Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Weekly / Vol. 60 / No. 30

August 5, 2011

West Nile Virus Disease and Other Arboviral Diseases — United States, 2010

Arthropod-borne viruses (arboviruses) are transmitted to humans primarily through the bites of infected mosquitoes and ticks. Since West Nile virus (WNV) was first detected in the Western Hemisphere in 1999, it has become the leading cause of neuroinvasive arboviral disease in the United States (*1*). However, several other arboviruses continue to cause sporadic cases and seasonal outbreaks of neuroinvasive disease (i.e., meningitis, encephalitis, or acute flaccid paralysis) (*1,2*). This report summarizes surveillance data reported to CDC in 2010 for WNV and other nationally notifiable arboviruses (excluding dengue, which is reported separately). In 2010, 40 states and the District of Columbia (DC) reported 1,021 cases of WNV disease. Of these, 629 (62%) were classified as WNV neuroinvasive disease, for a national incidence of 0.20 per 100,000 population. States with the highest incidence were Arizona (1.60), New Mexico (1.03), Nebraska (0.55), and Colorado (0.51). After WNV, the next most commonly reported cause of neuroinvasive arboviral disease was California serogroup viruses (CALV), with 68 cases, followed by eastern equine encephalitis virus (EEEV), 10 cases, St. Louis encephalitis virus (SLEV), eight cases, and Powassan virus (POWV), eight cases. WNV and other arboviruses continue to cause focal outbreaks and severe illness in substantial numbers of persons in the United States. Maintaining surveillance remains important to guide arboviral disease prevention activities.

In the United States, arboviruses are maintained in transmission cycles between arthropods and vertebrate hosts (typically birds or small mammals). Humans usually are infected incidentally and become "dead-end" hosts, with too little virus in their blood to continue the cycle by infecting feeding mosquitoes. The majority of human arboviral infections are asymptomatic. Symptomatic illness commonly manifests as systemic febrile illness and less commonly as neuroinvasive disease. Most endemic arboviral diseases are nationally notifiable (*3*). Data are reported to CDC through ArboNET, an Internet-based national surveillance system (*4*). In addition to cases of human disease, ArboNET collects data on viremic blood donors, veterinary cases, and infections in mosquitoes, dead birds, and sentinel chickens.* Using standard definitions, human cases are classified as neuroinvasive disease (i.e., meningitis, encephalitis, or acute flaccid paralysis) or nonneuroinvasive disease (*3*). Because of the substantial associated morbidity, detection and reporting of neuroinvasive disease cases is assumed to be more consistent and complete than for nonneuroinvasive disease cases. For this report, incidence was calculated only for cases of neuroinvasive disease.

In 2010, a total of 1,021 human cases of WNV disease, including 629 (62%) cases of neuroinvasive disease were reported from 40 states and DC. The number of human disease cases peaked in mid-August; in 911 (89%) cases, illness onset occurred during July–September (Table 1). Median age of WNV patients was 56 years (range 1–98 years), and 574 (56%) cases were in males. Overall, 718 (70%) persons were hospitalized with WNV disease, and 57 (6%) died.

Of the 629 cases of WNV neuroinvasive disease reported, 342 (54%) patients had encephalitis, 239 (38%) had meningitis,

* Available at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm.

INSIDE

1014 Carbon Monoxide Exposures — United States, 2000–2009
1018 Licensure of a Meningococcal Conjugate Vaccine for Children Aged 2 Through 10 Years and Updated Booster Dose Guidance for Adolescents and Other Persons at Increased Risk for Meningococcal Disease — Advisory Committee on Immunization Practices (ACIP), 2011
1020 Vital Signs: Hospital Practices to Support Breastfeeding — United States, 2007 and 2009
1026 Notes from the Field: Malnutrition and Mortality — Southern Somalia, July 2011
1028 QuickStats

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

TABLE 1. Number and percentage of reported cases of arboviral disease, by virus type and selected characteristics — United States, 2010

	WNV		CALV		EEEV		SLEV		POWV	
Characteristic	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**
Total	**1,021**	**(100)**	**75***	**(100)**	**10**	**(100)**	**10**	**(100)**	**8**	**(100)**
Age group (yrs)										
<18	38	(4)	66	(89)	1	(10)	0	(0)	2	(25)
18–59	558	(54)	6	(8)	7	(70)	6	(60)	4	(50)
≥60	425	(42)	2	(3)	2	(20)	4	(40)	2	(25)
Period of illness onset										
January–March	2	(<1)	1	(1)	0	(0)	0	(0)	0	(0)
April–June	42	(4)	4	(5)	0	(0)	1	(10)	4	(50)
July–September	911	(89)	64	(85)	10	(100)	7	(70)	1	(13)
October–December	66	(6)	6	(8)	0	(0)	2	(20)	3	(37)
Clinical syndrome										
Encephalitis	342	(33)	54	(72)	10	(100)	4	(40)	5	(63)
Meningitis	239	(23)	12	(16)	0	(0)	3	(30)	3	(37)
Acute flaccid paralysis†	48	(5)	2	(3)	0	(0)	1	(10)	0	(0)
Nonneuroinvasive	392	(38)	7	(9)	0	(0)	2	(20)	0	(0)
Outcome										
Hospitalization	718	(70)	68	(91)	10	(100)	10	(100)	8	(100)
Death	57	(6)	1	(1)	5	(50)	1	(10)	0	(0)

Abbreviations: WNV = West Nile virus; CALV = California serogroup viruses; EEEV = eastern equine encephalitis virus; SLEV = St. Louis encephalitis virus; POWV = Powassan virus.
* 74 of the 75 reported CALV disease cases were caused by La Crosse virus.
† 33 WNV patients with acute flaccid paralysis also had encephalitis or meningitis. The CALV and SLEV patients with acute flaccid paralysis cases also had encephalitis.

and 48 (8%) had acute flaccid paralysis; 33 (69%) of the 48 patients with acute flaccid paralysis also had encephalitis or meningitis. Fifty-four (9%) patients with neuroinvasive disease died. The national rate of neuroinvasive disease was 0.2 per 100,000 population. The highest reported rates were in Arizona (1.60), New Mexico (1.03), Nebraska (0.55), and Colorado (0.51) (Table 2). Among the neuroinvasive cases, 345 (55%) cases were reported from four states: Arizona (107 cases), New York (89), Texas (77), and California (72). Neuroinvasive disease incidence increased with age, with the highest incidence among persons aged ≥70 years (Figure).

The *MMWR* series of publications is published by the Office of Surveillance, Epidemiology, and Laboratory Services, 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 2011;60:[inclusive page numbers].

Centers for Disease Control and Prevention

Thomas R. Frieden, MD, MPH, *Director*
Harold W. Jaffe, MD, MA, *Associate Director for Science*
James W. Stephens, PhD, *Director, Office of Science Quality*
Stephen B. Thacker, MD, MSc, *Deputy Director for Surveillance, Epidemiology, and Laboratory Services*
Stephanie Zaza, MD, MPH, *Director, Epidemiology and Analysis Program Office*

MMWR Editorial and Production Staff

Ronald L. Moolenaar, MD, MPH, *Editor,* MMWR *Series*
John S. Moran, MD, MPH, *Deputy Editor,* MMWR *Series*
Robert A. Gunn, MD, MPH, *Associate Editor,* MMWR *Series*
Teresa F. Rutledge, *Managing Editor,* MMWR *Series*
Douglas W. Weatherwax, *Lead Technical Writer-Editor*
Donald G. Meadows, MA, Jude C. Rutledge, *Writer-Editors*
Martha F. Boyd, *Lead Visual Information Specialist*
Malbea A. LaPete, Julia C. Martinroe,
Stephen R. Spriggs, Terraye M. Starr
Visual Information Specialists
Quang M. Doan, MBA, Phyllis H. King
Information Technology Specialists

MMWR Editorial Board

William L. Roper, MD, MPH, Chapel Hill, NC, Chairman
Virginia A. Caine, MD, Indianapolis, IN
Jonathan E. Fielding, MD, MPH, MBA, Los Angeles, CA
David W. Fleming, MD, Seattle, WA
William E. Halperin, MD, DrPH, MPH, Newark, NJ
King K. Holmes, MD, PhD, Seattle, WA
Deborah Holtzman, PhD, Atlanta, GA
John K. Iglehart, Bethesda, MD
Dennis G. Maki, MD, Madison, WI
Patricia Quinlisk, MD, MPH, Des Moines, IA
Patrick L. Remington, MD, MPH, Madison, WI
Barbara K. Rimer, DrPH, Chapel Hill, NC
John V. Rullan, MD, MPH, San Juan, PR
William Schaffner, MD, Nashville, TN
Anne Schuchat, MD, Atlanta, GA
Dixie E. Snider, MD, MPH, Atlanta, GA
John W. Ward, MD, Atlanta, GA

TABLE 2. Number and rate* of reported cases of arboviral neuroinvasive disease, by virus type, U.S. Census division, and state — United States, 2010

	WNV		CALV		EEEV		SLEV		POWV	
State†	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
United States	**629**	**0.20**	**68**	**0.02**	**10**	**<0.01**	**8**	**<0.01**	**8**	**<0.01**
New England	14	0.10	—	—	2	0.01	—	—	—	—
Connecticut	7	0.20	—	—	—	—	—	—	—	—
Maine	—	—	—	—	—	—	—	—	—	—
Massachusetts	6	0.09	—	—	1	0.02	—	—	—	—
New Hampshire	1	0.08	—	—	—	—	—	—	—	—
Rhode Island	—	—	—	—	1	0.09	—	—	—	—
Vermont	—	—	—	—	—	—	—	—	—	—
Middle Atlantic	123	0.30	—	—	1	<0.01	—	—	1	<0.01
New Jersey	15	0.17	—	—	—	—	—	—	—	—
New York	89	0.45	—	—	1	0.01	—	—	1	0.01
Pennsylvania	19	0.15	—	—	—	—	—	—	—	—
East North Central	80	0.17	22	0.05	3	0.01	2	<0.01	4	0.01
Illinois	45	0.35	—	—	—	—	—	—	—	—
Indiana	6	0.09	—	—	—	—	—	—	—	—
Michigan	25	0.25	2	0.02	3	0.03	2	0.02	—	—
Ohio	4	0.03	20	0.17	—	—	—	—	—	—
Wisconsin	—	—	—	—	—	—	—	—	4	0.07
West North Central	32	0.16	1	<0.01	—	—	1	<0.01	3	0.01
Iowa	5	0.17	—	—	—	—	—	—	—	—
Kansas	4	0.14	—	—	—	—	—	—	—	—
Minnesota	4	0.08	1	0.02	—	—	—	—	3	0.06
Missouri	3	0.05	—	—	—	—	1	0.02	—	—
Nebraska	10	0.55	—	—	—	—	—	—	—	—
North Dakota	2	0.31	—	—	—	—	—	—	—	—
South Dakota	4	0.49	—	—	—	—	—	—	—	—
South Atlantic	38	0.06	34	0.06	4	0.01	—	—	—	—
Delaware	—	—	—	—	—	—	—	—	—	—
District of Columbia	3	0.49	—	—	—	—	—	—	—	—
Florida	9	0.05	—	—	4	0.02	—	—	—	—
Georgia	4	0.04	2	0.02	—	—	—	—	—	—
Maryland	17	0.30	2	0.03	—	—	—	—	—	—
North Carolina	—	—	22	0.23	—	—	—	—	—	—
South Carolina	1	0.02	—	—	—	—	—	—	—	—
Virginia	4	0.05	—	—	—	—	—	—	—	—
West Virginia	—	—	8	0.44	—	—	—	—	—	—

See table footnotes on page 1012.

Seventy-five cases of CALV disease, including 68 (91%) neuroinvasive disease cases, were reported from 11 states (Table 2); 74 (99%) of the CALV cases were caused by La Crosse virus, the most commonly reported CALV in the United States. Dates of illness onset for human cases ranged from March to November; 64 (85%) cases had illness onset during July–September (Table 1). The median age of patients was 8 years (range 1 month–74 years); 66 (89%) cases occurred in persons aged <18 years, and 42 (56%) occurred in males. One fatal case (1%) was reported. CALV neuroinvasive disease incidence was highest in West Virginia (0.44 per 100,000), North Carolina (0.23), and Ohio (0.17) (Table 2).

Ten EEEV disease cases (all neuroinvasive disease) were reported from five states, with the largest numbers reported from Florida (four cases) and Michigan (three) (Table 2). Dates of illness onset for human cases ranged from July to August (Table 1). Nine cases occurred in adults (median age: 51 years, range: 1–73 years); seven cases occurred in males. Five of the 10 cases (50%) were fatal, including all four cases reported from Florida. Median age in fatal cases was 56 years (range: 1–73 years); median number of days from illness onset to death was 10 (range: 1–11 days).

A total of 10 SLEV disease cases were reported from Texas (three cases), Arkansas (two), Michigan (two), DC (two), and Missouri (one) (Table 2). The DC cases were the first SLEV cases reported from that jurisdiction since 1975; both were classified as nonneuroinvasive disease. The other eight cases all were classified as neuroinvasive disease. Dates of illness onset for the 10 cases overall ranged from June to November (Table 1). All cases occurred in adults (median age: 56 years, range: 23–75 years); five occurred in males. One fatal case (10%) was reported.

TABLE 2. (*Continued*) Number and rate* of reported cases of arboviral neuroinvasive disease, by virus type, U.S. Census division, and state — United States, 2010

	WNV		CALV		EEEV		SLEV		POWV	
State†	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
East South Central	8	0.04	10	0.05	—	—	—	—	—	—
Alabama	1	0.02	—	—	—	—	—	—	—	—
Kentucky	2	0.05	1	0.02	—	—	—	—	—	—
Mississippi	3	0.10	—	—	—	—	—	—	—	—
Tennessee	2	0.03	9	0.14	—	—	—	—	—	—
West South Central	104	0.29	1	<0.01	—	—	5	0.01	—	—
Arkansas	6	0.21	—	—	—	—	2	0.07	—	—
Louisiana	20	0.44	—	—	—	—	—	—	—	—
Oklahoma	1	0.03	—	—	—	—	—	—	—	—
Texas	77	0.31	1	<0.01	—	—	3	0.01	—	—
Mountain	157	0.70	—	—	—	—	—	—	—	—
Arizona	107	1.60	—	—	—	—	—	—	—	—
Colorado	26	0.51	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—	—	—
Montana	—	—	—	—	—	—	—	—	—	—
Nevada	—	—	—	—	—	—	—	—	—	—
New Mexico	21	1.03	—	—	—	—	—	—	—	—
Utah	1	0.04	—	—	—	—	—	—	—	—
Wyoming	2	0.37	—	—	—	—	—	—	—	—
Pacific	73	0.15	—	—	—	—	—	—	—	—
Alaska	—	—	—	—	—	—	—	—	—	—
California	72	0.19	—	—	—	—	—	—	—	—
Hawaii	—	—	—	—	—	—	—	—	—	—
Oregon	—	—	—	—	—	—	—	—	—	—
Washington	1	0.01	—	—	—	—	—	—	—	—

Abbreviations: WNV = West Nile virus; CALV = California serogroup viruses; EEEV = eastern equine encephalitis virus; SLEV = St. Louis encephalitis virus; POWV = Powassan virus.
* Per 100,000 population, based on July 1, 2010, U.S. Census population estimates.
† Including District of Columbia.

Eight POWV disease cases (all neuroinvasive disease) were reported from Wisconsin (four cases), Minnesota (three), and New York (one) (Table 2). Months of illness onset ranged from May to December, with four occurring during April–June and three during October–December (Table 1). Median age of patients was 56 years (range: 6–77 years); seven cases occurred in males. No fatal cases were reported.

Reported by

Nicole P. Lindsey, MS, Jennifer A. Lehman, Dustin Weaver, DVM, Grant L. Campbell, MD, J. Erin Staples, MD, Marc Fischer, MD, Div of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases, CDC. ***Corresponding contributor:*** *Nicole P. Lindsey, nplindsey@cdc.gov, 970-221-6400.*

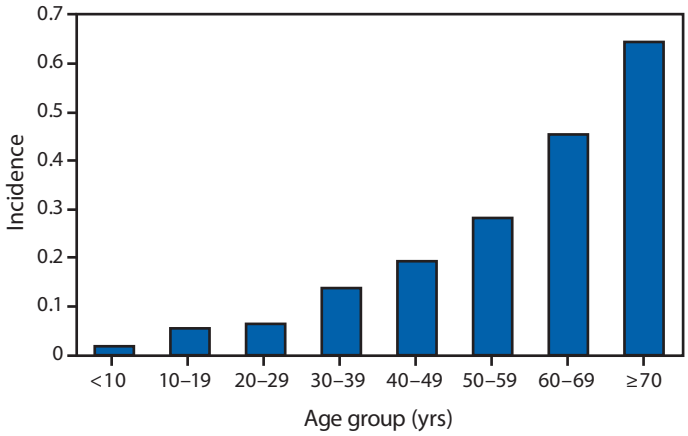
Editorial Note

In 2010, WNV was the most common cause of neuroinvasive arboviral disease in the United States; however, La Crosse virus was the most common cause among children, a finding consistent with previous reports (*1*). EEEV disease, although rare, remained the most severe arboviral disease, with a 50% case-fatality rate. Among human cases of arboviral disease reported in 2010, 88% occurred during July–September, emphasizing the importance of targeting public health interventions for this period.

Reported numbers of arboviral disease cases vary from year to year. During 2004–2007, WNV appeared to reach a stable annual incidence of approximately 0.4 per 100,000. Incidence dropped to 0.2 per 100,000 in 2008 and declined further in 2009 (*1,5*). However, in 2010, the number of reported WNV neuroinvasive disease cases increased 62% from that reported in 2009. The number of arboviral disease cases reported annually is affected by complex interactions between arthropod vectors, vertebrate hosts, human behavior, environmental factors, and diagnostic testing and reporting practices (*6*). These variables make difficult predicting how many cases of disease might occur in the future and in what areas. Persons who seek to limit their risk for arboviral disease should use measures (e.g., repellent) to reduce their exposure to mosquitoes and ticks.

The findings in this report are subject to at least two limitations. First, arboviral surveillance programs, testing capacity, and reporting vary by location. Second, ArboNET is a passive surveillance system that relies on clinicians considering diagnosis of an arboviral disease and obtaining appropriate

FIGURE. Incidence* of cases (N = 629) of West Nile virus neuroinvasive disease,† by age group — United States, 2010



* Per 100,000 population, based on July 1, 2010, U.S. Census estimates.
† Meningitis, encephalitis, or acute flaccid paralysis.

diagnostic tests, and on reporting of laboratory-confirmed cases to public health authorities. Detection and reporting are incomplete, leading to a substantial underestimate of the actual number of cases. Based on previous studies, for every case of WNV neuroinvasive disease, approximately 140 human WNV infections occur, with 80% of infected persons remaining asymptomatic and 20% developing nonneuroinvasive disease (*7,8*). Extrapolating from the 629 reported WNV neuroinvasive disease cases, an estimated 88,000 infections and 17,600 cases of nonneuroinvasive disease might have occurred in 2010; however, only 392 (2%) nonneuroinvasive disease cases were reported.

WNV and other arboviruses continue to cause severe illness in substantial numbers of persons in the United States. Continued surveillance of WNV and other arboviruses is important to guide prevention efforts aimed at reducing the incidence of these diseases. Health-care providers should consider arboviral infections in the differential diagnosis of cases of aseptic meningitis and encephalitis, obtain appropriate specimens for laboratory testing, and promptly report cases to state health departments. Specific etiologic diagnoses in such cases are important to 1) rule out diseases for which specific therapy is available, 2) better inform patients about prognosis, and 3) alert public health authorities to take appropriate control measures. In the absence of effective human vaccines, prevention of arboviral disease depends on community and household efforts to reduce vector densities (e.g., applying insecticides and reducing mosquito breeding sites), personal protective measures to decrease exposure to vectors (e.g., use of repellents and long-sleeved shirts and long pants), and screening blood donors.

What is already known on this topic?

Since West Nile virus (WNV) was first detected in the Western Hemisphere in 1999, it has become the leading cause of neuroinvasive arboviral disease in the United States. However, several other arboviruses can cause sporadic cases and seasonal outbreaks of neuroinvasive disease.

What is added by this report?

WNV was the most common cause of neuroinvasive arboviral diseases in the United States in 2010; however, La Crosse virus was the most common cause among children. Eastern equine encephalitis, although rare, remained the most severe arboviral disease, with a 50% case-fatality rate.

What are the implications for public health practice?

WNV and other arboviruses continue to be a source of severe illness each year for substantial numbers of persons in the United States. Maintaining surveillance remains important to help direct and promote prevention activities.

Acknowledgment

ArboNET surveillance coordinators in local and state health departments.

References

1. Reimann CA, Hayes EB, DiGuiseppi C, et al. Epidemiology of neuroinvasive arboviral disease in the United States, 1999–2007. Am J Trop Med Hyg 2008;79:974–9.
2. CDC. Arboviral infections of the central nervous system—United States, 1996–1997. MMWR 1998;47:517–22.
3. CDC. Arboviral diseases, neuroinvasive and non-neuroinvasive: 2011 case definition. Atlanta, GA: US Department of Health and Human Services, CDC; 2011. Available at http://www.cdc.gov/osels/ph_surveillance/nndss/casedef/arboviral_current.htm. Accessed July 29, 2011.
4. CDC. Surveillance for human West Nile virus disease—United States, 1999–2008. MMWR 2010;59(No. SS-2).
5. CDC. West Nile virus activity—United States, 2009. MMWR 2010; 59:769–72.
6. Hayes EB, Komar N, Nasci RS, Montgomery SP, O'Leary DR, Campbell GL. Epidemiology and transmission dynamics of West Nile virus disease. Emerg Infect Dis 2005;11:1167–73.
7. Mostashari F, Bunning ML, Kitsutani PT, et al. Epidemic West Nile encephalitis, New York, 1999: results of a household-based seroepidemiological survey. Lancet 2001;358:261–4.
8. Tsai TF, Popovici F, Cernescu C, Campbell GL, Nedelcu NI. West Nile encephalitis epidemic in southeastern Romania. Lancet 1998; 352:767–71.

Carbon Monoxide Exposures — United States, 2000–2009

Carbon monoxide (CO) poisoning is a leading cause of unintentional poisoning deaths in the United States (*1*). CO is an odorless, colorless gas that usually remains undetectable until exposure results in injury or death. CO poisoning is preventable; nonetheless, unintentional, non–fire-related CO poisoning is responsible for approximately 15,000 emergency department visits and nearly 500 deaths annually in the United States (*2*). National estimates of CO exposures have been based on secondary data sources, such as hospital administrative records, and are limited to exposures treated within the health-care system. To describe more completely the national burden of CO exposure and risk factors associated with vulnerable populations, CDC used data from the National Poison Data System (NPDS) to characterize reported unintentional, non–fire-related CO exposures, including those that were managed at the site of exposure and were not treated at a health-care facility. Among 68,316 CO exposures reported to poison centers during 2000–2009, a total of 30,798 (45.1%) were managed at the site of exposure with instructions from the poison center by telephone, 36,691 (53.7%) were treated at a health-care facility, and the management site for the remainder was unknown. Although symptoms varied slightly between persons managed on-site and those treated at a health-care facility, most CO exposures occurred at home and most often involved females, children aged ≤17 years, and adults aged 18–44 years. Surveillance and analysis of data from NPDS and secondary sources might provide a more comprehensive description of the burden of CO exposure in the United States and assist in the development of interventions better targeted to high-risk populations.

NPDS is a near real-time, comprehensive poisoning surveillance system that collects data on calls regarding poison exposure placed to any of the U.S. poison centers. NPDS is owned and managed by the American Association of Poison Control Centers. CDC uses NPDS to receive, analyze, and display data from poison center calls. Calls to poison centers come from health-care professionals or persons voluntarily reporting a poison exposure. The information provided by the caller might pertain to themselves or others and is used by the poison center to create a record of the call with details such as the date, poison substance, and symptoms.* If the report concerns someone who was treated at a health-care facility, a poison center staff member will contact the health-care facility during the course of treatment to obtain pertinent clinical information. Details from poison center records are uploaded to NPDS.

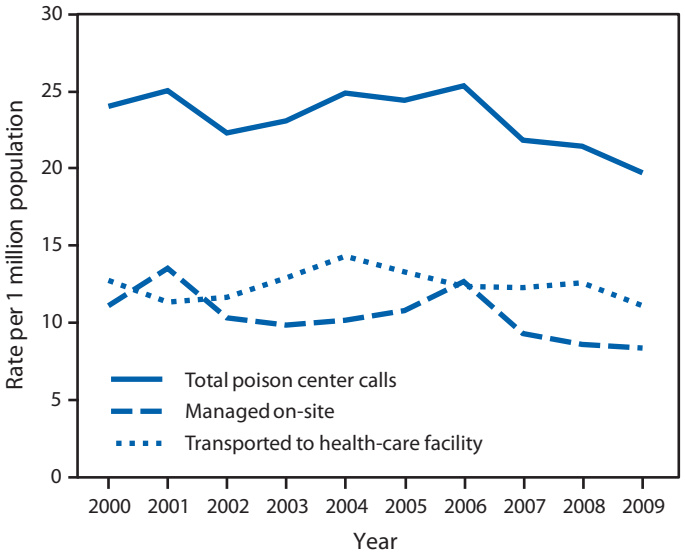
NPDS data from 2000–2009 in which CO was identified in the substance data field and the reason for exposure was recorded as "unintentional" were extracted for this report If "fire" or "smoke" were in the substance data field, these exposures were excluded to restrict the analysis to unintentional, non–fire-related CO exposures. The data were then stratified according to management site (i.e., health-care facility or site of exposure) and a descriptive analysis was conducted. Rates were calculated using reports of CO exposures to the poison centers and 2000–2009 U.S. census data (*3,4*). Additionally, the characteristics of persons managed on-site were compared with those of persons managed at a health-care facility.

The 68,316 CO exposures reported to poison centers during 2000–2009 represented 0.29% of all poison exposures reported in NPDS. Compared with all exposures reported to NPDS, the proportion of reported CO exposures steadily declined, from 0.31% in 2006 to 0.24% in 2009. On average, 23.2 CO exposures were reported per 1 million population per year (range: 19.7–25.3) (Figure). The number of persons with reported CO exposures who were transported to a health-care facility ranged from 11.1 to 14.3 per million each year and the number of persons with reported CO exposures who were managed on-site ranged from 8.6 to 14.0 per million each year (Figure). Total reported CO exposures included 34,356 females (23.0 per million) and 30,257 males (20.9 per million). The most commonly exposed age groups were <17 years (25.7 per million) and 18–44 years (19.4 per million) (Table 1).

CO exposures most frequently occurred between November and February (53.5%) and among persons residing in the Midwest (31.2 per million) or the Northeast (36.7 per million). A greater proportion of CO exposures managed on-site occurred in the Northeast (35.5%) (Table 1). The exposure site was reported as "residence" (77.6%) or "workplace" (12.0%) in most cases (Table 1). Clinical symptoms were reported for 68.1% of the total exposures, with headache, nausea, and dizziness most commonly reported (Table 2). However, 83.0% of reported exposures had a medical outcome of "no effect" or "minor effect." During 2000–2009, a total of 235 CO exposure–related deaths were reported to NPDS. Of those persons who died, 65.0% were male and 30.5% were aged 18–44 years. Most persons (68.2%) transported to a health-care facility were aged <45 years and 18.6% experienced confusion,

* Poison center staff members are trained how to judge whether an exposure has occurred. They use specific information provided by the caller in this determination. If the substance causing the poisoning can not be identified with certainty, it would be classified as "unknown." Poison centers use a combination of reported information, including potential CO sources, CO alarms, symptoms, and fire/rescue CO readings in the same environment to classify calls as CO-related.

FIGURE. Annual rate* of reported carbon monoxide exposures — National Poison Data System, United States 2000–2009



Source: US Census Bureau. Annual estimates of the resident population for the United States, regions, states, and Puerto Rico: April 1, 2000 to July 1, 2009. Washington, DC: US Census Bureau, Population Division; 2010.
* Per 1 million population.

syncope, dyspnea, or chest pain following CO exposure. In contrast, among persons managed on-site, 6.2% experienced confusion, syncope, dyspnea, or chest pain (Table 2).

Reported by

Alvin Bronstein, MD, American Association of Poison Control Centers, Alexandria, Virginia. Jacquelyn H. Clower, MPH, Shahed Iqbal, PhD, Fuyuen Y. Yip, PhD, Colleen A. Martin, MSPH, Arthur Chang, MD, Amy F. Wolkin, MSPH, Div of Environmental Hazards and Health Effects, National Center for Environmental Health; Jeneita Bell, MD, EIS Officer, CDC. ***Corresponding contributor:*** *Jeneita Bell, jbell2@cdc.gov, 770-488-3700.*

Editorial Note

NPDS provides national data regarding CO-exposed persons treated at a health-care facility and those who do not seek medical care at a health-care facility. This is the first analysis for which NPDS has been used to examine a 10-year period of reported CO exposures. During 2000–2009, based on reports to NPDS, 30,798 persons were exposed to CO but were not treated at a health-care facility. Those persons would not have been identified through CO exposure data sources that rely on health-care facility records and mortality data. The characteristics of all CO exposures reported in NPDS, including those treated on-site and at a health-care facility, are consistent with previous knowledge of CO exposure (*1,2*).

What is already known on this topic?

National estimates of carbon monoxide (CO) exposures have only included persons who receive medical attention at a health-care facility.

What is added by this report?

During 2000–2009, a total of 30,798 CO exposures managed outside of a health-care facility were reported in the National Poison Data System (NPDS) that would not have been identified by health-care administrative records. A greater proportion of CO exposures managed on-site were in the Northeast (35.5%), and health effects as a result of CO exposure generally were less severe among persons managed on-site than among those treated at a health-care facility.

What are the implications for public health practice?

NPDS is a useful source of CO-related exposure surveillance data, especially for persons whose CO exposure was not severe enough to require treatment in a health-care facility. State health departments can use this data to detect recent CO exposures and obtain additional information from local poison centers to further characterize populations at-risk, determine the circumstances preceding CO exposure, and better ensure that public health communication and preventive interventions include all potentially affected populations.

Women and children are the most commonly exposed, but deaths from CO exposure more often occur among men, and exposures most often occur at home and during winter months. CO exposures in the Northeast more frequently were managed on-site.

From 2006 to 2009, the rate of reported CO exposures steadily declined, and the call proportion declined from 0.31% to 0.24%. Similarly, the proportion of CO exposures among all reported unintentional poison exposures decreased by 0.8% during the period, which might be attributable to an overall reduction in calls to poison centers for any unintentional poisoning. The decrease in CO exposure calls to poison centers also might be a result of factors such as increased use of home CO alarms and improved use and maintenance of portable generators and other CO-emitting devices. Data available through NPDS are limited and insufficient to identify specific factors that might contribute to the observed decline in CO exposure calls. Poison center case notes could provide useful information to identify sources of exposure such as portable generators and furnaces, which are common in unintentional CO poisonings (*5*).

The findings in this report are subject to at least three limitations. First, not all CO exposures recorded in NPDS are confirmed with biological testing. Each poison expert managing a call uses their own clinical knowledge to determine whether the reported health effects are attributable to the implicated exposure. In some instances, follow-up calls from a

TABLE 1. Incidence and treatment of reported exposures to unintentional, non–fire-related carbon monoxide — National Poison Data System, United States, 2000–2009

	Total (N = 68,316)			Managed on-site* (N = 30,798)			Transported to health-care facility* (N = 36,691)		
Variable*	No.	(%)	Rate per 1 million†	No.	(%)	Rate per 1 million†	No.	(%)	Rate per 1 million†
Age (yrs)									
≤17	18,896	(27.7)	25.7	7,367	(23.9)	10.0	11,344	(30.9)	15.4
18–44	23,100	(20.4)	19.4	9,171	(29.8)	8.1	13,673	(37.3)	12.0
45–64	7,806	(11.4)	10.9	2,924	(9.5)	4.1	4,796	(13.1)	6.7
≥65	2,287	(3.4)	6.2	825	(2.7)	2.2	1,431	(3.9)	3.9
Sex									
Female	34,356	(50.3)	23.0	15,631	(50.8)	10.5	18,282	(59.4)	12.2
Male	30,257	(44.3)	20.9	12,934	(42.0)	8.9	16,982	(46.3)	11.7
Region§									
Midwest	20,527	(30.1)		9,465	(30.7)		10,840	(29.5)	
Northeast	20,030	(29.3)		10,919	(35.5)		8,966	(24.4)	
West	13,510	(19.8)		4,224	(13.7)		6,984	(19.0)	
South	11,366	(16.6)		4,989	(16.2)		8,243	(22.5)	
Exposure site§									
Residence	53,039	(77.6)		24,734	(80.3)		27,569	(75.1)	
Workplace	8,170	(12.0)		2,789	(9.1)		5,273	(14.4)	
Public area	2,593	(3.8)		1,292	(4.2)		1,268	(3.5)	
School	2,016	(3.0)		28	(0.1)		119	(0.3)	
Other	2,498	(4.7)		1,955	(6.3)		2,340	(6.4)	
Outcome									
Death	235	(0.3)		95	(0.3)		106	(0.3)	
Major effect¶	1,027	(1.5)		26	(0.1)		995	(2.7)	
Moderate effect**	10,291	(15.1)		1,542	(5.0)		8,630	(23.5)	
Minor effect††	34,207	(50.1)		12,430	(40.4)		21,345	(58.2)	
No effect	22,520	(33.0)		16,697	(54.2)		5,595	(15.3)	

* Excludes responses listed as "unknown"; therefore, sums might not total 100%.
† Total population based on U.S. Census Bureau data. Source: Annual estimates of the resident population for the United States by sex, selected age group, and regions: April 1, 2000 to July 1, 2009. Washington, DC: U.S. Census Bureau, Population Division; 2010.
§ Rates could not be calculated.
¶ Exposure symptoms were life-threatening or resulted in significant residual disability or disfigurement.
** Exposure symptoms were pronounced, prolonged, or systemic and usually required some form of treatment.
†† Exposure symptoms were minimally noticeable.

TABLE 2. Symptoms of persons exposed to carbon monoxide, by treatment location — National Poison Data System, United States, 2000–2009

	Total* (N = 68,316)		Managed on-site (N = 30,798)		Treated at health-care facility (N = 36,691)	
Symptoms	No.	(%)	No.	(%)	No.	(%)
Headache	30,845	(66.3)	9,733	(67.1)	20,773	(66.1)
Nausea	17,653	(38.0)	5,043	(34.8)	12,399	(39.5)
Dizziness/vertigo	13,363	(28.7)	3,732	(25.7)	9,459	(30.1)
Drowsiness/lethargy	8,966	(19.3)	2,864	(19.8)	5,999	(19.1)
Vomiting	7,550	(16.2)	1,601	(11.0)	5,871	(18.7)
Confusion	2,083	(4.5)	319	(2.2)	1,736	(5.5)
Syncope	1,950	(4.2)	105	(0.7)	1,831	(5.8)
Dyspnea	1,538	(3.3)	313	(2.2)	1,209	(3.9)
Chest pain†	1,226	(2.6)	156	(1.1)	1,054	(3.4)
Other	6,548	(14.1)	1,734	(12.0)	4,707	(15.0)

* Symptoms were reported for 68% of all calls during 2000–2009.
† Includes noncardiac chest pain.

poison center to a health-care facility might identify an elevated carboxyhemoglobin level, but this finding would be indicated in case notes, which are not included in the data poison centers submit to NPDS. Second, additional details regarding the cause of exposure, which would be included in case notes and might be useful in understanding risk-behaviors for public health prevention planning, also are omitted from data submitted to NPDS. Finally, the reported exposures represented in this analysis are an underestimate of all CO exposures. Although >20,000 CO exposure-related emergency department visits are reported annually in the United States, NPDS only captured 36,691 of those over a 10-year period (*6*). Likewise, the number of deaths is an underestimate; previous literature has reported that approximately 450 CO poisoning deaths occur annually in the United States (*2*). This underestimate exists partly because NPDS is a passive surveillance system and poison center use can vary by geographic location (*7*). However, CO exposures recorded by NPDS can be used to supplement data from other CO surveillance systems.

Previously, formal characterization of persons exposed to CO only included those who sought treatment at a health-care facility. This left an information gap that could not be addressed with current surveillance methods using hospital administrative records. NPDS can be used to more accurately depict the burden of CO poisoning and its true health impact and cost to society. Using NPDS data, this report found that the demographics of persons managed on-site for CO exposure and those treated at a health-care facility were similar, and the predominant exposure location (e.g., residence) also was similar. This suggests that current prevention efforts for CO poisoning, such as home installation of CO alarms, also can apply to the population managed on-site. NPDS can be useful in monitoring the impact of such prevention efforts. Additionally, state health departments can partner with local poison centers to obtain additional information from case notes to further characterize populations at-risk, determine the circumstances preceding CO exposure, and help develop local- and state-level approaches to prevent CO exposure.

Acknowledgments

Tegan K. Boehmer, PhD, Div of Environmental Hazards and Health Effects, National Center for Environmental Health.

References

1. CDC. Carbon monoxide–related deaths—United States, 1999–2004. MMWR 2007;56:1309–12.
2. CDC. Unitintentional, non–fire-related, carbon monoxide exposures—United States, 2001–2003. MMWR 2005;54:36–9.
3. US Census Bureau. Annual estimates of the resident population for the United States, regions, states, and Puerto Rico: April 1, 2000 to July 1, 2009. Washington, DC: Population Division, US Census Bureau; 2010. Available at http://www.census.gov/popest/states/NST-ann-est.html. Accessed July 29, 2011.
4. US Census Bureau. Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States: April 1, 2000 to July 1, 2009. Washington, DC: Population Division, US Census Bureau; 2010. Available at http://www.census.gov/popest/national/asrh/NC-EST2009-sa.html. Accessed July 29, 2011.
5. Clower JH, Hampson NB, Iqbal S, Yip FY. Recipients of hyperbaric oxygen treatment for carbon monoxide poisoning and exposure circumstances. J Emerg Med. In press 2011.
6. Litovitz T, Benson BE, Youniss J, Metz E. Determinants of U.S. poison center utilization. Clin Toxicol 2010;48:449–57.
7. Iqbal S, Clower JH, Boehmer TK, Yip FY, Garbe P. Carbon monoxide-related hospitalizations in the US: evaluation of a web-based query system for public health surveillance. Public Health Rep 2010;125:423–32.

Licensure of a Meningococcal Conjugate Vaccine for Children Aged 2 Through 10 Years and Updated Booster Dose Guidance for Adolescents and Other Persons at Increased Risk for Meningococcal Disease — Advisory Committee on Immunization Practices (ACIP), 2011

In January 2011, the Food and Drug Administration lowered the approval age range for use of MenACWY-CRM (Menveo, Novartis Vaccines and Diagnostics), a quadrivalent meningococcal conjugate vaccine, to include persons aged 2 through 55 years. One other quadrivalent meningococcal conjugate vaccine, MenACWY-D (Menactra, Sanofi Pasteur), is licensed in the United States for prevention of meningococcal disease caused by serogroups A, C, Y, and W-135 among persons aged 2 through 55 years; MenACWY-D also is licensed as a 2-dose series for children aged 9 through 23 months (*1,2*). The Advisory Committee on Immunization Practices (ACIP) recommends that persons aged 2 through 55 years at increased risk for meningococcal disease and all adolescents aged 11 through 18 years be immunized with meningococcal conjugate vaccine. ACIP further recommended, in January 2011, that all adolescents receive a booster dose of quadrivalent meningococcal conjugate vaccine at age 16 years (*3*). This report summarizes data supporting the extended age indication for MenACWY-CRM and the interchangeability of the two licensed meningococcal conjugate vaccines.

Safety and Immunogenicity in Children Aged 2 Through 10 Years

The safety and immunogenicity of MenACWY-CRM in children aged 2 through 10 years was evaluated in a multicenter, randomized controlled trial (*1*). A human complement serum bactericidal assay (hSBA) was used to measure antibody responses. Following a single MenACWY-CRM dose, seroresponses to group C, Y, and W-135 in children aged 2 through 5 years and 6 through 10 years were noninferior to responses after a single MenACWY-D dose. Seroresponse was defined as the proportion of subjects with a postvaccination hSBA titer ≥8 if the prevaccination (baseline) titer was <4, or at least a fourfold higher hSBA titer than baseline if the prevaccination titer was ≥4. Overall, the percentage of MenACWY-CRM and MenACWY-D participants aged 2 through 10 years with hSBA titers ≥8 was, respectively, 75% and 80% for serogroup A, 72% and 68% for serogroup C, 90% and 79% for serogroup W-135, and 77% and 60% for serogroup Y (*4*). Injection-site reactions within 7 days after vaccination included pain, erythema, and induration, and were common, with pain being most common. The most common systemic adverse effects were headache and irritability. Rates of adverse effects were similar to those seen after vaccination with MenACWY-D. Serious adverse events were reported in <1% of MenACWY-CRM recipients, and none were attributed to the vaccine.

Use of Meningococcal Conjugate Vaccine in Children Aged 2 Through 10 Years

ACIP recommends vaccination with meningococcal conjugate vaccine for children aged 2 through 10 years at increased risk for meningococcal disease (*3*). A 2-dose primary series is recommended for children with terminal complement deficiencies (e.g., C5–C9, properidin, factor H, or factor D deficiencies) or anatomic or functional asplenia (*5,6*). A single primary dose is recommended for children with increased risk for disease because they are travelers to or residents of countries in which meningococcal disease is hyperendemic or epidemic (e.g., the meningitis belt of sub-Saharan Africa) (*3*). Either meningococcal conjugate vaccine can be used in children aged 2 through 10 years and both are preferred over quadrivalent meningococcal polysaccharide vaccine. This recommendation supersedes the previous recommendation that children aged 2 through10 years should receive only MenACWY-D when meningococcal vaccination is indicated (*2*). Children aged 2 through 10 years with no increased risk for meningococcal disease are not recommended to receive any meningococcal vaccine (*6*).

Interchangeability of MenACWY-CRM and MenACWY-D

In January 2011, ACIP recommended a single booster dose of meningococcal conjugate vaccine for adolescents who received a previous dose before age 16 years (*3*). For persons aged 2 through 55 years at increased risk for meningococcal disease (i.e., persons with asplenia or terminal complement deficiencies, or laboratory workers who work with *Neisseria meningitidis*), a booster dose is recommended if they remain at increased risk (*3,7*).

In a postlicensure study, persistence of hSBA antibodies and the safety and immunogenicity of MenACWY-CRM vaccination were evaluated in persons 3 years after they had received a single dose of MenACWY-CRM or MenACWY-D

(Novartis, unpublished data, 2011). The percentage of participants with hSBA titers ≥8 36 months after a single dose of MenACWY-CRM or MenACWY-D at ages 11 through 18 years was similar for all serogroups (Table 1). After revaccination with MenACWY-CRM, ≥99% of persons previously immunized with MenACWY-CRM or MenACWY-D had hSBA titers ≥8 (Table 2). Injection-site reactions reported within 7 days after revaccination among those who had received MenACWY-CRM followed by MenACWY-CRM or MenACWY-D followed by MenACWY-CRM included pain (45% versus 48%), erythema (7% versus 9%), and induration (11% versus 5%). Systemic adverse events reported by the same groups were headache (24% versus 27%), malaise (5% versus 10%), nausea (8% versus 10%), and fever (2% versus none). The solicited adverse event rates reported after revaccination were similar to the rates reported after primary immunization.

TABLE 1. Percentage of persons with human complement serum bactericidal assay (hSBA) titer ≥8, 3 years after vaccination with a single dose of MenACWY-D* or MenACWY-CRM† at age 11–18 years

	MenACWY-$_D$ (n = 202)		MenACWY-$_{CRM}$ (n = 292)	
Serogroup	%	(95% CI)	%	(95% CI)
A	21	(16–28)	28	(23–33)
C	62	(55–69)	64	(58–69)
W-135	71	(65–77)	82	(77–86)
Y	53	(46–60)	65	(60–71)

Abbreviation: CI = confidence interval.
* Menactra, Sanofi Pasteur.
† Menveo, Novartis Vaccines and Diagnostics.

At this time, no data exist on the use of MenACWY-D following primary vaccination with MenACWY-CRM. Health-care providers should use every opportunity to provide the booster dose when indicated, regardless of the vaccine brand used for the previous dose or doses.

References

1. Food and Drug Administration. Product approval information: package insert. Menveo (Meningococcal [Groups A, C, Y, W-135] oligosaccharide diphtheria CRM197 conjugate vaccine). Rockville, MD: US Department of Health and Human Services, Food and Drug Administration; 2011. Available at http://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm201349.pdf. Accessed August 3, 2011.
2. CDC. Licensure of a meningococcal conjugate vaccine (Menveo) and guidance for use—Advisory Committee on Immunization Practices (ACIP), 2010. MMWR 2010;59:273.
3. CDC. Updated recommendations for use of meningococcal conjugate vaccines—Advisory Committee on Immunization Practices (ACIP), 2010. MMWR 2011;60:72–6.
4. Halperin S, Gupta A, Jeanfreau R, et al. Comparison of the safety and immunogenicity of an investigational and a licensed quadrivalent meningococcal conjugate vaccine in children 2–10 years of age. Vaccine 2010;28:7865–72.
5. CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2005;54(No. RR-7).
6. CDC. Report from the Advisory Committee on Immunization Practices (ACIP): decision not to recommend routine vaccination of all children aged 2–10 years with quadrivalent meningococcal conjugate vaccine (MCV4). MMWR 2008;57:462–5.
7. CDC. Updated recommendation from the Advisory Committee on Immunization Practices (ACIP) for revaccination of persons at prolonged increased risk for meningococcal disease. MMWR 2009;58:1042–3.

TABLE 2. Human complement serum bactericidal assay (hSBA) antibody responses after a booster dose MenACWY-CRM* administered 3 years after a single dose of MenACWY-D† or MenACWY-CRM in persons who received the first dose at age 11–18 years

	Proportion hSBA titer ≥8				Geometric mean titer			
	MenACWY-D† » MenACWY-CRM		MenACWY-CRM » MenACWY-CRM		MenACWY-D » MenACWY-CRM		MenACWY-CRM » MenACWY-CRM	
Serogroup	No.	(%)	No.	(%)	Titer	(95% CI)	Titer	(95% CI)
A	70	(100)	71	(100)	493	(366–664)	356	(256–495)
C	70	(100)	71	(100)	626	(435–901)	703	(473–1,044)
W-135	69	(99)	71	(100)	883	(610–1,278)	987	(656–1,485)
Y	70	(99)	71	(100)	459	(313–671)	679	(447–1,033)

Abbreviation: CI = confidence interval.
* Menveo, Novartis Vaccines and Diagnostics.
† Menactra, Sanofi Pasteur.

Vital Signs: Hospital Practices to Support Breastfeeding — United States, 2007 and 2009

On August 2, 2011, this report was posted as an MMWR *Early Release on the* MMWR *website (http://www.cdc.gov/mmwr).*

Abstract

Background: Childhood obesity is a national epidemic in the United States. Increasing the proportion of mothers who breastfeed is one important public health strategy for preventing childhood obesity. The World Health Organization and United Nations Children's Fund (UNICEF) Baby-Friendly Hospital Initiative specifies Ten Steps to Successful Breastfeeding that delineate evidence-based hospital practices to improve breastfeeding initiation, duration, and exclusivity.

Methods: In 2007 and 2009, CDC conducted a national survey of U.S. obstetric hospitals and birth centers. CDC analyzed these data to describe the prevalence of facilities using maternity care practices consistent with the Ten Steps to Successful Breastfeeding.

Results: In 2009, staff members at most hospitals provide prenatal breastfeeding education (93%) and teach mothers breastfeeding techniques (89%) and feeding cues (82%). However, few hospitals have model breastfeeding policies (14%), limit breastfeeding supplement use (22%), or support mothers postdischarge (27%). From 2007 to 2009, the percentage of hospitals with recommended practices covering at least nine of 10 indicators increased only slightly, from 2.4% to 3.5%. Recommended maternity care practices vary by region and facility size.

Conclusion: Most U.S. hospitals have policies and practices that do not conform to international recommendations for best practices in maternity care and interfere with mothers' abilities to breastfeed.

Implications for Public Health Practice: Hospitals providing maternity care should adopt evidence-based practices to support breastfeeding. Public health agencies can set quality standards for maternity care and help hospitals achieve Baby-Friendly designation. Because nearly all births in the United States occur in hospitals, improvements in hospital policies and practices could increase rates of exclusive and continued breastfeeding nationwide, contributing to improved child health, including lower rates of obesity.

Introduction

Obesity is a national epidemic in the United States, and children are not exempt. Currently, 21% of children aged 2–5 years are at least overweight, and half of those children are obese (*1*). Obese children and adolescents are more likely to have elevated cholesterol and blood pressure levels, breathing and joint problems, and to become obese adults (*2*). Substantial epidemiologic evidence now establishes breastfeeding as an important public health strategy for preventing childhood obesity (*3*). In a meta-analysis, children who were breastfed had reduced odds for obesity at various ages compared with those who were formula fed (*4*). In a separate meta-analysis, children breastfed for 9 months had a more than 30% reduced odds of becoming overweight compared with children never breastfed, and the two studies that examined exclusive breastfeeding showed a stronger effect (*5*). Breastfeeding affords infants and mothers additional benefits. When mothers formula feed or discontinue breastfeeding early, the risk for infectious illnesses in their children is increased, as is the mother's risk for developing breast and ovarian cancer (*6*).

The American Academy of Pediatrics recommends exclusive breastfeeding (breast milk with no solids or other liquids except vitamin/mineral supplements or medications) for about the first 6 months of infancy, and then continued breastfeeding, along with the introduction of iron-rich foods, for at least the first year of an infant's life (*7*). Although approximately 80% of women in the United States indicate before delivery that they intend to breastfeed (*8*), and 75% initiate breastfeeding, at

1 week half of women have already given their infant formula, and only 31% are breastfeeding to any extent at 9 months (*9*).

For women who plan to breastfeed, experiences and support during the first hours and days after birth influence their later ability to continue breastfeeding. Because nearly all U.S. births occur in hospitals, policies that determine hospital practices can influence the feeding behaviors of more than 11,000 infants born each day.* In 1991, the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) developed the Baby-Friendly Hospital Initiative,† the core of which is the Ten Steps to Successful Breastfeeding. These evidence-based steps outline best practices in hospital settings to help mothers initiate and continue breastfeeding, thus increasing exclusivity and duration of breastfeeding well beyond the hospital stay (*10*). In one study of women who intended to breastfeed for longer than 2 months, 30% of them stopped breastfeeding early if they experienced none of the Ten Steps to Successful Breastfeeding in the hospital, compared with only 3% who experienced six steps (*11*). The American Academy of Pediatrics endorsed the Ten Steps to Successful Breastfeeding in 2009 and the White House Task Force on Childhood Obesity Report to the President recommended improving maternity care practices in 2010 (*3*). This report uses data from the national Maternity Practices in Infant Nutrition and Care (mPINC) survey to describe maternity care practices in the United States.§

Methods

In 2007, CDC began the biennial mPINC survey to characterize U.S. maternity practices related to breastfeeding. The mPINC is a census survey, assessing practices at all facilities in all states, the District of Columbia, and four U.S. territories that provide maternity services. In 2007, a total of 2,690 facilities participated, and 2,672 facilities participated in 2009; the response rate each time was 82%. Because 96% of respondents in both survey years were hospitals, with the remaining respondents being free-standing birth centers, in this report the term "hospital" refers to all respondents. The mPINC survey is mailed to each hospital and completed by a key informant identified in advance via a screening telephone call as the person best able to answer questions about infant feeding routines. Data from 2007 and 2009 were analyzed for 10 indicators consistent with WHO/UNICEF's Ten Steps to Successful Breastfeeding: 1) existence of a model breastfeeding policy,¶ 2) staff competency assessment, 3) prenatal breastfeeding education, 4) early initiation of breastfeeding, 5) teaching breastfeeding techniques, 6) limited supplementation of breastfeeding infants, 7) rooming-in, 8) teaching feeding cues, 9) limited use of pacifiers, and 10) post-discharge support.** The prevalence of hospitals with recommended policies and practices in 2007 and 2009 for each of the 10 indicators were assessed. Data for 2009 were analyzed to describe variations by geographic area and hospital annual number of births. Because the mPINC survey is a census rather than a sample, no statistical tests were conducted.

Results

In 2009, most hospitals reported providing prenatal breastfeeding education (92.8%), teaching women breastfeeding techniques (89.1%), and teaching women how to recognize and respond to infant feeding cues (81.8%) (Table 1). For all other indicators, half or fewer hospitals followed recommended practices. The lowest prevalence of recommended practices related to having a model breastfeeding policy (14.4%); limiting use of formula, water, or glucose supplements for healthy, full-term breastfed infants (21.5%); and providing adequate breastfeeding support to breastfeeding mothers at hospital discharge (26.8%). From 2007 to 2009, the percent of hospitals implementing recommended practices improved at least 1 percentage point for seven indicators, but less than 1 percentage point for three indicators. The majority of hospitals were implementing three to five recommended practices (60.5% in 2007 and 54.3% in 2009), with only 2.4% of hospitals implementing at least nine recommended practices in 2007, and 3.5% in 2009 (Figure). Fewer than 1% of hospitals implemented all 10 policies and practices either year.

The Northeast had the highest prevalence of hospitals with recommended practice for most indicators (Table 2). However, even in the Northeast, the prevalence of recommended practice

* National Vital Statistics System birth data available at http://www.cdc.gov/nchs/births.htm.

† Additional information available at http://www.babyfriendlyusa.org/eng/03.html.

§ Additional information available at http://www.cdc.gov/breastfeeding/data/mpinc/index.htm.

¶ A model breastfeeding policy includes all of the following elements: 1) in-service training, 2) prenatal breastfeeding classes, 3) asking about mothers' feeding plans, 4) initiating breastfeeding within 1 hour of uncomplicated vaginal birth, 5) initiating breastfeeding after recovery for uncomplicated cesarean deliveries and/or showing mothers how to express milk and maintain lactation if separated from infant, 6) giving only breast milk to breastfed infants, 7) rooming-in 24 hours/day, 8) breastfeeding on demand, 9) no pacifier use by breastfed infants, and 10) referral of mothers with breastfeeding problems and/or referral of mothers to appropriate breastfeeding resources at discharge. Inclusion of these elements was derived from the Academy of Breastfeeding Medicine's Model Breastfeeding Policy. Additional information available at http://www.bfmed.org/Media/Files/Protocols/English%20Protocol%207%20Model%20Hospital%20Policy.pdf.

** Strategies include home visit and hospital postpartum follow-up visit (physical contact); follow-up telephone call after discharge (reaching out); and hospital telephone number to call, hospital-based support group, other breastfeeding support group, lactation consultant, etc. (referrals).

TABLE 1. The Ten Steps to Successful Breastfeeding* and national prevalence of hospitals with corresponding recommended practices, as measured by indicators consistent with the Ten Steps — Maternity Practices in Infant Nutrition and Care (mPINC), United States, 2007 and 2009

Ten Steps to Successful Breastfeeding*	mPINC indicator	2007 (%)†	2009 (%)†
1. Have a written breastfeeding policy that is routinely communicated to all health care staff	Model breastfeeding policy: hospital has a written breastfeeding policy that includes 10 model policy elements§	11.7	14.4
2. Train all health care staff in skills necessary to implement this policy	Staff competency assessment: nurses/birth attendants are assessed for competency in basic breastfeeding management and support at least once per year	44.6	49.7
3. Inform all pregnant women about the benefits and management of breastfeeding	Prenatal breastfeeding education: breastfeeding education is included as a routine element of prenatal classes	92.5	92.8
4. Help mothers initiate breastfeeding within an hour of birth	Early initiation of breastfeeding: ≥90% of healthy full-term breastfed infants initiate breastfeeding within one hour of uncomplicated vaginal birth	43.5	50.9
5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants	Teach breastfeeding techniques: ≥90% of mothers who are breastfeeding or intend to breastfeed are taught breastfeeding techniques (e.g., positioning, how to express milk, etc.)	87.8	89.1
6. Give breastfeeding newborn infants no food or drink other than breast milk unless medically indicated	Limited use of breastfeeding supplements: <10% of healthy full-term breastfed infants are supplemented with formula, glucose water, or water	20.6	21.5
7. Practice rooming in - that is, allow mothers and infants to remain together 24 hours per day	Rooming-in: ≥90% of healthy full-term infants, regardless of feeding method, remain with their mother for at least 23 hours per day during the hospital stay	30.8	33.2
8. Encourage breastfeeding on demand	Teach feeding cues: ≥90% of mothers are taught to recognize and respond to infant feeding cues instead of feeding on a set schedule	77.0	81.8
9. Give no artificial teats or pacifiers to breastfeeding infants	Limited use of pacifiers: <10% of healthy full-term breastfed infants are given pacifiers by maternity care staff members	25.3	30.1
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic	Post-discharge support: hospital routinely provides three modes of post-discharge support to breastfeeding mothers: physical contact, active reaching out, and referrals¶	26.8	26.8

* As designated by Baby-Friendly USA. The U.S. steps are the same as those recommended by the World Health Organization/UNICEF, except for step 4, which in the United States recommends that mothers should initiate breastfeeding within 1 hour of birth, compared with 30 minutes elsewhere.

† Number responding varied slightly from totals (2007 = 2,679, 2009 = 2,665) for each of the prevalence estimates.

§ Model policy elements are 1) in-service training, 2) prenatal breastfeeding classes, 3) asking about mothers' feeding plans, 4) initiating breastfeeding within 1 hour of uncomplicated vaginal birth, 5) initiating breastfeeding after recovery for uncomplicated cesarean delivery and/or showing mothers how to express milk and maintain lactation if separated from infant, 6) giving only breast milk to breastfed infants, 7) rooming-in 24 hours/day, 8) breastfeeding on demand, 9) no pacifier use by breastfed infants, 10) referral of mothers with breastfeeding problems and/or referral of mothers to appropriate breastfeeding resources at discharge.

¶ Physical contact = home visit, hospital postpartum follow-up visit; active reaching out = follow-up telephone call to patient after discharge; referrals = hospital phone number to call, hospital-based support group, other breastfeeding support group, lactation consultant/specialist, outpatient clinic.

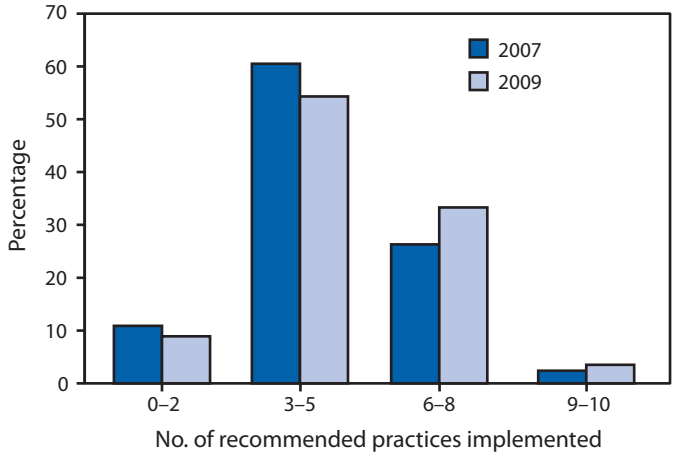
exceeded 50% for only six indicators, and only 32% of hospitals had a model breastfeeding policy. Although the Mountain Plains and Southwest regions each had the lowest prevalence of recommended practice on each of several indicators, no specific region was consistently the lowest across all indicators.

Larger hospitals were more likely to have model breastfeeding policies. Despite such policies, the largest hospitals (≥5,000 births annually) had the lowest prevalence of recommended practice on each of several indicators, including only 7.9% with limited hospital use of breastfeeding supplements (Table 2). The prevalence of recommended practice on institutional indicators, including having a model policy, assessing staff breastfeeding competency, and providing prenatal breastfeeding education, was lower among smaller hospitals. However, smaller hospitals had a higher prevalence of adherence to recommended practice on other indicators, including early initiation of breastfeeding, limited use of supplements, rooming-in, and providing discharge care.

Conclusions and Comment

Improving breastfeeding rates is one strategy to address childhood obesity. For women who intend to breastfeed, the hospital experience is critical. These data illustrate the persistent use of practices that are inconsistent with best-practice standards and do not support breastfeeding. To give infants the best start in achieving a healthy life, including reduced obesity, mothers must be supported immediately after birth to establish breastfeeding. Suboptimal breastfeeding in the United States annually results in an estimated $2.2 billion in additional direct medical costs (*12*). Recognizing the important

FIGURE. Percentage of hospitals that implemented recommended maternity care practices related to breastfeeding* — Maternity Practices in Infant Nutrition and Care Survey (mPINC), United States, 2007 and 2009



* Recommended maternity care practices are indicators of the Ten Steps to Successful Breastfeeding (available at http://www.babyfriendlyusa.org/eng/10steps.html), as measured in the mPINC survey.

role of hospitals in helping women begin breastfeeding, *Healthy People 2020* added two objectives related to breastfeeding and maternity care: reducing the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life (MICH-23), and increasing the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies (MICH-24) (*13*). Even infants of mothers who choose to feed their infants both breast milk and formula should not be given formula in the hospital unless medically indicated, as hospital supplementation is associated with early discontinuation of breastfeeding (*14*). Recognizing exclusive breastfeeding as a quality-of-care issue, the Joint Commission, the organization that accredits and certifies U.S. hospitals, added exclusive breast milk feeding in the hospital as a new quality of care measure in 2010 (*15*).

The Baby-Friendly Hospital Initiative recognizes hospitals with best practices in supporting breastfeeding. To be designated as Baby-Friendly, a hospital must implement the WHO/UNICEF Ten Steps to Successful Breastfeeding and comply with the *International Code of Marketing of Breast-milk Substitutes*, which requires hospitals to pay fair market value for infant formula and not promote items detrimental to breastfeeding, including discharge bags that contain formula (*16*). The percent of U.S. infants born at Baby-Friendly hospitals increased from 1.8% in 2007 to 4.5% in 2011 (*17*).

The mPINC survey assesses the Ten Steps to Successful Breastfeeding using a key informant interview, a methodology that is not directly comparable to the Baby-Friendly designation process, which incorporates direct observation and interviews with mothers. However, reports from the mPINC survey provide all hospitals an opportunity to identify practices that inhibit mothers' abilities to breastfeed. Every hospital that participates in the mPINC survey receives a report of its own results showing how its practices compare with recommended practices and with practices of hospitals around the country. These reports can help hospitals develop and implement a plan to improve care to better support breastfeeding, with the goal of preparing hospitals to move more quickly toward Baby-Friendly designation.

A strong breastfeeding policy is the foundation of quality hospital breastfeeding support and sets standards for the remaining nine steps. These data illustrate that in most states few hospitals have established breastfeeding policies that fully support and encourage mothers to breastfeed. The Northeast had the highest prevalence of having a model policy and also the highest prevalence of recommended practice on many indicators. However, policy does not necessarily indicate practice. To improve practice, hospitals will need to ensure that staff members are sufficiently trained to carry out strong breastfeeding policies, and routinely assess adherence.

Although hospital support is critical for helping mothers establish breastfeeding, it is not the only support needed to help them continue breastfeeding. As documented in the *Surgeon General's Call to Action to Support Breastfeeding,* families, communities, employers, health-care providers, and government and nonprofit agencies all have critical roles to play

Key Points

- Breastfeeding for 9 months reduces a child's odds of becoming overweight by more than 30%.
- Although 75% of U.S. women begin breastfeeding, only 31% are still breastfeeding at 9 months.
- Suboptimal breastfeeding in the United States results in an estimated $2.2 billion annually in additional direct medical costs.
- Hospital policies and practices to support breastfeeding are critical for improving breastfeeding rates. However, in 2009 only 3.5% of U.S. hospitals were following at least nine of the 10 practices consistent with the Baby-Friendly Ten Steps to Successful Breastfeeding.
- Facilities providing maternity care need to adopt evidence-based practices to support breastfeeding. Government and public health agencies can help by working with hospitals to achieve Baby-Friendly designation.
- Additional information is available at http://www.cdc.gov/vitalsigns.

TABLE 2. Percentage of hospitals that had implemented recommended practices on indicators consistent with the Ten Steps to Successful Breastfeeding,* by region and hospital annual births — Maternity Practices in Infant Nutrition and Care (mPINC) Survey, United States, 2009

		Steps implemented									
Hospital location/ births	Participants (%)	1. Model breast-feeding policy (%)	2. Staff competency assessment (%)	3. Prenatal breast-feeding education (%)	4. Early initiation of breast-feeding (%)	5. Teach breast-feeding technique (%)	6. Limited use of breast-feeding supplements (%)	7. Rooming-in (%)	8. Teach feeding cues (%)	9. Limited use of pacifiers (%)	10. Post-discharge support (%)
Region†											
Western	16.4	15.7	49.4	90.4	59.1	87.4	26.8	67.9	81.7	42.8	26.7
Southwest	13.0	11.9	48.0	82.4	39.1	84.9	17.5	40.1	77.9	29.2	20.4
Southeast	16.6	10.3	55.1	93.6	42.6	89.0	12.7	26.8	80.3	23.3	21.7
Northeast	9.2	31.8	64.8	97.6	58.5	93.1	27.3	23.7	91.1	51.2	34.0
Mountain Plains	14.9	8.1	38.1	92.6	55.6	87.3	23.4	28.5	75.8	18.2	31.7
Midwest	20.2	15.4	45.6	97.7	51.7	91.4	22.6	20.3	84.3	24.4	31.2
Mid-Atlantic	9.8	13.0	54.7	94.1	50.6	92.3	21.7	19.5	84.9	32.1	20.8
Annual births											
<250	22.5	7.0	33.2	83.7	61.6	85.7	38.7	47.0	77.9	40.7	34.6
250–499	17.2	11.6	41.8	90.4	54.1	89.4	21.1	27.2	83.0	23.4	27.5
500–999	20.8	11.8	51.6	95.4	49.2	88.8	17.5	29.9	79.8	25.0	23.8
1,000–1,999	19.9	19.2	61.6	97.5	49.1	91.5	16.7	27.1	86.3	26.7	27.3
2,000–4,999	17.4	22.7	60.8	97.2	39.7	90.7	11.5	32.7	83.1	31.9	20.3
≥5,000	2.4	25.0	63.5	100.0	38.7	90.5	7.9	30.7	82.5	41.3	17.5

* Recommended maternity care practices are indicators of the Ten Steps to Successful Breastfeeding (available at http://www.babyfriendlyusa.org/eng/10steps.html), as measured in the mPINC survey.

† Western = Alaska, American Samoa, Arizona, California, Guam, Hawaii, Idaho, Nevada, Oregon, Washington; Southwest = Arkansas, Louisiana, New Mexico, Oklahoma, Texas; Southeast = Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee; Northeast = Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont; Mountain Plains = Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, Wyoming; Midwest = Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin; Mid-Atlantic = Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Puerto Rico, Virginia, U.S. Virgin Islands, West Virginia.

(*18*). Ongoing efforts and initiatives in these areas include the Affordable Care Act, which amended the Fair Labor Standards Act to require employers with more than 50 employees to provide reasonable break time and a private location (other than a bathroom) for breastfeeding mothers to express milk.[††] Additionally, the U.S. Department of Agriculture's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which supports approximately 50% of all infants born in the United States, recently revised its program to support breastfeeding more effectively by modifying the mother's food package to be more supportive of women who are breastfeeding, and increasing peer counseling support for breastfeeding.[§§] CDC produces an annual Breastfeeding Report Card, which provides state-level data on breastfeeding rates and key types of community breastfeeding support, showing where states have been successful and where more work is needed to promote and support breastfeeding.[¶¶]

The findings in this report are subject to at least two limitations. The survey was completed by one key informant at each hospital and might not accurately reflect actual hospital practices. To ensure data were as valid as possible, CDC requested that the survey be completed by the person most knowledgeable of the hospital's maternity practices, in consultation with other knowledgeable persons, as needed. Second, although more than 80% of hospitals participated in each survey, practices in those that participated and those that did not might differ.

Hospitals provide care to nearly all women giving birth in the United States; however, in most hospitals, this care falls short of evidence-based best practices that fully support mothers to be able to breastfeed. Systematically improving maternity care practices, including increased adherence to the Ten Steps to Successful Breastfeeding, will help women who intend to breastfeed get the support they need to be able to start and continue breastfeeding, and by so doing, reduce child obesity and improve other aspects of child health.

Reported by

Cria G. Perrine, PhD, Katherine R. Shealy, MPH, Kelley S. Scanlon, PhD, Laurence M. Grummer-Strawn, PhD, Deborah A. Galuska, PhD, Div of Nutrition, Physical Activity, and Obesity; Deborah L. Dee, PhD, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; CDC. Jennifer H. Cohen, PhD, Battelle Centers for Public Health Research and Evaluation, Seattle, WA. ***Contributing correspondent:*** *Cria G. Perrine, CDC, 770-488-5183, cperrine@cdc.gov.*

Acknowledgments

Hospitals and birth centers that participated in the mPINC survey. Persons involved in developing and implementing the survey.

[††] Patient Protection and Affordable Care Act (as amended through May 1, 2010). Pub, L, No. 114–48. Available at http://docs.house.gov/energycommerce/ppacacon.pdf.

[§§] Additional information available at http://www.fns.usda.gov/wic/breastfeeding/mainpage.htm.

[¶¶] Additional information available at http://www.cdc.gov/breastfeeding/data/reportcard.htm.

References

1. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in U.S. children and adolescents, 2007–2008. JAMA 2010;303:242–9.
2. Reilly JJ, Methven E, McDowell ZC, et al. Health consequences of obesity. Arch Dis Child 2003;88:748–52.
3. White House Task Force on Childhood Obesity. Solving the problem of childhood obesity within a generation. Washington, DC: The White House; 2010. Available at http://www.letsmove.gov/white-house-task-force-childhood-obesity-report-president. Accessed June 30, 2011.
4. Owen CG, Martin RM, Whincup PH, Davey Smith G. Effect of infant feeding on the risk of obesity across the life course: a quantitative review of published evidence. Pediatrics 2005;115:1367–77.
5. Harder T, Bergmann R, Kallischnigg G, Plagemann A. Duration of breastfeeding and risk of overweight: a meta-analysis. Am J Epidemiol 2005;162:397–403.
6. Ip S, Chung M, Raman G, et al. Breastfeeding and maternal and infant health outcomes in developed countries. Rockville, MD: Agency for Healthcare Research and Quality; 2007.
7. Gartner LM, Morton J, Lawrence RA, et al. Breastfeeding and the use of human milk. Pediatrics 2005;115:496–506.
8. Declercq ER, Sakala C, Corry MP, Applebaum S. Listening to mothers II: report of the Second National U.S. Survey of Women's Childbearing Experiences. New York, NY: Childbirth Connection; 2006.
9. CDC. Breastfeeding among U.S. children born 2000–2008, CDC National Immunization Survey. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm. Accessed July 8, 2011.
10. Kramer MS, Chalmers B, Hodnett ED, et al. Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. JAMA 2001;285:413–20.
11. DiGirolamo AM, Grummer-Strawn LM, Fein SB. Effect of maternity-care practices on breastfeeding. Pediatrics 2008;122:s43–9.
12. Bartick M, Reinhold A. The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. Pediatrics 2010;125:e1048–56.
13. US Department of Health and Human Services. Healthy People 2020: Maternal, Infant, and Child Health Objectives. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=26. Accessed May 20, 2011.
14. World Health Organization. Evidence for the ten steps to successful breastfeeding. Geneva, Switzerland: World Health Organization; 1998.
15. Joint Commission. Specifications manual for Joint Commission National Quality Care Measures: perinatal care. Available at http://manual.jointcommission.org/releases/TJC2011A/PerinatalCare.html. Accessed May 20, 2011.
16. World Health Organization. International code of marketing of breast-milk substitutes. Geneva, Switzerland: World Health Organization; 1981.
17. CDC. Breastfeeding report card—United States, 2011. Atlanta, GA: US Department of Health and Human Services, CDC; 2011. Available at http://www.cdc.gov/breastfeeding/data/reportcard.htm. Accessed August 1, 2011.
18. US Department of Health and Human Services. The Surgeon General's call to action to support breastfeeding. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General; 2011.

Notes from the Field

Malnutrition and Mortality — Southern Somalia, July 2011

In July 2011, the internationally supported Food Security and Nutrition Analysis Unit — Somalia* conducted nutrition and mortality surveys across 17 livelihood zones† in southern Somalia to assess the impact of 18 months of insecurity and drought, which have resulted in crop failure, livestock mortality, increased cereal prices, and widespread malnutrition. On July 14, CDC was asked to assist with analyzing the survey data. This report describes the results of that analysis.

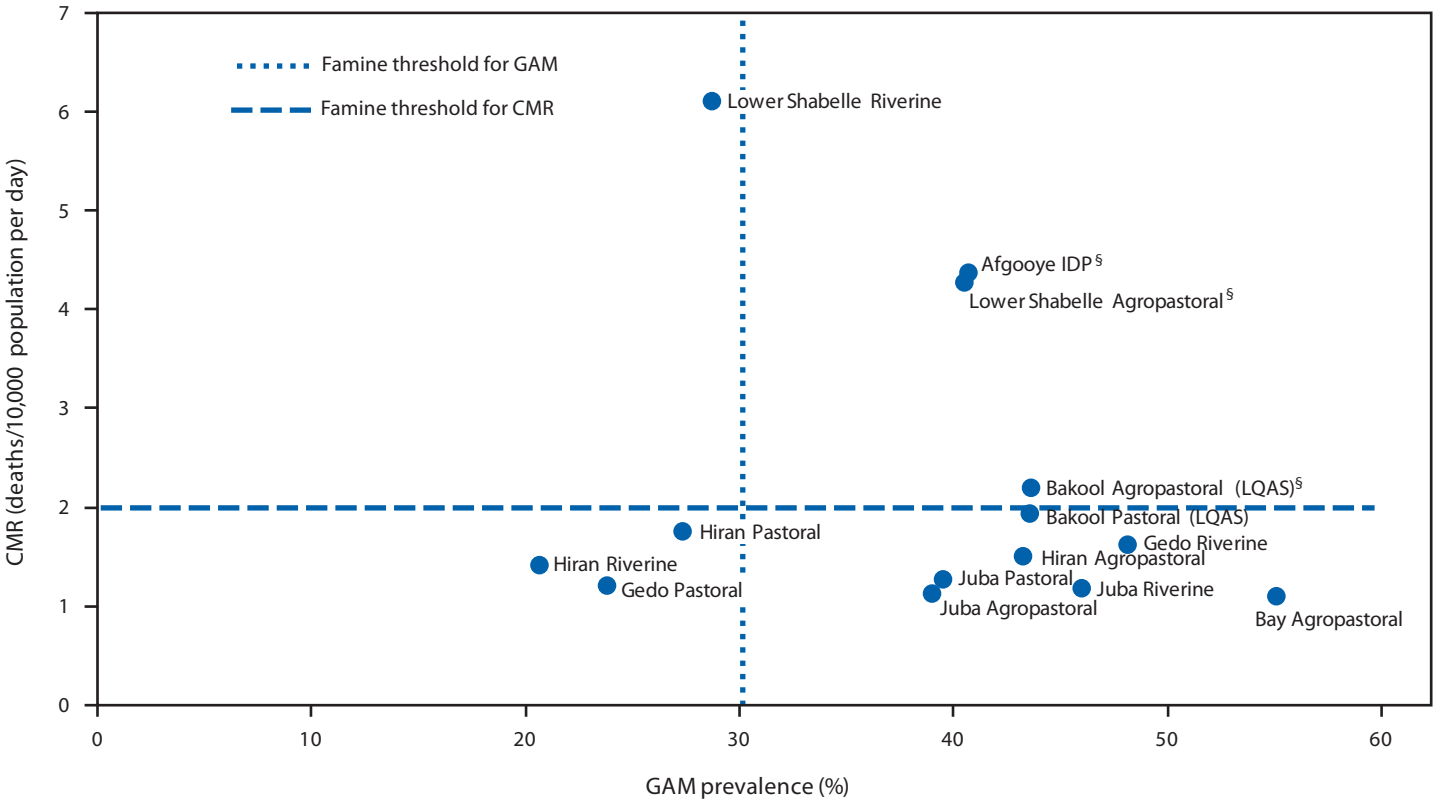
* Funded by the U.S. Agency for International Development, European Commission, U.K. Department for International Development, Swedish International Development Cooperation Agency, Swiss Agency for Development and Cooperation, United Nations Childrens Fund, Italian Cooperation, Office of the United Nations High Commissioner for Refugees, and Common Humanitarian Fund-Somalia, and implemented by the Food and Agriculture Organization of the United Nations.

† Areas within which residents share generally the same pattern of livelihood (e.g., agriculture and/or raising livestock).

Fifteen of the 17 surveys were conducted using standardized monitoring and assessment of relief and transitions (SMART) methodology, which incorporates standard guidelines, questionnaires, and a software package to assess data quality (*1*). The remaining two surveys employed lot quality assurance sampling (LQAS), a method to assess whether a health condition in a given population exceeds a critical threshold. As of August 1, surveys in 15 livelihood zones (13 using SMART and two using LQAS) had been assessed for data quality using emergency nutrition assessment software (*2*). Prevalence of global acute malnutrition (GAM) was estimated using World Health Organization growth standards (*3*). Crude mortality rates (CMRs) and mortality rates for children aged <5 years were calculated using the most recent population estimates available (*4*).

Prevalence of GAM was >20% in all 15 livelihood zones analyzed (Figure). In 11 of the 15 zones, GAM exceeded the famine threshold of 30% (range: 39%–55%). In four zones,

FIGURE. Global acute malnutrition (GAM) prevalence and crude mortality rates (CMRs) — 15 livelihood zones,* southern Somalia, July 2011†



Abbreviation: IDP = internally displaced persons; LQAS = lot quality assurance sampling.
* Areas within which residents share generally the same pattern of livelihood (e.g., agriculture and/or raising livestock).
† Gedo Agropastoral data (GAM: 51.9%, CMR: not available) are not shown.
§ Zone classified as Famine/Humanitarian Catastrophe.

CMR exceeded the famine threshold of 2 deaths/10,000 population per day (range: 2.2–6.1); in all zones, the mortality rate among those aged <5 years ranged from 4.1 to 20.3 deaths/10,000/day. Survey results for three zones (Lower Shabelle Agropastoral, Afgooye [internally displaced persons], and Bakool Agropastoral) were beyond the famine thresholds for both GAM and CMR (Figure) and therefore were classified as Famine/Humanitarian Catastrophe on the integrated food security phase classification scale (*5*).

The current situation, with extremely high levels of acute malnutrition and mortality, represents the worst nutrition crisis in Africa since the 1991–1992 famine in Somalia. Because the harvest season is still months away, the severe nutrition crisis is likely to spread across southern Somalia in the coming months. An opportunity exists for the international community to improve nutrition and prevent additional deaths. Priority interventions must focus on ensuring improved access to food and nutrition and health-care services.

Reported by

Grainne M. Moloney, Elijah O. Odundo, Louise M. Masese, Ahono R. Busili, Tom J. Oguta, Joseph M. Waweru, Mohamed A. Borle, Abukar Y. Nur, Food Security and Nutrition Analysis Unit — Somalia. Leisel E. Talley, MPH, Jeffrey D. Ratto, MPH, Curtis Blanton, MS, Michael L. Gerber, MPH, Mark A. Anderson, MD, Kashef Ijaz, MD, Scott F. Dowell MD, Div of Global Disease Detection and Emergency Response, Center for Global Health, CDC. ***Corresponding contributor:*** *Mark A. Anderson, manderson@cdc.gov, 770-488-0689.*

Acknowledgments

Mohamed Moalim, Bashir Osman, Mohammed Haji Nur, Ibrahim Mohamud Mohamed, Abdikarim Aden, Hussein Hirey and Mohammed Hussein Nur, Food Security and Nutrition Analysis Unit — Somalia.

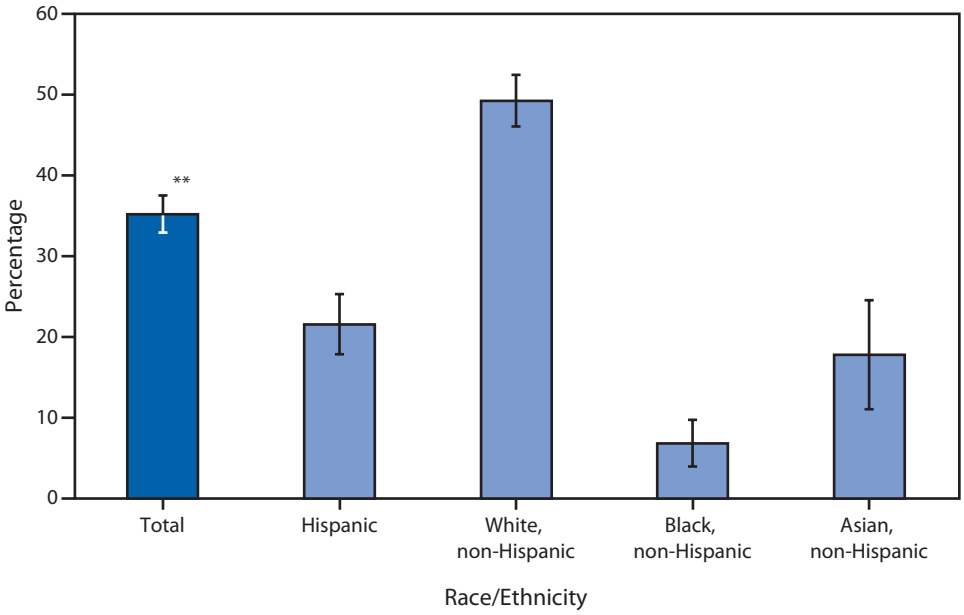
References

1. Standard Monitoring & Assessment of Relief & Transitions (SMART). Measuring mortality, nutritional status, and food security in crisis situations: SMART methodology version 1, April 2006. Available at http://smartmethodology.org/images/stories/SMART_Methodology_08-07-2006.pdf. Accessed August 1, 2011.
2. CDC. Emergency nutrition assessment software. Atlanta, GA: US Department of Health and Human Services, CDC; 2011. Available at http://www.cdc.gov/globalhealth/gdder/ierh/researchandsurvey/enasoftware.htm. Accessed August 1, 2011.
3. World Health Organization. The WHO child growth standards. Geneva, Switzerland: World Health Organization; 2011. Available at http://www.who.int/childgrowth/en/index.html. Accessed August 1, 2011.
4. Food Security and Nutrition Analysis Unit. Total population in acute food and livelihood crisis (AFLC), humanitarian emergency (HE) and famine in Somalia. Available at http://fsnau.org/downloads/Total%20Population%20in%20AFLC%2C%20HE%20and%20Famine%20in%20Somalia.pdf. Accessed August 1, 2011.
5. IPC Global Partners. Integrated food security phase classification technical manual. Version 1.1. Rome, Italy: Food and Agriculture Organization of the United Nations; 2008. Available at http://www.fao.org/docrep/010/i0275e/i0275e.pdf. Accessed August 1, 2011.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Teens Aged 14–17 Years Who Had a Sunburn* During the Preceding 12 Months,† by Race/Ethnicity§ — National Health Interview Survey, United States, 2010¶



* Sunburn is defined as even a small part of the skin turning red or hurting for ≥12 hours. Burns from sunlamps and other indoor tanning devices are included.
† Based on an affirmative response to the question, "During the past 12 months, has [child] had a sunburn?"
§ Persons of Hispanic ethnicity might be of any race or combination of races. Non-Hispanic persons of a single race other than those shown or of multiple races are not shown separately because of small sample sizes but are included in the total.
¶ Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. population and are derived from the National Health Interview Survey sample child component.
** 95% confidence interval.

In 2010, approximately one third of U.S. teens aged 14–17 years had a sunburn during the preceding 12 months. One half of non-Hispanic white teens had a sunburn during the preceding 12 months and were more than twice as likely as Hispanic (22%) and non-Hispanic Asian teens (18%) and approximately seven times as likely as non-Hispanic black teens (7%) to have had a sunburn during that period.

Source: National Health Interview Survey, 2010 data. Available at http://www.cdc.gov/nchs/nhis.htm.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 30, 2011 (30th week)*

Disease	Current week	Cum 2011	5-year weekly average†	Total cases reported for previous years 2010	2009	2008	2007	2006	States reporting cases during current week (No.)
Anthrax	—	—	—	—	1	—	1	1	
Arboviral diseases§,¶:									
California serogroup virus disease	—	8	4	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	0	10	4	4	4	8	
Powassan virus disease	—	4	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	—	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	17	177	2	NN	NN	NN	NN	NN	NH (1), NY (15), PA (1)
Botulism, total	2	50	3	112	118	145	144	165	
foodborne	—	6	0	7	10	17	32	20	
infant	2	38	2	80	83	109	85	97	OH (1), WA (1)
other (wound and unspecified)	—	6	1	25	25	19	27	48	
Brucellosis	2	40	3	115	115	80	131	121	ID (1), CA (1)
Chancroid	1	12	1	24	28	25	23	33	VA (1)
Cholera	—	21	0	13	10	5	7	9	
Cyclosporiasis§	8	89	6	179	141	139	93	137	NY (1), MO (1), FL (5), TX (1)
Diphtheria	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	4	0	23	35	30	22	29	
nonserotype b	—	67	3	200	236	244	199	175	
unknown serotype	1	148	3	223	178	163	180	179	MI (1)
Hansen disease§	—	25	2	98	103	80	101	66	
Hantavirus pulmonary syndrome§	—	14	1	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal§	1	68	7	266	242	330	292	288	NY (1)
Influenza-associated pediatric mortality§,††	—	110	1	61	358	90	77	43	
Listeriosis	5	255	21	821	851	759	808	884	OH (2), VA (1), FL (1), ID (1)
Measles§§	—	154	1	63	71	140	43	55	
Meningococcal disease, invasive¶¶:									
A, C, Y, and W-135	—	117	4	280	301	330	325	318	
serogroup B	—	55	3	135	174	188	167	193	
other serogroup	—	6	0	12	23	38	35	32	
unknown serogroup	2	262	8	406	482	616	550	651	MO (1), FL (1)
Novel influenza A virus infections***	—	2	0	4	43,774	2	4	NN	
Plague	—	1	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic§	—	—	—	—	—	—	—	NN	
Psittacosis§	—	1	0	4	9	8	12	21	
Q fever, total§	—	41	3	131	113	120	171	169	
acute	—	28	2	106	93	106	—	—	
chronic	—	13	0	25	20	14	—	—	
Rabies, human	—	1	0	2	4	2	1	3	
Rubella†††	—	4	0	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV§	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	78	2	148	161	157	132	125	
Syphilis, congenital (age <1 yr)§§§	—	92	9	378	423	431	430	349	
Tetanus	—	6	0	10	18	19	28	41	
Toxic-shock syndrome (staphylococcal)§	—	44	1	82	74	71	92	101	
Trichinellosis	—	7	0	7	13	39	5	15	
Tularemia	3	57	5	124	93	123	137	95	MO (1), KY (1), AR (1)
Typhoid fever	1	197	9	468	397	449	434	353	NE (1)
Vancomycin-intermediate *Staphylococcus aureus*§	2	32	1	91	78	63	37	6	NY (1), PA (1)
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	2	1	—	2	1	
Vibriosis (noncholera *Vibrio* species infections)§	17	280	22	848	789	588	549	NN	MD (1), VA (3), FL (8), NV (1), WA (4)
Viral hemorrhagic fever¶¶¶	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 30, 2011 (30th week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.

* Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf.

† 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/osels/ph_surveillance/nndss/phs/files/5yearweeklyaverage.pdf.

§ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/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 weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 114 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.

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

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

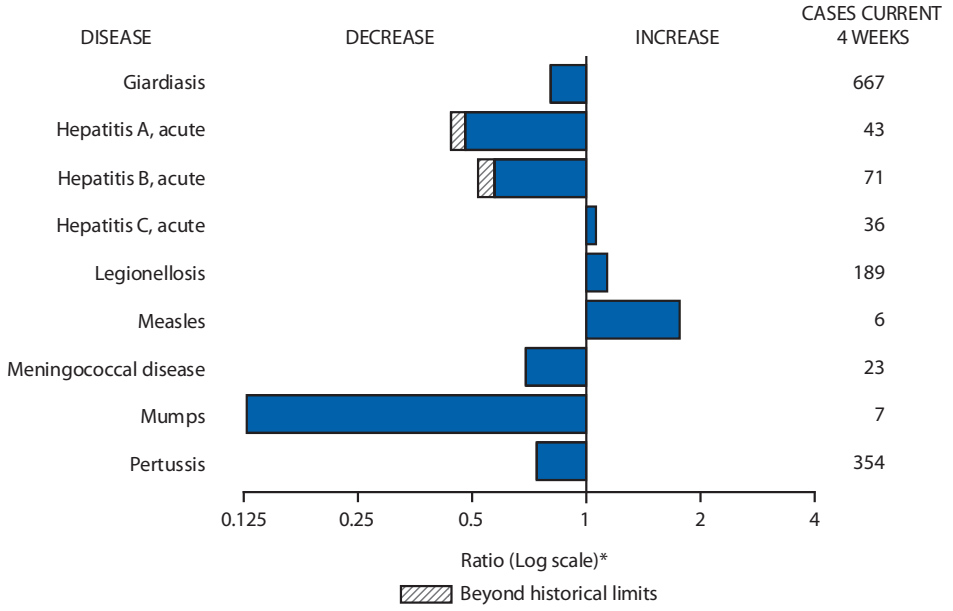
*** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the two cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).

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

§§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

¶¶¶ There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals July 30, 2011, 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

Jennifer Ward
Deborah A. Adams
Willie J. Anderson
Lenee Blanton
Rosaline Dhara
Pearl C. Sharp
Michael S. Wodajo

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending July 30, 2011, and July 31, 2010 (30th week)*

Reporting area	*Chlamydia trachomatis* infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	10,173	25,933	31,142	726,550	737,884	52	109	567	9,590	NN	129	133	417	3,653	4,194
New England	375	847	2,043	24,306	23,085	—	0	1	1	NN	1	6	39	200	307
Connecticut	—	228	1,557	5,174	5,880	—	0	0	—	NN	—	0	33	33	77
Maine†	—	58	100	1,732	1,432	—	0	0	—	NN	1	1	8	28	53
Massachusetts	362	406	860	12,656	11,727	—	0	0	—	NN	—	3	9	89	88
New Hampshire	13	53	81	1,610	1,311	—	0	1	1	NN	—	1	4	26	39
Rhode Island†	—	70	154	2,308	1,996	—	0	0	—	NN	—	0	2	1	12
Vermont†	—	26	84	826	739	—	0	0	—	NN	—	1	5	23	38
Mid. Atlantic	1,416	3,413	5,069	92,046	96,265	—	0	1	3	NN	20	17	38	465	425
New Jersey	121	522	905	15,152	15,122	—	0	0	—	NN	—	1	4	19	17
New York (Upstate)	633	712	2,099	20,292	18,695	—	0	0	—	NN	7	4	13	89	82
New York City	49	1,140	2,612	27,522	35,683	—	0	0	—	NN	—	2	6	34	43
Pennsylvania	613	959	1,237	29,080	26,765	—	0	1	3	NN	13	9	26	323	283
E.N. Central	1,190	3,974	7,039	108,955	116,486	3	0	3	31	NN	37	30	141	838	1,144
Illinois	20	1,090	1,320	25,923	34,345	—	0	0	—	NN	—	3	39	70	157
Indiana	270	459	3,376	14,912	11,157	—	0	0	—	NN	—	4	15	118	158
Michigan	538	948	1,397	26,985	28,545	1	0	3	18	NN	3	5	18	157	179
Ohio	176	1,000	1,134	28,486	29,314	2	0	3	13	NN	31	9	24	320	221
Wisconsin	186	470	559	12,649	13,125	—	0	0	—	NN	3	8	65	173	429
W.N. Central	543	1,436	1,646	39,908	41,337	—	0	2	4	NN	17	19	132	545	775
Iowa	12	209	240	5,865	6,032	—	0	0	—	NN	1	7	30	192	166
Kansas	6	191	288	5,672	5,601	—	0	0	—	NN	—	0	6	3	60
Minnesota	—	288	364	6,168	8,869	—	0	0	—	NN	—	0	22	—	209
Missouri	446	532	766	16,084	14,809	—	0	0	—	NN	12	4	57	128	177
Nebraska†	52	105	218	3,557	2,919	—	0	2	4	NN	4	4	26	118	78
North Dakota	—	37	90	664	1,321	—	0	0	—	NN	—	0	9	16	13
South Dakota	27	65	93	1,898	1,786	—	0	0	—	NN	—	2	13	88	72
S. Atlantic	3,114	5,110	6,537	155,572	149,857	—	0	2	3	NN	27	21	57	649	568
Delaware	45	83	220	2,452	2,450	—	0	0	—	NN	—	0	1	5	4
District of Columbia	—	105	180	2,844	3,074	—	0	0	—	NN	1	0	1	5	2
Florida	675	1,492	1,706	43,426	43,310	—	0	0	—	NN	17	8	23	251	211
Georgia	889	943	2,384	30,029	25,391	—	0	0	—	NN	6	5	11	159	166
Maryland†	351	453	1,125	12,325	13,822	—	0	2	3	NN	1	1	6	37	22
North Carolina	—	756	1,477	25,874	27,014	—	0	0	—	NN	—	0	17	36	47
South Carolina†	438	527	946	16,469	14,964	—	0	0	—	NN	1	3	19	75	42
Virginia†	619	675	970	19,777	17,720	—	0	0	—	NN	1	2	7	65	66
West Virginia	97	78	121	2,376	2,112	—	0	0	—	NN	—	0	5	16	8
E.S. Central	1,152	1,794	3,314	53,174	52,779	—	0	0	—	NN	3	7	24	173	129
Alabama†	—	543	1,564	15,661	14,822	—	0	0	—	NN	1	3	15	80	49
Kentucky	276	264	2,352	9,078	9,133	—	0	0	—	NN	—	1	5	26	44
Mississippi	568	392	614	11,469	12,713	—	0	0	—	NN	—	0	2	16	7
Tennessee†	308	581	795	16,966	16,111	—	0	0	—	NN	2	1	5	51	29
W.S. Central	450	3,315	4,723	96,051	102,150	—	0	1	1	NN	4	8	62	191	198
Arkansas†	347	306	440	9,471	8,947	—	0	0	—	NN	—	0	3	8	20
Louisiana	—	526	1,052	13,302	15,433	—	0	1	1	NN	—	0	9	28	24
Oklahoma	103	224	1,371	5,716	7,505	—	0	0	—	NN	3	1	34	49	42
Texas†	—	2,364	3,107	67,562	70,265	—	0	0	—	NN	1	4	28	106	112
Mountain	920	1,650	2,155	46,256	47,746	42	71	432	7,569	NN	11	11	30	310	301
Arizona	108	513	697	12,639	15,559	40	67	427	7,473	NN	—	1	4	21	18
Colorado	360	408	845	13,439	11,115	—	0	0	—	NN	6	3	11	90	76
Idaho†	1	66	179	1,630	2,364	—	0	0	—	NN	3	2	7	63	51
Montana†	57	62	83	1,884	1,724	—	0	1	2	NN	2	1	5	38	30
Nevada†	230	196	380	6,199	5,810	2	1	4	54	NN	—	0	7	—	10
New Mexico†	111	195	1,183	5,686	6,267	—	0	4	31	NN	—	2	12	59	58
Utah	53	130	175	3,740	3,740	—	0	2	6	NN	—	1	5	24	41
Wyoming†	—	38	90	1,039	1,167	—	0	2	3	NN	—	0	5	15	17
Pacific	1,013	3,809	6,559	110,282	108,179	7	35	142	1,978	NN	9	11	29	282	347
Alaska	—	114	157	3,123	3,553	—	0	0	—	NN	—	0	3	7	2
California	423	2,901	5,763	84,585	82,425	7	35	142	1,976	NN	7	6	19	164	198
Hawaii	—	108	138	2,605	3,556	—	0	0	—	NN	—	0	0	—	1
Oregon	277	260	524	7,890	6,554	—	0	1	2	NN	—	3	20	70	101
Washington	313	430	522	12,079	12,091	—	0	0	—	NN	2	1	9	41	45
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	NN	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	5	81	189	545	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	—	104	349	3,404	3,586	—	0	0	—	NN	N	0	0	N	N
U.S. Virgin Islands	—	14	27	359	334	—	0	0	—	NN	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Dengue Virus Infection†									
	Dengue Fever§					Dengue Hemorrhagic Fever¶				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	—	4	55	52	323	—	0	2	—	4
New England	—	0	3	1	4	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island**	—	0	1	—	—	—	0	0	—	—
Vermont**	—	0	1	1	1	—	0	0	—	—
Mid. Atlantic	—	1	25	19	100	—	0	1	—	2
New Jersey	—	0	5	—	15	—	0	0	—	—
New York (Upstate)	—	0	5	—	14	—	0	1	—	1
New York City	—	1	17	10	57	—	0	1	—	1
Pennsylvania	—	0	3	9	14	—	0	0	—	—
E.N. Central	—	0	7	4	26	—	0	1	—	—
Illinois	—	0	2	1	8	—	0	0	—	—
Indiana	—	0	2	1	7	—	0	0	—	—
Michigan	—	0	2	—	3	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	2	3	—	0	1	—	—
W.N. Central	—	0	6	—	20	—	0	1	—	—
Iowa	—	0	1	—	1	—	0	0	—	—
Kansas	—	0	1	—	3	—	0	0	—	—
Minnesota	—	0	1	—	11	—	0	0	—	—
Missouri	—	0	1	—	4	—	0	0	—	—
Nebraska**	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	19	13	116	—	0	1	—	1
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	13	11	94	—	0	1	—	1
Georgia	—	0	2	1	7	—	0	0	—	—
Maryland**	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	1	1	—	0	0	—	—
South Carolina**	—	0	3	—	7	—	0	0	—	—
Virginia**	—	0	3	—	5	—	0	0	—	—
West Virginia	—	0	0	—	2	—	0	0	—	—
E.S. Central	—	0	2	—	4	—	0	0	—	—
Alabama**	—	0	2	—	2	—	0	0	—	—
Kentucky	—	0	1	—	1	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	0	—	1	—	0	0	—	—
W.S. Central	—	0	4	1	16	—	0	0	—	1
Arkansas**	—	0	0	—	—	—	0	0	—	1
Louisiana	—	0	2	1	2	—	0	0	—	—
Oklahoma	—	0	1	—	2	—	0	0	—	—
Texas**	—	0	2	—	12	—	0	0	—	—
Mountain	—	0	2	3	10	—	0	0	—	—
Arizona	—	0	2	2	3	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	1	—	0	0	—	—
Montana**	—	0	1	—	3	—	0	0	—	—
Nevada**	—	0	1	—	2	—	0	0	—	—
New Mexico**	—	0	0	—	1	—	0	0	—	—
Utah	—	0	1	1	—	—	0	0	—	—
Wyoming**	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	7	11	27	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	5	2	20	—	0	0	—	—
Hawaii	—	0	4	5	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	4	6	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	25	550	335	5,246	—	0	20	2	114
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance).
§ Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.
¶ DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.
** 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	17	7	109	350	401	17	16	54	269	1,206	2	1	13	51	64
New England	—	0	2	3	3	1	2	16	81	61	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	6	—	25	—	0	0	—	—
Maine§	—	0	1	1	2	—	0	2	10	13	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	10	49	—	—	0	0	—	—
New Hampshire	—	0	1	1	1	—	0	3	7	8	—	0	1	1	2
Rhode Island§	—	0	1	1	—	—	0	6	12	14	—	0	0	—	—
Vermont§	—	0	0	—	—	1	0	1	3	1	—	0	0	—	—
Mid. Atlantic	5	1	7	32	58	16	4	26	130	137	2	0	2	5	8
New Jersey	—	0	2	—	41	—	0	3	—	51	—	0	0	—	1
New York (Upstate)	5	0	7	29	12	16	3	26	115	79	2	0	2	5	5
New York City	—	0	1	3	4	—	0	5	15	7	—	0	0	—	—
Pennsylvania	—	0	1	—	1	—	0	1	—	—	—	0	1	—	2
E.N. Central	—	0	3	12	29	—	1	15	7	382	—	0	4	22	34
Illinois	—	0	2	7	10	—	0	2	2	2	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	17	13
Michigan	—	0	1	2	1	—	0	1	—	2	—	0	1	1	—
Ohio	—	0	1	3	5	—	0	1	2	1	—	0	1	1	—
Wisconsin	—	0	1	—	13	—	1	15	3	377	—	0	3	1	18
W.N. Central	4	1	17	100	94	—	1	20	17	575	—	0	11	13	8
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	1	2	6	—	0	0	—	1	—	0	0	—	—
Minnesota	—	0	12	—	—	—	0	20	1	567	—	0	11	—	—
Missouri	4	0	17	97	88	—	0	4	16	7	—	0	7	12	8
Nebraska§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	1	1	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	3	29	119	146	—	1	7	26	38	—	0	1	3	2
Delaware	—	0	2	12	13	—	0	1	1	4	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	—	0	3	13	6	—	0	1	3	1	—	0	0	—	—
Georgia	—	0	3	11	16	—	0	1	6	1	—	0	1	1	1
Maryland§	—	0	3	16	16	—	0	1	1	12	—	0	1	—	1
North Carolina	—	0	17	32	46	—	0	6	13	13	—	0	0	—	—
South Carolina§	—	0	1	—	3	—	0	1	—	—	—	0	0	—	—
Virginia§	—	1	8	35	45	—	0	1	2	7	—	0	1	1	—
West Virginia	—	0	1	—	1	—	0	0	—	—	—	0	1	1	—
E.S. Central	2	0	7	39	55	—	0	2	8	13	—	0	1	4	7
Alabama§	—	0	3	—	7	—	0	1	3	5	N	0	0	N	N
Kentucky	—	0	2	9	10	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	—	2	—	0	1	—	1	—	0	0	—	1
Tennessee§	2	0	5	30	36	—	0	1	5	7	—	0	1	4	5
W.S. Central	6	0	87	45	15	—	0	9	—	—	—	0	0	—	1
Arkansas§	5	0	7	16	1	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	1	0	82	28	11	—	0	7	—	—	—	0	0	—	—
Texas§	—	0	1	1	2	—	0	1	—	—	—	0	0	—	1
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	2	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	2	—
Colorado	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Idaho§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Montana§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Nevada§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
New Mexico§	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	0	—	—	—	0	1	1	2
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	1	—	1	—	0	0	—	—	—	0	1	1	2
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Cumulative total *E. ewingii* cases reported for year 2010 = 10, and 6 cases reported for 2011.
§ 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	187	287	549	7,499	10,414	2,427	5,824	7,484	162,672	172,191	17	63	141	1,943	1,863
New England	17	25	50	686	918	55	100	206	2,875	3,063	1	4	12	131	105
Connecticut	—	4	12	104	166	—	43	150	1,192	1,418	—	1	6	33	23
Maine§	9	3	11	89	108	—	3	7	102	108	—	0	2	14	8
Massachusetts	6	12	25	343	395	54	48	80	1,301	1,277	1	2	6	62	54
New Hampshire	1	2	6	47	108	1	3	7	75	84	—	0	2	9	7
Rhode Island§	—	1	7	29	39	—	6	16	176	139	—	0	2	9	8
Vermont§	1	3	10	74	102	—	0	8	29	37	—	0	3	4	5
Mid. Atlantic	30	58	106	1,471	1,722	340	738	1,121	20,143	19,566	2	12	32	414	356
New Jersey	—	7	22	130	245	34	122	198	3,838	3,239	—	2	7	68	60
New York (Upstate)	24	20	72	507	583	124	113	271	3,161	2,971	1	3	18	105	94
New York City	—	17	30	447	486	9	238	497	5,823	6,708	—	2	6	85	58
Pennsylvania	6	16	27	387	408	173	260	364	7,321	6,648	1	4	11	156	144
E.N. Central	29	49	99	1,188	1,802	346	1,045	2,091	28,354	31,781	2	11	21	353	301
Illinois	—	9	31	204	404	4	276	369	6,376	8,679	—	3	9	104	102
Indiana	—	6	14	121	228	61	111	1,018	3,582	3,162	—	2	7	64	64
Michigan	6	10	25	252	380	185	244	490	6,880	7,979	1	1	4	39	21
Ohio	22	16	29	435	471	55	322	383	8,948	9,233	1	3	7	102	72
Wisconsin	1	8	35	176	319	41	98	130	2,568	2,728	—	1	5	44	42
W.N. Central	25	25	73	538	1,095	141	293	363	8,325	8,172	2	4	10	92	127
Iowa	4	5	12	132	159	7	38	57	1,049	957	—	0	0	—	1
Kansas	2	2	10	44	130	2	39	57	1,110	1,193	—	0	2	13	13
Minnesota	—	0	33	—	405	—	37	62	841	1,226	—	0	5	—	47
Missouri	17	8	26	205	214	121	146	181	4,279	3,812	1	1	5	48	47
Nebraska§	2	4	9	100	120	11	23	49	680	671	1	0	3	21	11
North Dakota	—	0	12	21	12	—	3	9	61	113	—	0	6	9	8
South Dakota	—	1	5	36	55	—	11	20	305	200	—	0	1	1	—
S. Atlantic	38	58	127	1,464	2,091	765	1,470	1,862	41,516	44,417	8	14	30	466	477
Delaware	—	1	5	17	15	13	17	48	480	565	—	0	2	3	5
District of Columbia	1	1	5	20	33	—	38	70	1,048	1,189	—	0	0	—	—
Florida	26	24	75	630	1,113	177	379	486	11,005	11,551	6	5	12	155	117
Georgia	1	14	51	438	420	257	317	874	9,128	8,746	—	3	7	90	109
Maryland§	6	4	10	129	170	74	119	246	3,026	3,971	2	2	4	48	37
North Carolina	N	0	0	N	N	—	257	468	8,482	8,990	—	2	8	51	82
South Carolina§	1	2	9	61	74	100	151	257	4,612	4,571	—	1	5	45	59
Virginia§	3	7	32	147	247	133	117	185	3,270	4,565	—	2	8	65	55
West Virginia	—	0	8	22	19	11	15	29	465	269	—	0	9	9	13
E.S. Central	1	4	11	99	95	325	489	1,007	14,163	14,272	1	3	11	128	115
Alabama§	1	4	11	99	95	—	161	410	4,730	4,335	—	1	4	40	20
Kentucky	N	0	0	N	N	69	69	712	2,432	2,321	—	0	4	18	22
Mississippi	N	0	0	N	N	176	116	197	3,037	3,550	—	0	3	11	9
Tennessee§	N	0	0	N	N	80	139	186	3,964	4,066	1	2	5	59	64
W.S. Central	3	6	17	115	216	142	905	1,664	24,517	27,463	—	3	26	81	90
Arkansas§	3	2	9	61	62	124	101	138	2,882	2,660	—	0	3	19	14
Louisiana	—	3	12	54	92	—	144	509	3,735	4,445	—	0	4	29	20
Oklahoma	—	0	1	—	62	18	62	332	1,663	2,227	—	1	19	32	49
Texas§	N	0	0	N	N	—	587	867	16,237	18,131	—	0	4	1	7
Mountain	30	25	58	649	950	129	188	255	5,403	5,449	1	5	12	168	205
Arizona	1	3	8	70	83	27	64	95	1,769	1,861	—	2	6	62	76
Colorado	21	12	23	320	402	45	47	92	1,289	1,528	1	1	5	43	59
Idaho§	4	4	9	76	117	4	2	14	75	61	—	0	2	12	12
Montana§	2	2	6	35	61	4	1	5	43	66	—	0	1	2	2
Nevada§	2	1	11	28	32	40	33	103	1,157	1,049	—	0	2	12	5
New Mexico§	—	1	5	34	59	6	27	98	913	656	—	1	4	25	24
Utah	—	4	13	72	170	3	4	9	135	205	—	0	3	11	22
Wyoming§	—	0	5	14	26	—	0	3	22	23	—	0	1	1	5
Pacific	14	49	129	1,289	1,525	184	620	791	17,376	18,008	—	3	10	110	87
Alaska	—	2	7	47	56	—	20	34	540	776	—	0	2	13	15
California	8	33	68	904	945	146	509	695	14,305	14,699	—	0	6	20	15
Hawaii	—	0	4	15	36	—	13	26	343	405	—	0	3	16	14
Oregon	—	7	20	159	267	14	23	39	696	581	—	2	6	58	38
Washington	6	8	57	164	221	24	59	86	1,492	1,547	—	0	2	3	5
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	2	—	0	17	6	49	—	0	0	—	—
Puerto Rico	—	1	7	25	47	—	6	12	195	165	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	5	52	83	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	13	22	74	596	871	19	54	167	1,291	1,821	13	17	39	531	467
New England	—	1	6	30	67	—	1	8	44	36	—	1	4	37	36
Connecticut	—	0	4	5	16	—	0	4	9	12	—	0	3	22	22
Maine†	—	0	1	1	6	—	0	2	5	10	—	0	2	6	2
Massachusetts	—	0	5	16	36	—	0	6	29	8	—	0	2	5	12
New Hampshire	—	0	1	—	—	—	0	1	1	4	N	0	0	N	N
Rhode Island†	—	0	1	3	9	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	2	5	—	—	0	0	—	2	—	0	1	4	—
Mid. Atlantic	4	4	12	111	142	2	5	12	151	181	3	1	6	44	62
New Jersey	—	1	4	12	42	—	1	4	28	49	—	0	4	—	13
New York (Upstate)	2	1	4	28	28	—	1	9	25	29	1	0	4	26	29
New York City	—	1	6	38	42	—	1	5	44	55	—	0	1	—	2
Pennsylvania	2	1	3	33	30	2	2	4	54	48	2	0	2	18	18
E.N. Central	1	4	9	105	97	1	6	35	185	298	2	3	12	107	56
Illinois	—	1	3	22	27	—	1	6	36	76	—	0	1	3	—
Indiana	—	0	3	10	10	—	1	6	22	42	—	0	5	39	20
Michigan	—	2	5	46	33	—	2	6	53	78	2	1	7	60	26
Ohio	1	1	5	24	17	1	1	30	59	69	—	0	1	4	6
Wisconsin	—	0	2	3	10	—	0	3	15	33	—	0	1	1	4
W.N. Central	1	1	25	21	29	—	2	16	70	71	1	0	6	3	11
Iowa	—	0	3	3	6	—	0	1	6	10	—	0	0	—	—
Kansas	—	0	2	3	8	—	0	2	8	4	—	0	1	2	—
Minnesota	—	0	22	2	1	—	0	15	2	6	—	0	6	—	6
Missouri	1	0	1	8	11	—	2	5	45	41	—	0	1	—	3
Nebraska†	—	0	4	3	3	—	0	3	8	9	1	0	0	1	2
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	1	1	—	0	0	—	—
S. Atlantic	1	5	14	126	204	7	13	33	339	494	4	4	11	126	103
Delaware	—	0	1	1	5	—	0	1	—	18	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	—	2	7	41	73	5	4	11	117	172	1	1	5	30	29
Georgia	1	1	4	30	23	2	2	8	50	108	—	1	3	17	13
Maryland†	—	0	3	14	14	—	1	4	27	37	1	0	2	21	15
North Carolina	—	0	4	14	36	—	2	16	70	35	2	1	7	39	25
South Carolina†	—	0	2	5	21	—	1	4	18	34	—	0	1	1	—
Virginia†	—	1	4	16	30	—	1	7	38	51	—	0	2	9	8
West Virginia	—	0	5	5	1	—	0	18	19	36	—	0	5	9	11
E.S. Central	1	0	6	28	22	2	8	14	230	196	2	3	8	96	82
Alabama†	—	0	2	1	5	1	2	4	57	38	—	0	1	7	3
Kentucky	—	0	6	6	9	—	3	8	63	62	1	2	6	40	56
Mississippi	1	0	1	5	1	—	1	3	22	20	U	0	0	U	U
Tennessee†	—	0	5	16	7	1	3	7	88	76	1	1	5	49	23
W.S. Central	3	2	15	60	74	6	8	67	154	293	1	2	11	48	44
Arkansas†	—	0	1	—	—	—	1	4	24	39	—	0	0	—	1
Louisiana	—	0	1	2	5	—	1	4	22	33	—	0	2	5	1
Oklahoma	2	0	4	3	1	5	1	16	36	50	1	1	10	24	14
Texas†	1	2	11	55	68	1	4	45	72	171	—	0	3	19	28
Mountain	2	2	5	42	99	—	2	7	46	83	—	1	4	33	35
Arizona	—	0	2	9	44	—	0	3	11	16	U	0	0	U	U
Colorado	2	0	2	16	23	—	0	5	13	25	—	0	3	12	8
Idaho†	—	0	1	5	6	—	0	1	2	5	—	0	2	6	7
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	2	—
Nevada†	—	0	3	5	9	—	0	3	14	27	—	0	1	4	3
New Mexico†	—	0	1	3	3	—	0	2	5	3	—	0	1	6	10
Utah	—	0	2	—	7	—	0	1	1	7	—	0	2	1	7
Wyoming†	—	0	1	2	3	—	0	1	—	—	—	0	1	2	—
Pacific	—	4	15	73	137	1	3	25	72	169	—	1	12	37	38
Alaska	—	0	1	2	1	—	0	1	4	2	U	0	1	U	U
California	—	2	15	47	106	—	2	22	27	112	—	0	4	13	17
Hawaii	—	0	2	5	5	—	0	1	5	3	U	0	0	U	U
Oregon	—	0	2	5	12	—	0	3	21	29	—	0	3	12	9
Washington	—	0	4	14	13	1	1	4	15	23	—	0	5	12	12
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	4	—	0	8	28	48	—	0	8	10	40
Puerto Rico	—	0	2	4	11	—	0	3	6	13	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	39	53	128	1,349	1,658	528	361	1,284	12,903	19,146	11	26	114	633	839
New England	2	4	16	92	119	19	88	302	2,021	5,780	1	2	20	45	63
Connecticut	—	1	6	17	16	—	34	123	763	2,024	—	0	20	1	2
Maine†	—	0	3	4	6	—	10	62	205	278	—	0	1	2	5
Massachusetts	2	2	10	58	68	1	21	103	494	2,373	—	1	5	33	47
New Hampshire	—	0	5	4	9	—	13	45	294	862	—	0	2	2	1
Rhode Island†	—	0	4	5	14	—	1	40	60	49	—	0	4	2	6
Vermont†	—	0	2	4	6	18	5	45	205	194	1	0	1	5	2
Mid. Atlantic	14	13	53	332	392	473	149	1,060	8,481	6,623	—	8	22	126	266
New Jersey	—	1	18	25	65	126	46	548	3,528	2,492	—	1	6	8	65
New York (Upstate)	10	5	19	128	120	178	35	214	1,519	1,324	—	1	6	22	38
New York City	—	2	17	53	68	—	1	30	12	419	—	3	13	67	128
Pennsylvania	4	5	19	126	139	169	61	374	3,422	2,388	—	1	4	29	35
E.N. Central	15	10	47	325	358	2	25	155	615	2,812	2	3	9	78	94
Illinois	—	1	12	28	94	—	1	13	55	96	—	1	6	29	35
Indiana	2	1	5	40	29	—	0	6	41	64	—	0	2	5	8
Michigan	3	2	20	70	72	1	1	9	31	60	—	0	4	13	16
Ohio	10	4	34	186	125	1	1	9	26	17	2	1	5	27	29
Wisconsin	—	0	5	1	38	—	18	134	462	2,575	—	0	2	4	6
W.N. Central	—	2	9	44	69	—	4	85	48	1,578	1	1	45	13	34
Iowa	—	0	2	5	8	—	0	6	39	68	1	0	2	9	8
Kansas	—	0	2	4	7	—	0	1	3	10	—	0	2	2	4
Minnesota	—	0	8	—	21	—	0	80	—	1,487	—	0	45	—	3
Missouri	—	1	5	32	22	—	0	1	—	2	—	0	3	—	8
Nebraska†	—	0	1	1	5	—	0	2	6	7	—	0	1	2	9
North Dakota	—	0	1	1	2	—	0	10	—	3	—	0	1	—	—
South Dakota	—	0	2	1	4	—	0	0	—	1	—	0	1	—	2
S. Atlantic	3	9	22	219	309	28	57	178	1,592	2,144	3	8	41	216	204
Delaware	—	0	1	5	10	2	10	38	460	458	—	0	1	3	2
District of Columbia	—	0	3	8	13	1	0	5	11	24	—	0	1	5	10
Florida	1	3	9	82	93	5	2	8	52	35	1	2	7	55	65
Georgia	—	1	4	15	39	1	0	2	9	9	1	1	7	45	35
Maryland†	2	1	6	34	67	16	17	103	503	943	1	1	21	48	32
North Carolina	—	1	6	34	32	—	0	9	24	44	—	0	13	17	18
South Carolina†	—	0	2	5	8	—	0	3	6	21	—	0	1	1	3
Virginia†	—	1	9	31	38	3	19	76	495	563	—	1	8	42	38
West Virginia	—	0	2	5	9	—	0	29	32	47	—	0	1	—	1
E.S. Central	4	2	10	83	77	1	0	3	21	30	1	0	2	15	17
Alabama†	—	0	2	10	9	—	0	2	7	—	—	0	1	3	3
Kentucky	2	0	4	19	13	—	0	1	—	2	—	0	1	4	3
Mississippi	—	0	3	9	9	—	0	0	—	—	—	0	2	1	2
Tennessee†	2	1	8	45	46	1	0	3	14	28	1	0	2	7	9
W.S. Central	—	3	13	54	78	—	1	29	20	62	—	1	18	21	52
Arkansas†	—	0	2	4	12	—	0	0	—	—	—	0	1	2	4
Louisiana	—	0	3	9	4	—	0	1	—	2	—	0	1	—	2
Oklahoma	—	0	2	3	8	—	0	0	—	—	—	0	1	2	3
Texas†	—	2	11	38	54	—	1	29	20	60	—	1	17	17	43
Mountain	1	2	9	46	104	—	0	3	8	14	1	1	4	36	34
Arizona	—	1	7	16	35	—	0	1	3	2	—	0	4	15	15
Colorado	—	0	2	4	20	—	0	1	1	—	—	0	3	12	10
Idaho†	—	0	1	4	2	—	0	2	—	5	—	0	1	2	1
Montana†	—	0	1	—	4	—	0	1	2	1	—	0	1	—	1
Nevada†	1	0	2	8	17	—	0	1	—	—	1	0	2	4	3
New Mexico†	—	0	1	4	5	—	0	1	1	4	—	0	1	2	1
Utah	—	0	2	9	16	—	0	1	1	2	—	0	1	1	3
Wyoming†	—	0	2	1	5	—	0	0	—	—	—	0	0	—	—
Pacific	—	5	21	154	152	5	4	11	97	103	2	4	10	83	75
Alaska	—	0	0	—	2	—	0	1	1	5	—	0	2	4	2
California	—	4	15	139	129	1	3	9	74	63	2	2	10	61	48
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	3	2
Oregon	—	0	2	4	8	—	0	3	18	30	—	0	3	5	6
Washington	—	0	6	10	12	4	0	4	4	5	—	0	5	10	17
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	1	—	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	2	14	53	440	500	2	9	47	161	2,295	97	346	2,925	7,075	10,109
New England	—	0	3	23	11	—	0	2	3	21	1	9	24	243	245
Connecticut	—	0	1	3	1	—	0	0	—	11	—	1	8	22	48
Maine§	—	0	1	3	3	—	0	1	—	1	1	2	8	74	21
Massachusetts	—	0	2	11	2	—	0	2	3	6	—	4	13	99	149
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	6	31	6
Rhode Island§	—	0	1	—	—	—	0	0	—	—	—	0	4	10	18
Vermont§	—	0	3	5	5	—	0	0	—	—	—	0	4	7	3
Mid. Atlantic	—	1	6	50	51	1	1	23	21	2,011	17	35	125	727	610
New Jersey	—	0	1	3	16	—	1	6	9	322	—	2	10	55	89
New York (Upstate)	—	0	4	16	9	1	0	3	4	649	13	11	81	255	226
New York City	—	0	3	18	12	—	0	22	8	1,023	—	0	19	27	41
Pennsylvania	—	0	2	13	14	—	0	16	—	17	4	17	70	390	254
E.N. Central	—	2	7	56	87	—	1	7	43	40	14	85	198	1,520	2,322
Illinois	—	0	3	16	18	—	1	3	28	12	—	17	50	355	429
Indiana	—	0	2	7	20	—	0	1	—	3	—	9	26	102	363
Michigan	—	0	4	5	13	—	0	1	6	16	1	27	57	424	651
Ohio	—	1	2	19	21	—	0	5	9	8	13	26	80	461	709
Wisconsin	—	0	2	9	15	—	0	1	—	1	—	11	26	178	170
W.N. Central	1	1	4	29	35	1	0	4	23	77	4	28	501	569	785
Iowa	—	0	1	6	8	—	0	1	4	36	—	6	36	97	270
Kansas	—	0	1	2	4	—	0	1	4	4	—	2	9	55	95
Minnesota	—	0	2	—	3	—	0	4	1	4	—	0	469	184	78
Missouri	1	0	2	11	14	1	0	3	7	8	2	6	43	161	239
Nebraska§	—	0	2	7	5	—	0	1	3	23	1	2	13	38	78
North Dakota	—	0	1	1	1	—	0	3	4	—	1	0	30	30	—
South Dakota	—	0	1	2	—	—	0	1	—	2	—	0	1	4	25
S. Atlantic	1	2	8	85	88	—	0	4	10	40	26	33	106	786	896
Delaware	—	0	1	1	—	—	0	0	—	—	—	0	5	19	7
District of Columbia	—	0	1	1	—	—	0	0	—	3	—	0	2	3	4
Florida	1	1	5	36	43	—	0	2	2	8	13	6	17	183	164
Georgia	—	0	2	9	6	—	0	2	1	2	7	4	13	105	127
Maryland§	—	0	1	8	4	—	0	1	1	8	—	2	6	43	70
North Carolina	—	0	3	12	9	—	0	2	4	5	3	3	35	112	201
South Carolina§	—	0	1	7	8	—	0	1	—	3	1	4	25	84	202
Virginia§	—	0	2	9	16	—	0	2	2	9	2	7	41	192	103
West Virginia	—	0	1	2	2	—	0	0	—	2	—	1	41	45	18
E.S. Central	—	1	3	20	24	—	0	1	3	9	8	9	35	212	436
Alabama§	—	0	2	9	4	—	0	1	1	6	4	3	11	86	127
Kentucky	—	0	2	2	10	—	0	0	—	1	1	2	16	50	146
Mississippi	—	0	1	2	3	—	0	1	2	—	—	1	10	13	42
Tennessee§	—	0	2	7	7	—	0	1	—	2	3	3	11	63	121
W.S. Central	—	1	12	33	56	—	1	15	45	53	13	27	297	528	1,686
Arkansas§	—	0	1	7	5	—	0	1	1	5	—	2	18	36	112
Louisiana	—	0	2	6	12	—	0	2	—	4	—	0	3	11	25
Oklahoma	—	0	2	6	14	—	0	1	1	—	—	0	92	18	17
Texas§	—	0	10	14	25	—	1	14	43	44	13	23	187	463	1,532
Mountain	—	1	4	32	41	—	0	4	4	12	9	42	100	988	724
Arizona	—	0	1	8	11	—	0	1	—	4	3	14	29	370	231
Colorado	—	0	2	8	13	—	0	1	3	6	3	10	63	264	107
Idaho§	—	0	1	4	5	—	0	1	—	—	3	2	15	68	95
Montana§	—	0	2	3	1	—	0	0	—	—	—	2	16	74	33
Nevada§	—	0	1	1	7	—	0	1	—	—	—	0	5	12	18
New Mexico§	—	0	1	1	3	—	0	2	1	—	—	3	11	65	48
Utah	—	0	2	7	1	—	0	1	—	2	—	6	16	131	185
Wyoming§	—	0	1	—	—	—	0	1	—	—	—	0	2	4	7
Pacific	—	3	26	112	107	—	0	3	9	32	5	83	1,710	1,502	2,405
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	6	18	18
California	—	2	17	78	64	—	0	3	3	22	1	69	1,569	1,105	2,026
Hawaii	—	0	1	4	1	—	0	1	2	2	—	1	8	48	47
Oregon	—	0	3	16	24	—	0	1	3	1	—	4	11	137	176
Washington	—	0	8	12	17	—	0	1	—	6	4	12	131	194	138
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	3	15	12	415	—	0	14	31	1
Puerto Rico	—	0	1	—	1	—	0	1	1	—	—	0	1	2	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	27	53	172	1,327	2,495	728	896	1,812	20,749	24,889	81	92	264	2,196	2,582
New England	2	3	18	70	159	14	31	294	1,128	1,545	—	2	28	109	146
Connecticut	—	0	8	—	76	—	0	273	273	491	—	0	28	28	60
Maine§	—	1	3	33	34	4	2	8	70	69	—	0	3	17	9
Massachusetts	—	0	0	—	—	8	19	52	554	717	—	1	10	44	52
New Hampshire	1	0	6	11	4	—	3	7	91	114	—	0	3	13	17
Rhode Island§	—	0	3	10	16	—	1	62	108	119	—	0	1	1	2
Vermont§	1	1	3	16	29	2	1	5	32	35	—	0	3	6	6
Mid. Atlantic	8	13	31	356	649	88	93	207	2,400	3,053	13	9	30	253	277
New Jersey	—	0	0	—	—	—	14	44	301	643	—	2	7	33	67
New York (Upstate)	8	7	19	180	296	65	25	63	671	703	12	4	12	95	88
New York City	—	0	4	7	132	—	19	53	536	677	—	1	6	38	32
Pennsylvania	—	7	17	169	221	23	32	73	892	1,030	1	3	10	87	90
E.N. Central	2	2	27	70	125	50	84	184	2,139	3,389	13	10	48	292	451
Illinois	1	1	11	22	62	—	28	61	702	1,171	—	2	9	46	95
Indiana	—	0	3	4	—	—	9	29	193	443	—	2	10	45	78
Michigan	1	1	5	23	40	5	13	49	365	519	2	2	7	65	87
Ohio	—	0	12	21	23	45	21	42	620	761	11	2	11	85	76
Wisconsin	N	0	0	N	N	—	11	50	259	495	—	2	16	51	115
W.N. Central	1	2	40	47	157	32	46	121	1,123	1,562	12	13	38	349	488
Iowa	—	0	3	—	13	1	9	23	237	291	—	2	13	84	96
Kansas	1	1	4	19	41	5	7	18	187	227	—	1	7	50	45
Minnesota	—	0	34	—	17	—	0	30	—	428	—	0	14	—	154
Missouri	—	0	6	—	45	21	16	43	473	400	9	4	14	128	135
Nebraska§	—	1	3	20	33	5	4	13	116	119	3	1	6	58	41
North Dakota	—	0	6	8	8	—	0	15	22	15	—	0	10	6	3
South Dakota	—	0	0	—	—	—	3	17	88	82	—	1	4	23	14
S. Atlantic	12	19	53	636	686	314	266	624	5,979	6,081	12	14	31	341	350
Delaware	—	0	0	—	—	1	3	11	75	71	—	0	2	8	4
District of Columbia	—	0	0	—	—	—	1	7	31	57	—	0	1	3	7
Florida	—	0	29	61	121	154	107	226	2,474	2,629	4	3	15	67	107
Georgia	—	0	0	—	—	40	40	142	1,013	1,134	—	2	7	60	52
Maryland§	—	6	14	163	212	26	18	54	443	525	4	1	8	33	49
North Carolina	—	0	0	—	—	32	33	241	794	553	1	2	10	58	27
South Carolina§	N	0	0	N	N	27	30	99	587	534	—	0	4	10	15
Virginia§	12	11	27	357	309	34	21	68	526	475	3	3	9	99	79
West Virginia	—	0	30	55	44	—	0	14	36	103	—	0	4	3	10
E.S. Central	2	2	7	73	115	55	60	175	1,589	1,563	11	5	22	157	137
Alabama§	2	1	7	51	49	32	18	52	461	406	3	1	15	53	30
Kentucky	—	0	2	8	11	—	9	32	205	280	3	1	6	24	26
Mississippi	—	0	1	1	—	12	21	65	492	444	—	0	12	14	10
Tennessee§	—	0	4	13	55	11	18	53	431	433	5	2	11	66	71
W.S. Central	—	5	54	53	471	89	130	515	2,558	2,882	2	8	151	160	143
Arkansas§	—	0	10	41	22	22	14	43	321	290	—	0	4	20	33
Louisiana	—	0	0	—	—	—	17	52	366	656	—	0	2	6	11
Oklahoma	—	0	30	12	8	17	11	95	265	264	1	1	55	19	13
Texas§	—	0	30	—	441	50	87	381	1,606	1,672	1	6	95	115	86
Mountain	—	0	5	9	32	32	47	113	1,234	1,498	8	11	33	265	300
Arizona	N	0	0	N	N	1	14	43	366	471	—	2	14	48	33
Colorado	—	0	0	—	—	16	10	24	299	329	2	3	14	69	118
Idaho§	—	0	2	1	2	8	3	9	94	87	3	3	7	54	32
Montana§	N	0	0	N	N	3	2	6	64	58	1	0	4	19	25
Nevada§	—	0	2	1	2	4	3	21	79	159	1	0	6	16	15
New Mexico§	—	0	1	4	9	—	6	19	130	157	—	1	6	19	20
Utah	—	0	3	3	3	—	6	17	168	209	1	1	8	30	45
Wyoming§	—	0	4	—	16	—	1	8	34	28	—	0	3	10	12
Pacific	—	1	15	13	101	54	105	288	2,599	3,316	10	12	46	270	290
Alaska	—	0	2	9	11	—	1	6	36	46	—	0	1	—	1
California	—	0	10	—	79	37	75	232	1,973	2,372	2	8	36	186	123
Hawaii	—	0	0	—	—	—	6	13	181	192	—	0	3	5	20
Oregon	—	0	2	4	11	4	7	20	125	336	3	2	11	24	44
Washington	—	0	14	—	—	13	13	42	284	370	5	2	16	55	102
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	6	—	0	0	—	—
Puerto Rico	—	0	6	21	28	—	6	25	100	316	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF)†									
						Confirmed					Probable				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	146	258	742	5,667	7,852	4	2	12	74	84	25	24	245	653	736
New England	—	4	25	124	231	—	0	0	—	—	—	0	1	3	2
Connecticut	—	0	24	24	69	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	4	16	3	—	0	0	—	—	—	0	1	—	1
Massachusetts	—	2	13	76	142	—	0	0	—	—	—	0	1	1	—
New Hampshire	—	0	2	1	5	—	0	0	—	—	—	0	1	1	1
Rhode Island§	—	0	4	4	11	—	0	0	—	—	—	0	1	1	—
Vermont§	—	0	1	3	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	8	14	74	341	1,070	2	0	2	9	2	—	1	5	13	56
New Jersey	—	3	12	41	251	—	0	0	—	1	—	0	3	—	36
New York (Upstate)	7	3	18	119	108	1	0	1	2	1	—	0	3	3	5
New York City	—	4	14	123	182	—	0	0	—	—	—	0	2	5	7
Pennsylvania	1	4	56	58	529	1	0	2	7	—	—	0	2	5	8
E.N. Central	8	17	37	394	1,079	—	0	1	2	1	3	1	5	43	52
Illinois	—	5	18	85	649	—	0	1	—	—	—	0	2	18	24
Indiana§	—	1	4	32	35	—	0	0	—	1	3	0	4	20	16
Michigan	5	3	9	89	151	—	0	0	—	—	—	0	1	—	1
Ohio	3	5	27	188	193	—	0	1	2	—	—	0	2	5	8
Wisconsin	—	0	4	—	51	—	0	0	—	—	—	0	1	—	3
W.N. Central	5	12	41	195	1,573	1	0	5	12	8	2	4	25	175	150
Iowa	—	0	4	10	34	—	0	0	—	—	—	0	2	3	4
Kansas§	1	3	12	35	168	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	4	—	29	—	0	0	—	—	—	0	2	—	—
Missouri	2	7	29	139	1,316	1	0	3	9	6	2	4	25	171	144
Nebraska§	2	0	10	7	22	—	0	3	3	2	—	0	1	1	1
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota	—	0	2	4	4	—	0	0	—	—	—	0	0	—	—
S. Atlantic	76	67	133	2,115	1,215	—	1	6	39	54	2	6	59	166	194
Delaware§	—	0	1	1	35	—	0	1	1	1	1	0	4	12	13
District of Columbia	—	0	3	8	18	—	0	1	1	—	—	0	0	—	—
Florida§	60	38	99	1,537	487	—	0	1	3	2	—	0	2	4	7
Georgia	9	13	26	305	414	—	0	5	23	44	—	0	0	—	—
Maryland§	—	2	7	48	69	—	0	1	2	—	—	0	3	13	29
North Carolina	5	4	36	133	82	—	0	4	5	6	—	1	47	73	76
South Carolina§	1	1	4	30	42	—	0	1	3	—	—	0	2	11	8
Virginia§	1	2	8	49	67	—	0	2	1	1	—	2	12	50	61
West Virginia	—	0	66	4	1	—	0	0	—	—	1	0	1	3	—
E.S. Central	15	13	29	323	436	—	0	3	5	12	4	5	26	142	225
Alabama§	2	4	15	108	88	—	0	1	—	2	—	1	6	28	44
Kentucky	3	1	6	36	172	—	0	0	—	6	—	0	0	—	—
Mississippi	1	2	7	79	28	—	0	1	1	—	—	0	4	1	14
Tennessee§	9	4	14	100	148	—	0	2	4	4	4	4	20	113	167
W.S. Central	12	59	503	1,296	1,334	1	0	8	1	1	14	2	235	82	51
Arkansas§	1	2	7	38	28	1	0	2	1	—	14	0	30	72	23
Louisiana	—	5	14	110	144	—	0	0	—	—	—	0	1	2	2
Oklahoma	5	2	161	45	163	—	0	5	—	—	—	0	202	5	15
Texas§	6	48	338	1,103	999	—	0	1	—	1	—	0	5	3	11
Mountain	4	16	32	375	380	—	0	5	6	2	—	0	7	29	5
Arizona	—	6	19	113	208	—	0	4	6	—	—	0	7	21	—
Colorado§	3	2	7	46	49	—	0	1	—	—	—	0	1	2	—
Idaho§	—	0	3	13	16	—	0	0	—	—	—	0	1	1	2
Montana§	—	1	15	106	4	—	0	0	—	2	—	0	0	—	1
Nevada§	1	0	6	12	19	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	3	10	59	62	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	25	22	—	0	0	—	—	—	0	1	1	1
Wyoming§	—	0	1	1	—	—	0	0	—	—	—	0	1	4	—
Pacific	18	22	63	504	534	—	0	2	—	4	—	0	0	—	1
Alaska	—	0	2	3	—	N	0	0	N	N	N	0	0	N	N
California	16	18	59	396	407	—	0	2	—	4	—	0	0	—	—
Hawaii	—	1	3	33	33	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	26	36	—	0	0	—	—	—	0	0	—	1
Washington	2	1	8	46	58	—	0	1	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	1	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	5	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	4	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by Rickettsia rickettsii, is the most common and well-known spotted fever.
§ 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	*Streptococcus pneumoniae*,† invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	79	297	937	8,837	10,041	10	23	101	653	1,234	78	256	363	6,712	7,601
New England	—	11	79	362	575	—	1	5	28	74	1	8	18	219	266
Connecticut	—	0	49	94	236	—	0	3	6	21	—	1	8	32	50
Maine§	—	2	13	87	83	—	0	1	3	6	—	0	3	10	14
Massachusetts	—	0	3	21	52	—	0	3	8	36	—	5	11	135	168
New Hampshire	—	2	8	69	76	—	0	1	5	4	1	0	3	13	13
Rhode Island§	—	1	8	40	71	—	0	1	1	4	—	0	7	24	19
Vermont§	—	1	6	51	57	—	0	2	5	3	—	0	2	5	2
Mid. Atlantic	—	32	81	909	1,041	—	3	27	81	161	6	31	46	803	969
New Jersey	—	13	35	429	464	—	1	4	27	39	—	5	12	122	140
New York (Upstate)	—	2	10	57	104	—	1	9	32	80	4	3	20	105	72
New York City	—	14	42	423	473	—	0	14	22	42	—	15	31	383	543
Pennsylvania	N	0	0	N	N	N	0	0	N	N	2	7	13	193	214
E.N. Central	13	65	110	1,986	2,041	2	4	10	114	182	5	32	53	817	1,119
Illinois	N	0	0	N	N	N	0	0	N	N	5	13	23	335	538
Indiana	—	15	32	418	462	—	0	4	19	37	—	3	14	95	97
Michigan	4	15	29	451	469	—	1	4	25	58	—	4	10	117	155
Ohio	8	26	45	824	792	2	2	7	58	61	—	9	21	241	300
Wisconsin	1	9	24	293	318	—	0	3	12	26	—	1	4	29	29
W.N. Central	—	5	35	93	526	—	0	5	4	71	1	7	18	158	181
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	2	12	14
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	13	11
Minnesota	—	0	24	—	396	—	0	5	—	58	—	3	10	56	64
Missouri	N	0	0	N	N	N	0	0	N	N	1	2	9	72	87
Nebraska§	—	2	9	75	89	—	0	1	4	11	—	0	2	5	5
North Dakota	—	0	18	18	41	—	0	1	—	2	—	0	1	—	—
South Dakota	N	0	0	N	N	N	0	0	N	N	—	0	1	—	—
S. Atlantic	45	71	170	2,404	2,714	7	6	22	181	338	25	64	178	1,715	1,731
Delaware	1	1	6	34	24	—	0	1	—	—	1	0	4	13	4
District of Columbia	—	1	3	28	52	—	0	1	4	7	—	3	8	106	85
Florida	18	23	68	920	1,010	4	3	13	84	134	1	23	44	617	619
Georgia	7	20	54	616	855	—	2	7	43	103	11	11	130	286	362
Maryland§	19	9	32	357	345	3	0	4	23	39	5	8	17	241	155
North Carolina	N	0	0	N	N	N	0	0	N	N	—	7	19	204	255
South Carolina§	—	8	25	304	346	—	1	3	18	39	2	4	10	120	79
Virginia§	N	0	0	N	N	N	0	0	N	N	5	4	16	126	169
West Virginia	—	0	48	145	82	—	0	6	9	16	—	0	2	2	3
E.S. Central	4	19	36	606	688	—	1	4	38	67	17	15	34	400	498
Alabama§	N	0	0	N	N	N	0	0	N	N	—	4	11	104	141
Kentucky	N	0	0	N	N	N	0	0	N	N	2	2	16	61	74
Mississippi	N	0	0	N	N	N	0	0	N	N	13	3	16	91	123
Tennessee§	4	19	36	606	688	—	1	4	38	67	2	5	12	144	160
W.S. Central	15	31	368	1,209	1,213	1	4	30	110	163	7	35	71	919	1,151
Arkansas§	3	3	26	152	116	—	0	3	12	11	6	3	10	113	143
Louisiana	—	3	11	107	64	—	0	2	9	16	—	7	36	190	249
Oklahoma	N	0	0	N	N	N	0	0	N	N	1	1	6	27	56
Texas§	12	25	333	950	1,033	1	3	27	89	136	—	23	33	589	703
Mountain	2	32	72	1,166	1,173	—	3	8	89	162	5	12	23	293	332
Arizona	—	11	45	552	575	—	1	5	41	76	—	4	9	101	123
Colorado	2	11	23	362	344	—	1	4	26	46	—	2	8	64	75
Idaho§	N	0	0	N	N	N	0	0	N	N	—	0	2	5	2
Montana§	N	0	0	N	N	N	0	0	N	N	—	0	1	3	3
Nevada§	N	0	0	N	N	N	0	0	N	N	5	3	9	82	57
New Mexico§	—	3	13	159	112	—	0	2	10	14	—	1	4	33	25
Utah	—	3	8	74	132	—	0	3	12	24	—	0	4	5	47
Wyoming§	—	0	15	19	10	—	0	1	—	2	—	0	0	—	—
Pacific	—	3	11	102	70	—	0	2	8	16	11	51	66	1,388	1,354
Alaska	—	2	11	101	70	—	0	2	8	16	—	0	1	1	3
California	N	0	0	N	N	N	0	0	N	N	9	41	57	1,152	1,149
Hawaii	—	0	3	1	—	—	0	0	—	—	—	0	5	8	23
Oregon	N	0	0	N	N	N	0	0	N	N	—	1	7	50	32
Washington	N	0	0	N	N	N	0	0	N	N	2	6	13	177	147
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	4	13	139	131
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
† Includes drug resistant and susceptible cases of invasive Streptococcus pneumoniae disease among children <5 years and among all ages. Case definition: Isolation of S. pneumoniae from a normally sterile body site (e.g., blood or cerebrospinal fluid).
§ 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 30, 2011, and July 31, 2010 (30th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2011	Cum 2010
United States	81	257	367	7,001	9,656	—	1	71	15	93	—	0	53	12	104
New England	2	21	46	636	665	—	0	3	—	—	—	0	2	—	1
Connecticut	—	5	16	149	201	—	0	2	—	—	—	0	2	—	1
Maine¶	—	5	16	135	116	—	0	0	—	—	—	0	0	—	—
Massachusetts	1	6	18	260	183	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	1	9	9	82	—	0	1	—	—	—	0	0	—	—
Rhode Island¶	—	0	5	18	18	—	0	0	—	—	—	0	0	—	—
Vermont¶	1	2	10	65	65	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	23	34	65	1,152	1,062	—	0	19	—	12	—	0	13	—	11
New Jersey	16	10	52	585	385	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	8	—	0	7	—	10
New York City	—	0	0	—	—	—	0	7	—	3	—	0	4	—	1
Pennsylvania	7	18	41	567	677	—	0	3	—	1	—	0	3	—	—
E.N. Central	9	68	118	1,758	3,195	—	0	15	—	1	—	0	7	—	2
Illinois	—	17	31	442	805	—	0	10	—	—	—	0	4	—	—
Indiana¶	—	4	18	135	237	—	0	2	—	—	—	0	2	—	1
Michigan	2	20	38	575	970	—	0	6	—	—	—	0	1	—	—
Ohio	7	20	58	605	851	—	0	1	—	1	—	0	1	—	—
Wisconsin	—	0	22	1	332	—	0	0	—	—	—	0	1	—	1
W.N. Central	2	11	42	218	512	—	0	7	1	5	—	0	11	1	23
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas¶	—	4	15	69	222	—	0	1	—	1	—	0	3	—	4
Minnesota	—	0	0	—	—	—	0	1	—	2	—	0	3	—	—
Missouri	—	5	24	101	234	—	0	1	—	1	—	0	0	—	—
Nebraska¶	—	0	5	3	7	—	0	3	—	1	—	0	7	—	8
North Dakota	2	0	10	25	29	—	0	2	—	—	—	0	2	1	4
South Dakota	—	1	7	20	20	—	0	2	1	—	—	0	3	—	7
S. Atlantic	15	36	64	1,124	1,407	—	0	6	6	6	—	0	4	1	3
Delaware¶	—	0	3	6	20	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	12	15	—	0	1	—	—	—	0	1	—	—
Florida¶	11	15	38	551	687	—	0	3	5	2	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	2	—	0	3	1	3
Maryland¶	N	0	0	N	N	—	0	3	—	1	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina¶	—	0	8	11	74	—	0	1	—	—	—	0	0	—	—
Virginia¶	4	8	25	265	339	—	0	1	1	1	—	0	1	—	—
West Virginia	—	8	32	279	272	—	0	0	—	—	—	0	0	—	—
E.S. Central	1	5	15	170	186	—	0	2	3	2	—	0	3	3	2
Alabama¶	1	5	14	161	179	—	0	0	—	1	—	0	1	—	2
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	3	9	7	—	0	2	3	1	—	0	2	3	—
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	28	43	258	1,474	1,846	—	0	16	1	10	—	0	3	2	5
Arkansas¶	—	3	17	130	132	—	0	3	—	—	—	0	1	—	—
Louisiana	—	2	5	48	48	—	0	3	—	6	—	0	1	1	2
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas¶	28	37	247	1,296	1,666	—	0	15	1	4	—	0	2	1	3
Mountain	1	13	50	402	710	—	0	18	2	43	—	0	15	4	43
Arizona	—	0	0	—	—	—	0	13	2	42	—	0	6	2	29
Colorado¶	—	5	31	155	256	—	0	5	—	1	—	0	11	1	12
Idaho¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana¶	1	2	28	100	149	—	0	0	—	—	—	0	0	—	—
Nevada¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	1
New Mexico¶	—	1	8	23	71	—	0	6	—	—	—	0	2	—	—
Utah	—	4	26	117	221	—	0	1	—	—	—	0	1	—	—
Wyoming¶	—	0	3	7	13	—	0	1	—	—	—	0	1	1	1
Pacific	—	2	6	67	73	—	0	8	2	14	—	0	6	1	14
Alaska	—	1	4	31	28	—	0	0	—	—	—	0	0	—	—
California	—	0	3	7	23	—	0	8	2	14	—	0	6	1	14
Hawaii	—	1	4	29	22	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	17	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	6	21	100	383	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† 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 reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting 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/osels/ph_surveillance/nndss/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 30, 2011 (30th week)

Reporting area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
New England	560	373	135	29	9	13	57
Boston, MA	120	73	33	8	3	3	11
Bridgeport, CT	31	22	4	2	2	1	1
Cambridge, MA	17	15	1	—	—	1	4
Fall River, MA	27	20	5	1	1	—	—
Hartford, CT	59	37	17	4	—	1	4
Lowell, MA	31	23	6	1	—	—	3
Lynn, MA	8	6	2	—	—	—	—
New Bedford, MA	14	8	4	2	—	—	—
New Haven, CT	48	28	15	4	—	1	13
Providence, RI	59	42	15	1	—	1	4
Somerville, MA	4	1	1	—	—	2	—
Springfield, MA	39	30	7	1	1	—	8
Waterbury, CT	33	24	9	—	—	—	—
Worcester, MA	70	44	16	5	2	3	9
Mid. Atlantic	1,742	1,189	393	97	43	20	83
Albany, NY	45	26	11	3	1	4	4
Allentown, PA	26	18	6	—	2	—	1
Buffalo, NY	62	38	18	3	—	3	5
Camden, NJ	24	14	6	3	1	—	2
Elizabeth, NJ	19	12	5	—	2	—	3
Erie, PA	48	36	5	3	4	—	2
Jersey City, NJ	13	9	4	—	—	—	3
New York City, NY	965	667	220	52	16	10	40
Newark, NJ	43	24	12	2	5	—	2
Paterson, NJ	27	18	4	4	1	—	1
Philadelphia, PA	115	70	34	7	4	—	5
Pittsburgh, PA§	35	26	4	3	1	1	2
Reading, PA	38	21	13	4	—	—	—
Rochester, NY	90	62	21	5	1	1	4
Schenectady, NY	18	12	5	—	1	—	1
Scranton, PA	27	20	6	—	1	—	—
Syracuse, NY	81	63	14	4	—	—	6
Trenton, NJ	33	26	3	2	1	1	1
Utica, NY	15	10	2	1	2	—	1
Yonkers, NY	18	17	—	1	—	—	—
E.N. Central	2,003	1,368	436	123	36	40	138
Akron, OH	53	34	13	3	—	3	5
Canton, OH	36	25	9	2	—	—	3
Chicago, IL	241	162	53	19	5	2	16
Cincinnati, OH	77	43	22	4	1	7	5
Cleveland, OH	283	210	47	18	5	3	15
Columbus, OH	237	164	46	15	7	5	16
Dayton, OH	129	82	31	12	1	3	12
Detroit, MI	163	93	48	12	5	5	9
Evansville, IN	36	26	8	2	—	—	3
Fort Wayne, IN	76	56	13	5	1	1	6
Gary, IN	10	5	1	2	2	—	—
Grand Rapids, MI	49	35	6	2	1	5	7
Indianapolis, IN	168	104	44	13	3	4	19
Lansing, MI	47	38	7	2	—	—	3
Milwaukee, WI	80	53	21	6	—	—	5
Peoria, IL	35	28	5	—	1	1	—
Rockford, IL	66	49	16	1	—	—	5
South Bend, IN	66	46	17	—	3	—	2
Toledo, OH	79	57	17	3	1	1	3
Youngstown, OH	72	58	12	2	—	—	4
W.N. Central	701	421	202	44	18	15	39
Des Moines, IA	61	41	15	4	1	—	3
Duluth, MN	32	22	9	1	—	—	2
Kansas City, KS	24	10	10	—	2	2	1
Kansas City, MO	51	27	20	3	1	—	2
Lincoln, NE	42	35	6	1	—	—	1
Minneapolis, MN	86	58	21	2	2	3	8
Omaha, NE	95	58	26	6	3	2	4
St. Louis, MO	155	61	61	18	7	7	9
St. Paul, MN	68	46	14	6	2	—	5
Wichita, KS	87	63	20	3	—	1	4
S. Atlantic	1,228	739	315	109	33	32	73
Atlanta, GA	151	91	34	16	5	5	1
Baltimore, MD	180	99	50	20	8	3	15
Charlotte, NC	122	66	34	10	5	7	5
Jacksonville, FL	146	90	42	8	2	4	9
Miami, FL	136	100	26	9	1	—	10
Norfolk, VA	49	28	12	4	1	4	1
Richmond, VA	51	25	15	8	3	—	2
Savannah, GA	56	32	17	4	2	1	6
St. Petersburg, FL	51	33	13	4	1	—	4
Tampa, FL	167	102	49	12	1	3	10
Washington, D.C.	103	61	19	14	4	5	9
Wilmington, DE	16	12	4	—	—	—	1
E.S. Central	872	547	239	43	22	21	61
Birmingham, AL	221	138	62	12	4	5	14
Chattanooga, TN	63	38	22	—	2	1	5
Knoxville, TN	127	86	29	7	3	2	13
Lexington, KY	44	29	9	3	1	2	5
Memphis, TN	169	97	51	12	3	6	12
Mobile, AL	61	41	15	2	2	1	3
Montgomery, AL	34	22	8	1	3	—	3
Nashville, TN	153	96	43	6	4	4	6
W.S. Central	1,316	889	265	102	32	27	64
Austin, TX	78	49	22	5	2	—	6
Baton Rouge, LA	65	53	10	—	—	2	—
Corpus Christi, TX	52	35	12	3	2	—	5
Dallas, TX	211	134	42	19	10	5	12
El Paso, TX	80	43	25	4	4	4	1
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	253	169	37	36	4	7	11
Little Rock, AR	81	52	21	4	1	3	6
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	228	164	42	16	5	1	15
Shreveport, LA	136	97	21	10	3	5	3
Tulsa, OK	132	93	33	5	1	—	5
Mountain	1,103	696	270	92	18	25	64
Albuquerque, NM	125	76	25	16	2	6	5
Boise, ID	47	39	6	2	—	—	2
Colorado Springs, CO	88	58	16	9	2	3	2
Denver, CO	79	40	30	6	—	3	4
Las Vegas, NV	261	170	67	20	4	—	18
Ogden, UT	34	25	7	2	—	—	5
Phoenix, AZ	156	85	47	14	2	6	10
Pueblo, CO	25	18	4	2	1	—	1
Salt Lake City, UT	113	71	26	10	4	2	8
Tucson, AZ	175	114	42	11	3	5	9
Pacific	1,682	1,150	386	84	40	22	142
Berkeley, CA	14	9	4	—	—	1	—
Fresno, CA	123	83	28	5	5	2	11
Glendale, CA	30	27	2	1	—	—	6
Honolulu, HI	59	37	14	3	2	3	4
Long Beach, CA	54	34	17	2	—	1	7
Los Angeles, CA	251	164	64	10	11	2	31
Pasadena, CA	33	28	5	—	—	—	5
Portland, OR	142	97	34	8	2	1	10
Sacramento, CA	219	156	48	13	1	1	23
San Diego, CA	160	115	32	4	4	5	12
San Francisco, CA	95	56	25	7	5	2	4
San Jose, CA	171	126	30	11	4	—	7
Santa Cruz, CA	38	25	10	1	1	1	5
Seattle, WA	114	73	30	7	2	2	5
Spokane, WA	49	37	6	4	2	—	3
Tacoma, WA	130	83	37	8	1	1	9
Total¶	**11,207**	**7,372**	**2,641**	**723**	**251**	**215**	**721**

U: Unavailable. —: No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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, visit MMWR's free subscription page at *http://www.cdc.gov/mmwr/mmwrsubscribe.html*. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data presented by the Notifiable Disease Data Team and 122 Cities Mortality Data Team in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. 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 *mmwrq@cdc.gov.*

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

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

U.S. Government Printing Office: 2011-723-011/21063 Region IV ISSN: 0149-2195