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Nonfatal Sports and Recreation Heat Illness Treated in Hospital Emergency Departments — United States, 2001–2009

Although heat illness is recognized as a leading cause of death and disability during participation in U.S. high school and collegiate athletics (*1*), the incidence of heat illness among younger children and adults participating in sports and recreational activities is unknown. To examine the incidence and characteristics of nonfatal sports and recreation heat illness among persons of all ages, CDC analyzed 2001–2009 data from the National Electronic Injury Surveillance System – All Injury Program. This report describes the results of that analysis, which found that an estimated 5,946 persons were treated in U.S. emergency departments (EDs) each year for a heat illness sustained while participating in a sport or recreational activity, for an estimated annual rate of 2.0 ED visits per 100,000 population. Incidence was highest among males (72.5%) and among those aged 15–19 years (35.6%), and 7.1% of patients were hospitalized. These findings highlight the need for effective heat illness prevention messages to target all persons who are physically active, including those who participate in unstructured sports and recreational activities. Specific emphasis should be placed on targeting appropriate prevention messages toward those aged 15–19 years, who are at greatest risk, and their coaches and parents.

The National Electronic Injury Surveillance System (NEISS) is an ongoing surveillance system that monitors consumer product–related injuries treated in U.S. hospital EDs (*2*). The system is maintained and operated by the U.S. Consumer Product Safety Commission (CPSC). NEISS currently includes 100 hospital EDs, which represent a stratified probability sample of all U.S. and U.S. territory hospitals that have at least six beds and provide 24-hour emergency services. The National Electronic Injury Surveillance System – All Injury Program (NEISS-AIP) is a subsample of 66 NEISS hospitals. NEISS-AIP tracks all injuries seen in EDs, whether or not they are associated with consumer products, and as such, is a nationally representative dataset on injuries. For each entry, data include up to two consumer product codes and a brief narrative describing the circumstances of the injury.

For this report, NEISS-AIP data were analyzed for a 9-year period from 2001 through 2009. Sports and recreation injuries were first identified and classified into one of 39 mutually exclusive sports and recreation groups by applying an algorithm that considered the consumer products involved (e.g., basketball activity, apparel, or equipment; or football activity, apparel, or equipment) and the narrative description of the incident. Cases were excluded if the incident did not meet the unintentional sports injury definition (e.g., argument or physical assault). After identifying unintentional sports injuries, the subset of cases that were classified within NEISS-AIP having a precipitating or immediate cause of "natural/environmental" or "other specified" were identified. Finally, ED visits for nonfatal heat illness were identified by electronically searching for indicators of heat illness (e.g., "heat exhaustion," "dehydration," or "overheated") in the narrative description. Heat illnesses that were work-related, including military training, were excluded.

Each case was assigned a sample weight based on the inverse probability of selection; these weights were summed to provide national estimates of nonfatal ED visits for heat illness. Rates per 100,000 population were calculated using U.S. Census Bureau population estimates (*3*). Subgroups with fewer than 20 visits or with a coefficient of variation >30% were considered unstable and were not reported.

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During 2001–2009, a total of 983 ED visits for sports and recreation heat illnesses were reported by the 66 participating NEISS-AIP hospitals. These data correspond to an estimated average annual number of 5,946 (95% confidence interval [CI] = 4,194–7,698) ED visits for sports and recreation heat illnesses nationwide during this period, and an estimated annual rate of 2.0 heat illnesses per 100,000 population (CI = 1.4–2.6) (Table 1). Sports and recreation heat illnesses were more common among males (72.5%) and among those aged 10–14 years (18.2%) and 15–19 years (35.6%). They occurred most frequently during July–September (66.4%) (specifically, July [19.8%], August [33.2%], and September [13.5%], with a substantial number of visits also occurring in June [12.9%]). Although the majority (91.9%) of ED visits resulted in the patient being treated and released, 7.1% of patients were hospitalized or transferred to another facility for a higher level of care. Hospitalization was more common among males (8.9%) compared with females (2.4%) and among persons aged ≥55 years (18.8%) compared with persons aged <55 years (4.6%).

Sex-specific and age-specific rates of ED visits for sports and recreation heat illnesses remained consistent during the 9 study years. On the basis of unweighted NEISS-AIP data (national estimates for sex and age groups were unstable by activity), the most common activities leading to ED visits for heat illness for all ages were football (24.7%) and exercise (e.g., walking, jogging, and calisthenics) (20.4%); however, this varied by age group and sex. For males, the most common activity leading

TABLE 1. Estimated annual number and percentage of persons treated for nonfatal sports and recreation heat illness in hospital emergency departments, by selected characteristics — National Electronic Injury Surveillance System – All Injury Program, United States, 2001–2009

Characteristic	Estimated no.	(%)	Rate*	(95% CI†)
Age group (yrs)				
≤9	268	(4.5)	0.7	(0.3–1.0)
10–14	1,082	(18.2)	5.2	(3.4–7.1)
15–19	2,119	(35.6)	10.1	(7.2–13.0)
20–24	594	(10.0)	2.8	(1.6–4.1)
25–34	498	(8.4)	1.2	(0.8–1.7)
35–44	424	(7.1)	1.0	(0.6–1.4)
45–54	468	(7.9)	1.1	(0.6–1.6)
≥55§	493	(8.3)	—	—
Sex				
Male	4,313	(72.5)	3.0	(2.0–3.9)
Female	1,633	(27.5)	1.1	(0.8–1.4)
Disposition				
Treated and released	5,464	(91.9)	1.8	(1.3–2.4)
Hospitalized/Transferred	424	(7.1)	0.1	(0.1–0.2)
Other§	58	(1.0)	—	—
Months of occurrence				
January–March§	349	(5.9)	—	—
April–June	1,224	(20.6)	1.7	(1.1–2.3)
July–September	3,951	(66.4)	5.3	(3.9–6.8)
October–December§	422	(7.1)	—	—
Total	**5,946**	**(100.0)**	**2.0**	**(1.4–2.6)**

* Per 100,000 population.
† Confidence interval.
§ Estimates might be unstable because the coefficient of variation is >30%; therefore, rates are not presented.

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to heat illness was football for those aged ≤19 years, exercise for those aged 20–44 years, and golf for those aged ≥45 years (Table 2). Other common activities among males were baseball/softball for those aged ≤14 years and exercise for those aged ≥45 years. For females, the most common activity leading to heat illness was baseball/softball for those aged ≤14 years, track and field for those aged 15–19 years, and exercise for those aged ≥20 years.

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Editorial Note

Approximately 250 million U.S. residents report occasional participation in sports or recreational activities (*4*). This report, the first to provide national estimates of heat illness among all sports and recreation participants, found that an estimated 5,946 ED visits are made annually for heat illness that occurs during sports and recreational activities. A 5-year age group, consisting of those aged 15–19 years, represents 35.6% of these ED visits. Heat illness was most frequent during the summer months, a finding consistent with previous reports (*5,6*).

In the absence of prompt intervention, heat illness can result in permanent morbidity (e.g., organ failure and brain damage) and mortality. Thus, increased emphasis on appropriate primary and secondary prevention strategies is critical.

What is already known on this topic?

Heat illness is recognized as a leading cause of death and disability during participation in U.S. high school and collegiate athletics.

What is added by this report?

An estimated 5,946 persons were treated in U.S. emergency departments (EDs) each year for a heat illness sustained while participating in a sport or recreational activity. The two most common activities leading to heat-related ED visits were football and exercise.

What are the implications for public health practice?

All persons should be physically active; however, this puts athletes as well as persons who participate in unstructured sports and recreational activities at risk for heat illness, especially during the summer. Therefore, prevention messages that target all persons who are physically active are needed. Specific emphasis should be placed on targeting appropriate prevention messages toward those aged 15–19 years, who are at greatest risk, and their coaches and parents.

All heat illnesses are preventable. Everyone engaging in sports or recreational activities is at risk for heat illness and thus can benefit from following established recommendations, the most important of which is primary prevention. Coaches of organized sports teams should schedule frequent rest breaks and encourage fluid consumption (*7*), particularly on days that are very hot or humid. Practices that begin during summer months should increase frequency, duration, and intensity gradually to allow athletes to acclimate to the heat (*8*). Participants in recreational activities should be aware of the risk for heat illness and potential prevention strategies. In addition to recommendations for sports teams, recommendations for

TABLE 2. Unweighted number and percentage of persons treated for nonfatal sports and recreation heat illness in hospital emergency departments, by sex, age group, and specific activity — National Electronic Injury Surveillance System – All Injury Program, United States, 2001–2009

	Age group (yrs)											
	≤14			15–19			20–44			≥45		
Sex/Rank	Activity	No.	(%)	Activity	No.	(%)	Activity	No.	(%)	Activity	No.	(%)
Males												
1	Football	75	(46)	Football	140	(57)	Exercise	77	(39)	Golf	27	(29)
2	Baseball/Softball	19	(12)	Basketball	22	(9)	Baseball/Softball	21	(11)	Exercise	21	(23)
3	Basketball	12	(7)	Exercise	15	(6)	Track/Field	19	(10)	Bicycle	16	(17)
4	Exercise	12	(7)	Baseball/Softball	14	(6)	Bicycle	15	(8)	Track/Field	6	(7)
5	Track/Field	8	(5)	Racquet sports	10	(4)	Basketball	14	(7)	Racquet sports	4	(4)
Other	—	37	(23)	—	45	(18)	—	54	(27)	—	18	(20)
Total	—	**163**	**(100)**	—	**246**	**(100)**	—	**200**	**(100)**	—	**92**	**(100)**
Females												
1	Baseball/Softball	22	(25)	Track/Field	21	(27)	Exercise	26	(32)	Exercise	16	(44)
2	Exercise	11	(13)	Exercise	16	(21)	Track/Field	25	(31)	Bicycle	5	(14)
3	Track/Field	9	(10)	Baseball/Softball	10	(13)	Baseball/Softball	5	(6)	Golf	5	(14)
4	Soccer	8	(9)	Soccer	6	(8)	Bicycle	4	(5)	Racquet sports	3	(8)
5	Swimming	6	(7)	Gymnastics	4	(5)	Soccer	4	(5)	Baseball/Softball	2	(6)
Other	—	32	(36)	—	20	(26)	—	17	(21)	—	5	(14)
Total	—	**88**	**(100)**	—	**77**	**(100)**	—	**81**	**(100)**	—	**36**	**(100)**

individual participants include wearing lightweight, light-colored, and loose-fitting clothing; exercising early or late in the day when it is cooler; and having an exercise partner (*9*).

The findings in this report are subject to at least four limitations. First, only nonfatal heat illnesses treated in EDs were included; thus, this report is an underestimate of all heat illnesses. Second, because no comprehensive data source on national participation in sports and recreational activities exists, rates were based on population estimates and therefore are not as representative as participation-based rates. Third, limited data are available on the circumstances of the event, such as temperature and relative humidity. Finally, although the spatial distribution of heat illness might differ across the United States, NEISS-AIP is designed to provide national estimates only and does not provide state or local estimates.

Untreated heat illness can progress quickly to serious, potentially fatal illness. Thus, everyone should recognize symptoms of heat illness, which include dehydration, nausea, vomiting, headache, dizziness, or a change in mental status (*10*). When symptoms of heat illness do occur, medical attention should be sought immediately. Information on preventing and responding to heat illness is available at http://emergency.cdc.gov/disasters/extremeheat/heat_guide.asp. In addition, information on preventing heat illness in organized sports is available at http://www.nata.org/health-issues/heat-illness.

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Characteristics Associated With Seasonal Influenza Vaccination of Preschool Children — Oregon, 2006–2008

Starting with the 2010–11 influenza season, the Advisory Committee on Immunization Practices (ACIP) recommended that all children aged ≥6 months be vaccinated against influenza annually, and that previously unvaccinated children aged ≤8 years be given 2 doses of vaccine (*1*). The American Academy of Pediatrics (AAP) also recommends influenza vaccinations for this population (*2*). Throughout influenza seasons, preschool children often have higher rates of influenza-related hospitalization than any other age group except older adults (*2–4*). To estimate influenza vaccination coverage and identify sociodemographic and health-care usage correlates of influenza vaccination status among children aged 2 years, data from the 2006–2008 Oregon Pregnancy Risk Assessment Monitoring Survey follow-back survey (Oregon PRAMS-2) were analyzed. This report summarizes the results. In Oregon, 37.7% of mothers reported that their children had received an influenza vaccination during the most recent influenza season. Factors positively associated with recent influenza vaccination in the multivariable-adjusted model were children's influenza vaccination in the previous year, children's receipt of all recommended immunizations, children's uninterrupted health insurance coverage, and mothers' unmarried status. The only factor negatively associated with vaccination was use of a family doctor rather than a pediatrician for well-child visits. The concern about vaccinations most commonly identified by mothers of children who had not received an influenza vaccination during the most recent influenza season (33.9%) was the opinion that too many shots are given at a time. This report highlights the need for health-care provider–based and community-based strategies to increase influenza vaccination coverage for children in Oregon.

For this analysis, Oregon women with a live birth during 2004–2005 (Oregon PRAMS) were reinterviewed during 2006–2008 (Oregon PRAMS-2) shortly after the child's second birthday. PRAMS is a state-specific, population-based surveillance system that collects birth certificate–linked data from mothers with a recent live birth. Oregon PRAMS-2 is a follow-back survey for mothers who participated in the first PRAMS survey. Data for Oregon PRAMS and PRAMS-2 are collected via mailed surveys and by telephone surveys of persons who did not respond to the mailed survey. Data are weighted to adjust for the complex sampling strategy and nonresponse.

Oregon PRAMS-2 inquired about influenza vaccination coverage by asking the two-part question, "Has your 2-year-old ever had a flu vaccination or shot anytime during: a) This year's flu season (September thru March of this calendar year); b) Last year's flu season (September thru March of last calendar year)?" Recent receipt of influenza vaccine and receipt of influenza vaccination during the previous influenza season were dichotomized to "no" or "yes." The Cox proportional hazards model with constant follow-up time was used to calculate multivariable adjusted prevalence ratios (APRs) and 95% confidence intervals for vaccination coverage by selected sociodemographic and health-care characteristics using standard survey procedures (*5,6*).

The weighted response rate for PRAMS was 75.2% and for PRAMS-2 was 56.7% of the original PRAMS sampling frame. Of the 1,911 participants, responses were collected from 1,880 mothers of children alive at 2 years. The median age of children at the time of Oregon PRAMS-2 survey completion was 2.1 years. A total of 197 surveys were excluded from the analysis because the influenza vaccination question was not answered. Another 157 surveys were excluded because of missing data for predictor variables, and, to limit conclusions to children of adult mothers, 37 surveys of mothers aged <18 years were excluded. The final multivariable model included 1,489 mothers.

In Oregon, 37.7% of the 1,489 mothers reported that their child had received an influenza vaccination during the most recent influenza season. Children with uninterrupted health insurance coverage had higher rates of vaccination (40.6%) compared with children whose coverage was interrupted (23.8%). Children with a regular health-care provider had higher rates of vaccination (38.6%) compared with children without a regular health-care provider (20.1%). Children who saw a pediatrician most of the time for well-child care visits had higher rates of vaccination (44.6%) compared with children who saw a family doctor (20.7%) and children who saw a physician assistant or nurse practitioner (21.7%). Children whose mothers reported that their child had an influenza vaccination during the previous influenza season had higher rates of recent vaccination (61.8%) compared with children whose mothers did not report a previous influenza vaccination (15.5%). Children reported to have received all the recommended childhood vaccinations had higher rates of recent vaccination (40.5%) compared with children who did not have all vaccinations (7.2%) (Table 1).

The multivariable model included mother's age, race/ethnicity, education, and marital status; the child's health insurance type; whether or not health insurance coverage was interrupted; whether or not the child had a regular health-care provider; health-care provider type; receipt of previous influenza vaccination; and receipt of recommended childhood immunizations. Report of child's receipt of a previous influenza vaccination (APR = 3.3) and report of child's receipt of all

TABLE 1. Influenza vaccination coverage among children aged 2 years (N = 1,489), by selected sociodemographic and health-care characteristics — Oregon Pregnancy Risk Assessment Monitoring System follow-back survey, 2006–2008

	Survey population		Received influenza vaccination		Multivariable	
Characteristic	No.*	%	%	(95% CI)	APR	(95% CI)
Total	**1,489**	**100**	**37.7**	**(34.3–41.1)**		
Maternal age group (yrs)						
18–24	371	27	39.6	(32.0–47.2)	Referent	
25–34	841	59	35.7	(31.0–40.4)	0.9	(0.7–1.1)
≥35	277	14	42.8	(33.9–51.7)	1.1	(0.8–1.4)
Maternal race/ethnicity						
White, non-Hispanic	697	74	36.7	(32.0–41.4)	Referent	
Hispanic	246	17	40.7	(34.1–47.3)	1.0	(0.8–1.3)
Asian/Pacific Islander, non-Hispanic	222	5	43.1	(36.3–49.9)	1.1	(0.9–1.3)
Black, non-Hispanic	149	2	37.2	(28.9–45.6)	0.9	(0.7–1.2)
American Indian/Alaska Native, non-Hispanic	175	2	35.9	(28.3–43.5)	0.9	(0.7–1.2)
Maternal education						
<12th grade	179	11	40.6	(31.1–50.1)	Referent	
≥12th grade	1,310	89	37.4	(33.4–41.3)	0.8	(0.6–1.2)
Maternal marital status						
Married	1,110	73	36.2	(32.0–40.3)	Referent	
Unmarried	379	27	42.0	(34.3–49.6)	1.2	(1.0–1.6)
Health insurance type						
None	87	7	22.1	(10.5–33.6)	Referent	
Public	443	28	39.9	(32.8–46.9)	1.1	(0.7–1.8)
Private	832	54	40.1	(35.1–45.0)	1.1	(0.7–1.9)
Other	127	11	30.5	(19.4–41.7)	0.9	(0.5–1.6)
Uninterrupted health insurance coverage						
No	222	17	23.8	(15.8–31.9)	Referent	
Yes	1,267	83	40.6	(36.5–44.6)	1.4	(1.0–2.0)
Regular health-care provider						
No	77	5	20.1	(7.3–33.0)	Referent	
Yes	1,412	95	38.6	(34.8–42.4)	1.6	(0.9–2.7)
Health-care provider type						
Pediatrician	1,097	71	44.6	(40.2–49.0)	Referent	
Family doctor	300	22	20.7	(14.0–27.4)	0.7	(0.5–0.9)
Physician assistant/Nurse practitioner/Other	92	7	21.7	(9.2–34.1)	0.8	(0.5–1.2)
Previous influenza vaccination						
No	721	52	15.5	(11.5–19.6)	Referent	
Yes	768	48	61.8	(56.6–67.1)	3.3	(2.5–4.4)
Childhood vaccinations						
None or some recommended shots	121	8	7.2	(2.0–12.5)	Referent	
All recommended shots	1,368	92	40.5	(36.6–44.4)	2.8	(1.4–5.7)

Abbreviations: CI = confidence interval; APR = adjusted prevalence ratio.
* Unweighted.

childhood vaccinations (APR = 2.8) were positively associated with vaccination status. Children with uninterrupted health insurance coverage were more likely to be vaccinated than those with interrupted health insurance (APR = 1.4). Children who saw a family doctor for well-child visits were significantly less likely to be vaccinated than those who saw a pediatrician (APR = 0.7). Children of unmarried mothers were more likely to be vaccinated than those of married mothers (APR = 1.2) (Table 1).

Responding mothers were asked to select from a list of possible concerns they might have about vaccinations recommended for their child. Concerns identified by mothers whose children had not received a recent influenza vaccination included "Too many shots are given at a time" (33.9%), "Getting some of the childhood diseases is natural" (18.7%), "Some shots are given too early" (18.4%), and "Some shots do more harm than good" (15.3%) (Table 2).

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TABLE 2. Maternal concerns about vaccinations* of children aged 2 years who were not vaccinated against influenza (N = 1,040) — Oregon Pregnancy Risk Assessment Monitoring System follow-back survey, 2006–2008

Concern	%	(95% CI†)
Too many shots are given at a time	33.9	(29.6–38.2)
Getting some of the childhood diseases is natural	18.7	(15.3–22.3)
Some shots are given too early	18.4	(14.9–21.9)
Some shots do more harm than good	15.3	(11.8–18.7)
Shots may weaken my child's immune system	11.5	(8.4–11.7)
I do not feel some of the diseases will affect my child	11.4	(8.5–14.3)
I have religious beliefs or concerns about some shots	4.9	(2.9–6.8)
I have religious beliefs or concerns about all shots	2.7	(1.2–4.2)

* Concerns about vaccinations were not mutually exclusive.
† Confidence interval.

Editorial Note

Influenza vaccination of children remains a public health priority for at least three reasons. First, it is the best way to prevent influenza. Second, preschool children are at greater risk for influenza-related hospitalization than other populations (*2–4*). Third, preliminary studies suggest that vaccinating children against influenza might decrease transmission of influenza to adults and other children in the household (*7*). Nonetheless, fewer than two fifths of children aged 2 years received a recent influenza vaccination based on the 2006–2008 Oregon PRAMS-2 survey.

PRAMS-2 is a population-based sample and representative of children aged 2 years in Oregon. The PRAMS-2 vaccination coverage estimates exceeded estimates from the 2007 National Immunization Survey (NIS), which found that 24.5% of children aged <2 years received an influenza vaccination in Oregon (*8*). However, these results are less than the 2006–2007 and 2007–2008 estimates of 46.6% and 42.4%, respectively, for children aged <2 years from the Immunization Information System sentinel site in Oregon, which includes the greater Portland area (*9*). Differences in survey sampling methods are one potential reason for variation in these estimates. For example, Oregon PRAMS-2 vaccination coverage data were collected from mothers of children aged 2 years during 2006–2008, and the NIS data were collected from health-care providers during the influenza season. Even so, the 24.5% vaccination coverage among preschool children in Oregon, based on NIS data, is below the national average of 31.8%.

The findings in this report are subject to at least three limitations. First, these findings were collected primarily through self-reported surveys of mothers and might be subject to recall and other response biases. Second, because the survey did not include a question regarding the number of doses of influenza vaccination that each child received, conclusions regarding full vaccination coverage cannot be made. Finally, the response rate for PRAMS was 75.2%, and, because of incomplete data, the analysis of PRAMS-2 responses included only 1,489 of the original 3,883 PRAMS respondents and might not be representative of all mothers of children aged 2 years.

The findings in this report are based on state data, which are useful for local action in Oregon. In light of the estimated influenza vaccine coverage of 37.7% in this study, the correlates of influenza vaccination identified, and the concerns about influenza vaccination expressed by mothers, two types of strategies are warranted to increase influenza vaccination coverage in this population. First, health-care provider–based strategies that assess and increase maternal knowledge regarding vaccination should be considered. Second, community-based strategies aimed at providing all children access to influenza vaccine and all other ACIP-recommended immunizations should be examined, including children eligible for free vaccinations through the Oregon Vaccines for Children Program (*10*). This especially might be necessary for children with interruptions in health insurance, those without a pediatrician as a regular health-care provider, and children of mothers with concerns about vaccinations.

What is already known on this topic?

The Advisory Committee on Immunization Practices (ACIP) and the American Academy of Pediatrics (AAP) recommend that all children aged ≥6 months receive annual influenza vaccinations. Previous studies have estimated influenza vaccination coverage among preschool children in Oregon, but few have examined correlates of influenza vaccination status among preschool children.

What is added by this report?

In this study, factors positively associated with recent influenza vaccination included children's influenza vaccination in the previous year, children's receipt of all recommended vaccinations, children's uninterrupted health insurance coverage, and mothers' unmarried status; the only factor negatively associated was use of a family doctor rather than a pediatrician for well-child visits.

What are the implications for public health practice?

Strategies that target children with interruptions in health insurance coverage, children without a pediatrician as a regular health-care provider, and children of mothers with concerns about vaccinations are needed to increase influenza vaccination coverage in Oregon.

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HIV-2 Infection Surveillance — United States, 1987–2009

Human immunodeficiency virus (HIV) is categorized into two types, HIV-1 and HIV-2. Worldwide, most HIV infections are HIV-1, whereas HIV-2 largely has been confined to persons in or from West Africa (*1,2*). HIV-1 and HIV-2 have the same routes of transmission, and both can cause acquired immunodeficiency syndrome (AIDS) (*3*); however, HIV-2 infections should be differentiated from HIV-1 infections because they are less likely to cause AIDS and their clinical management differs (*4,5*). CDC's current surveillance case definition for HIV infection applies to both variants of HIV (*6*) but lacks criteria for differentiating between HIV-1 and HIV-2. To enumerate and describe HIV-2 cases reported in the United States, a working case definition was developed. During 1988–June 2010, a total of 242 HIV-2 cases were reported to CDC. Of these, 166 met the working definition. These HIV-2 cases were concentrated in the Northeast (66%, including 46% in New York City) and occurred primarily among persons born in West Africa (81%). Ninety-seven of the HIV-2 cases also had a positive HIV-1 immunoblot antibody test result (e.g., Western blot). Immunoblot antibody tests currently used to confirm HIV reactive screening tests do not contain reagents specific to HIV-2 and thus are not reliable for identification of HIV-2 infections (*7*). Additional testing specific to HIV-2 should be considered if HIV-1 test results are atypical or inconsistent with clinical findings, especially for persons from West Africa. If an HIV case is reported to the health department but subsequently identified as HIV-2, health-care providers should update the case report to reflect the correct type.

During 2009–2010, CDC convened a workgroup to develop the working HIV-2 definition used in this report. To meet this working definition, cases had to satisfy one or more of the following three criteria: 1) HIV-1/HIV-2 type-differentiating antibody immunoassay (e.g., Bio-Rad Multispot HIV1/HIV-2 Rapid Test) positive for HIV-2 but negative for HIV-1, 2) positive HIV-2 nucleic acid test (DNA or RNA), 3) positive HIV-2 immunoblot and negative or indeterminate HIV-1 immunoblot. In addition, one case reported in 1991 was accepted based only on a positive radioimmunoprecipitation assay (a now obsolete test). Neither the nucleic acid tests nor the immunoblots have been approved by the Food and Drug Administration for diagnosis of HIV-2 infection, but the Bio-Rad Multispot HIV-1/HIV-2 Rapid Test has been approved for differentiation of HIV-2 from HIV-1.

During 1988–June 2010, health departments of the 50 states and the District of Columbia reported to CDC a total of 242 HIV-2 cases, based on a variety of criteria with no formal HIV-2 infection case definition. From that total, 47 reported cases were excluded because they had insufficient identifying information to discern whether or not they were duplicate reports. An additional 29 cases were excluded because they did not meet any of the three working definition criteria.

The remaining 166 cases met one or more of the criteria of the working definition and were analyzed by diagnostic test results, reason for suspecting HIV-2 infection, region of report, country of birth, race/ethnicity, sex, age, and transmission risk factor. Poisson regression was used to assess trends in the annual number of diagnoses. The year of diagnosis was defined as the year of the first positive HIV test, which in some cases was years before recognition that the HIV type was HIV-2.

Of the 166 HIV-2 cases, 113 (68%) met the first criterion of a result positive for HIV-2 but negative for HIV-1 on a type-differentiating antibody immunoassay, 66 (40%) met the second criterion of a positive HIV-2 nucleic acid test, and 58 (35%) met the third criterion of a positive HIV-2 immunoblot and negative or indeterminate HIV-1 immunoblot. Seventy-one (43%) of the 166 cases met more than one of the three criteria. HIV-1 immunoblot results were available for 163 of the HIV-2 cases; 97 (60%) were positive for HIV-1, 63 (39%) were indeterminate, and three (2%) were negative. Of the 97 HIV-2 cases with positive HIV-1 immunoblot results, the diagnosis of HIV-2 was established by a type-differentiating antibody immunoassay in 46 cases, by an HIV-2 nucleic acid test in 22 cases, and by both in 29 cases (Table 1).

Nucleic acid test evidence of HIV-1 coinfection was present in 19 (11%) of the 166 HIV-2 cases, including two with positive qualitative HIV-1 nucleic acid tests and 17 with detectable HIV-1 viral loads, of which the highest level was 1,000–1,999 copies/mL in six cases, 2,000–4,999 copies/mL in seven cases, and >10,000 copies/mL in four cases. HIV-1 nucleic acid test results were negative in 66 (40%) HIV-2 cases and were missing in 81 (49%) HIV-2 cases.

Data were available for 116 HIV-2 cases regarding why HIV-2 might have been suspected initially. Of these, 65 (56%) patients had an indeterminate HIV-1 immunoblot despite a positive HIV-1 or HIV-1/HIV-2 antibody screening test, 47 (41%) had an undetectable HIV-1 viral load despite a positive HIV-1 immunoblot, and four patients (three born in West Africa and one who had visited West Africa) had a negative HIV-1 immunoblot despite a positive HIV-1 or HIV-1/HIV-2 antibody screening test.

Of the 164 HIV-2 patients for whom birthplace was known, 132 (81%) were born in West Africa. Seven (4%) were born in other parts of Africa, and six (4%) in unspecified parts of Africa. Nine (6%) were born in India, five in the United States, three in Europe, and two in Mexico (Table 2). Of the 166 cases

TABLE 1. Diagnoses of HIV-2 infection, by laboratory criteria and HIV-1 immunoblot results — United States, 1987–2009

Positive HIV-2 laboratory test result	HIV-1 immunoblot results					
	Positive	Indeterminate	Negative	Missing	Total	(%)
TDAI only	46	2	0	1	**49**	**(30)**
TDAI + NAT	29	4	0	2	**35**	**(21)**
TDAI + IB	0	24	1	0	**25**	**(15)**
IB only	0	24	1	0	**25**	**(15)**
NAT only	22	1	0	0	**23**	**(14)**
IB + NAT + TDAI	0	3	1	0	**4**	**(2)**
IB + NAT	0	4	0	0	**4**	**(2)**
RIPA	0	1	0	0	**1**	**(1)**
Total (%)	**97 (58)**	**63 (38)**	**3 (2)**	**3 (2)**	**166**	**(100)**

Abbreviations: HIV = human immunodeficiency virus; TDAI = type-differentiating antibody immunoassay positive for HIV-2 and negative for HIV-1; NAT = HIV-2 nucleic acid test (DNA or RNA); IB = positive HIV-2 immunoblot antibody test and negative or indeterminate HIV-1 immunoblot antibody test; RIPA = HIV-2 radioimmunoprecipitation assay.

TABLE 2. Number (N = 164*) and percentage of persons receiving diagnoses of HIV-2 infection, by country of birth — United States, 1987–2009

Country of birth	No.	(%)†
West Africa	**132**	**(81)**
Ivory Coast	36	(22)
Ghana	15	(9)
Cape Verde	13	(8)
Gambia	13	(8)
Mali	12	(7)
Senegal	12	(7)
Liberia	10	(6)
Guinea	6	(4)
Burkina Faso	4	(2)
Nigeria	4	(2)
Mauritania	2	(1)
Sierra Leone	2	(1)
Guinea Bissau	1	(1)
Togo	1	(1)
Niger	1	(1)
Other Africa	**7**	**(4)**
Rwanda	2	(1)
Cameroon	1	(1)
Kenya	1	(1)
South Africa	1	(1)
Swaziland	1	(1)
Uganda	1	(1)
Unspecified Africa	**6**	**(4)**
India	**9**	**(6)**
North America	**7**	**(4)**
Mexico	2	(1)
United States	5	(3)
Europe	**3**	**(2)**
France	2	(1)
Sweden	1	(1)
Total	**164**	**(100)**

Abbreviation: HIV = human immunodeficiency virus.
* Country of birth was missing for two patients.
† Percentages do not sum to 100 because of rounding.

of HIV-2 infection, 77 (46%) were reported from New York City, 33 (20%) from elsewhere in the Northeast, 24 (15%) from the South, 18 (11%) from the Midwest, and 14 (8%) from the West. Among the patients, 89% were non-Hispanic blacks, 58% were men, and the median age at diagnosis of HIV infection was 39 years (range: 21–76 years).

No transmission risk factor was identified in 120 (72%) of the 166 cases, including 78 cases among persons with a history of heterosexual contact but whose sex partners had unknown infection status or were known to be uninfected. The reported risk factors for the remaining 88 cases were heterosexual contact with a sex partner known to be HIV-infected (38 patients, 23%), male-to-male sexual contact (four, 2%), and injection-drug use (four, 2%). Of the 50 women aged 15–44 years at diagnosis, 24 (48%) were pregnant at or after HIV-2 diagnosis. No children born to these 24 women were reported to be HIV-infected, but follow-up information was missing for six of the children born after their mother's diagnosis.

Poisson regression indicated that the annual number of HIV-2 diagnoses in the United States increased significantly from 1987 to 2009; however, the increase might be the result of surveillance artifact. No significant trends in HIV-2 diagnoses were observed during 1990–1999 (mean: 4.3 diagnoses per year; range: 1–8), or during 2000–2009 (mean: 12.0 per year; range: 8–19). The annual number increased abruptly from two in 1999 to 12 in 2000, the year that New York began confidential name-based reporting of HIV infection cases in addition to AIDS reporting. Similar results were obtained when the trend analyses included all suspected cases that were excluded from other analyses (Figure).

The 166 HIV-2 cases constituted only 0.01% of the more than 1.4 million U.S. cases of HIV infection diagnosed during 1987–2009 (unadjusted for reporting delay). Of the 5,284 HIV infections reported in the United States among persons born in West Africa, 132 (3%) were HIV-2 infections. Among the HIV-infected persons born in West Africa, the percentage identified as HIV-2 cases varied significantly ($p<0.05$, chi square test) by reporting region: 5% in New York City, 2% in the rest of the Northeast, 2% in the Midwest, 2% in the West, and 1% in the South.

Reported by

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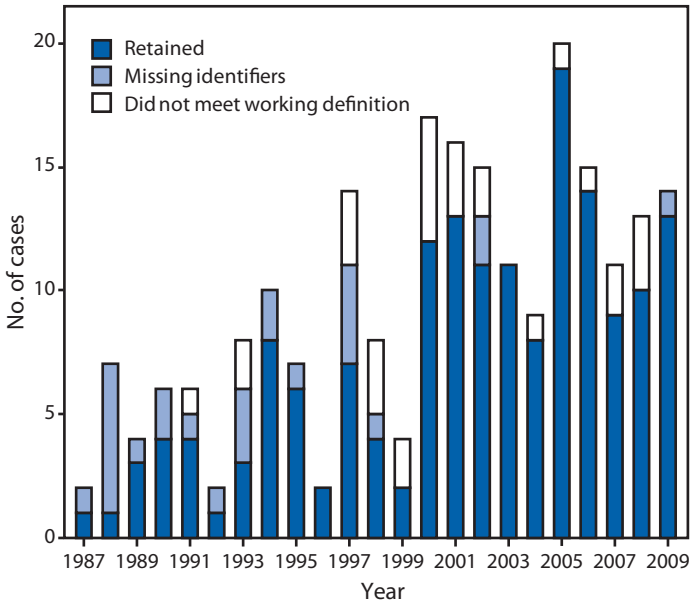
FIGURE. Number of reported cases of HIV-2 infection, by analytic category* and year of diagnosis — United States, 1987–2009



Abbreviation: HIV-2 = human immunodeficiency virus–2.

* *Retained:* 166 cases included in all analyses. *Missing identifiers:* 47 reported cases excluded from the analyses because of missing birth dates or other identifiers (including one case diagnosed in 1986 and not shown). *Did not meet working definition:* 29 other reported cases excluded from the analyses because they met none of the criteria of the working definition. In addition, not shown are 20 reported cases with unknown year of diagnosis that also were excluded from analyses.

Editorial Note

The results of the analyses described in this report indicate that HIV-2 infections in the United States are rare, concentrated in the Northeast, and limited mainly to persons born in West Africa. Regional differences in the percentage of reported HIV cases caused by HIV-2 might be, in part, a result of the nonuniform geographic distribution of U.S. residents born in West Africa. New York is a major gateway for African immigrants to the United States (*9*).

However, regional differences in the percentage of HIV cases caused by HIV-2 also could be the result of variations in completeness of diagnosis and reporting of HIV-2 by laboratories and state HIV surveillance programs. In particular, the large percentage of HIV-2 cases reported from New York City might have resulted, in part, from an increased focus on ascertainment of HIV-2 cases by the New York City Department of Health and Mental Hygiene, which has conducted active investigations to identify HIV-2 infections (*9*) and issued an advisory to clinicians regarding diagnostic testing for HIV-2. The percentage of HIV-2 diagnoses based on an HIV-2 DNA test was several times higher among cases reported from New York City (68%), where many cases were diagnosed by the city's public health laboratory, than among cases from the four other regions (range: zero to 26%).

The findings in this report are subject to at least three limitations. First, the surveillance case definition for HIV infection and the working HIV-2 definition used in this analysis are intended primarily for analysis of epidemiologic trends and associations and might be inappropriate for other purposes, such as the clinical management of patients, which might require diagnostic considerations beyond the criteria used for the case definition. CDC currently is reviewing the HIV surveillance case definition to identify areas for revision, including the addition of specific criteria for HIV-2. Second, the 166 HIV-2 infections described in this report are likely an underestimate of HIV-2 cases in the United States. Many of the 76 suspected cases excluded from the analysis because of inadequate data on test results or missing identifiers might be actual HIV-2 cases. Other cases might not have been diagnosed because diagnostic tests specific for HIV-2 (e.g., DNA test or type-differentiating antibody immunoassay) were not widely used, and some cases might not have been recognized because of negative or persistently indeterminate results on assays designed primarily to detect HIV-1 antibodies. Finally,

What is already known on this topic?

Of the two types of human immunodeficiency virus (HIV), HIV-1 accounts for most HIV infections worldwide and, untreated, causes acquired immunodeficiency syndrome (AIDS). HIV-2 is rarely reported in the United States, largely confined to persons from West Africa, and less likely to cause AIDS. Distinguishing between HIV-2 and HIV-1 is important because their clinical management differs; HIV-2 does not respond to some antiretroviral drugs effective on HIV-1, and HIV-2 cannot be measured by HIV-1 viral load tests.

What is added by this report?

Using a working case definition for HIV-2 infection, CDC identified 166 cases diagnosed during 1987–2009. Most cases (66%) were reported from the Northeast, particularly New York City (46%). A total of 132 (81%) cases were in persons born in West Africa. Most (60%) HIV-2 cases had positive HIV-1 immunoblot test results, indicating that the usual tests for HIV-1 infection can misclassify HIV-2 cases as HIV-1 unless other tests (e.g., DNA test or type-differentiating antibody immunoassay) specific for HIV-2 are used.

What are the implications for public health practice?

Specific testing for HIV-2 should be considered if results of tests for HIV-1 are inconsistent with one another, inconclusive, or imply the absence of HIV infection despite clinical evidence suggesting its presence, particularly if the patient is from West Africa. Suspected HIV-2 cases should be reported to state or local health departments, which can conduct supplemental tests for HIV-2 or arrange for testing at CDC. If the type of HIV is identified as HIV-2 after an HIV case is reported, the report should be updated with the type specified as HIV-2.

although 11% of HIV-2 cases had nucleic acid evidence of possible coinfection with HIV-1, the full extent of coinfection could not be assessed because HIV-1 nucleic acid test results were missing for 49% of the HIV-2 cases. In addition, 13 of the 17 detectable HIV-1 viral loads were <5,000 copies/mL, raising the possibility that they might be falsely positive.

Additional specific testing for HIV-2 should be considered if test results for HIV-1 are inconsistent with one another, inconclusive, or imply the absence of HIV infection despite clinical evidence suggesting its presence, particularly if the patient was born in or had other associations with areas such as West Africa, where HIV-2 infection is prevalent. Suspected HIV-2 cases should be reported to state or local health departments, which can conduct supplemental diagnostic tests for HIV-2 or arrange for them to be done at the CDC laboratory. In every state, confirmed HIV infection diagnoses are required by law or regulation to be reported to the health department.

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Progress Toward Elimination of Lymphatic Filariasis — Togo, 2000–2009

Lymphatic filariasis (LF) is a disabling, mosquito-borne disease of humans caused by the parasitic filarial nematodes *Wuchereria bancrofti*, *Brugia malayi*, and *Brugia timori*. In 2000, the Global Program to Eliminate LF (GPELF) was established with the objective of eliminating LF as a public health problem by 2020. At that time, 80 countries had ongoing transmission, with an estimated 1.34 billion persons at risk for infection and 120 million infected (*1*). This report describes the LF elimination program in Togo, one of the 39 LF-endemic countries in the World Health Organization (WHO) African Region (*2*). Togo's approach to interrupt LF transmission included screening for infection to identify LF-endemic districts and mass drug administration (MDA) of ivermectin and albendazole in LF-endemic districts. MDA coverage and the impact of MDAs on the prevalence of infection were monitored throughout the program. In 2000, seven of 35 districts were LF-endemic, with baseline prevalence rates ranging from 1% to 22%. By 2009, MDAs had been conducted at least six times in each LF-endemic district. At that time, the decision was made to stop MDAs because reported drug coverage in LF-endemic districts exceeded 80% and no microfilaremia was detected in persons tested to monitor impact of MDAs. Togo is the first sub-Saharan country to have stopped MDAs after prevalence data suggested that LF transmission had been interrupted. Post-MDA surveillance is continuing nationally; the next step will be to certify elimination. The successful Togo program demonstrates that LF elimination can be achieved in countries with limited resources.

In 1997, the World Health Assembly (WHA) called for the elimination of LF as a public health problem (WHA resolution 50.29). In Africa, LF is caused by *W. bancrofti*, which is the cause of approximately 90% of the estimated 120 million LF cases worldwide. The threadlike adult worm lives in lymphatic tissues, and in 30% of infected persons LF infection can lead to permanent disability from swollen limbs and breasts (lymphedema), damage to the genitals (hydrocele), or swollen limbs with thickened, hardened skin (elephantiasis) (*3*). An estimated 40 million persons have chronic clinical disease, making LF the second most common cause of permanent disability worldwide (*4*). In 2000, GPELF established two major strategies to achieve the goal of eliminating LF as a public health problem by 2020: 1) interrupting transmission through annual MDAs and 2) reducing the burden of disease through morbidity management (*5*).

In 2000, the Togo Ministry of Health mapped the prevalence of LF by district using the Rapid Assessment of the Geographical Distribution of Filariasis methodology developed by the WHO Special Programme for Research and Training in Tropical Diseases (*6*). Togo, a West African country of 6.1 million inhabitants with a gross national income per capita of $440 in 2009,* is divided into 35 districts. At least one village per district was selected to be included in the national LF mapping. Additional villages were selected when the distance between sampled villages was greater than 50 km to ensure that no large geographic areas were missed. In each village, a convenience sample of 50 to 100 persons aged ≥15 years was selected and invited to provide a drop of blood to be screened for filariasis using an immunochromatographic test (ICT) specific for *W. bancrofti* circulating antigen (BinaxNow Filariasis; Alere, Inc.). Districts in which ≥1% of ICTs were positive were considered LF-endemic (*7*). The LF-endemic district was the intervention unit within which all eligible residents received MDA.

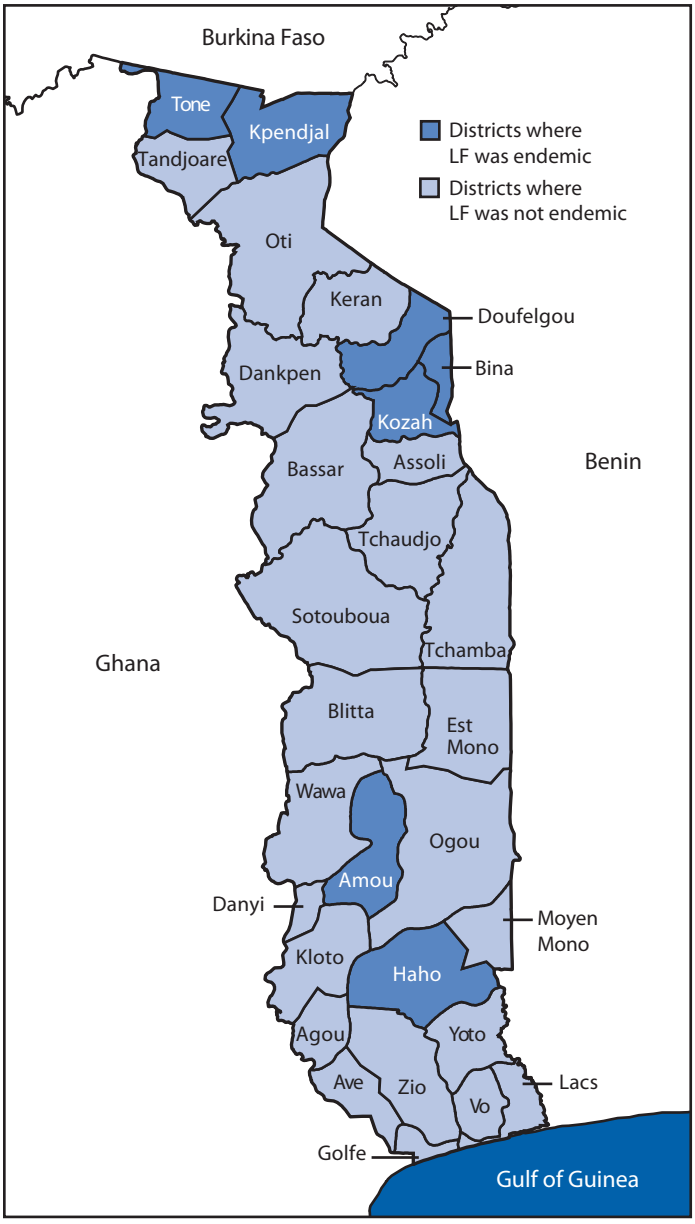
Togo used a network of community health workers to distribute antiparasitic drugs house-to-house. Ineligible residents were pregnant women, children <35.4 inches (<90.0 cm) in height (a proxy for children aged <5 years), and severely ill persons. Ivermectin and albendazole tablets were donated by Merck & Co., Inc. and GlaxoSmithKline, respectively (*8*). MDA was monitored through reported and surveyed coverage (*7*). After each annual MDA, reported drug coverage was calculated by dividing the number of persons who were observed to take the drugs during the MDA by the total targeted population. In 2004, population-based cluster drug coverage surveys were conducted in six districts to validate reported coverage.

The impact of MDAs on prevalence in LF-endemic districts was assessed in seven villages (sentinel sites) in 2000 (baseline) and before the third and fifth years of MDA, and in 14 other villages (spot-check sites) during 2005–2009. Sentinel sites remained the same during the course of the program, whereas each year different spot-check sites were selected. Spot-check sites were used to minimize the risk for greater drug coverage in sentinel sites leading to overestimation of impact. During each survey, capillary blood samples for thick blood smear examinations were obtained by finger prick from a convenience sample of 500 volunteers (aged ≥5 years) in each sentinel and spot-check site (*7*). Each thick smear was examined under a microscope for the presence of microfilariae, the larval stage of the parasite produced by adult worms in the human host that circulate in peripheral blood. Because *W. bancrofti* in Africa is present in peripheral blood in much higher concentrations at night than in the day, samples were drawn during the hours of 10:00 p.m. to 2:00 a.m.

* Additional information available at http://data.worldbank.org/indicator/ny.gnp.pcap.cd.

A total of 61 villages were included in the baseline mapping in 2000. Of the 5,009 persons tested during the mapping, 89 (1.8%) had a positive ICT, indicating LF infection. The infection rate was ≥1% in seven of the 35 districts, where approximately 1.1 million persons lived (Figure). During 2001–2009, six to nine MDAs were conducted in each LF-endemic district. Since 2003, approximately 80% of the population of the seven LF-endemic districts were administered drugs, according to reports. The population-based cluster drug coverage surveys conducted in 2004 in six LF-endemic districts indicated a drug coverage that exceeded 70% of the total population, validating the reported coverage. Since 2004, microfilaria prevalence from sentinel and spot-check sites has been <1% in all LF-endemic districts. By 2009, no microfilaremia was detected in persons sampled in sentinel or spot-check sites of five of the seven districts. Additional MDA campaigns were conducted in 2009 in the two districts with microfilaremia prevalence >0% to <1%. Subsequent surveys in these districts showed no microfilaremia in persons sampled.

FIGURE. Districts where lymphatic filariasis (LF) was endemic* — Togo, 2000



* Defined as LF prevalence ≥1%.

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Editorial Note

WHO recommends a stepwise approach to interrupt LF transmission, beginning with mapping the distribution of LF to identify areas in need of MDAs, followed by ≥5 years of MDAs, a period of post-MDA surveillance, and ultimately, verification of LF elimination (*7*). In Togo, six to nine rounds of MDA in each LF-endemic district have succeeded in reducing levels of microfilaremia to a point where no microfilaremia could be detected in tested persons living in all districts that were LF-endemic in 2000. The last LF MDAs were conducted in 2009. The decision to cease MDAs was based on criteria established by WHO that included the successful implementation of MDAs in LF-endemic districts during at least 5 consecutive years, the high proportion of the population that received antiparasitic drugs as part of MDAs, and the demonstrable reduction of microfilaremia prevalence to levels below those expected to be needed to sustain transmission (<1%).

Post-MDA surveillance is crucial to monitor for resurgence of infection or importation, and it will continue in Togo by monitoring data from 40 laboratories and 18 dispensaries geographically dispersed throughout the country, including in districts considered nonendemic for LF after the 2000 mapping. Although LF transmission is not efficient (which is the basis for believing reduction of population prevalence to <1% will eliminate transmission), reemergence might occur if foci of transmission were missed during the initial mapping or if the disease were reintroduced from LF-endemic areas of neighboring countries (Burkina Faso, Benin, and Ghana). In 2009, Burkina Faso had implemented at least five rounds of MDAs in all LF-endemic areas, Ghana had implemented fewer than five rounds of MDAs in all LF-endemic areas, and Benin had implemented MDAs in some but not all LF-endemic areas (*9*);

What is already known on this topic?

Annual mass drug administration (MDA) is the recommended strategy for lymphatic filariasis (LF) elimination. By 2009, a total of 19 of 34 countries from the World Health Organization (WHO) African Region that determined that MDAs were needed to control and eliminate LF had started their implementation.

What is added by this report?

This report describes the LF elimination program in Togo during 2000–2009. Togo is the first sub-Saharan country to have stopped MDAs after prevalence data suggested that LF transmission had been interrupted after six to nine rounds of MDAs in each LF-endemic district.

What are the implications for public health practice?

The success of the Togo program demonstrates that LF elimination can be achieved in countries with limited resources using existing technologies and WHO guidance, and with the help of strong partnerships. The Togo experience also has stressed the need for improved protocols and serologic tests for determining when MDAs can be stopped, for post-MDA surveillance, and for certifying elimination in countries in the African Region where LF is endemic.

however, in Benin, MDA is ongoing in all districts adjacent to Togo. A substantial amount of cross-border movement of persons occurs among the four countries. Surveillance should be carried out for at least 5 years after the last MDA has taken place before verification and certification of LF elimination is considered.

The success of the LF elimination program in Togo has been possible because of the support of the Togo Ministry of Health in scaling up activities to address LF, comprehensive and detailed program guidelines, timely and coordinated implementation of the different program components, successful partnership among international public-sector and private-sector health partners, and strong social mobilization through the community health worker network. By 2009, a total of 34 of 39 LF-endemic countries from the WHO African Region had determined that MDAs were needed to control and eliminate LF. Of those, 19 have started their implementation. Of the targeted population of approximately 85 million in the WHO African Region, approximately 66 million (77%) have been treated (*2*). Despite this progress, several challenges remain if LF is to be eliminated as a global public health problem by 2020. Funding to scale up LF elimination programs in LF-endemic countries needs to be secured. Also, a need exists to continue to validate protocols and serologic tests currently used to determine when MDAs can be stopped, to perform post-MDA surveillance, and to certify elimination.

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Notes from the Field

Fatal Fungal Soft-Tissue Infections After a Tornado — Joplin, Missouri, 2011

On May 22, 2011, at 5:34 p.m. a tornado with winds >200 mph struck Joplin, Missouri, injuring approximately 1,000 persons and causing 159 deaths. On June 3, a local physician notified the Springfield-Greene County Health Department and the Missouri Department of Health and Senior Services (MODHSS) of two patients hospitalized with tornado injuries who had suspected necrotizing fungal soft-tissue infections. MODHSS initiated active surveillance for such infections at hospitals and laboratories serving patients injured in the tornado, and CDC began assisting MODHSS with identification of fungal isolates. By June 10, eight patients with necrotizing fungal soft-tissue wound infections caused by Mucormycetes (formerly Zygomycetes) were identified. On June 14, a CDC field team arrived in Missouri to assist with the onsite investigation.

As of July 19, a total of 18 suspected cases of cutaneous mucormycosis had been identified, of which 13 were confirmed. A confirmed case was defined as 1) necrotizing soft-tissue infection requiring antifungal treatment or surgical debridement in a person injured in the tornado, 2) with illness onset on or after May 22, and 3) positive fungal culture or histopathology and genetic sequencing consistent with a Mucormycete. No additional cases have been reported since June 17.

The field team reviewed medical charts to describe the 13 confirmed cases. The median age of the patients was 48 years (range: 13–76 years); seven were female, and all were white. Injuries sustained during the tornado included lacerations (12 patients), fractures (11), and blunt trauma (nine). The 13 patients had an average of four wounds documented in the medical chart when they were examined at the emergency department. Post-trauma wound management included surgical debridement for all 13 patients and removal of a foreign body from six. Wooden splinters were the most common foreign body, found in the wounds of four patients. Two patients had diabetes, and none were immunocompromised. Ten patients required admission to an intensive-care unit, and five died.

CDC received 48 clinical specimens, including 32 fungal isolates and 16 tissue blocks collected from wounds for microscopic evaluation, immunohistochemical staining, and DNA sequencing; specimens from all 13 patients yielded the Mucormycete *Apophysomyces trapeziformis*. Further laboratory and epidemiologic studies are ongoing, including case-control studies to evaluate risk factors for infection.

Cutaneous mucormycosis is a rare infection caused by fungi of the order Mucorales, which typically are found in soil and decaying wood and other organic matter. Although cutaneous mucormycosis often is opportunistic, affecting patients with diabetes, hematologic malignancy or solid organ transplant (*1*), *A. trapeziformis* often is associated with immunocompetent hosts after traumatic implantation of fungal spores (*2*). The case-fatality rate for cutaneous mucormycosis has ranged from 29% to 83%, depending on severity of disease and underlying medical condition of the patient (*1*). Early diagnosis, aggressive surgical debridement, and administration of systemic antifungals have been associated with improved outcomes (*1*).

Cutaneous mucormycosis has been reported after previous natural disasters (*3,4*); however, this is the first known cluster occurring after a tornado. None of the infections were found in persons cleaning up debris. Health-care providers should consider environmental fungi as potential causes of necrotizing soft-tissue infections in patients injured during tornados and initiate early treatment for suspected infections. Additional information is available at http://www.cdc.gov/mucormycosis.

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Errata: Vol. 60, No. RR-2

In the *MMWR* Recommendations and Reports "General Recommendations on Immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP)," errors occurred. On page 10, in the second sentence of the first complete paragraph, "quadrivalent meningococcal conjugate" should be accompanied by a footnote that reads, "**Only if necessary, based on vaccine availability.**" On page 23, line 7 of the first complete paragraph in the second column should read, ". . . receiving antimicrobial agents until **72** hours after the last dose . . . " On page 40, in Table 6, the precaution (third column) for history of arthus-type hypersensitivity reactions for DTaP; DT, Td; and Tdap should read, "History of arthus-type hypersensitivity reactions after a previous dose of tetanus **or diphtheria-toxoid containing vaccines (including MCV4)**; defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine." On page 43, in Table 7, the first sentence of the § footnote should read, "MMR, **LAIV**, and varicella vaccines can be administered on the same day."

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 23, 2011 (29th week)*

Disease	Current week	Cum 2011	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	—	—	1	—	1	1	
Arboviral diseases§,¶:									
California serogroup virus disease	—	4	4	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	0	10	4	4	4	8	
Powassan virus disease	—	4	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	—	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	42	152	3	NN	NN	NN	NN	NN	NH (1), RI (7), NY (32), PA (1), MD (1)
Botulism, total	—	49	3	112	118	145	144	165	
foodborne	—	6	0	7	10	17	32	20	
infant	—	37	2	80	83	109	85	97	
other (wound and unspecified)	—	6	0	25	25	19	27	48	
Brucellosis	—	36	3	115	115	80	131	121	
Chancroid	—	12	1	24	28	25	23	33	
Cholera	—	21	0	13	10	5	7	9	
Cyclosporiasis§	4	79	6	179	141	139	93	137	NY (1), FL (2), TX (1)
Diphtheria	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	4	0	23	35	30	22	29	
nonserotype b	—	65	4	200	236	244	199	175	
unknown serotype	2	146	3	223	178	163	180	179	PA (1), NV (1)
Hansen disease§	1	25	1	98	103	80	101	66	CA (1)
Hantavirus pulmonary syndrome§	—	9	1	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal§	1	64	7	266	242	330	292	288	TN (1)
Influenza-associated pediatric mortality§,††	—	110	1	61	358	90	77	43	
Listeriosis	4	244	20	821	851	759	808	884	PA (2), TN (1), CA (1)
Measles§§	1	154	1	63	71	140	43	55	FL (1)
Meningococcal disease, invasive¶¶:									
A, C, Y, and W-135	2	116	4	280	301	330	325	318	GA (1), OK (1)
serogroup B	1	54	3	135	174	188	167	193	WA (1)
other serogroup	—	5	0	12	23	38	35	32	
unknown serogroup	4	259	8	406	482	616	550	651	VT (1), OH (1), MO (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§	1	38	3	131	113	120	171	169	
acute	1	25	1	106	93	106	—	—	FL (1)
chronic	—	13	0	25	20	14	—	—	
Rabies, human	—	1	0	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§	2	79	2	148	161	157	132	125	NY (1), KY (1)
Syphilis, congenital (age <1 yr)§§§	—	91	8	378	423	431	430	349	
Tetanus	1	5	0	10	18	19	28	41	MI (1)
Toxic-shock syndrome (staphylococcal)§	—	43	2	82	74	71	92	101	
Trichinellosis	—	7	0	7	13	39	5	15	
Tularemia	4	48	5	124	93	123	137	95	MO (1), KS (1), NC (1), AR (1)
Typhoid fever	4	195	8	468	397	449	434	353	NC (1), FL (1), CA (2)
Vancomycin-intermediate *Staphylococcus aureus*§	—	29	1	91	78	63	37	6	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	2	1	—	2	1	
Vibriosis (noncholera *Vibrio* species infections)§	12	250	19	848	789	588	549	NN	MO (1), VA (2), FL (3), TN (1), AZ (1), WA (4)
Viral hemorrhagic fever¶¶¶	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 23, 2011 (29th week)*

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

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

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

§ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.

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

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

†† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 114 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.

§§ The one measles case reported for the current week was imported.

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

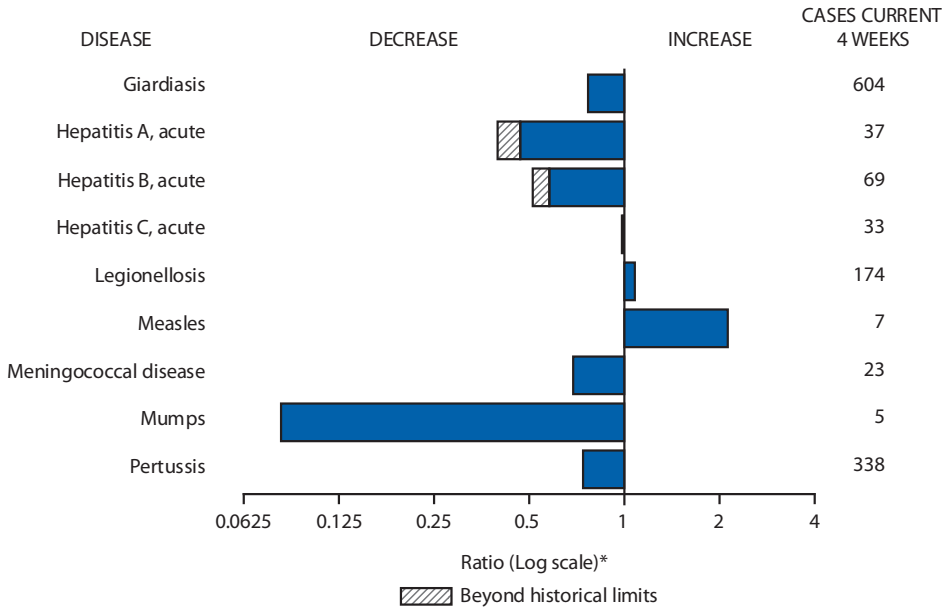
*** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. 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 23, 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.

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending July 23, 2011, and July 24, 2010 (29th week)*

Reporting area	*Chlamydia trachomatis* infection					Coccidioidomycosis					Cryptosporidiosis				
	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	10,538	25,795	31,142	699,824	712,173	61	104	567	9,195	NN	98	133	417	3,403	3,865
New England	834	847	2,043	23,755	22,159	—	0	1	1	NN	4	6	37	191	297
Connecticut	248	228	1,557	5,174	5,509	—	0	0	—	NN	—	0	31	31	77
Maine†	—	58	100	1,657	1,372	—	0	0	—	NN	—	1	8	26	49
Massachusetts	431	406	860	12,218	11,332	—	0	0	—	NN	3	3	9	84	85
New Hampshire	10	53	81	1,572	1,264	—	0	1	1	NN	—	1	4	26	37
Rhode Island†	104	70	154	2,308	1,956	—	0	0	—	NN	—	0	2	1	11
Vermont†	41	26	84	826	726	—	0	0	—	NN	1	1	5	23	38
Mid. Atlantic	1,806	3,327	5,069	87,349	92,806	—	0	1	3	NN	14	17	38	436	387
New Jersey	111	485	684	12,330	14,542	—	0	0	—	NN	—	1	4	19	16
New York (Upstate)	700	712	2,099	19,666	17,891	—	0	0	—	NN	4	4	13	83	74
New York City	223	1,139	2,612	27,241	34,568	—	0	0	—	NN	—	2	6	32	40
Pennsylvania	772	957	1,234	28,112	25,805	—	0	1	3	NN	10	9	26	302	257
E.N. Central	1,106	4,001	7,039	104,887	112,202	1	0	3	28	NN	18	30	141	764	1,025
Illinois	19	1,105	1,320	24,934	33,185	—	0	0	—	NN	—	3	39	61	118
Indiana	238	459	3,376	14,324	10,545	—	0	0	—	NN	—	4	15	117	147
Michigan	508	950	1,397	26,081	27,607	—	0	3	17	NN	5	5	18	135	174
Ohio	233	1,000	1,134	27,438	28,267	1	0	3	11	NN	12	9	24	289	202
Wisconsin	108	472	559	12,110	12,598	—	0	0	—	NN	1	8	65	162	384
W.N. Central	97	1,439	1,645	37,956	39,855	2	0	1	4	NN	15	19	132	501	705
Iowa	23	208	240	5,712	5,849	—	0	0	—	NN	1	7	30	180	151
Kansas	20	191	288	5,483	5,409	—	0	0	—	NN	—	0	6	3	56
Minnesota	—	290	364	5,923	8,546	—	0	0	—	NN	—	0	22	—	194
Missouri	54	532	766	15,061	14,220	—	0	0	—	NN	6	4	57	111	151
Nebraska†	—	104	218	3,350	2,841	2	0	1	4	NN	8	4	26	111	73
North Dakota	—	38	90	664	1,278	—	0	0	—	NN	—	0	9	16	12
South Dakota	—	65	93	1,763	1,712	—	0	0	—	NN	—	1	13	80	68
S. Atlantic	4,170	5,113	6,541	151,403	144,196	—	0	2	3	NN	19	21	57	615	544
Delaware	87	83	220	2,407	2,371	—	0	0	—	NN	—	0	1	4	4
District of Columbia	91	106	180	2,844	2,969	—	0	0	—	NN	—	0	1	4	2
Florida	732	1,492	1,706	41,876	41,649	—	0	0	—	NN	12	8	23	234	205
Georgia	881	938	2,384	29,025	24,294	—	0	0	—	NN	2	5	11	149	157
Maryland†	468	451	1,125	11,947	13,267	—	0	2	3	NN	—	1	6	36	22
North Carolina	628	756	1,477	25,874	26,156	—	0	0	—	NN	—	0	17	36	47
South Carolina†	523	518	946	15,998	14,522	—	0	0	—	NN	—	3	19	72	39
Virginia†	679	666	970	19,153	16,937	—	0	0	—	NN	5	2	7	64	61
West Virginia	81	78	121	2,279	2,031	—	0	0	—	NN	—	0	5	16	7
E.S. Central	475	1,811	3,314	50,914	50,951	—	0	0	—	NN	4	7	24	163	118
Alabama†	—	542	1,567	14,937	14,191	—	0	0	—	NN	—	3	15	76	44
Kentucky	234	267	2,352	8,802	8,834	—	0	0	—	NN	1	1	5	24	39
Mississippi	6	395	614	10,840	12,355	—	0	0	—	NN	—	0	2	16	7
Tennessee†	235	590	795	16,335	15,571	—	0	0	—	NN	3	1	5	47	28
W.S. Central	528	3,327	4,723	92,515	99,341	—	0	1	1	NN	5	8	62	176	177
Arkansas†	341	306	440	9,120	8,623	—	0	0	—	NN	—	0	3	8	17
Louisiana	139	526	1,052	13,302	15,283	—	0	1	1	NN	1	0	9	28	20
Oklahoma	48	226	1,371	5,615	7,378	—	0	0	—	NN	1	1	34	36	41
Texas†	—	2,369	3,107	64,478	68,057	—	0	0	—	NN	3	4	28	104	99
Mountain	356	1,679	2,155	44,512	46,240	47	60	431	7,216	NN	13	11	30	290	285
Arizona	2	513	697	12,533	14,996	44	58	426	7,123	NN	—	1	3	17	17
Colorado	—	407	848	12,584	10,783	—	0	0	—	NN	4	3	11	84	71
Idaho†	—	66	199	1,503	2,250	—	0	0	—	NN	4	2	7	59	50
Montana†	44	62	83	1,812	1,660	—	0	1	2	NN	3	1	5	36	30
Nevada†	186	197	380	5,958	5,620	3	1	3	51	NN	—	0	7	—	10
New Mexico†	64	195	1,183	5,486	6,157	—	0	4	31	NN	1	2	12	55	52
Utah	37	130	175	3,597	3,626	—	0	2	6	NN	—	1	5	24	38
Wyoming†	23	38	90	1,039	1,148	—	0	2	3	NN	1	0	5	15	17
Pacific	1,166	3,783	6,559	106,533	104,423	11	30	142	1,939	NN	6	11	29	267	327
Alaska	—	115	157	3,010	3,435	—	0	0	—	NN	—	0	3	7	2
California	573	2,888	5,763	81,644	79,547	11	30	142	1,938	NN	3	6	19	152	187
Hawaii	—	108	138	2,521	3,438	—	0	0	—	NN	—	0	0	—	1
Oregon	254	255	524	7,592	6,338	—	0	1	1	NN	—	3	20	69	97
Washington	339	430	522	11,766	11,665	—	0	0	—	NN	3	1	9	39	40
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	NN	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	4	81	189	545	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	—	105	349	3,351	3,491	—	0	0	—	NN	N	0	0	N	N
U.S. Virgin Islands	—	14	27	359	330	—	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 23, 2011, and July 24, 2010 (29th week)*

Reporting area	Dengue Virus Infection†									
	Dengue Fever§					Dengue Hemorrhagic Fever¶				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max		
United States	—	3	55	44	276	—	0	2	—	4
New England	—	0	3	1	4	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island**	—	0	1	—	—	—	0	0	—	—
Vermont**	—	0	1	1	1	—	0	0	—	—
Mid. Atlantic	—	1	25	19	82	—	0	1	—	2
New Jersey	—	0	5	—	10	—	0	0	—	—
New York (Upstate)	—	0	5	—	12	—	0	1	—	1
New York City	—	1	17	10	49	—	0	1	—	1
Pennsylvania	—	0	3	9	11	—	0	0	—	—
E.N. Central	—	0	7	3	23	—	0	1	—	—
Illinois	—	0	3	—	7	—	0	0	—	—
Indiana	—	0	2	1	5	—	0	0	—	—
Michigan	—	0	2	—	3	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	2	3	—	0	1	—	—
W.N. Central	—	0	6	—	17	—	0	1	—	—
Iowa	—	0	1	—	1	—	0	0	—	—
Kansas	—	0	1	—	2	—	0	0	—	—
Minnesota	—	0	1	—	10	—	0	0	—	—
Missouri	—	0	1	—	3	—	0	0	—	—
Nebraska**	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	19	12	102	—	0	1	—	1
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	13	10	84	—	0	1	—	1
Georgia	—	0	2	1	6	—	0	0	—	—
Maryland**	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	1	—	—	0	0	—	—
South Carolina**	—	0	3	—	5	—	0	0	—	—
Virginia**	—	0	3	—	5	—	0	0	—	—
West Virginia	—	0	0	—	2	—	0	0	—	—
E.S. Central	—	0	2	—	2	—	0	0	—	—
Alabama**	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	1	—	1	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	0	—	1	—	0	0	—	—
W.S. Central	—	0	4	—	14	—	0	0	—	1
Arkansas**	—	0	0	—	—	—	0	0	—	1
Louisiana	—	0	2	—	1	—	0	0	—	—
Oklahoma	—	0	1	—	1	—	0	0	—	—
Texas**	—	0	2	—	12	—	0	0	—	—
Mountain	—	0	2	3	8	—	0	0	—	—
Arizona	—	0	2	2	2	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	1	—	0	0	—	—
Montana**	—	0	1	—	3	—	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	24	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	5	2	18	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	4	5	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	28	550	299	4,810	—	0	20	1	103
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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* 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 23, 2011, and July 24, 2010 (29th week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	65	7	109	311	375	35	16	58	242	1,152	4	1	13	45	61
New England	—	0	2	3	3	1	2	16	73	56	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	6	—	22	—	0	0	—	—
Maine§	—	0	1	1	2	1	0	2	10	12	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	10	42	—	—	0	0	—	—
New Hampshire	—	0	1	1	1	—	0	3	7	8	—	0	1	1	2
Rhode Island§	—	0	1	1	—	—	0	6	12	13	—	0	0	—	—
Vermont§	—	0	0	—	—	—	0	1	2	1	—	0	0	—	—
Mid. Atlantic	5	1	7	28	56	26	4	20	113	125	—	0	2	3	7
New Jersey	—	0	2	—	39	—	0	3	—	49	—	0	0	—	1
New York (Upstate)	5	0	7	25	12	26	3	18	99	70	—	0	2	3	4
New York City	—	0	1	3	4	—	0	5	14	6	—	0	0	—	—
Pennsylvania	—	0	1	—	1	—	0	1	—	—	—	0	1	—	2
E.N. Central	—	0	4	10	29	—	1	20	7	367	1	0	4	18	32
Illinois	—	0	2	6	10	—	0	2	2	2	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	1	0	3	13	12
Michigan	—	0	1	1	1	—	0	1	—	2	—	0	1	1	—
Ohio	—	0	3	3	5	—	0	1	2	1	—	0	1	1	—
Wisconsin	—	0	1	—	13	—	1	19	3	362	—	0	3	1	17
W.N. Central	3	1	15	83	86	1	1	22	16	556	1	0	11	14	8
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	—	0	12	—	—	—	0	22	1	548	—	0	11	—	—
Missouri	3	0	15	81	81	1	0	4	15	7	1	0	7	12	8
Nebraska§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
S. Atlantic	28	3	18	116	132	7	1	4	26	36	1	0	1	2	2
Delaware	—	0	2	12	12	—	0	1	1	4	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	2	0	3	13	6	—	0	1	3	1	—	0	0	—	—
Georgia	1	0	3	11	16	1	0	1	6	1	—	0	1	1	1
Maryland§	3	0	2	15	14	—	0	1	1	12	—	0	1	—	1
North Carolina	17	0	13	32	40	6	0	4	13	12	—	0	0	—	—
South Carolina§	—	0	1	—	3	—	0	1	—	—	—	0	0	—	—
Virginia§	5	1	8	33	40	—	0	1	2	6	—	0	1	—	—
West Virginia	—	0	1	—	1	—	0	0	—	—	1	0	0	1	—
E.S. Central	2	0	11	33	55	—	0	2	7	12	1	0	1	4	7
Alabama§	—	0	3	—	7	—	0	1	3	4	N	0	0	N	N
Kentucky	—	0	2	7	10	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	—	2	—	0	1	—	1	—	0	0	—	1
Tennessee§	2	0	7	26	36	—	0	2	4	7	1	0	1	4	5
W.S. Central	27	0	87	38	13	—	0	9	—	—	—	0	1	—	1
Arkansas§	—	0	7	10	—	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	26	0	82	27	10	—	0	7	—	—	—	0	0	—	—
Texas§	1	0	1	1	2	—	0	1	—	—	—	0	1	—	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	—	—

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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 23, 2011, and July 24, 2010 (29th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	178	287	549	7,172	9,935	2,419	5,835	7,484	156,492	165,917	20	63	141	1,904	1,816
New England	13	25	55	641	875	114	100	206	2,810	2,970	1	4	12	126	105
Connecticut	—	4	12	104	160	55	43	150	1,192	1,379	—	1	6	33	23
Maine§	7	3	11	67	103	—	3	7	95	104	—	0	2	14	8
Massachusetts	5	12	25	324	370	44	48	80	1,244	1,231	1	2	6	58	54
New Hampshire	—	2	7	44	106	2	3	7	74	81	—	0	2	9	7
Rhode Island§	—	1	7	29	38	10	6	16	176	138	—	0	2	8	8
Vermont§	1	3	10	73	98	3	0	8	29	37	—	0	3	4	5
Mid. Atlantic	32	59	106	1,416	1,644	381	716	1,121	19,004	18,769	3	12	32	407	346
New Jersey	—	7	22	129	229	28	116	172	3,177	3,092	—	2	7	68	59
New York (Upstate)	20	21	72	483	557	126	111	271	3,036	2,845	1	3	18	104	90
New York City	—	17	30	433	469	42	238	497	5,762	6,468	—	2	6	80	56
Pennsylvania	12	15	27	371	389	185	260	364	7,029	6,364	2	4	11	155	141
E.N. Central	24	50	99	1,121	1,714	280	1,046	2,091	27,255	30,504	1	11	21	344	290
Illinois	—	9	31	191	383	4	276	369	6,117	8,359	—	3	9	103	99
Indiana	—	6	14	119	216	55	113	1,018	3,448	2,972	—	2	7	62	61
Michigan	1	10	25	231	362	129	248	490	6,624	7,657	—	1	4	36	21
Ohio	21	16	29	413	448	67	322	383	8,604	8,899	1	3	7	101	70
Wisconsin	2	8	35	167	305	25	98	130	2,462	2,617	—	1	5	42	39
W.N. Central	9	25	73	501	1,028	46	295	363	7,842	7,857	2	4	10	91	124
Iowa	—	5	12	127	150	9	38	57	1,012	917	—	0	0	—	1
Kansas	—	2	10	41	124	6	39	57	1,052	1,154	—	0	2	13	13
Minnesota	—	0	33	—	378	—	38	62	792	1,178	—	0	5	—	46
Missouri	4	8	26	183	199	31	146	181	3,998	3,659	2	1	5	47	45
Nebraska§	5	4	9	96	114	—	23	49	640	652	—	0	3	21	11
North Dakota	—	0	12	21	11	—	3	9	61	110	—	0	6	9	8
South Dakota	—	1	5	33	52	—	12	20	287	187	—	0	1	1	—
S. Atlantic	33	59	127	1,411	2,001	1,117	1,471	1,862	40,513	42,820	3	14	30	456	464
Delaware	—	1	5	17	15	12	17	48	467	542	—	0	2	3	5
District of Columbia	—	1	5	19	31	41	38	70	1,048	1,156	—	0	0	—	—
Florida	26	24	75	603	1,063	212	382	486	10,643	11,113	1	5	12	149	114
Georgia	3	14	51	436	401	247	317	874	8,842	8,389	—	3	7	89	109
Maryland§	2	4	10	122	163	115	120	246	2,937	3,804	—	2	4	46	35
North Carolina	N	0	0	N	N	180	257	468	8,482	8,706	1	2	8	51	80
South Carolina§	—	2	9	53	69	133	153	257	4,503	4,436	—	1	5	45	57
Virginia§	2	8	32	139	240	148	117	185	3,137	4,419	1	2	8	64	51
West Virginia	—	0	8	22	19	29	14	26	454	255	—	0	9	9	13
E.S. Central	2	4	11	94	92	105	495	1,007	13,530	13,770	1	3	11	125	111
Alabama§	2	4	11	94	92	—	160	410	4,514	4,159	1	1	4	39	19
Kentucky	N	0	0	N	N	60	70	712	2,363	2,254	—	0	4	19	22
Mississippi	N	0	0	N	N	—	118	197	2,840	3,422	—	0	3	11	9
Tennessee§	N	0	0	N	N	45	140	194	3,813	3,935	—	2	5	56	61
W.S. Central	8	6	17	112	205	133	913	1,664	23,661	26,688	3	2	26	81	87
Arkansas§	4	2	9	58	58	84	101	138	2,758	2,554	—	0	3	19	14
Louisiana	4	3	12	54	86	38	144	509	3,735	4,385	—	0	4	29	19
Oklahoma	—	0	5	—	61	11	63	332	1,645	2,182	3	1	19	32	48
Texas§	N	0	0	N	N	—	592	867	15,523	17,567	—	0	4	1	6
Mountain	20	26	58	616	910	48	185	253	5,072	5,236	4	5	12	167	203
Arizona	2	3	8	67	79	—	64	95	1,742	1,784	—	2	6	62	76
Colorado	14	12	23	299	388	—	46	84	1,089	1,467	2	1	5	42	59
Idaho§	1	4	9	71	113	—	2	14	55	60	—	0	2	12	12
Montana§	3	1	6	33	60	3	1	5	38	63	—	0	1	2	2
Nevada§	—	1	11	26	31	37	33	103	1,117	1,015	1	0	2	12	5
New Mexico§	—	1	5	34	56	3	28	98	880	626	1	1	4	25	23
Utah	—	4	13	72	157	5	4	9	129	199	—	0	3	11	21
Wyoming§	—	0	5	14	26	—	0	3	22	22	—	0	1	1	5
Pacific	37	49	129	1,260	1,466	195	625	791	16,805	17,303	2	3	10	107	86
Alaska	—	2	7	44	53	—	20	34	515	750	—	0	2	13	15
California	30	33	68	887	909	144	514	695	13,828	14,120	1	0	6	19	15
Hawaii	—	0	4	14	35	—	13	26	328	386	—	0	3	16	13
Oregon	—	7	20	156	256	10	23	39	666	564	1	2	6	56	38
Washington	7	9	57	159	213	41	59	86	1,468	1,483	—	0	2	3	5
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	2	—	0	17	6	49	—	0	0	—	—
Puerto Rico	—	1	7	25	46	—	6	12	187	160	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	7	52	80	—	0	0	—	—

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† 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 23, 2011, and July 24, 2010 (29th week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	9	22	74	564	838	27	56	167	1,236	1,749	4	17	39	509	444
New England	—	1	6	28	64	—	1	7	42	34	—	1	4	35	35
Connecticut	—	0	4	5	15	—	0	4	9	10	—	0	3	22	21
Maine†	—	0	1	1	6	—	0	2	5	10	—	0	2	5	2
Massachusetts	—	0	5	16	35	—	0	5	27	8	—	0	1	4	12
New Hampshire	—	0	1	—	—	—	0	1	1	4	N	0	0	N	N
Rhode Island†	—	0	1	2	8	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	2	4	—	—	0	0	—	2	—	0	1	4	—
Mid. Atlantic	2	4	12	104	138	3	5	11	139	177	—	1	6	41	60
New Jersey	—	1	4	12	40	—	1	4	27	49	—	0	4	—	13
New York (Upstate)	1	1	4	26	28	1	1	9	25	29	—	1	4	25	29
New York City	—	1	6	36	41	—	1	5	43	52	—	0	1	—	2
Pennsylvania	1	1	3	30	29	2	1	4	44	47	—	0	2	16	16
E.N. Central	1	4	9	94	95	1	6	35	175	291	—	3	12	102	55
Illinois	—	1	3	16	26	—	2	6	36	73	—	0	1	2	—
Indiana	—	0	3	10	10	—	1	6	18	41	—	0	5	39	19
Michigan	1	1	5	42	33	—	2	5	50	76	—	1	7	56	26
Ohio	—	1	5	23	17	1	1	30	57	68	—	0	1	4	6
Wisconsin	—	0	2	3	9	—	0	3	14	33	—	0	1	1	4
W.N. Central	—	1	25	19	28	1	2	16	69	65	—	0	6	2	8
Iowa	—	0	3	3	5	—	0	1	6	10	—	0	0	—	—
Kansas	—	0	2	3	8	—	0	2	7	4	—	0	1	2	—
Minnesota	—	0	22	2	1	—	0	15	2	2	—	0	6	—	3
Missouri	—	0	1	6	11	1	2	5	45	39	—	0	1	—	3
Nebraska†	—	0	4	3	3	—	0	3	8	9	—	0	0	—	2
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	1	1	—	0	0	—	—
S. Atlantic	3	5	14	123	190	9	14	33	332	475	2	4	11	121	95
Delaware	—	0	1	1	5	—	0	1	—	18	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	2	2	7	41	70	2	4	11	112	168	—	1	5	29	27
Georgia	—	1	4	28	21	2	2	8	47	103	—	0	3	16	12
Maryland†	1	0	2	13	13	1	1	4	28	37	—	0	2	20	15
North Carolina	—	0	4	14	32	3	2	16	70	35	2	1	7	37	25
South Carolina†	—	0	2	5	20	—	1	4	18	32	—	0	1	1	—
Virginia†	—	1	4	16	27	1	1	7	38	48	—	0	2	9	8
West Virginia	—	0	5	5	1	—	0	18	19	31	—	0	5	9	6
E.S. Central	1	0	6	26	22	2	8	14	220	188	2	3	8	97	78
Alabama†	—	0	2	1	5	1	2	4	54	36	—	0	1	7	3
Kentucky	—	0	6	5	9	1	3	8	61	59	2	2	6	43	53
Mississippi	1	0	1	4	1	—	1	3	22	20	U	0	0	U	U
Tennessee†	—	0	5	16	7	—	3	7	83	73	—	1	5	47	22
W.S. Central	1	2	15	57	74	9	8	67	146	281	—	2	11	45	41
Arkansas†	—	0	1	—	—	—	1	4	22	38	—	0	0	—	1
Louisiana	—	0	1	2	5	—	1	4	22	31	—	0	2	5	1
Oklahoma	—	0	4	1	1	6	1	16	31	44	—	1	10	21	13
Texas†	1	2	11	54	68	3	4	45	71	168	—	0	3	19	26
Mountain	—	2	5	40	96	1	2	7	46	76	—	1	4	31	34
Arizona	—	0	2	9	44	—	0	3	11	16	U	0	0	U	U
Colorado	—	0	2	14	23	1	0	5	13	20	—	0	3	12	8
Idaho†	—	0	1	5	6	—	0	1	2	5	—	0	2	6	7
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	2	—
Nevada†	—	0	3	5	7	—	0	3	14	25	—	0	1	4	3
New Mexico†	—	0	1	3	3	—	0	2	5	3	—	0	1	4	9
Utah	—	0	2	—	6	—	0	1	1	7	—	0	2	1	7
Wyoming†	—	0	1	2	3	—	0	1	—	—	—	0	1	2	—
Pacific	1	4	15	73	131	1	3	25	67	162	—	1	12	35	38
Alaska	—	0	1	2	1	—	0	1	4	1	U	0	1	U	U
California	1	2	15	47	101	—	2	22	24	108	—	0	4	13	17
Hawaii	—	0	2	5	5	—	0	1	5	3	U	0	0	U	U
Oregon	—	0	2	5	12	—	0	3	20	27	—	0	3	10	9
Washington	—	0	4	14	12	1	1	4	14	23	—	0	5	12	12
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	4	—	0	8	28	48	—	0	8	10	40
Puerto Rico	—	0	2	4	11	—	0	3	6	13	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 23, 2011, and July 24, 2010 (29th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	53	53	128	1,284	1,563	767	356	1,248	11,381	18,084	13	27	114	607	789
New England	1	4	16	89	107	23	83	302	1,876	5,560	—	2	20	44	60
Connecticut	—	1	6	17	16	—	34	123	763	1,955	—	0	20	1	2
Maine†	1	0	3	4	5	—	9	62	134	277	—	0	1	2	5
Massachusetts	—	2	10	55	61	—	22	103	471	2,281	—	1	5	33	44
New Hampshire	—	0	5	4	8	—	13	45	294	825	—	0	2	2	1
Rhode Island†	—	0	4	5	13	9	1	40	60	48	—	0	4	2	6
Vermont†	—	0	2	4	4	14	4	32	154	174	—	0	1	4	2
Mid. Atlantic	18	13	53	312	372	646	147	979	7,353	6,211	—	8	22	125	254
New Jersey	—	1	18	25	63	214	44	500	2,903	2,418	—	1	6	8	64
New York (Upstate)	14	5	19	118	113	217	35	202	1,344	1,191	—	1	6	22	36
New York City	—	3	17	49	64	—	1	30	11	395	—	3	13	66	120
Pennsylvania	4	5	19	120	132	215	61	348	3,095	2,207	—	1	4	29	34
E.N. Central	14	9	44	297	328	3	21	181	509	2,657	1	3	9	69	85
Illinois	—	1	12	23	86	—	1	9	40	91	—	1	6	23	33
Indiana	—	1	5	36	27	—	1	4	26	60	—	0	2	5	8
Michigan	1	2	20	61	63	—	1	14	21	51	—	0	4	13	15
Ohio	13	4	34	176	119	3	1	9	22	14	1	1	5	24	24
Wisconsin	—	0	5	1	33	—	17	159	400	2,441	—	0	2	4	5
W.N. Central	2	2	9	43	66	2	4	110	42	1,493	—	1	45	10	32
Iowa	—	0	2	5	6	—	0	5	33	67	—	0	2	6	7
Kansas	—	0	2	4	7	—	0	1	3	9	—	0	2	2	4
Minnesota	—	0	8	—	21	—	0	105	—	1,407	—	0	45	—	3
Missouri	2	1	5	31	21	—	0	1	—	2	—	0	3	—	7
Nebraska†	—	0	1	1	5	2	0	2	6	5	—	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	11	9	22	214	298	91	57	178	1,481	1,966	9	8	41	212	198
Delaware	—	0	1	3	10	11	10	29	393	445	—	0	1	3	2
District of Columbia	—	0	3	8	13	—	0	5	10	20	—	0	1	5	9
Florida	5	3	9	81	88	2	1	8	47	32	2	2	7	54	61
Georgia	1	1	4	15	38	1	0	2	8	9	4	1	7	44	35
Maryland†	1	1	6	32	66	22	17	103	469	877	2	1	21	46	32
North Carolina	1	1	6	34	32	1	0	9	24	37	—	0	13	17	18
South Carolina†	—	0	2	5	8	—	0	3	6	21	—	0	1	1	3
Virginia†	3	1	9	31	34	42	19	76	492	507	1	1	8	42	37
West Virginia	—	0	2	5	9	12	0	29	32	18	—	0	1	—	1
E.S. Central	1	2	10	78	73	—	0	3	19	30	—	0	2	13	15
Alabama†	—	0	2	10	8	—	0	2	7	—	—	0	1	3	3
Kentucky	1	0	4	16	13	—	0	1	—	2	—	0	1	4	3
Mississippi	—	0	3	9	9	—	0	0	—	—	—	0	2	1	—
Tennessee†	—	1	8	43	43	—	0	3	12	28	—	0	2	5	9
W.S. Central	1	3	13	54	74	1	1	29	20	54	—	1	18	21	45
Arkansas†	—	0	2	4	12	—	0	0	—	—	—	0	1	2	3
Louisiana	—	0	3	9	4	—	0	1	—	1	—	0	1	—	2
Oklahoma	—	0	2	3	8	—	0	0	—	—	—	0	1	2	3
Texas†	1	2	11	38	50	1	1	29	20	53	—	1	17	17	37
Mountain	—	2	9	44	95	—	0	3	7	14	1	1	4	34	32
Arizona	—	1	7	15	28	—	0	1	3	2	—	0	4	15	13
Colorado	—	0	2	4	19	—	0	1	1	—	—	0	3	12	10
Idaho†	—	0	1	4	2	—	0	2	—	5	1	0	1	2	1
Montana†	—	0	1	—	4	—	0	1	1	1	—	0	1	—	1
Nevada†	—	0	2	7	16	—	0	1	—	—	—	0	2	3	3
New Mexico†	—	0	1	4	5	—	0	1	1	4	—	0	1	2	1
Utah	—	0	2	9	16	—	0	1	1	2	—	0	0	—	3
Wyoming†	—	0	2	1	5	—	0	0	—	—	—	0	0	—	—
Pacific	5	5	21	153	150	1	3	11	74	99	2	4	10	79	68
Alaska	—	0	0	—	2	—	0	1	1	4	—	0	2	4	2
California	5	4	15	138	127	1	2	9	55	61	2	2	10	58	41
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	2	2
Oregon	—	0	2	4	8	—	0	3	18	29	—	0	3	5	6
Washington	—	0	6	10	12	—	0	4	—	5	—	0	5	10	17
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	1	—	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 23, 2011, and July 24, 2010 (29th 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	7	14	53	434	490	1	9	47	156	2,273	93	361	2,925	6,806	9,429
New England	1	0	3	23	11	—	0	2	3	21	3	9	24	231	224
Connecticut	—	0	1	3	1	—	0	0	—	11	—	1	8	22	41
Maine§	—	0	1	3	3	—	0	1	—	1	2	1	8	69	20
Massachusetts	—	0	2	11	2	—	0	2	3	6	1	4	13	96	137
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	5	29	5
Rhode Island§	—	0	1	—	—	—	0	0	—	—	—	0	4	9	18
Vermont§	1	0	3	5	5	—	0	0	—	—	—	0	4	6	3
Mid. Atlantic	—	1	6	49	50	—	2	23	20	2,003	27	37	125	704	574
New Jersey	—	0	1	3	15	—	1	6	9	319	—	2	10	54	86
New York (Upstate)	—	0	4	16	9	—	0	3	3	649	22	11	81	244	217
New York City	—	0	3	17	12	—	0	22	8	1,018	—	0	19	27	38
Pennsylvania	—	0	2	13	14	—	0	16	—	17	5	18	70	379	233
E.N. Central	1	2	7	55	81	—	1	7	41	38	7	93	198	1,468	2,175
Illinois	—	0	3	16	17	—	1	3	27	12	—	17	50	339	407
Indiana	—	0	2	7	19	—	0	1	—	3	—	9	26	96	341
Michigan	—	0	4	5	11	—	0	1	5	15	—	29	57	414	599
Ohio	1	1	2	19	19	—	0	5	9	7	7	29	80	448	676
Wisconsin	—	0	2	8	15	—	0	1	—	1	—	13	26	171	152
W.N. Central	1	1	4	28	35	—	0	4	21	75	1	31	501	553	699
Iowa	—	0	1	6	8	—	0	1	4	36	—	7	36	92	252
Kansas	—	0	1	2	4	—	0	1	3	4	—	2	9	51	94
Minnesota	—	0	2	—	3	—	0	4	1	3	—	0	469	184	33
Missouri	1	0	2	10	14	—	0	3	6	8	1	6	43	157	223
Nebraska§	—	0	2	7	5	—	0	1	3	23	—	2	13	37	72
North Dakota	—	0	1	1	1	—	0	3	4	—	—	0	30	29	—
South Dakota	—	0	1	2	—	—	0	1	—	1	—	0	1	3	25
S. Atlantic	1	2	8	84	87	—	0	4	10	40	26	33	106	747	856
Delaware	—	0	1	1	—	—	0	0	—	—	—	0	3	15	7
District of Columbia	—	0	1	1	—	—	0	1	—	3	—	0	2	3	4
Florida	—	1	5	35	43	—	0	2	2	8	17	6	15	170	153
Georgia	1	0	2	9	6	—	0	2	1	2	—	4	13	92	123
Maryland§	—	0	1	8	4	—	0	1	1	8	1	2	6	43	65
North Carolina	—	0	3	12	9	—	0	2	4	5	—	3	35	109	197
South Carolina§	—	0	1	7	8	—	0	1	—	3	1	4	25	81	194
Virginia§	—	0	2	9	15	—	0	2	2	9	7	7	41	189	97
West Virginia	—	0	1	2	2	—	0	0	—	2	—	1	41	45	16
E.S. Central	—	1	3	19	24	—	0	1	3	9	3	10	35	198	426
Alabama§	—	0	2	9	4	—	0	1	1	6	1	3	11	81	124
Kentucky	—	0	1	1	10	—	0	0	—	1	—	3	16	46	143
Mississippi	—	0	1	2	3	—	0	1	2	—	—	1	10	12	41
Tennessee§	—	0	2	7	7	—	0	1	—	2	2	3	11	59	118
W.S. Central	1	1	12	33	56	1	1	15	45	45	5	27	297	510	1,623
Arkansas§	—	0	1	7	5	—	0	1	1	4	—	2	18	36	98
Louisiana	—	0	2	6	12	—	0	2	—	4	—	0	3	11	24
Oklahoma	1	0	2	6	14	—	0	1	1	—	—	0	92	17	17
Texas§	—	0	10	14	25	1	1	14	43	37	5	25	187	446	1,484
Mountain	—	1	4	32	41	—	0	4	4	12	7	42	100	966	688
Arizona	—	0	1	8	11	—	0	1	—	4	—	14	29	361	223
Colorado	—	0	2	8	13	—	0	1	3	6	2	10	63	261	95
Idaho§	—	0	1	4	5	—	0	1	—	—	4	2	15	63	91
Montana§	—	0	2	3	1	—	0	0	—	—	—	2	16	74	32
Nevada§	—	0	1	1	7	—	0	1	—	—	1	0	5	12	18
New Mexico§	—	0	1	1	3	—	0	2	1	—	—	3	11	60	41
Utah	—	0	2	7	1	—	0	1	—	2	—	6	16	131	181
Wyoming§	—	0	1	—	—	—	0	1	—	—	—	0	2	4	7
Pacific	2	3	26	111	105	—	0	3	9	30	14	95	1,710	1,429	2,164
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	6	16	17
California	1	2	17	78	63	—	0	3	3	20	1	80	1,569	1,078	1,820
Hawaii	—	0	1	3	1	—	0	1	2	2	—	1	7	29	45
Oregon	—	0	3	16	24	—	0	1	3	1	—	4	11	115	169
Washington	1	0	8	12	16	—	0	1	—	6	13	11	131	191	113
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	3	15	12	400	—	0	14	31	1
Puerto Rico	—	0	1	—	1	—	0	1	1	—	—	0	1	2	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† 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 23, 2011, and July 24, 2010 (29th 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	41	56	172	1,291	2,378	776	884	1,812	19,440	23,122	63	97	264	2,045	2,382
New England	1	3	18	66	151	6	30	269	1,045	1,492	3	2	24	102	143
Connecticut	—	0	8	—	71	—	0	248	248	491	—	0	24	24	60
Maine§	1	1	3	32	33	—	2	8	63	67	1	0	3	16	8
Massachusetts	—	0	0	—	—	4	19	52	515	676	2	1	10	43	51
New Hampshire	—	0	6	10	4	—	3	7	83	112	—	0	3	13	16
Rhode Island§	—	0	3	9	14	—	1	62	108	113	—	0	1	1	2
Vermont§	—	1	3	15	29	2	1	5	28	33	—	0	2	5	6
Mid. Atlantic	11	14	31	348	624	77	89	217	2,234	2,863	10	9	30	230	250
New Jersey	—	0	0	—	—	—	14	57	271	602	—	2	9	30	60
New York (Upstate)	11	7	19	172	280	44	25	63	605	651	6	4	12	83	79
New York City	—	0	4	7	132	—	20	53	509	640	—	1	6	35	26
Pennsylvania	—	7	17	169	212	33	32	80	849	970	4	3	10	82	85
E.N. Central	3	2	27	66	114	36	85	184	2,018	3,207	3	11	48	268	403
Illinois	2	1	11	20	55	—	28	61	674	1,110	—	2	9	46	86
Indiana	—	0	3	4	—	—	10	29	192	414	—	2	10	45	68
Michigan	—	1	5	21	37	2	13	49	337	487	2	2	7	60	83
Ohio	1	0	12	21	22	34	21	42	577	725	1	2	11	74	65
Wisconsin	N	0	0	N	N	—	11	50	238	471	—	2	16	43	101
W.N. Central	1	2	40	46	144	34	45	121	1,066	1,445	10	13	38	316	454
Iowa	—	0	3	—	12	—	9	23	229	268	—	2	13	74	89
Kansas	—	1	4	18	39	10	7	18	177	211	—	1	7	48	44
Minnesota	—	0	34	—	17	—	0	30	—	403	—	0	14	—	140
Missouri	—	0	6	—	39	24	16	43	446	357	5	4	14	117	126
Nebraska§	1	1	3	20	30	—	4	13	109	111	5	1	5	54	39
North Dakota	—	0	6	8	7	—	0	15	22	15	—	0	10	6	3
South Dakota	—	0	0	—	—	—	3	17	83	80	—	1	4	17	13
S. Atlantic	21	19	53	620	665	314	263	624	5,551	5,529	7	14	31	328	323
Delaware	—	0	0	—	—	1	3	11	69	66	—	0	2	8	3
District of Columbia	—	0	0	—	—	1	1	7	31	54	—	0	1	3	6
Florida	—	0	29	57	121	199	107	226	2,320	2,423	3	3	15	63	100
Georgia	—	0	0	—	—	24	40	142	939	1,020	—	2	7	59	50
Maryland§	—	6	14	163	204	30	18	54	412	471	—	1	8	29	45
North Carolina	—	0	0	—	—	33	31	241	760	505	1	2	10	57	26
South Carolina§	N	0	0	N	N	—	30	99	500	470	1	0	4	10	15
Virginia§	21	11	27	345	296	26	21	68	484	427	2	3	9	96	70
West Virginia	—	0	30	55	44	—	0	14	36	93	—	0	4	3	8
E.S. Central	2	2	7	70	112	43	60	175	1,453	1,435	10	5	22	141	127
Alabama§	2	1	7	48	47	26	18	52	418	375	5	1	15	49	28
Kentucky	—	0	2	8	11	5	9	32	200	265	—	1	6	19	25
Mississippi	—	0	1	1	—	—	19	65	428	409	1	0	12	13	10
Tennessee§	—	0	4	13	54	12	18	53	407	386	4	2	11	60	64
W.S. Central	—	6	54	53	442	135	126	515	2,427	2,626	1	8	151	155	129
Arkansas§	—	0	10	41	13	28	14	43	299	268	—	0	4	19	29
Louisiana	—	0	0	—	—	12	19	52	366	612	—	0	2	6	10
Oklahoma	—	0	30	12	8	22	11	95	234	236	1	1	55	18	11
Texas§	—	0	30	—	421	73	85	381	1,528	1,510	—	6	95	112	79
Mountain	2	0	5	9	31	38	47	113	1,159	1,404	10	11	33	251	280
Arizona	N	0	0	N	N	6	14	43	351	446	1	2	14	48	33
Colorado	—	0	0	—	—	15	10	24	283	307	5	3	21	66	112
Idaho§	1	0	2	1	2	5	3	9	85	85	3	3	7	50	27
Montana§	N	0	0	N	N	—	2	6	56	57	—	0	4	17	24
Nevada§	1	0	2	1	2	6	3	21	75	141	1	0	6	15	13
New Mexico§	—	0	2	4	9	1	6	19	120	148	—	1	6	18	17
Utah	—	0	3	3	2	—	6	17	155	192	—	1	8	27	42
Wyoming§	—	0	4	—	16	5	1	8	34	28	—	0	3	10	12
Pacific	—	2	15	13	95	93	103	288	2,487	3,121	9	12	46	254	273
Alaska	—	0	2	9	11	—	1	6	36	46	—	0	1	—	1
California	—	0	10	—	74	70	78	232	1,892	2,212	7	8	36	177	115
Hawaii	—	0	0	—	—	—	6	13	168	181	—	0	3	4	17
Oregon	—	0	2	4	10	—	7	20	115	326	—	2	11	20	41
Washington	—	0	14	—	—	23	13	42	276	356	2	2	20	53	99
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	6	—	0	0	—	—
Puerto Rico	—	0	6	21	27	—	6	25	100	307	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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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 23, 2011, and July 24, 2010 (29th week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF)†									
						Confirmed					Probable				
	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	156	259	742	5,464	7,569	3	2	12	70	79	20	23	245	585	687
New England	1	4	24	119	220	—	0	0	—	—	—	0	1	3	2
Connecticut	—	0	23	23	69	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	4	16	3	—	0	0	—	—	—	0	1	—	1
Massachusetts	1	2	13	73	132	—	0	0	—	—	—	0	1	1	—
New Hampshire	—	0	2	1	5	—	0	0	—	—	—	0	1	1	1
Rhode Island§	—	0	4	4	10	—	0	0	—	—	—	0	1	1	—
Vermont§	—	0	1	2	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	15	14	74	320	1,026	1	0	2	7	2	—	1	5	12	54
New Jersey	—	3	12	41	239	—	0	0	—	1	—	0	3	—	36
New York (Upstate)	14	3	18	111	99	1	0	0	1	1	—	0	3	2	4
New York City	—	4	14	113	180	—	0	0	—	—	—	0	2	5	7
Pennsylvania	1	4	56	55	508	—	0	2	6	—	—	0	2	5	7
E.N. Central	5	17	37	376	1,053	1	0	1	2	1	—	1	5	35	51
Illinois	—	5	20	79	646	—	0	1	—	—	—	0	2	16	24
Indiana§	—	1	4	32	34	—	0	0	—	1	—	0	3	14	15
Michigan	1	4	9	80	142	—	0	0	—	—	—	0	1	—	1
Ohio	4	5	27	185	182	1	0	1	2	—	—	0	2	5	8
Wisconsin	—	0	4	—	49	—	0	0	—	—	—	0	1	—	3
W.N. Central	—	13	41	187	1,555	—	0	5	11	7	6	4	24	156	141
Iowa	—	0	4	9	32	—	0	0	—	—	—	0	1	2	3
Kansas§	—	3	12	34	163	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	4	—	29	—	0	0	—	—	—	0	2	—	—
Missouri	—	7	29	135	1,306	—	0	3	8	5	6	4	24	153	136
Nebraska§	—	0	10	5	21	—	0	3	3	2	—	0	1	1	1
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota	—	0	2	4	4	—	0	0	—	—	—	0	0	—	—
S. Atlantic	70	67	133	2,036	1,144	1	1	6	39	51	6	6	59	163	183
Delaware§	—	0	1	1	35	—	0	1	1	1	—	0	4	11	11
District of Columbia	—	0	3	8	18	—	0	1	1	—	—	0	0	—	—
Florida§	58	37	99	1,477	438	—	0	1	3	2	—	0	2	4	7
Georgia	4	13	26	294	401	1	0	5	23	41	—	0	0	—	—
Maryland§	2	2	7	48	67	—	0	1	2	—	3	0	3	13	28
North Carolina	4	3	36	128	76	—	0	4	5	6	—	1	47	73	76
South Carolina§	1	1	5	28	42	—	0	1	3	—	—	0	2	11	7
Virginia§	1	2	8	48	66	—	0	2	1	1	3	2	12	49	54
West Virginia	—	0	66	4	1	—	0	0	—	—	—	0	1	2	—
E.S. Central	10	13	29	309	425	—	0	3	5	11	4	5	26	131	214
Alabama§	—	5	15	105	85	—	0	1	—	1	—	1	6	28	39
Kentucky	9	1	6	40	170	—	0	0	—	6	—	0	0	—	—
Mississippi	—	2	7	74	26	—	0	1	1	—	—	0	4	1	13
Tennessee§	1	4	14	90	144	—	0	2	4	4	4	4	20	102	162
W.S. Central	46	59	503	1,270	1,287	—	0	8	—	1	3	1	235	57	37
Arkansas§	4	2	7	37	26	—	0	2	—	—	2	0	28	48	12
Louisiana	—	5	14	110	142	—	0	0	—	—	—	0	1	2	1
Oklahoma	—	2	161	40	162	—	0	5	—	—	1	0	202	5	13
Texas§	42	48	338	1,083	957	—	0	1	—	1	—	0	5	2	11
Mountain	2	17	32	367	357	—	0	5	6	2	1	0	7	28	4
Arizona	1	7	19	113	191	—	0	4	6	—	—	0	7	21	—
Colorado§	—	2	7	43	48	—	0	1	—	—	—	0	1	2	—
Idaho§	—	0	3	12	15	—	0	0	—	—	—	0	1	1	1
Montana§	—	1	15	106	4	—	0	0	—	2	—	0	0	—	1
Nevada§	—	0	6	11	18	—	0	0	—	—	—	0	0	—	—
New Mexico§	1	3	10	56	60	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	25	21	—	0	0	—	—	—	0	1	—	1
Wyoming§	—	0	1	1	—	—	0	0	—	—	1	0	1	4	—
Pacific	7	23	63	480	502	—	0	2	—	4	—	0	0	—	1
Alaska	—	0	2	3	—	N	0	0	N	N	N	0	0	N	N
California	6	18	59	377	379	—	0	2	—	4	—	0	0	—	—
Hawaii	—	1	3	30	32	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	26	35	—	0	0	—	—	—	0	0	—	1
Washington	1	1	22	44	56	—	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	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
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† 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 23, 2011, and July 24, 2010 (29th week)*

Reporting area	*Streptococcus pneumoniae*,† invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	85	287	937	8,403	9,929	9	24	101	640	1,216	58	259	363	6,431	7,306
New England	3	11	79	358	571	—	1	5	28	73	—	8	19	212	261
Connecticut	—	0	49	94	236	—	0	3	6	21	—	1	8	32	50
Maine§	2	2	13	85	81	—	0	1	3	5	—	0	3	10	14
Massachusetts	—	0	3	21	52	—	0	3	8	36	—	5	14	129	164
New Hampshire	—	2	8	69	75	—	0	1	5	4	—	0	3	12	12
Rhode Island§	—	1	36	39	71	—	0	3	1	4	—	0	7	24	19
Vermont§	1	1	6	50	56	—	0	2	5	3	—	0	2	5	2
Mid. Atlantic	1	23	81	601	1,025	1	3	27	80	156	9	31	46	767	934
New Jersey	—	6	29	131	458	—	1	4	26	39	—	4	10	103	133
New York (Upstate)	1	2	10	57	103	1	1	9	32	79	3	3	20	101	71
New York City	—	14	42	413	464	—	0	14	22	38	2	15	31	373	521
Pennsylvania	N	0	0	N	N	N	0	0	N	N	4	7	13	190	209
E.N. Central	12	65	110	1,950	2,016	1	4	10	112	179	2	31	56	754	1,086
Illinois	N	0	0	N	N	N	0	0	N	N	—	14	23	310	526
Indiana	—	15	32	407	454	—	1	4	19	36	1	3	14	90	90
Michigan	1	15	29	440	462	1	1	4	25	56	—	4	10	112	152
Ohio	10	26	45	816	784	—	2	7	56	61	1	9	21	217	289
Wisconsin	1	9	24	287	316	—	0	3	12	26	—	1	4	25	29
W.N. Central	—	5	35	93	520	—	0	5	4	70	—	7	18	148	169
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	2	12	13
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	9	10
Minnesota	—	0	24	—	391	—	0	5	—	57	—	3	10	56	59
Missouri	N	0	0	N	N	N	0	0	N	N	—	2	9	66	82
Nebraska§	—	2	9	75	88	—	0	1	4	11	—	0	2	5	5
North Dakota	—	0	18	18	41	—	0	1	—	2	—	0	1	—	—
South Dakota	N	0	0	N	N	N	0	0	N	N	—	0	1	—	—
S. Atlantic	32	71	170	2,353	2,685	4	7	22	174	336	26	64	178	1,654	1,649
Delaware	—	1	6	33	23	—	0	1	—	—	—	0	4	12	4
District of Columbia	—	1	3	28	52	—	0	1	4	7	3	3	8	106	77
Florida	6	23	68	902	1,000	—	3	13	80	133	—	23	44	593	592
Georgia	3	20	54	603	849	—	2	7	43	103	2	11	130	268	345
Maryland§	—	9	32	338	343	—	1	4	20	39	6	8	17	230	149
North Carolina	N	0	0	N	N	N	0	0	N	N	9	7	19	204	249
South Carolina§	3	8	25	304	342	—	1	3	18	39	5	4	10	118	74
Virginia§	N	0	0	N	N	N	0	0	N	N	1	4	16	121	156
West Virginia	20	0	48	145	76	4	0	6	9	15	—	0	2	2	3
E.S. Central	7	19	36	593	680	—	1	4	37	65	1	15	34	376	486
Alabama§	N	0	0	N	N	N	0	0	N	N	—	4	11	101	138
Kentucky	N	0	0	N	N	N	0	0	N	N	1	2	16	59	74
Mississippi	N	0	0	N	N	N	0	0	N	N	—	3	16	77	116
Tennessee§	7	19	36	593	680	—	1	4	37	65	—	5	11	139	158
W.S. Central	16	31	368	1,193	1,199	2	4	30	109	160	8	35	71	892	1,096
Arkansas§	1	3	26	149	115	—	0	3	12	11	5	3	10	106	139
Louisiana	—	3	11	107	64	—	0	2	9	16	3	7	36	190	222
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	6	26	55
Texas§	15	26	333	937	1,020	2	3	27	88	133	—	23	33	570	680
Mountain	14	32	72	1,160	1,164	1	3	8	88	161	1	12	23	284	324
Arizona	6	11	45	548	572	—	1	5	40	76	—	4	9	101	121
Colorado	8	11	23	360	340	1	1	4	26	46	—	2	8	61	72
Idaho§	N	0	0	N	N	N	0	0	N	N	1	0	2	5	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	—	3	9	77	55
New Mexico§	—	3	13	159	110	—	0	2	10	13	—	1	4	32	25
Utah	—	3	8	74	132	—	0	3	12	24	—	0	4	5	47
Wyoming§	—	0	15	19	10	—	0	1	—	2	—	0	0	—	—
Pacific	—	3	11	102	69	—	0	2	8	16	11	51	66	1,344	1,301
Alaska	—	2	11	101	69	—	0	2	8	16	—	0	1	1	3
California	N	0	0	N	N	N	0	0	N	N	5	42	57	1,114	1,104
Hawaii	—	0	3	1	—	—	0	0	—	—	—	0	5	7	23
Oregon	N	0	0	N	N	N	0	0	N	N	1	1	7	47	32
Washington	N	0	0	N	N	N	0	0	N	N	5	6	13	175	139
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	4	13	134	129
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† 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 23, 2011, and July 24, 2010 (29th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	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	74	257	367	6,838	9,530	—	0	71	6	67	—	0	53	6	81
New England	3	21	46	632	657	—	0	3	—	—	—	0	2	—	1
Connecticut	—	5	16	149	200	—	0	2	—	—	—	0	2	—	1
Maine¶	3	5	16	135	114	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	6	18	257	179	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	1	9	9	81	—	0	1	—	—	—	0	0	—	—
Rhode Island¶	—	0	5	18	18	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	2	10	64	65	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	26	32	61	1,083	1,047	—	0	19	—	4	—	0	13	—	4
New Jersey	18	9	50	527	382	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	3	—	0	7	—	4
New York City	—	0	0	—	—	—	0	7	—	1	—	0	4	—	—
Pennsylvania	8	18	41	556	665	—	0	3	—	—	—	0	3	—	—
E.N. Central	11	68	118	1,738	3,164	—	0	15	—	1	—	0	7	—	2
Illinois	—	17	31	439	792	—	0	10	—	—	—	0	4	—	—
Indiana¶	2	4	18	134	235	—	0	2	—	—	—	0	2	—	1
Michigan	5	20	38	566	966	—	0	6	—	—	—	0	1	—	—
Ohio	4	20	58	598	843	—	0	1	—	1	—	0	1	—	—
Wisconsin	—	0	22	1	328	—	0	0	—	—	—	0	1	—	1
W.N. Central	—	12	42	211	501	—	0	7	1	1	—	0	11	—	20
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas¶	—	4	15	66	219	—	0	1	—	—	—	0	3	—	4
Minnesota	—	0	0	—	—	—	0	1	—	1	—	0	3	—	—
Missouri	—	5	24	100	230	—	0	1	—	—	—	0	0	—	—
Nebraska¶	—	0	5	3	6	—	0	3	—	—	—	0	7	—	7
North Dakota	—	0	10	23	29	—	0	2	—	—	—	0	2	—	3
South Dakota	—	1	7	19	17	—	0	2	1	—	—	0	3	—	6
S. Atlantic	12	36	64	1,105	1,381	—	0	6	1	5	—	0	4	1	3
Delaware¶	—	0	3	6	20	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	12	15	—	0	1	—	—	—	0	1	—	—
Florida¶	8	15	38	539	679	—	0	3	—	2	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	1	—	0	3	1	3
Maryland¶	N	0	0	N	N	—	0	3	—	1	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina¶	—	0	8	11	74	—	0	1	—	—	—	0	0	—	—
Virginia¶	1	8	25	258	325	—	0	1	1	1	—	0	1	—	—
West Virginia	3	8	32	279	268	—	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	16	44	258	1,437	1,821	—	0	16	1	7	—	0	3	1	4
Arkansas¶	1	3	17	122	129	—	0	3	—	—	—	0	1	—	—
Louisiana	—	2	5	48	48	—	0	3	—	4	—	0	1	—	1
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas¶	15	38	247	1,267	1,644	—	0	15	1	3	—	0	2	1	3
Mountain	6	13	50	401	702	—	0	18	2	36	—	0	15	3	36
Arizona	—	0	0	—	—	—	0	13	2	35	—	0	6	2	23
Colorado¶	5	4	31	155	252	—	0	5	—	1	—	0	11	—	11
Idaho¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana¶	1	2	28	99	149	—	0	0	—	—	—	0	0	—	—
Nevada¶	N	0	0	N	N	—	0	0	—	—	—	0	1	—	1
New Mexico¶	—	1	8	23	69	—	0	6	—	—	—	0	2	—	—
Utah	—	4	26	117	219	—	0	1	—	—	—	0	1	—	—
Wyoming¶	—	0	3	7	13	—	0	1	—	—	—	0	1	1	1
Pacific	—	2	6	64	72	—	0	8	1	11	—	0	6	—	10
Alaska	—	1	4	30	28	—	0	0	—	—	—	0	0	—	—
California	—	0	3	7	22	—	0	8	1	11	—	0	6	—	10
Hawaii	—	1	4	27	22	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	17	—	0	0	—	—	—	0	0	—	—
Puerto Rico	1	7	21	100	380	—	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 23, 2011 (29th week)

Reporting area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
New England	518	355	116	27	10	10	50
Boston, MA	138	93	35	6	1	3	13
Bridgeport, CT	33	23	8	2	—	—	2
Cambridge, MA	12	6	5	1	—	—	2
Fall River, MA	16	12	2	2	—	—	1
Hartford, CT	43	28	8	3	3	1	8
Lowell, MA	16	13	3	—	—	—	2
Lynn, MA	11	6	3	2	—	—	—
New Bedford, MA	31	23	6	2	—	—	2
New Haven, CT	37	23	8	4	—	2	6
Providence, RI	60	42	12	1	2	3	5
Somerville, MA	1	—	1	—	—	—	—
Springfield, MA	32	19	11	—	2	—	2
Waterbury, CT	21	17	2	2	—	—	2
Worcester, MA	67	50	12	2	2	1	5
Mid. Atlantic	2,102	1,434	477	103	53	34	83
Albany, NY	44	25	11	2	1	5	3
Allentown, PA	25	20	4	—	1	—	3
Buffalo, NY	65	44	16	3	1	1	5
Camden, NJ	26	13	10	2	—	1	3
Elizabeth, NJ	3	1	2	—	—	—	—
Erie, PA	56	39	16	—	1	—	5
Jersey City, NJ	11	8	3	—	—	—	—
New York City, NY	978	696	207	48	19	7	35
Newark, NJ	35	16	13	2	4	—	1
Paterson, NJ	25	14	6	4	1	—	2
Philadelphia, PA	527	341	121	31	21	13	14
Pittsburgh, PA§	45	27	18	—	—	—	2
Reading, PA	31	26	4	—	—	1	1
Rochester, NY	72	48	15	3	1	5	1
Schenectady, NY	22	16	5	—	1	—	—
Scranton, PA	13	8	5	—	—	—	3
Syracuse, NY	66	52	10	3	1	—	2
Trenton, NJ	25	15	7	1	1	1	—
Utica, NY	15	11	2	2	—	—	3
Yonkers, NY	18	14	2	2	—	—	—
E.N. Central	1,905	1,287	440	105	41	32	119
Akron, OH	43	30	10	2	—	1	6
Canton, OH	43	27	13	1	1	1	4
Chicago, IL	230	164	43	13	6	4	17
Cincinnati, OH	105	69	23	2	6	5	2
Cleveland, OH	266	191	61	11	2	1	12
Columbus, OH	156	93	45	10	4	4	11
Dayton, OH	117	87	23	5	1	1	12
Detroit, MI	154	84	45	14	8	3	4
Evansville, IN	44	35	7	—	2	—	3
Fort Wayne, IN	75	55	14	6	—	—	2
Gary, IN	13	7	5	1	—	—	—
Grand Rapids, MI	43	32	9	1	1	—	2
Indianapolis, IN	192	116	52	15	5	4	16
Lansing, MI	49	37	10	2	—	—	3
Milwaukee, WI	114	70	29	13	2	—	9
Peoria, IL	40	27	9	1	—	3	1
Rockford, IL	53	40	8	3	1	1	3
South Bend, IN	42	34	7	1	—	—	1
Toledo, OH	76	52	16	4	1	3	5
Youngstown, OH	50	37	11	—	1	1	6
W.N. Central	644	382	185	38	19	19	47
Des Moines, IA	62	45	15	—	—	2	6
Duluth, MN	32	24	7	1	—	—	4
Kansas City, KS	31	23	6	2	—	—	—
Kansas City, MO	86	55	26	1	2	2	2
Lincoln, NE	37	25	10	1	—	1	2
Minneapolis, MN	63	37	16	4	4	2	7
Omaha, NE	98	63	31	2	—	2	15
St. Louis, MO	106	43	35	13	10	4	3
St. Paul, MN	66	32	21	7	3	3	4
Wichita, KS	63	35	18	7	—	3	4
S. Atlantic	1,273	770	310	112	54	27	79
Atlanta, GA	157	94	41	18	4	—	10
Baltimore, MD	149	82	42	12	6	7	14
Charlotte, NC	116	67	22	18	5	4	9
Jacksonville, FL	141	78	36	11	12	4	13
Miami, FL	133	87	30	8	6	2	5
Norfolk, VA	39	24	10	2	2	1	—
Richmond, VA	80	52	20	4	4	—	5
Savannah, GA	61	33	22	5	—	1	4
St. Petersburg, FL	49	34	9	4	1	1	2
Tampa, FL	235	151	58	18	4	4	9
Washington, D.C.	103	60	18	12	10	3	3
Wilmington, DE	10	8	2	—	—	—	5
E.S. Central	905	584	238	49	18	15	71
Birmingham, AL	128	89	29	4	2	3	10
Chattanooga, TN	85	61	18	3	1	2	2
Knoxville, TN	120	83	29	5	1	2	11
Lexington, KY	78	54	17	5	1	1	2
Memphis, TN	197	129	51	11	5	1	18
Mobile, AL	106	60	34	4	6	2	8
Montgomery, AL	33	30	2	—	—	1	4
Nashville, TN	158	78	58	17	2	3	16
W.S. Central	1,232	771	319	80	41	20	77
Austin, TX	88	58	25	2	2	1	6
Baton Rouge, LA	62	46	9	5	2	—	—
Corpus Christi, TX	85	52	28	4	1	—	6
Dallas, TX	191	103	57	18	10	3	4
El Paso, TX	90	58	22	5	4	1	6
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	229	141	64	9	9	6	20
Little Rock, AR	61	36	15	6	2	2	—
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	235	145	59	17	8	5	15
Shreveport, LA	68	50	12	4	—	2	7
Tulsa, OK	123	82	28	10	3	—	13
Mountain	960	628	225	64	18	25	56
Albuquerque, NM	93	59	24	9	—	1	8
Boise, ID	68	48	14	2	—	4	3
Colorado Springs, CO	59	35	12	8	1	3	—
Denver, CO	75	32	29	10	2	2	3
Las Vegas, NV	288	202	65	12	7	2	17
Ogden, UT	30	23	5	1	1	—	4
Phoenix, AZ	168	107	40	9	3	9	7
Pueblo, CO	49	32	13	4	—	—	3
Salt Lake City, UT	130	90	23	9	4	4	11
Tucson, AZ	U	U	U	U	U	U	U
Pacific	1,703	1,144	403	86	44	26	141
Berkeley, CA	16	10	5	1	—	—	1
Fresno, CA	126	78	35	6	4	3	9
Glendale, CA	31	21	6	4	—	—	7
Honolulu, HI	80	59	13	5	3	—	5
Long Beach, CA	70	49	16	1	4	—	9
Los Angeles, CA	269	176	63	18	5	7	28
Pasadena, CA	30	18	7	1	—	4	1
Portland, OR	135	88	34	5	6	2	11
Sacramento, CA	179	122	40	10	6	1	14
San Diego, CA	150	109	30	7	1	3	12
San Francisco, CA	102	74	19	5	3	1	8
San Jose, CA	182	121	50	6	3	2	13
Santa Cruz, CA	30	15	8	3	3	1	3
Seattle, WA	112	72	31	6	3	—	4
Spokane, WA	63	47	14	1	—	1	5
Tacoma, WA	128	85	32	7	3	1	11
Total¶	**11,242**	**7,355**	**2,713**	**664**	**298**	**208**	**723**

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.

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