndrome of inappropriate antidiuretic hormone secretion, hemolysis attributed to ribavirin, and ventilator-associated pneumonia.

A nuclear medicine brain death scintigraphy study revealed preserved brain perfusion; however, on April 23 (the 68th day of clinical illness), repeated magnetic resonance imaging demonstrated diffuse severe signal abnormality of the cortex, white matter, basal ganglia, and thalami. Clinical examination, including apnea testing, was consistent with brain death. After discussion with the family, life-support was withdrawn on April 26, approximately 8 weeks after initiating therapy, and the patient died. DFA staining of the autopsied brain stem and cerebral cortex demonstrated an abundance of rabies viral inclusions. These results were confirmed by RT-PCR. Microscopic examination revealed extensive and virtually complete loss of cortical neurons, whereas the cerebellum and brainstem had preservation of neurons.

Public Health Investigation

In conjunction with the admitting tertiary-care hospital, the public health departments of three Alberta health regions traced the household and health-care–associated contacts of the patient starting from 1 week before onset of neurologic symptoms, a practice consistent with previous similar investigations (*2*). Postexposure prophylaxis (PEP) was recommended for health-care workers and close contacts of the patient with a possible exposure (defined as a bite, scratch, or exposure of nonintact skin or mucous membrane surface to saliva, CSF, tears, or brain tissue). A total of 19 contacts received PEP. All family members (the patient's wife and his two sons) were administered PEP with rabies immune globulin and vaccine. Sixteen health-care workers, who had reported exposures of mucous membranes or nonintact skin to the patient's saliva, were administered PEP; 15 (six from the primary referring hospital and nine from the tertiary-care hospital) received rabies immune globulin and vaccine. One health-care worker, who had been vaccinated previously, received 2 booster vaccine doses. To date, none of the persons who received PEP have demonstrated illness consistent with rabies.

Reported by: *J Johnstone, MD, L Saxinger, MD, Infectious Diseases, R McDermid, MD, S Bagshaw, MD, Critical Care, L Resch, MD, Pathology, Univ of Alberta; B Lee, MD, Alberta Provincial Public Health Laboratory; M Johnson, MD, Public Health Div, AM Joffe, MD, Occupational Health, Safety, and Wellness, Capital Health Region, Edmonton; G Benade, MD, Public Health Div, East Central Health Region, Camrose; D Johnson, MD, Public Health Div, Aspen Health Region, Westlock, Alberta; S Nadin-Davis, PhD, Canadian Food Inspection Agency, Ottawa; E Cheung, Public Health Laboratories Br, Ministry of Health and Long-Term Care, Etobicoke, Ontario, Canada. R Willoughby Jr, MD, Medical College of Wisconsin, Milwaukee, Wisconsin. R Franka, DVM, PhD, Div of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases, CDC.*

Editorial Note: In Canada, 24 documented human rabies cases, including the one described in this report, have occurred since 1924 (*2,3*). Since 1970, six of the seven cases have been attributable to rabies virus variants associated with bats (*2,3*). Bats are an increasingly common source of human rabies in the United States, accounting for 37 (92.5%) of the 40 indigenous cases of rabies since 1990 (*4*). Passive surveillance of bats in western Canada during 1985–1989 indicated that 4.8% of bats submitted for testing were positive for the presence of rabies virus; the prevalence has remained stable since 1965 (*5*). The rabies virus variant associated with *L. noctivagans* bats in North America has been implicated in multiple indigenously acquired human rabies cases in the United States in recent years and also was responsible for a case of human rabies in Quebec, Canada, in 2000 (*6*).

After an exposure, human rabies is preventable by local wound care and administration of PEP (*3,7,8*). Patients with no previous rabies vaccination require rabies immune globulin and a 5-dose series of rabies vaccine (*7,8*). However, as the case in this report illustrates, persons are not always aware of the importance of seeking attention and PEP after bat exposures. In addition, clinicians need to recognize that a majority of patients with human rabies transmitted by bats might have no recollection of a bat bite. Thus, PEP should be considered in circumstances in which the likelihood of a bite cannot be reasonably excluded (*7,8*). PEP can be administered any time after an exposure, up to the onset of neurologic illness, but effectiveness of prophylaxis decreases with time; therefore, early administration of PEP is critical. After infection, the usual incubation period for rabies is 20 to 60 days, although it can vary from several days to years (*8*).

Only one unvaccinated rabid patient (the girl in the Milwaukee case) has survived. Several other attempts to use the Milwaukee Protocol have been unsuccessful (*9*). Compared with the Milwaukee patient, the patient in this report 1) had advanced age; 2) had encephalitic disease with high levels of viral load in saliva and no detectable antibody response at the time of diagnosis; and 3) had received rabies immune globulin. Immune globulin administration during clinical rabies has not been demonstrated to be useful and is not part of the Milwaukee Protocol because of concerns that it might alter the kinetics of the immune response (*10*).

Sixteen health-care workers received PEP after the public health investigation. The indication for PEP includes exposure of nonintact skin or mucous membranes to potentially infectious body fluids (e.g., saliva) or neuronal tissue; standard infection-control precautions can minimize health-care workers' risk for exposure to rabies virus (*7,8*). To date, no cases of transmission of rabies to persons exposed through health-care activities have been documented.

This report underscores the need for increasing public awareness of the risk for rabies after contact with bats. Underestimation of the importance of such exposures can lead to a fatal outcome. Persons bitten by a bat should immediately 1) wash the wound thoroughly with soap and water; 2) capture the animal, if this can be done safely (otherwise call local animal-control services for assistance), and submit the bat for testing; 3) report the incident to local or regional/state public health officials; and 4) visit a physician for treatment and evaluation regarding the need for PEP. Timely submission of the bat (or other possibly rabid animal) to public health officials facilitates testing for the presence of rabies virus, helps to ensure rapid administration of PEP when indicated, and minimizes the unnecessary use of PEP if the animal is not rabid.

An experimental approach to treat rabies in humans requires early diagnosis. Therefore, rabies should be included in the differential diagnosis of any unexplained acute, rapidly progressive viral encephalitis.

Rabies is a fatal but easily preventable disease that has no established effective therapy after onset of clinical disease. In addition to animal vaccination, continued public education regarding rabies exposure and timely and appropriate prophylaxis is a primary strategy for human rabies prevention.

Acknowledgments

This report is based, in part, on contributions by staff members in the Capital and Aspen Health Regions, B Aitken, East Central Health Region, Alberta; F Muldoon, M Sheen, C Fehlner-Gardiner, A Wandeler, Canadian Food Inspection Agency, Ottawa, M Shaw, T Okura, R Kandiah, Public Health Laboratories Br, Ministry of Health and Long-Term Care, Etobicoke, Ontario; and CE Rupprecht, VMD, PhD, LA Orciari, MS, M Niezgoda, MS, A Velasco-Villa, PhD, PA Yager, I Kuzmin, MD, Div of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases, CDC.

References

1. Willoughby RE, Tieves KS, Hoffman GM, et al. Survival after treatment of rabies with induction of coma. N Engl J Med 2005;352:2508–14.
2. Parker R, McKay D, Hawes C, et al. Human rabies, British Columbia—January 2003. Can Commun Dis Rep 2003;29:137–8.
3. Varughese P. Human rabies in Canada—1924–2000. Can Commun Dis Rep 2000;26:210–1.
4. Blanton JD, Hanlon CA, Rupprecht CE. Rabies surveillance in the United States during 2006. J Am Vet Med Assoc 2007;231:540–56.
5. Prins B, Loewen KG. Rabies diagnosis in western Canada, 1985–1989. Can Vet J 1991;32:487–91.
6. Turgeron N, Tucci M, Deshaies D, et al. Human rabies in Montreal, Quebec—October 2000. Can Commun Dis Rep 2000;26:209–10.
7. CDC. Human rabies prevention—United States, 1999: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-1).
8. Public Health Agency of Canada. Canadian immunization guide. 7th ed. Ottawa, Ontario: Public Health Agency of Canada; 2006:285–6. Available at http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf.
9. CDC. Human rabies—Indiana and California, 2006. MMWR 2007;56:361–5.
10. Jackson AC. Human disease. In: Jackson AC, Wunner WH, eds. Rabies. 2nd ed. San Diego, CA: Academic Press; 2007:309–40.

Perceived Insufficient Rest or Sleep — Four States, 2006

Chronic sleep loss is an under-recognized public health problem that has a cumulative effect on physical and mental health. Sleep loss and sleep disorders can reduce quality of life and productivity, increase use of health-care services, and result in injuries, illness, or deaths (*1*). Epidemiologic surveys suggest that mean sleep duration among U.S. adults has decreased during the past two decades (CDC, unpublished data, 2007). An estimated 50–70 million persons in the United States have chronic sleep and wakefulness disorders (*1*). Most sleep disorders are marked by difficulty falling or staying asleep, daytime sleepiness, sleep-disordered breathing, or abnormal movements, behaviors, or sensations during sleep (*1*). To examine characteristics of men and women who reported days of perceived insufficient rest or sleep during the preceding 30 days, CDC analyzed 2006 Behavioral Risk Factor Surveillance System (BRFSS) data from four states (Delaware, Hawaii, New York, and Rhode Island). This report summarizes the results of that analysis. Among all respondents, 29.6% reported no days of insufficient rest or sleep during the preceding 30 days and 10.1% reported insufficient rest or sleep every day during the preceding 30 days. Rest and sleep insufficiency can be assessed in general medical-care visits and treated through effective behavioral and pharmacologic methods. Expanded and more detailed surveillance of insufficient rest or sleep (e.g., national estimates) might clarify the nature of this problem and its effect on the health of the U.S. population.

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized, U.S. civilian population aged ≥18 years, conducted by state health departments in collaboration with CDC (*3*). The median response rate (i.e., the percentage of persons who completed interviews among all BRFSS-eligible persons, including those who were not successfully contacted) among the four states asking the sleep question in 2006 was 46.6% (range: 41.0%–48.6%). The median cooperation rate (i.e., the proportion of all respondents interviewed among those contacted) for the four states was 72.2% (range: 65.0%–73.3%). The median response rate among all states in the 2006 BRFSS was 51.4% (range: 35.1%–66.0%).

In 2006, the question "During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?" was asked in the four states. Data from the four states were combined, and the number of days of perceived insufficient rest or sleep (0 days, 1–6 days, 7–13 days, 14–20 days, 21–29 days, and 30 days) was categorized. Analyses were stratified by race/ethnicity, age group, sex, education level, and employment status. Weighted prevalence estimates and 95% confidence intervals (CIs) were calculated using statistical software to account for the complex survey design.* Differences with nonoverlapping CIs were considered statistically significant.

In 2006, 29.6% of respondents in the four states reported no days of insufficient rest or sleep during the preceding 30 days (Table). In Hawaii, 38.4% of respondents indicated no days of rest or sleep insufficiency during the preceding 30 days, which was significantly greater than the 27.7% of respondents in Delaware, 29.2% in New York, and 27.7% in Rhode Island. Responses categorized by race/ethnicity and sex were not significantly different. The prevalence of no days of insufficient rest or sleep increased with age; 44.7% of persons aged ≥55 years reported no days of insufficient rest or sleep, compared with 21.9% of persons aged 18–34 years. Retired persons (53.5%) were significantly more likely to report no days of insufficient rest or sleep than persons who were employed (24.0%), unemployed (32.9%), unable to work (24.6%), or otherwise employed† (28.1%). Finally, as education level increased, a smaller percentage of respondents reported no days of insufficient rest or sleep: 39.7% of adults with less than a high school diploma or General Educational Development certificate (GED) reported no days of insufficient rest or sleep, compared with 33.4% of those with a high school diploma or a GED and 26.3% of those with some college or a college degree.

On average, 10.1% of respondents reported insufficient rest or sleep every day during the preceding 30 days. Persons aged ≥55 years (7.3%) were significantly less likely to report 30 days of insufficient rest or sleep, compared with persons aged 18–34 years. Similarly, retired persons (5.5%) were significantly less likely to report 30 days of insufficient rest or sleep. Persons who were unable to work (24.8%) were significantly more likely to report 30 days of insufficient rest or sleep than employed (9.9%), unemployed (12.8%), or otherwise employed persons (10.6%).

Reported by: *LR McKnight-Eily, PhD, LR Presley-Cantrell, PhD, TW Strine, MPH, DP Chapman, PhD, GS Perry, DrPH, JB Croft, PhD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

Editorial Note: This report is one of the first to present state-level information on any sleep-related measure. The findings indicate that 29.6% of adult respondents in the four states reported no days of insufficient rest or sleep during the preceding 30 days, whereas 10.1% reported insufficient rest or sleep every day. Responses to this survey did not vary significantly when categorized by sex or race/ethnicity, possibly because of the limited sample size of minority populations in some of the four states. Previous studies have indicated disparities in the prevalence of sleep-related problems in minority populations (*2*) and in women (*4*). Although certain studies have indicated that sleep disturbance is more prevalent among older adults, the results from the study described in this report are consistent with research indicating that older adults (who are more likely to be retired) are less likely to report impaired sleep (*4*). Persons unable to work expressed the greatest prevalence of perceived rest or sleep insufficiency, which might be the result of mental distress or the medical problems, disabilities, or other conditions that prevent them from being employed (*5*).

Geographic variation in reported rest or sleep insufficiency among the four states described in this report might result from local and cultural differences, including variations in opportunities for shift work. The causes of perceived rest or sleep loss might include occupational factors such as extended work schedules, jet lag, or shift work, resulting in irregular sleep schedules (*1*). Lifestyle choices, including late-night television watching, Internet use, or consumption of caffeine and other stimulants (i.e., alcohol and over-the-counter or prescribed medications), also can result in sleep loss (*1*). Additionally, common sleep disorders such as insomnia, sleep-disordered breathing, sleep apnea, restless legs syndrome, narcolepsy, and circadian rhythm

* Information regarding BRFSS data and methods is available at http://www.cdc.gov/brfss/technical_infodata/surveydata/2005.htm.

† Homemaker or student.

TABLE. Percentage of adults who reported insufficient rest or sleep during the preceding 30 days,* by number of days and selected sociodemographic characteristics — Behavior Risk Factor Surveillance System, Delaware, Hawaii, New York, and Rhode Island, 2006

Characteristic	0 days %	0 days (95% CI†)	1–6 days %	1–6 days (95% CI)	7–13 days %	7–13 days (95% CI)	14–20 days %	14–20 days (95% CI)	21–29 days %	21–29 days (95% CI)	30 days %	30 days (95% CI)
State (unweighted sample size)												
Delaware (n = 3,876)	27.7	(25.9–29.7)	32.9	(30.8–35.1)	12.6	(11.2–14.3)	11.2	(9.8–12.8)	1.5	(1.1–2.1)	14.0	(12.2–16.0)
Hawaii (n = 6,077)	38.4	(36.7–40.1)	29.8	(28.2–31.4)	11.1	(10.0–12.2)	10.3	(9.2–11.4)	1.7	(1.3–2.2)	8.8	(7.9–9.8)
New York (n = 5,293)	29.2	(27.6–30.9)	32.9	(31.2–34.6)	13.0	(11.8–14.3)	12.3	(11.1–13.6)	2.7	(2.2–3.3)	9.9	(8.9–11.1)
Rhode Island (n = 4,343)	27.7	(26.1–29.4)	31.6	(29.7–33.5)	13.3	(11.9–14.9)	12.9	(11.5–14.4)	2.6	(2.0–3.4)	11.9	(10.7–13.3)
Age group (yrs)												
18–34 (n = 3,147)	21.9	(18.9–25.3)	27.8	(24.6–31.2)	16.5	(14.0–19.3)	17.1	(14.5–20.1)	3.4	(2.3–4.9)	13.3	(11.1–15.9)
35–44 (n = 3,505)	20.9	(18.1–23.9)	38.2	(34.9–41.6)	13.5	(11.6–15.7)	14.0	(12.0–16.3)	3.4	(2.5–4.7)	10.0	(8.2–12.0)
45–54 (n = 4,195)	26.2	(23.6–29.1)	36.0	(33.2–38.9)	14.4	(12.5–16.5)	11.3	(9.7–13.2)	2.1	(1.4–3.2)	10.0	(8.3–11.9)
≥55 (n = 8,742)	44.7	(42.7–46.7)	31.7	(29.9–33.7)	8.1	(7.1–9.2)	6.6	(5.7–7.7)	1.5	(1.1–2.1)	7.3	(6.3–8.4)
Race/Ethnicity												
White, non-Hispanic (n = 13,258)	28.2	(26.8–29.7)	33.0	(31.5–34.5)	13.7	(12.6–14.9)	12.7	(11.6–13.9)	2.7	(2.2–3.3)	9.7	(8.7–10.8)
Black, non-Hispanic (n = 1,006)	27.1	(22.7–32.1)	32.5	(27.5–38.0)	13.4	(10.1–17.6)	13.9	(9.9–19.0)	—§	—	11.4	(8.3–15.4)
Hispanic (n = 1,258)	33.7	(28.6–39.2)	32.3	(27.2–37.8)	9.8	(7.3–13.0)	9.7	(6.7–13.8)	—	—	11.6	(8.6–15.4)
Other, non-Hispanic¶ (n = 4,067)	33.8	(29.4–38.5)	31.2	(26.8–36.0)	12.1	(9.0–16.0)	11.1	(8.5–14.5)	2.2	(1.3–3.8)	9.5	(7.2–12.6)
Sex												
Men (n = 7,598)	31.1	(28.8–33.4)	34.6	(32.2–37.0)	11.5	(10.1–13.1)	11.2	(9.8–12.9)	2.7	(2.0–3.7)	8.9	(7.6–10.5)
Women (n = 11,991)	28.3	(26.7–30.0)	30.8	(29.1–32.5)	14.2	(12.9–15.6)	13.1	(11.6–14.6)	2.5	(2.0–3.1)	11.2	(10.0–12.6)
Employment status												
Employed (n = 11,610)	24.0	(22.3–25.7)	37.2	(35.3–39.2)	13.7	(12.5–15.0)	12.4	(11.2–13.8)	2.8	(2.2–3.5)	9.9	(8.8–11.2)
Unemployed (n = 706)	32.9	(26.0–40.6)	27.5	(21.6–34.3)	9.5	(6.1–14.4)	14.7	(9.4–22.3)	—	—	12.8	(8.7–18.5)
Retired (n = 4,781)	53.5	(50.8–56.1)	28.9	(26.6–31.4)	5.9	(4.8–7.3)	4.9	(3.9–6.1)	1.2	(0.8–1.9)	5.5	(4.4–6.9)
Unable to work (n = 968)	24.6	(19.4–30.7)	15.1	(11.3–20.0)	13.6	(9.3–19.4)	17.7	(13.4–23.1)	—	—	24.8	(19.6–30.8)
Other** (n = 1,524)	28.1	(23.8–33.0)	23.1	(19.1–27.8)	18.8	(14.7–23.6)	16.6	(12.8–21.3)	2.8	(1.7–4.5)	10.6	(7.7–14.3)
Education level												
<High school diploma or GED†† (n = 1,461)	39.7	(34.0–45.7)	27.8	(22.4–34.0)	9.8	(7.2–13.2)	10.1	(7.1–14.3)	—	—	10.4	(7.9–13.7)
High school diploma or GED (n = 5,565)	33.4	(30.8–36.1)	29.6	(26.9–32.5)	10.7	(9.0–12.7)	10.9	(9.1–13.0)	3.5	(2.4–5.2)	11.9	(10.0–14.0)
Some college or college graduate (n = 12,563)	26.3	(24.6–28.0)	34.7	(33.0–36.5)	14.4	(13.1–15.8)	13.1	(11.8–14.5)	2.2	(1.8–2.7)	9.3	(8.2–10.6)
Total (N = 19,589)	**29.6**	**(28.2–31.0)**	**32.6**	**(31.2–34.1)**	**12.9**	**(11.9–14.0)**	**12.2**	**(11.2–13.3)**	**2.6**	**(2.1–3.1)**	**10.1**	**(9.2–11.1)**

* Determined by response to the question, "During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?"
† Confidence interval.
§ No estimate calculated (n <50).
¶ Asian, Hawaiian or other Pacific Islander, American Indian/Alaska Native, or multiracial.
** Homemaker or student.
†† General Educational Development certificate.

disorders, can cause sleep loss (*1*). Sleep disorders and sleep loss are associated with mental distress, depression, anxiety, obesity, hypertension, diabetes, high cholesterol, and adverse health behaviors such as cigarette smoking, physical inactivity, and heavy drinking (*1,4,6*).

The findings in this report are subject to at least four limitations. First, the definitions of "enough" (sufficient) sleep and "rest" and responses to the survey question were subjective and were not accompanied by reports of hours of sleep per night; therefore, this analysis cannot be compared directly with studies measuring hours of sleep. Because the survey question also did not define or distinguish between "rest" and "sleep," respondents might vary in their interpretation of the questions and the terms. Second, causes of rest or sleep insufficiency were not ascertained by the survey. The BRFSS question does not allow for estimates of the prevalence or incidence of specific sleep disorders in the population. Third, persons with severely impaired mental or physical health might not be able to complete the BRFSS, and institutionalized persons, and persons residing in households without landline telephones are not included in the survey. For those reasons, and because the analysis was limited to data from the four states that asked the rest or sleep insufficiency question, results might not be representative of the entire United States. Finally, the median response rate of 46.6% was low.

However, BRFSS data have minimal bias compared with census data (*3*).

According to a 2005 National Sleep Foundation poll, U.S. adults sleep an average of 6.9 hours per night, and 40% report sleeping less than 7 hours on weekdays (*7*). The National Sleep Foundation reports that most adults need 7–9 hours of sleep each night to feel fully rested, children aged 5–12 years require 9–11 hours, and adolescents require 8.5–9.5 hours each night.[§] Few formal clinical practice guidelines or practice parameters are yet available for assessing and treating rest or sleep insufficiency and sleeping disorders (*2,8*). Further research and randomized clinical trials are needed to establish the efficacy of several treatment modalities available (*1*).

Persons concerned about chronic rest or sleep insufficiency should seek evaluation and treatment by a physician, preferably one familiar with assessment and treatment of these conditions (*1*). Clinicians should advise patients who need to improve their sleep quality to keep a regular sleep schedule; sleep in a dark, quiet, well-ventilated space with a comfortable temperature; avoid stimulating activities within 2 hours of bedtime; avoid caffeine, nicotine, and alcohol in the evening; and avoid going to bed on a full or empty stomach.

Acknowledgment

The findings in this report are based, in part, on data provided by BRFSS state coordinators from Delaware, Hawaii, New York, and Rhode Island.

References

1. Institute of Medicine. Sleep disorders and sleep deprivation: an unmet public health problem. Washington, DC: The National Academies Press; 2006. Available at http://www.iom.edu/cms/3740/23160/33668.aspx.
2. US Department of Health and Human Services, National Center on Sleep Disorders Research. 2003 National Sleep Disorders Research Plan. Available at http://www.nhlbi.nih.gov/health/prof/sleep/res_plan/sleep-rplan.pdf.
3. CDC. Public health surveillance for behavioral risk factors in a changing environment: recommendations from the Behavioral Risk Factor Surveillance Team. MMWR 2003;52(No. RR-9).
4. Strine TW, Chapman DP. Associations of frequent sleep insufficiency with health-related quality of life and health behaviors. Sleep Med 2005;6:23–7.
5. Roth T. Prevalence, associated risks, and treatment patterns of insomnia. J Clin Psychiatry 2005;66(Suppl 9).
6. Newman AB, Nieto FJ, Guidry U, et al. Relation of sleep-disordered breathing to cardiovascular disease risk factors: the sleep heart health study. Am J Epidemiol 2001;154:50–9.
7. National Sleep Foundation. 2005. Sleep in America poll: summary of findings. Available at http://www.kintera.org/atf/cf/%7bf6bf2668-a1b4-4fe8-8d1a-a5d39340d9cb%7d/2005_summary_of_findings.pdf.
8. American Academy of Pediatrics. Clinical practice guideline: diagnosis and management of childhood obstructive sleep apnea syndrome. Pediatrics 2002;109:704–12.

[§] Additional information, including suggestions to help persons sleep better, is available at http://newsinhealth.nih.gov/2007/April/index.htm and http://www.sleepfoundation.org.

Outbreak of Measles — San Diego, California, January–February 2008

On February 22, this report was posted as an MMWR Early Release *on the* MMWR *website* (http://www.cdc.gov/mmwr).

Measles, once a common childhood disease in the United States, can result in severe complications, including encephalitis, pneumonia, and death. Because of successful implementation of measles vaccination programs, endemic measles transmission has been eliminated in the United States and the rest of the Americas. However, measles continues to occur in other regions of the world, including Europe (*1*). In January 2008, measles was identified in an unvaccinated boy from San Diego, California, who had recently traveled to Europe with his family. After his case was confirmed, an outbreak investigation and response were initiated by local and state health departments in coordination with CDC, using standard measles surveillance case definitions and classifications.* This report summarizes the preliminary results of that investigation, which has identified 11 additional cases of measles in unvaccinated children† in San Diego that are linked epidemiologically to the index case and include two generations of secondary transmission. Recommendations for preventing further measles transmission from importations in this and other U.S. settings include reminding health-care providers to 1) consider a diagnosis of measles in ill persons who have traveled overseas, 2) use appropriate infection-control practices to prevent transmission in health-care settings, and 3) maintain high coverage with measles, mumps, and rubella (MMR) vaccine among children.

The index patient was an unvaccinated boy aged 7 years who had visited Switzerland with his family, returning to the United States on January 13, 2008. He had fever and sore throat on January 21, followed by cough, coryza, and conjunctivitis. On January 24, he attended school. On January 25, the date of his rash onset, he visited the offices of his family physician and his pediatrician. A diagnosis of

* Available at http://www.cdc.gov/ncphi/disss/nndss/casedef/measles_current.htm.
† One case was identified in a girl aged 2 years whose vaccination was delayed. The girl had received a dose of single antigen measles vaccine routinely. However, investigators later determined that she had been exposed to measles 6 days before vaccination. Because postexposure vaccination is only considered effective if administered within 3 days of exposure and because immunity takes several weeks to develop, investigators considered the girl unvaccinated.

scarlet fever was ruled out on the basis of a negative rapid test for streptococcus. When the boy's condition became worse on January 26, he visited a children's hospital inpatient laboratory, where blood specimens were collected for measles antibody testing; later that day, he was taken to the same hospital's emergency department because of high fever 104°F (40°C) and generalized rash. No isolation precautions were instituted at the doctors' offices or hospital facilities.

The boy's measles immunoglobulin M (IgM) positive laboratory test result was reported to the county health department on February 1, 2008. During January 31–February 19, a total of 11 additional measles cases in unvaccinated infants and children aged 10 months–9 years were identified. These 11 cases included both of the index patient's siblings (rash onset: February 3), five children in his school (rash onset: January 31–February 17), and four additional children (rash onset: February 6–10) who had been in the pediatrician's office on January 25 at the same time as the index patient. Among these latter four patients, three were infants aged <12 months. One of the three infants was hospitalized for 2 days for dehydration; another infant traveled by airplane to Hawaii on February 9 while infectious.

Two generations of measles cases were identified. The first generation (eight cases) included the index patient's two siblings, two playmates from his school, and the four children from the pediatrician's office. The second generation cases included three children from the index patient's school: a sibling of a child from the first generation and two friends of one of the index patient's siblings (Figure).

California allows personal beliefs exemptions (PBEs) to vaccinations required of schoolchildren[§]; parents can request exemptions if all or some vaccinations are contrary to their beliefs. The index patient and one of his siblings attended a school with 376 children, who ranged in age from 5 to 14 years. Thirty-six (9.6%) of the children had PBEs on file at the school. Among the nine patients aged ≥12 months, including the index patient, eight were unvaccinated because of PBEs. Among the 36 schoolchildren with PBEs, four had documentation of previous measles vaccination, 11 were vaccinated during the outbreak, and the remaining 21, who did not have evidence of immunity to measles, were placed under voluntary quarantine for 21 days after their last exposure. Overall, approximately 70 children exposed to children with measles in the school, a day care center, the pediatrician's office, and other community settings were placed under voluntary home quarantine because their parents either declined measles vaccination or they were too young to be vaccinated.

As part of the public health response in San Diego, surveillance has been enhanced to identify additional rash illnesses, and outbreak response measures in the community are ongoing. In Hawaii, ongoing response measures include following up airplane and other contacts of the infant who traveled to Hawaii to inform them of their potential exposure and refer them to their physicians regarding their susceptibility to measles. Five exposed infants, four airplane contacts, and one personal acquaintance were administered immune globulin within 72 hours of exposure. No secondary cases have been identified in Hawaii to date.

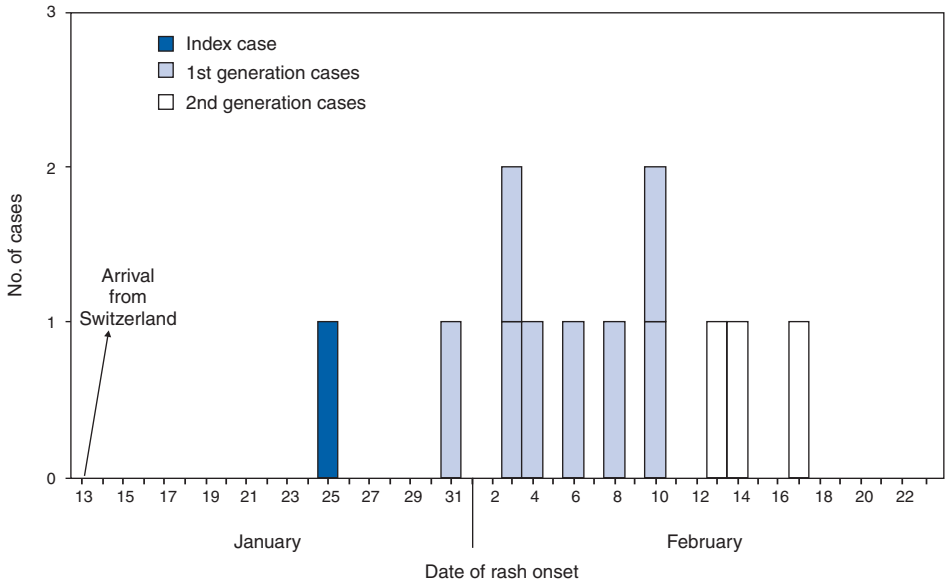
Reported by: *A Hassidim, K Waters-Montijo, W Wooten, MD, M Sawyer, MD, D Sidelinger, MD, Health and Human Svcs Agency, San Diego; K Harriman, PhD, H Backer, MD, Div of Communicable Disease Control, Center for Infectious Diseases, California Dept of Public Health. P Effler, MD, Michele Nakata, Hawaii State Dept of Health. A Srinivasan, MD, M Bell, MD, Div of Healthcare Quality Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases; P Kutty, MD, S Redd, S Goldstein, MD, J Seward, MBBS, Div of Viral Diseases, National Center for Immunization and Respiratory Diseases, CDC.*

Editorial Note: Once ubiquitous, measles now is uncommon in the United States. In the prevaccine era, 3 to 4 million measles cases occurred every year, resulting in approximately 450 deaths, 28,000 hospitalizations, and 1,000 children with chronic disabilities from measles encephalitis. Because of successful implementation of measles vaccination programs, fewer than 100 measles cases are now reported annually in the United States and virtually all of those are linked to imported cases (*2,3*), reflecting the incidence of measles globally and travel patterns of U.S. residents and visitors. During 2006–2007, importations were most common from India, Japan, and countries in Europe, where measles transmission remains endemic and large outbreaks have occurred in recent years (CDC, unpublished data, 2008). Since November 2006, Switzerland has experienced that country's largest measles outbreak since introduction of mandatory notification for measles in 1999 (*1*).

The San Diego import-associated outbreak, affecting exclusively an unvaccinated population and infants too young to be vaccinated, serves as a reminder that unvaccinated persons remain at risk for measles and that measles spreads rapidly in susceptible subgroups of the population unless effective outbreak-control strategies are implemented. Although notable progress has been made globally in measles control and elimination, measles still occurs throughout the world. U.S. travelers can be exposed to measles almost

[§] Information available at http://www.dhs.ca.gov/ps/dcdc/izgroup/pdf/imm488e.pdf.

FIGURE. Number of epidemiologically linked cases (N = 12) in a measles outbreak, by date of rash onset — San Diego, California, January–February 2008



anywhere they travel, including to developed countries. To prevent acquiring measles during travel, U.S. residents aged ≥6 months traveling overseas should have documentation of measles immunity before travel (*4*). Travel histories should be obtained and a diagnosis of measles should be considered by physicians evaluating patients who have febrile rash illness within 3 weeks of traveling abroad.

Measles virus is highly infectious; vaccination coverage levels of >90% are needed to interrupt transmission and maintain elimination in populations. The ongoing outbreak in Switzerland, which has resulted in hospitalizations for pneumonia and encephalitis, has occurred in the context of vaccination coverage levels of 86% for 1 dose at age 2 years and 70% for the second dose for children aged <12 years. In the United States, vaccination coverage levels for at least 1 dose of MMR vaccine have been >90% among children aged 19–35 months and >95% among school-aged children during this decade. Although not measured routinely, 2-dose vaccine coverage is extremely high among U.S. schoolchildren because of school vaccination requirements.

Measles transmission in schools was common in the era before interruption of endemic-disease transmission, and school requirements for vaccination have been a successful strategy for achieving high vaccination coverage levels in this age group and decreasing transmission in school settings. In the United States, all states require children to be vaccinated in accordance with Advisory Committee on Immunization Practices recommendations before attending school (*4*). However, medical exemptions to immunization requirements for day care and school attendance are available in all states; in addition, 48 states offer nonmedical religious exemptions, and 21 states (including California) offer nonmedical PBEs.[¶] These exemptions are defined differently by each state. The PBE allowed by California requires only a parental affidavit (*5*). Compared with vaccinated persons, those exempt from vaccination are 22 to 224 times more likely to contract measles (*5–7*).

The community transmission that has occurred during the San Diego outbreak is consistent with previous observations that the frequency of vaccination exemptors in a community is associated with the incidence of measles in that community; in addition, imported measles cases have demonstrated the potential for sizeable outbreaks in U.S. communities with suboptimal vaccine coverage (5,*6,8*). The public health response to this outbreak has included identification of cases, isolation of patients and vaccination, administration of immune globulin, and voluntary quarantine of contacts who have no evidence of measles immunity. Costs associated with control of these outbreaks can be substantial. In Iowa, the public health response to one imported measles case cost approximately $150,000 (*9*).

This outbreak also illustrates the risk for measles transmission in health-care settings. Airborne transmission of measles has been reported in emergency departments, physician offices, and pediatric ambulatory care-settings (*10*). Persons exposed to measles should be instructed to inform all health-care providers of their exposure before entering a health-care facility. Health-care personnel providing care to suspected measles patients (i.e., patients with febrile illness and generalized maculopapular rash or known contacts with prodromal symptoms) should apply appropriate isolation practices, including airborne precautions, in addition to taking standard precautions for such patients.**

Once a suspected measles case has been identified, prompt isolation of the potentially infectious patient and implementation of appropriate infection-control measures can

[¶] Institute for Vaccine Safety. Vaccine exemptions. Baltimore MD: Johns Hopkins Bloomberg School Public Health. Available at http://www.vaccinesafety.edu/cc-exem.htm.

** Available at http://www.cdc.gov/ncidod/dhqp/gl_isolation.html.

help to decrease risk for transmission. Patients with suspected measles should be placed in an examination room, preferably an airborne-infection isolation room, as soon as possible and should not be permitted in patient waiting areas. Until placed in an airborne-infection isolation room, the patient should wear a surgical mask. If a surgical mask cannot be tolerated, other practical means to contain respiratory aerosols should be implemented. The door to the examination room should be kept closed, and all health-care personnel in contact with the patient should be documented as immune to measles. Health-care personnel and visitors without evidence of immunity (i.e., documentation of adequate vaccination, laboratory evidence of immunity, born before 1957, or documentation of physician-diagnosed measles) should be restricted from entering the rooms of patients known or suspected to have measles (*4,10*). The examination room should not be used for 2 hours after the infectious patient leaves. Suspected measles patients should not be referred to other locations for laboratory tests unless infection-control measures can be implemented at those locations.

Measles morbidity and mortality can be reduced through vaccination with MMR vaccine. Vaccination of U.S. travelers can reduce measles importations. Sustained high population immunity through vaccination, effective surveillance, and robust public health preparedness and response capacity are needed to keep the United States free from indigenous measles transmission and control any outbreaks associated with importations.

References

1. Richard JL, Masserey-Spicher V, Santibanez S, Mankertz A. Measles outbreak in Switzerland—an update relevant for the European football championship (EURO 2008). Euro Surveill 2008;13(8). Available at http://www.eurosurveillance.org/edition/v13n08/080221_1.asp.
2. Papania MJ, Seward JF, Redd SB, Lievano F, Harpaz R, Wharton ME. Epidemiology of measles in the United States, 1997–2001. J Infect Dis 2004;189(Suppl 1):61–8.
3. Measles—United States, 2005. MMWR 2006;55:1348–51.
4. CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1998;47(No. RR-8).
5. Salmon DA, Haber M, Gangarosa EJ, et al. Health consequences of religious and philosophical exemptions from immunization laws: individual and societal risk of measles. JAMA 1999;282:47–53.
6. Feikin DR, Lezotte DC, Hamman RF, Salmon DA, Chen RT, Hoffman RE. Individual and community risks of measles and pertussis associated with personal exemptions to immunization. JAMA 2000;284:3145–50.
7. Van den Hof S, Conyn-van Spaendonck MA, van Steenbergen JE. Measles epidemic in Netherlands, 1999–2000. J Infect Dis 2002;186:1483–6.
8. Parker AA, Staggs W, Dayan GH, et al. Implications of a 2005 measles outbreak in Indiana for sustained elimination of measles in the United States. N Engl J Med 2006;355:447–55.
9. Dayan GH, Ortega-Sanchez IR, LeBaron CW, Quinlisk MP; Iowa Measles Response Team. The cost of containing one case of measles: the economic impact on the public health infrastructure—Iowa, 2004. Pediatrics 2005;116:e1–4.
10. Siegel JD, Rhinehart E, Jackson M, Chiarello L; Health Care Infection Control Practices Advisory Committee, 2007. Guideline for isolation precautions: preventing transmission of infectious agents in health care settings. Am J Infect Control 2007;35(10 Suppl 2):S65–164.

Notice to Readers

National Sleep Awareness Week, March 3–9, 2008

March 3–9, 2008, is National Sleep Awareness Week. The National Sleep Foundation recommends that healthy adults sleep 7–9 hours daily. Younger persons need even more sleep. Sufficient sleep is increasingly being recognized as an essential aspect of health maintenance (*1*). Sleep-related complaints are common; 60 million persons in the United States experience them, and 20% of patients consulting a general practitioner report sleep disturbances (*2*).

Insufficient sleep might result from lifestyles and behaviors, medical conditions, and other factors. Persons experiencing insufficient sleep might be suffering from chronic insomnia, sleep apnea (commonly characterized by periodic gasping or snorting during sleep), narcolepsy (sudden, extreme sleepiness coupled with a loss of muscle tone), or restless legs syndrome (a "crawling" sensation seemingly arising from the lower legs, characteristically relieved by movement, such as walking or kicking) (*3*). Insufficient sleep has been linked to impaired school and work performance and to the development of chronic diseases and conditions, such as diabetes, cardiovascular disease, obesity, and depression (*4*). Increased recognition of the importance of sleep and sleep disorders is pivotal to heightening awareness of adequate sleep as a sign of good health. Additional information about the public health implications of sleep is available at http://www.cdc.gov/sleep. Additional information regarding sufficient sleep is available from the National Sleep Foundation at http://www.sleepfoundation.org/site.

References

1. US Department of Health and Human Services, National Center on Sleep Disorders Research. 2003 National Sleep Disorders Research Plan. Available at http://www.nhlbi.nih.gov/health/prof/sleep/res_plan/sleep-rplan.pdf.
2. Andreasen NC, Black DW. Introductory textbook of psychiatry. 3rd ed. Washington, DC: American Psychiatric Publishing, Inc.; 2001.
3. Reite M, Ruddy J, Nagel K. Concise guide to evaluation and management of sleep disorders. 3rd ed. Washington, DC: American Psychiatric Publishing; 2002.

4. CDC. Sleep and chronic disease. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/sleep/chronic_disease.htm.

Notice to Readers

World Kidney Day — March 13, 2008

March 13, 2008, is World Kidney Day, observed in the United States and the world to raise awareness of kidney disease and educate persons at risk about the importance of prevention and early detection. Kidney disease, the ninth leading cause of death in the United States (*1*), is a costly disease associated with severe morbidity and premature death. The disease spectrum extends from persistent microalbuminuria to end-stage renal disease (ESRD) (i.e., kidney failure requiring dialysis or transplantation).

Thirteen percent of U.S. adults (i.e., 26 million adults) were estimated to have chronic kidney disease in 2000, and most of these adults were not aware of their condition (*2*). Persons with chronic kidney disease are at increased risk for cardiovascular disease and are more likely to die from cardiovascular disease than progress to ESRD (*3*). In 2005, approximately 100,000 persons began treatment for ESRD in the United States, nearly half a million persons were living on chronic dialysis or with a kidney transplant, and total Medicare expenditures for ESRD reached approximately $20 billion, accounting for 6.4% of the total Medicare budget (*4*). Of the new cases of ESRD in 2005, 71% had diabetes or hypertension listed as the primary cause (*4*).

By 2020, with the aging of the population and the increasing prevalence of diabetes, nearly 150,000 persons in the United States are projected to begin therapy for ESRD, nearly 800,000 persons will be living on chronic dialysis or with a kidney transplant, and costs for ESRD are projected to reach approximately $54 billion (*4*). However, the ESRD incidence rate in the population with diabetes has declined since 1996 (*5*). Among persons with diabetes, early detection and treatment of kidney disease can help prevent or delay cardiovascular death and progression to ESRD (*6,7*); among those with diabetes and hypertension, blood sugar and blood pressure control have been shown to prevent or delay the onset of kidney disease (*6,8*).

CDC, in collaboration with partners, has launched the Chronic Kidney Disease Initiative to develop capacity at CDC in the areas of kidney disease surveillance, epidemiology, health outcomes research, and health economics to provide public health strategies for promoting kidney health. Additional information about this initiative is available at http://www.cdc.gov/diabetes/projects/kidney.htm.

Information about kidney disease prevention and control is available from the National Kidney Disease Education Program at http://www.nkdep.nih.gov. Information on World Kidney Day activities is available at http://www.worldkidneyday.org.

References

1. Kung HC, Hoyert DL, Xu JQ, Murphy SL. Deaths: final data for 2005. Natl Vital Stat Rep 2008;56(10):9.
2. Coresh J, Selvin E, Stevens LA, et al. Prevalence of chronic kidney disease in the United States. JAMA 2007;298:2038–47.
3. Collins AJ, Li S, Gilbertson DT, et al. Chronic kidney disease and cardiovascular disease in the Medicare population. Kidney Int Suppl 2003;87:S24–31.
4. US Renal Data System. ESRD incidence and prevalence. In: US Renal Data System 2007 annual data report: atlas of chronic kidney disease and end-stage renal disease in the United States. Bethesda, MD: National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases; 2007. Available at http://www.usrds.org/2007/pdf/02_incid_prev_07.pdf.
5. CDC. Incidence of end-stage renal disease among persons with diabetes—United States, 1990–2002. MMWR 2005;54:1097–100.
6. American Diabetes Association. Nephropathy in diabetes. Diabetes Care 2004;27 (Suppl 1):S79–83.
7. Brenner BM, Cooper ME, de Zeeuw D, et al. Effects of losartan on renal and cardiovascular outcomes in patients with type 2 diabetes and nephropathy. N Engl J Med 2001;345:861–9.
8. Ruggenenti P, Fassi A, Ilieva AP, et al. Preventing microalbuminuria in type 2 diabetes. N Eng J Med 2004;351:1941–51.

Notice to Readers

Newly Licensed Smallpox Vaccine to Replace Old Smallpox Vaccine

CDC has begun distribution of a new-generation smallpox vaccine, ACAM2000™ (Acambis, Inc., Cambridge, Massachusetts), to civilian laboratory personnel, the military, and state public health preparedness programs. ACAM2000 is a live, vaccinia virus smallpox vaccine that was licensed for use in the United States by the Food and Drug Administration in August 2007 (*1*).* ACAM2000 will be replacing Dryvax® smallpox vaccine (Wyeth Pharmaceuticals, Inc., Marietta, Pennsylvania) because of withdrawal of the Dryvax license. ACAM2000 is a live vaccinia virus derived from plaque purification cloning from Dryvax. The safety data available from the ACAM2000 clinical trials indicate a similar safety profile to Dryvax.

Wyeth intends to withdraw the Dryvax license and asks that all remaining quantities of vaccine held by civilian and military users be quarantined by February 29, 2008, for the purpose of destruction. This withdrawal is not necessitated by any safety, purity, or quality concerns with

*ACAM2000 package insert and medication guide are available at http://www.acambis.com/acam2000.

the product but rather is consistent with a contract agreement between CDC and Wyeth.[†] All lots of Dryvax vaccine will expire on February 29, 2008, and should not be used after that date.

All Dryvax vaccine should be destroyed on site. Vaccine vials can be 1) dropped into the hospital sharps container and autoclaved or 2) disposed of following the procedure for all other biohazard materials. In sites where medical waste is buried, soaking the medical waste in a 1:10 dilution of bleach for at least 10 minutes before disposal is advised. All programs that hold supplies of Dryvax vaccine must provide documentation of Dryvax vaccine destruction to the CDC Drug Service by March 31, 2008. These programs are advised to use the Dryvax vaccine destruction form.[§]

CDC will continue to provide ACAM2000 smallpox vaccine to protect responders as part of state public health preparedness programs (*2*) and civilian laboratory personnel who risk exposure to orthopoxviruses (*3*). Unlike Dryvax, ACAM2000 expires 18 months after release from the CDC Strategic National Stockpile. Requests for smallpox vaccine should be directed to the CDC Drug Service by e-mail (drugservice@cdc.gov) or telephone (404-639-3670).

[†] Additional information regarding the withdrawal is communicated in a letter, dated February 1, 2008, from Wyeth to the CDC Drug Service; the letter is available at http://emergency.cdc.gov/agent/smallpox/vaccination/pdf/ltr_cdc_010208_dryvax.pdf.

[§] Available at http://emergency.cdc.gov/agent/smallpox/vaccination/pdf/dryvax_destruction_note_gen.pdf.

References

1. Food and Drug Administration. Product approval information. Available at http://www.fda.gov/cber/products/acam2000.htm.
2. CDC. Recommendations for using smallpox vaccine in a pre-event vaccination program: supplemental recommendations of the Advisory Committee on Immunizations Practices (ACIP) and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR 2003;52 (Dispatch).
3. CDC. Smallpox vaccine available for protection of at-risk laboratory workers. MMWR 1983;32:543–4.

Notice to Readers

Epidemiology in Action Course

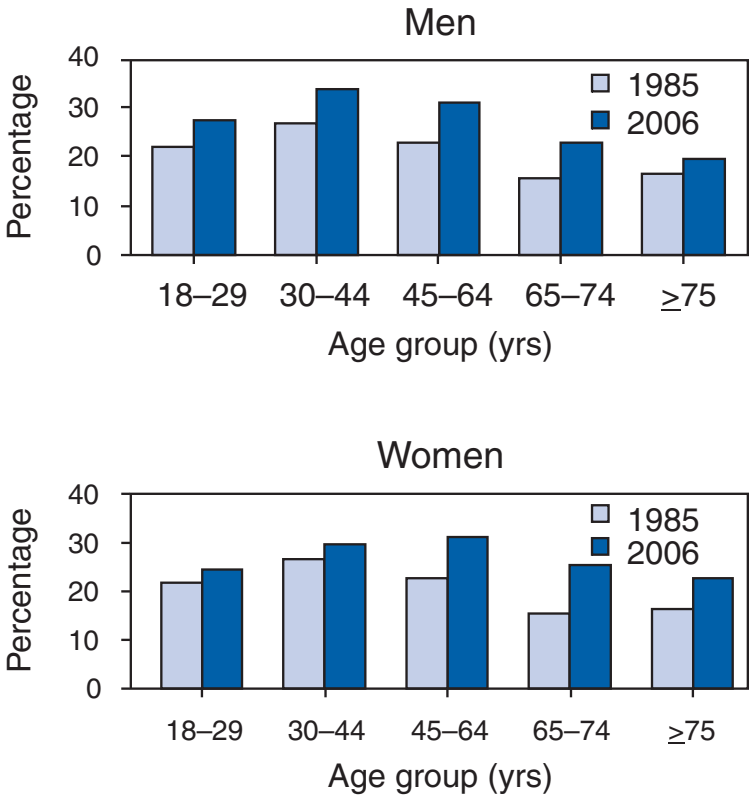
CDC's Office of Workforce and Career Development and Rollins School of Public Health at Emory University will cosponsor the course, Epidemiology in Action, April 21–May 2, 2008, at the Emory University campus in Atlanta, Georgia. The course is designed for state and local public health professionals, emphasizing practical application of epidemiology to public health problems and consisting of lectures, workshops, classroom exercises (including actual epidemiologic problems), and roundtable discussions. Topics include descriptive epidemiology and biostatistics, analytic epidemiology, epidemic investigations, public health surveillance, surveys and sampling, Epi Info training (Windows version), and discussions of selected diseases.

Tuition is charged. Additional information and applications are available at http://www.sph. emory.edu/epicourses, or by e-mail (pvaleri@sph.emory.edu), telephone (404-727-3485), fax (404-727-4590), or mail (Emory University, Hubert Global Health Dept. [Attn: Pia], 1518 Clifton Rd. NE, Rm. 746, Atlanta, GA 30322).

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Adults Aged ≥18 Years* Who Reported an Average of ≤6 Hours of Sleep† per 24-Hour Period, by Sex and Age Group — National Health Interview Survey, United States, 1985 and 2006§



* N = 23,679 (10,457 men and 13,222 women).
† Based on response to the following question: "On average, how many hours of sleep do you get in a 24-hour period?" Respondents could indicate getting 1 to 24 hours of sleep.
§ Estimates were based on household interviews of a sample of the noninstitutionalized, U.S. civilian population.

From 1985 to 2006, the percentage of men and women who reported an average of ≤6 hours of sleep per 24-hour period increased in all age groups. In 2006, for both men and women, the percentage of respondents reporting ≤6 hours of sleep per 24-hour period was highest among those aged 30–44 years and 45–64 years. The National Sleep Foundation recommends 7–9 hours of sleep per 24-hour period for adults (additional information available at http://www.sleepfoundation.org).

SOURCES: Schoenborn CA. Health habits of U.S. adults, 1985: the "Alameda 7" revisited. Public Health Rep 1986;101:571–80.

Unpublished estimates from the 2006 National Health Interview Survey. Available at http://www.cdc.gov/nchs/nhis.htm.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending February 23, 2008 (8th Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years 2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Anthrax	—	—	0	—	1	—	—	—	
Botulism:									
foodborne	—	1	0	20	20	19	16	20	
infant	—	6	2	84	97	85	87	76	
other (wound & unspecified)	—	—	1	24	48	31	30	33	
Brucellosis	—	4	2	128	121	120	114	104	
Chancroid	3	8	1	31	33	17	30	54	MA (1), SC (1), TX (1)
Cholera	—	—	0	7	9	8	6	2	
Cyclosporiasis§	1	8	3	99	137	543	160	75	FL (1)
Diphtheria	—	—	—	—	—	—	—	1	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	0	44	67	80	112	108	
eastern equine	—	—	—	4	8	21	6	14	
Powassan	—	—	—	1	1	1	1	—	
St. Louis	—	—	—	7	10	13	12	41	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§:									
Ehrlichia chaffeensis	—	1	—	N	N	N	N	N	
Ehrlichia ewingii	—	—	—	N	N	N	N	N	
Anaplasma phagocytophilum	—	—	—	N	N	N	N	N	
undetermined	—	—	—	N	N	N	N	N	
Haemophilus influenzae,**									
invasive disease (age <5 yrs):									
serotype b	—	3	0	22	29	9	19	32	
nonserotype b	2	21	3	170	175	135	135	117	TN (1), OK (1)
unknown serotype	4	36	4	191	179	217	177	227	NY (1), PA (1), OH (1), AK (1)
Hansen disease§	1	8	1	66	66	87	105	95	FL (1)
Hantavirus pulmonary syndrome§	—	—	0	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	1	4	2	261	288	221	200	178	AL (1)
Hepatitis C viral, acute	3	71	15	779	766	652	720	1,102	MD (1), WA (1), CA (1)
HIV infection, pediatric (age <13 yrs)††	—	—	4	—	—	380	436	504	
Influenza-associated pediatric mortality§,§§	3	22	2	76	43	45	—	N	CA (1), NV (1), VA (1)
Listeriosis	—	48	9	771	884	896	753	696	
Measles¶¶	—	1	1	37	55	66	37	56	
Meningococcal disease, invasive***:									
A, C, Y, & W-135	2	20	8	277	318	297	—	—	TN (1), OK (1)
serogroup B	2	13	4	141	193	156	—	—	FL (1), WA (1)
other serogroup	—	4	1	31	32	27	—	—	
unknown serogroup	13	57	18	597	651	765	—	—	PA (2), OH (2), MI (1), IA (1), SC (1), GA (1), FL (1), TN (1), MS (1), ID (1), CA (1)
Mumps	9	86	14	762	6,584	314	258	231	PA (5), OH (3), CA (1)
Novel influenza A virus infections	—	—	—	4	N	N	N	N	
Plague	—	—	0	6	17	8	3	1	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Poliovirus infection, nonparalytic§	—	—	—	—	N	N	N	N	
Psittacosis§	—	—	0	10	21	16	12	12	
Q fever§:									
acute	—	2	—	—	—	—	—	—	
chronic	—	—	—	—	—	—	—	—	
Rabies, human	—	—	—	—	3	2	7	2	
Rubella†††	—	—	0	12	11	11	10	7	
Rubella, congenital syndrome	—	—	0	—	1	1	—	1	
SARS-CoV§,§§§	—	—	0	—	—	—	—	8	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	1	10	4	103	125	129	132	161	NY (1)
Syphilis, congenital (age <1 yr)	—	7	7	268	349	329	353	413	
Tetanus	—	—	0	23	41	27	34	20	

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.

** Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

†† Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Twenty four cases occurring during the 2007–08 influenza season have been reported.

¶¶ No measles cases were reported for the current week.

*** Data for meningococcal disease (all serogroups) are available in Table II.

††† No rubella cases were reported for the current week.

§§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending February 23, 2008 (8th Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years 2007	2006	2005	2004	2003	States reporting cases during current week (No.)
Toxic-shock syndrome (staphylococcal)§	—	6	2	80	101	90	95	133	
Trichinellosis	—	1	0	6	15	16	5	6	
Tularemia	—	1	0	114	95	154	134	129	
Typhoid fever	1	37	5	352	353	324	322	356	TN (1)
Vancomycin-intermediate *Staphylococcus aureus*§	—	—	—	28	6	2	—	N	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	—	1	3	1	N	
Vibriosis (noncholera *Vibrio* species infections)§	—	13	1	361	N	N	N	N	
Yellow fever	—	—	—	—	—	—	—	—	

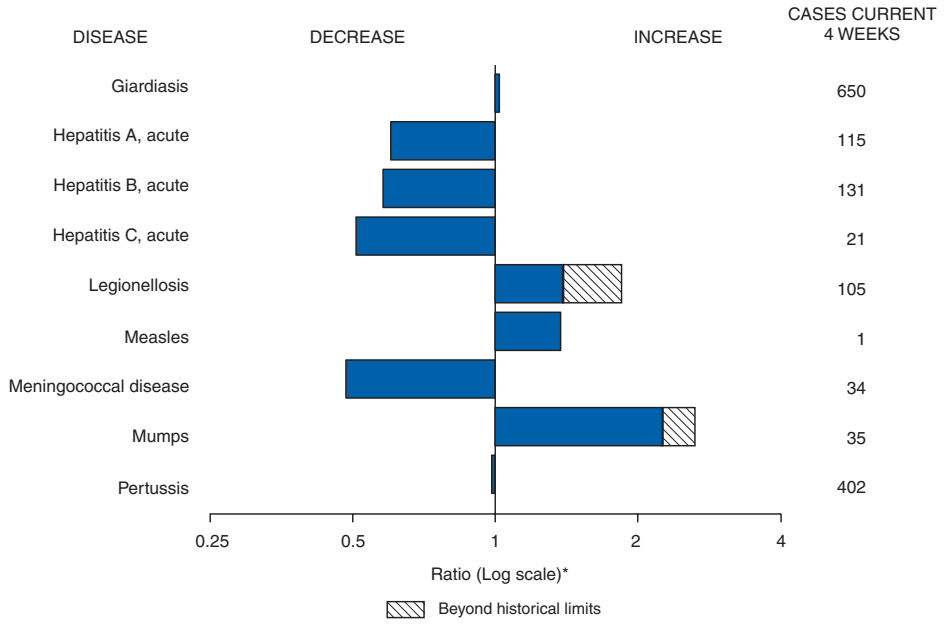
—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals February 23, 2008, 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.

Notifiable Disease Data Team and 122 Cities Mortality Data Team

Patsy A. Hall

Deborah A. Adams
Willie J. Anderson
Lenee Blanton
Rosaline Dhara
Carol Worsham
Pearl C. Sharp

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	8,096	20,872	25,187	122,949	153,756	159	139	280	932	1,200	26	84	975	368	439
New England	599	690	1,524	4,745	4,648	—	0	1	1	—	—	4	16	13	60
Connecticut	249	223	1,097	870	827	N	0	0	N	N	—	0	2	2	42
Maine§	57	49	74	403	392	—	0	0	—	—	—	1	5	—	4
Massachusetts	211	305	661	2,665	2,407	—	0	0	—	—	—	2	11	—	5
New Hampshire	28	39	73	346	308	—	0	1	1	—	—	1	5	3	7
Rhode Island§	54	62	98	455	544	—	0	0	—	—	—	0	3	—	—
Vermont§	—	16	32	6	170	N	0	0	N	N	—	1	4	8	2
Mid. Atlantic	1,009	2,832	4,196	15,361	22,944	—	0	0	—	—	1	10	118	47	48
New Jersey	—	404	524	1,492	3,402	N	0	0	N	N	—	0	8	—	2
New York (Upstate)	508	548	2,022	2,921	2,584	N	0	0	N	N	1	3	20	9	6
New York City	—	966	2,206	5,165	7,915	N	0	0	N	N	—	1	10	5	16
Pennsylvania	501	808	1,764	5,783	9,043	N	0	0	N	N	—	6	103	33	24
E.N. Central	913	3,236	6,196	18,060	26,388	—	1	3	4	7	9	20	134	97	97
Illinois	—	1,009	2,165	3,628	7,616	—	0	0	—	—	—	2	13	4	18
Indiana	273	395	629	2,975	3,377	—	0	0	—	—	—	2	32	11	2
Michigan	426	703	981	5,712	6,345	—	0	2	3	6	4	4	11	26	18
Ohio	90	801	3,619	3,014	5,943	—	0	1	1	1	3	5	61	30	35
Wisconsin	124	373	576	2,731	3,107	N	0	0	N	N	2	7	59	26	24
W.N. Central	198	1,197	1,462	6,565	9,565	—	0	1	—	2	3	14	125	52	50
Iowa	—	156	251	597	1,355	N	0	0	N	N	—	3	61	16	11
Kansas	—	149	394	650	1,207	N	0	0	N	N	1	2	16	7	6
Minnesota	—	262	479	1,059	2,083	—	0	0	—	—	2	3	34	14	8
Missouri	100	456	551	3,219	3,515	—	0	1	—	2	—	2	13	5	8
Nebraska§	48	92	183	579	718	N	0	0	N	N	—	1	24	7	3
North Dakota	—	27	61	37	303	N	0	0	N	N	—	0	6	1	1
South Dakota	50	51	81	424	384	N	0	0	N	N	—	2	16	2	13
S. Atlantic	2,195	4,022	6,224	26,707	25,511	—	0	1	—	1	9	19	69	101	104
Delaware	88	64	140	547	577	—	0	0	—	—	—	0	4	4	2
District of Columbia	—	113	182	748	803	—	0	0	—	—	—	0	0	—	3
Florida	1,112	1,255	1,565	9,698	4,472	N	0	0	N	N	7	9	35	46	52
Georgia	9	595	1,502	55	5,580	N	0	0	N	N	2	5	17	34	25
Maryland§	216	423	696	2,904	2,347	—	0	1	—	1	—	0	2	—	3
North Carolina	113	435	2,595	4,942	4,086	—	0	0	—	—	—	1	18	7	2
South Carolina§	423	526	3,030	4,309	3,852	N	0	0	N	N	—	1	15	5	7
Virginia§	217	490	628	3,076	3,319	N	0	0	N	N	—	1	5	2	9
West Virginia	17	60	95	428	475	N	0	0	N	N	—	0	5	3	1
E.S. Central	735	1,527	2,112	10,248	12,884	—	0	0	—	—	1	4	65	13	23
Alabama§	22	484	605	2,684	3,930	N	0	0	N	N	1	1	14	8	9
Kentucky	229	188	357	1,788	973	N	0	0	N	N	—	1	40	2	5
Mississippi	—	325	1,039	1,770	3,633	N	0	0	N	N	—	0	11	1	8
Tennessee§	484	505	719	4,006	4,348	N	0	0	N	N	—	1	18	2	1
W.S. Central	1,584	2,511	3,504	19,046	16,071	—	0	1	—	—	1	6	28	20	22
Arkansas§	326	204	395	2,066	1,161	N	0	0	N	N	—	0	8	1	2
Louisiana	—	358	851	1,077	2,578	—	0	1	—	—	—	1	4	1	8
Oklahoma	—	248	467	1,533	1,707	N	0	0	N	N	1	1	11	7	5
Texas§	1,258	1,687	3,156	14,370	10,625	N	0	0	N	N	—	3	16	11	7
Mountain	319	1,230	1,667	4,151	9,327	147	94	171	783	782	2	8	572	19	25
Arizona	134	452	665	527	3,128	147	91	170	771	760	—	1	6	6	3
Colorado	—	185	384	423	1,615	N	0	0	N	N	—	2	26	—	10
Idaho§	74	56	233	524	548	N	0	0	N	N	—	1	72	8	1
Montana§	15	43	337	391	430	N	0	0	N	N	1	1	7	4	1
Nevada§	—	183	293	891	1,443	—	1	5	10	3	—	0	6	—	—
New Mexico§	—	163	394	467	1,278	—	0	2	—	7	—	2	9	—	8
Utah	96	118	218	917	702	—	1	7	2	12	—	1	488	—	1
Wyoming§	—	22	35	11	183	—	0	1	—	—	1	0	8	1	1
Pacific	544	3,365	4,046	18,066	26,418	12	40	176	144	408	—	1	16	6	10
Alaska	88	85	124	591	713	N	0	0	N	N	—	0	2	—	—
California	323	2,688	3,409	15,249	20,748	12	40	176	144	408	—	0	0	—	—
Hawaii	—	107	134	541	871	N	0	0	N	N	—	0	0	—	—
Oregon§	133	181	403	1,577	1,473	N	0	0	N	N	—	1	16	6	10
Washington	—	150	621	108	2,613	N	0	0	N	N	—	0	0	—	—
American Samoa	—	0	32	29	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	13	34	12	121	—	0	0	—	—	—	0	0	—	—
Puerto Rico	75	119	612	669	1,121	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	3	10	—	30	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	166	295	853	1,526	2,140	2,423	6,784	7,955	36,280	51,168	30	41	108	368	432
New England	3	23	54	85	165	109	105	227	659	757	—	3	8	8	37
Connecticut	—	6	18	35	44	55	42	199	182	185	—	0	7	—	15
Maine§	3	3	10	15	24	2	2	8	11	14	—	0	4	2	—
Massachusetts	—	8	29	—	78	37	50	127	392	440	—	1	6	—	18
New Hampshire	—	0	3	7	2	5	2	6	14	21	—	0	2	1	4
Rhode Island§	—	1	15	10	—	10	7	14	60	86	—	0	2	2	—
Vermont§	—	3	8	18	17	—	1	5	—	11	—	0	1	3	—
Mid. Atlantic	20	59	118	271	383	242	675	1,013	3,400	6,169	6	9	26	73	97
New Jersey	—	7	15	11	52	—	117	159	571	973	—	1	4	11	16
New York (Upstate)	14	23	101	106	106	137	131	514	763	749	2	2	19	19	18
New York City	1	16	29	57	132	—	174	376	655	1,830	—	1	6	11	25
Pennsylvania	5	14	29	97	93	105	247	586	1,411	2,617	4	3	10	32	38
E.N. Central	19	47	89	232	325	293	1,291	2,580	6,616	10,915	2	6	14	52	61
Illinois	—	14	33	30	90	1	375	750	1,179	2,761	—	2	6	8	18
Indiana	N	0	0	N	N	109	161	308	1,302	1,355	—	1	7	9	5
Michigan	3	10	20	44	100	120	284	513	2,288	2,535	—	0	3	3	7
Ohio	14	15	37	122	89	28	345	1,559	1,041	3,108	2	2	6	31	26
Wisconsin	2	6	21	36	46	35	123	210	806	1,156	—	0	1	1	5
W.N. Central	73	22	384	205	145	47	365	445	1,822	3,160	1	3	22	37	18
Iowa	—	4	23	35	34	—	33	56	96	329	—	0	1	1	—
Kansas	1	3	11	20	18	—	39	102	169	373	—	0	1	1	4
Minnesota	64	0	379	75	2	—	67	117	282	590	—	1	20	9	—
Missouri	7	8	23	46	66	31	188	255	1,064	1,639	1	1	5	18	11
Nebraska§	1	3	8	22	15	9	26	57	174	169	—	0	3	7	2
North Dakota	—	0	3	4	1	—	2	4	2	17	—	0	1	1	1
South Dakota	—	1	6	3	9	7	5	11	35	43	—	0	0	—	—
S. Atlantic	28	53	94	316	355	838	1,565	2,339	9,041	10,345	17	11	30	116	100
Delaware	1	1	6	6	5	19	25	43	178	253	—	0	3	1	1
District of Columbia	—	0	6	—	11	—	46	71	256	352	—	0	1	—	1
Florida	17	23	47	147	160	379	490	623	3,590	2,136	9	3	10	36	29
Georgia	7	12	36	99	74	3	256	621	21	2,357	4	2	8	34	23
Maryland§	3	4	18	28	35	43	118	234	806	819	1	1	6	26	23
North Carolina	—	0	0	—	—	174	231	1,170	1,563	2,081	3	1	9	10	5
South Carolina§	—	3	6	14	6	154	203	1,361	1,629	1,622	—	1	4	5	7
Virginia§	—	10	39	21	63	59	129	224	901	591	—	1	23	2	9
West Virginia	—	0	8	1	1	7	16	38	97	134	—	0	3	2	2
E.S. Central	1	10	23	46	76	246	598	868	3,776	4,891	2	2	8	19	28
Alabama§	—	4	11	30	46	10	208	281	1,138	1,686	1	0	3	5	7
Kentucky	N	0	0	N	N	83	70	161	697	368	—	0	1	—	2
Mississippi	N	0	0	N	N	—	125	386	687	1,331	—	0	2	1	2
Tennessee§	1	5	16	16	30	153	176	261	1,254	1,506	1	1	6	13	17
W.S. Central	4	7	21	20	40	476	1,004	1,313	6,558	6,975	1	2	15	12	12
Arkansas§	—	1	9	5	18	70	77	138	666	607	—	0	2	—	1
Louisiana	—	2	14	3	11	—	208	384	666	1,621	—	0	2	—	2
Oklahoma	4	3	9	12	11	—	92	235	638	637	1	1	8	11	9
Texas§	N	0	0	N	N	406	622	929	4,588	4,110	—	0	3	1	—
Mountain	4	31	67	84	208	48	234	322	675	1,892	—	4	13	39	52
Arizona	1	3	10	15	37	30	97	130	153	657	—	2	9	27	28
Colorado	—	10	26	6	80	—	35	85	24	476	—	1	4	—	9
Idaho§	1	3	19	21	17	6	5	19	28	25	—	0	1	—	1
Montana§	1	2	8	8	9	—	1	48	11	24	—	0	1	1	—
Nevada§	—	3	8	12	11	—	45	87	231	345	—	0	1	4	2
New Mexico§	—	2	5	—	19	—	31	64	143	237	—	0	4	—	6
Utah	—	7	33	17	30	12	13	36	85	116	—	0	6	7	5
Wyoming§	1	1	4	5	5	—	1	5	—	12	—	0	1	—	1
Pacific	14	59	205	267	443	124	672	799	3,733	6,064	1	2	6	12	27
Alaska	1	1	5	9	11	8	9	18	65	75	1	0	4	3	4
California	7	42	84	191	342	94	586	713	3,369	5,147	—	0	5	—	5
Hawaii	—	0	2	1	1	—	12	23	67	96	—	0	1	1	—
Oregon§	2	8	17	51	71	21	23	63	216	175	—	1	4	8	18
Washington	4	8	117	15	18	1	23	142	16	571	—	0	3	—	—
American Samoa	—	0	0	—	—	—	0	2	1	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	1	13	4	13	—	0	0	—	—
Puerto Rico	—	4	21	—	48	3	6	23	45	47	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	1	3	—	12	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Hepatitis (viral, acute), by type† A: Current week	A: Previous 52 weeks Med	A: Previous 52 weeks Max	A: Cum 2008	A: Cum 2007	B: Current week	B: Previous 52 weeks Med	B: Previous 52 weeks Max	B: Cum 2008	B: Cum 2007	Legionellosis: Current week	Legionellosis: Previous 52 weeks Med	Legionellosis: Previous 52 weeks Max	Legionellosis: Cum 2008	Legionellosis: Cum 2007
United States	27	53	129	322	369	31	80	137	373	593	17	46	91	236	235
New England	2	2	6	12	6	—	1	5	1	8	—	2	14	12	9
Connecticut	—	0	3	3	2	—	0	5	—	3	—	0	4	3	1
Maine§	—	0	1	1	—	—	0	2	1	1	—	0	2	—	—
Massachusetts	—	0	4	—	3	—	0	1	—	—	—	0	2	—	7
New Hampshire	—	0	3	—	1	—	0	1	—	2	—	0	2	1	—
Rhode Island§	2	0	2	8	—	—	0	3	—	2	—	0	6	6	—
Vermont§	—	0	1	—	—	—	0	1	—	—	—	0	2	2	1
Mid. Atlantic	4	9	21	42	60	3	8	15	35	90	3	13	37	54	58
New Jersey	—	2	6	4	19	—	1	4	—	29	—	1	11	4	14
New York (Upstate)	2	1	5	10	9	1	2	7	5	6	—	4	15	10	9
New York City	1	3	9	12	20	—	2	6	1	25	—	3	11	2	10
Pennsylvania	1	2	5	16	12	2	3	13	29	30	3	5	21	38	25
E.N. Central	5	5	12	35	49	5	8	15	42	87	1	9	28	48	63
Illinois	—	2	5	3	24	—	2	6	4	21	—	1	12	1	12
Indiana	—	0	4	1	—	—	0	8	2	2	—	1	7	1	4
Michigan	4	2	5	22	14	3	2	6	10	32	—	3	10	14	20
Ohio	1	1	4	7	10	2	2	7	24	25	1	4	17	32	23
Wisconsin	—	0	3	2	1	—	0	2	2	7	—	0	1	—	4
W.N. Central	1	3	18	42	9	2	2	8	11	25	1	1	9	11	11
Iowa	—	1	5	14	4	1	0	2	2	7	—	0	2	2	1
Kansas	—	0	3	4	—	1	0	2	3	1	—	0	1	—	—
Minnesota	—	0	17	2	—	—	0	4	—	—	1	0	6	1	1
Missouri	1	0	3	10	2	—	1	5	5	14	—	1	3	3	6
Nebraska§	—	0	4	11	1	—	0	1	1	2	—	0	2	4	2
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	1	1	2	—	0	1	—	1	—	0	1	1	1
S. Atlantic	2	10	21	57	63	13	19	42	120	147	4	7	26	55	51
Delaware	—	0	1	—	—	—	0	2	—	2	—	0	2	1	1
District of Columbia	—	0	5	—	4	—	0	1	—	—	—	0	1	—	—
Florida	2	3	8	24	26	4	6	12	55	48	4	3	12	25	23
Georgia	—	1	4	8	12	2	2	6	14	26	—	1	3	12	5
Maryland§	—	1	5	10	7	—	2	6	8	17	—	1	5	10	12
North Carolina	—	0	9	9	1	6	0	16	24	21	—	0	4	3	3
South Carolina§	—	0	4	1	3	—	1	6	10	9	—	0	2	1	3
Virginia§	—	1	5	5	10	1	2	14	7	20	—	1	5	2	3
West Virginia	—	0	2	—	—	—	0	13	2	4	—	0	5	1	1
E.S. Central	—	2	5	6	15	1	7	14	43	46	2	2	6	10	13
Alabama§	—	0	4	1	4	1	2	6	17	14	—	0	1	1	2
Kentucky	—	0	2	2	2	—	1	7	16	4	1	1	3	6	4
Mississippi	—	0	1	—	4	—	0	3	1	8	—	0	0	—	—
Tennessee§	—	1	5	3	5	—	2	8	9	20	1	1	4	3	7
W.S. Central	2	5	44	22	31	5	18	46	67	69	—	2	8	7	3
Arkansas§	—	0	2	—	2	—	1	4	1	7	—	0	3	1	—
Louisiana	—	0	3	—	4	—	1	6	2	15	—	0	1	—	—
Oklahoma	—	0	8	—	—	—	1	38	4	2	—	0	2	—	—
Texas§	2	3	43	22	25	5	13	28	60	45	—	2	8	6	3
Mountain	7	4	15	29	40	—	3	9	10	41	1	2	6	14	15
Arizona	4	3	11	22	32	—	1	5	2	20	1	0	5	9	3
Colorado	—	0	2	—	4	—	0	3	1	5	—	0	2	—	3
Idaho§	2	0	2	4	—	—	0	1	—	3	—	0	1	1	1
Montana§	—	0	2	—	—	—	0	1	—	—	—	0	1	1	—
Nevada§	—	0	2	—	1	—	1	3	5	11	—	0	2	1	2
New Mexico§	—	0	1	—	1	—	0	2	—	2	—	0	1	—	2
Utah	—	0	2	1	1	—	0	2	2	—	—	0	3	2	3
Wyoming§	1	0	1	2	1	—	0	1	—	—	—	0	1	—	1
Pacific	4	12	45	77	96	2	10	32	44	80	5	3	15	25	12
Alaska	—	0	1	—	1	—	0	2	2	2	—	0	0	—	—
California	2	11	36	60	90	—	7	23	30	58	3	2	13	22	12
Hawaii	—	0	1	—	—	—	0	2	1	—	—	0	0	—	—
Oregon§	—	1	3	10	3	—	1	3	7	17	1	0	2	2	—
Washington	2	1	7	7	2	2	1	9	4	3	1	0	2	1	—
American Samoa	—	0	0	—	—	—	0	13	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	1	—	0	0	—	—
Puerto Rico	—	0	4	—	12	—	1	5	2	10	—	0	1	—	2
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Data for acute hepatitis C, viral are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	34	320	1,302	641	1,095	5	24	87	97	139	17	18	47	94	183
New England	—	44	301	11	75	—	1	16	—	6	—	0	3	1	7
Connecticut	—	12	214	—	13	—	0	16	—	—	—	0	1	1	1
Maine§	—	5	61	—	1	—	0	2	—	1	—	0	1	—	1
Massachusetts	—	0	31	—	27	—	0	3	—	5	—	0	2	—	4
New Hampshire	—	8	88	8	30	—	0	4	—	—	—	0	1	—	—
Rhode Island§	—	0	79	—	—	—	0	0	—	—	—	0	1	—	—
Vermont§	—	1	13	3	4	—	0	2	—	—	—	0	1	—	1
Mid. Atlantic	8	162	664	380	606	—	7	18	16	32	2	2	8	10	20
New Jersey	—	36	177	25	178	—	0	4	—	3	—	0	2	1	3
New York (Upstate)	4	54	192	30	64	—	1	8	2	3	—	1	3	4	5
New York City	—	4	27	4	18	—	4	9	9	21	—	0	4	1	3
Pennsylvania	4	51	321	321	346	—	1	4	5	5	2	1	5	4	9
E.N. Central	—	12	169	12	36	—	2	7	20	26	3	3	6	16	33
Illinois	—	1	16	—	2	—	1	6	7	13	—	1	3	2	10
Indiana	—	0	7	—	1	—	0	2	1	—	—	0	4	1	6
Michigan	—	0	5	4	2	—	0	2	4	4	1	0	2	5	6
Ohio	—	0	4	1	2	—	0	3	7	4	2	1	2	8	6
Wisconsin	—	10	149	7	29	—	0	1	1	5	—	0	1	—	5
W.N. Central	—	4	483	1	16	—	0	8	1	8	1	1	8	16	14
Iowa	—	1	11	1	2	—	0	1	—	1	1	0	3	4	4
Kansas	—	0	2	—	1	—	0	1	—	—	—	0	1	—	2
Minnesota	—	1	483	—	13	—	0	8	—	4	—	0	7	7	—
Missouri	—	0	4	—	—	—	0	1	—	1	—	0	3	4	5
Nebraska§	—	0	1	—	—	—	0	1	1	2	—	0	2	1	1
North Dakota	—	0	2	—	—	—	0	1	—	—	—	0	1	—	1
South Dakota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	1
S. Atlantic	25	63	213	206	339	2	4	14	30	31	4	3	11	15	26
Delaware	3	11	34	53	63	—	0	1	—	1	—	0	1	—	—
District of Columbia	—	0	7	—	—	—	0	1	—	1	—	0	0	—	—
Florida	1	1	11	9	3	1	1	7	14	8	2	1	7	6	8
Georgia	—	0	3	1	—	—	1	3	6	2	1	0	3	1	5
Maryland§	21	32	130	127	235	1	1	5	8	9	—	0	2	1	7
North Carolina	—	0	8	2	—	—	0	4	2	2	—	0	4	3	—
South Carolina§	—	0	4	1	2	—	0	1	—	—	1	0	2	4	2
Virginia§	—	17	62	13	36	—	1	7	—	8	—	0	2	—	4
West Virginia	—	0	9	—	—	—	0	1	—	—	—	0	1	—	—
E.S. Central	—	1	5	—	3	—	1	3	2	5	3	1	3	11	12
Alabama§	—	0	3	—	1	—	0	1	1	—	—	0	2	—	3
Kentucky	—	0	2	—	—	—	0	1	1	1	—	0	2	4	1
Mississippi	—	0	1	—	—	—	0	1	—	1	1	0	2	2	4
Tennessee§	—	0	4	—	2	—	0	2	—	3	2	0	2	5	4
W.S. Central	—	1	6	1	5	1	2	41	4	9	1	2	9	7	19
Arkansas§	—	0	1	—	—	—	0	1	—	—	—	0	2	—	1
Louisiana	—	0	1	—	1	—	0	2	—	2	—	0	3	3	8
Oklahoma	—	0	0	—	—	—	0	2	1	1	1	0	4	3	4
Texas§	—	1	6	1	4	1	1	40	3	6	—	1	4	1	6
Mountain	—	1	3	1	2	—	1	6	4	7	1	1	4	6	14
Arizona	—	0	1	—	—	—	0	3	—	1	—	0	2	2	2
Colorado	—	0	1	1	—	—	0	2	1	6	—	0	2	—	2
Idaho§	—	0	2	—	—	—	0	2	—	—	1	0	2	2	1
Montana§	—	0	2	—	1	—	0	1	—	—	—	0	1	—	1
Nevada§	—	0	2	—	1	—	0	3	3	—	—	0	1	1	1
New Mexico§	—	0	1	—	—	—	0	1	—	—	—	0	1	—	1
Utah	—	0	2	—	—	—	0	3	—	—	—	0	2	—	6
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	—
Pacific	1	3	11	29	13	2	3	9	20	15	2	4	19	12	38
Alaska	—	0	2	—	2	—	0	0	—	2	—	0	1	—	1
California	1	2	9	29	11	1	2	8	14	9	1	2	11	4	33
Hawaii	N	0	0	N	N	—	0	1	1	—	—	0	1	—	—
Oregon§	—	0	1	—	—	—	0	2	3	3	—	1	3	4	3
Washington	—	0	7	—	—	1	0	3	2	1	1	0	7	4	1
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	—	1	—	0	1	—	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, & W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	28	171	417	766	1,438	47	103	192	366	658	—	34	147	35	57
New England	2	23	45	16	260	6	10	22	31	70	—	0	1	—	1
Connecticut	—	0	5	—	12	5	4	10	18	29	—	0	0	—	—
Maine†	1	1	5	8	19	—	1	5	1	14	—	0	1	—	—
Massachusetts	—	18	33	—	201	—	0	0	—	N	—	0	1	—	1
New Hampshire	—	1	5	1	11	—	1	4	4	7	—	0	1	—	—
Rhode Island†	—	0	8	3	2	1	1	4	4	4	—	0	0	—	—
Vermont†	1	0	6	4	15	—	2	13	4	16	—	0	0	—	—
Mid. Atlantic	7	22	38	117	272	7	26	56	39	152	—	1	7	2	7
New Jersey	—	2	6	—	43	N	0	0	N	N	—	0	3	—	1
New York (Upstate)	3	8	24	36	143	7	9	20	39	41	—	0	1	—	—
New York City	—	2	7	9	26	—	0	5	—	12	—	0	3	1	2
Pennsylvania	4	7	22	72	60	—	16	44	—	99	—	0	3	1	4
E.N. Central	6	26	180	340	298	—	4	48	—	2	—	1	4	1	3
Illinois	—	2	8	10	49	—	1	15	—	1	—	0	3	—	1
Indiana	—	0	9	3	1	—	0	1	—	—	—	0	2	—	—
Michigan	2	3	16	12	65	—	1	27	—	1	—	0	1	—	1
Ohio	4	12	176	315	141	—	1	11	—	—	—	0	2	1	1
Wisconsin	—	0	24	—	42	N	0	0	N	N	—	0	0	—	—
W.N. Central	1	12	69	77	98	—	4	13	8	22	—	5	37	9	8
Iowa	—	2	8	10	34	—	0	3	1	2	—	0	4	—	—
Kansas	—	2	5	1	41	—	2	7	—	14	—	0	2	—	3
Minnesota	—	0	67	—	—	—	0	6	5	2	—	0	2	—	—
Missouri	—	2	15	55	7	—	0	3	—	1	—	5	29	9	5
Nebraska†	1	1	12	10	3	—	0	0	—	—	—	0	2	—	—
North Dakota	—	0	4	—	1	—	0	5	2	3	—	0	0	—	—
South Dakota	—	0	7	1	12	—	0	2	—	—	—	0	1	—	—
S. Atlantic	9	16	48	77	115	33	40	65	262	359	—	15	111	20	21
Delaware	—	0	2	—	—	—	0	0	—	—	—	0	2	—	2
District of Columbia	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
Florida	6	3	17	19	45	3	0	6	19	124	—	0	3	1	—
Georgia	—	0	3	1	12	—	5	31	42	26	—	0	6	3	3
Maryland†	—	2	6	10	24	10	9	18	58	52	—	1	5	4	6
North Carolina	3	5	34	35	—	6	9	19	56	55	—	7	96	11	3
South Carolina†	—	1	18	4	15	—	0	11	—	14	—	0	7	—	3
Virginia†	—	2	11	8	18	11	12	31	77	80	—	2	11	1	4
West Virginia	—	0	12	—	—	3	0	11	10	8	—	0	3	—	—
E.S. Central	1	6	35	32	50	—	3	6	2	13	—	5	16	2	15
Alabama†	—	1	6	5	17	—	0	0	—	—	—	1	10	1	7
Kentucky	—	0	4	6	1	—	0	3	2	4	—	0	2	—	—
Mississippi	—	3	32	15	11	—	0	1	—	—	—	0	2	—	1
Tennessee†	1	1	5	6	21	—	2	6	—	9	—	2	10	1	7
W.S. Central	—	20	80	30	47	1	1	23	6	10	—	1	30	1	1
Arkansas†	—	2	17	7	3	1	1	3	6	2	—	0	15	—	—
Louisiana	—	0	2	—	3	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	26	1	—	—	0	22	—	8	—	0	20	—	—
Texas†	—	16	70	22	41	—	0	0	—	—	—	1	5	1	1
Mountain	—	19	40	44	208	—	3	14	10	8	—	0	4	—	1
Arizona	—	2	10	6	64	—	2	12	9	7	—	0	1	—	—
Colorado	—	5	14	11	60	—	0	0	—	—	—	0	2	—	—
Idaho†	—	0	4	2	9	—	0	0	—	—	—	0	1	—	1
Montana†	—	1	7	9	6	—	0	3	—	—	—	0	1	—	—
Nevada†	—	0	6	1	7	—	0	2	—	—	—	0	0	—	—
New Mexico†	—	1	7	—	9	—	0	2	—	—	—	0	1	—	—
Utah	—	6	27	15	44	—	0	2	—	1	—	0	0	—	—
Wyoming†	—	0	2	—	9	—	0	4	1	—	—	0	2	—	—
Pacific	2	14	136	33	90	—	4	10	8	22	—	0	2	—	—
Alaska	1	1	6	13	9	—	0	3	4	15	N	0	0	N	N
California	—	7	26	—	50	—	3	8	4	7	—	0	2	—	—
Hawaii	—	0	1	—	2	N	0	0	N	N	N	0	0	N	N
Oregon†	—	1	14	7	14	—	0	3	—	—	—	0	1	—	—
Washington	1	3	115	13	15	—	0	0	—	—	N	0	0	N	N
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	—	—	—	0	5	1	11	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	179	855	1,319	3,130	4,849	10	70	214	191	292	89	358	667	1,773	1,512
New England	4	31	74	79	596	—	4	11	9	66	—	3	11	8	71
Connecticut	—	0	33	33	430	—	0	2	2	45	—	0	2	2	44
Maine§	2	2	14	20	16	—	0	4	2	4	—	0	4	—	2
Massachusetts	—	21	58	—	126	—	2	10	—	12	—	2	8	—	24
New Hampshire	—	2	10	6	13	—	0	4	2	5	—	0	1	1	1
Rhode Island§	1	2	15	12	5	—	0	2	1	—	—	0	9	4	—
Vermont§	1	1	5	8	6	—	0	3	2	—	—	0	1	1	—
Mid. Atlantic	16	108	190	369	661	3	8	27	21	38	2	16	152	100	79
New Jersey	—	19	48	9	138	—	2	7	—	12	—	3	10	18	8
New York (Upstate)	11	27	63	102	127	1	3	12	9	10	2	3	19	21	11
New York City	1	25	51	106	172	—	1	5	3	3	—	5	11	42	51
Pennsylvania	4	34	69	152	224	2	2	11	9	13	—	2	141	19	9
E.N. Central	12	104	255	313	591	—	9	35	18	41	9	55	133	337	145
Illinois	—	32	188	52	226	—	1	13	—	6	—	14	25	76	88
Indiana	—	12	34	27	34	—	1	13	3	—	—	3	81	128	8
Michigan	5	19	41	76	96	—	1	8	5	8	—	1	7	8	7
Ohio	7	25	64	128	140	—	2	9	6	24	9	18	104	104	22
Wisconsin	—	15	50	30	95	—	3	11	4	3	—	4	13	21	20
W.N. Central	18	49	103	210	270	—	12	38	26	25	3	31	80	87	219
Iowa	2	9	18	36	51	—	2	13	4	—	—	2	6	5	6
Kansas	2	7	20	22	40	—	1	4	2	3	—	0	3	3	6
Minnesota	6	13	41	51	38	—	4	17	12	12	1	4	12	12	34
Missouri	6	15	29	73	82	—	2	12	6	4	2	21	72	47	153
Nebraska§	2	5	13	25	21	—	2	6	2	6	—	0	3	—	3
North Dakota	—	0	9	2	6	—	0	1	—	—	—	0	5	9	5
South Dakota	—	3	11	1	32	—	0	5	—	—	—	0	30	11	12
S. Atlantic	70	228	435	1,111	1,285	4	13	38	54	55	37	82	153	452	495
Delaware	—	2	8	9	12	—	0	2	1	3	—	0	2	—	2
District of Columbia	—	0	4	—	6	—	0	1	—	—	—	0	1	—	2
Florida	57	87	181	590	544	1	3	18	21	16	21	36	75	174	299
Georgia	10	33	82	192	192	2	1	6	4	7	13	28	86	194	163
Maryland§	3	14	44	68	105	1	1	6	12	12	2	2	7	10	13
North Carolina	—	26	191	122	204	—	1	24	10	4	—	0	12	12	—
South Carolina§	—	18	51	79	99	—	0	3	3	—	1	4	20	53	7
Virginia§	—	22	50	43	116	—	3	9	2	13	—	3	14	9	9
West Virginia	—	4	20	8	7	—	0	3	1	—	—	0	62	—	—
E.S. Central	2	59	145	235	346	—	4	26	17	13	10	49	177	238	126
Alabama§	—	16	50	80	90	—	1	19	4	2	—	13	42	57	41
Kentucky	—	10	23	37	56	—	1	12	3	3	—	8	35	31	11
Mississippi	—	13	57	41	101	—	0	1	1	1	—	18	111	79	31
Tennessee§	2	17	35	77	99	—	2	11	9	7	10	5	32	71	43
W.S. Central	12	91	319	198	208	—	5	13	7	11	19	45	255	349	87
Arkansas§	3	13	50	32	28	—	0	3	1	4	4	1	11	16	9
Louisiana	—	16	42	24	62	—	0	2	—	1	—	9	22	11	31
Oklahoma	9	9	43	36	28	—	0	3	2	1	1	3	9	18	7
Texas§	—	50	272	106	90	—	3	11	4	5	14	32	234	304	40
Mountain	11	49	83	181	309	3	10	42	29	26	2	17	40	76	111
Arizona	8	17	40	101	111	2	2	8	11	7	2	10	30	49	50
Colorado	—	10	24	13	74	—	1	17	—	6	—	2	6	3	13
Idaho§	2	3	10	18	20	1	2	16	16	1	—	0	2	1	1
Montana§	1	1	9	6	13	—	0	0	—	—	—	0	2	—	2
Nevada§	—	5	12	28	26	—	0	3	2	3	—	1	10	21	9
New Mexico§	—	5	13	—	32	—	0	3	—	7	—	1	6	—	21
Utah	—	4	17	7	22	—	1	9	—	2	—	0	5	—	3
Wyoming§	—	1	5	8	11	—	0	0	—	—	—	0	5	2	12
Pacific	34	113	354	434	583	—	9	38	10	17	7	27	70	126	179
Alaska	3	1	5	6	6	N	0	0	N	N	—	0	1	—	4
California	24	85	227	340	511	—	5	33	5	9	7	21	61	112	158
Hawaii	—	1	13	23	1	—	0	1	1	—	—	0	3	5	1
Oregon§	1	6	16	36	38	—	1	11	1	3	—	1	6	7	8
Washington	6	12	127	29	27	—	1	18	3	5	—	2	20	2	8
American Samoa	—	0	1	1	—	—	0	0	—	—	—	0	1	1	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	1	—	N	0	0	N	N	—	0	3	1	1
Puerto Rico	—	12	55	5	99	—	0	0	—	—	—	0	2	—	9
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Streptococcal disease, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max		
United States	78	88	168	679	779	19	32	115	206	283
New England	2	4	28	7	55	—	1	7	3	33
Connecticut	—	0	22	—	2	—	0	1	—	5
Maine§	1	0	3	3	4	—	0	1	1	—
Massachusetts	—	2	12	—	38	—	1	4	—	21
New Hampshire	—	0	4	2	5	—	0	2	2	4
Rhode Island§	—	0	1	—	—	—	0	1	—	2
Vermont§	1	0	1	2	6	—	0	1	—	1
Mid. Atlantic	13	16	40	118	155	3	5	38	32	42
New Jersey	—	2	12	5	27	—	1	5	2	11
New York (Upstate)	6	6	20	52	29	3	2	13	17	21
New York City	—	3	13	12	47	—	2	35	13	10
Pennsylvania	7	4	11	49	52	N	0	0	N	N
E.N. Central	27	15	34	151	188	4	4	17	36	47
Illinois	—	4	10	27	68	—	1	6	—	7
Indiana	—	2	10	18	11	—	0	11	7	3
Michigan	1	3	10	32	42	3	1	5	12	20
Ohio	11	4	14	57	60	1	1	5	14	13
Wisconsin	15	0	5	17	7	—	0	2	3	4
W.N. Central	4	5	32	62	38	—	3	15	20	10
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	3	8	10	—	0	1	2	—
Minnesota	—	0	29	20	—	—	1	14	6	—
Missouri	2	2	9	23	22	—	0	2	10	7
Nebraska§	2	0	3	9	1	—	0	3	2	2
North Dakota	—	0	3	—	3	—	0	0	—	1
South Dakota	—	0	2	2	2	—	0	0	—	—
S. Atlantic	21	23	49	188	153	6	6	14	32	59
Delaware	—	0	1	2	1	—	0	0	—	—
District of Columbia	—	0	3	—	1	—	0	0	—	—
Florida	6	6	16	53	36	5	1	5	10	6
Georgia	1	5	12	48	35	—	0	5	—	20
Maryland§	3	5	9	39	30	1	1	5	14	18
North Carolina	10	1	22	19	14	—	0	0	—	—
South Carolina§	—	1	7	10	15	—	1	4	8	5
Virginia§	1	2	12	15	18	—	0	3	—	10
West Virginia	—	0	3	2	3	—	0	1	—	—
E.S. Central	3	4	13	19	35	1	2	11	6	17
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	4	9	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	—	2
Tennessee§	3	3	13	15	26	1	2	9	6	15
W.S. Central	5	7	45	51	38	4	5	45	32	31
Arkansas§	—	0	2	—	5	—	0	2	3	3
Louisiana	—	0	4	1	4	—	0	3	—	11
Oklahoma	2	1	8	20	16	3	1	5	15	8
Texas§	3	5	36	30	13	1	2	40	14	9
Mountain	2	9	20	71	98	1	4	12	38	37
Arizona	1	4	9	41	41	1	2	8	31	21
Colorado	—	3	9	17	21	—	1	4	4	8
Idaho§	1	0	2	4	3	—	0	1	1	—
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	2	2	—	0	1	1	—
New Mexico§	—	1	4	—	12	—	0	4	—	5
Utah	—	1	6	7	18	—	0	2	1	3
Wyoming§	—	0	1	—	1	—	0	0	—	—
Pacific	1	3	7	12	19	—	0	4	7	7
Alaska	1	0	3	3	3	—	0	4	7	5
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	5	9	16	—	0	1	—	2
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	4	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	44	41	97	449	559	5	7	23	55	103	72	216	279	1,243	1,411
New England	1	1	7	8	35	—	0	2	2	3	3	6	14	32	30
Connecticut	—	0	4	—	24	—	0	1	—	2	—	0	6	2	5
Maine§	1	0	1	3	3	—	0	1	1	—	—	0	2	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	3	3	8	26	18
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	3	3	3
Rhode Island§	—	0	3	2	4	—	0	1	—	1	—	0	5	1	4
Vermont§	—	0	2	3	4	—	0	1	1	—	—	0	5	—	—
Mid. Atlantic	1	2	9	27	32	—	0	5	2	5	3	33	46	213	228
New Jersey	—	0	0	—	—	—	0	0	—	—	—	5	9	33	26
New York (Upstate)	1	1	5	8	8	—	0	4	—	2	3	3	9	11	13
New York City	—	0	0	—	—	—	0	0	—	—	—	18	35	135	130
Pennsylvania	—	1	6	19	24	—	0	2	2	3	—	8	17	34	59
E.N. Central	9	11	38	102	155	1	2	12	11	28	4	15	25	97	128
Illinois	—	1	9	7	34	—	0	6	—	13	—	7	14	12	62
Indiana	—	3	22	24	22	—	0	9	2	3	—	1	6	15	7
Michigan	1	0	1	3	—	—	0	1	1	—	1	2	12	14	18
Ohio	8	6	23	68	99	1	1	3	8	12	1	4	10	45	34
Wisconsin	N	0	0	N	N	—	0	0	—	—	2	1	4	11	7
W.N. Central	1	2	49	26	39	—	0	3	—	3	—	7	14	47	34
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	—	1
Kansas	—	0	7	2	22	—	0	1	—	2	—	0	2	—	3
Minnesota	—	0	46	—	—	—	0	3	—	—	—	1	4	6	13
Missouri	1	1	8	24	16	—	0	1	—	—	—	5	10	40	17
Nebraska§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	1	—	0	1	—	1	—	0	3	—	—
S. Atlantic	28	19	43	207	215	4	4	12	31	51	19	50	95	277	266
Delaware	—	0	1	1	—	—	0	1	—	1	—	0	3	1	2
District of Columbia	—	0	1	—	2	—	0	0	—	—	—	2	12	14	28
Florida	18	11	27	127	114	3	2	7	22	25	11	17	35	115	68
Georgia	10	5	17	77	92	1	1	5	8	21	—	9	80	7	25
Maryland§	—	0	1	1	—	—	0	1	1	—	—	6	15	39	46
North Carolina	—	0	0	—	—	—	0	0	—	—	2	5	23	55	47
South Carolina§	—	0	0	—	—	—	0	0	—	—	1	1	11	17	15
Virginia§	N	0	0	N	N	—	0	0	—	—	5	4	16	29	34
West Virginia	—	1	9	1	7	—	0	1	—	4	—	0	1	—	1
E.S. Central	4	4	12	60	31	—	1	3	4	5	16	19	31	146	89
Alabama§	N	0	0	N	N	—	0	0	—	—	5	8	17	62	31
Kentucky	1	0	2	9	7	—	0	1	1	—	2	1	7	9	10
Mississippi	—	0	0	—	—	—	0	0	—	—	—	2	15	13	16
Tennessee§	3	3	12	51	24	—	0	3	3	5	9	8	15	62	32
W.S. Central	—	2	12	8	40	—	0	3	3	4	17	37	55	214	233
Arkansas§	—	0	1	1	1	—	0	1	1	—	—	2	10	7	16
Louisiana	—	1	4	7	18	—	0	2	2	1	—	10	20	17	47
Oklahoma	—	0	10	—	21	—	0	2	—	3	—	1	3	9	13
Texas§	—	0	0	—	—	—	0	0	—	—	17	24	39	181	157
Mountain	—	1	5	11	12	—	0	2	1	4	—	7	25	29	62
Arizona	—	0	0	—	—	—	0	0	—	—	—	3	17	2	35
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	9	6
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	3	—	1
Nevada§	—	0	3	10	8	—	0	2	1	1	—	2	6	14	11
New Mexico§	—	0	1	—	—	—	0	0	—	—	—	1	3	4	6
Utah	—	0	5	1	3	—	0	2	—	2	—	0	2	—	2
Wyoming§	—	0	2	—	1	—	0	1	—	1	—	0	1	—	1
Pacific	—	0	0	—	—	—	0	1	1	—	10	40	61	188	341
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	—	2
California	N	0	0	N	N	—	0	0	—	—	5	37	58	150	320
Hawaii	—	0	0	—	—	—	0	1	1	—	—	0	2	3	1
Oregon§	N	0	0	N	N	—	0	0	—	—	—	0	2	3	2
Washington	N	0	0	N	N	—	0	0	—	—	5	3	13	32	16
American Samoa	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	2	3	10	14	12
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 23, 2008, and February 24, 2007 (8th Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	454	577	1,282	3,620	6,727	—	1	141	—	—	—	2	299	—	1
New England	4	12	47	76	112	—	0	2	—	—	—	0	2	—	—
Connecticut	—	0	1	—	1	—	0	2	—	—	—	0	1	—	—
Maine¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
New Hampshire	2	6	17	30	48	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Vermont¶	2	6	38	46	63	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	44	68	154	353	1,073	—	0	3	—	—	—	0	3	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	3	—	—	—	0	3	—	—
Pennsylvania	44	68	154	353	1,073	—	0	1	—	—	—	0	1	—	—
E.N. Central	71	161	358	995	2,451	—	0	18	—	—	—	0	12	—	1
Illinois	—	3	11	17	29	—	0	13	—	—	—	0	8	—	—
Indiana	N	0	0	N	N	—	0	4	—	—	—	0	2	—	—
Michigan	26	71	146	439	994	—	0	5	—	—	—	0	0	—	—
Ohio	45	71	208	539	1,156	—	0	4	—	—	—	0	3	—	1
Wisconsin	—	11	80	—	272	—	0	2	—	—	—	0	2	—	—
W.N. Central	36	25	114	235	348	—	0	41	—	—	—	1	117	—	—
Iowa	N	0	0	N	N	—	0	4	—	—	—	0	3	—	—
Kansas	28	6	29	112	187	—	0	3	—	—	—	0	7	—	—
Minnesota	—	0	0	—	—	—	0	9	—	—	—	0	12	—	—
Missouri	8	13	78	120	137	—	0	9	—	—	—	0	3	—	—
Nebraska¶	N	0	0	N	N	—	0	5	—	—	—	0	15	—	—
North Dakota	—	0	60	1	6	—	0	11	—	—	—	0	49	—	—
South Dakota	—	0	14	2	18	—	0	9	—	—	—	0	32	—	—
S. Atlantic	104	89	214	572	836	—	0	12	—	—	—	0	6	—	—
Delaware	—	1	4	1	7	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	8	—	—	—	0	0	—	—	—	0	0	—	—
Florida	82	26	83	322	190	—	0	1	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	8	—	—	—	0	5	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
North Carolina	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
South Carolina¶	1	15	55	88	253	—	0	2	—	—	—	0	1	—	—
Virginia¶	—	17	85	15	136	—	0	1	—	—	—	0	1	—	—
West Virginia	21	22	66	146	250	—	0	0	—	—	—	0	0	—	—
E.S. Central	27	12	82	156	73	—	0	11	—	—	—	0	14	—	—
Alabama¶	27	12	82	155	71	—	0	2	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	1	2	—	0	7	—	—	—	0	12	—	—
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	160	169	530	1,133	1,289	—	0	34	—	—	—	0	18	—	—
Arkansas¶	—	12	46	75	88	—	0	5	—	—	—	0	2	—	—
Louisiana	—	1	8	5	33	—	0	5	—	—	—	0	3	—	—
Oklahoma	—	0	0	—	—	—	0	11	—	—	—	0	7	—	—
Texas¶	160	155	484	1,053	1,168	—	0	18	—	—	—	0	10	—	—
Mountain	7	38	130	98	529	—	0	36	—	—	—	1	143	—	—
Arizona	—	0	0	—	—	—	0	8	—	—	—	0	10	—	—
Colorado	—	13	62	28	222	—	0	17	—	—	—	0	65	—	—
Idaho¶	N	0	0	N	N	—	0	3	—	—	—	0	22	—	—
Montana¶	7	6	40	39	60	—	0	10	—	—	—	0	30	—	—
Nevada¶	—	0	1	—	1	—	0	1	—	—	—	0	3	—	—
New Mexico¶	—	4	37	—	58	—	0	8	—	—	—	0	6	—	—
Utah	—	7	72	30	188	—	0	8	—	—	—	0	8	—	—
Wyoming¶	—	0	9	1	—	—	0	4	—	—	—	0	33	—	—
Pacific	1	0	4	2	16	—	0	18	—	—	—	0	23	—	—
Alaska	1	0	4	2	16	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	17	—	—	—	0	21	—	—
Hawaii	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	3	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	3	21	4	67	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	10	37	11	95	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2007 and 2008 are provisional.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending February 23, 2008 (8th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
New England	636	447	137	29	13	10	69
Boston, MA	175	110	49	6	7	3	11
Bridgeport, CT	46	37	8	—	1	—	6
Cambridge, MA	18	17	1	—	—	—	2
Fall River, MA	37	28	7	2	—	—	10
Hartford, CT	58	38	15	5	—	—	1
Lowell, MA	23	19	4	—	—	—	5
Lynn, MA	13	13	—	—	—	—	3
New Bedford, MA	31	23	5	2	—	1	1
New Haven, CT	45	29	11	1	2	2	7
Providence, RI	68	45	16	3	1	3	9
Somerville, MA	—	—	—	—	—	—	—
Springfield, MA	26	20	3	3	—	—	4
Waterbury, CT	30	19	8	3	—	—	5
Worcester, MA	66	49	10	4	2	1	5
Mid. Atlantic	2,117	1,498	441	104	33	39	116
Albany, NY	47	35	10	1	—	1	2
Allentown, PA	41	28	9	2	2	—	2
Buffalo, NY	89	60	21	5	1	2	12
Camden, NJ	52	32	9	3	3	5	3
Elizabeth, NJ	18	14	4	—	—	—	—
Erie, PA	61	50	9	1	—	1	8
Jersey City, NJ	U	U	U	U	U	U	U
New York City, NY	1,182	841	246	63	17	15	56
Newark, NJ	49	21	16	2	3	6	2
Paterson, NJ	12	9	3	—	—	—	—
Philadelphia, PA	171	103	52	14	2	—	8
Pittsburgh, PA§	42	29	9	1	1	2	2
Reading, PA	55	44	7	2	—	2	4
Rochester, NY	158	123	25	4	3	2	13
Schenectady, NY	22	15	5	2	—	—	1
Scranton, PA	28	24	4	—	—	—	2
Syracuse, NY	35	29	3	2	—	1	1
Trenton, NJ	20	14	3	1	—	2	—
Utica, NY	16	13	2	1	—	—	—
Yonkers, NY	19	14	4	—	1	—	—
E.N. Central	2,242	1,519	507	122	43	51	185
Akron, OH	67	45	11	7	4	—	1
Canton, OH	44	32	11	—	1	—	4
Chicago, IL	314	192	88	24	5	5	27
Cincinnati, OH	95	63	16	6	5	5	16
Cleveland, OH	219	160	43	8	4	4	11
Columbus, OH	188	128	36	16	4	4	17
Dayton, OH	151	114	30	4	2	1	18
Detroit, MI	190	100	65	15	5	5	13
Evansville, IN	55	40	12	1	1	1	2
Fort Wayne, IN	67	54	9	2	2	—	4
Gary, IN	10	5	—	2	—	3	—
Grand Rapids, MI	72	49	17	3	—	3	3
Indianapolis, IN	227	142	55	17	4	9	15
Lansing, MI	41	32	7	2	—	—	5
Milwaukee, WI	113	74	33	3	—	3	15
Peoria, IL	63	47	13	—	1	2	11
Rockford, IL	77	55	17	2	1	2	5
South Bend, IN	44	30	10	1	1	2	3
Toledo, OH	129	88	28	9	2	2	8
Youngstown, OH	76	69	6	—	1	—	7
W.N. Central	581	387	122	37	19	15	60
Des Moines, IA	—	—	—	—	—	—	—
Duluth, MN	32	25	7	—	—	—	2
Kansas City, KS	32	23	7	2	—	—	2
Kansas City, MO	111	73	22	8	4	4	11
Lincoln, NE	49	37	11	1	—	—	10
Minneapolis, MN	51	31	9	5	3	3	4
Omaha, NE	97	74	13	7	2	1	17
St. Louis, MO	94	43	26	12	8	4	5
St. Paul, MN	50	36	9	—	2	3	6
Wichita, KS	65	45	18	2	—	—	3
S. Atlantic	1,249	814	298	86	23	24	73
Atlanta, GA	126	70	35	14	4	3	3
Baltimore, MD	142	83	44	10	4	1	14
Charlotte, NC	120	79	28	8	2	2	13
Jacksonville, FL	111	81	22	6	1	1	2
Miami, FL	299	201	65	22	4	4	9
Norfolk, VA	54	30	15	1	2	6	4
Richmond, VA	64	45	16	2	1	—	3
Savannah, GA	64	37	21	5	—	1	4
St. Petersburg, FL	52	38	12	1	—	1	4
Tampa, FL	195	131	38	17	5	4	14
Washington, D.C.	U	U	U	U	U	U	U
Wilmington, DE	22	19	2	—	—	1	3
E.S. Central	973	671	223	42	18	19	102
Birmingham, AL	182	116	46	6	5	9	19
Chattanooga, TN	99	72	22	4	—	1	6
Knoxville, TN	92	65	22	5	—	—	10
Lexington, KY	49	40	9	—	—	—	4
Memphis, TN	192	146	27	7	6	6	28
Mobile, AL	125	79	36	7	1	2	12
Montgomery, AL	75	45	27	2	—	1	10
Nashville, TN	159	108	34	11	6	—	13
W.S. Central	1,620	1,066	384	90	36	44	122
Austin, TX	100	77	17	5	1	—	12
Baton Rouge, LA	49	27	12	6	—	4	—
Corpus Christi, TX	68	47	15	4	1	1	6
Dallas, TX	237	146	71	12	3	5	12
El Paso, TX	64	39	15	6	4	—	7
Fort Worth, TX	137	93	33	7	2	2	13
Houston, TX	377	233	86	27	13	18	21
Little Rock, AR	78	55	18	3	—	2	4
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	297	206	67	13	6	5	26
Shreveport, LA	51	33	11	3	2	2	4
Tulsa, OK	162	110	39	4	4	5	17
Mountain	1,242	852	270	76	27	15	105
Albuquerque, NM	164	113	38	9	4	—	16
Boise, ID	42	31	6	3	1	1	4
Colorado Springs, CO	57	38	15	1	2	1	3
Denver, CO	84	56	19	5	1	3	10
Las Vegas, NV	350	227	88	24	7	3	26
Ogden, UT	38	31	6	1	—	—	1
Phoenix, AZ	178	107	51	13	5	1	16
Pueblo, CO	38	29	7	2	—	—	4
Salt Lake City, UT	137	103	20	7	6	1	16
Tucson, AZ	154	117	20	11	1	5	9
Pacific	1,672	1,205	308	93	40	26	173
Berkeley, CA	14	8	3	3	—	—	2
Fresno, CA	109	73	25	4	4	3	15
Glendale, CA	31	27	4	—	—	—	4
Honolulu, HI	U	U	U	U	U	U	U
Long Beach, CA	70	45	18	3	3	1	9
Los Angeles, CA	274	188	54	19	12	1	43
Pasadena, CA	26	21	4	1	—	—	1
Portland, OR	131	96	23	9	2	1	9
Sacramento, CA	219	157	47	6	5	4	22
San Diego, CA	150	110	20	12	1	7	19
San Francisco, CA	115	87	19	5	2	2	15
San Jose, CA	200	151	34	10	3	2	12
Santa Cruz, CA	34	26	6	—	1	1	7
Seattle, WA	110	74	23	5	6	2	6
Spokane, WA	56	43	6	5	—	2	3
Tacoma, WA	133	99	22	11	1	—	6
Total	12,332**	8,459	2,690	679	252	243	1,005

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.

¶ Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

** Total includes unknown ages.

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. To receive an electronic copy 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 Internet server at *http://www.cdc.gov/mmwr* or from CDC's file transfer protocol server at *ftp://ftp.cdc.gov/pub/publications/mmwr*. Paper copy subscriptions are available through the 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. Data are compiled in the National Center for Public Health Informatics, Division of Integrated Surveillance Systems and Services. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to *www.mmwrq@cdc.gov*.

☆U.S. Government Printing Office: 2008-723-026/41078 Region IV ISSN: 0149-2195