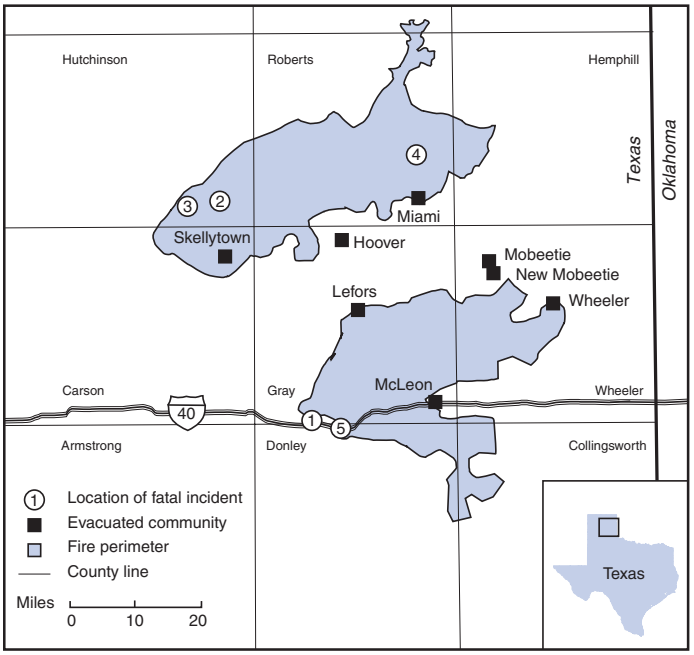
MMWR™
Morbidity and Mortality Weekly Report
Weekly August 3, 2007 / Vol. 56 / No. 30

Wildfire-Related Deaths — Texas, March 12–20, 2006

During March 12–20, 2006, wildfires burned approximately 1 million acres in the Panhandle region of Texas, advancing 45 miles in 9 hours, with dense smoke and flames up to 11 feet. The two largest fires, which together extended into nine counties, resulted from power lines downed by sustained winds of 46 mph and gusts up to 53 mph. The wildfires destroyed more than 89 structures, with losses estimated at $16 million. The fires caused evacuations in eight communities with a total population of 4,072 (*1*). This report summarizes the circumstances of 12 deaths and describes the five separate incidents caused by the two wildfires that resulted in those deaths (Figure).

FIGURE. Locations of five incidents that resulted in 12 deaths and the eight communities where evacuations occurred during wildfires that burned approximately 1 million acres — Texas, March 12–20, 2006



In response to the wildfires, regional and state public health preparedness staff members at the Texas Department of State Health Services (TDSHS) began mortality surveillance and initiated an investigation to characterize the associated deaths. Case finding was conducted via interviews with local emergency management officials, justices of the peace, and highway safety officials in addition to reviews of local newspaper accounts of the wildfires. A case was defined as any death among civilians or firefighters (volunteer or paid) directly or indirectly associated with incidents associated with one of the two wildfires during March 12–20, 2006. A directly related death was defined as one resulting from direct contact with the wildfire or a wildfire product (e.g., smoke or superheated air). An indirectly related death was defined as one resulting from indirect contact with a wildfire product (e.g., smoke that caused poor visibility, resulting in an automobile crash). Age, sex, county of occurrence, and time and cause of death for each decedent was provided by the Bureau of Vital Statistics of TDSHS.

Twelve deaths (seven directly related and five indirectly related) were considered related to the wildfires. Decedents were aged 14–94 years; median age was 48 years. Eight of the decedents were male. All 12 decedents were injured on March 12, between 1:30 p.m. and 7:00 p.m. Eleven were

INSIDE

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 2007;56:[inclusive page numbers].

civilians who died on March 12, less than 7 hours after the fires began; the twelfth decedent was a volunteer firefighter who sustained serious injuries on March 12 and died 27 days later.

The injuries that resulted in the 12 deaths occurred in four rural counties (Hutchinson, Roberts, Gray, and Donley), in five separate incidents within a 45-mile radius (Figure). Three of the five incidents resulted in multiple deaths, including two incidents in which four persons died and one in which two persons died. The immediate cause of death for eight (67%) of the decedents was smoke inhalation; the underlying cause for four of those eight was listed as superheated air from grass wildfires. The immediate cause of death for the other four (33%) decedents was blunt-force trauma and complications resulting from injuries; the underlying cause was listed as vehicular accident/collision. Following are descriptions of the five incidents, all of which occurred on March 12.

Incident 1. At approximately 1:30 pm, four persons died as a result of a nine-car collision on Interstate 40. The collision was caused by reduced visibility because of blowing smoke, sand, and dirt from a wildfire. Three of the decedents, two females aged 14 and 49 years and one male aged 56 years, were in the same vehicle; the fourth decedent, a female aged 46 years, was in a separate vehicle. Local officials closed 90 miles of the highway for 9 hours because of heavy smoke.

Incident 2. At approximately 3:00 p.m., an estimated 38 miles from incident 1, rescuers attempted to evacuate an older couple from their home in advance of a spreading wildfire. A female neighbor aged 64 years came to the home to assist with the evacuation. Rescuers were able to place the wife into a rescue vehicle and her husband, aged 84 years, into the neighbor's vehicle. As both vehicles were leaving the property, rescuers noticed that the second vehicle (with the older man and neighbor) had turned around and returned to the home. Both the man and his neighbor were overcome by flames from the advancing wildfire.

Incident 3. At approximately 6:00 p.m., a man aged 94 years died at his home, approximately 5 miles from incident 2. The man had refused attempts by emergency responders to evacuate him from his home in the face of the advancing wildfire.

Incident 4. At approximately 6:30 p.m., an estimated 30 miles from incident 3, four male oil rig workers (aged 25, 27, 30, and 42 years) were driving to work when their vehicle veered off a pasture road in reduced visibility conditions caused by smoke from a wildfire. The vehicle was trapped in a ravine; the men fled the vehicle and used a

cellular telephone to contact a coworker, telling him they were having trouble breathing and could not see. The four men were overcome by smoke; their bodies were recovered by emergency responders 24 hours later, approximately 75 yards from their vehicle.

Incident 5. At approximately 7:00 p.m., an estimated 45 miles from incident 4, a male volunteer firefighter aged 62 years was driving a water truck near Interstate 40 in a field where graders had moved brush, leaving the ground softened. When flames approached, the firefighter attempted to escape by backing up the truck, which turned over and rolled down a 60-foot ravine. The firefighter sustained serious injuries and died 27 days later.

Reported by: *D Zane, MS, J Henry, PhD, C Lindley, DVM, P Pendergrass, MD, L Mansolo, Texas Dept of State Health Svcs. D Galloway, T Spencer, M Stanford, Texas Forest Svc. D Batts, MD, National Center for Environmental Health, CDC.*

Editorial Note: Wildfires can spread rapidly, and even in sparsely populated areas, multiple fatalities can occur within a brief period. Eleven of the 12 deaths described in this report occurred within 7 hours of the start of the fires; these 11 deaths were the most civilian deaths associated with wildfires in the United States since 2003 (*2*). Conditions in the Panhandle region of Texas in March 2006 were ideal for wildfires. The area had experienced a drought for 11 months, and drought conditions for the preceding 5 months had been rated as extreme by the U.S. Drought Monitor; the National Weather Service Storm Prediction Center had issued a fire danger warning of extremely critical for March 8, 10, 11, and 12.

Wildfire deaths can be prevented; however, preparedness and disaster planning are essential to reduce the health impact of wildfires. Effective methods for creating "defensible spaces" have been described for homeowners, but these must be in place before a wildfire starts (*3*). Steps to protect a home from wildfires include keeping all combustible materials (e.g., firewood and dead vegetation) away from structures and clearing roof surfaces and gutters regularly to avoid build-up of flammable materials such as leaves and other debris (*3*).

Wildfires are a growing hazard in most regions of the United States, presenting a threat to property and life (*4*). In 2004, wildfires burned approximately 8 million acres in 40 states. During 2000–2007, an annual average of 17,615 wildfires occurred in the United States (Jennifer Smith, National Interagency Fire Center, personal communication, 2007). During 1995–2004, a total of 184 firefighter deaths were associated with fighting wildfires in the United States (*5*). Of the 21 firefighter deaths associated with wildfires in 2004, a total of 10 resulted from myocardial infarction, five were related to vehicle crashes, three were caused by aircraft crashes, and three resulted from other circumstances. The number of civilian deaths related to wildfires during this period is unknown.

The findings in this report are subject to at least two limitations. First, although cases were identified through multisource case finding, certain deaths directly or indirectly attributable to the wildfires might have been missed. Second, certain deaths might have occurred outside of the study period, particularly those indirectly attributable to the wildfires.

Wildfire prevention messages are available from the Texas Forest Service, U.S. Fire Administration, Federal Emergency Management Agency, and CDC (*3,6–8*). Key messages include adhering to warnings and evacuation orders, avoiding traveling through smoke on roadways, having an exit strategy, and avoiding the path of the wildfire. Detailed action plans also exist for persons trapped at home and persons threatened by smoke and fire outdoors or while riding in vehicles (*7*). A comprehensive strategy addressing wildfires is provided in the U.S. National Fire Plan (*9*), and a guide for public health officials regarding wildfire smoke health effects and prevention measures is available at http://www.oehha.ca.gov/air/risk_assess/wildfirev8.pdf.

Acknowledgments

The findings in this report are based, in part, on contributions by J Alexander, DVM, B Hernandez, T Haywood, P Raimondo, J Walker, MD, T Sidwa, DVM, S Elkins, D Johnson, A Whitley, P Tabor, C Tuttle, D McLellan, R Apodaca, M Widtfeldt, S Prosperie, B Ray, D Powell, Texas Dept of State Health Svcs; B Woods, P Hannemann, P Schaub, C Roggenbuck, Texas Forest Svc; J Smith, National Interagency Fire Center; and local emergency management staff members, justices of the peace, and public safety officers in the Texas Panhandle region.

References

1. Center for Health Statistics. 2000 US Census data. Austin, TX: Texas Department of State Health Services, Center for Health Statistics.
2. National Interagency Fire Center. Fire information: wildland fire statistics. Boise, ID: National Interagency Fire Center; 2007. Available at http://www.nifc.gov/fire_info/historical_stats.htm.
3. Texas Forest Service. 10 simple steps to protect your home from wildland fire. College Station, TX: Texas Forest Service. Available at http://txforestservice.tamu.edu/main/article.aspx?id=1542.
4. US Geological Survey. Wildfire hazards—a national threat. Washington, DC: US Department of the Interior, US Geological Survey; 2006. Available at http://pubs.usgs.gov/fs/2006/3015/2006-3015.pdf.
5. US Fire Administration. Firefighter fatalities in the United States reports available. Emmitsburg, MD: Federal Emergency Management Agency, US Fire Administration; 2005. Available at http://216.70.126.67/library/?p=129.
6. US Fire Administration. Wildfire . . . are you prepared? Emmitsburg, MD: Federal Emergency Management Agency, US Fire Administration. Available at http://www.usfa.dhs.gov/downloads/pdf/publications/fa-287-508.pdf.

7. Federal Emergency Management Agency. What to do during a wildfire. Washington, DC: Federal Emergency Management Agency; 2006. Available at http://www.fema.gov/hazard/wildfire/wf_during.shtm.
8. CDC. Wildfires fact sheet. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.bt.cdc.gov/disasters/wildfires/pdf/wildfiresfacts.pdf.
9. US Department of the Interior. A collaborative approach for reducing wildland fire risks to communities and the environment. Washington, DC: US Department of the Interior; 2006. Available at http://www.forestsandrangelands.gov/plan/documents/10-yearstrategyfinal_dec2006.pdf.

Breastfeeding Trends and Updated National Health Objectives for Exclusive Breastfeeding — United States, Birth Years 2000–2004

Breastfeeding is associated with decreased risk for many early-life diseases and conditions, including otitis media, respiratory tract infections, atopic dermatitis, gastroenteritis, type 2 diabetes, sudden infant death syndrome, and obesity (*1*). Breastfeeding also is associated with health benefits to women, including decreased risk for type 2 diabetes, ovarian cancer, and breast cancer (*1*). Exclusive breastfeeding is defined as an infant receiving only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines (*2*). In 2007, *Healthy People 2010* (*HP2010*) objectives for breastfeeding initiation and duration were updated to include two new objectives on exclusive breastfeeding (i.e., to increase the proportion of mothers who exclusively breastfeed their infants through age 3 months to 60% and through age 6 months to 25% [objectives 16-19d and 16-19e]) (*3*). To monitor progress toward achieving *HP2010* breastfeeding objectives, CDC analyzed data from the National Immunization Survey (NIS). This report describes the results of that analysis, which indicated that rates for breastfeeding initiation and duration increased among infants born during 2000–2004. Rates for exclusive breastfeeding through ages 3 months and 6 months among infants born in 2004 were 30.5% and 11.3%, respectively, below targets set by *HP2010*. Rates of exclusive breastfeeding were significantly lower among black infants (compared with white infants) and infants born to unmarried mothers (compared with married mothers). Additionally, older age, urban residence, higher education, and higher income of mothers all were positively associated with exclusive breastfeeding. Further research is needed to identify successful programs and policies to support exclusive breastfeeding, especially among subgroups with the lowest rates.

NIS is a random-digit–dialed telephone survey conducted annually by CDC to obtain national, state, and selected urban area estimates of vaccination rates among U.S. children aged 19–35 months. (Additional information about NIS methods is available at http://www.cdc.gov/nis.) NIS is designed to collect nationally representative data regarding the noninstitutionalized, U.S. civilian population. Telephone interviews are conducted with the adult household member most knowledgeable regarding the child's vaccination history to collect data about the child, mother, and household. The overall interview response rates, defined by the Council of American Survey and Research Organizations, for NIS years 2001–2006 were consistently above 64% (range: 64.5%–76.1%). Questions on breastfeeding initiation and duration and exclusive breastfeeding were first added to NIS in the third quarter of 2001. Early postpartum breastfeeding (i.e., initiation of breastfeeding) was defined by a positive response to the question, "Was [child's name] ever breastfed or fed breast milk?" Breastfeeding at ages 6 months and 12 months (i.e., duration of breastfeeding) was further defined by responses to the question, "How long was [child's name] breastfed or fed breast milk?" The wording of this question changed slightly in 2006 (Table 1) but did not substantially affect responses. Although questions used to determine duration of exclusive breastfeeding have been included in NIS since 2001, in 2006, revised questions based on results of cognitive testing (CDC, unpublished data, 2005) resulted in substantially lower rates of exclusive breastfeeding than in previous years.

Because data included in this analysis are for children aged 19–35 months at the time of the NIS interview, each cross-sectional survey includes children from birth cohorts that span 3 calendar years. The 2006 NIS, for example, includes children born from February 2003 through May 2005. To monitor progress toward achieving the *HP2010* objectives, data from the 2001–2006 surveys were combined, and breastfeeding data were analyzed by year of birth during 2000–2004 (i.e., birth year cohort) rather than by survey year (*4*). Therefore, each birth year cohort represents data collected over 3 survey years. Sample sizes ranged from 12,388 for the 2000 birth cohort to 29,256 for the 2003 birth cohort. The sample size for the 2000 birth cohort was substantially smaller than that for other years because breastfeeding questions were asked only of a sample of all NIS respondents during the first 18 months after breastfeeding questions were added to NIS.

TABLE 1. Changes in breastfeeding questions — National Immunization Survey, 2001–2006

Original questions	Revised questions (2006)
1. Was [child's name] ever breastfed or fed breast milk?	1. Question remained unchanged.
2. How long was [child's name] breastfed or fed breast milk?	2. How old was [child's name] when [child's name] completely stopped breastfeeding or being fed breast milk?
3. How old was [child's name] when s/he was first fed something other than breast milk or water?* This includes formula, juice, cow's milk, sugar water, solid foods, or anything else.	3. How old was [child's name] when (he/she) was first fed formula?† 4. This next question is about the first thing that [child's name] was given other than breast milk or formula. Please include juice, cow's milk, sugar water, baby food, or anything else that [child's name] may have been given, even water. How old was [child's name] when (he/she) was first fed anything other than breast milk or formula?

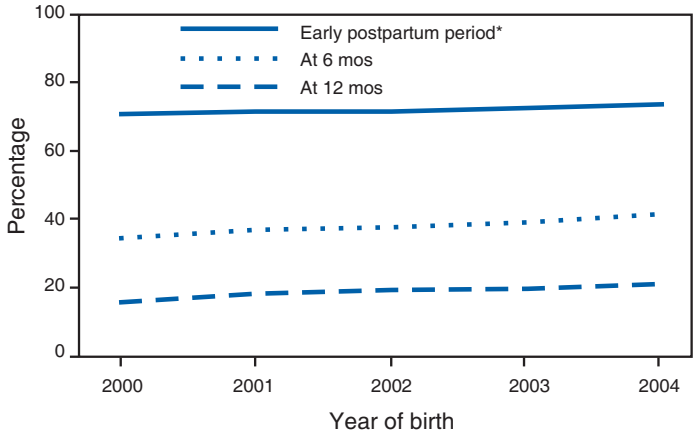
* In 2004, "or water" was removed from the first part of the question and placed in the list of items after "cow's milk."
† Question 3 (revised from original) and question 4 (new in 2006) replaced the original question 3.

Among infants born in 2000, breastfeeding rates for the early postpartum period,* 6 months, and 12 months were 70.9% (95% confidence interval [CI] = 69.0%–72.8%), 34.2% (CI = 32.2%–36.2%), and 15.7% (CI = 14.2%–17.2%), respectively. For infants born in 2004, these rates had consistently increased to 73.8% (CI = 72.8%–74.8%), 41.5% (CI = 40.4%–42.6%), and 20.9% (CI = 20.0%–21.8%), respectively (Figure). Based on the revised questions, rates for exclusive breastfeeding through ages 3 and 6 months were 30.5% and 11.3%, respectively, among infants born in 2004 (Table 2).

Disparities were observed in rates of exclusive breastfeeding among infants born in 2004. Rates of exclusive breastfeeding through age 3 months were lowest among black infants (19.8%) and among infants of mothers who were aged <20 years (16.8%), had a high school education or less (22.9% and 23.9%, respectively), were unmarried (18.8%), resided in rural areas (23.9%), and had an income-to-poverty ratio of <100% (23.9%) (Table 2).

Reported by: *KS Scanlon, PhD, L Grummer-Strawn, PhD, KR Shealy, MPH, ME Jefferds, PhD, J Chen, MS, Div of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion; JA Singleton, MS, Immunization Svcs Div, National Center for Immunization and Respiratory Diseases; CM Philip, MD, EIS Officer, CDC.*

FIGURE. Estimated percentage of infants who were breastfed, by birth year and period — National Immunization Survey, United States, birth years 2000–2004



* In-hospital period, before discharge.

Editorial Note: The findings in this report indicate that although progress is being made toward achieving the *HP2010* objectives for breastfeeding initiation and duration, rates of exclusive breastfeeding are below desired levels, especially among black infants and those born to women who are young, unmarried, have lower incomes, are less educated, or who live in rural areas. Previous research has indicated that less education and lower socioeconomic status are associated with lower rates of breastfeeding among all racial/ethnic groups; however, black women across all sociodemographic variables consistently had lower rates of breastfeeding than white and Mexican-American women (*5*). Lower rates of breastfeeding among black women have been attributed to several factors, such as economic pressures to return to work environments that do not support breastfeeding, lack of breastfeeding education and supportive social networks, aggressive marketing by formula manufacturers, and cultural environments that do not value breastfeeding or promote positive images of breastfeeding women (*6*). However, successful interventions such as the Baby Friendly Hospital Initiative,† in which hospitals adopt 10 practices that support breastfeeding as outlined by UNICEF and the World Health Organization (WHO), have resulted in increases in rates of both overall and exclusive breastfeeding among black women and other subgroups with the lowest breastfeeding rates (*7*). Increasing exclusive breastfeeding rates is a critical public health strategy to improve infant health outcomes among populations at high risk.

* In-hospital period, before discharge.

† Available at http://www.babyfriendlyusa.org/eng/index.html.

TABLE 2. Estimated percentage of infants born in 2004 who were exclusively breastfed* through ages 3 and 6 months, by selected sociodemographic characteristics — National Immunization Survey, United States

Characteristic	Exclusive breastfeeding through age 3 mos (%)	Exclusive breastfeeding through age 3 mos (95% CI§)	Exclusive breastfeeding through age 6 mos (%)	Exclusive breastfeeding through age 6 mos (95% CI)
U.S. overall (N = 17,654†)	**(30.5)**	**(29.4–31.6)**	**(11.3)**	**(10.5–12.1)**
Sex				
Male	(30.7)	(29.1–32.3)	(10.8)	(9.8–11.8)
Female¶	(30.3)	(28.7–31.9)	(11.7)	(10.5–12.9)
Race/Ethnicity (child)				
Hispanic	(30.8)	(28.3–33.3)	(11.5)	(9.7–13.3)
White, non-Hispanic¶	(33.0)	(31.6–34.4)	(11.8)	(10.9–12.7)
Black, non-Hispanic	(19.8)**	(17.0–22.6)	(7.3)**	(5.5–9.1)
Asian, non-Hispanic	(30.6)	(25.0–36.2)	(14.5)	(10.0–19.0)
Other race, non-Hispanic††	(29.3)	(24.9–33.7)	(12.2)	(9.2–15.2)
Age of mother at child's birth (yrs)				
<20	(16.8)**	(10.3–23.3)	(6.1)**	(1.5–10.7)
20–29	(26.2)**	(24.4–28.0)	(8.4)**	(7.3–9.5)
≥30¶	(34.6)	(33.2–36.0)	(13.8)	(12.7–14.9)
Education				
Less than high school	(23.9)**	(21.0–26.8)	(9.1)**	(7.1–11.1)
High school	(22.9)**	(20.9–24.9)	(8.2)**	(7.0–9.4)
Some college	(32.8)**	(30.3–35.3)	(12.3)**	(10.2–14.4)
College graduate¶	(41.5)	(39.7–43.3)	(15.4)	(14.1–16.7)
Marital status				
Married¶	(35.4)	(34.0–36.8)	(13.4)	(12.4–14.4)
Unmarried	(18.8)**	(16.9–20.7)	(6.1)**	(5.0–7.2)
Residence				
MSA,§§ central city¶	(30.7)	(29.0–32.4)	(11.7)	(10.5–12.9)
MSA, non-central city	(32.8)	(30.9–34.7)	(12.1)	(10.8–13.4)
Non-MSA	(23.9)**	(21.8–26.0)	(8.2)**	(6.9–9.5)
Income-to-poverty ratio (%)¶¶				
<100	(23.9)**	(21.6–26.2)	(8.3)**	(6.9–9.7)
100–184	(26.6)**	(23.8–29.4)	(8.9)**	(7.2–10.6)
185–349	(33.2)**	(30.9–35.5)	(11.8)**	(10.3–13.3)
≥350¶	(37.7)	(35.7–39.7)	(14.0)	(12.6–15.4)

* Defined as an infant receiving only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines.
† Weighted sample.
§ Confidence interval.
¶ Referent group.
** p<0.05 by chi-square test, compared with the referent group.
†† Includes American Indian/Alaska Native, Native Hawaiian, other Pacific Islander, and multiple race.
§§ Metropolitan statistical area, defined by the U.S. Census Bureau.
¶¶ Ratio of self-reported family income to the federal threshold value, defined by the U.S. Census Bureau.

The NIS breastfeeding rates described in this report are different from those reported by the Ross Mothers Survey (RMS), the data source used to set and monitor the *HP2010* objectives for breastfeeding initiation and duration (*8*). Exclusive breastfeeding, as defined by WHO (*2*), is not measured by RMS. The in-hospital breastfeeding rate from RMS was 68.4% in 2000, 70.1% in 2002, and 64.7% in 2004 (*8*). In contrast, early postpartum NIS breastfeeding rates steadily increased during those years. RMS is administered by mail, and historically low response rates continue to decline; a recent RMS publication reports a response rate of 28% (*9*). Ross Laboratories, which conducts the RMS, manufactures infant formula, and breastfeeding practices of RMS respondents might be different from those of NIS respondents. Further examination of the differences between NIS and RMS is needed.

The findings in this report are subject to at least four limitations. First, breastfeeding behavior was based on retrospective self-report by mothers or other caregivers, whose responses might be subject to recall bias. Maternal recall is a valid and reliable method for estimating breastfeeding initiation and duration (*10*). However, NIS respondents include other types of caregivers, and their recall might not be as valid or reliable as that of mothers. Second, the NIS question that defines early postpartum breastfeeding or initiation, "Was [child's name] ever breastfed or fed breast milk?" collects information that might differ from the *HP2010* objective (16-19a) for initiation, defined as in-hospital breastfeeding before discharge; RMS uses in-hospital rates to measure breastfeeding initiation. Breastfeeding is time-sensitive, and duration of breastfeeding is influenced by initiation during the first few hours and days of life (*7*). Measurement of breastfeeding initiation using questions regarding whether an infant ever received breast milk is likely a valid proxy. Third, although survey data were weighted to make them representative of all U.S. children aged 19–35 months, some bias might remain. Finally, accurate trend analysis of exclusive breastfeeding is not yet possible because data collected using the improved 2006 questions resulted in significantly lower rates of exclusive breastfeeding for the 2004 birth cohort than for previous birth cohorts.

Compared with breastfeeding combined with formula feeding, exclusive breastfeeding provides more protection against lower respiratory tract infections, acute otitis media, atopic dermatitis, and childhood obesity (*1*). The American Academy of Pediatrics and other health organizations recommend that mothers exclusively breastfeed their infants for the first 6 months of life, with continuation of breastfeeding through age 12 months and beyond as other foods are introduced (*1*). To increase exclusive breastfeeding rates and decrease disparities in breastfeeding initiation and duration and exclusive breastfeeding among subgroups such

as black women, more research is needed regarding factors that influence breastfeeding decisions. As outlined in the U.S. Department of Health and Human Services *Blueprint for Action on Breastfeeding*,[§] such factors include maternity care practices, interactions with health-care professionals, and workplace support. To help states assess their progress in addressing these factors, CDC's Division of Nutrition, Physical Activity, and Obesity created the *Breastfeeding Report Card*,[¶] which links process and outcome measures of eight indicators important to breastfeeding support, including progress toward all five *HP2010* breastfeeding objectives. Among all sociodemographic groups, identification and implementation of successful practices and programs that increase rates of breastfeeding (particularly rates of exclusive breastfeeding through 6 months) are paramount to achieving these breastfeeding objectives.

References

1. Ip S, Chung M, Raman G, et al. Breastfeeding and maternal and infant health outcomes in developed countries. Rockville, MD: US Department of Health and Human Services; 2007. Available at http://www.ahrq.gov/downloads/pub/evidence/pdf/brfout/brfout.pdf.
2. World Health Organization. Indicators for assessing breastfeeding practices. Geneva, Switzerland: World Health Organization; 1991. Available at http://www.who.int/child-adolescent-health/new_publications/nutrition/who_cdd_ser_91.14.pdf.
3. US Department of Health and Human Services. Healthy People 2010 midcourse review. Washington, DC: US Department of Health and Human Services; 2005. Available at http://www.healthypeople.gov/data/midcourse.
4. Smith PJ, Zhao Z, Wolter KM, Singleton JA, Nuorti JP. Age-period-cohort analyses of public health data collected from independent serial cross-sectional complex probability sample surveys. Seattle, WA: Joint Statistical Meeting; 2006. Available at http://www.amstat.org/sections/srms/proceedings/y2006/files/jsm2006-000537.pdf.
5. Li R, Grummer-Strawn L. Racial and ethnic disparities in breastfeeding among United States infants: third National Health and Nutrition Examination Survey, 1988–1994. Birth 2002;29:251–7.
6. Forste R, Weiss J, Lippincott E. The decision to breastfeed in the United States: does race matter? Pediatrics 2001;108:291–6.
7. Shealy KR, Li R, Benton-Davis S, Grummer-Strawn LM. The CDC guide to breastfeeding interventions. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/breastfeeding/pdf/breastfeeding_interventions.pdf.
8. Ross Products Division. Mothers survey. Columbus, OH: Abbott Laboratories; 2007.
9. Ryan AS, Zhou W, Acosta A. Breastfeeding continues to increase in the new millennium. Pediatrics 2002;110:1103–9.
10. Li R, Scanlon KS, Serdula MK. The validity and reliability of maternal recall of breastfeeding practice. Nutr Rev 2005;63:103–10.

[§] Available at http://www.cdc.gov/breastfeeding/pdf/blueprntbk2.pdf.
[¶] Available at http://www.cdc.gov/breastfeeding/data/report_card.htm.

Youth Exposure to Alcohol Advertising in Magazines — United States, 2001–2005

Alcohol consumption among persons aged 12–20 years contributes to the three leading causes of death (unintentional injury, homicide, and suicide) in this age group in the United States and is associated with other health-risk behaviors, including high-risk sexual activity, smoking, and physical fighting (*1*). Recent studies have documented the contribution of alcohol marketing to underage drinking (*2,3*). In 2000, the trade association for the wine industry changed its voluntary marketing code to stop advertising in magazines in which youths aged 12–20 years were >30% of the audience. In 2003, this threshold was adopted by the trade associations for beer and liquor producers. To determine the proportion of alcohol advertisements placed in magazines with disproportionately large youth readerships (i.e., >15% of readers aged 12–20 years) and to assess the proportion of youths exposed to these advertisements, the Center on Alcohol Marketing and Youth (Health Policy Institute, Georgetown University, District of Columbia) evaluated the placement of alcohol advertisements in 143 national magazines for which readership composition data were available for 2001–2005; these 143 publications accounted for approximately 90% of expenditures for all alcohol advertising in national print magazines. This report summarizes the results of that study, which indicated that alcohol advertising remained common in magazines with >15% youth readership but decreased substantially in magazines with >30% youth readership. These results suggest that although voluntary industry standards have reduced youth exposure to alcohol advertising in magazines, strengthening these standards by establishing a >15% youth readership threshold would further reduce exposure. In addition, independent monitoring of youth exposure to alcohol advertising should continue, as recommended by the U.S. Congress (*4*) and Surgeon General (*5*).

In this study, underage youths were defined as persons aged 12–20 years. Age 12 years is the youngest age at which exposure to magazine advertising is tracked, and age 21 years is the minimum age at which persons can legally purchase alcohol in all U.S. states. Youth-oriented magazines were defined as those in which youth readership exceeded the proportion of youths aged 12–20 years in the general population (i.e., >15% [*6*]). Alcohol advertising in magazines was assessed at two levels of youth readership. The first level was magazines in which the proportion of youth

readers exceeded 15%; this is the threshold above which the National Research Council and Institute of Medicine (NRC/IOM) recommend that alcohol companies refrain from advertising (*7*). The second level was magazines in which the proportion of youth readers exceeded 30%, which is twice their proportion in the general population and the threshold above which the major alcohol companies have agreed to refrain from alcohol advertising.

Data on advertising in print versions of national magazines that included alcohol advertisements (lists available at http://www.camy.org) were obtained from TNS Media Intelligence (formerly CMR, New York, New York), which monitors advertising in 394 national magazines and collects information about total advertising expenditures by industry type. Data on readership demographics were obtained from population-based surveys conducted by Mediamark Research, Inc. (New York, New York), which reports readership estimates for approximately 250 of the largest national magazines (not all of which include alcohol advertising). Advertisements that were alcohol related but that primarily promoted responsible drinking (approximately 3% of all alcohol advertisements) were excluded from the analysis. In the advertising industry, the total number of advertisements viewed by a particular demographic group is referred to as the gross number of impressions; this number includes repeat exposures for readers who saw more than one advertisement in a magazine or multiple advertisements for a particular brand in different magazines. Advertising impressions were calculated by multiplying the magazine-specific annual number of readers aged 12–20 years by the number of advertising placements for each publication that year and summing them across magazines.

Of the approximately 250 national magazines that were monitored for advertising placement and readership composition during 2001–2005, 143 included alcohol advertising. This advertising accounted for 86.3% of spending on alcohol advertising in national magazines in 2001, 93.1% of 2002 spending, 93.9% of 2003 spending, 93.0% of 2004 spending, and 93.1% of 2005 spending. Of the 143 publications, 51 (36.7%) had >15% youth readership, and nine (6.3%) had >30% youth readership in any year during 2001–2005. Occurrence and readership data were available for 16,635 individual advertisements for 391 alcohol brands that appeared in the 143 magazines during 2001–2005.

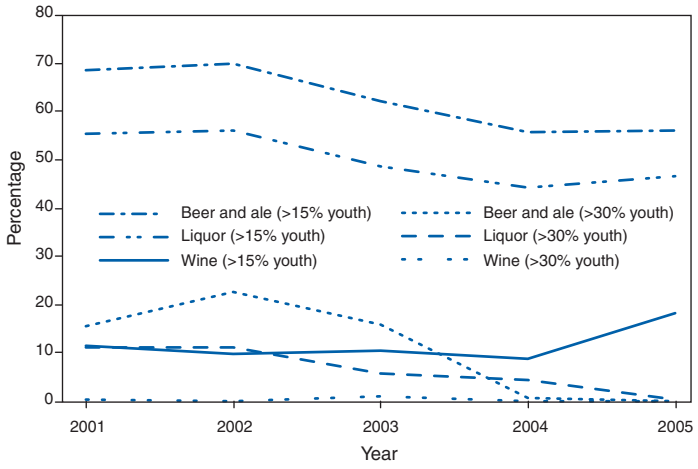
The number and proportion of alcohol advertisements that appeared in magazines with >15% youth readership (i.e., those with >15%–30% plus those with >30% youth readership) decreased from 1,867 (51.6% of all advertisements) in 2001 to 1,281 (44.2%) in 2005. From 2001 to 2005, in magazines with >15%–30% youth readership, the number of advertisements decreased 14.3% (from 1,485 in 2001 to 1,272 in 2005), whereas the proportion of alcohol advertisements in these magazines increased 6.9% (from 41.1% to 43.9%) (Table 1). The proportion of alcohol advertisements in magazines with >30% youth readership decreased 97.6% during this period (from 10.6% [382 advertisements] in 2001 to 0.3% [nine advertisements] in 2005). Therefore, most of the decreases in advertisement placements in magazines with >15% youth readership were a result of fewer advertisements in magazines with >30% youth readership. During the study period, the largest decreases in numbers of advertisements in youth-oriented magazines were for those advertising liquor and beer (Figure), both at the >15% and >30% levels. Advertisements

TABLE 1. Number and percentage of alcohol advertisements in magazines* and youth† exposure to advertisements, by year and composition of youth readership — United States, 2001–2005

Year	Total no. of alcohol advertisements	No. and % of alcohol advertisements in magazines				Total no. (in millions) of alcohol advertising impressions§ among youths	No. (in millions) and % of alcohol advertising impressions among youths			
		>15%–30% youth composition		>30% youth composition			>15%–30% youth composition		>30% youth composition	
		No.	(%)	No.	(%)		No.	(%)	No.	(%)
2001	3,616	1,485	(41.1)	382	(10.6)	5,741	3,932	(68.5)	1,194	(20.8)
2002	3,598	1,466	(40.7)	389	(10.8)	5,093	3,136	(61.6)	1,304	(25.6)
2003	3,241	1,271	(39.2)	223	(6.9)	4,157	2,969	(71.4)	643	(15.5)
2004	3,283	1,272	(38.7)	101	(3.1)	4,037	3,161	(78.3)	172	(4.3)
2005	2,897	1,272	(43.9)	9	(0.3)	3,046	2,486	(81.6)	28	(0.9)

* Advertisements from 143 national, full-run print magazines, representing all such magazines that contained alcohol advertising and were monitored for advertising placement and readership composition from 2001–2005 by Mediamark Research, Inc. (New York, New York); these 143 publications represented approximately 90% of expenditures for all alcohol advertising in national print magazines during these years.
† Aged 12–20 years.
§ Advertising impressions are the advertisements seen by a particular demographic group and include repeat exposures for readers who see more than one advertisement in a publication or multiple advertisements for a particular brand in different publications.

FIGURE. Percentage of alcohol advertisements in magazines,* by composition of youth readership,† beverage type, and year — United States, 2001–2005



* Advertisements from 143 national, full-run print magazines, representing all such magazines that contained alcohol advertising and were monitored for advertising placement and readership composition from 2001–2005 by Mediamark Research, Inc. (New York, New York); these 143 publications represented approximately 90% of expenditures for all alcohol advertising in national print magazines during these years.
† Aged 12–20 years. >15% and >30% refer to magazines with >15% and >30% of readers aged 12–20 years, respectively.

for wine remained low at both thresholds throughout the study period.

During 2001–2005, total youth exposure to alcohol advertising in magazines decreased 46.9% (from approximately 5.74 billion impressions in 2001 to 3.05 billion in 2005) (Table 1). During this period, exposure among those aged ≥21 years decreased 25.0%. The proportion of youth exposure to alcohol advertising in magazines with >15% youth readership decreased 7.6% (from 89.3% in 2001 to 82.5% in 2005). The proportion of youth exposure to alcohol advertising in magazines with >30% youth readership decreased 95.5% (from 20.8% in 2001 to 0.9% in 2005), whereas the proportion of youth exposure in magazines with >15%–30% youth readership increased 19.1% (from 68.5% in 2001 to 81.6% in 2005).

Liquor accounted for most alcohol advertising in magazines in all study years and for 1,909 (65.9%) of 2,897 advertisements in 2005 (Table 2). In 2005, nine (0.3%) alcohol advertisements appeared in magazines with >30% youth readership. In magazines with >15%–30% youth readership, liquor accounted for 879 (69.1%) of 1,272 advertisements, and beer accounted for 291 (22.9%) of advertisements. However, premixed alcoholic beverages (also known as "alcopops," which are flavored, premixed drinks such as hard lemonade) had the largest proportion of advertisements in magazines with >15%–30% youth readership (90.9%), followed by beer (56.0%), liquor (46.0%), and wine (18.4%). Liquor (67.9%) and beer (23.8%) advertisements accounted for most youth exposure to alcohol advertising overall (Table 2). The beverage-specific proportions of youth exposure accounted for by advertising in magazines with >15%–30% youth readership ranged from 64.6% for wine to 98.7% for premixed alcoholic beverages.

The proportion of alcohol advertisements placed in magazines with disproportionately large youth audiences varied considerably by brand, even within beverage categories. Of the 201 alcohol brands advertised in magazines in 2005, a total of 36 brands placed all of their advertising in magazines with >15% youth readership, 38 brands placed more than half of their advertising in these magazines, 39 had

TABLE 2. Number and percentage of alcohol advertisements in magazines* and youth† exposure to advertisements, by beverage type and composition of youth readership — United States, 2005

Type of alcoholic beverage advertised	Total no. of alcohol advertisements	No. and % of alcohol advertisements in magazines				No. (in millions) and % of alcohol advertising impressions§ among youths					
		>15%–30% youth composition		>30% youth composition		Total		>15%–30% youth composition		>30% youth composition	
		No.	(%)	No.	(%)	No.¶	(%)	No.	(%)	No.	(%)
Beer and ale	520	291	(56.0)	—	(0)	724	(23.8)	611	(84.5)	—	(0)
Liquor	1,909	879	(46.0)	9	(0.5)	2,069	(67.9)	1,702	(82.3)	28	(1.4)
Premixed beverages**	22	20	(90.9)	—	(0)	23	(0.8)	23	(98.7)	—	(0)
Wine	446	82	(18.4)	—	(0)	231	(7.6)	149	(64.6)	—	(0)
Total	**2,897**	**1,272**	**(43.9)**	**9**	**(0.3)**	**3,046**	**(100.0)**	**2,486**	**(81.6)**	**28**	**(0.9)**

* Advertisements from 143 national, full-run print magazines, representing all such magazines that contained alcohol advertising and were monitored for advertising placement and readership composition from 2001–2005 by Mediamark Research, Inc. (New York, New York); these 143 publications represented approximately 90% of expenditures for all alcohol advertising in national print magazines during these years.
† Aged 12–20 years.
§ Advertising impressions are the advertisements seen by a particular demographic group and include repeat exposures for readers who see more than one advertisement in a publication or multiple advertisements for a particular brand in different publications.
¶ Numbers do not add to total because of rounding.
** Also known as "alcopops," which are flavored, premixed alcoholic drinks such as hard lemonade.

half or less of their advertising in these magazines, and 88 brands had no advertising in these magazines (listing of brands available at http://www.camy.org).

Reported by: *DH Jernigan, PhD, Georgetown Univ, District of Columbia. J Ostroff, CS Ross, MBA, Virtual Media Resources, Natick, Massachusetts. TS Naimi, MD, RD Brewer, MD, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

Editorial Note: This report describes the first study of alcohol advertising in magazines since the trade associations for the beer and liquor industries adopted and implemented a new standard in which they agreed to restrict advertising in media in which the youth audience composition exceeds 30%. The surveillance system used in this report is the only independent source of brand- and company-specific data regarding youth exposure to alcohol marketing and has been used to document levels of youth exposure to alcohol advertising in magazines by sex (*8*).

The placement of advertisements in the nine publications with >30% youth readership decreased approximately 90% during 2001–2005; however, almost 45% of alcohol advertisements were still placed in magazines with a disproportionately large youth readership (i.e., >15%). Furthermore, advertisements in magazines with >15% youth readership accounted for approximately 80% of all youth exposure to alcohol advertising in magazines overall. These data indicate that although alcohol companies have modified their advertising practices to meet >30% target thresholds, youth exposure to alcohol advertising would be further reduced if these companies followed the NRC/IOM recommendation and did not advertise in magazines in which youth readership exceeds 15%.

Although alcohol advertising in magazines decreased from 2001 to 2005, alcohol advertising on television increased 41% for youth and 48% for adults during this same period (*9*). This increase is largely attributable to increased advertising by liquor producers on cable television programs, which are more likely than broadcast television program to have disproportionately large youth audiences (*9*). The Distilled Spirits Council of the United States changed its voluntary marketing practices code in 1996 to allow television advertising. After the four major U.S. broadcast television networks refused an attempt by liquor producers to advertise on broadcast network television in 2001, liquor companies expanded their cable television advertising (*9*). This increase in liquor advertising on cable television coincided with an increase in liquor consumption among underage youth, including among those who binge drink (i.e., consume five or more drinks in a row on ≥1 day in the past 30 days) (*10*).

The findings in this report are subject to at least three limitations. First, the data did not include advertisements from regional, local, or Internet magazines or advertisements in partial-run magazine editions (i.e., special regional or demographic editions of national magazines); therefore, the data might not be representative of all advertisement patterns of all magazines in the United States. Second, approximately 10% of alcohol advertising expenditures were for advertisements placed in national magazines that were not measured by Mediamark during the study period. Finally, surveys of audience composition by Mediamark have inherent limitations associated with surveys (e.g., noncoverage), but whether these lead to overrepresentation or underrepresentation of underage youths when measuring the composition of magazine readers is unclear; however, these data are representative of the data used by advertisers to make marketing decisions.

In 2003, to recognize the importance of reducing youth exposure to alcohol marketing as part of a comprehensive strategy to reduce underage drinking, NRC/IOM recommended movement toward a 15% threshold, with immediate adoption of a 25% threshold to encourage progress toward this goal. The findings in this report indicate that implementation of the 15% threshold would further reduce youth exposure to alcohol advertising in magazines. In addition, independent, regular monitoring of alcohol marketing to youth should continue as recommended by the U.S. Congress (*4*) and Surgeon General (*5*), and future research should further examine the relation between alcohol advertising and alcohol consumption among youths.

References

1. Miller JW, Naimi TS, Brewer RD, Jones SE. Binge drinking and associated health risk behaviors among high school students. Pediatrics 2007;119:76–85.
2. Snyder LB, Milici FF, Slater M, Sun H, Strizhakova Y. Effects of alcohol advertising exposure on youth drinking. Arch Pediatr Adolesc Med 2006;160:18–24.
3. Stacy AW, Zogg JB, Unger JB, Dent CW. Exposure to televised alcohol ads and subsequent adolescent alcohol use. Am J Health Behav 2004;28:498–509.
4. Sober Truth on Preventing Underage Drinking Act, Pub. L. No. 109-422, 115 Stat. 1190. Available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ422.109.
5. US Department of Health and Human Services. The Surgeon General's call to action to prevent and reduce underage drinking. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General; 2007. Available at http://www.surgeongeneral.gov/topics/underagedrinking.
6. CDC. Youth exposure to alcohol advertising on radio—United States, June–August 2004. MMWR 2006;55:937–40.
7. Bonnie RJ, O'Connell ME, eds. Reducing underage drinking: a collective responsibility. Washington, DC: The National Academies Press; 2003.

8. Jernigan DH, Ostroff J, Ross C, O'Hara JA 3rd. Sex differences in adolescent exposure to alcohol advertising in magazines. Arch Pediatr Adolesc Med 2004;158:629–34.
9. Center on Alcohol Marketing and Youth. Still growing after all these years: youth exposure to alcohol advertising on television, 2001–2005. Available at http://camy.org/research/tv1206.
10. CDC. Types of alcoholic beverages usually consumed by students in 9th–12th grades—four states, 2005. MMWR 2007;56:737–40.

Botulism Associated with Commercially Canned Chili Sauce — Texas and Indiana, July 2007

On July 30, 2007, this report was posted as an MMWR Dispatch *on the* MMWR *website* (http://www.cdc.gov/mmwr).

On July 7 and July 11, 2007, public health officials in Texas and Indiana, respectively, reported to CDC four suspected cases of foodborne botulism, two in each state. Investigations conducted by state and local health departments revealed that all four patients had eaten brands of Castleberry's hot dog chili sauce before illness began. Botulinum toxin type A was detected in the serum of one Indiana patient and in a leftover chili mixture obtained from his home. CDC informed the Food and Drug Administration (FDA) of the apparent link between illness and consumption of the chili sauce. On July 18, FDA issued a consumer advisory, and the manufacturer, Castleberry's Food Company (Augusta, Georgia), subsequently recalled the implicated brand and several other products produced in the same set of retorts (commercial-scale pressure cookers for processing canned foods) at the same canning facility. Examination of the canning facility in Georgia during the outbreak investigation had identified deficiencies in the canning process. On July 19, the U.S. Department of Agriculture Food Safety and Inspection Service (FSIS) issued a press release that announced a recall of chili and certain meat products from the Castleberry canning facility and provided recommendations to consumers. That recall was expanded on July 21 to include additional canned products. A fifth case of botulism potentially linked to one of the recalled products is under investigation in California. This report describes the ongoing investigation by members of OutbreakNet* and others and the measures undertaken to control the outbreak, which is the first outbreak of foodborne botulism in the United States associated with a commercial canning facility in approximately 30 years. Clinicians should be vigilant for symptoms of botulism, including symmetric cranial nerve palsies, especially if accompanied by descending flaccid paralysis. Consumers should not eat any of the recalled chili sauce or other recalled products and should carefully dispose of all recalled products. Information regarding product disposal is available at http://www.cdc.gov/botulism/botulism_faq.htm.

* A network of public health epidemiologists at the local, state, and federal levels (including employees of CDC, FDA, and FSIS) who investigate foodborne and diarrheal disease outbreaks.

Case Reports

Texas. On July 7, the Texas Department of State Health Services (TDSHS) reported to CDC two suspected cases of foodborne botulism in children who are siblings. On June 29, both patients had onset of illness that progressed to include cranial nerve palsies and symmetric, descending paralysis typical of botulism. The two children initially were evaluated at two different hospitals, where multiple diagnoses were considered. After one child was transferred to the same hospital as the sibling, botulism was identified as the etiology of the shared symptoms. The two children required mechanical ventilation; botulinum antitoxin was requested on the evening of July 7, released by CDC, and administered the next morning. Patient stool and serum specimens, collected 9 days after symptom onset, were negative for botulinum toxin by mouse bioassay. Initial stool cultures did not yield *Clostridium botulinum*.

The children had shared several meals in the days before symptoms began. They had eaten Castleberry's Austex Hot Dog Chili Sauce Original for lunch on June 28. The opened can from this meal had been discarded and could not be located. However, one unopened can of this product, produced on May 7 at the Castleberry's Food Company canning facility in Georgia and purchased at the same time as the discarded can, was found in the children's home. The TDSHS laboratory tested an aliquot from this can using an enzyme-linked immunosorbent assay (ELISA) for botulinum toxin and did not detect toxin. One child remains hospitalized and is on mechanical ventilation. The second child has been removed from mechanical ventilation and begun rehabilitation.

Indiana. On July 11, the Indiana State Department of Health (ISDH) reported to CDC two suspected cases of foodborne botulism in a married couple. The couple had onset of symptoms on July 7. Like the Texas children, the Indiana patients initially were evaluated at two different hospitals, where multiple diagnoses were considered. On July 9, after both were admitted to the same hospital, botulism was identified as the etiology of the shared symptoms.

The man and woman were hospitalized with cranial nerve palsies and symmetric, descending paralysis typical of botulism and were placed on mechanical ventilation. On July 11, CDC released botulinum antitoxin, and the antitoxin was administered to both patients. Serum samples collected on July 10 were sent to CDC's Botulism Reference Laboratory and received on July 15. On July 16, CDC detected botulinum toxin type A by mouse bioassay in the man's serum sample. Botulinum toxin also was detected by mouse bioassay in the woman's serum sample, but the sample volume was insufficient to determine the toxin type.

During the initial investigation by ISDH, food histories could not be obtained from the patients because of the severity of their illnesses. Local health officials collected several foods from the home of the patients, including an unlabeled, sealed plastic bag of leftover chili mixture from the refrigerator. On July 16, CDC detected botulinum toxin type A by mouse bioassay in the chili mixture. Empty, well-rinsed cans (with no visible signs of food debris) of Castleberry's Hot Dog Chili Sauce Original and chili made by another company were found in the couple's recycling bin. CDC re-rinsed the two cans and tested the rinse water for botulinum toxin by mouse bioassay; both were negative. The label on the Castleberry's Hot Dog Chili Sauce Original can indicated a production date of May 8 and a time of 2:23 a.m., less than 5 hours after the 9:41 p.m., May 7 production time indicated on the can collected from the Texas patients; the Indiana can had been manufactured in the same set of retorts as the Texas can. Both patients remain hospitalized and on mechanical ventilation.

On July 17, CDC OutbreakNet staff members provided information regarding the production dates and times to FDA; the evidence strongly suggested that brands of Castleberry's hot dog chili sauce were the common source of the four cases of botulism. On July 18, FDA issued a consumer advisory. On that same day, after being informed about the outbreak and findings from FDA investigation of the canning facility, Castleberry's Food Company issued a voluntary recall that included limited production dates of Castleberry's Hot Dog Chili Sauce Original, Castleberry's Austex Hot Dog Chili Sauce Original, and Kroger Hot Dog Chili Sauce. That recall was expanded on July 21 to include all production dates for 91 types of canned chili sauce, chili, other meat products, chicken products, and dog food that were manufactured in the same set of retorts as the hot dog chili sauce at the Castleberry's Food Company facility in Georgia. These included Castleberry's brands and products produced by the manufacturer but distributed under 25 other brand names (e.g., Austex, Kroger, and Piggly Wiggly).[†]

California. On July 25, the California Department of Public Health (CDPH) reported to CDC a case of botulism caused by botulinum toxin type A with a potential link to one of the recalled products. On July 1, several days after reportedly eating a recalled chili product, the patient, a woman, had onset of symptoms that progressed to include cranial nerve palsies and bilateral generalized weakness. She was hospitalized on July 5. On July 7, CDPH released botulinum antitoxin, which was administered to the patient. Botulinum toxin type A was detected by mouse bioassay from a serum sample collected on July 7. The product had been discarded and could not be tested. The patient was hospitalized for 10 days and is now recovering at home. CDPH is continuing to investigate to determine whether the patient's illness was associated with the recalled chili product.

Canning Facility Investigation

The Castleberry's canning facility in Georgia produces both FDA- and FSIS-regulated products. The outbreak investigation by FDA and FSIS identified production deficiencies that might have permitted spores of *C. botulinum* to survive the canning process. *C. botulinum* spores are in the environment and can be present in foods that have not been properly subjected to high temperature and pressure during the canning process. Anaerobic conditions, low acidity (pH>4.6), low salt and sugar concentrations, and temperatures >39.0°F (>3.9°C) allow germination of *C. botulinum* spores and subsequent production of botulinum toxin. FDA officials tested 17 swollen cans of Castleberry's hot dog chili sauce produced on May 8 in the same set of retorts as the cans associated with the Indiana and Texas botulism cases. Sixteen of the 17 cans were positive for botulinum toxin type A by ELISA. Mouse bioassay results were consistent with ELISA findings. Castleberry's Food Company has closed its Georgia canning facility and has hired a firm to help recall products from approximately 8,500 retail outlets.

Reported by: *MM Ginsberg, MD, County of San Diego, Health and Human Svcs Agency. L Granzow, MPH, RF Teclaw, DVM, PhD, Indiana State Dept of Health. LK Gaul, PhD, S Bagdure, MD, A Cole, R Drumgoole, Texas Dept of State Health Svcs. Food and Drug Admin. US Dept of Agriculture Food Safety and Inspection Svc. EJ Barzilay, MD,*

[†] The recalled products were distributed in 49 of the 50 United States (all states except Alaska). A listing of the 91 products recalled as of July 21 is available at http://www.castleberrys.com/news_productrecall.asp.

MS Biggerstaff, MPH, MF Lynch, MD, SE Maslanka, PhD, IT Williams, PhD, Div of Foodborne, Bacterial, and Mycotic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases; PC Juliao, PhD, C Barton Behravesh, DVM, CK Olson, MD, EIS officers, CDC.

Editorial Note: In the United States, foodborne botulism usually is associated with home-canned foods. During 1950–2005, local and state health departments reported to CDC 405 events (i.e., single cases or outbreaks) of foodborne botulism in which an implicated food item was identified. Of these 405 events, 371 (92%) were linked to home-processed foods and 34 (8%) to commercially processed foods, including foods prepared in restaurants. Only four of the outbreaks associated with commercially processed foods (i.e., canned tuna, liver paste, vichyssoise, and beef stew) were associated with deficiencies in a commercial canning process. The last such outbreak in the United States occurred in 1974 and was associated with commercially canned beef stew (*1*). Although rare, any deficiency in the retort canning process is a major public health concern because of the severity of botulism and the widespread distribution of canned products.

Botulism is a nationally notifiable disease. Investigators are actively seeking additional cases that might be linked to the current outbreak by issuing health alerts and examining reported botulism cases dating back to 2005. Clinicians should consider botulism in patients with symmetric cranial nerve palsies, especially if accompanied by descending flaccid paralysis. Suspected cases of botulism should be reported immediately to local or state public health officials, who should then call the 24-hour CDC Emergency Operations Center (770-488-7100); callers will be connected immediately with an on-call CDC botulism specialist. Health-care providers and public health officials are encouraged to inquire specifically about consumption of the recalled canned products as part of the food history of persons with suspected botulism. Additional information regarding this botulism outbreak is available at http://www.cdc.gov/botulism/botulism.htm. Consumers should check their homes for any of the 91 recalled products listed by Castleberry's Food Company at http://www.castleberrys.com/news_productrecall.asp. Persons with unopened cans of recalled products should dispose of the cans without opening or puncturing them, as described at http://www.cdc.gov/botulism/botulism_faq.htm.

Reference

1. Blake PA, Horwitz MA, Hopkins L, et al. Type A botulism from commercially canned beef stew. South Med J 1977;70:5–7.

Notice to Readers

New Medication for Severe Malaria Available Under an Investigational New Drug Protocol

On June 21, 2007, CDC's Investigational New Drug Application (IND) for intravenous artesunate went into effect. This IND allows for use of an investigational antimalarial medication (intravenous artesunate) under a protocol entitled "Intravenous Artesunate for Treatment of Severe Malaria in the United States." Intravenous artesunate can be used only under the provisions of this IND protocol because it is not a drug approved by the Food and Drug Administration (FDA). Artesunate is in the class of medications known as artemisinins, which are derivatives from "quing hao," or sweet wormwood plant (*Artemisia annua*). Only the CDC Drug Service and CDC Quarantine Stations will be permitted to release the medication for use under this IND protocol.

Approximately 1,400 cases of malaria (nearly all imported) are diagnosed in the United States each year; approximately 10% are cases of severe malaria (*1*). Intravenous quinidine gluconate, principally used as an antiarrhythmic medicine, also has antimalarial properties and is the only parenteral drug approved by FDA for treatment of severe malaria that is available in the United States. However, quinidine has cardiotoxic effects and has become less available in U.S. hospitals with the advent of newer antiarrhythmic drugs (*2,3*). Since 2000, the World Health Organization has recommended artesunate in preference to quinidine for treatment of severe malaria, and artesunate has been used outside the United States for many years (*4*). CDC's IND protocol provides a mechanism for investigational use of intravenous artesunate for patients with severe malaria in the United States.

Patient Eligibility for Investigational Use of Artesunate

The Walter Reed Army Institute for Research has agreed to provide a supply of intravenous artesunate to CDC for release to hospitals in the United States under the IND protocol for treatment of patients with severe malaria. To be eligible to receive intravenous artesunate under CDC's IND protocol, patients must have malaria and need parenteral therapy because they are either unable to take oral medications, have high-density parasitemia (>5%), or

have severe malaria, indicated by other clinical criteria such as acute respiratory distress syndrome or severe anemia. In addition, for these patients, one of the following must be true: 1) artesunate is available more rapidly than quinidine (if the drugs are equally available, attending clinicians will decide which drug to use in consultation with CDC), 2) the patient has experienced quinidine failure or intolerance, or 3) use of quinidine is contraindicated.

Dosage and Administration

Under the IND protocol, intravenous artesunate should be administered in 4 equal doses of 2.4 mg/kg each over a 3-day period. In parts of the world where artesunate is used regularly, intravenous administration typically is followed by a course of oral antimalarial medication once the patient is able to tolerate medications by mouth. Although artesunate is a life-saving drug, it has a short half-life, and supplementary therapy is necessary to increase the likelihood of eliminating all of the circulating parasites. This is similar to the current standard of care regimens in the United States, in which a rapidly acting drug such as quinine or quinidine is always coupled with a follow-on drug such as doxycycline or clindamycin. The recommended options for follow-on drugs in this protocol are oral treatment with atovaquone-proguanil (Malarone®), doxycycline, clindamycin, or mefloquine.

How to Obtain Investigational Artesunate

Artesunate will be provided free to hospitals, upon request and on an emergency basis, by the CDC Drug Service or by one of the CDC Quarantine Stations. Physicians who administer the drug to patients must notify CDC of any adverse event after administration and comply with the IND protocol. To enroll a patient with severe malaria in this treatment protocol, health-care providers should telephone the CDC Malaria Hotline at 770-488-7788, Monday–Friday, 8 a.m.–4:30 p.m., Eastern time. At other times, callers should telephone 770-488-7100 and ask to speak with a CDC Malaria Branch clinician.

References

1. CDC. Malaria surveillance—United States, 2005. MMWR 2007;56(No. SS-6);23–40.
2. CDC. Availability of parenteral quinidine gluconate for treatment of severe or complicated malaria. MMWR 1996;45:494–5.
3. Humar A, Sharma S, Zoutman D, Kain KC. Fatal falciparum malaria in Canadian travellers. CMAJ 1997;156:1165–7.
4. World Health Organization. Guidelines for the treatment of malaria. Geneva, Switzerland: World Health Organization; 2006. Available at http://www.who.int/malaria/docs/TreatmentGuidelines2006.pdf.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 28, 2007 (30th Week)*

Disease	Current week	Cum 2007	5-year weekly average†	Total cases reported for previous years 2006	2005	2004	2003	2002	States reporting cases during current week (No.)
Anthrax	—	—	0	1	—	—	—	2	
Botulism:									
foodborne	—	3	0	20	19	16	20	28	
infant	1	46	1	97	85	87	76	69	TX (1)
other (wound & unspecified)	—	12	1	48	31	30	33	21	
Brucellosis	1	61	3	121	120	114	104	125	CA (1)
Chancroid	—	15	1	33	17	30	54	67	
Cholera	—	—	0	9	8	5	2	2	
Cyclosporiasis§	2	57	6	136	543	171	75	156	PA (1), FL (1)
Diphtheria	—	—	—	—	—	—	1	1	
Domestic arboviral diseases§,¶:									
California serogroup	—	4	6	67	80	112	108	164	
eastern equine	—	—	1	8	21	6	14	10	
Powassan	—	—	0	1	1	1	—	1	
St. Louis	—	2	1	10	13	12	41	28	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	26	129	22	646	786	537	362	511	NY (7), MN (19)
human monocytic	13	174	16	578	506	338	321	216	NY (2), MN (7), VA (1), FL (2), TN (1)
human (other & unspecified)	—	58	5	231	112	59	44	23	
Haemophilus influenzae,**									
invasive disease (age <5 yrs):									
serotype b	—	7	0	29	9	19	32	34	
nonserotype b	—	57	2	175	135	135	117	144	
unknown serotype	2	156	3	179	217	177	227	153	NY (1), NC (1)
Hansen disease§	—	30	2	66	87	105	95	96	
Hantavirus pulmonary syndrome§	—	15	1	40	26	24	26	19	
Hemolytic uremic syndrome, postdiarrheal§	1	90	6	288	221	200	178	216	UT (1)
Hepatitis C viral, acute	7	364	22	802	652	713	1,102	1,835	NY (1), OH (1), MN (3), OK (1), TX (1)
HIV infection, pediatric (age <13 yrs)††	—	—	4	52	380	436	504	420	
Influenza-associated pediatric mortality§,§§	—	68	0	41	45	—	N	N	
Listeriosis	14	310	21	875	896	753	696	665	NY (2), PA (1), OH (1), IN (2), NC (1), SC (1), FL (2), AZ (1), NV (1), WA (2)
Measles¶¶	—	21	1	55	66	37	56	44	
Meningococcal disease, invasive***:									
A, C, Y, & W-135	—	162	4	311	297	—	—	—	
serogroup B	2	75	2	190	156	—	—	—	FL (2)
other serogroup	—	13	1	31	27	—	—	—	
unknown serogroup	2	385	9	648	765	—	—	—	MN (1), FL (1)
Mumps	3	498	12	6,584	314	258	231	270	KS (1), FL (1), TN (1)
Novel influenza A virus infections	—	—	—	N	N	N	N	N	
Plague	—	4	0	17	8	3	1	2	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Poliovirus infection, nonparalytic§	—	—	—	N	N	N	N	N	
Psittacosis§	—	2	0	21	16	12	12	18	
Q fever§	2	106	2	169	136	70	71	61	CO (1), CA (1)
Rabies, human	—	—	0	3	2	7	2	3	
Rubella†††	—	9	0	11	11	10	7	18	
Rubella, congenital syndrome	—	—	—	1	1	—	1	1	
SARS-CoV§,§§§	—	—	—	—	—	—	8	N	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	1	67	1	125	129	132	161	118	MN (1)
Syphilis, congenital (age <1 yr)	1	194	7	380	329	353	413	412	NY (1)
Tetanus	—	7	1	41	27	34	20	25	
Toxic-shock syndrome (staphylococcal)§	1	44	2	101	90	95	133	109	NY (1)
Trichinellosis	—	4	0	15	16	5	6	14	
Tularemia	2	55	4	95	154	134	129	90	MO (2)
Typhoid fever	5	151	8	353	324	322	356	321	VA (1), CA (4)
Vancomycin-intermediate *Staphylococcus aureus*§	—	6	0	6	2	—	N	N	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	1	3	1	N	N	
Vibriosis (noncholera *Vibrio* species infections)§	8	108	6	N	N	N	N	N	GA (1), FL (1), CA (6)
Yellow fever	—	—	—	—	—	—	—	1	

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.
* Incidence data for reporting years 2006 and 2007 are provisional, whereas data for 2002, 2003, 2004, and 2005 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 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. A total of 66 cases were reported for the 2006–07 flu season.
¶¶ 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 II. Provisional cases of selected notifiable diseases, United States, weeks ending July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	11,895	20,604	25,327	574,009	576,211	126	151	658	4,586	4,942	112	73	319	1,806	1,780
New England	714	670	1,357	19,635	18,342	—	0	1	1	—	1	4	27	101	141
Connecticut	244	204	829	5,720	5,503	N	0	0	N	N	—	0	13	13	38
Maine§	—	50	74	1,422	1,238	—	0	0	—	—	1	1	6	16	15
Massachusetts	368	310	600	9,089	7,918	—	0	0	—	—	—	2	19	33	51
New Hampshire	21	39	70	1,141	1,054	—	0	1	1	—	—	1	4	20	17
Rhode Island§	81	63	108	1,796	1,927	—	0	0	—	—	—	0	5	6	3
Vermont§	—	19	45	467	702	N	0	0	N	N	—	1	4	13	17
Mid. Atlantic	1,163	2,671	4,284	80,814	69,896	—	0	0	—	—	33	10	37	250	271
New Jersey	—	411	541	11,347	11,086	N	0	0	N	N	—	0	5	9	18
New York (Upstate)	506	509	2,758	14,676	13,386	N	0	0	N	N	4	3	14	68	57
New York City	—	849	1,602	25,336	22,909	N	0	0	N	N	—	1	10	32	76
Pennsylvania	657	821	1,797	29,455	22,515	N	0	0	N	N	29	4	18	141	120
E.N. Central	1,027	3,187	6,297	94,413	97,014	1	1	3	17	27	13	16	110	389	420
Illinois	430	1,013	1,327	26,737	30,919	—	0	0	—	—	—	2	22	37	60
Indiana	—	382	644	11,322	11,630	—	0	0	—	—	—	1	18	34	31
Michigan	274	731	1,225	20,665	18,818	1	0	3	12	23	2	2	10	78	64
Ohio	85	646	3,653	24,792	23,696	—	0	2	5	4	11	5	33	111	115
Wisconsin	238	372	528	10,897	11,951	N	0	0	N	N	—	5	53	129	150
W.N. Central	576	1,205	1,448	33,177	34,826	—	0	54	3	—	12	11	77	278	282
Iowa	1	165	243	4,786	4,765	N	0	0	N	N	7	2	28	70	43
Kansas	201	151	294	4,717	4,594	N	0	0	N	N	—	1	8	37	31
Minnesota	—	241	314	5,827	7,321	—	0	54	—	—	5	2	25	61	95
Missouri	295	454	628	13,038	12,797	—	0	1	3	—	—	2	21	38	54
Nebraska§	—	104	184	2,504	2,864	N	0	0	N	N	—	1	16	14	21
North Dakota	2	31	69	857	1,005	N	0	0	N	N	—	0	11	3	6
South Dakota	77	49	84	1,448	1,480	N	0	0	N	N	—	2	7	55	32
S. Atlantic	3,613	3,934	6,760	111,805	110,943	—	0	1	2	2	28	19	70	417	365
Delaware	69	69	122	1,996	2,034	N	0	0	N	N	1	0	3	4	1
District of Columbia	106	89	167	3,204	1,740	—	0	0	—	—	—	0	2	3	9
Florida	1,355	1,055	1,651	31,424	27,698	N	0	0	N	N	18	9	32	199	143
Georgia	6	673	3,822	13,117	20,098	N	0	0	N	N	4	4	17	83	109
Maryland§	343	409	697	11,245	11,864	—	0	1	2	2	—	0	2	17	11
North Carolina	551	596	1,233	16,500	19,733	—	0	0	—	—	2	1	11	46	44
South Carolina§	1,130	453	3,030	18,608	12,596	N	0	0	N	N	3	1	14	32	23
Virginia§	—	497	685	14,047	13,482	N	0	0	N	N	—	1	5	29	22
West Virginia	53	54	86	1,664	1,698	N	0	0	N	N	—	0	3	4	3
E.S. Central	612	1,389	2,044	37,887	43,997	—	0	0	—	—	8	3	15	91	70
Alabama§	54	345	539	5,691	13,580	N	0	0	N	N	—	0	12	26	28
Kentucky	66	124	691	4,252	5,597	N	0	0	N	N	8	1	5	34	18
Mississippi	—	381	959	12,080	10,601	N	0	0	N	N	—	0	8	14	8
Tennessee§	492	528	695	15,864	14,219	N	0	0	N	N	—	1	5	17	16
W.S. Central	1,756	2,214	3,028	65,196	64,725	—	0	1	1	—	3	5	45	89	103
Arkansas§	152	168	337	4,796	4,414	N	0	0	N	N	—	0	3	5	8
Louisiana	—	323	549	8,951	10,348	—	0	1	1	—	—	1	9	21	24
Oklahoma	314	264	470	7,330	6,533	N	0	0	N	N	3	0	9	21	22
Texas§	1,290	1,482	1,911	44,119	43,430	N	0	0	N	N	—	2	36	42	49
Mountain	325	1,327	2,026	33,325	37,719	103	93	293	2,982	3,482	11	5	40	144	80
Arizona	58	488	993	12,074	11,561	100	91	293	2,900	3,390	1	0	6	22	13
Colorado	—	274	416	5,207	9,189	N	0	0	N	N	3	1	7	40	20
Idaho§	3	53	253	1,927	1,920	N	0	0	N	N	—	0	5	9	7
Montana§	—	51	82	1,352	1,473	N	0	0	N	N	—	1	26	17	12
Nevada§	143	175	397	4,734	4,177	3	1	5	32	40	—	0	3	5	4
New Mexico§	—	157	396	4,334	5,813	—	0	2	14	11	—	1	6	29	14
Utah	105	100	209	2,992	2,741	—	1	4	35	39	7	0	3	12	6
Wyoming§	16	25	45	705	845	—	0	1	1	2	—	0	11	10	4
Pacific	2,109	3,380	4,362	97,757	98,749	22	55	311	1,580	1,431	3	1	5	47	48
Alaska	87	87	157	2,514	2,455	N	0	0	N	N	—	0	1	1	3
California	1,851	2,683	3,627	77,350	77,333	22	55	311	1,580	1,431	—	0	0	—	—
Hawaii	—	105	129	2,994	3,321	N	0	0	N	N	—	0	1	—	3
Oregon§	—	172	394	5,189	5,355	N	0	0	N	N	3	1	5	46	42
Washington	171	342	621	9,710	10,285	N	0	0	N	N	—	0	0	—	—
American Samoa	U	0	32	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	14	72	125	522	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	114	233	3,905	2,760	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	U	3	7	U	U	U	0	0	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	219	294	1,513	7,710	8,856	3,851	6,931	8,941	185,004	199,024	28	45	184	1,370	1,380
New England	9	24	67	583	667	118	109	259	3,172	3,185	2	3	19	108	96
Connecticut	1	5	25	158	139	52	41	204	1,183	1,294	2	0	6	31	24
Maine§	2	4	14	82	62	—	2	8	68	72	—	0	2	7	11
Massachusetts	3	9	26	236	316	57	50	96	1,555	1,386	—	2	5	54	46
New Hampshire	—	0	3	9	18	1	2	8	88	124	—	0	2	9	6
Rhode Island§	—	0	17	31	50	8	9	19	245	269	—	0	10	6	2
Vermont§	3	3	12	67	82	—	1	5	33	40	—	0	1	1	7
Mid. Atlantic	32	58	127	1,413	1,794	306	713	1,537	21,058	18,428	7	10	27	291	283
New Jersey	—	7	17	142	269	—	115	160	3,267	3,003	—	1	5	36	51
New York (Upstate)	24	24	108	515	595	115	115	1,035	3,499	3,458	4	3	15	83	86
New York City	1	16	32	430	532	—	189	376	5,370	5,610	1	2	6	59	51
Pennsylvania	7	14	34	326	398	191	246	613	8,922	6,357	2	3	10	113	95
E.N. Central	20	45	100	1,072	1,385	448	1,258	2,609	37,613	39,455	2	6	15	150	235
Illinois	—	10	30	214	348	205	362	501	9,683	11,470	—	1	6	29	72
Indiana	N	0	0	N	N	—	156	303	4,710	5,039	1	1	10	32	48
Michigan	4	14	38	319	370	100	296	880	8,608	7,560	—	0	5	15	20
Ohio	16	15	32	381	391	38	298	1,569	10,821	11,431	1	2	5	66	48
Wisconsin	—	8	27	158	276	105	132	181	3,791	3,955	—	0	4	8	47
W.N. Central	7	20	553	456	1,024	193	386	512	10,669	10,789	4	3	24	80	73
Iowa	—	5	16	106	141	—	39	62	1,011	1,022	—	0	1	1	—
Kansas	3	3	11	74	99	56	43	86	1,317	1,292	—	0	2	8	13
Minnesota	—	0	514	12	414	—	62	87	1,558	1,820	3	1	17	33	36
Missouri	4	7	28	179	266	131	202	266	5,909	5,663	1	1	5	26	18
Nebraska§	—	2	9	44	51	—	27	57	679	716	—	0	2	11	4
North Dakota	—	0	16	11	8	—	2	7	52	65	—	0	2	1	2
South Dakota	—	1	6	30	45	6	6	15	143	211	—	0	0	—	—
S. Atlantic	54	55	106	1,392	1,313	1,475	1,664	3,209	43,749	49,138	6	11	34	352	358
Delaware	1	1	3	22	20	28	27	44	799	837	—	0	3	5	1
District of Columbia	—	1	7	34	40	38	42	72	1,316	1,006	—	0	2	3	2
Florida	23	24	44	642	530	559	474	717	13,194	13,671	1	3	8	101	112
Georgia	21	12	31	288	310	1	327	2,068	5,522	9,483	1	2	7	69	75
Maryland§	3	5	12	127	109	128	131	228	3,530	4,098	2	2	6	57	45
North Carolina	—	0	0	—	—	192	303	675	7,720	10,102	2	1	9	43	40
South Carolina§	2	1	8	43	59	511	194	1,361	7,898	5,887	—	1	4	32	26
Virginia§	4	9	28	217	233	—	123	236	3,288	3,599	—	1	6	27	43
West Virginia	—	0	21	19	12	18	18	44	482	455	—	0	6	15	14
E.S. Central	11	9	34	249	232	263	541	879	14,339	17,667	4	2	9	82	74
Alabama§	5	4	22	131	109	23	156	271	2,587	6,272	—	0	3	18	15
Kentucky	N	0	0	N	N	26	50	268	1,607	1,963	—	0	1	2	4
Mississippi	N	0	0	N	N	—	156	434	4,525	4,008	—	0	1	6	10
Tennessee§	6	4	12	118	123	214	194	240	5,620	5,424	4	1	6	56	45
W.S. Central	5	7	55	168	152	635	949	1,490	26,883	28,259	1	2	34	68	56
Arkansas§	—	3	13	63	48	72	79	142	2,284	2,420	—	0	2	5	6
Louisiana	—	1	6	37	50	—	211	334	5,452	6,147	—	0	3	5	12
Oklahoma	5	2	42	68	54	102	91	236	2,732	2,468	1	1	29	55	34
Texas§	N	0	0	N	N	461	574	938	16,415	17,224	—	0	3	3	4
Mountain	35	30	67	776	806	80	254	454	6,376	8,292	2	4	11	163	142
Arizona	2	3	11	94	82	26	107	220	2,539	2,815	—	2	6	65	58
Colorado	11	10	26	256	264	—	60	93	1,278	2,109	1	1	4	39	36
Idaho§	8	3	12	78	87	1	3	20	128	109	—	0	1	4	3
Montana§	—	2	10	46	39	—	2	8	47	118	—	0	0	—	—
Nevada§	2	1	8	62	69	34	48	135	1,165	1,509	1	0	2	8	9
New Mexico§	—	2	6	53	35	—	28	64	726	1,066	—	0	3	22	20
Utah	11	7	27	165	217	18	17	33	448	488	—	0	3	23	13
Wyoming§	1	1	4	22	13	1	2	5	45	78	—	0	1	2	3
Pacific	46	59	558	1,601	1,483	333	742	935	21,145	23,811	—	2	16	76	63
Alaska	2	1	17	36	26	5	10	27	256	318	—	0	2	6	8
California	33	43	93	1,076	1,207	309	620	804	18,042	19,615	—	0	10	20	20
Hawaii	—	1	4	40	31	—	14	26	358	582	—	0	2	6	11
Oregon§	3	8	14	216	219	—	24	46	596	841	—	1	6	43	24
Washington	8	2	449	233	—	19	69	142	1,893	2,455	—	0	5	1	—
American Samoa	U	0	0	U	U	U	0	4	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	1	7	20	56	—	0	0	—	1
Puerto Rico	—	6	19	114	85	—	5	16	178	178	—	0	2	2	1
U.S. Virgin Islands	U	0	0	U	U	U	1	3	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Hepatitis (viral, acute), by type† A: Current week	A: Previous 52 weeks Med	A: Previous 52 weeks Max	A: Cum 2007	A: Cum 2006	B: Current week	B: Previous 52 weeks Med	B: Previous 52 weeks Max	B: Cum 2007	B: Cum 2006	Legionellosis: Current week	Legionellosis: Previous 52 weeks Med	Legionellosis: Previous 52 weeks Max	Legionellosis: Cum 2007	Legionellosis: Cum 2006
United States	35	55	201	1,464	1,997	34	76	405	2,148	2,461	19	39	109	932	1,181
New England	—	2	6	56	112	2	2	5	35	67	—	2	13	48	78
Connecticut	—	0	3	9	21	1	0	5	20	28	—	0	9	12	17
Maine§	—	0	1	1	7	—	0	2	2	15	—	0	2	1	3
Massachusetts	—	1	4	27	54	—	0	2	3	12	—	1	5	15	40
New Hampshire	—	0	3	10	18	—	0	1	4	7	—	0	2	—	6
Rhode Island§	—	0	2	7	6	1	0	4	5	4	—	0	6	16	9
Vermont§	—	0	1	2	6	—	0	1	1	1	—	0	2	4	3
Mid. Atlantic	3	7	20	202	215	1	9	21	250	302	5	12	55	269	396
New Jersey	—	2	5	42	68	—	2	7	51	95	—	1	10	21	55
New York (Upstate)	1	1	11	41	45	1	1	13	50	37	3	5	30	88	128
New York City	—	2	10	72	63	—	2	6	52	72	—	2	24	39	67
Pennsylvania	2	1	5	47	39	—	3	8	97	98	2	5	19	121	146
E.N. Central	2	6	17	127	173	2	9	23	240	290	6	8	31	168	253
Illinois	—	2	7	39	44	—	2	6	60	87	—	0	13	1	52
Indiana	—	0	7	6	15	—	0	21	26	27	—	1	6	15	18
Michigan	1	2	8	36	55	1	2	8	63	84	—	3	10	62	53
Ohio	1	1	4	39	39	1	2	10	80	68	6	3	19	82	105
Wisconsin	—	0	4	7	20	—	0	3	11	24	—	0	3	8	25
W.N. Central	2	2	18	93	81	—	2	15	70	83	—	1	16	40	32
Iowa	1	0	4	20	7	—	0	3	12	12	—	0	2	5	7
Kansas	—	0	1	2	21	—	0	1	5	8	—	0	3	2	1
Minnesota	—	0	17	46	8	—	0	13	13	10	—	0	11	11	—
Missouri	1	0	2	14	26	—	1	5	31	44	—	0	2	16	13
Nebraska§	—	0	2	6	11	—	0	3	7	6	—	0	1	3	7
North Dakota	—	0	3	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	—	0	1	5	8	—	0	1	2	3	—	0	1	3	4
S. Atlantic	15	11	27	282	283	19	20	56	568	693	1	8	25	188	222
Delaware	—	0	1	3	10	—	0	3	8	30	—	0	2	5	6
District of Columbia	—	0	5	14	2	—	0	2	1	5	—	0	5	1	9
Florida	4	3	13	81	108	11	7	14	213	237	1	2	9	78	83
Georgia	—	1	4	39	33	—	3	10	60	118	—	1	2	14	15
Maryland§	1	1	6	44	33	1	2	7	58	93	—	1	8	35	51
North Carolina	5	0	11	34	52	2	0	16	77	91	—	1	4	24	20
South Carolina§	2	0	3	7	11	1	2	5	40	51	—	0	2	8	3
Virginia§	3	1	5	56	30	4	2	8	82	28	—	1	4	20	31
West Virginia	—	0	1	4	4	—	0	23	29	40	—	0	4	3	4
E.S. Central	3	2	7	57	73	1	6	17	181	193	1	2	7	52	49
Alabama§	1	0	2	10	8	—	2	10	64	62	—	0	1	6	7
Kentucky	1	0	2	10	26	—	1	7	34	43	—	1	6	24	14
Mississippi	—	0	4	6	5	—	0	8	14	8	—	0	2	—	1
Tennessee§	1	1	5	31	34	1	3	8	69	80	1	1	3	22	27
W.S. Central	—	6	43	101	195	5	18	169	415	467	1	1	16	45	40
Arkansas§	—	0	2	6	36	1	1	7	25	39	—	0	2	3	2
Louisiana	—	1	4	18	12	—	1	4	39	40	—	0	2	2	6
Oklahoma	—	0	3	3	4	1	1	24	20	18	—	0	6	2	1
Texas§	—	4	39	74	143	3	14	135	331	370	1	1	13	38	31
Mountain	4	5	17	174	166	—	4	9	117	79	3	2	8	59	59
Arizona	2	4	13	135	94	—	0	6	48	—	1	0	4	19	20
Colorado	2	1	3	18	26	—	0	2	19	25	2	0	2	11	10
Idaho§	—	0	1	2	7	—	0	2	7	7	—	0	3	4	6
Montana§	—	0	3	4	6	—	0	3	—	—	—	0	1	3	3
Nevada§	—	0	2	7	8	—	1	5	24	19	—	0	2	6	4
New Mexico§	—	0	2	4	12	—	0	2	7	12	—	0	2	5	2
Utah	—	0	1	2	11	—	0	4	12	16	—	0	2	8	14
Wyoming§	—	0	1	2	2	—	0	1	—	—	—	0	1	3	—
Pacific	6	12	92	372	699	4	10	106	272	287	2	2	11	63	52
Alaska	—	0	1	2	1	—	0	3	4	2	—	0	1	—	—
California	5	10	40	329	665	3	7	31	199	235	1	1	11	48	52
Hawaii	—	0	1	3	9	—	0	1	—	5	—	0	1	1	—
Oregon§	—	1	3	16	24	1	1	5	41	45	—	0	1	3	—
Washington	1	0	52	22	—	—	0	74	28	—	1	0	2	11	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	1	10	35	28	—	1	9	36	34	—	0	2	3	1
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	462	227	1,004	7,265	10,130	13	21	105	526	759	5	20	87	635	737
New England	114	39	268	1,297	2,450	1	1	5	23	38	—	1	3	31	25
Connecticut	81	12	214	861	881	—	0	3	1	10	—	0	1	6	8
Maine§	22	3	38	93	46	—	0	1	3	3	—	0	3	5	2
Massachusetts	—	1	65	13	1,063	—	0	3	16	17	—	0	2	16	12
New Hampshire	8	6	43	265	425	—	0	1	2	7	—	0	1	—	1
Rhode Island§	—	0	93	3	1	—	0	1	—	—	—	0	1	1	—
Vermont§	3	1	16	62	34	1	0	0	1	1	—	0	1	3	2
Mid. Atlantic	231	116	560	3,700	4,961	1	6	18	121	187	—	2	8	83	123
New Jersey	—	26	112	611	1,688	—	0	7	—	58	—	0	2	1	12
New York (Upstate)	190	50	426	1,300	1,354	1	1	7	34	19	—	1	3	25	28
New York City	—	2	22	27	159	—	3	8	72	88	—	0	4	23	47
Pennsylvania	41	44	213	1,762	1,760	—	1	4	15	22	—	1	5	34	36
E.N. Central	1	5	72	118	1,288	—	2	10	52	84	—	3	9	81	107
Illinois	—	0	8	7	86	—	1	6	19	40	—	0	3	21	29
Indiana	—	0	4	16	11	—	0	2	5	7	—	0	4	16	14
Michigan	1	1	5	20	22	—	0	2	8	13	—	0	3	15	18
Ohio	—	0	5	9	26	—	0	2	13	18	—	1	3	23	30
Wisconsin	—	3	58	66	1,143	—	0	3	7	6	—	0	3	6	16
W.N. Central	16	4	195	198	246	—	0	12	21	28	2	1	5	38	42
Iowa	—	1	8	43	74	—	0	1	2	1	—	0	3	9	10
Kansas	1	0	2	9	3	—	0	1	1	4	1	0	1	1	1
Minnesota	14	1	188	128	159	—	0	12	11	14	1	0	3	11	10
Missouri	1	0	4	14	2	—	0	1	2	5	—	0	3	10	12
Nebraska§	—	0	2	4	7	—	0	1	4	2	—	0	1	2	6
North Dakota	—	0	7	—	—	—	0	1	—	1	—	0	3	2	1
South Dakota	—	0	0	—	1	—	0	1	1	1	—	0	1	3	2
S. Atlantic	97	48	134	1,801	1,114	5	5	14	121	194	3	3	11	103	126
Delaware	12	9	32	398	314	—	0	1	3	5	—	0	1	2	4
District of Columbia	—	0	7	13	18	—	0	2	3	3	—	0	1	—	—
Florida	1	1	4	26	10	—	1	4	24	28	3	1	7	38	50
Georgia	—	0	1	1	6	1	0	5	13	61	—	0	3	9	10
Maryland§	25	26	108	930	656	2	1	4	30	43	—	0	2	18	8
North Carolina	2	0	6	23	16	1	0	4	14	13	—	0	6	14	22
South Carolina§	—	0	2	12	5	—	0	1	5	7	—	0	2	10	14
Virginia§	51	10	36	375	84	1	1	4	28	32	—	0	2	12	14
West Virginia	6	0	14	23	5	—	0	1	1	2	—	0	2	—	4
E.S. Central	—	1	4	28	13	—	0	3	22	17	—	1	4	34	28
Alabama§	—	0	3	8	5	—	0	2	4	8	—	0	2	6	4
Kentucky	—	0	2	2	—	—	0	1	4	3	—	0	2	7	7
Mississippi	—	0	1	—	2	—	0	1	1	3	—	0	4	9	2
Tennessee§	—	0	3	18	6	—	0	2	13	3	—	0	2	12	15
W.S. Central	—	1	5	34	10	2	2	29	56	50	—	2	15	69	71
Arkansas§	—	0	0	—	—	—	0	2	—	1	—	0	2	8	7
Louisiana	—	0	1	2	—	—	0	2	13	3	—	0	4	23	29
Oklahoma	—	0	0	—	—	—	0	3	5	4	—	0	4	14	8
Texas§	—	1	5	32	10	2	1	25	38	42	—	0	11	24	27
Mountain	—	1	3	13	11	—	1	6	31	39	—	1	5	48	44
Arizona	—	0	1	—	4	—	0	3	5	13	—	0	3	13	13
Colorado	—	0	1	1	—	—	0	2	11	11	—	0	2	16	14
Idaho§	—	0	2	4	1	—	0	1	—	—	—	0	1	3	1
Montana§	—	0	1	1	—	—	0	1	3	1	—	0	1	1	3
Nevada§	—	0	2	5	1	—	0	1	2	2	—	0	1	3	4
New Mexico§	—	0	0	—	3	—	0	1	1	4	—	0	1	2	2
Utah	—	0	1	2	1	—	0	3	9	8	—	0	2	8	5
Wyoming§	—	0	0	—	1	—	0	0	—	—	—	0	2	2	2
Pacific	3	2	16	76	37	4	3	45	79	122	—	4	48	148	171
Alaska	—	0	1	2	1	—	0	4	2	20	—	0	1	1	3
California	3	2	10	72	34	2	2	6	51	89	—	2	10	105	134
Hawaii	N	0	0	N	N	—	0	1	2	6	—	0	1	3	5
Oregon§	—	0	1	2	2	—	0	3	12	7	—	0	3	24	29
Washington	—	0	8	—	—	2	0	43	12	—	—	0	43	15	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	—	—	0	1	6	4
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	96	193	1,479	4,726	7,682	92	92	171	2,531	2,957	29	28	211	781	982
New England	7	34	77	686	883	12	12	22	330	213	—	0	10	—	8
Connecticut	—	2	10	26	48	5	5	14	128	86	—	0	0	—	—
Maine†	—	2	15	38	38	—	2	8	45	54	—	0	0	—	—
Massachusetts	7	23	46	562	559	—	0	0	—	—	—	0	1	—	7
New Hampshire	—	2	9	36	134	4	1	4	29	20	—	0	0	—	1
Rhode Island†	—	0	31	4	25	—	0	3	21	16	—	0	9	—	—
Vermont†	—	0	9	20	79	3	2	13	107	37	—	0	0	—	—
Mid. Atlantic	15	30	155	643	938	—	13	44	420	261	1	1	6	30	48
New Jersey	—	3	16	65	171	—	0	0	—	—	—	0	3	1	25
New York (Upstate)	10	17	146	347	364	—	—	—	—	—	—	0	1	1	—
New York City	—	2	6	51	56	—	1	5	28	9	—	0	3	14	11
Pennsylvania	5	8	20	180	347	—	12	44	392	252	1	0	3	14	12
E.N. Central	17	40	80	894	1,135	11	2	18	115	63	—	0	9	12	35
Illinois	—	6	23	81	279	—	1	7	34	16	—	0	4	4	16
Indiana	9	2	45	39	129	—	0	2	6	6	—	0	1	2	3
Michigan	2	8	39	152	250	3	0	5	32	26	—	0	1	2	1
Ohio	6	15	54	430	339	8	0	12	43	15	—	0	4	4	14
Wisconsin	—	5	24	192	138	—	0	0	—	—	—	0	0	—	1
W.N. Central	2	16	151	347	756	11	6	17	159	174	2	4	12	109	106
Iowa	—	4	16	90	193	1	0	7	20	31	—	0	1	4	3
Kansas	1	3	14	87	154	1	2	8	80	49	1	0	1	2	—
Minnesota	—	0	119	59	111	5	0	4	16	25	—	0	2	1	1
Missouri	1	3	10	45	196	3	1	6	21	28	1	3	12	94	86
Nebraska†	—	1	4	22	72	—	0	0	—	—	—	0	2	6	16
North Dakota	—	0	18	4	13	1	0	6	12	14	—	0	0	—	—
South Dakota	—	0	6	40	17	—	0	2	10	27	—	0	1	2	—
S. Atlantic	18	19	163	535	623	46	40	65	1,155	1,365	18	12	67	412	565
Delaware	—	0	2	7	3	—	0	0	—	—	—	0	2	7	14
District of Columbia	—	0	2	2	3	—	0	0	—	—	—	0	1	1	—
Florida	7	4	18	140	121	—	0	28	73	176	—	0	4	13	8
Georgia	—	1	5	14	56	23	4	16	120	150	—	0	5	10	30
Maryland†	—	2	8	67	92	2	6	12	165	249	1	1	7	31	45
North Carolina	11	1	112	191	109	14	9	21	292	276	14	6	61	261	409
South Carolina†	—	2	11	47	90	—	2	11	46	92	2	1	7	31	18
Virginia†	—	2	17	56	126	7	13	31	420	362	1	2	12	56	40
West Virginia	—	0	19	11	23	—	1	8	39	60	—	0	2	2	1
E.S. Central	5	5	24	145	190	2	3	11	83	150	6	5	27	137	156
Alabama†	—	1	18	40	38	—	0	8	—	48	2	1	9	35	40
Kentucky	—	0	4	5	41	2	0	4	12	11	—	0	1	3	1
Mississippi	3	0	10	40	19	—	0	0	—	4	—	0	1	2	2
Tennessee†	2	2	7	60	92	—	2	6	71	87	4	3	22	97	113
W.S. Central	15	20	226	530	449	2	4	35	64	519	2	1	168	61	41
Arkansas†	3	2	17	101	43	2	0	5	19	20	—	0	53	14	28
Louisiana	—	0	2	11	19	—	0	1	—	2	—	0	1	1	—
Oklahoma	—	0	36	3	18	—	0	22	45	45	—	0	108	34	5
Texas†	12	17	174	415	369	—	0	34	—	452	2	0	7	12	8
Mountain	12	27	61	658	1,728	6	3	28	86	90	—	0	4	18	21
Arizona	—	6	17	162	363	6	2	10	63	69	—	0	2	—	7
Colorado	6	6	17	180	549	—	0	0	—	—	—	0	1	1	3
Idaho†	2	1	6	25	47	—	0	24	—	—	—	0	3	3	1
Montana†	—	1	7	31	79	—	0	2	6	8	—	0	1	1	2
Nevada†	—	0	5	3	54	—	0	2	1	2	—	0	0	—	—
New Mexico†	—	2	8	25	59	—	0	2	4	6	—	0	1	4	5
Utah	4	8	47	218	525	—	0	1	6	3	—	0	0	—	—
Wyoming†	—	1	5	14	52	—	0	2	6	2	—	0	2	9	3
Pacific	5	15	547	288	980	2	4	13	119	122	—	0	1	2	2
Alaska	2	1	8	31	46	—	0	6	34	14	N	0	0	N	N
California	—	11	225	99	781	2	3	12	80	99	—	0	0	—	—
Hawaii	—	0	3	13	74	N	0	0	N	N	N	0	0	N	N
Oregon†	—	1	11	59	79	—	0	4	5	9	—	0	1	2	2
Washington	3	0	377	86	—	—	0	0	—	—	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	7	—	22	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	—	1	—	1	5	27	56	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	620	821	2,338	19,939	20,803	106	75	336	1,763	1,690	219	325	1,287	7,897	6,231
New England	5	37	218	1,135	1,376	—	3	29	115	160	—	4	19	127	176
Connecticut	—	0	203	203	503	—	0	24	24	75	—	0	16	16	67
Maine§	—	3	14	59	61	—	1	8	17	9	—	0	5	13	3
Massachusetts	2	23	60	694	630	—	1	8	58	54	—	3	11	88	94
New Hampshire	1	3	15	81	107	—	0	3	8	14	—	0	2	4	4
Rhode Island§	—	2	20	50	46	—	0	2	2	2	—	0	3	4	5
Vermont§	2	2	6	48	29	—	0	4	6	6	—	0	2	2	3
Mid. Atlantic	71	98	189	2,583	2,617	8	7	63	173	209	12	11	47	323	556
New Jersey	—	13	50	218	583	—	1	20	11	52	—	1	5	25	231
New York (Upstate)	35	29	112	730	557	6	3	15	74	82	2	3	42	64	126
New York City	4	24	45	664	657	—	0	4	18	25	1	5	12	129	151
Pennsylvania	32	33	66	971	820	2	3	47	70	50	9	1	21	105	48
E.N. Central	109	101	203	2,782	2,905	11	9	63	211	254	36	31	81	952	631
Illinois	—	30	65	785	862	—	1	8	18	47	—	12	53	246	236
Indiana	36	15	55	367	359	2	1	8	25	29	1	2	17	38	78
Michigan	5	18	35	430	544	3	1	6	38	44	—	1	5	19	103
Ohio	68	25	57	732	630	6	3	18	70	69	35	5	68	522	92
Wisconsin	—	17	49	468	510	—	2	41	60	65	—	4	14	127	122
W.N. Central	26	49	104	1,367	1,344	12	12	45	294	306	20	44	156	1,168	819
Iowa	—	9	26	228	226	1	2	38	63	68	—	2	14	41	42
Kansas	9	7	20	218	192	1	0	4	30	16	1	1	10	18	66
Minnesota	10	13	44	344	360	1	4	26	102	80	3	5	24	139	59
Missouri	6	15	35	360	372	9	2	12	54	92	16	18	72	877	441
Nebraska§	—	3	11	109	106	—	1	11	27	29	—	1	14	11	45
North Dakota	—	0	23	19	10	—	0	12	1	2	—	0	127	4	8
South Dakota	1	3	11	89	78	—	0	5	17	19	—	4	28	78	158
S. Atlantic	191	214	401	4,993	5,021	35	14	32	329	267	80	84	167	2,698	1,480
Delaware	—	3	10	74	64	—	0	3	10	2	—	0	1	6	5
District of Columbia	—	0	4	16	35	—	0	1	1	1	—	0	5	4	6
Florida	100	88	176	2,074	2,117	5	2	8	85	50	28	46	76	1,472	683
Georgia	33	28	73	818	811	1	1	4	29	46	37	31	89	992	527
Maryland§	12	15	31	389	345	2	3	10	50	42	6	2	10	56	60
North Carolina	7	29	130	657	689	24	2	11	70	45	2	1	14	42	96
South Carolina§	27	18	45	430	457	—	0	3	9	7	4	1	5	55	68
Virginia§	8	20	58	451	455	3	3	11	69	71	3	2	9	64	35
West Virginia	4	1	31	84	48	—	0	5	6	3	—	0	6	7	—
E.S. Central	49	56	140	1,361	1,298	12	4	25	128	142	23	19	89	804	366
Alabama§	22	14	78	375	372	2	0	18	42	13	11	7	67	305	104
Kentucky	11	9	23	280	229	5	1	7	39	42	6	2	32	188	154
Mississippi	—	13	101	293	332	—	0	3	2	2	—	3	76	206	40
Tennessee§	16	17	32	413	365	5	2	8	45	85	6	3	14	105	68
W.S. Central	46	84	595	1,721	2,221	2	4	73	99	92	22	39	655	839	897
Arkansas§	2	13	45	262	408	1	1	7	19	14	—	2	10	56	49
Louisiana	—	18	48	319	491	—	0	2	—	11	—	8	25	254	82
Oklahoma	8	9	103	214	220	—	0	17	14	7	2	2	63	58	53
Texas§	36	44	470	926	1,102	1	2	68	66	60	20	23	580	471	713
Mountain	51	48	90	1,325	1,438	16	9	34	232	214	12	19	84	425	518
Arizona	21	17	44	469	416	1	2	9	64	43	8	10	37	227	277
Colorado	13	10	21	313	389	1	1	7	38	51	3	3	15	62	83
Idaho§	4	3	8	72	94	11	2	10	58	39	—	0	2	8	9
Montana§	—	2	6	46	83	—	0	0	—	—	—	0	13	13	4
Nevada§	4	4	10	105	122	—	0	5	14	16	1	1	20	17	50
New Mexico§	—	4	15	114	135	—	1	4	20	22	—	3	15	56	61
Utah	9	4	14	161	165	3	1	14	38	37	—	1	4	16	31
Wyoming§	—	1	4	45	34	—	0	3	—	6	—	1	19	26	3
Pacific	72	109	890	2,672	2,583	10	5	164	182	46	14	25	256	561	788
Alaska	—	1	5	44	44	N	0	0	N	N	1	0	2	7	5
California	45	88	260	1,976	2,186	5	1	15	105	N	11	21	84	441	680
Hawaii	—	5	16	133	125	—	0	3	9	7	—	0	3	16	26
Oregon§	—	7	17	173	226	—	1	9	25	39	—	1	6	37	77
Washington	27	1	625	346	2	5	0	162	43	—	2	0	170	60	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
Puerto Rico	9	14	66	320	254	—	0	0	—	—	—	0	4	16	24
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Streptococcal disease, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max		
United States	69	94	261	3,341	3,593	18	29	108	945	814
New England	7	6	27	282	230	—	3	11	70	70
Connecticut	7	0	23	91	59	—	0	6	—	23
Maine§	—	0	3	20	12	—	0	1	1	—
Massachusetts	—	3	12	129	122	—	2	6	54	41
New Hampshire	—	1	4	27	24	—	0	2	7	6
Rhode Island§	—	0	12	—	4	—	0	3	6	—
Vermont§	—	0	2	15	9	—	0	1	2	—
Mid. Atlantic	9	15	41	628	677	5	4	20	114	120
New Jersey	—	2	9	80	115	—	1	4	19	44
New York (Upstate)	6	5	27	214	219	5	2	15	72	63
New York City	—	3	12	148	121	—	1	3	23	13
Pennsylvania	3	5	11	186	222	N	0	0	N	N
E.N. Central	2	17	32	570	710	1	5	14	153	214
Illinois	—	4	13	141	217	—	1	6	35	59
Indiana	2	2	17	93	82	—	0	10	14	31
Michigan	—	3	10	139	149	—	1	4	54	51
Ohio	—	4	14	171	181	1	1	7	42	43
Wisconsin	—	1	6	26	81	—	0	2	8	30
W.N. Central	6	5	32	226	238	2	2	8	71	61
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	1	0	3	28	45	—	0	1	1	10
Minnesota	5	0	29	116	111	2	1	6	51	34
Missouri	—	2	6	51	45	—	0	2	13	11
Nebraska§	—	0	3	15	21	—	0	2	5	4
North Dakota	—	0	2	10	8	—	0	2	1	2
South Dakota	—	0	2	6	8	—	0	0	—	—
S. Atlantic	28	21	51	815	786	3	3	14	188	52
Delaware	1	0	2	7	7	—	0	0	—	—
District of Columbia	—	0	3	8	9	—	0	1	—	—
Florida	11	6	16	193	177	2	0	5	43	—
Georgia	4	5	12	153	166	—	0	5	45	—
Maryland§	2	4	9	147	151	—	1	6	44	43
North Carolina	8	0	22	119	117	—	0	0	—	—
South Carolina§	—	1	7	69	53	1	0	3	24	—
Virginia§	2	2	11	99	86	—	0	3	27	—
West Virginia	—	0	3	20	20	—	0	4	5	9
E.S. Central	4	4	13	143	150	2	1	6	55	15
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	31	35	—	0	0	—	—
Mississippi	N	0	0	N	N	—	0	2	3	15
Tennessee§	4	3	13	112	115	2	0	6	52	—
W.S. Central	8	6	90	206	269	2	4	43	139	135
Arkansas§	—	0	2	16	20	—	0	2	7	16
Louisiana	—	0	4	14	13	—	0	4	22	16
Oklahoma	2	2	23	52	70	1	1	13	35	26
Texas§	6	3	64	124	166	1	1	27	75	77
Mountain	4	10	23	387	471	2	4	12	132	132
Arizona	2	5	11	156	240	2	2	7	76	75
Colorado	2	3	9	113	83	—	1	4	32	32
Idaho§	—	0	2	8	7	—	0	1	2	1
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	2	—	—	0	1	1	2
New Mexico§	—	1	5	35	91	—	0	4	17	22
Utah	—	2	7	68	47	—	0	2	4	—
Wyoming§	—	0	1	5	3	—	0	0	—	—
Pacific	1	3	9	84	62	1	0	4	23	15
Alaska	1	0	3	21	N	1	0	2	21	—
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	9	63	62	—	0	2	2	15
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	13	47	256	1,486	1,602	5	9	35	265	244	109	200	310	5,525	5,237
New England	—	1	12	33	90	—	0	3	5	2	5	4	13	136	124
Connecticut	—	0	5	—	70	—	0	0	—	—	—	0	10	18	25
Maine§	—	0	2	9	5	—	0	2	1	1	—	0	1	2	7
Massachusetts	—	0	0	—	—	—	0	0	—	—	4	2	8	86	76
New Hampshire	—	0	0	—	—	—	0	0	—	—	1	0	3	17	7
Rhode Island§	—	0	4	13	6	—	0	1	2	—	—	0	5	12	7
Vermont§	—	0	2	11	9	—	0	1	2	1	—	0	1	1	2
Mid. Atlantic	—	2	9	86	100	1	0	5	22	13	7	27	45	888	647
New Jersey	—	0	0	—	—	—	0	0	—	—	—	3	8	96	93
New York (Upstate)	—	1	5	28	33	1	0	4	8	6	1	3	14	77	85
New York City	—	0	0	—	—	—	0	0	—	—	—	16	35	566	318
Pennsylvania	—	2	6	58	67	—	0	2	14	7	6	5	12	149	151
E.N. Central	2	9	40	375	349	2	1	7	48	55	11	15	27	429	517
Illinois	—	0	4	11	18	—	0	1	2	5	7	7	13	202	267
Indiana	—	2	31	97	90	2	0	5	12	14	—	1	5	24	44
Michigan	—	0	1	2	15	—	0	1	1	2	1	2	8	65	65
Ohio	2	6	38	265	226	—	1	5	33	34	2	3	9	103	109
Wisconsin	N	0	0	N	N	—	0	0	—	—	1	1	4	35	32
W.N. Central	—	2	124	105	30	—	0	15	7	1	10	5	14	177	159
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	7	9
Kansas	—	0	10	57	—	—	0	2	3	—	—	0	3	9	12
Minnesota	—	0	123	—	—	—	0	15	—	—	—	1	5	40	31
Missouri	—	1	5	40	29	—	0	1	—	1	10	3	12	116	102
Nebraska§	—	0	1	2	—	—	0	0	—	—	—	0	2	1	2
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota	—	0	3	6	1	—	0	1	4	—	—	0	3	4	2
S. Atlantic	11	21	59	665	765	2	4	15	135	116	23	46	180	1,258	1,149
Delaware	—	0	1	5	—	1	0	1	2	—	1	0	3	7	14
District of Columbia	—	0	2	5	19	—	0	0	—	2	—	3	12	101	63
Florida	5	11	29	382	398	1	2	8	75	76	11	15	25	445	415
Georgia	5	7	17	227	260	—	1	10	50	38	—	7	153	162	178
Maryland§	—	0	1	1	—	—	0	0	—	—	7	6	15	173	179
North Carolina	—	0	0	—	—	—	0	0	—	—	1	5	23	194	173
South Carolina§	—	0	0	—	—	—	0	0	—	—	3	1	10	56	40
Virginia§	N	0	0	N	N	—	0	0	—	—	—	4	17	115	85
West Virginia	1	1	17	45	88	—	0	1	8	—	—	0	2	5	2
E.S. Central	—	3	9	98	136	—	0	3	20	22	23	16	29	461	364
Alabama§	N	0	0	N	N	—	0	0	—	—	9	6	17	172	154
Kentucky	—	0	2	17	26	—	0	1	2	5	—	1	7	39	37
Mississippi	—	0	2	—	17	—	0	0	—	—	—	2	9	58	35
Tennessee§	—	2	8	81	93	—	0	3	18	17	14	6	14	192	138
W.S. Central	—	1	10	85	63	—	0	3	14	6	25	32	55	957	831
Arkansas§	—	0	1	1	9	—	0	0	—	2	—	1	7	65	40
Louisiana	—	1	3	40	54	—	0	2	6	4	—	7	29	200	142
Oklahoma	—	0	8	44	—	—	0	2	8	—	—	1	5	42	39
Texas§	—	0	0	—	—	—	0	0	—	—	25	21	37	650	610
Mountain	—	1	5	39	69	—	0	3	14	29	1	7	27	170	272
Arizona	—	0	0	—	—	—	0	0	—	—	—	3	16	73	103
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	19	46
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	1	2
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	1	1	1
Nevada§	—	0	3	16	15	—	0	2	5	1	1	2	12	45	74
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	1	7	26	37
Utah	—	0	5	13	28	—	0	3	8	20	—	0	2	4	9
Wyoming§	—	0	2	10	26	—	0	1	1	8	—	0	1	1	—
Pacific	—	0	0	—	—	—	0	0	—	—	4	38	57	1,049	1,174
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	2	5	5
California	N	0	0	N	N	—	0	0	—	—	1	36	54	960	1,038
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	1	5	13
Oregon§	N	0	0	N	N	—	0	0	—	—	—	0	6	9	10
Washington	N	0	0	N	N	—	0	0	—	—	3	2	11	70	108
American Samoa	U	0	0	U	U	U	0	1	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	N	0	0	N	N	—	0	0	—	—	—	0	1	3	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	—	2	11	77	85
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007, and July 29, 2006 (30th Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	149	795	2,813	24,215	30,851	—	1	178	60	319	2	2	417	125	466
New England	—	21	124	466	3,095	—	0	3	—	—	—	0	2	—	1
Connecticut	—	0	76	1	1,081	—	0	3	—	—	—	0	1	—	1
Maine¶	—	0	7	—	168	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	9	—	1,123	—	0	1	—	—	—	0	1	—	—
New Hampshire	—	7	17	200	236	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	9	66	265	487	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	13	109	195	2,990	3,258	—	0	11	—	5	—	0	4	—	1
New Jersey	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	4	—	1	—	0	2	—	—
Pennsylvania	13	109	195	2,990	3,258	—	0	2	—	4	—	0	0	—	1
E.N. Central	16	228	568	6,860	10,224	—	0	42	3	9	—	0	33	1	7
Illinois	—	2	11	91	87	—	0	24	2	6	—	0	22	1	3
Indiana	—	0	0	—	—	—	0	5	—	2	—	0	12	—	1
Michigan	6	97	258	2,830	3,037	—	0	10	—	—	—	0	4	—	1
Ohio	10	107	449	3,264	6,358	—	0	11	1	—	—	0	3	—	—
Wisconsin	—	17	72	675	742	—	0	2	—	1	—	0	2	—	2
W.N. Central	3	32	136	1,204	1,235	—	0	37	22	50	1	0	78	53	96
Iowa	N	0	0	N	N	—	0	3	1	4	—	0	4	1	7
Kansas	—	9	52	426	234	—	0	3	2	7	1	0	3	1	3
Minnesota	—	0	0	—	—	—	0	7	3	11	—	0	7	1	16
Missouri	3	16	78	634	940	—	0	14	—	10	—	0	2	2	—
Nebraska¶	N	0	0	N	N	—	0	9	—	8	—	0	38	12	30
North Dakota	—	0	60	84	27	—	0	5	4	1	—	0	28	10	23
South Dakota	—	2	15	60	34	—	0	8	12	9	—	0	22	26	17
S. Atlantic	32	96	239	3,200	2,990	—	0	2	1	5	—	0	7	—	—
Delaware	—	1	6	22	45	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	8	14	21	—	0	0	—	—	—	0	1	—	—
Florida	16	16	81	801	N	—	0	1	—	2	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	2	—	0	4	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
North Carolina	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Carolina¶	4	18	72	676	795	—	0	1	—	—	—	0	0	—	—
Virginia¶	—	27	190	960	1,115	—	0	1	1	—	—	0	2	—	—
West Virginia	12	23	50	727	1,014	—	0	1	—	1	—	0	0	—	—
E.S. Central	4	2	571	329	25	—	0	15	7	35	—	0	17	10	19
Alabama¶	4	2	571	327	25	—	0	1	2	5	—	0	1	2	—
Kentucky	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Mississippi	—	0	2	2	—	—	0	10	5	29	—	0	16	8	19
Tennessee¶	N	0	0	N	N	—	0	5	—	1	—	0	2	—	—
W.S. Central	76	181	1,640	7,322	8,188	—	0	59	5	132	—	0	27	2	49
Arkansas¶	42	12	105	476	592	—	0	5	1	8	—	0	2	—	2
Louisiana	—	2	11	89	178	—	0	13	—	21	—	0	10	—	17
Oklahoma	—	0	0	—	—	—	0	6	—	8	—	0	4	—	2
Texas¶	34	163	1,534	6,757	7,418	—	0	39	4	95	—	0	16	2	28
Mountain	5	56	131	1,819	1,836	—	0	63	5	65	—	1	245	34	231
Arizona	—	0	0	—	—	—	0	10	—	2	—	0	14	7	4
Colorado	2	22	62	696	960	—	0	11	2	7	—	0	51	8	40
Idaho¶	N	0	0	N	N	—	0	32	—	34	—	0	174	8	151
Montana¶	—	5	40	278	N	—	0	3	—	—	—	0	8	—	1
Nevada¶	—	0	1	1	9	—	0	9	—	11	—	0	17	1	23
New Mexico¶	1	6	37	286	297	—	0	2	2	—	—	0	1	—	—
Utah	2	15	73	540	538	—	0	8	1	11	—	0	17	1	9
Wyoming¶	—	0	11	18	32	—	0	7	—	—	—	0	10	9	3
Pacific	—	0	9	25	—	—	0	15	17	18	1	0	51	25	62
Alaska	—	0	9	25	N	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	N	—	0	15	17	17	1	0	37	25	51
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	1	—	0	14	—	9
Washington	N	0	0	N	N	—	0	0	—	—	—	0	1	—	2
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	4	30	99	153	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	12	29	380	350	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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 2006 and 2007 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 July 28, 2007 (30th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
New England	537	347	107	28	10	15	45
Boston, MA	185	88	41	13	5	8	7
Bridgeport, CT	27	19	6	2	—	—	3
Cambridge, MA	18	13	4	—	1	—	3
Fall River, MA	16	14	2	—	—	—	3
Hartford, CT	49	35	6	3	2	3	7
Lowell, MA	22	20	2	—	—	—	1
Lynn, MA	1	1	—	—	—	—	—
New Bedford, MA	19	17	2	—	—	—	2
New Haven, CT	46	33	9	3	—	1	7
Providence, RI	48	34	10	2	1	1	1
Somerville, MA	1	1	—	—	—	—	—
Springfield, MA	38	22	11	3	—	2	6
Waterbury, CT	22	14	7	1	—	—	1
Worcester, MA	45	36	7	1	1	—	4
Mid. Atlantic	1,956	1,331	419	121	45	35	99
Albany, NY	38	25	9	3	—	1	2
Allentown, PA	20	15	4	1	—	—	1
Buffalo, NY	94	59	26	4	2	3	9
Camden, NJ	16	9	3	3	1	—	2
Elizabeth, NJ	19	12	7	—	—	—	1
Erie, PA	42	29	9	3	1	—	1
Jersey City, NJ	31	19	8	2	2	—	4
New York City, NY	1,014	706	208	61	20	14	37
Newark, NJ	51	21	16	7	4	3	4
Paterson, NJ	14	9	3	—	2	—	2
Philadelphia, PA	288	184	58	24	10	12	16
Pittsburgh, PA§	50	37	9	3	—	1	3
Reading, PA	32	22	8	2	—	—	1
Rochester, NY	115	87	21	5	2	—	9
Schenectady, NY	7	4	3	—	—	—	—
Scranton, PA	31	25	6	—	—	—	1
Syracuse, NY	33	24	8	—	—	1	2
Trenton, NJ	25	16	8	1	—	—	—
Utica, NY	15	12	1	2	—	—	1
Yonkers, NY	21	16	4	—	1	—	3
E.N. Central	1,924	1,266	439	115	48	56	105
Akron, OH	47	30	12	2	—	3	—
Canton, OH	32	22	7	2	1	—	2
Chicago, IL	252	136	66	27	14	9	21
Cincinnati, OH	98	54	24	8	5	7	9
Cleveland, OH	257	184	50	12	3	8	11
Columbus, OH	199	144	35	15	3	2	11
Dayton, OH	125	87	26	6	3	3	6
Detroit, MI	163	90	50	11	7	5	4
Evansville, IN	51	35	12	3	—	1	3
Fort Wayne, IN	54	33	17	1	2	1	2
Gary, IN	19	6	6	3	2	2	1
Grand Rapids, MI	53	37	14	—	1	1	4
Indianapolis, IN	178	107	48	13	5	5	9
Lansing, MI	42	32	9	1	—	—	2
Milwaukee, WI	89	65	19	3	—	2	1
Peoria, IL	28	23	4	—	—	1	3
Rockford, IL	48	37	8	2	1	—	3
South Bend, IN	58	47	6	1	1	3	2
Toledo, OH	84	59	18	5	—	2	6
Youngstown, OH	47	38	8	—	—	1	5
W.N. Central	602	394	134	39	13	22	37
Des Moines, IA	83	62	15	4	1	1	4
Duluth, MN	29	17	9	3	—	—	—
Kansas City, KS	20	14	5	1	—	—	3
Kansas City, MO	90	63	15	3	2	7	4
Lincoln, NE	41	32	6	—	1	2	2
Minneapolis, MN	70	37	22	4	—	7	4
Omaha, NE	63	44	15	3	1	—	3
St. Louis, MO	95	47	25	17	2	4	6
St. Paul, MN	39	27	7	2	3	—	5
Wichita, KS	72	51	15	2	3	1	6
S. Atlantic	1,216	725	304	112	49	26	71
Atlanta, GA	174	91	42	26	13	2	7
Baltimore, MD	180	105	38	18	14	5	19
Charlotte, NC	131	94	24	8	4	1	11
Jacksonville, FL	186	108	53	16	7	2	10
Miami, FL	77	50	19	7	—	1	6
Norfolk, VA	52	30	12	5	3	2	2
Richmond, VA	90	38	33	9	6	4	3
Savannah, GA	53	40	8	2	1	2	1
St. Petersburg, FL	82	54	20	6	—	2	—
Tampa, FL	178	107	50	15	1	5	10
Washington, D.C.	U	U	U	U	U	U	U
Wilmington, DE	13	8	5	—	—	—	2
E.S. Central	920	590	219	73	22	15	58
Birmingham, AL	188	124	43	16	2	3	13
Chattanooga, TN	90	69	13	6	1	1	5
Knoxville, TN	88	53	22	7	5	1	8
Lexington, KY	94	54	27	7	2	4	1
Memphis, TN	167	103	40	16	6	2	13
Mobile, AL	115	82	20	9	2	2	6
Montgomery, AL	41	23	12	4	—	1	5
Nashville, TN	137	82	42	8	4	1	7
W.S. Central	1,369	838	342	103	50	36	73
Austin, TX	85	46	25	8	4	2	8
Baton Rouge, LA	40	31	9	—	—	—	—
Corpus Christi, TX	43	27	12	3	1	—	—
Dallas, TX	187	104	52	14	11	6	12
El Paso, TX	43	35	5	2	1	—	1
Fort Worth, TX	120	73	30	5	4	8	4
Houston, TX	367	214	89	40	12	12	24
Little Rock, AR	71	40	21	5	2	3	2
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	211	138	48	12	8	5	7
Shreveport, LA	69	43	22	3	1	—	9
Tulsa, OK	133	87	29	11	6	—	6
Mountain	945	583	204	87	44	26	53
Albuquerque, NM	76	55	13	4	2	2	6
Boise, ID	43	29	12	2	—	—	1
Colorado Springs, CO	69	45	17	2	4	1	5
Denver, CO	80	31	14	15	12	8	9
Las Vegas, NV	252	136	75	27	12	2	13
Ogden, UT	37	32	2	3	—	—	2
Phoenix, AZ	133	77	24	15	7	9	8
Pueblo, CO	39	32	6	—	1	—	3
Salt Lake City, UT	105	81	14	7	2	1	4
Tucson, AZ	111	65	27	12	4	3	2
Pacific	1,302	863	310	74	29	26	92
Berkeley, CA	12	7	4	1	—	—	—
Fresno, CA	113	68	31	8	2	4	15
Glendale, CA	U	U	U	U	U	U	U
Honolulu, HI	81	56	22	2	—	1	4
Long Beach, CA	56	37	15	2	—	2	8
Los Angeles, CA	U	U	U	U	U	U	U
Pasadena, CA	20	17	2	1	—	—	2
Portland, OR	123	77	28	12	2	4	9
Sacramento, CA	155	99	43	9	4	—	10
San Diego, CA	138	90	33	6	3	6	7
San Francisco, CA	117	77	30	6	2	2	10
San Jose, CA	178	123	31	12	8	4	12
Santa Cruz, CA	16	9	7	—	—	—	1
Seattle, WA	119	73	36	6	3	1	4
Spokane, WA	58	39	10	5	2	2	4
Tacoma, WA	116	91	18	4	3	—	6
Total	10,771**	6,937	2,478	752	310	257	633

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.

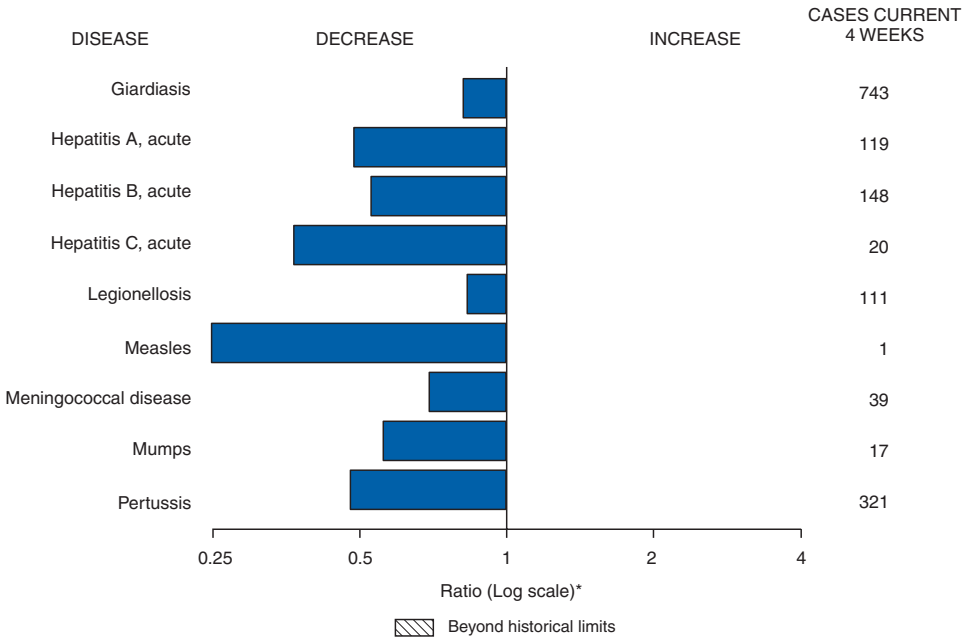
† Pneumonia and influenza.

§ 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.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals July 28, 2007, 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

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: 2007-623-038/41041 Region IV ISSN: 0149-2195