Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Weekly / Vol. 60 / No. 27

July 15, 2011

Smoking in Top-Grossing Movies — United States, 2010

The National Cancer Institute has concluded that studies indicate a causal relationship between exposure to depictions of smoking in movies and youth smoking initiation (*1*). Adolescents in the top quartile of exposures to onscreen tobacco incidents have been found to be approximately twice as likely to begin smoking as those in the bottom quartile (*2*). The 2010 U.S. Department of Health and Human Services strategic plan to reduce tobacco use includes reducing youth exposure to onscreen smoking (*3*). To monitor tobacco use in movies, Thumbs Up! Thumbs Down! (TUTD), a project of Breathe California of Sacramento-Emigrant Trails, counts occurrences of tobacco incidents in U.S. top-grossing movies each year. This report updates a previous report (*4*) with the latest TUTD findings. In 2010, the number of onscreen tobacco incidents in youth-rated (G, PG, or PG-13) movies continued a downward trend, decreasing 71.6% from 2,093 incidents in 2005 to 595 in 2010. Similarly, the average number of incidents per youth-rated movie decreased 66.2%, from 20.1 in 2005 to 6.8 in 2010. The degree of decline, however, varied substantially by motion picture company. The three companies with published policies designed to reduce tobacco use in their movies had an average decrease in tobacco incidents of 95.8%, compared with an average decrease of 41.7% among the three major motion picture companies and independents without policies. This finding indicates that an enforceable policy aimed at reducing tobacco use in youth-rated movies can lead to substantially fewer tobacco incidents in movies and help prevent adolescent initiation of smoking.

TUTD uses persons trained as monitors to count all tobacco incidents in those movies that are among the 10 top-grossing movies in any calendar week. During 2002–2008, U.S. movies that ranked in the top 10 for at least 1 week accounted for 83% of all movies exhibited in the United States and 96% of ticket sales. For this analysis, TUTD defined a tobacco incident as the use or implied use of a tobacco product by an actor. A new incident occurred each time 1) a tobacco product went off screen and then back on screen, 2) a different actor was shown with a tobacco product, or 3) a scene changed, and the new scene contained the use or implied off-screen use of a tobacco product. The number of movies without tobacco incidents was divided by the total number of movies to calculate the percentage of movies with no incidents, and the average number of tobacco incidents per movie was calculated for each motion picture company. Results in 2010 were compared with 2005 and analyzed by motion picture company and by whether the company had a published policy aimed at decreasing the depiction of smoking in its movies.

In 2010, a total of 75 (54.7%) of 137 top-grossing movies had no tobacco incidents, compared with 49 (33.3%) of 147 in 2005; among R-rated movies, 14 (29.2%) of 48 had no tobacco incidents in 2010, compared with two (4.7%) of 43 in 2005. Among youth-rated movies (G, PG, or PG-13), 61 (69.3%) of 88 had no tobacco incidents in 2010 (Table), compared with 47 (45.2%) of 104 in 2005.

From 2005 to 2010, the total number of tobacco incidents in top-grossing movies decreased 56.0%, from 4,152 to 1,825. The total number of incidents in G or PG movies decreased 93.6%, from 472 to 30, whereas the number in PG-13 movies decreased 65.1%, from 1,621 to 565, and the number in R-rated movies decreased 40.5%, from 2,059 to 1,226 (Figure 1).

From 2005 to 2010, among the three major motion picture companies (half of the six members of the Motion Picture

INSIDE

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

Association of America [MPAA]) with policies aimed at reducing tobacco use in their movies, the number of tobacco incidents per youth-rated movie decreased 95.8%, from an average of 23.1 incidents per movie to an average of 1.0 incident. For independent companies (which are not MPAA members) and the three MPAA members with no antitobacco policies, tobacco incidents decreased 41.7%, from an average of 17.9 incidents per youth-rated movie in 2005 to 10.4 in 2010, a 10-fold higher rate than the rate for the companies with policies (Table, Figure 2). Among the three companies with antitobacco policies, 88.2% of their top-grossing movies had no tobacco incidents, compared with 57.4% of movies among companies without policies (Table).

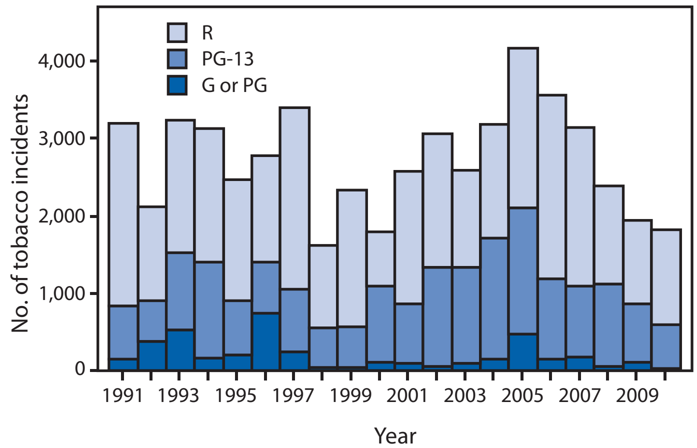
Reported by

Stanton A. Glantz, PhD, Univ of California, San Francisco; Shelley Mitchell, Kori Titus, Breathe California of Sacramento-Emigrant Trails; Jonathan R. Polansky, Onbeyond, Fairfax, California. Rachel B. Kaufmann, PhD, Ursula E. Bauer, PhD, National Center for Chronic Disease Prevention and Health Promotion, CDC. ***Corresponding contributor:*** *Stanton A. Glantz, glantz@medicine.ucsf.edu, 415-476-3893.*

Editorial Note

The findings in this report indicate continuing progress toward the U.S. Department of Health and Human Services goal of reducing youth exposure to onscreen smoking (*3*). Across all MPAA rating categories, the percentages of 2010

FIGURE 1. Number of tobacco incidents in top-grossing movies, by movie rating — United States, 1991–2010



top-grossing movies with no tobacco incidents were the highest observed in 2 decades (*4*). The decreased presence of onscreen smoking might have contributed to the decline in cigarette use among middle school and high school students (*5,6*). A 2010 meta-analysis of four studies attributed 44% of youth smoking initiation to viewing tobacco incidents in movies (*2*). Smoking and smokeless tobacco use usually are initiated during adolescence (*7*).

This report is the first to compare differences in onscreen tobacco incidents by major motion picture companies with and without published policies aimed at reducing tobacco use in their movies. These policies, adopted during 2004–2007 by

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.

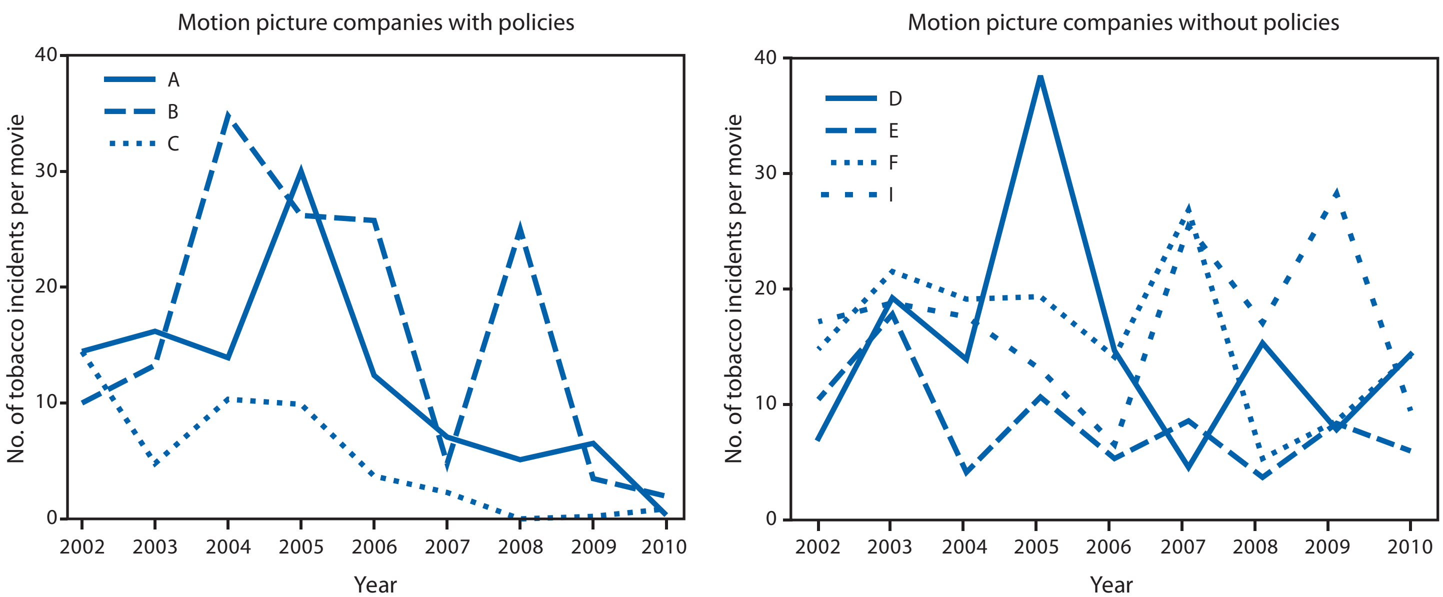
Suggested citation: Centers for Disease Control and Prevention. [Article title]. MMWR 2011;60:[inclusive page numbers].

TABLE. Percentage of top-grossing, youth-rated (G, PG, or PG-13) movies with no tobacco incidents* and number of tobacco incidents per movie, by motion picture company tobacco policy status† — United States, 2005 and 2010

		2005			2010			
Company	Month policy took effect	Total no. of movies	% of movies with no tobacco incidents	Tobacco incidents per movie	Total no. of movies	% of movies with no tobacco incidents	Tobacco incidents per movie	% change in tobacco incidents per movie from 2005 to 2010§
Companies with published policies on tobacco incidents in movies								
A	July 2005 (updated July 2007)	19	47.4	30.0	12	83.3	0.3	-98.9
B	April 2007	13	23.1	26.2	10	90.0	1.9	-92.8
C	October 2004	13	61.5	9.8	12	91.7	0.8	-91.5
Average	—	45	44.0	23.1¶	34	88.2	1.0¶	-95.8
Companies without published policies on tobacco incidents in movies								
D	—	8	25.0	38.5	8	62.5	14.4	-62.7
E	—	16	56.3	10.7	16	81.3	6.0	-43.9
I	—	16	50.0	13.0	16	43.8	9.5	-26.9
F	—	19	42.1	19.3	14	42.9	14.2	-26.4
Average	—	59	45.8	17.9¶	54	57.4	10.4¶	-41.7
Overall	**—**	**104**	**45.2**	**20.1**	**88**	**69.3**	**6.8**	**-66.4**

* An incident was defined as the use or implied use of a tobacco product by an actor. A new incident occurred each time 1) a tobacco product went off screen and then back on screen, 2) a different actor was shown with a tobacco product, or 3) a scene changed, and the new scene contained the use or implied off-screen use of a tobacco product.
† A through F are the six major U.S. motion picture companies that comprise the Motion Picture Association of America (MPAA). Movies produced or distributed by one of these six companies are credited to that company, regardless of whether the company produced the film itself or distributed a film produced by others. I represents independent motion picture companies that are not MPAA members and distribute their own movies directly.
§ Because of rounding, percentage changes in tobacco incidents per movie might not match results of calculations using data as presented.
¶ Average incidents weighted by number of movies per company.

FIGURE 2. Number of tobacco incidents per top-grossing youth-rated movie (G, PG, and PG-13) among motion picture companies with and without published policies* aimed at reducing smoking — United States, 2002–2010



* Companies A through F are the six major U.S. motion picture companies that comprise the Motion Picture Association of America (MPAA). Movies produced or distributed by one of the six are credited to that company, regardless of whether the company produced the film itself or distributed a film produced by others. Company I represents independent motion picture companies that are not MPAA members and distribute their own movies directly. Policy effective dates were as follows: company A, July 2005 (updated July 2007); company B, April 2007; company C, October 2004.

What is already known on this topic?

Exposure to onscreen smoking in movies promotes adolescent smoking, and greater levels of exposure are associated with increased probability of smoking initiation. The amount of onscreen smoking declined from 2005 through 2009.

What is added by this report?

The number of onscreen tobacco incidents in top-grossing movies continued to decline in 2010, when 69.3% of top-grossing movies had no tobacco incidents. However, reductions in tobacco incidents per movie were not uniform across the motion picture industry, averaging 95.8% per movie among motion picture companies with published antitobacco policies and 41.7% among other major motion picture companies and independents.

What are the implications for public health practice?

Although three major motion picture companies have excluded nearly all tobacco incidents from their top-grossing youth-rated movies, inconsistent performance among motion picture companies threatens continued progress. Consistent with the effects of antitobacco use policies adopted by the three major motion picture companies, expanding the R rating to include movies with smoking could further reduce exposures of young persons to onscreen tobacco incidents, making smoking initiation less likely.

three companies, provide for review of scripts, story boards, daily footage, rough cuts, and the final edited film by managers in each studio with the authority to implement the policies. However, although the three companies have eliminated depictions of tobacco use almost entirely from their G, PG, and PG-13 movies, as of June 2011 none of the three policies completely banned smoking or other tobacco imagery in the youth-rated films that they produced or distributed.

The findings in this report are subject to at least two limitations. First, the policies on smoking in movies took effect at different times for different motion picture companies. When the policies came into force, many movies were already in production, a process that typically takes several years. By 2010, all movies released by the three companies with published policies aimed at reducing tobacco use had entered production after the policies were promulgated. Second, motion picture companies were under growing antitobacco pressure from public health organizations, state health departments, and state attorneys general beginning in 2001, which might account, in part, for the decrease in onscreen tobacco incidents after 2005, even before two of the three major motion picture companies had adopted their policies.

This study demonstrates the practicality of enacting policies to reduce tobacco incidents in youth-rated movies. The findings also indicate that those major motion picture companies with antitobacco policies had the greatest success in reducing tobacco incidents in their movies.

The World Health Organization (*8*) and numerous public health and health professional organization have recommended giving movies with tobacco incidents an R rating, with two exceptions: those movies that portray a historical figure who smoked and those that portray the negative effects of tobacco use. Adoption of this policy could further reduce tobacco incidents in youth-rated movies. However, this policy would not affect youth exposure to older movies that have already been released and are available as downloads, rentals, and on television. Because of this and because youths do view some R-rated movies (*9*), removing tobacco incidents from youth-rated movies going forward will not completely eliminate youth exposure to smoking in movies. Therefore, antitobacco ads are recommended for showing before movies that depict smoking (*3*). Other recommended policies include certifying no payments for depicting tobacco use and ending depiction of tobacco brands (*9*).

Almost all states offer movie producers subsidies in the form of tax credits or cash rebates to attract movie production to their states, totaling approximately $1 billion annually. The 15 states subsidizing top-grossing movies with tobacco incidents spent more on these productions in 2010 ($288 million) than they budgeted for their state tobacco-control programs in 2011 ($280 million) (*10*). State and local health departments could work with state policy makers to harmonize their state movie subsidy programs with their tobacco-control programs by limiting eligibility for subsidies to tobacco-free movies.

More efforts are needed to reduce initiation of smoking among youths. Monitoring 1) the success of policies in reducing tobacco incidents in youth-rated movies and 2) the impact of incident reductions on youth smoking behavior helps assess and guide efforts to protect youths from tobacco addiction.

References

1. National Cancer Institute. Tobacco control monograph 19: the role of the media in promoting and reducing tobacco use. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2008. Available at http://www.cancercontrol.cancer.gov/tcrb/monographs/19/index.html. Accessed July 11, 2011.
2. Millett C, Glantz SA. Assigning an '18' rating to movies with tobacco imagery is essential to reduce youth smoking. Thorax 2010;65:377–8.
3. US Department of Health and Human Services. Ending the tobacco epidemic: a tobacco control strategic action plan for the U.S. Department of Health and Human Services. Washington, DC: US Department of Health and Human Services; 2010. Available at http://www.hhs.gov/ash/initiatives/tobacco/tobaccostrategicplan2010.pdf. Accessed July 11, 2011.
4. CDC. Smoking in top-grossing movies—United States, 1991–2009. MMWR 2010;59:1014–7.
5. CDC. Tobacco use among middle and high school students—United States, 2000–2009. MMWR 2010;59:1063–8.

6. CDC. Cigarette use among high school students—United States, 1991–2009. MMWR 2010;59:797–801.
7. US Department of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 1994. Available at http://www.cdc.gov/tobacco/data_statistics/sgr/1994/index.htm. Accessed July 11, 2011.
8. World Health Organization. Smoke-free movies: from evidence to action. Geneva, Switzerland: World Health Organization; 2009. Available at http://www.who.int/tobacco/smoke_free_movies/en. Accessed July 11, 2011.
9. Sargent JD, Tanski SE, Gibson J. Exposure to movie smoking among US adolescents aged 10 to 14 years: a population estimate. Pediatrics 2007;119:e1167–76.
10. Millett C, Polansky J, Glantz S. Government inaction on ratings and government subsidies to the US film industry help promote youth smoking. PLoS Medicine. In press.

Dengue Virus Infections Among Travelers Returning from Haiti — Georgia and Nebraska, October 2010

In October 2010, a Nebraska clinician notified the state's Central District Health Department (CDHD) of a cluster of dengue-like illnesses in six of 28 missionary workers from Nebraska and Georgia who recently had returned after 7–11 days in Haiti. Infection with the mosquito-transmitted dengue virus (DENV) later was confirmed by laboratory testing in seven persons, five of whom were hospitalized. CDHD, the Nebraska Department of Health and Human Services (NDHHS), the Georgia Department of Public Health (GDPH), and CDC conducted a retrospective cohort study to assess the pretravel dengue knowledge and mosquito-avoidance practices of those with and without laboratory-confirmed infection. This report describes the results of that study, which indicated that 90% of those in the study had a pretravel health-care appointment, 57% sought travel advice on the Internet, and 24% used mosquito repellent several times a day; neither pretravel knowledge nor mosquito-avoidance practices were significantly associated with absence of DENV infection. Clinicians should be vigilant for dengue among travelers returning from Haiti and other areas where DENV is endemic or likely to be endemic and should report suspected cases of dengue to public health authorities (*1*).

On October 18, 2010, CDHD notified NDHHS of six persons who experienced fever, headache, arthralgia, and myalgia upon returning from a 7–11 day missionary trip to Haiti's Carrefour community. Initial interviews indicated that these persons traveled with a larger missionary group of 28 persons (22 from Nebraska and six from Georgia). NDHHS, CDHD, GDPH, and CDC collaborated to collect serum specimens for dengue testing and to administer a survey to assess travelers' dengue knowledge and mosquito-avoidance practices.

Specimens were collected from 21 Nebraska travelers and two Georgia travelers. Specimens were sent to CDC for diagnostic testing along with dengue case investigation forms (DCIFs)* that included demographic, epidemiologic, and clinical information.

Because a substantial portion of DENV infections can be asymptomatic (*2*), both symptomatic travelers and travelers who were not ill underwent laboratory testing for DENV infection. Specimens collected from symptomatic travelers included an acute specimen (collected ≤5 days after symptom onset from travelers reporting any symptoms during travel or within 14 days of return home) and a convalescent specimen (collected >5 days after symptom onset). Specimens collected from travelers who were not ill included a first specimen (collected ≤8 days of return home) and a second specimen (collected ≥14 days after the first specimen). Acute and first specimens were tested for the presence of DENV nucleic acid by reverse transcription–polymerase chain reaction (RT-PCR) using primers specific for DENV-1, DENV-2, DENV-3, and DENV-4 (*3*). Acute and first serum specimens with a negative RT-PCR result also were tested by anti-DENV immunoglobulin M antibody capture enzyme-linked immunosorbent assay (MAC-ELISA). All travelers who had a negative RT-PCR result from the acute or first specimen were asked to provide a convalescent or second specimen for testing by MAC-ELISA. A case was defined as DENV infection confirmed by positive RT-PCR or MAC-ELISA. Noncases were laboratory-test–negative (i.e., RT-PCR was negative or not performed, and MAC-ELISA was negative in the convalescent or second specimen). A negative MAC-ELISA and RT-PCR in the sole acute or first specimen with no convalescent or second specimen provided was considered indeterminate.

Eighteen travelers submitted specimens that were tested by RT-PCR; DENV-1 was detected in specimens submitted by seven of these travelers. Specimens from 11 travelers that tested negative by RT-PCR also tested negative by MAC-ELISA. Of these 11, nine subsequently submitted a convalescent or second specimen, all of which tested negative by MAC-ELISA. Two of the 11 travelers had indeterminate test results. Five travelers provided only a convalescent specimen; all tested negative by MAC-ELISA. Thus, of the 28 travelers in this group, 21 (75%) had complete DENV laboratory testing, seven of whom (33%) were infected with DENV-1.

All 28 travelers were asked to participate in a survey using a 53-item questionnaire to collect information regarding demographics, medical and travel history, pretravel preparations and knowledge, mosquito-avoidance practices while in Haiti, and illnesses during and after travel. Twenty-five (89%) travelers participated: 21 by telephone or in-person interviews, two by proxy, and two by self-administration.

The group had traveled to Haiti for 7–11 days, during which they offered spiritual and community support and educational activities. Although pretravel medical preparation was left up to each person, travel organizers referred them to a CDC Internet site for travelers' health recommendations. While in Haiti, the group stayed together in a house lacking functional window and door screens, air-conditioning, and electricity. The

* Available at http://www.cdc.gov/dengue/resources/denguecasereports/dcif_english.pdf.

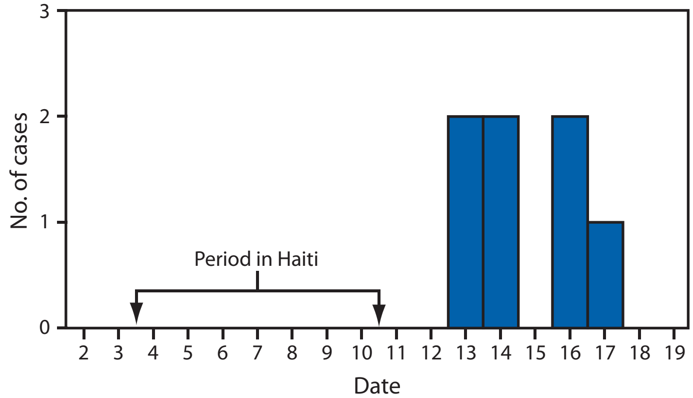
majority of activities were conducted within walking distance of the house during daylight hours; evening group meetings were held nearby on a building rooftop.

Twenty-one (75%) of the 28 travelers completed both questionnaires and laboratory testing and were included in the analysis. Of these, 12 (57%) were male. Median age was 34 years (range: 16–69 years), and all were non-Hispanic whites. Six (29%) had lived and 14 (67%) had traveled outside of the continental United States previously; none reported previous travel to Haiti or previous DENV infection.

Based on information collected on DCIFs and questionnaires, 16 (76%) of the 21 travelers included in the analysis reported one or more signs or symptoms of illness during travel or within 14 days of returning home; 12 (75%) reported febrile illness, and 10 (63%), including all seven confirmed cases, reported illnesses compatible with 2009 World Health Organization (WHO) clinical criteria for probable dengue (*4*). Among the seven persons with DENV infection, all had illness onset 3–7 days (median: 4 days) after returning home (Figure), sought medical care, and recovered. Five (71%) of the seven were hospitalized for 3–5 days (median: 3 days) within 3–6 days (median: 5 days) of onset. Of these, four had hemorrhagic manifestations, including two with petechiae, one with purpura, and one with petechiae and menorrhagia. Review of hospital discharge summaries showed that none of those hospitalized met the WHO clinical criteria for severe dengue (*4*).

Nineteen (90%) of the 21 travelers included in the analysis reported having a pretravel health-care appointment, and 12 (57%) reported seeking pretravel health advice on the Internet. Twenty (95%) reported having pretravel knowledge about infectious disease risks in Haiti, and 10 (48%) reported pretravel knowledge about dengue. Ten (48%) travelers recalled having been bitten by a mosquito during the trip, and five (24%) reported using insect repellent multiple times a day. Ten (48%) had worn long pants, and two (10%) had worn long-sleeved shirts more than 1 day while in Haiti. When questionnaire responses from persons with DENV infection were compared with those from persons without DENV infection, no statistically significant association was found between having DENV infection and pretravel knowledge or mosquito-avoidance practices (Table).

FIGURE. Symptom onset date for seven travelers returning from Haiti with laboratory-confirmed dengue virus infection — Georgia and Nebraska, October 2010



Reported by

Teresa Anderson, Jeremy Collinson, Trina Vap, Central District Health Dept, Grand Island; Robin M. Williams, Nebraska Dept of Health and Human Svcs and Univ of Nebraska-Lincoln; Thomas J. Safranek, MD, Dennis P. Leschinsky, Annette K. Bredthauer, DVM, Nebraska Dept of Health and Human Svcs. Julie Gabel, DVM, Div of Public Health, Georgia Dept of Public Health. Bryan F. Buss, DVM, Career Epidemiology Field Officer Program, Office for Public Health Preparedness and Emergency Response; Mark J. Sotir, PhD, Emily S. Jentes, PhD, Div of Global Migration and Quarantine; Jorge L. Muñoz-Jordan, PhD, Elizabeth A. Hunsperger, PhD, D. Fermin Argüello, MD, Div of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases; Parvathy Pillai, MD, Tyler M. Sharp, PhD, EIS officers, CDC. ***Corresponding contributor:*** *Tyler M. Sharp, tsharp@cdc.gov, 787-706-2399.*

Editorial Note

This report confirms recent DENV transmission in Haiti with an attack rate of ≥25% among a group of travelers who were in the country for 7–11 days. A similar investigation of dengue among short-term travelers to the Dominican Republic in 2008 indicated an attack rate of ≥42%, with laboratory testing limited to those with a clinical presentation consistent with dengue (*5*). Little is known about the epidemiology of dengue in Haiti. However, this report corroborates previous findings of dengue among military personnel deployed to Haiti (*6*) and high DENV seroprevalence among Haitian children (*7*), indicating that DENV likely is endemic in Haiti.

In this report, although nearly all travelers sought pretravel health-care advice, only 48% had pretravel knowledge about dengue, 48% wore long pants on more than 1 day, and 24% used mosquito repellent multiple times a day. Travelers should be aware of the health risks associated with their travel and seek a pretravel medical consultation, in which they should receive destination-specific health advice. To inform persons traveling to DENV-endemic areas, clinicians and travel organizers should consult travel medicine resources, including travelers' health Internet sites,† to provide information to travelers about

† Including http://wwwnc.cdc.gov/travel/yellowbook/2012/chapter-3-infectious-diseases-related-to-travel/dengue-fever-and-dengue-hemorrhagic-fever.htm; http://www.cdc.gov/dengue; and http://www.healthmap.org/dengue/index.php.

TABLE. Pretravel knowledge of dengue and mosquito-avoidance practices among travelers returning from Haiti — Georgia and Nebraska, 2010

	Total (N = 21)		Persons with DENV infection* (n = 7)		Persons without DENV infection† (n = 14)		
Characteristic	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**p value§**
Pretravel knowledge							
Knew about infectious diseases in Haiti	**20**	**(95)**	7	(100)	13	(93)	>0.99
Knew about dengue	**10**	**(48)**	3	(43)	7	(50)	>0.99
Knew dengue is transmitted by mosquitoes	**9**	**(43)**	3	(43)	6	(43)	>0.99
Knew about potential dengue exposure in Haiti	**6**	**(29)**	1	(14)	5	(36)	0.61
Knew no vaccine for dengue exists	**6**	**(29)**	3	(43)	3	(21)	0.35
Knew no treatment for dengue exists	**2**	**(10)**	1	(14)	1	(7)	>0.99
Mosquito-avoidance practices							
Recalled mosquito bite	**10**	**(48)**	2	(29)	8	(57)	0.36
Used repellent multiple times a day	**5**	**(24)**	3	(43)	2	(14)	0.28
Wore long pants more than 1 day	**10**	**(48)**	2	(29)	8	(57)	0.36
Wore long-sleeve shirt more than 1 day	**2**	**(10)**	1	(14)	1	(7)	>0.99
Used mosquito coils	**1**	**(5)**	1	(14)	0	—	0.33

Abbreviation: DENV = dengue virus.
* DENV infection confirmed by reverse transcription–polymerase chain reaction (RT-PCR) or immunoglobulin M antibody capture enzyme-linked immunosorbent assay (MAC-ELISA).
† Laboratory test–negative (i.e., RT-PCR was negative or not performed, and MAC-ELISA was negative in the convalescent or second specimen).
§ Calculated by using Fisher's exact test to compare persons with and without DENV infection.

DENV transmission, symptoms of dengue, and mosquito-avoidance practices, including use of insect repellent, protective clothing, and insecticides.

Only 29% of those with DENV infection in this report recalled mosquito bites; travelers to DENV-endemic areas should adhere to mosquito-avoidance strategies even if mosquitoes are not apparent. Because *Aedes aegypti*, the primary mosquito vector for DENV, typically lives inside or close to human dwellings and has peak biting periods during daylight hours (*8*), travelers should be advised to use protective measures both indoors and outdoors, particularly during the daytime.

Clinicians should be vigilant to recognizing dengue among returning travelers. In this cluster, a clinician identified dengue-like illness among travelers returning from Haiti, submitted specimens for testing, and promptly notified public health authorities. Although clinical management should not be delayed pending diagnostic testing, laboratory testing is required to confirm diagnoses of dengue. Furthermore, previous DENV infection is considered a risk factor for increased severity of disease upon subsequent infection with DENV of a differing serotype (*4*); therefore, laboratory testing can allow clinicians to inform travelers of increased risk for severe dengue if they are infected again upon subsequent travel to DENV-endemic areas.

Prompt reporting of suspected cases of dengue to public health authorities can facilitate diagnostic testing and prevent secondary DENV transmission. Recent reports of DENV transmission in Hawaii and Florida (*9,10*) indicate the existence of competent mosquito vectors in certain areas of the United States. As such, the potential exists for domestic transmission of DENV imported by viremic travelers returning to areas in the United States with competent vectors. Early detection of cases and a rapid public health response might prevent such importations from leading to outbreaks.

All travelers to Haiti should seek pretravel health counseling, preferably 4–6 weeks before travel, receive information about risks for DENV infection, and employ recommended mosquito-avoidance practices. Clinicians evaluating travelers with febrile illness who recently have returned from Haiti or other DENV-endemic areas are encouraged to consider dengue in their differential diagnosis, submit specimens for laboratory testing, and report cases of dengue expeditiously to local or state health departments (Box).

What is already known about this topic?

Dengue virus (DENV) is a leading cause of febrile illness among travelers returning from the Caribbean, Latin America, and Asia; however, evidence of DENV infection in Haiti is limited.

What is added by this report?

Twenty-eight travelers visited Haiti for 7–11 days, and upon return to the United States, seven (25%) had laboratory evidence of recent infection with DENV, confirming that travelers to Haiti are at risk for dengue.

What are the implications for public health practice?

Travelers to Haiti should seek pretravel medical consultation, preferably 4–6 weeks before travel, and adhere to prevention strategies to avoid mosquito bites; clinicians should advise travelers about dengue and consider dengue in their differential diagnosis for persons returning from Haiti with febrile illness.

BOX. CDC recommendations regarding travel to dengue virus–endemic areas*

Before travel

- Travelers should seek pretravel medical consultations from clinicians regarding prevention of dengue.
- Clinicians should provide travelers with information about risk for dengue, means to prevent dengue through mosquito-avoidance practices, symptoms of dengue, and what to do if the traveler thinks he or she has dengue.
- Travel organizers should inform clients of the risk for dengue and reinforce the importance of seeking a pretravel medical consultation from a clinician.

During travel

- Travelers should adhere to recommended dengue-prevention practices (e.g., use of insect repellent, protective clothing, and insecticides), both indoors and outdoors, and particularly during the daytime.
- Travelers should seek medical evaluation if they develop a febrile illness.

After travel

- Travelers should seek medical evaluation if they develop a febrile illness.
- Clinicians should consider dengue in their differential diagnosis for persons returning with febrile illness, submit appropriate laboratory specimens for diagnostic testing, and report cases to public health authorities.

* Additional information available at http://wwwnc.cdc.gov/travel/yellowbook/2012/chapter-3-infectious-diseases-related-to-travel/dengue-fever-and-dengue-hemorrhagic-fever.htm; http://www.cdc.gov/dengue; and http://www.healthmap.org/dengue/index.php.

Acknowledgments

Mike Darbro, Central District Health Dept, Grand Island; Brian Buhlke, DO, Lone Tree Medical Associates PC, Central City; Cindy Ference, Loup Basin Public Health Dept, Burwell; Alison Keyser-Metobo, MPH, Dorothy Smiley, Nebraska Dept of Health and Human Svcs. Emily Zielinski-Gutierrez, PhD, Erin J. Staples, MD, Carmen L. Perez-Guerra, PhD, Kay Tomashek, MD, Harold Margolis, MD, Div of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases; Julie Magri, MD, Betsy L. Cadwell, MSPH, Scientific Education and Professional Development Program Office, CDC.

References

1. CDC. Changes to the National Notifiable Infectious Disease list and data presentation—January 2010. MMWR 2010;59:11.
2. Rodriguez-Figueroa L, Rigau-Perez JG, Suarez EL, Reiter P. Risk factors for dengue infection during an outbreak in Yanes, Puerto Rico in 1991. Am J Trop Med Hyg 1995;52:496–502.
3. Johnson BW, Russell BJ, Lanciotti RS. Serotype-specific detection of dengue viruses in a fourplex real-time reverse transcriptase PCR assay. J Clin Microbiol 2005;43:4977–83.
4. World Health Organization. Dengue: guidelines for diagnosis, treatment, prevention and control. Geneva, Switzerland: World Health Organization; 2009. Available at http://whqlibdoc.who.int/publications/2009/9789241547871_eng.pdf. Accessed July 6, 2011.
5. CDC. Dengue fever among U.S. travelers returning from the Dominican Republic—Minnesota and Iowa, 2008. MMWR 2010;59:654–6.
6. Trofa AF, DeFraites RF, Smoak BL, et al. Dengue fever in US military personnel in Haiti. JAMA 1997;277:1546–8.
7. Beatty ME, Hunsperger E, Long E, et al. Mosquitoborne infections after Hurricane Jeanne, Haiti, 2004. Emerg Infect Dis 2007;13:308–10.
8. Rodhain F, Rosen L. Dengue and dengue hemorrhagic fever: mosquito vectors and dengue virus-vector relationships. In: Gubler D, Kuno G, eds. Dengue and dengue hemorrhagic fever. Wallingford, United Kingdom: CABI International; 1997:45–60.
9. Effler P, Pang L, Kitsutani P, et al. Dengue fever, Hawaii, 2001–2002. Emerg Infect Dis 2005;11:742–9.
10. CDC. Locally acquired dengue—Key West, Florida, 2009–2010. MMWR 2010;59:577–81.

Cryptosporidiosis Outbreak at a Summer Camp — North Carolina, 2009

In July 2009, local, regional, state, and federal public health officials investigated a cryptosporidiosis outbreak at a youth summer camp in North Carolina. The investigation identified 46 laboratory-confirmed and probable cryptosporidiosis cases at the camp. Analyses of data from a retrospective cohort study of staff members revealed that eating ham from a sandwich bar that included camp-grown raw produce and sharing a cabin with an ill person were significantly associated with illness. *Cryptosporidium* isolates from stool specimens of livestock and humans at the camp were of the identical *Cryptosporidium parvum* subtype, IIaA17G2R1, indicating that zoonotic transmission had occurred, and suggesting a link not implicated by traditional epidemiologic methods. This investigation underscores the importance of reducing the risk for *Cryptosporidium* transmission in camp settings and the value of *Cryptosporidium* subtyping as a tool to elucidate cryptosporidiosis epidemiology.

On June 24, owners of a North Carolina youth summer camp and health-care providers began identifying cases of diarrhea in campers and staff members and notified local public health officials. By June 30, local, regional, and state public health officials had identified four laboratory-confirmed cases of cryptosporidiosis and >30 cases of diarrhea at the camp. CDC was asked to collaborate on the investigation because no common outbreak exposure was identified and multiple potential outbreak sources were present at the camp. The investigation focused on identifying risk factors associated with acute cryptosporidiosis and implementing control measures to stop *Cryptosporidium* transmission at the camp.

Cryptosporidiosis is a diarrheal illness caused by the parasite *Cryptosporidium*. Fecal-oral transmission of *Cryptosporidium* oocysts can occur via ingestion of contaminated recreational water, drinking water, or food, or via contact with infected persons or animals, most notably preweaned calves (*1*). Potential routes of transmission at the camp included several recreational water venues (a swimming pool, lake, and river), drinking water supplied by wells, meals served by a central kitchen, and a garden that provided >50% of the produce for camp meals. Multiple animals, with which campers and staff members had contact, were kept at the camp, including cows, goats, and pigs. Ten Jersey and 12 Holstein preweaned calves arrived at the camp on May 29 and June 13, respectively.

For this investigation, a case was defined as probable if the ill person 1) had been at the camp during June 20–26, 2009, and 2) had onset of gastrointestinal symptoms (including diarrhea, defined as three or more loose or watery stools in 24 hours) after June 21, 2009. Confirmed cases were defined as meeting those conditions and having laboratory-based evidence of *Cryptosporidium* infection. Human and animal stool specimens were tested for *Cryptosporidium*, and isolates were subtyped using DNA sequence analysis (*2*). In response to anecdotal reports of bloody diarrhea, stool specimens also were tested for bacterial pathogens.

A total of 46 cases were identified; 12 confirmed and 34 probable. The unimodal epidemic curve peaked on June 26–27 (Figure). *Cryptosporidium* was detected in stool specimens from 12 patients.* *C. parvum* was detected in stool specimens from one (10%) of 10 Jersey calves, two (17%) of 12 Holstein calves, one goat kid (33%) of three goats, and one piglet (50%) of two pigs. *C. parvum* isolates from seven humans and all but one of the animals were of the identical *C. parvum* subtype, IIaA17G2R1. Shiga toxin–producing *Escherichia coli* serogroup O111 strains were detected in stool specimens of one patient† and five calves; the pulsed-field gel electrophoresis (PFGE) pattern of the human *E. coli* isolate did not match any of the three PFGE patterns found in the calf isolates.

A retrospective cohort study enrolled staff members only; campers, who were as young as age 5 years, were excluded because of concerns about recall accuracy and because they had minimal variation in their camp activities. The self-administered study questionnaire asked about clinical symptoms and approximately 160 camp-specific exposures and individual food items. All risk factors in bivariate analysis with p-values <0.05 were considered for inclusion in the multivariable model. Because data were sparse and many risk factors were assessed, the final multivariable model was constructed using stepwise selection, starting with the variable with the smallest p-value and adding variables one by one. The final model included only significant (p<0.05) covariates.

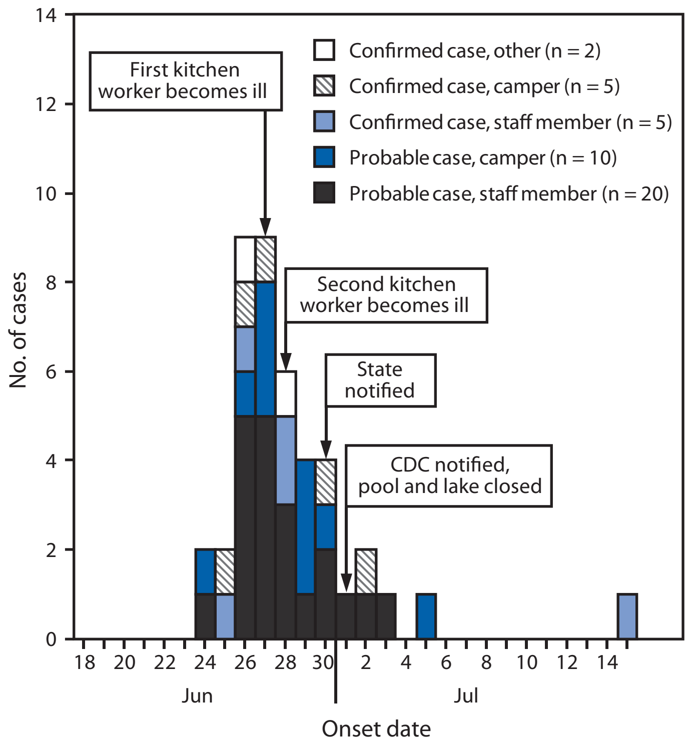
Of 129 staff members, 123 (95%) completed the retrospective cohort study questionnaire (Table). In multivariable analysis, only two factors were significantly associated with illness: ham from the sandwich bar on June 21 (adjusted prevalence ratio [aPR] = 3.5; 95% confidence interval [CI] = 1.6–7.4) and sharing a cabin with an ill person (aPR = 2.8; CI = 1.3–6.2).

A simultaneous environmental health investigation included inspection of the camp and collection of samples from all camp water sources, including the pool, lake, creeks, river, wells,

* Commercial laboratories detected *Cryptosporidium* spp. in stool specimens of five patients. These five stool specimens had been discarded, and isolates were not available for confirmatory testing and *Cryptosporidium* subtyping unlike the remaining seven.

† Stool specimens from only four of the seven patients with laboratory-confirmed *C. parvum* infection were tested for bacterial pathogens.

FIGURE. Cases of cryptosporidiosis at a summer camp (n = 42*), by date of onset of gastrointestinal symptoms — North Carolina, 2009



* An additional four probable cases involving two staff members, one camper, and one other person had unknown symptom onset dates but reported onset of gastrointestinal symptoms after June 21, 2009.

produce preparation sink, and ice-maker filter, and composite soil samples from the gardens for *Cryptosporidium* testing. The investigation revealed that persons were encouraged to spray a diluted bleach solution on their hands before and after interacting with the calves,§ but a hand-washing sink was not available in the barn area. *Cryptosporidium* spp. were detected in multiple composite soil samples from the gardens; however, components of the soil inhibited DNA amplification and precluded typing of *Cryptosporidium* isolates. *Cryptosporidium* was not detected in any of the water samples. After the outbreak began, the camp implemented control measures, including installing a hand-washing sink in the barn area.

Reported by

Sarah A. Collier, MPH, IHRC, Atlanta, GA. Steven Smith, MPA, Anita Lowe, Patricia Hawkins, Pam McFarland, Transylvania County Health Dept, Brevard; Martha Salyers, MD, Phyllis Rocco, MPH, Ginger Bumby, North Carolina Public Health Regional Surveillance Team 6, Asheville; Jean-Marie Maillard, MD, Carl Williams, DVM, North Carolina Div of Public Health, North Carolina Dept of Health and Human Svcs. Aaron Fleischauer, PhD, Career Epidemiology Field Officer Program, Office for Public Health Preparedness and Emergency Response; Vincent Radke, MPH, Div of Emergency and Environmental Health Svcs, National Center for Environmental Health; Jacquelin M. Roberts, MS, Allen W. Hightower, MS, Henry S. Bishop, Blaine A. Mathison, Alexandre J. da Silva, PhD, Div of Parasitic Diseases and Malaria, Center for Global Health; Joe Carpenter, Althea S. Hayden, MD, Div of Healthcare Quality Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases; Michele C. Hlavsa, MPH, Lihua Xiao, DVM, PhD, Virginia A. Roberts, MSPH, Joan Brunkard, PhD, Michael J. Beach, PhD, Vincent Hill, PhD, Jonathan Yoder, MPH, MSW, Elizabeth L. Dunbar, MPH, Theresa Dearen, Cheryl Bopp, MS, Michael S. Humphrys, MS, Div of Foodborne, Waterborne, and Environmental Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases; Ghasi Phillips, ScD, Loretta Chang, MD, Elisa M. Meites, MD, EIS officers, CDC. ***Corresponding contributor:*** *Michele C. Hlavsa, healthywater@cdc.gov.*

§ Although dilute bleach solution might effectively disinfect chlorine-susceptible pathogens such as *E. coli*, it would not be an effective disinfectant for *Cryptosporidium*, which is extremely chlorine-tolerant.

What is already known on this topic?

Cryptosporidium is an extremely chlorine-tolerant parasite that causes cryptosporidiosis, a common cause of diarrhea in the United States. Fecal-oral transmission of *Cryptosporidium* can occur via ingestion of contaminated recreational water, drinking water, food, or via contact with infected persons or animals, most notably preweaned calves.

What is added by this report?

Traditional epidemiologic methods indicated food and person-to-person contact were significantly associated with illness. However, *Cryptosporidium* subtyping results indicated the source of the outbreak was likely to be preweaned calves, a source that was not implicated by traditional epidemiologic methods.

What are the implications for public health practice?

Camps where animals are kept need to enforce effective hygiene and sanitation practices to prevent *Cryptosporidium* transmission. A national program that systematically subtypes *Cryptosporidium* isolates could elucidate the epidemiology of cryptosporidiosis in the United States.

Editorial Note

The incidence of reported cryptosporidiosis in the United States increased from 1.0 cases per 100,000 population in 1999 to >3.0 cases in 2008 (*3*). The cause of this increase is unknown; however, recreational water plays an important role in *Cryptosporidium* transmission. In immunocompetent persons, cryptosporidiosis can range from asymptomatic infection to diarrhea that typically lasts 1–2 weeks. Immunocompromised persons might experience chronic, severe diarrhea, which can lead to malnutrition and substantial weight loss, potentially

TABLE. Exposures possibly associated with cryptosporidiosis among camp staff members who completed a cohort survey (N = 123) at a summer camp — North Carolina, 2009

Date/Possible risk factor	Ill No. (n = 26)	Ill (%)	Not ill No. (n = 97)	Not ill (%)	Prevalence ratio (unadjusted)	(95% CI)
June 21						
Drank water at breakfast	20	(77)	34	(35)	4.3	(1.8–9.9)
Ate pancakes at breakfast	24	(92)	62	(64)	5.2	(1.3–20.7)
Ate bacon at breakfast	16	(62)	37	(38)	2.1	(1.0–4.3)
Ate at welcome lunch	21	(92)	62	(71)	6.6	(0.9–46.6)
Ate ham sandwich at welcome lunch	13	(62)	17	(20)	4.1*	(1.9–8.8)
Ate macaroni and cheese at dinner	24	(92)	62	(64)	5.2	(1.3–20.7)
Ate salad at dinner	23	(88)	56	(58)	4.3	(1.4–13.6)
Ate fruit at dinner	22	(85)	52	(54)	3.6	(1.3–9.9)
Participated in swim test	13	(52)	22	(23)	2.6	(1.3–5.1)
June 22						
Ate pancakes at breakfast	24	(92)	61	(63)	5.4	(1.3–21.6)
Ate quesadilla at dinner	23	(88)	61	(63)	3.6	(1.1–11.1)
Ate lettuce at dinner	24	(92)	58	(60)	6.0	(1.5–24.2)
June 23						
Drank milk at breakfast	18	(69)	40	(41)	2.5	(1.2–5.4)
Ate French fries at dinner	21	(81)	53	(55)	2.8	(1.1–6.9)
Ate vegetables at dinner	21	(81)	53	(55)	2.8	(1.1–6.9)
June 24						
Ate bagel at breakfast	22	(85)	57	(59)	3.1	(1.1–8.3)
Ate salad at dinner	23	(88)	60	(62)	3.7	(1.2–11.6)
June 25						
Ate salad at dinner	22	(85)	60	(62)	2.7	(1.0–7.5)
June–July						
Swam in camp pool	18	(78)	37	(51)	2.7	(1.1–6.6)
Kayaking	11	(44)	18	(20)	2.3	(1.2–4.5)
Canoeing	9	(36)	9	(10)	3.0	(1.6–5.7)
Attended staff members gathering at lake	4	(17)	4	(4)	2.7	(1.2–6.0)
Participated in "Web of Life" activity	13	(50)	28	(29)	2.0	(1.0–3.9)
Shared a cabin with ill person	16	(62)	31	(32)	2.6†	(1.3–5.2)
Shared dining table with ill person	14	(54)	30	(31)	2.1	(1.1–4.1)

Abbreviation: CI = confidence interval.
* Adjusted prevalence ratio = 3.5 (95% CI = 1.6–7.4). A stepwise selection method was used for model construction and the final multivariable model included only significant ($p<0.05$) covariates.
† Adjusted prevalence ratio = 2.8 (95% CI = 1.3–6.2). A stepwise selection method was used for model construction and the final multivariable model included only significant ($p<0.05$) covariates.

causing death. The principal *Cryptosporidium* species that infect humans are *C. parvum*, which can be transmitted zoonotically or anthroponotically, and *Cryptosporidium hominis* (formerly known as *C. parvum* genotype I), which primarily is transmitted anthroponotically. Molecular techniques are needed to distinguish the morphologically indistinguishable oocysts of the two species.

Traditional epidemiologic methods used in this outbreak investigation revealed a unimodal epidemic curve suggestive of a point-source exposure and that food was significantly associated with illness. Contact with calves or other livestock were not significantly associated with illness in bivariate analysis. However, molecular epidemiologic methods demonstrate that the *C. parvum* subtype IIaA17G2R1 transmitted at the camp likely came from livestock on the farm. Ham from the June 21 sandwich bar might be a marker for contaminated produce. Lettuce grown at the camp and commercially purchased tomatoes and onions were available as sandwich toppings. The lettuce was grown adjacent to the calves' area. One patient who was only at the camp June 22–23 did not participate in the June 21 lunch, but reported eating quesadillas with lettuce and tomatoes on June 22. The association between eating lettuce at the June 22 dinner and illness was significant in bivariate analysis, but not in multivariable analysis.

The mechanism leading to food contamination could not be identified. However, *C. parvum* transmission from animals to humans occurred, sharing a cabin with an ill person was significantly associated with illness, and the barn area lacked a hand-washing sink, suggesting that hand hygiene at the camp could be improved. This is particularly important because campers and staff members participated in livestock care and produce harvesting. The timing of both sets of calves' arrival at the North Carolina camp and the onset of the outbreak suggests that the parasite might have been introduced to the camp by the Holstein calves. Findings from previously reported cryptosporidiosis outbreaks at camps with calves present have indicated that visible manure on hands was associated with illness; conversely, habitual hand washing with soap after calf contact was protective (*4*). Along with hand washing, additional measures to protect against transmission of *Cryptosporidium* in camp settings are needed (Box).

The findings in this report are subject to at least four limitations. First, the study questionnaire did not ask respondents about raw produce added to their sandwiches on June 21. Second, only 26 cases were included in the cohort study, limiting statistical power. Third, persons with preexisting *Cryptosporidium* antibodies might be less likely to develop illness upon reinfection (*5*), introducing possible misclassification of illness status and biasing estimates of association between exposure and illness toward the null. Finally, this investigation might have failed to identify all ill food handlers, a source of previously reported foodborne cryptosporidiosis outbreaks (*6*). Two food handlers (onset of illness June 27 and 28) were removed from kitchen duties when they reported their illness to camp owners. Neither reported any camp-specific risk factors for illness other than communal meals.

This investigation demonstrates the need for extensive use of effective measures to prevent *Cryptosporidium* transmission at camps where animals are kept (*7*). Hand-washing facilities with running water, soap, and disposable towels or air dryers should be accessible in animal areas. Hands should be washed after touching animals or their waste; before, during, and after food preparation; and after using the toilet, caring for ill persons, or cleaning soiled bedding. *Cryptosporidium* is chlorine-tolerant, and alcohol-based hand sanitizers are not effective against it.

C. parvum subtype IIaA17G2R1 previously was identified as the etiologic agent of an Ohio outbreak associated with ozonated apple cider (*8*). *C. parvum* infection is common in preweaned calves. Although *C. parvum* subtype IIaA17G2R1 infection in calves has been documented (*2,9*), the significance of isolating this *C. parvum* subtype is unknown. *Cryptosporidium* isolates are not systematically subtyped in the United States. Subtyping has generally been limited to use as an outbreak investigation tool at the national level, despite its epidemiologic utility. In this outbreak investigation, subtyping verified an epidemiologic link that was not implicated by traditional epidemiologic methods; in other investigations, subtyping differentiated individual clusters (*8,10*). Systematically subtyping *Cryptosporidium* isolates via a national molecular surveillance program could elucidate transmission patterns and help direct prevention efforts needed to address increasing incidence of cryptosporidiosis (*3*).

BOX. Key recommendations for camp owners and managers to help prevent and control transmission of *Cryptosporidium**

Hand washing

Provide appropriate and accessible hand hygiene stations with running water, soap, and disposable towels or air dryers. Alcohol-based hand sanitizers are not effective against *Cryptosporidium*.

Hands should be washed

- Before, during, and after preparing food and beverages
- Before eating food
- Before and after caring for someone who is ill
- After using the toilet
- After cleaning up a person who has used the toilet
- After touching an animal or an animal's manure or environment (e.g., a stall)
- After removing clothing or shoes that might be soiled by animal waste
- After touching garbage

Steps on how to properly wash hands are described at http://www.cdc.gov/handwashing.

Animals

Consider limiting contact with preweaned calves.

Review and implement recommendations in the *Compendium of Measures to Prevent Disease Associated with Animals in Public Settings, 2011*, available at http://www.cdc.gov/mmwr/pdf/rr/rr6004.pdf.

Food

Maintain food services to the standards set by local or state laws.

Exclude persons from food and beverage preparation if they are ill with diarrhea or other gastrointestinal symptoms.

* Additional recommendations for camp facilities to prevent *Cryptosporidium* transmission are available at http://www.cdc.gov/parasites/crypto/camps.html.

References

1. Santin M, Trout JM, Xiao L, Zhou L, Greiner E, Fayer R. Prevalence and age-related variation of *Cryptosporidium* species and genotypes in dairy calves. Vet Parasitol 2004;122:103–17.
2. Xiao L, Hlavsa MC, Yoder J, et al. Subtype analysis of *Cryptosporidium* specimens from sporadic cases in Colorado, Idaho, New Mexico, and Iowa in 2007: widespread occurrence of one *Cryptosporidium hominis* subtype and case history of an infection with the *Cryptosporidium* horse genotype. J Clin Microbiol 2009;47:3017–20.
3. Yoder JS, Beach MJ. *Cryptosporidium* surveillance and risk factors in the United States. Exp Parasitol 2010;124:31–9.

4. Smith KE, Stenzel SA, Bender JB, et al. Outbreaks of enteric infections caused by multiple pathogens associated with calves at farm day camp. Pediatr Infect Dis 2004;23:1098–104.
5. Moss DM, Chappell CL, Okhuysen PC, et al. The antibody response to 27-, 17-, and 15-kDa *Cryptosporidium* antigens following experimental infection in humans. J Infect Dis 1998;178:827–33.
6. Smith HV, Caccio SM, Cook N, Nichols RAB, Tait A. *Cryptosporidium* and *Giardia* as foodborne zoonoses. Vet Parasitol 2007;149:29–40.
7. CDC. Compendium of measures to prevent disease associated with animals in public settings, 2011. MMWR 2011;60(No. RR-4).
8. Blackburn BG, Mazurek JM, Hlavsa M, et al. Cryptosporidiosis associated with ozonated apple cider. Emerg Infect Dis 2006;12:684–6.
9. Xiao L, Zhou L, Santin M, Yang W, Fayer R. Distribution of *Cryptosporidium parvum* subtypes in calves in eastern United States. Parasitol Res 2007;100:701–6.
10. Valderrama AL, Hlavsa MC, Cronquist A, et al. Multiple risk factors associated with a large statewide increase in cryptosporidiosis. Epidemiol Infect 2009;137:1781–8.

Illness Associated with Exposure to Methyl Bromide–Fumigated Produce — California, 2010

Methyl bromide (MeBr) is a toxic gas used to fumigate agricultural fields and some produce. The U.S. Department of Agriculture (USDA) requires MeBr fumigation of grapes imported from Chile to prevent invasion by the Chilean false red mite, *Brevipalpus chilensis*. In 2010, two workers were exposed intermittently to MeBr over several months as part of their job inspecting produce at a cold-storage facility in Carson, California. Both workers had disabling neurologic symptoms (e.g., ataxia, memory difficulties, and dizziness) and elevated serum bromide concentrations. An environmental investigation revealed the potential for MeBr to accumulate in enclosed areas during the transportation and storage of fumigated grapes. Some MeBr air concentrations measured at a single point in time exceeded current 8-hour exposure limits, suggesting that exposure in confined areas could result in poisoning. Possible measures for facilities managers to consider to reduce postfumigation MeBr exposures include 1) increased aeration time, 2) reduction of packaging that might absorb MeBr or limit aeration, and 3) changes in the stacking of pallets to improve air flow. Facilities should monitor air MeBr levels if they store MeBr-fumigated commodities in enclosed spaces entered by workers. Clinicians should consider occupational and environmental exposures in their differential diagnosis, and workers who might become exposed to fumigants should be informed of the health hazards related to these pesticides.

The California Department of Pesticide Regulation (CDPR) was notified of MeBr exposure in one worker (patient A) after the treating physician contacted the California Poison Control System on March 19, 2010. Investigation by staff members of the Los Angeles County Department of Agriculture and CDPR confirmed that patient A had elevated serum bromide concentrations and that he had learned that a coworker (patient B) had similar symptoms. During April 13–21, 2010, CDPR conducted industrial hygiene testing, measuring MeBr concentrations at single points in time with samples obtained at several locations, using colorimetric indicator tubes sensitive to air concentrations ranging from 0.4 ppm to 80 ppm.* Sampling was conducted at three sites: the Port of Long Beach (PLB), where the imported grapes were fumigated with MeBr and then aerated; a cold-storage facility in Carson (facility A), where the two patients inspected produce, 6 miles from PLB; and a second cold-storage facility 215 miles from PLB in Tulare County (facility B), which was chosen to assess the effect on MeBr concentrations of transporting a shipment a long distance.

Case Reports

Patient A was a man aged 22 years with an unremarkable medical history who was employed as a quality inspector by a wholesale produce shipping company and was assigned to facility A from late December 2009 through the middle of March 2010. He worked long work shifts 3–4 days per week. In late January 2010, he began experiencing gradually increasing difficulty walking (i.e., ataxia). Additionally, he described gradual onset of problems with concentration, dizziness, and visual disturbances (i.e., decreased visual acuity and peripheral vision). On March 13, after speaking with a coworker (patient B) and learning they had similar symptoms, patient A began to suspect that a workplace exposure was responsible.

Patient A obtained a medical evaluation by his primary-care provider and an occupational medicine specialist. Major findings included a positive Romberg sign, difficulty maintaining balance while standing on one leg, and difficulty with tandem gait. The pertinent negatives on examination were as follows: no nystagmus, normal extraocular movements, normal funduscopic examination, cranial nerves 2–12 intact, muscle strength and control intact, fingertip-to-nose intact, deep tendon reflexes equal and active (2+), and intact perception of light touches (<0.5 mm apart). Patient A's serum bromide concentration on March 18 was 4.4 mg/dL.† Assuming first-order elimination kinetics and a 12-day half-life for inorganic bromide, his serum bromide was estimated to have been 58.7 mg/dL on March 13, his last day working in cold storage. When interviewed in April, the patient stated that his symptoms had lessened and that he was hoping to return to work shortly. By September 2010, he appeared fully recovered, had left his job as a produce inspector, and had enrolled in graduate school.

Patient B was a previously healthy man, aged 52 years, who worked as an independently contracted quality inspector for customers in the produce shipping and packing industry. From December 2009 to February 18, 2010, he worked 8 hours or more, 4 to 5 days per week, inside the refrigerated storage

* The exposure limit for MeBr set by the American Conference of Governmental Industrial Hygienists and the Cal/OSHA Permissible Exposure Limit (PEL) is a time-weighted average concentration for up to an 8-hour workday with exposure of 1 ppm. The U.S. Environmental Protection Agency has noted that short- and intermediate-term (1 day to 6 months) exposures to MeBr concentrations of 0.15 ppm for an 8-hour time-weighted average are of concern. Additional information available at http://www.epa.gov/oppsrrd1/REDs/factsheets/methylbromide-fs.pdf.

† The laboratory reference range for serum bromide is <0.5 mg/dL (5 ppm).

space at facility A. In January and February he noticed the gradual onset of lightheadedness and difficulty with speech. On February 22, 2010, he sought treatment for respiratory symptoms, decreased libido, feeling mentally "slow," and trouble speaking. He also experienced symptoms of nausea, vomiting, lightheadedness, ataxia, and memory difficulty. Abnormal findings on physical examination by a physician included blood pressure of 170/120 mm Hg, difficulty with tandem gait, drift of his right hand with supination, and inability to remember three words (e.g., apple, book, and pencil) communicated to him 5 minutes earlier. He refused hospitalization to rule out a cerebrovascular incident. Magnetic resonance imaging of the brain and head was normal except for bilateral sinusitis. Routine screening tests of his blood and his complete blood count were normal except for borderline blood urea nitrogen elevation and mildly increased nonfasting blood glucose. He was treated with a sulfa antibiotic for sinusitis and lisinopril for high blood pressure.

Patient B visited his physician for follow-up on February 24, 2010, when he was noted to have continuing lightheadedness and referred to a neurologist. Laboratory testing during March 1–12, 2010, was negative or normal for rheumatoid arthritis, systemic lupus, coccidiodomycosis, and several other inflammatory or infectious diseases. An echocardiogram was normal, and evaluation for pheochromocytoma and carcinoid tumor were negative. After learning that patient A had similar symptoms, a serum bromide test was obtained on March 20, 2010, that showed a bromide level of 1.5 mg/dL, which was estimated to have been a level of 85 mg/dL on patient B's last work day (February 18). On March 24, because of his continued lightheadedness, patient B was restricted from activities that could endanger himself or others (e.g., driving), which precluded him from working. When contacted in September 2010, he felt he had fully recovered and had returned to work as an independently contracted produce inspector in cold-storage facilities.

Both patient A and patient B told investigators that their working conditions at facility A were unusual. Typically, they worked outside refrigerated storage areas, not inside, but at facility A they were required to work inside the refrigerated area. Forklift drivers and other facility A employees entered intermittently, but only patient A and patient B worked for prolonged periods inside the refrigerated area. No other coworkers reported illness; however, CDPR did not conduct an illness survey or measure serum bromide in other potentially exposed workers.

Environmental Investigation

During April 13–21, environmental sampling was conducted 1) at the semi-enclosed dockside buildings where imported produce is fumigated at PLB, 2) inside loaded semitrailers ready for departure from PLB, 3) inside the semitrailers on arrival at cold-storage facilities A and B, 4) at the loading docks at facilities A and B, and 5) inside the refrigerated area at facility A. When produce is fumigated with MeBr, stacks of tarped pallets are injected with MeBr gas and after a few hours the fumigated commodities are aerated. After aeration, MeBr concentrations must be <5 ppm, based on single point in time measurements, before the commodity can be released for commercial distribution (*1,2*).

Results of the environmental investigation demonstrated that PLB had aerated grapes fumigated with MeBr according to current USDA standards.[§] Beginning April 9, after PLB became aware of the two workers' symptoms, aeration time was extended from 4 to 9 hours, reducing short-term MeBr concentrations in semitrailers sampled before their departure from PLB. When packaged produce was shipped in enclosed semitrailers, however, offgassing of the fumigant from the produce caused levels to increase to potentially hazardous concentrations. The 15 samples collected from the semitrailers after they arrived at facility A and facility B from PLB showed significantly[¶] higher concentrations of MeBr (median 10 ppm and geometric mean 5.0 ppm) than the 10 samples taken inside the loaded semitrailers before departure from PLB (median 0.75 ppm and geometric mean 0.68 ppm) (Table).

What is already known on this topic?

Some imported produce must be treated with methyl bromide (MeBr), a toxic gas that can cause severe illness. Such illness principally has been observed in workers conducting MeBr applications.

What is added by this report?

In 2010, two produce inspectors working in a California cold-storage facility where MeBr-treated grapes were stored developed severe neurologic illness believed to have resulted from prolonged MeBr exposure. These are the first illnesses in the United States arising from MeBr exposure occurring in produce storage areas remote from the site of application.

What are the implications for public health practice?

The evidence suggests that proposed U.S. Environmental Protection Agency requirements to prevent illness associated with MeBr exposure were not being followed. Facilities should monitor air MeBr levels if they store MeBr-fumigated commodities in enclosed spaces entered by workers. In addition, clinicians should consider occupational and environmental exposures, especially when diagnosing patients with unusual illnesses, and workers who might become exposed to fumigants should be informed of the health hazards related to these pesticides.

[§] Available at http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment_pdf/02_03_chemicaltreatmentsmb.pdf.

[¶] Mann-Whitney/Wilcoxon two-sample test, p<0.01.

To reduce MeBr levels, the small vent door on one trailer was left open to continue ventilation throughout the 215-mile trip from PLB to facility B. On arrival, no MeBr (<0.4 ppm) could be detected in this load. However, 10 minutes later, despite having the main rear doors open, the MeBr concentration was 4 ppm, above the recommended 8-hour exposure limits of 1 ppm. In addition, MeBr concentrations on the loading docks at facilities A and B and in the refrigerated area at facility A where patients A and B inspected produce (median 2.0 ppm and geometric mean 1.9 ppm) also exceeded 1 ppm (Table). These observations were consistent with predictions that a large volume of commodity that is offgassing MeBr, handled in conditions of low ventilation, has the potential to generate MeBr exposures above permissible exposure limits during an 8-hour work shift (*3*).

Reported by

Michael A. O'Malley, MD, Univ of California, Davis; Harvard Fong, Louise Mehler, MD, George Farnsworth, Sue Edmiston, Frank Schneider, California Dept of Pesticide Regulation; Michael J. Runge, DO, Occupational Medical Associates, Fresno; Racquel Pina, MD, Family Medicine Group, Bakersfield, California. Geoffrey M. Calvert, MD, Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC. ***Corresponding contributor:*** *Geoffrey M. Calvert, gcalvert@cdc.gov, 513-841-4448.*

Editorial Note

MeBr is a colorless and odorless multisystem toxicant, producing severe and sometimes permanent nervous system effects (*4*). Most use of MeBr ceased by 2005 to protect stratospheric ozone, but it is still used to treat commodities

TABLE. Results of testing for methyl bromide (MeBr) concentrations at the Port of Long Beach (PLB) and cold-storage facilities in Carson (facility A) and Tulare County (facility B) — California, April 2010

Location of sampling (dates)	No. of samples	Range of results (ppm MeBr*)	Median (ppm MeBr)	Geometric mean (ppm MeBr†)
PLB: in semi-enclosed dockside buildings containing produce after fumigation and aeration (April 13, 19, and 21)				
After 4 hrs of aeration	8	<0.4–8.0§	1.9	1.7
After 9 hrs of aeration	19	<0.4–5.0	1.0	1.0
Total in semi-enclosed dockside buildings at PLB	**27**	**<0.4–8.0**	**1.4**	**1.3**
PLB: inside loaded semitrailers ready to depart				
After produce aerated 4 hrs (April 19 only)	3	2.0–5.5	2.5	3.0
After produce aerated 9 hrs (April 13, 19, and 21)	7	<0.4–1.0	<0.4	0.4
Total for semitrailers ready to depart PLB	**10**	**<0.4–5.5**	**0.75**	**0.68**
Facility A: semitrailers on arrival after driven with trailers fully closed (April 13 and 19)				
Sample collected through small vent door immediately on arrival	6	10.0–20.0	13.5	13.5
Sample collected beside load (with doors open) after 19–25 min aeration	3	<0.4–4.0	2.5	1.3
Facility B: semitrailer on arrival after driven with vent doors open the entire 215-mile trip (April 21)				
Sample collected through small vent door immediately on arrival	1	<0.4	—	—
Sample collected beside load (doors open) after 10 min aeration	1	4.0	—	—
Facility B: semitrailer on arrival after driven with vent doors closed the entire 215-mile trip (April 21)				
Sample collected through small vent door immediately on arrival	2	10.0–20.0	15.0	14.1
Sample collected beside load (doors open) after 10 min aeration	2	4.0	4.0	4.0
Total in semitrailers at facilities A and B	**15**	**<0.4–20**	**10.0**	**5.0**
Facilities A and B: indoor areas (April 13, 19, and 21)				
Loading dock (enclosed to retain cold air)	3	<0.4–7.0	2.0	1.4
Inside facility A refrigerated area (April 13 and 19)	2	2.0–4.0	3.0	2.8
Total at loading dock and inside refrigerated area at facilities A and B	**5**	**<0.4–7.0**	**2.0**	**1.9**

* All results obtained from detector tubes with a minimum level of detection of 0.4 ppm and a variability of ±15%.
† All results below the limit of detection were assigned a value of 0.2 ppm.
§ The highest value (8.0 ppm) could not be replicated. Excluding that value, the range for the remaining seven samples in this grouping was <0.4–3.5 ppm, with a median value of 1.8 ppm and a geometric mean of 1.4 ppm. According to U.S. Environmental Protection Agency regulations, after aeration, MeBr concentrations must be below 5 ppm before the commodity can be released for commercial distribution.

potentially contaminated with a recognized quarantine pest, and to treat certain agricultural items (e.g., soil and seedlings) when no feasible alternative exists (*4*). Fatalities and serious poisonings principally involve workers conducting structural and commodity fumigations (*5–9*). However, at least one report describes toxicity in a warehouse worker exposed to imported produce fumigated with MeBr under circumstances similar to those described in this report (*10*). MeBr poisoning is becoming rare. CDPR identified one such case in 2007, which involved an agricultural worker applying MeBr.

Cold-storage facilities on the East Coast and West Coast of the United States have recently adopted measures to increase dissipation of MeBr and to prevent MeBr overexposure. These measures include creating well-ventilated fruit inspection stations separate from chiller rooms, reconfiguring airflow and improving ventilation to increase air exchange where fumigated commodities are stored, and increasing the frequency of air monitoring of MeBr levels.

The illnesses in the two workers described in this report are consistent with prolonged indoor exposure to fumigated produce. These findings suggest that other workers with similar exposures might be at risk for serious poisoning. The U.S. Census Bureau estimated that in 2002 a total of 877 cold-storage facilities were in operation in the United States. Commodity groups and cold-storage facility operators in the western United States, USDA, the U.S. Environmental Protection Agency, and representatives of the Chilean produce industry have been notified of these findings.

The findings in this report are subject to at least two limitations. First, because of the delay in reporting and confirming the two cases, CDPR did not have an opportunity to survey the workplace at the time the exposures occurred; staffing limitations also precluded industrial hygiene sampling beyond PLB and two offsite cold-storage facilities. Second, existing exposure standards are based on 8-hour time-weighted averages; CDPR performed only single point in time measurements of MeBr air concentrations to maximize the number of sites sampled.

Additional investigation is needed to identify effective measures to prevent MeBr overexposure among persons who spend prolonged periods inside cold-storage facilities (*2*). The industry is evaluating the effectiveness of recently adopted measures to prevent MeBr overexposure. In addition to exploring modifications to packaging and aeration, studies of the dissipation kinetics of fumigated fruit and lower rates of application are needed to guide development of fully protective procedures.

References

1. US Department of Agriculture. Treatment manual. Washington, DC: US Department of Agriculture; 2010. Available at http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf. Accessed July 11, 2011.
2. US Environmental Protection Agency. Report of Food Quality Protection Act (FQPA) tolerance reassessment and risk management decision (TRED) for methyl bromide, and reregistration eligibility decision (RED) for methyl bromide's commodity uses. Washington, DC: US Environmental Protection Agency; 2006. Available at http://www.epa.gov/opp00001/reregistration/REDs/methyl_bromide_tred.pdf. Accessed July 11, 2011.
3. Nicas M. Estimating methyl bromide exposure due to offgassing from fumigated commodities. Appl Occup Environ Hyg 2003;18;200–10.
4. Office of Pesticide Programs, US Environmental Protection Agency. Reregistration eligibility decision (RED) for methyl bromide. Washington, DC: US Environmental Protection Agency; 2008. Available at http://www.epa.gov/oppsrrd1/reregistration/REDs/methylbromide-red.pdf. Accessed July 11, 2011.
5. Rathus EM, Landy PJ. Methyl bromide poisoning. Br J Ind Med 1961; 18:53–7.
6. Hine CH. Methyl bromide poisoning. A review of ten cases. J Occup Med 1969;11:1–10.
7. O'Malley M. Clinical evaluation of pesticide exposure and poisonings. Lancet 1997;349:1161–6.
8. Horowitz Z, Albertson T, O'Malley M, Swenson E. An unusual exposure to methyl bromide leading to fatality. J Toxicol Clin Toxicol 1998; 36:353–7.
9. Geyer HL, Schaumburg HH, Herskovitz S. Methyl bromide intoxication causes reversible symmetric brainstem and cerebellar MRI lesions. Neurology 2005;64:1279–81.
10. Suwanlaong K, Phanthumchinda K. Neurological manifestation of methyl bromide intoxication. J Med Assoc Thai 2008;91:421–6.

Announcement

National Cleft and Craniofacial Awareness and Prevention Month

July is National Cleft and Craniofacial Awareness and Prevention Month, an annual observance to promote awareness, education, and prevention of cleft and craniofacial defects and conditions affecting the head and face. Common craniofacial defects include orofacial clefts, craniosynostosis, and microtia/anotia. Each year, approximately 7,000 U.S. infants are born with an orofacial cleft (*1*), which includes cleft palate and cleft lip with or without cleft palate. Because of their prevalence and substantial costs to families and the health-care system (*2–4*), craniofacial defects significantly affect public health.

Most U.S. states have birth defects surveillance programs that collect data on infants and children affected by selected craniofacial defects. That information is used to identify risk factors, assess quality of life and outcomes, and examine access to care and health service use, including the timeliness of services, special education service use, and health-care costs. CDC's National Birth Defects Prevention Study (http://www.nbdps.org) has indicated an increased risk for cleft lip with or without cleft palate associated with maternal diabetes (*5*) and smoking (*6*) and an increased risk for craniosynostosis associated with maternal thyroid disease or its treatment during pregnancy (*7*).

Health-care providers should encourage women who are thinking about becoming pregnant to maintain a healthy weight, control diagnosed diabetes, and quit smoking. Information regarding National Cleft and Craniofacial Awareness and Prevention Month is available at http://www.nccapm.org/about.html. Additional information on craniofacial defects is available at http://www.cdc.gov/ncbddd/features/craniofacialdefects.html.

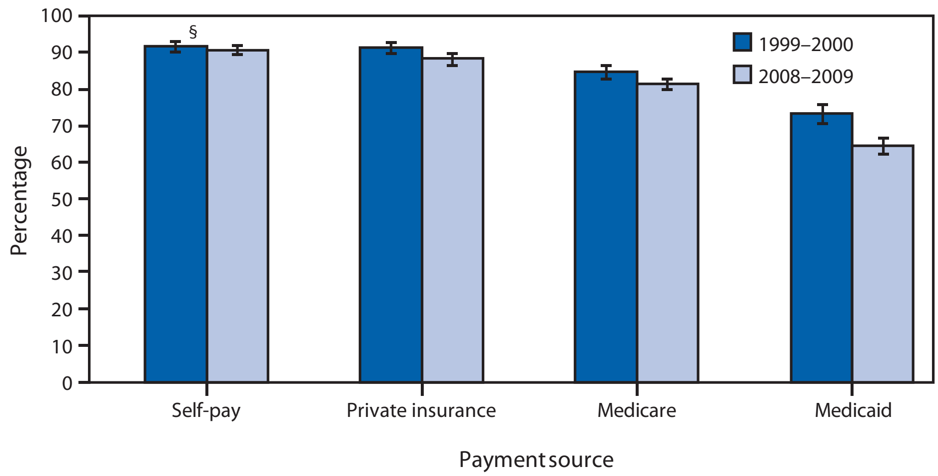
References

1. Parker SE, Mai CT, Canfield MA, et al. Updated national birth prevalence estimates for selected birth defects in the United States, 2004–2006. Birth Defects Res A Clin Mol Teratol 2010;88:1008–16.
2. Weiss J, Kotelchuck M, Grosse S, et al. Hospital use and associated costs of children ages zero-to-two years with craniofacial malformations in Massachusetts. Birth Defects Res A Clin Mol Teratol 2009;85:925–34.
3. Cassell CH, Meyer R, Daniels J. Health care expenditures among Medicaid enrolled children with and without orofacial clefts in North Carolina, 1995–2002. Birth Defects Res A Clin Mol Teratol 2008;82:785–94.
4. Boulet SL, Grosse SD, Honein MA, et al. Children with orofacial clefts: health care use and costs among a privately insured population. Public Health Rep 2009;124:447–53.
5. Correa A, Gilboa SM, Besser LM, et al. Diabetes mellitus and birth defects. Am J Obstet Gynecol 2008;199:237.e1–9.
6. Honein MA, Rasmussen SA, Reefhuis J, et al. Maternal smoking, environmental tobacco smoke, and the risk of oral clefts. Epidemiology 2007;18:226–33.
7. Rasmussen SA, Yazdy MM, Carmichael SL, et al. Maternal thyroid disease as a risk factor for craniosynostosis. Obstet Gynecol 2007;110:369–77.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Office-Based Physicians Accepting New Patients, by Types of Payment Accepted* — United States, 1999–2000 and 2008–2009†



* Office-based physicians were asked whether they accept new patients, and if so, what types of payment they accept. Denominators for each percentage include all physicians except those whose acceptance of new patients or payment type was unknown.

† Estimates are 2-year averages and are based on data from the National Ambulatory Medical Care Survey, an annual probability sample survey of visits to nonfederally employed, office-based physicians primarily engaged in direct patient care.

§ 95% confidence interval.

During 1999–2000 and 2008–2009, approximately 95% of physicians accepted new patients, but acceptance varied by payment source. From 1999–2000 to 2008–2009, the percentage of office-based physicians accepting private insurance as the source of payment by new patients decreased from 91.5% to 88.4%. Acceptance of Medicare decreased from 85.0% to 81.5%, and acceptance of Medicaid decreased from 73.5% to 64.5%. No statistical difference was noted in the percentage of those accepting self-pay patients.

Source: National Ambulatory Medical Care Survey, available at http://www.cdc.gov/namcs.

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 9, 2011 (27th 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	—	1	3	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	0	10	4	4	4	8	
Powassan virus disease	—	2	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	—	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	9	71	3	NN	NN	NN	NN	NN	NY (7), PA (2)
Botulism, total	—	42	3	112	118	145	144	165	
foodborne	—	4	0	7	10	17	32	20	
infant	—	32	2	80	83	109	85	97	
other (wound and unspecified)	—	6	0	25	25	19	27	48	
Brucellosis	—	33	3	115	115	80	131	121	
Chancroid	—	12	0	24	28	25	23	33	
Cholera	—	20	0	13	10	5	7	9	
Cyclosporiasis§	—	61	7	179	141	139	93	137	
Diphtheria	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	3	0	23	35	30	22	29	
nonserotype b	1	56	4	200	236	244	199	175	WA (1)
unknown serotype	1	135	3	223	178	163	180	179	AR (1)
Hansen disease§	—	22	2	98	103	80	101	66	
Hantavirus pulmonary syndrome§	1	7	1	20	20	18	32	40	PA (1)
Hemolytic uremic syndrome, postdiarrheal§	—	50	7	266	242	330	292	288	
Influenza-associated pediatric mortality§,††	1	109	1	61	358	90	77	43	CA (1)
Listeriosis	4	219	19	821	851	759	808	884	PA (2), MI (1), WA (1)
Measles§§	3	130	2	63	71	140	43	55	NYC (3)
Meningococcal disease, invasive¶¶:									
A, C, Y, and W-135	1	102	4	280	301	330	325	318	WA (1)
serogroup B	—	54	4	135	174	188	167	193	
other serogroup	—	5	0	12	23	38	35	32	
unknown serogroup	5	245	9	406	482	616	550	651	NY (1), NYC (1), FL (1), TN (1), CA (1)
Novel influenza A virus infections***	—	1	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§	2	34	4	131	113	120	171	169	
acute	2	23	2	106	93	106	—	—	NC (1), CA (1)
chronic	—	11	0	25	20	14	—	—	
Rabies, human	—	1	—	2	4	2	1	3	
Rubella†††	—	3	0	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV§	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	69	2	148	161	157	132	125	
Syphilis, congenital (age <1 yr)§§§	—	75	8	377	423	431	430	349	
Tetanus	—	4	1	10	18	19	28	41	
Toxic-shock syndrome (staphylococcal)§	—	42	2	82	74	71	92	101	
Trichinellosis	—	7	0	7	13	39	5	15	
Tularemia	1	39	6	124	93	123	137	95	MO (1)
Typhoid fever	—	179	7	468	397	449	434	353	
Vancomycin-intermediate *Staphylococcus aureus*§	1	28	1	91	78	63	37	6	PA (1)
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	2	1	—	2	1	
Vibriosis (noncholera *Vibrio* species infections)§	6	196	14	848	789	588	549	NN	MO (1), FL (2), KY (1), TN (1), AZ (1)
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 9, 2011 (27th 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, 113 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.

§§ The three measles cases reported for the current week were indigenous.

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

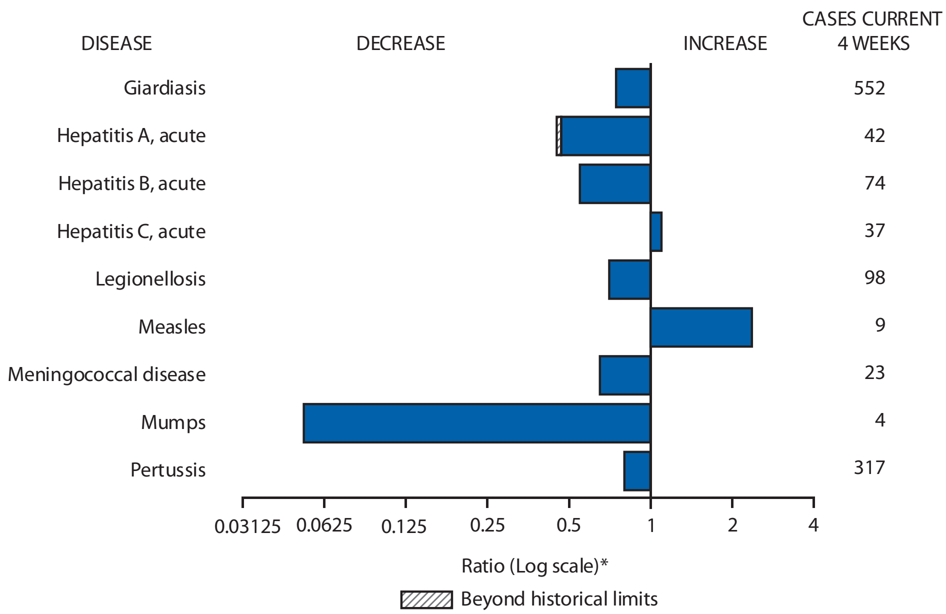
*** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the one case 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 9, 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, MS

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending July 9, 2011, and July 10, 2010 (27th 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	8,596	25,764	31,142	644,989	661,262	45	43	567	8,270	NN	45	92	374	2,086	3,282
New England	397	840	2,043	22,044	20,476	—	0	1	1	NN	1	4	29	96	256
Connecticut	159	232	1,557	4,918	5,050	—	0	0	—	NN	—	0	24	24	77
Maine†	—	57	100	1,515	1,275	—	0	0	—	NN	—	0	7	3	32
Massachusetts	210	404	860	11,278	10,508	—	0	0	—	NN	—	2	9	32	70
New Hampshire	20	53	81	1,454	1,179	—	0	1	1	NN	1	1	3	17	34
Rhode Island†	—	69	154	2,129	1,821	—	0	0	—	NN	—	0	2	1	11
Vermont†	8	26	84	750	643	—	0	0	—	NN	—	1	5	19	32
Mid. Atlantic	1,047	3,318	5,069	81,661	86,442	—	0	1	3	NN	10	15	38	346	338
New Jersey	21	478	684	11,057	13,572	—	0	0	—	NN	—	1	4	18	14
New York (Upstate)	479	713	2,099	18,285	16,585	—	0	0	—	NN	4	4	13	72	67
New York City	15	1,145	2,612	26,219	32,283	—	0	0	—	NN	—	2	6	31	37
Pennsylvania	532	952	1,229	26,100	24,002	—	0	1	3	NN	6	8	26	225	220
E.N. Central	774	4,001	7,039	95,340	104,022	—	0	3	23	NN	2	22	137	433	856
Illinois	5	1,099	1,320	22,790	30,707	—	0	0	—	NN	—	1	21	4	101
Indiana	221	450	3,376	14,780	9,572	—	0	0	—	NN	—	4	15	41	133
Michigan	482	943	1,397	24,278	25,885	—	0	3	16	NN	2	5	18	113	153
Ohio	—	998	1,134	22,236	26,159	—	0	3	7	NN	—	7	24	138	184
Wisconsin	66	468	559	11,256	11,699	—	0	0	—	NN	—	8	65	137	285
W.N. Central	47	1,437	1,642	35,063	37,069	—	0	1	2	NN	5	11	99	177	544
Iowa	3	207	240	5,233	5,480	—	0	0	—	NN	—	2	25	25	119
Kansas	12	190	287	5,092	5,042	—	0	0	—	NN	—	0	6	3	46
Minnesota	U	288	361	5,596	7,942	U	0	0	—	NN	U	1	22	—	159
Missouri	—	524	766	13,680	13,197	—	0	0	—	NN	2	3	29	63	95
Nebraska†	32	104	218	3,176	2,661	—	0	1	2	NN	3	3	26	62	59
North Dakota	—	39	90	664	1,149	—	0	0	—	NN	—	0	9	13	11
South Dakota	—	64	93	1,622	1,598	—	0	0	—	NN	—	1	6	11	55
S. Atlantic	3,525	5,121	6,541	140,183	133,445	—	0	2	3	NN	9	18	53	401	488
Delaware	51	83	220	2,251	2,219	—	0	0	—	NN	—	0	1	3	3
District of Columbia	—	105	180	2,542	2,757	—	0	0	—	NN	—	0	1	4	2
Florida	498	1,486	1,706	38,796	38,626	—	0	0	—	NN	5	6	19	102	186
Georgia	710	938	2,384	26,780	22,704	—	0	0	—	NN	1	5	11	135	151
Maryland†	242	460	1,125	10,984	12,147	—	0	2	3	NN	3	1	6	33	17
North Carolina	668	756	1,477	23,937	24,048	—	0	0	—	NN	—	0	17	36	35
South Carolina†	484	523	946	14,956	13,363	—	0	0	—	NN	—	2	8	49	31
Virginia†	795	658	970	17,794	15,710	—	0	0	—	NN	—	1	5	27	57
West Virginia	77	78	121	2,143	1,871	—	0	0	—	NN	—	0	5	12	6
E.S. Central	901	1,826	3,314	47,793	47,055	—	0	0	—	NN	2	4	19	78	96
Alabama†	412	542	1,566	14,340	12,996	—	0	0	—	NN	—	1	13	9	39
Kentucky	297	268	2,352	8,361	8,277	—	0	0	—	NN	—	1	6	23	29
Mississippi	—	395	614	9,928	11,566	—	0	0	—	NN	2	0	2	16	7
Tennessee†	192	584	795	15,164	14,216	—	0	0	—	NN	—	1	5	30	21
W.S. Central	346	3,286	4,723	80,303	92,898	—	0	1	1	NN	5	6	33	115	163
Arkansas†	250	311	440	8,490	7,912	—	0	0	—	NN	—	0	3	8	16
Louisiana	96	343	1,052	6,949	14,984	—	0	1	1	NN	3	0	6	16	19
Oklahoma	—	226	1,371	5,319	6,782	—	0	0	—	NN	—	0	8	—	36
Texas†	—	2,365	3,107	59,545	63,220	—	0	0	—	NN	2	4	24	91	92
Mountain	641	1,679	2,155	42,969	42,787	32	29	432	6,578	NN	7	10	30	229	254
Arizona	138	514	697	12,420	13,959	30	28	427	6,488	NN	—	1	3	15	16
Colorado	168	412	848	12,398	9,963	—	0	0	—	NN	3	2	10	65	63
Idaho†	—	63	199	1,403	2,033	—	0	0	—	NN	1	1	7	31	47
Montana†	—	63	85	1,680	1,556	—	0	1	2	NN	2	1	5	32	30
Nevada†	141	197	380	5,558	5,223	2	0	4	48	NN	—	0	7	3	8
New Mexico†	149	194	1,183	5,173	5,604	—	0	4	31	NN	—	3	12	50	46
Utah	45	131	175	3,380	3,393	—	0	2	6	NN	1	1	5	23	32
Wyoming†	—	38	90	957	1,056	—	0	2	3	NN	—	0	3	10	12
Pacific	918	3,758	6,559	99,633	97,068	13	9	142	1,659	NN	4	11	27	211	287
Alaska	—	115	157	2,823	3,196	—	0	0	—	NN	—	0	3	7	2
California	590	2,884	5,763	75,868	73,685	13	9	142	1,658	NN	4	6	19	132	161
Hawaii	—	109	138	2,435	3,208	—	0	0	—	NN	—	0	0	—	1
Oregon	147	255	524	7,080	6,063	—	0	1	1	NN	—	3	13	68	85
Washington	181	430	522	11,427	10,916	—	0	0	—	NN	—	0	9	4	38
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	NN	N	0	0	N	NN
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	3	81	189	545	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	68	105	349	3,269	3,327	—	0	0	—	NN	N	0	0	N	N
U.S. Virgin Islands	—	14	27	328	292	—	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 9, 2011, and July 10, 2010 (27th 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	—	3	52	44	202	—	0	2	—	4
New England	—	0	3	1	2	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	1	—	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	—	2	25	19	62	—	0	1	—	2
New Jersey	—	0	5	—	6	—	0	0	—	—
New York (Upstate)	—	0	5	—	9	—	0	1	—	1
New York City	—	1	17	10	40	—	0	1	—	1
Pennsylvania	—	0	3	9	7	—	0	0	—	—
E.N. Central	—	0	5	4	14	—	0	1	—	—
Illinois	—	0	1	1	—	—	0	0	—	—
Indiana	—	0	2	1	4	—	0	0	—	—
Michigan	—	0	2	2	3	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	2	2	—	0	1	—	—
W.N. Central	—	0	6	—	11	—	0	1	—	—
Iowa	—	0	1	—	1	—	0	0	—	—
Kansas	—	0	1	—	1	—	0	0	—	—
Minnesota	U	0	1	—	8	U	0	0	—	—
Missouri	—	0	0	—	—	—	0	0	—	—
Nebraska**	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	19	11	86	—	0	1	—	1
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	14	10	71	—	0	1	—	1
Georgia	—	0	2	—	5	—	0	0	—	—
Maryland**	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	1	—	—	0	0	—	—
South Carolina**	—	0	3	—	5	—	0	0	—	—
Virginia**	—	0	3	—	4	—	0	0	—	—
West Virginia	—	0	1	—	1	—	0	0	—	—
E.S. Central	—	0	2	—	1	—	0	0	—	—
Alabama**	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	0	—	1	—	0	0	—	—
W.S. Central	—	0	1	—	—	—	0	1	—	1
Arkansas**	—	0	0	—	—	—	0	1	—	1
Louisiana	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	1	—	—	—	0	0	—	—
Texas**	—	0	1	—	—	—	0	0	—	—
Mountain	—	0	2	3	7	—	0	0	—	—
Arizona	—	0	2	2	2	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	1	—	0	0	—	—
Montana**	—	0	1	—	2	—	0	0	—	—
Nevada**	—	0	1	—	1	—	0	0	—	—
New Mexico**	—	0	0	—	1	—	0	0	—	—
Utah	—	0	1	1	—	—	0	0	—	—
Wyoming**	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	7	6	19	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	5	2	14	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	4	4	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	32	454	254	3,033	—	0	20	1	90
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 9, 2011, and July 10, 2010 (27th week)*

	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum	Cum	Current week	Previous 52 weeks		Cum	Cum	Current week	Previous 52 weeks		Cum	Cum
Reporting area		Med	Max	2011	2010		Med	Max	2011	2010		Med	Max	2011	2010
United States	12	6	109	193	296	13	14	114	129	1,005	—	1	13	37	50
New England	—	0	2	2	3	—	1	8	14	51	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	6	—	17	—	0	0	—	—
Maine§	—	0	1	1	2	—	0	2	7	12	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	1	1	—	0	3	7	8	—	0	1	1	2
Rhode Island§	—	0	1	—	—	—	0	6	—	13	—	0	0	—	—
Vermont§	—	0	0	—	—	—	0	1	—	1	—	0	0	—	—
Mid. Atlantic	3	1	7	18	47	12	4	19	73	103	—	0	2	3	6
New Jersey	—	0	2	—	35	—	0	3	—	45	—	0	0	—	1
New York (Upstate)	3	0	7	15	9	12	3	18	60	52	—	0	2	3	4
New York City	—	0	1	3	2	—	0	5	13	6	—	0	0	—	—
Pennsylvania	—	0	1	—	1	—	0	1	—	—	—	0	1	—	1
E.N. Central	—	0	4	8	22	—	1	30	5	323	—	0	4	15	27
Illinois	—	0	2	5	9	—	0	2	1	2	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	11	11
Michigan	—	0	1	1	—	—	0	1	—	1	—	0	1	1	—
Ohio	—	0	3	2	1	—	0	1	1	—	—	0	0	—	—
Wisconsin	—	0	1	—	12	—	1	29	3	320	—	0	3	1	13
W.N. Central	5	1	13	62	68	—	2	66	12	489	—	0	11	12	5
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	1	2	5	—	0	0	—	1	—	0	0	—	—
Minnesota	U	0	12	—	—	U	0	64	1	482	U	0	11	—	—
Missouri	5	0	13	60	63	—	0	3	11	6	—	0	7	10	5
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	0	—	—	—	0	0	—	—	—	0	1	1	—
S. Atlantic	4	3	18	76	109	—	1	4	19	31	—	0	1	1	1
Delaware	—	0	2	10	11	—	0	1	1	3	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	—	0	3	10	4	—	0	1	3	1	—	0	0	—	—
Georgia	—	0	3	8	15	—	0	1	5	1	—	0	1	1	1
Maryland§	1	0	2	10	12	—	0	1	1	11	—	0	1	—	—
North Carolina	—	0	13	15	33	—	0	4	7	10	—	0	0	—	—
South Carolina§	—	0	1	—	3	—	0	1	—	—	—	0	0	—	—
Virginia§	3	1	8	23	30	—	0	1	2	5	—	0	1	—	—
West Virginia	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	0	11	27	37	1	0	2	6	8	—	0	1	2	7
Alabama§	—	0	3	—	5	1	0	2	3	2	N	0	0	N	N
Kentucky	—	0	2	7	6	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	—	1	—	0	1	—	1	—	0	0	—	1
Tennessee§	—	0	7	20	25	—	0	2	3	5	—	0	1	2	5
W.S. Central	—	0	87	—	9	—	0	9	—	—	—	0	1	—	—
Arkansas§	—	0	5	—	—	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	82	—	7	—	0	7	—	—	—	0	0	—	—
Texas§	—	0	1	—	1	—	0	1	—	—	—	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 9, 2011, and July 10, 2010 (27th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive† All ages, all serotypes				
	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	141	293	549	6,393	9,111	2,030	5,781	7,484	143,035	153,276	28	62	141	1,715	1,706
New England	7	24	55	449	794	64	102	206	2,616	2,761	—	4	12	104	98
Connecticut	3	5	12	103	143	44	42	150	1,135	1,298	—	1	6	33	21
Maine§	4	3	11	58	90	—	3	7	84	100	—	0	2	14	7
Massachusetts	—	12	25	176	341	19	49	80	1,156	1,124	—	2	6	37	51
New Hampshire	—	2	7	39	96	1	3	7	64	75	—	0	2	9	7
Rhode Island§	—	1	7	7	37	—	5	15	151	133	—	0	2	7	8
Vermont§	—	3	10	66	87	—	0	8	26	31	—	0	3	4	4
Mid. Atlantic	22	60	106	1,316	1,514	236	715	1,121	17,643	17,331	15	11	32	370	327
New Jersey	—	8	22	128	206	11	116	172	2,783	2,901	—	2	7	56	53
New York (Upstate)	12	21	72	443	516	77	113	271	2,822	2,616	11	3	18	100	89
New York City	2	17	30	413	433	6	238	497	5,526	6,023	1	2	6	68	54
Pennsylvania	8	15	27	332	359	142	262	364	6,512	5,791	3	4	11	146	131
E.N. Central	1	50	99	949	1,570	210	1,045	2,091	24,658	28,116	—	11	19	292	274
Illinois	—	10	31	181	353	2	296	369	5,628	7,659	—	3	9	87	95
Indiana	—	6	14	95	192	52	111	1,018	3,771	2,706	—	2	7	52	55
Michigan	1	10	25	211	339	138	244	490	6,076	7,125	—	1	4	32	19
Ohio	—	16	29	311	411	—	321	383	6,895	8,233	—	2	7	79	67
Wisconsin	—	8	35	151	275	18	100	130	2,288	2,393	—	1	5	42	38
W.N. Central	15	26	73	460	928	13	297	363	7,192	7,230	2	4	10	87	115
Iowa	4	5	12	118	138	2	37	57	933	846	—	0	0	—	1
Kansas	—	2	10	38	111	3	39	57	959	1,064	—	0	2	12	12
Minnesota	U	7	33	—	342	U	38	62	744	1,087	U	0	5	—	43
Missouri	5	8	26	167	177	—	144	181	3,614	3,360	1	1	5	44	42
Nebraska§	6	4	9	89	100	8	23	49	609	606	1	0	3	21	9
North Dakota	—	0	12	19	11	—	3	9	61	101	—	0	6	9	8
South Dakota	—	1	5	29	49	—	12	20	272	166	—	0	1	1	—
S. Atlantic	47	62	127	1,326	1,853	891	1,473	1,862	37,353	39,612	5	14	30	422	431
Delaware	2	0	5	17	15	12	17	48	446	497	—	0	2	3	5
District of Columbia	—	1	5	16	31	—	37	70	920	1,050	—	0	0	—	—
Florida	19	26	75	561	982	132	382	486	9,828	10,296	3	5	12	145	106
Georgia	15	14	51	417	365	202	317	874	8,139	7,785	—	3	7	81	106
Maryland§	5	4	10	114	160	51	124	246	2,710	3,494	1	2	4	40	34
North Carolina	N	0	0	N	N	220	257	490	7,821	8,038	—	2	9	48	64
South Carolina§	1	2	9	53	65	124	155	257	4,227	4,043	1	1	5	38	55
Virginia§	5	8	32	126	219	136	116	185	2,844	4,177	—	1	8	58	50
West Virginia	—	0	8	22	16	14	14	26	418	232	—	0	9	9	11
E.S. Central	2	4	11	79	84	247	495	1,007	12,694	12,649	1	3	11	118	107
Alabama§	2	4	11	79	84	98	160	414	4,308	3,782	—	1	4	37	18
Kentucky	N	0	0	N	N	97	71	712	2,240	2,102	—	0	4	17	20
Mississippi	N	0	0	N	N	—	116	197	2,576	3,187	—	0	3	11	9
Tennessee§	N	0	0	N	N	52	140	194	3,570	3,578	1	1	5	53	60
W.S. Central	5	5	17	89	181	95	851	1,664	20,167	24,896	2	2	26	73	83
Arkansas§	3	2	9	51	50	76	101	138	2,570	2,323	2	0	3	19	13
Louisiana	2	2	12	38	78	19	94	509	1,858	4,274	—	0	4	27	19
Oklahoma	—	0	5	—	53	—	72	332	1,562	2,001	—	1	19	26	45
Texas§	N	0	0	N	N	—	593	867	14,177	16,298	—	0	4	1	6
Mountain	12	27	58	575	833	98	189	255	4,916	4,863	1	5	12	159	191
Arizona	—	3	8	61	74	19	64	95	1,710	1,669	—	2	6	62	73
Colorado	6	12	27	275	344	31	47	92	1,160	1,359	—	1	5	39	53
Idaho§	2	3	9	66	108	—	2	14	48	54	—	0	2	9	11
Montana§	2	1	6	26	59	—	1	5	36	61	—	0	1	2	2
Nevada§	1	2	11	35	28	35	33	103	1,030	943	1	0	2	12	5
New Mexico§	—	2	5	30	51	9	28	98	789	569	—	1	4	23	22
Utah	1	4	13	68	144	4	4	9	121	188	—	0	3	11	20
Wyoming§	—	0	5	14	25	—	0	3	22	20	—	0	1	1	5
Pacific	30	49	129	1,150	1,354	176	625	807	15,796	15,818	2	3	10	90	80
Alaska	—	2	7	35	47	—	20	34	480	707	—	0	2	10	14
California	21	33	68	797	840	148	512	695	12,960	12,869	—	0	6	12	15
Hawaii	—	0	4	14	30	—	13	26	316	361	1	0	3	15	11
Oregon	—	7	20	156	242	9	23	39	613	516	—	1	6	51	36
Washington	9	8	57	148	195	19	59	86	1,427	1,365	1	0	2	2	4
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	13	41	2	6	12	181	149	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	7	49	66	—	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 9, 2011, and July 10, 2010 (27th week)*

Reporting area	Hepatitis (viral, acute), by type: A Current week	A Previous 52 weeks Med	A Previous 52 weeks Max	A Cum 2011	A Cum 2010	B Current week	B Previous 52 weeks Med	B Previous 52 weeks Max	B Cum 2011	B Cum 2010	C Current week	C Previous 52 weeks Med	C Previous 52 weeks Max	C Cum 2011	C Cum 2010
United States	11	22	74	508	788	13	56	167	1,096	1,617	9	17	39	464	413
New England	—	1	6	13	60	—	0	5	21	33	—	1	4	24	34
Connecticut	—	0	4	5	14	—	0	4	7	10	—	0	3	15	20
Maine†	—	0	1	1	4	—	0	2	5	9	—	0	2	5	2
Massachusetts	—	0	5	3	35	—	0	3	8	8	—	0	1	1	12
New Hampshire	—	0	1	—	—	—	0	1	1	4	N	0	0	N	N
Rhode Island†	—	0	1	2	7	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	1	2	—	—	0	0	—	2	—	0	1	3	—
Mid. Atlantic	—	4	12	97	124	—	5	11	131	163	2	1	6	38	52
New Jersey	—	1	4	10	38	—	1	4	26	47	—	0	4	—	10
New York (Upstate)	—	1	4	25	25	—	1	9	24	26	2	0	4	24	26
New York City	—	1	6	34	35	—	1	5	42	49	—	0	1	—	2
Pennsylvania	—	1	3	28	26	—	1	4	39	41	—	0	2	14	14
E.N. Central	1	3	9	85	92	—	6	23	134	274	—	3	12	97	49
Illinois	—	1	3	15	24	—	2	6	35	70	—	0	1	2	—
Indiana	—	0	3	10	10	—	1	6	15	37	—	0	5	37	18
Michigan	1	1	5	35	32	—	2	5	47	71	—	1	7	55	23
Ohio	—	1	5	22	17	—	1	16	25	64	—	0	1	2	5
Wisconsin	—	0	2	3	9	—	0	3	12	32	—	0	1	1	3
W.N. Central	—	1	25	17	24	2	2	16	65	62	—	0	6	2	6
Iowa	—	0	3	2	4	—	0	1	5	10	—	0	0	—	—
Kansas	—	0	2	3	7	—	0	2	7	4	—	0	1	2	—
Minnesota	U	0	22	2	1	U	0	15	2	2	U	0	6	—	3
Missouri	—	0	1	5	10	1	2	5	42	36	—	0	1	—	2
Nebraska†	—	0	4	3	2	1	0	3	8	9	—	0	1	—	1
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	1	1	—	0	0	—	—
S. Atlantic	2	5	14	114	177	5	13	33	312	445	5	4	11	111	90
Delaware	—	0	1	1	5	—	0	1	—	17	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	1	2	7	40	64	3	4	11	107	154	2	1	5	28	24
Georgia	—	1	4	27	20	1	2	8	43	96	—	0	3	15	12
Maryland†	—	0	2	11	12	—	1	4	26	32	1	0	2	18	14
North Carolina	—	0	4	12	30	—	2	16	66	35	2	1	7	33	24
South Carolina†	—	0	2	5	19	—	1	4	18	31	—	0	1	—	—
Virginia†	1	1	4	13	25	1	1	7	33	46	—	0	2	8	8
West Virginia	—	0	5	5	1	—	0	18	19	31	—	0	5	9	6
E.S. Central	—	0	6	23	22	1	8	14	192	168	—	3	8	83	75
Alabama†	—	0	2	1	5	1	1	4	35	34	—	0	1	5	3
Kentucky	—	0	6	4	9	—	3	8	59	54	—	2	6	37	52
Mississippi	—	0	1	3	1	—	1	3	19	18	U	0	0	U	U
Tennessee†	—	0	5	15	7	—	3	8	79	62	—	1	5	41	20
W.S. Central	2	2	15	51	72	4	8	67	132	252	1	2	11	43	40
Arkansas†	—	0	1	—	—	—	1	4	20	35	—	0	0	—	1
Louisiana	—	0	1	2	5	1	1	4	22	25	—	0	2	5	1
Oklahoma	—	0	4	1	1	—	1	16	25	39	—	1	10	21	13
Texas†	2	2	11	48	66	3	4	45	65	153	1	0	3	17	25
Mountain	—	2	5	39	94	—	2	7	46	70	1	1	4	34	30
Arizona	—	0	2	9	43	—	0	3	11	15	U	0	0	U	U
Colorado	—	0	2	14	22	—	0	5	10	18	—	0	3	12	8
Idaho†	—	0	1	5	6	—	0	1	2	4	—	0	2	6	7
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	2	—
Nevada†	—	0	3	4	7	—	1	3	18	23	1	0	2	7	2
New Mexico†	—	0	1	3	3	—	0	2	4	3	—	0	1	4	9
Utah	—	0	2	—	6	—	0	1	1	7	—	0	2	1	4
Wyoming†	—	0	1	2	3	—	0	1	—	—	—	0	1	2	—
Pacific	6	4	15	69	123	1	4	25	63	150	—	1	12	32	37
Alaska	—	0	1	2	1	—	0	1	4	1	U	0	1	U	U
California	—	2	15	42	94	—	2	22	23	100	—	0	4	10	17
Hawaii	1	0	2	5	5	—	0	1	5	3	U	0	0	U	U
Oregon	—	0	2	5	11	—	0	3	18	25	—	0	3	10	9
Washington	5	0	2	15	12	1	1	4	13	21	—	0	5	12	11
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	3	9	—	0	3	6	12	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 9, 2011, and July 10, 2010 (27th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	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	34	45	128	997	1,417	469	334	1,575	7,868	15,261	10	26	114	513	709
New England	1	3	16	44	91	6	74	401	1,337	4,869	—	1	20	18	51
Connecticut	1	1	6	15	14	5	35	151	745	1,722	—	0	20	1	2
Maine†	—	0	3	3	4	1	10	62	133	217	—	0	1	2	4
Massachusetts	—	1	10	17	54	—	11	177	94	2,012	—	1	5	9	37
New Hampshire	—	0	5	3	5	—	14	45	259	753	—	0	2	2	1
Rhode Island†	—	0	4	2	12	—	1	40	20	41	—	0	4	1	6
Vermont†	—	0	2	4	2	—	5	28	86	124	—	0	1	3	1
Mid. Atlantic	18	14	53	263	338	405	145	782	4,842	5,099	2	8	22	115	230
New Jersey	—	2	18	24	56	28	42	456	1,639	2,177	—	1	6	8	56
New York (Upstate)	12	5	19	100	99	170	35	159	928	891	2	1	6	22	34
New York City	—	2	17	40	59	—	1	30	5	338	—	4	13	61	108
Pennsylvania	6	5	19	99	124	207	61	279	2,270	1,693	—	1	4	24	32
E.N. Central	3	9	44	167	298	1	22	298	411	2,252	—	3	9	53	73
Illinois	—	1	12	17	75	—	1	9	15	80	—	1	6	20	28
Indiana	—	1	5	34	27	—	0	7	19	49	—	0	2	5	7
Michigan	3	2	20	44	52	1	1	14	27	31	—	0	4	10	13
Ohio	—	4	15	71	113	—	0	9	7	11	—	1	5	17	20
Wisconsin	—	0	5	1	31	—	18	285	343	2,081	—	0	2	1	5
W.N. Central	2	2	9	34	59	2	3	176	23	1,212	—	1	45	6	28
Iowa	—	0	2	4	4	—	0	7	16	57	—	0	2	2	7
Kansas	—	0	2	4	6	—	0	1	3	9	—	0	2	2	3
Minnesota	U	0	8	—	17	U	3	165	—	1,138	U	0	45	—	3
Missouri	2	1	5	24	21	—	0	1	—	2	—	0	3	—	4
Nebraska†	—	0	1	—	5	2	0	2	4	3	—	0	1	2	9
North Dakota	—	0	1	1	2	—	0	10	—	2	—	0	1	—	—
South Dakota	—	0	2	1	4	—	0	0	—	1	—	0	1	—	2
S. Atlantic	4	9	22	191	270	51	57	178	1,141	1,661	5	7	41	184	187
Delaware	—	0	2	3	10	9	10	32	317	391	—	0	1	3	2
District of Columbia	—	0	3	8	13	—	0	5	9	16	—	0	1	5	9
Florida	—	3	9	72	80	3	1	8	37	27	3	2	7	49	59
Georgia	2	1	4	12	35	—	0	2	5	8	—	1	7	37	32
Maryland†	1	1	6	30	61	16	17	103	377	736	2	1	21	41	31
North Carolina	—	1	6	31	26	—	0	9	23	34	—	0	13	17	18
South Carolina†	—	0	2	5	7	—	0	3	6	20	—	0	1	1	3
Virginia†	1	1	9	25	31	20	19	82	347	414	—	1	4	31	33
West Virginia	—	0	2	5	7	3	0	29	20	15	—	0	1	—	—
E.S. Central	2	2	10	71	70	2	0	3	19	27	1	0	3	13	11
Alabama†	—	0	2	10	7	1	0	2	7	—	—	0	1	3	2
Kentucky	1	0	4	14	13	—	0	1	—	2	—	0	1	4	3
Mississippi	—	0	3	9	9	—	0	0	—	—	—	0	2	1	—
Tennessee†	1	1	8	38	41	1	0	3	12	25	1	0	2	5	6
W.S. Central	—	3	13	43	62	—	1	29	18	45	—	1	18	21	40
Arkansas†	—	0	2	4	11	—	0	0	—	—	—	0	1	2	1
Louisiana	—	0	3	7	2	—	0	1	—	—	—	0	1	—	1
Oklahoma	—	0	2	2	6	—	0	0	—	—	—	0	1	2	3
Texas†	—	2	11	30	43	—	1	29	18	45	—	1	17	17	35
Mountain	—	2	10	45	84	—	0	3	6	11	1	1	4	32	27
Arizona	—	1	7	15	25	—	0	1	3	2	—	0	4	14	11
Colorado	—	0	2	4	16	—	0	1	1	—	1	0	3	12	9
Idaho†	—	0	1	4	1	—	0	2	—	2	—	0	1	1	—
Montana†	—	0	1	—	4	—	0	1	—	1	—	0	1	—	1
Nevada†	—	0	2	8	15	—	0	1	—	—	—	0	2	3	3
New Mexico†	—	0	2	4	3	—	0	1	1	4	—	0	1	2	—
Utah	—	0	2	9	16	—	0	1	1	2	—	0	0	—	3
Wyoming†	—	0	2	1	4	—	0	0	—	—	—	0	0	—	—
Pacific	4	5	21	139	145	2	3	11	71	85	1	4	10	71	62
Alaska	—	0	2	—	2	—	0	1	—	3	—	0	2	3	2
California	4	4	15	125	123	2	2	9	53	55	—	2	10	51	35
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	2	2
Oregon	—	0	2	4	8	—	0	3	18	23	—	0	3	5	6
Washington	—	0	6	9	11	—	0	4	—	4	1	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 9, 2011, and July 10, 2010 (27th 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	6	14	53	406	467	3	10	73	148	2,245	85	471	2,925	6,152	8,262
New England	—	0	4	20	11	—	0	2	1	20	3	9	24	173	191
Connecticut	—	0	1	3	1	—	0	0	—	11	1	1	8	21	28
Maine§	—	0	1	3	3	—	0	1	—	1	2	1	8	65	16
Massachusetts	—	0	2	9	2	—	0	2	1	5	—	4	13	48	122
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	5	29	5
Rhode Island§	—	0	1	—	—	—	0	0	—	—	—	0	7	8	17
Vermont§	—	0	3	4	5	—	0	0	—	—	—	0	4	2	3
Mid. Atlantic	2	1	6	46	46	1	2	68	20	1,984	27	38	125	653	481
New Jersey	—	0	1	3	14	—	1	6	9	312	—	2	10	53	70
New York (Upstate)	1	0	4	13	9	—	0	3	3	646	13	12	81	216	179
New York City	1	0	3	17	11	1	0	60	8	1,011	3	0	19	27	34
Pennsylvania	—	0	2	13	12	—	0	16	—	15	11	18	70	357	198
E.N. Central	—	2	7	51	78	—	1	7	37	36	1	112	198	1,325	1,942
Illinois	—	0	2	15	17	—	1	3	24	11	—	19	50	297	356
Indiana	—	0	2	6	17	—	0	1	—	3	—	10	26	91	310
Michigan	—	0	4	5	11	—	0	1	5	14	1	29	57	404	536
Ohio	—	1	2	17	18	—	0	5	8	7	—	33	80	390	613
Wisconsin	—	0	2	8	15	—	0	1	—	1	—	12	26	143	127
W.N. Central	—	1	4	27	34	1	0	4	20	74	2	36	501	499	603
Iowa	—	0	1	6	8	—	0	1	4	35	—	8	36	78	234
Kansas	—	0	1	2	4	—	0	1	3	4	1	2	9	44	86
Minnesota	U	0	2	—	2	U	0	4	1	3	U	0	469	171	5
Missouri	—	0	2	9	14	—	0	3	6	8	1	6	43	143	199
Nebraska§	—	0	2	7	5	1	0	1	2	23	—	3	13	37	57
North Dakota	—	0	1	1	1	—	0	3	4	—	—	0	30	24	—
South Dakota	—	0	1	2	—	—	0	1	—	1	—	0	2	2	22
S. Atlantic	1	2	8	75	83	—	0	4	10	38	25	36	106	682	727
Delaware	—	0	1	1	—	—	0	0	—	—	—	0	2	10	7
District of Columbia	—	0	1	—	—	—	0	1	—	2	—	0	2	3	4
Florida	1	1	5	32	40	—	0	2	2	8	6	6	15	144	141
Georgia	—	0	2	5	6	—	0	2	1	2	—	4	13	85	105
Maryland§	—	0	1	7	4	—	0	1	1	8	1	2	6	42	58
North Carolina	—	0	3	12	9	—	0	2	4	5	1	4	35	109	148
South Carolina§	—	0	1	7	7	—	0	1	—	3	1	4	25	76	168
Virginia§	—	0	2	9	15	—	0	2	2	8	16	7	41	168	87
West Virginia	—	0	1	2	2	—	0	0	—	2	—	1	41	45	9
E.S. Central	1	1	3	19	22	—	0	1	3	9	—	11	35	182	397
Alabama§	—	0	2	9	4	—	0	1	1	6	—	3	11	75	116
Kentucky	—	0	1	1	9	—	0	0	—	1	—	3	16	45	135
Mississippi	—	0	1	2	3	—	0	1	2	—	—	1	10	8	36
Tennessee§	1	0	2	7	6	—	0	1	—	2	—	3	11	54	110
W.S. Central	—	1	12	32	56	—	1	15	44	45	2	37	297	478	1,530
Arkansas§	—	0	1	7	5	—	0	1	1	4	—	2	18	29	88
Louisiana	—	0	2	6	12	—	0	2	—	4	—	0	3	10	23
Oklahoma	—	0	2	5	14	—	0	1	1	—	—	0	92	17	14
Texas§	—	0	10	14	25	—	1	14	42	37	2	30	187	422	1,405
Mountain	—	1	4	33	39	1	0	4	4	11	7	42	100	863	619
Arizona	—	0	1	8	9	—	0	1	—	4	—	14	29	352	211
Colorado	—	0	2	8	13	1	0	1	3	5	3	10	63	255	76
Idaho§	—	0	1	3	5	—	0	1	—	—	4	2	15	55	82
Montana§	—	0	2	3	1	—	0	0	—	—	—	2	16	73	32
Nevada§	—	0	1	3	7	—	0	1	—	—	—	0	5	15	16
New Mexico§	—	0	1	1	3	—	0	2	1	—	—	3	11	60	39
Utah	—	0	2	7	1	—	0	1	—	2	—	4	16	49	157
Wyoming§	—	0	1	—	—	—	0	1	—	—	—	0	2	4	6
Pacific	2	4	26	103	98	—	0	3	9	28	18	110	1,710	1,297	1,772
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	6	16	15
California	1	2	17	70	61	—	0	3	3	18	—	104	1,569	993	1,468
Hawaii	—	0	1	3	1	—	0	1	2	2	—	1	6	19	35
Oregon	—	0	3	16	21	—	0	1	3	1	—	4	11	98	156
Washington	1	0	8	12	14	—	0	1	—	6	18	11	131	171	98
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	3	15	12	388	—	0	14	31	1
Puerto Rico	—	0	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 9, 2011, and July 10, 2010 (27th 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	23	60	172	1,171	2,167	471	830	1,812	16,286	20,064	44	94	264	1,922	2,004
New England	3	3	18	60	138	—	25	209	601	1,373	—	2	27	62	123
Connecticut	—	0	8	—	66	—	0	187	187	491	—	0	27	27	60
Maine§	1	1	3	27	30	—	2	8	55	60	—	0	3	13	4
Massachusetts	—	0	0	—	—	—	16	52	204	592	—	0	9	5	38
New Hampshire	2	0	6	9	4	—	3	12	74	95	—	0	3	13	14
Rhode Island§	—	0	3	9	12	—	1	42	57	106	—	0	1	1	2
Vermont§	—	1	3	15	26	—	1	5	24	29	—	0	2	3	5
Mid. Atlantic	5	14	33	327	563	66	90	217	1,981	2,454	6	9	30	207	211
New Jersey	—	0	0	—	—	—	16	57	256	498	—	2	9	33	47
New York (Upstate)	5	7	19	151	247	44	25	63	527	547	4	3	12	69	70
New York City	—	0	4	7	128	3	21	53	478	581	—	2	6	32	21
Pennsylvania	—	8	17	169	188	19	32	80	720	828	2	3	13	73	73
E.N. Central	1	2	27	38	93	—	81	203	1,552	2,832	—	10	48	198	343
Illinois	1	1	11	17	42	—	27	61	566	1,008	—	2	9	41	74
Indiana	—	0	3	4	—	—	9	61	143	345	—	2	10	36	57
Michigan	—	1	5	17	32	—	13	49	297	414	—	2	7	54	73
Ohio	—	0	12	—	19	—	19	42	324	653	—	2	11	44	60
Wisconsin	N	0	0	N	N	—	11	50	222	412	—	1	16	23	79
W.N. Central	3	2	40	43	128	29	48	121	958	1,232	9	13	49	258	380
Iowa	—	0	3	—	10	1	9	34	213	220	—	2	16	56	71
Kansas	—	1	4	18	34	8	7	18	150	182	1	1	7	42	36
Minnesota	U	0	34	—	16	U	3	30	—	350	U	1	20	—	111
Missouri	—	0	6	—	33	15	16	43	391	302	4	4	14	97	112
Nebraska§	3	0	3	18	29	5	4	13	105	96	4	1	5	44	36
North Dakota	—	0	6	7	6	—	0	15	20	13	—	0	10	6	3
South Dakota	—	0	0	—	—	—	3	17	79	69	—	1	4	13	11
S. Atlantic	11	19	53	565	608	177	275	624	4,776	4,698	11	19	31	447	275
Delaware	—	0	0	—	—	1	3	11	57	57	1	0	1	7	3
District of Columbia	—	0	0	—	—	—	1	7	26	48	—	0	1	3	6
Florida	—	0	29	53	121	106	108	226	1,961	2,069	4	6	15	193	85
Georgia	—	0	0	—	—	40	39	142	818	829	—	2	7	46	40
Maryland§	—	6	14	149	187	11	18	54	352	396	3	2	8	45	39
North Carolina	—	0	0	—	—	—	31	241	682	467	—	2	10	53	23
South Carolina§	N	0	0	N	N	4	29	99	429	372	1	0	4	14	13
Virginia§	10	11	27	308	261	15	21	68	415	378	2	3	9	79	60
West Virginia	1	0	30	55	39	—	0	14	36	82	—	0	5	7	6
E.S. Central	—	2	7	65	104	39	60	175	1,204	1,201	2	5	22	125	109
Alabama§	—	1	7	44	44	14	18	52	320	314	1	1	4	23	26
Kentucky	—	0	2	8	10	6	9	32	189	227	—	1	6	15	18
Mississippi	—	0	0	—	—	9	21	65	363	325	—	0	12	11	10
Tennessee§	—	1	4	13	50	10	17	53	332	335	1	3	12	76	55
W.S. Central	—	7	54	53	423	83	109	515	1,926	2,236	3	8	151	134	107
Arkansas§	—	0	10	41	13	9	13	43	237	203	2	0	4	19	24
Louisiana	—	0	0	—	—	12	13	52	219	521	—	0	2	5	9
Oklahoma	—	0	30	12	6	—	10	95	164	202	—	1	55	12	8
Texas§	—	3	30	—	404	62	82	381	1,306	1,310	1	6	95	98	66
Mountain	—	0	5	7	27	20	48	113	1,066	1,264	3	11	33	238	231
Arizona	N	0	0	N	N	2	15	43	316	410	—	2	14	44	30
Colorado	—	0	0	—	—	13	10	24	258	273	—	3	21	55	84
Idaho§	—	0	2	—	1	—	3	9	75	76	2	3	7	45	23
Montana§	N	0	0	N	N	1	2	6	52	52	—	1	4	18	23
Nevada§	—	0	2	1	2	4	4	21	86	116	1	0	6	17	11
New Mexico§	—	0	2	4	7	—	6	19	101	128	—	1	6	19	15
Utah	—	0	3	2	1	—	6	17	150	183	—	1	8	30	35
Wyoming§	—	0	4	—	16	—	1	8	28	26	—	0	3	10	10
Pacific	—	2	15	13	83	57	103	288	2,222	2,774	10	13	46	253	225
Alaska	—	0	2	9	11	—	1	4	30	44	—	0	1	—	1
California	—	0	10	—	63	27	76	232	1,691	1,946	3	8	36	169	99
Hawaii	—	0	0	—	—	6	6	13	155	163	—	0	3	4	17
Oregon	—	0	2	4	9	—	7	20	115	301	—	2	11	32	32
Washington	—	0	14	—	—	24	13	42	231	320	7	2	20	48	76
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	20	25	—	6	25	49	287	—	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 9, 2011, and July 10, 2010 (27th week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF)† Confirmed					Spotted Fever Rickettsiosis (including RMSF)† 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	143	252	742	4,862	6,998	1	2	11	50	69	27	23	245	435	576
New England	—	3	20	82	200	—	0	0	—	—	—	0	1	2	1
Connecticut	—	0	18	18	69	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	4	15	3	—	0	0	—	—	—	0	1	—	1
Massachusetts	—	2	16	42	112	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	2	1	5	—	0	0	—	—	—	0	1	1	—
Rhode Island§	—	0	4	4	10	—	0	0	—	—	—	0	1	1	—
Vermont§	—	0	1	2	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	3	15	74	292	942	—	0	1	3	2	—	1	5	12	46
New Jersey	—	3	16	40	216	—	0	0	—	1	—	0	3	—	32
New York (Upstate)	3	3	18	93	83	—	0	0	—	1	—	0	3	2	2
New York City	—	4	14	106	167	—	0	0	—	—	—	0	2	5	6
Pennsylvania	—	4	56	53	476	—	0	1	3	—	—	0	2	5	6
E.N. Central	—	16	37	270	987	—	0	1	—	—	—	1	7	24	45
Illinois	—	6	20	74	611	—	0	1	—	—	—	0	4	14	22
Indiana§	—	1	4	27	29	—	0	1	—	—	—	0	3	8	14
Michigan	—	4	9	75	130	—	0	0	—	—	—	0	1	—	1
Ohio	—	4	15	94	171	—	0	0	—	—	—	0	2	2	5
Wisconsin	—	0	4	—	46	—	0	0	—	—	—	0	1	—	3
W.N. Central	2	14	52	176	1,486	1	0	2	7	6	3	4	20	111	120
Iowa	—	0	4	8	31	—	0	0	—	—	—	0	1	1	3
Kansas§	—	3	12	31	156	—	0	0	—	—	—	0	0	—	—
Minnesota	U	0	4	—	26	U	0	0	—	—	U	0	2	—	—
Missouri	1	7	41	129	1,250	—	0	2	6	4	3	4	20	110	116
Nebraska§	1	0	10	5	19	1	0	1	1	2	—	0	1	—	1
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	3	4	—	0	0	—	—	—	0	0	—	—
S. Atlantic	82	65	131	1,875	1,040	—	1	6	30	44	4	6	59	136	154
Delaware§	—	0	1	1	35	—	0	1	1	1	—	0	2	7	10
District of Columbia	—	0	3	7	18	—	0	1	1	—	—	0	0	—	—
Florida§	67	35	99	1,362	396	—	0	1	3	2	—	0	2	3	6
Georgia	10	13	26	267	367	—	0	4	15	37	—	0	0	—	—
Maryland§	2	2	8	45	59	—	0	1	1	—	1	0	5	7	22
North Carolina	—	3	36	119	71	—	0	4	5	3	—	1	47	73	69
South Carolina§	—	1	5	26	36	—	0	1	3	—	—	0	2	10	7
Virginia§	3	2	8	44	57	—	0	2	1	1	3	2	12	34	40
West Virginia	—	0	66	4	1	—	0	0	—	—	—	0	1	2	—
E.S. Central	6	13	29	274	386	—	0	3	4	10	3	5	26	100	173
Alabama§	—	5	15	96	69	—	0	1	—	1	—	1	6	18	34
Kentucky	5	1	6	40	167	—	0	0	—	6	—	0	0	—	—
Mississippi	1	2	7	68	21	—	0	1	1	—	—	0	4	1	10
Tennessee§	—	3	14	70	129	—	0	3	3	3	3	4	20	81	129
W.S. Central	31	57	503	1,100	1,180	—	0	8	—	1	17	1	235	26	32
Arkansas§	1	2	7	31	25	—	0	2	—	—	17	0	28	18	12
Louisiana	1	5	13	69	135	—	0	0	—	—	—	0	1	2	1
Oklahoma	—	2	161	40	152	—	0	5	—	—	—	0	202	4	9
Texas§	29	46	338	960	868	—	0	1	—	1	—	0	5	2	10
Mountain	2	17	32	346	325	—	0	5	6	2	—	0	7	24	4
Arizona	2	7	19	106	175	—	0	4	6	—	—	0	7	19	—
Colorado§	—	2	7	40	43	—	0	1	—	—	—	0	1	2	—
Idaho§	—	0	3	9	12	—	0	0	—	—	—	0	1	—	1
Montana§	—	1	15	103	4	—	0	0	—	2	—	0	0	—	1
Nevada§	—	0	6	10	17	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	3	10	53	57	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	24	17	—	0	0	—	—	—	0	1	—	1
Wyoming§	—	0	1	1	—	—	0	0	—	—	—	0	1	3	—
Pacific	17	23	63	447	452	—	0	2	—	4	—	0	0	—	1
Alaska	—	0	2	3	—	N	0	0	N	N	N	0	0	N	N
California	13	18	59	346	358	—	0	2	—	4	—	0	0	—	—
Hawaii	—	1	3	29	31	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	26	31	—	0	0	—	—	—	0	0	—	1
Washington	4	1	22	43	32	—	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	—	3	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 9, 2011, and July 10, 2010 (27th week)*

Reporting area	*Streptococcus pneumoniae*,† invasive disease — All ages					*Streptococcus pneumoniae*,† invasive disease — Age <5					Syphilis, primary and secondary				
	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	53	284	937	7,850	9,560	3	23	101	607	1,172	40	257	363	5,878	6,698
New England	1	11	79	256	519	1	1	5	26	69	—	8	19	197	229
Connecticut	—	0	49	8	232	—	0	3	6	20	—	1	8	32	43
Maine§	—	2	13	81	79	—	0	1	3	5	—	0	3	9	14
Massachusetts	—	0	3	14	52	—	0	3	6	36	—	5	14	116	144
New Hampshire	1	2	8	68	73	1	0	1	5	4	—	0	3	12	11
Rhode Island§	—	1	36	39	28	—	0	3	1	1	—	0	7	23	15
Vermont§	—	1	6	46	55	—	0	2	5	3	—	0	2	5	2
Mid. Atlantic	2	23	81	568	1,000	1	3	27	79	152	8	31	46	708	854
New Jersey	—	6	29	114	441	—	1	4	26	38	—	4	10	101	125
New York (Upstate)	—	2	10	55	100	—	1	9	31	76	4	3	20	96	58
New York City	2	13	42	399	459	1	0	14	22	38	—	15	31	339	470
Pennsylvania	N	0	0	N	N	N	0	0	N	N	4	7	13	172	201
E.N. Central	4	65	110	1,798	1,959	—	4	10	101	171	—	29	56	612	989
Illinois	N	0	0	N	N	N	0	0	N	N	—	14	23	242	486
Indiana	—	15	32	383	443	—	1	4	16	34	—	3	14	83	77
Michigan	—	15	29	422	448	—	1	4	24	53	—	4	10	94	139
Ohio	—	25	45	710	759	—	2	7	49	59	—	9	21	171	263
Wisconsin	4	9	24	283	309	—	0	3	12	25	—	1	4	22	24
W.N. Central	1	5	35	92	511	—	1	5	4	69	—	7	18	138	145
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	3	11	9
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	9	10
Minnesota	U	2	24	—	386	U	0	5	—	56	U	3	10	56	45
Missouri	N	0	0	N	N	N	0	0	N	N	—	2	9	59	76
Nebraska§	1	2	9	74	87	—	0	1	4	11	—	0	2	3	5
North Dakota	—	0	18	18	38	—	0	1	—	2	—	0	1	—	—
South Dakota	N	0	0	N	N	N	0	0	N	N	—	0	1	—	—
S. Atlantic	24	68	170	2,201	2,575	—	6	22	165	323	15	62	178	1,529	1,528
Delaware	—	1	6	33	22	—	0	1	—	—	—	0	4	12	3
District of Columbia	—	1	3	28	52	—	0	1	4	7	—	3	8	99	74
Florida	12	23	68	892	966	—	3	13	80	130	—	22	44	551	539
Georgia	6	19	54	500	827	—	2	7	40	99	—	10	130	241	328
Maryland§	3	10	32	325	307	—	1	4	18	35	5	8	17	212	133
North Carolina	N	0	0	N	N	N	0	0	N	N	3	7	19	183	238
South Carolina§	3	8	25	298	331	—	1	3	18	37	2	4	10	111	67
Virginia§	N	0	0	N	N	N	0	0	N	N	5	4	16	119	143
West Virginia	—	1	48	125	70	—	0	6	5	15	—	0	2	1	3
E.S. Central	4	19	36	574	656	—	1	4	34	64	5	15	34	352	440
Alabama§	N	0	0	N	N	N	0	0	N	N	2	4	11	93	131
Kentucky	N	0	0	N	N	N	0	0	N	N	3	2	16	58	67
Mississippi	N	0	0	N	N	N	0	0	N	N	—	3	16	75	96
Tennessee§	4	19	36	574	656	—	1	4	34	64	—	5	11	126	146
W.S. Central	9	31	368	1,140	1,152	1	4	30	105	153	1	37	71	832	1,032
Arkansas§	2	3	26	146	111	1	0	3	12	11	1	3	10	97	134
Louisiana	—	3	11	100	61	—	0	2	9	16	—	7	36	175	212
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	6	25	54
Texas§	7	26	333	894	980	—	3	27	84	126	—	23	33	535	632
Mountain	8	32	72	1,126	1,125	—	3	8	85	158	3	12	23	276	300
Arizona	1	12	45	529	548	—	1	5	39	73	—	4	9	101	113
Colorado	5	11	23	350	329	—	1	4	25	46	1	2	8	57	67
Idaho§	N	0	0	N	N	N	0	0	N	N	—	0	2	4	2
Montana§	N	0	0	N	N	N	0	0	N	N	—	0	1	3	2
Nevada§	N	0	0	N	N	N	0	0	N	N	2	3	9	75	51
New Mexico§	—	3	13	156	107	—	0	2	10	13	—	1	4	31	22
Utah	—	3	8	72	131	—	0	3	11	24	—	0	5	5	43
Wyoming§	2	0	15	19	10	—	0	1	—	2	—	0	0	—	—
Pacific	—	2	11	95	63	—	0	2	8	13	8	50	66	1,234	1,181
Alaska	—	2	11	94	63	—	0	2	8	13	—	0	0	—	3
California	N	0	0	N	N	N	0	0	N	N	5	41	57	1,013	1,004
Hawaii	—	0	3	1	—	—	0	0	—	—	—	0	5	7	22
Oregon	N	0	0	N	N	N	0	0	N	N	1	1	7	44	32
Washington	N	0	0	N	N	N	0	0	N	N	2	6	13	170	120
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	12	127	123
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 9, 2011, and July 10, 2010 (27th week)*

	Varicella (chickenpox)					West Nile virus disease† Neuroinvasive					West Nile virus disease† Nonneuroinvasive§				
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010
United States	42	249	367	6,245	9,234	—	0	71	3	36	—	0	53	2	48
New England	—	17	46	453	629	—	0	3	—	—	—	0	2	—	1
Connecticut	—	5	16	147	192	—	0	2	—	—	—	0	2	—	1
Maine¶	—	5	16	115	111	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	4	17	103	169	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	1	9	9	75	—	0	1	—	—	—	0	0	—	—
Rhode Island¶	—	0	5	18	18	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	2	10	61	64	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	9	31	56	916	1,015	—	0	19	—	2	—	0	13	—	1
New Jersey	1	9	40	393	370	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	1	—	0	7	—	1
New York City	—	0	0	—	—	—	0	7	—	1	—	0	4	—	—
Pennsylvania	8	18	41	523	645	—	0	3	—	—	—	0	3	—	—
E.N. Central	3	68	118	1,638	3,098	—	0	15	—	1	—	0	7	—	1
Illinois	—	17	31	430	760	—	0	10	—	—	—	0	4	—	—
Indiana¶	—	4	18	123	230	—	0	2	—	—	—	0	2	—	—
Michigan	3	20	38	546	960	—	0	6	—	—	—	0	1	—	—
Ohio	—	21	57	538	827	—	0	1	—	1	—	0	1	—	—
Wisconsin	—	2	22	1	321	—	0	0	—	—	—	0	1	—	1
W.N. Central	—	11	42	200	484	—	0	7	1	—	—	0	11	—	13
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas¶	—	4	15	56	209	—	0	1	—	—	—	0	3	—	3
Minnesota	U	0	0	—	—	U	0	1	—	—	U	0	3	—	—
Missouri	—	5	24	99	226	—	0	1	—	—	—	0	0	—	—
Nebraska¶	—	0	5	3	5	—	0	3	—	—	—	0	7	—	5
North Dakota	—	0	10	23	29	—	0	2	—	—	—	0	2	—	2
South Dakota	—	1	7	19	15	—	0	2	1	—	—	0	3	—	3
S. Atlantic	5	36	64	1,032	1,332	—	0	6	—	—	—	0	4	—	3
Delaware¶	—	0	3	5	19	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	12	15	—	0	1	—	—	—	0	1	—	—
Florida¶	4	15	38	520	659	—	0	3	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	3	—	3
Maryland¶	N	0	0	N	N	—	0	3	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina¶	—	0	8	11	74	—	0	1	—	—	—	0	0	—	—
Virginia¶	1	8	25	243	309	—	0	1	—	—	—	0	1	—	—
West Virginia	—	7	32	241	256	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	5	15	167	185	—	0	1	—	2	—	0	3	1	1
Alabama¶	—	5	14	158	178	—	0	0	—	1	—	0	1	—	1
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	3	9	7	—	0	1	—	1	—	0	2	1	—
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	22	44	258	1,390	1,745	—	0	16	1	5	—	0	3	1	—
Arkansas¶	—	3	17	119	122	—	0	3	—	—	—	0	1	—	—
Louisiana	—	2	5	48	47	—	0	3	—	3	—	0	1	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas¶	22	37	247	1,223	1,576	—	0	15	1	2	—	0	2	1	—
Mountain	3	13	50	387	682	—	0	18	1	23	—	0	15	—	22
Arizona	—	0	0	—	—	—	0	13	1	22	—	0	9	—	12
Colorado¶	3	5	31	149	241	—	0	5	—	1	—	0	11	—	9
Idaho¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana¶	—	2	28	92	148	—	0	0	—	—	—	0	0	—	—
Nevada¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	1
New Mexico¶	—	1	8	23	64	—	0	6	—	—	—	0	2	—	—
Utah	—	4	26	116	216	—	0	1	—	—	—	0	1	—	—
Wyoming¶	—	0	3	7	13	—	0	1	—	—	—	0	1	—	—
Pacific	—	2	6	62	64	—	0	8	—	3	—	0	6	—	6
Alaska	—	1	5	30	22	—	0	0	—	—	—	0	0	—	—
California	—	0	3	6	21	—	0	8	—	3	—	0	6	—	6
Hawaii	—	1	4	26	21	—	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	—	7	28	70	336	—	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 9, 2011 (27th week)

Reporting area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
New England	500	368	90	27	9	6	34
Boston, MA	127	79	36	7	2	3	6
Bridgeport, CT	23	20	3	—	—	—	—
Cambridge, MA	13	12	1	—	—	—	3
Fall River, MA	29	27	1	1	—	—	—
Hartford, CT	49	33	6	5	3	2	2
Lowell, MA	23	16	5	2	—	—	1
Lynn, MA	8	7	—	—	1	—	—
New Bedford, MA	24	20	3	1	—	—	3
New Haven, CT	36	26	10	—	—	—	5
Providence, RI	48	41	6	1	—	—	1
Somerville, MA	3	2	—	1	—	—	—
Springfield, MA	41	27	9	4	1	—	5
Waterbury, CT	25	21	2	2	—	—	1
Worcester, MA	51	37	8	3	2	1	7
Mid. Atlantic	1,588	1,123	336	87	26	16	85
Albany, NY	39	30	4	3	—	2	1
Allentown, PA	18	14	3	—	1	—	1
Buffalo, NY	105	65	21	11	6	2	10
Camden, NJ	31	19	9	1	1	1	4
Elizabeth, NJ	18	16	1	1	—	—	4
Erie, PA	31	22	6	3	—	—	1
Jersey City, NJ	20	13	7	—	—	—	—
New York City, NY	851	603	185	45	10	8	41
Newark, NJ	34	21	6	3	4	—	—
Paterson, NJ	15	7	5	3	—	—	—
Philadelphia, PA	112	81	21	8	2	—	3
Pittsburgh, PA§	28	23	5	—	—	—	1
Reading, PA	28	22	5	—	1	—	3
Rochester, NY	87	60	23	2	—	2	5
Schenectady, NY	21	14	6	1	—	—	2
Scranton, PA	27	24	3	—	—	—	2
Syracuse, NY	76	58	13	3	1	1	5
Trenton, NJ	16	10	5	1	—	—	—
Utica, NY	14	11	2	1	—	—	1
Yonkers, NY	17	10	6	1	—	—	1
E.N. Central	1,717	1,115	412	119	32	38	97
Akron, OH	38	25	8	1	2	2	5
Canton, OH	36	26	5	4	1	—	1
Chicago, IL	275	155	75	32	8	4	5
Cincinnati, OH	56	35	9	5	5	2	8
Cleveland, OH	226	155	53	11	—	7	9
Columbus, OH	224	153	49	9	6	7	19
Dayton, OH	114	72	31	11	—	—	6
Detroit, MI	119	62	39	11	3	4	4
Evansville, IN	38	26	10	2	—	—	3
Fort Wayne, IN	60	40	14	5	1	—	6
Gary, IN	14	8	4	—	—	2	—
Grand Rapids, MI	44	30	6	2	3	3	3
Indianapolis, IN	160	103	40	13	3	1	16
Lansing, MI	44	32	10	2	—	—	4
Milwaukee, WI	77	51	21	4	—	1	2
Peoria, IL	U	U	U	U	U	U	U
Rockford, IL	41	28	6	2	—	5	1
South Bend, IN	33	22	9	2	—	—	1
Toledo, OH	62	44	16	2	—	—	2
Youngstown, OH	56	48	7	1	—	—	2
W.N. Central	288	188	74	14	6	6	27
Des Moines, IA	—	—	—	—	—	—	—
Duluth, MN	U	U	U	U	U	U	U
Kansas City, KS	20	11	7	2	—	—	1
Kansas City, MO	67	40	21	2	4	—	5
Lincoln, NE	35	30	3	1	1	—	3
Minneapolis, MN	U	U	U	U	U	U	U
Omaha, NE	59	40	15	3	—	1	8
St. Louis, MO	37	18	14	1	1	3	4
St. Paul, MN	U	U	U	U	U	U	U
Wichita, KS	70	49	14	5	—	2	6

Reporting area (*Continued*)	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
S. Atlantic	1,050	624	297	82	25	22	59
Atlanta, GA	132	68	37	17	6	4	4
Baltimore, MD	150	75	59	9	6	1	16
Charlotte, NC	93	61	20	9	1	2	4
Jacksonville, FL	146	96	35	10	3	2	7
Miami, FL	51	35	14	2	—	—	2
Norfolk, VA	69	39	22	6	—	2	—
Richmond, VA	58	30	22	3	—	3	4
Savannah, GA	42	30	11	1	—	—	4
St. Petersburg, FL	38	23	9	4	1	1	3
Tampa, FL	180	115	46	11	3	5	10
Washington, D.C.	84	48	21	8	5	2	4
Wilmington, DE	7	4	1	2	—	—	1
E.S. Central	624	382	162	39	23	18	43
Birmingham, AL	142	80	43	14	2	3	10
Chattanooga, TN	71	42	21	4	2	2	5
Knoxville, TN	67	49	12	1	3	2	3
Lexington, KY	52	29	15	1	4	3	2
Memphis, TN	96	57	29	6	3	1	5
Mobile, AL	55	36	14	4	1	—	6
Montgomery, AL	19	16	3	—	—	—	3
Nashville, TN	122	73	25	9	8	7	9
W.S. Central	973	594	261	67	31	19	56
Austin, TX	85	57	19	6	3	—	7
Baton Rouge, LA	60	39	15	3	2	1	—
Corpus Christi, TX	63	42	15	4	—	2	3
Dallas, TX	124	71	40	8	4	1	2
El Paso, TX	82	54	18	4	4	2	1
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	182	96	48	19	8	11	12
Little Rock, AR	65	42	22	—	—	1	5
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	219	135	59	16	8	—	17
Shreveport, LA	U	U	U	U	U	U	U
Tulsa, OK	93	58	25	7	2	1	9
Mountain	790	497	205	54	21	12	44
Albuquerque, NM	86	49	23	8	3	3	7
Boise, ID	33	21	8	2	1	1	1
Colorado Springs, CO	59	42	14	3	—	—	1
Denver, CO	59	38	15	2	2	2	2
Las Vegas, NV	242	150	65	17	7	2	22
Ogden, UT	29	18	10	—	1	—	1
Phoenix, AZ	U	U	U	U	U	U	U
Pueblo, CO	29	19	8	1	1	—	2
Salt Lake City, UT	121	70	32	11	6	2	4
Tucson, AZ	132	90	30	10	—	2	4
Pacific	1,485	1,024	346	73	26	16	126
Berkeley, CA	17	15	1	1	—	—	1
Fresno, CA	110	67	28	9	5	1	6
Glendale, CA	25	20	4	1	—	—	7
Honolulu, HI	89	66	16	3	2	2	10
Long Beach, CA	49	37	8	3	1	—	5
Los Angeles, CA	231	150	60	13	5	3	27
Pasadena, CA	15	8	5	—	1	1	1
Portland, OR	94	62	20	8	2	2	3
Sacramento, CA	177	126	38	10	2	1	14
San Diego, CA	124	82	34	3	1	4	8
San Francisco, CA	108	71	29	6	1	1	11
San Jose, CA	189	141	40	6	2	—	15
Santa Cruz, CA	31	23	6	2	—	—	2
Seattle, WA	97	65	30	—	1	1	6
Spokane, WA	52	36	9	5	2	—	4
Tacoma, WA	77	55	18	3	1	—	6
Total¶	**9,015**	**5,915**	**2,183**	**562**	**199**	**153**	**571**

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.

TABLE IV. Provisional cases of selected notifiable disease,* United States, second quarter ending July 2, 2011 (26th week)

Reporting area	Tuberculosis†				
	Current quarter	Previous 4 quarters		Cum 2011	Cum 2010
		Min	Max		
United States	1,192	1,192	3,218	2,790	5,112
New England	40	40	87	104	185
Connecticut	1	1	22	21	43
Maine	1	0	3	4	5
Massachusetts	32	32	57	68	111
New Hampshire	2	0	2	2	7
Rhode Island	4	3	4	7	18
Vermont	—	0	3	2	1
Mid. Atlantic	279	279	422	573	745
New Jersey	91	46	141	137	140
New York (Upstate)	42	41	71	83	103
New York City	146	124	146	291	386
Pennsylvania	—	0	69	62	116
E.N. Central	50	50	265	147	398
Illinois	—	0	100	41	178
Indiana	27	17	31	44	36
Michigan	—	0	63	20	73
Ohio	—	0	55	—	83
Wisconsin	23	12	23	42	28
W.N. Central	41	34	85	75	155
Iowa	—	0	15	6	19
Kansas	—	0	11	—	28
Minnesota	38	20	39	58	65
Missouri	—	0	12	5	14
Nebraska	3	3	7	6	13
North Dakota	—	0	4	—	6
South Dakota	—	0	5	—	10
S. Atlantic	217	217	569	618	1,126
Delaware	—	0	5	1	14
District of Columbia	8	8	14	21	17
Florida	89	89	191	268	463
Georgia	2	2	102	81	228
Maryland	50	50	67	108	93
North Carolina	—	0	80	33	142
South Carolina	12	12	50	28	63
Virginia	53	20	91	73	95
West Virginia	3	2	3	5	11
E.S. Central	106	92	159	198	250
Alabama	46	28	46	76	83
Kentucky	3	0	46	3	28
Mississippi	16	16	36	40	47
Tennessee	41	38	52	79	92
W.S. Central	60	60	492	243	802
Arkansas	23	10	29	33	31
Louisiana	—	0	78	13	70
Oklahoma	15	15	21	33	46
Texas	22	22	368	164	655
Mountain	116	49	229	165	219
Arizona	45	6	120	51	92
Colorado	14	10	34	24	26
Idaho	3	1	5	4	8
Montana	—	0	1	—	5
Nevada	39	13	45	52	46
New Mexico	6	6	16	14	25
Utah	9	1	11	20	13
Wyoming	—	0	2	—	4
Pacific	283	283	914	667	1,232
Alaska	—	0	55	—	—
California	228	228	775	553	1,059
Hawaii	—	0	0	—	—
Oregon	—	0	24	13	44
Washington	55	46	60	101	129
Territories					
American Samoa	—	0	1	—	1
C.N.M.I.	—	0	12	2	14
Guam	—	0	27	—	52
Puerto Rico	12	11	25	23	39
U.S. Virgin Islands	—	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.
* CDC is in the process of upgrading the national surveillance data management system for human immunodeficiency virus/acquired immunodeficiency syndrome. As a result, the quarterly data scheduled for this issue of MMWR is not being published in Table IV.
† CDC is in the process of implementing Public Health Information Network tuberculosis (TB) case notification message standards, which will simplify reporting of TB cases. As a result, TB provisional incidence counts are now reported from the National Electronic Disease Surveillance System (NEDSS) and the Tuberculosis Information Management System (TIMS) data sources. Previously, provisional TB incidence counts were reported through the National Electronic Telecommunications System for Surveillance (NETSS). The TB provisional incidence counts are low in some reporting jurisdictions as these areas continue to catch up with data entry and transmission to CDC during this transition.

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.*

U.S. Government Printing Office: 2011-723-011/21059 Region IV   ISSN: 0149-2195