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Carbon Monoxide Exposures After Hurricane Ike – Texas, September 2008

During power outages after hurricanes, survivors can be at risk for carbon monoxide (CO) poisoning if they use portable generators improperly (1). On September 13, 2008, Hurricane Ike struck the coast of Texas, leaving approximately 2.3 million households in the southeastern portion of the state without electricity (2). Six days later, 1.3 million homes were still without electrical power (2). To assess the impact of storm-related CO exposures and to enhance prevention efforts, CDC analyzed data from five disparate surveillance sources on CO exposures reported during September 13–26 in counties of southeast Texas that were declared disaster areas by the federal government. This report describes the results of that analysis, which indicated that one data source, Texas poison centers, received reports of 54 persons with storm-related CO exposures during the surveillance period. Another data source, the Undersea and Hyperbaric Medical Society (UHMS) hyperbaric oxygen treatment database, reported that 15 persons received hyperbaric oxygen treatment for storm-related CO poisoning. Medical examiners, public health officials, and hospitals in Texas reported that seven persons died from storm-related CO poisoning. Among the data sources, the percentage of reported storm-related CO exposures caused by improper generator use ranged from 82% to 87%. These findings underscore the need for effective prevention messages during storm preparation, warnings, and response periods regarding the correct use of generators and the installation and maintenance of battery-powered CO detectors.

For this analysis, a storm-related CO exposure was defined as evidence of inhalation of CO (e.g., self-reported activation of a CO detector) that was related to the storm. Storm-related CO poisoning was defined as storm-related inhalation of CO that resulted in symptoms of CO poisoning. Only poison center

calls and deaths associated with CO exposures deemed to be unintentional were included in this analysis. CDC obtained surveillance data from five different sources: 1) the National Poison Data System (NPDS); 2) the Texas Poison Center Network (TPCN), operated by the Texas Department of State Health Services (TDSHS); 3) the TDSHS disaster mortality surveillance system; 4) the UHMS hyperbaric oxygen treatment database*; and 5) CDC's BioSense system.†

NPDS and TDSHS provided CDC with information on all storm-related CO-related calls to poison centers during the surveillance period originating from Texas counties that were declared federal disaster areas. All 61 poison centers in the United States upload call data, including demographic and symptom information, to NPDS; the six poison centers in Texas simultaneously submit similar data to TDSHS via TPCN (3). For each call, poison center staff members determined the number of CO-exposed or CO-poisoned persons described by the caller. Data on CO-related calls provided by NPDS and TPCN were matched to avoid duplication. However, cases

* Additional information available at <http://www.uhms.org/cdc/tabid/418/default.aspx>.

† Additional information available at <http://www.cdc.gov/biosense>.

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reported by poison centers could not be reconciled with cases from the other data sources because some poison center calls lacked identifying information.

In addition to providing poison center call data, TDSHS also provided CDC with information on storm-related deaths with CO exposure listed as the cause of death. Mortality data came from medical examiners, public health officials, and hospitals for deaths in persons residing in counties in the disaster area.

UHMS maintains a national online reporting system in collaboration with CDC. This system collects information on hyperbaric oxygen treatments administered for severe CO poisonings. Participating UHMS physicians enter patient demographic and clinical data for those receiving treatment for CO poisoning in their hyperbaric facilities.

Reports from BioSense, a CDC-sponsored and maintained automated surveillance system that receives data from approximately 590 civilian hospitals in the United States (4), included free-text, patient-reported chief complaint data and *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) diagnosis codes from emergency departments of the seven participating hospitals in southeast Texas. Visits were included if “carbon monoxide exposure” or “carbon monoxide poisoning” was listed as the chief complaint and/or ICD-9-CM code 986 was listed as either a working or a final diagnosis. For UHMS and Biosense, because no data were provided on the address of the patient, residency was determined using the location of the health-care facility.[§]

Poison Center Calls

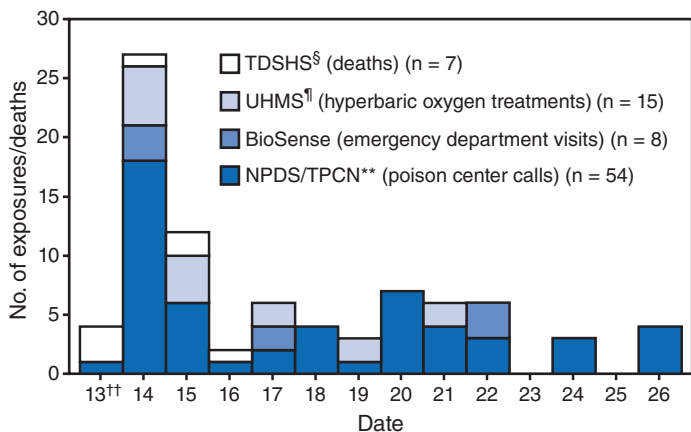
Calls to poison centers regarding 54 storm-related CO exposures were reported to CDC during September 13–26 (Figure). The median age of the exposed persons was 24 years (range: 1 month–71 years), and most (64.8%) were women (Table). Headache (63%), nausea (44%), and vomiting (28%) were the most commonly reported symptoms. Twenty-seven patients were treated in a health-care facility, of whom 25 (93%) were treated and released; two (7%) were hospitalized. Generators were the source of CO exposure in 82% of cases. Most (93%) of the exposures occurred in a residential setting; four (7%) exposures occurred at a workplace.

Hyperbaric Oxygen Treatments

UHMS data indicated that 15 persons were treated for severe, storm-related CO poisoning at one hyperbaric oxygen treatment facility in the disaster area during September 13–26 (Figure). Additional cases were identified by those persons

[§] Chief complaints could include “carbon monoxide,” “CO exp,” “CO intox,” “CO poisoning,” “CO₂ poisoning,” “CO poisoning,” “exposicion a monoxido de carbono,” “monoxido de carbono,” and “O₂ poisoning.”

FIGURE. Number of storm-related carbon monoxide exposures/deaths after Hurricane Ike, by date and data source† — Texas, September 13–26, 2008



* A storm-related CO exposure was defined as evidence of inhalation of CO (e.g., self-reported activation of a CO detector) that was related to the storm. Storm-related CO poisoning was defined as storm-related inhalation of CO that resulted in symptoms of CO poisoning. Only poison center calls and deaths associated with CO exposures deemed to be unintentional were included in this analysis.

† Counts should not be summed because poison center cases could not be reconciled with those from other data sources.

§ Texas Department of State Health Services.

†† Undersea and Hyperbaric Medical Society.

** NPDS and TDSHS provided CDC with information on all storm-related CO-related calls to poison centers during the surveillance period originating from Texas counties that were declared federal disaster areas.

†† Hurricane Ike made landfall.

undergoing treatment but are not described in this report. Thirteen CO poisonings were caused by gasoline-powered generators, and two were caused by house fires. The median age of patients was 49 years (range: 1–86 years), and eight were women (Table). The mean carboxyhemoglobin measurement was 18% (range: 7%–40%). Three of the persons treated with hyperbaric oxygen were treated and released, seven were hospitalized, and five had an unknown outcome. Generators were the source of CO exposure in 13 cases. Thirteen patients were exposed to CO in a residential setting.

Emergency Department Visits

Among the seven participating hospitals in the disaster area, BioSense reported that eight persons made emergency department visits to four health-care facilities with a chief complaint or final diagnosis of CO poisoning (Figure). The median age of the patients was 57 years (range: 17–72 years), and five of them were female. The symptoms most frequently reported were headache (four patients) and nausea (four patients). Three of the eight patients were admitted to the hospital.

Deaths

During the surveillance period, TDSHS received reports from medical examiners, public health officials, and hospitals of seven deaths in the disaster area caused by storm-related CO poisoning (Figure). Among those seven decedents, the median age was 32 years (range: 4–76 years). Six of the decedents were male, and five were of Hispanic ethnicity (Table). The source of exposure for six of the deaths was a generator placed inside the home or garage. All of the poisonings occurred in residential settings, and all occurred within 4 days after Hurricane Ike.

Reported by: *N Hampson, MD, S Dunn, Center for Hyperbaric Medicine, Virginia Mason Medical Center, Seattle, Washington. A Bronstein, MD, American Assoc of Poison Control Centers, Alexandria, Virginia. C Fife, MD, Memorial Hermann-Texas Medical Center, Houston; J Villanacci, PhD, D Zane, MS, M Forrester, J Hellsten, PhD, R Beal, MPH, C Beasley, MS, Texas Dept of State Health Svcs. J Clower, MPH, F Yip, PhD, S Iqbal, PhD, C Martin, MSPH, C Cooper, A Wolkin, MSPH, Div of Environmental Hazards and Health Effects, National Center for Environmental Health; M Podgornik, MPH, J Tokars, MD, S Benoit, MD, Div of Emergency Preparedness and Response, National Center for Public Health Informatics, CDC.*

Editorial Note: Even when placed outdoors or in well-ventilated areas, generators can be a dangerous source of CO. After Hurricane Katrina in 2005, 50 (98%) of the 51 reported CO-poisoning cases involved generator use (5). The analysis in this report indicates that CO exposure also was an important source of morbidity and mortality after Hurricane Ike. Most of the exposures occurred within 2 days after the storm, likely because of widespread power outages and increased generator usage (1). Improper generator use, including placement inside residential settings, was the primary cause for these reported CO exposures. These findings emphasize the need for effective, storm-related prevention messages concerning proper generator use, and underscore the need for ongoing prevention messages regarding the installation and maintenance of battery-powered CO detectors in homes.

In post-disaster situations, prevalence estimates of household generator usage have ranged from 18% to 31% (6,7), indicating that a substantial number of persons affected by a storm could be at risk for CO exposure. Previous studies have shown that, in nondisaster situations, children are disproportionately affected by CO poisonings that result in emergency department visits. Women often make up the majority of persons exposed to CO, whereas men make up the majority of deaths (8,9). Increased rates of CO toxicity in men have been attributed to engagement in high-risk activities, such as fuel-burning tool and equipment use (9). The results described in this report indicate that, of storm-related CO exposures reported to poison centers in counties of southeast Texas that were declared disaster areas, approximately one third were in persons aged <1–17 years. Additionally, most CO exposures reported by

TABLE. Number and percentage of storm-related carbon monoxide exposures/deaths* after Hurricane Ike, by data source† and selected characteristics — Texas, September 13–26, 2008

Characteristic	NPDS/TPCN§ (poison center calls) (n = 54)		UHMS¶ (hyperbaric oxygen treatments) (n = 15)		BioSense (emergency department visits) (n = 8)		TDSHS** (deaths) (n = 7)	
	No.	(%)††	No.	(%)	No.	(%)	No.	(%)
Age of patient (yrs)								
0–17	18	(33)	3	(20)	1	(13)	1	(14)
18–44	15	(28)	3	(20)	2	(25)	5	(71)
45–64	11	(20)	3	(20)	3	(38)	1	(14)
>64	5	(9)	5	(33)	2	(25)	0	(0)
Unknown	5	(9)	1	(7)	0	(0)	0	(0)
Sex								
Men	17	(32)	7	(47)	3	(38)	6	(86)
Women	35	(65)	8	(53)	5	(63)	1	(14)
Unknown	2	(4)	0	(0)	0	(0)	0	(0)
Race								
Black	—§§		5	(33)	—		0	(0)
White	—		10	(67)	—		3	(43)
Unknown	—		0	(0)	—		4	(57)
Ethnicity								
Hispanic	—		3	(20)	—		5	(71)
Non-Hispanic	—		12	(80)	—		2	(29)
Primary language								
English	—		11	(73)	—		—	
Spanish	—		2	(13)	—		—	
Unknown	—		2	(13)	—		—	
Exposure source								
Generator	44	(82)	13	(87)	—		6	(86)
Fire	1	(2)	2	(13)	—		0	(0)
Vehicle exhaust	3	(6)	0	(0)	—		0	(0)
Other	1	(2)	0	(0)	—		0	(0)
Unknown	5	(9)	0	(0)	—		1	(14)
Exposure location								
Residential	50	(93)	13	(87)	—		7	(100)
Occupational	4	(7)	0	(0)	—		0	(0)
Other	0	(0)	2	(13)	—		0	(0)
Outcome								
Hospitalized	2	(4)	7	(47)	3	(38)	—	
Treated and released	25	(46)	3	(20)	5	(63)	—	
Onsite care¶¶	19	(35)	—		—		—	
Other	2	(4)	—		—		—	
Unknown	6	(11)	5	(33)	0	(0)	—	

* A storm-related CO exposure was defined as evidence of inhalation of CO (e.g., self-reported activation of a CO detector) that was related to the storm. Storm-related CO poisoning was defined as storm-related inhalation of CO that resulted in symptoms of CO poisoning. Only poison center calls and deaths associated with CO exposures deemed to be unintentional were included in this analysis.

† Counts should not be summed because poison center cases could not be reconciled with those from other data sources.

§ NPDS and TDSHS provided CDC with information on all storm-related CO-related calls to poison centers during the surveillance period originating from Texas counties that were declared federal disaster areas.

¶ Undersea and Hyperbaric Medical Society.

** Texas Department of State Health Services.

†† Percentages might not sum to 100% because of rounding.

§§ Data not collected.

¶¶ Person did not require transport to a medical facility for treatment.

poison centers, BioSense, and UHMS occurred among women (65%, 63%, and 53%, respectively).

These CO exposures occurred despite efforts to warn the public of CO-related hazards. TDSHS issued statewide press releases on CO poisoning and prevention within 1 day of hurricane landfall and again on day 3, and public health workers distributed CO-poisoning prevention materials at ice and water distribution locations. Public health officials in Houston distributed prevention materials to residents and evacuees returning to their homes, and during door-to-door community health assessments and, along with the Harris County Medical Examiner Office, produced a press release in both English and Spanish to warn residents about indoor generator placement. In addition, public health officials in Galveston distributed approximately 6,000 flyers containing CO-poisoning and prevention information.

The findings in this report are subject to at least three limitations. First, although CDC was able to match cases from mortality, emergency department, and hyperbaric oxygen treatment facility data sources, cases reported by poison centers could not be matched with those from other data sources because some poison center data were missing identifying information. This might have resulted in some duplication of cases. Second, estimates of nonfatal CO exposures in this report are likely underestimations of the overall number of CO exposures after Hurricane Ike; presumably, not all exposed persons contacted poison centers or sought treatment. Finally, data could be obtained for fewer than half of the patients receiving hyperbaric oxygen treatment.

CO exposure is preventable, yet it continues to pose a substantial public health problem in the wake of hurricanes. The public, especially those in the path of an impending storm, should be reminded that 1) installation of a battery-operated CO detector outside each sleeping area in the home and routine battery changes can save lives, and 2) generators should never be operated in a basement or garage and should be placed as far away from the home as possible. These surveillance results, in addition to results from previous post-disaster situations, can help in the development of public health interventions during storm preparation, warnings, and response periods.

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Svcs; and T Bayleyegn MD, National Center for Environmental Health, CDC.

References

1. Hampson NB, Stock AL. Storm-related carbon monoxide poisoning: lessons learned from recent epidemics. *Undersea Hyperb Med* 2006;33:257–63.
2. CenterPoint Energy. CenterPoint Energy concludes emergency operations. October 2, 2008. Available at <http://www.centerpointenergy.com/newsroom/newsreleases/1e107fbef1bbc110VgnVCM1000005a1a0d0aR.CRD>.
3. CDC. Using the National Poisoning Data System for public health surveillance. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at <http://www.cdc.gov/nceh/hsb/chemicals/pdfs/nps.pdf>.
4. CDC. BioSense for public health departments. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at <http://www.cdc.gov/biosense/publichealth.htm>.
5. CDC. Carbon monoxide poisoning after Hurricane Katrina—Alabama, Louisiana, and Mississippi, August–September 2005. *MMWR* 2005;54:996–8.
6. Daley WR, Smith A, Paz-Argandona E, Malilay J, McGeehin M. An outbreak of carbon monoxide poisoning after a major ice storm in Maine. *J Emerg Med* 2000;18:87–93.
7. CDC. Epidemiologic assessment of the impact of four hurricanes—Florida, 2004. *MMWR* 2005;54:693–7.
8. CDC. Nonfatal, unintentional, non-fire related, carbon monoxide exposures—United States, 2004–2006. *MMWR* 2008;57:896–9.
9. CDC. Carbon monoxide related deaths—United States, 1999–2004. *MMWR* 2007;56:1309–12.

Pseudo-Outbreak of Legionnaires Disease Among Patients Undergoing Bronchoscopy — Arizona, 2008

Legionnaires disease (LD) is a potentially fatal form of pneumonia acquired by inhalation of aerosolized water containing *Legionella* bacteria. *Legionella* is a common cause of health-care-associated pneumonia, particularly in settings with hematopoietic stem-cell or solid-organ transplant recipients (1). On July 25, 2008, the Arizona Department of Health Services (ADHS) notified CDC of four patients who had *Legionella* cultured from specimens obtained during bronchoscopies performed at a medical center in Arizona. To characterize transmission and identify the source, ADHS and CDC began an investigation on August 1. This report summarizes the results of that investigation, which determined that the patients did not have LD and that nonsterile ice used to cool saline-filled syringes for bronchoalveolar lavage was the likely source of *Legionella* contamination of these clinical specimens. Ice was supplied by two ice machines, which became contaminated by heavy *Legionella* colonization within the center's potable water supply during a 6-month period (February–July 2008).

Findings from the investigation underscore the importance of adherence to recommended infection control practices and surveillance for LD in health-care settings. Clinicians and endoscopy technicians should ensure that nonsterile items are not introduced during bronchoscopy procedures.

In May 2006, a hematopoietic stem-cell transplant patient at the medical center contracted LD, which was attributed to *Legionella* contamination of the center's potable water. After that incident was identified, the medical center began conducting routine clinical and environmental surveillance. Clinical surveillance included collection of respiratory specimens for *Legionella* culture during every bronchoscopy conducted at the center. Environmental surveillance included conducting routine cultures from samples of the center's potable water supply, in accordance with CDC guidelines (2). Specifically, semiannual testing was conducted in areas where oncology patients and hematopoietic stem-cell or solid-organ transplant recipients received care. Finally, to augment the routine chlorine disinfection of its water supply, a copper-silver ionization system was installed in August 2006.

The four apparent cases of LD occurred among patients who received bronchoscopy services at an endoscopy suite within the medical center. In the 12 months before the first patient's bronchoscopy on June 4, 2008, approximately 4,900 endoscopies had been performed in the suite, including 500 bronchoscopies. On July 21, 2008, as part of the clinical surveillance, the medical center's laboratory director reported to ADHS a cluster of four patients who had *Legionella* isolated from specimens obtained during bronchoscopies. ADHS notified CDC of the four apparent cases of LD on July 25, and the investigation began on August 1 (Figure). Investigators queried electronic laboratory records for *Legionella*-positive cultures from respiratory specimens collected at the medical center during January 2007–December 2008 to determine if additional unrecognized cases associated with bronchoscopies performed in the suite had occurred. No additional cases were identified. Investigators reviewed the medical records (i.e., demographic and clinical information, including microbiological testing, diagnostic imaging, and treatment) of the four patients to determine if they had clinical courses consistent with LD.

An environmental investigation also was conducted. Investigators reviewed test results from samples obtained during routine semiannual environmental surveillance from February and July to characterize the extent of *Legionella* contamination in the center's potable water supply. Additional environmental testing was conducted by sampling potable water to determine chlorine levels and identify sources of *Legionella* contamination where patient exposures might have occurred.

Clinical and Epidemiologic Investigation

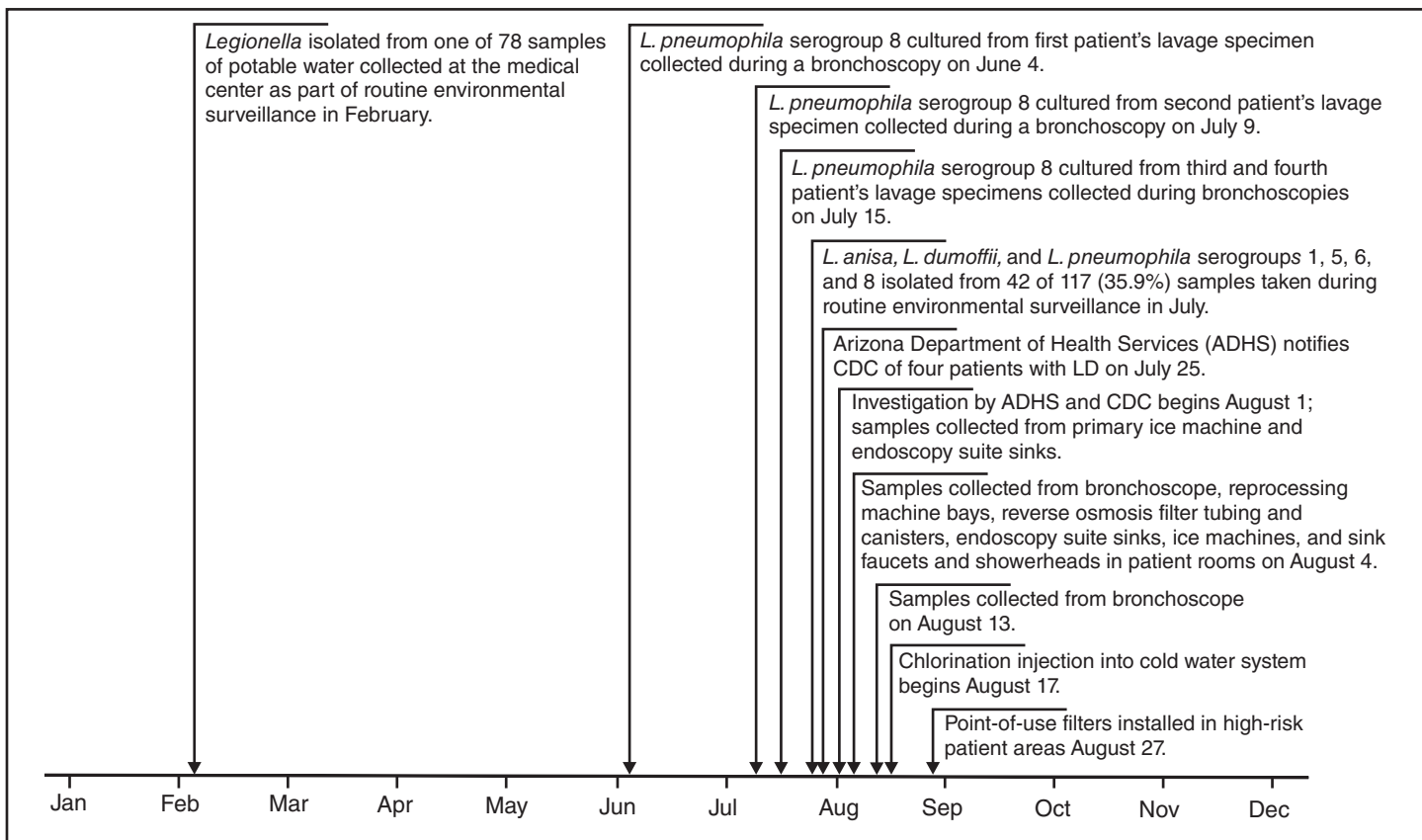
The diagnosis of LD in the four patients was based on isolation of *Legionella pneumophila* from lavage specimens that had been collected as part of routine *Legionella* surveillance (Table 1). None of the patients had urine antigen or serologic testing for LD. All patients had undergone bronchoscopy using the same bronchoscope, and all received care at the medical center during May 31–July 31, 2008. None of the four patients had experienced fever or had a clinical course consistent with LD. Patients 1 and 3 had multiple organisms (methicillin-resistant *Staphylococcus aureus*, viridans group *Streptococcus*, or yeast) isolated from their lavage specimens, suggesting specimen contamination. Patient 2 had received empirical antimicrobial therapy for community-acquired pneumonia. Patients 1 and 3 had received levofloxacin specifically for LD; therapy was provided either because the patients had pulmonary abnormalities attributed to LD after *Legionella* was isolated or because a conservative therapeutic approach was elected because of the potential severity of LD, even if the disease was considered unlikely. The three hospitalized patients recovered from their underlying conditions. Patient 4 received outpatient services only and was not subsequently admitted to the center's health-care system nor did ADHS receive notification that he had received a diagnosis of LD at another health facility.

Environmental Investigation

Investigators believed bronchoscopy procedures were the most likely source of contamination and focused their investigation on bronchoscopy procedures and sterilization. In early July 2008, endoscopy technicians at the center began using cold saline flushes for bleeding control among patients undergoing bronchoalveolar lavage. One endoscopy technician reported using nonsterile ice to cool saline flushes in prefilled syringes. Ice for cooling was obtained from a primary ice machine in a nearby nursing station or from a back-up ice machine in a room used to prepare food and beverages. The ice was placed in a 16-ounce plastic tray. Although the tip of the prefilled saline syringe was placed directly into the ice bath, whether the tip was capped or uncapped could not be determined. Investigators identified no other source of nonsterile water used during bronchoscopies, or other pertinent breaches in infection control practices or bronchoscope sterilization or reprocessing.

To identify the specific contamination source, investigators collected biofilm swabs and 1-liter bulk water samples according to published procedures (3). During the investigation, environmental samples were taken from the bronchoscope, sink faucets in the endoscopy processing room, bays in the

FIGURE. Timeline of events preceding and during an investigation of a pseudo-outbreak of Legionnaires disease (LD) among patients undergoing bronchoscopy at a medical center — Arizona, 2008



automatic endoscope reprocessing machine, reverse osmosis filter tubing and canisters, primary and back-up ice machines, and sink faucets and showerheads from two of the three hospitalized patients' rooms (Table 2). *Legionella* isolates from potable water samples that were routinely collected at the center in February and July of 2008, the clinical isolates from the four patients, and the environmental samples collected in August 2008 during the investigation were sent to CDC. At CDC, the *Legionella* laboratory cultured *Legionella* from the samples and analyzed the isolates, including serogrouping and sequence-based typing using seven gene fragments. Free chlorine concentrations in samples taken at distal locations in the medical center's potable water system also were measured to assess the amount of disinfectant present.

During the investigation, the review of sample results from routine environmental surveillance demonstrated that the potable water system had become heavily colonized with *Legionella* during a 6-month period, February–July 2008. *Legionella* had been isolated from one (1.3%) of 78 samples collected in February from sink faucets and showerheads in other patients' rooms. In contrast, *Legionella* (*L. anisa*, *L. dumoffii*, and *L. pneumophila* serogroups 1, 5, 6, and 8) was isolated

from 42 of 117 (35.9%) potable water samples collected in July. No free chlorine was detected in the center's potable water supply during the investigation in August, indicating that disinfectant levels were inadequate to limit *Legionella* growth. *L. pneumophila* serogroup 8 was detected in both ice machines used by endoscopy staff (Table 2); serogroup 6 also was detected in the back-up machine. All four serogroup 8 isolates obtained from the four patients had sequence-based typing patterns that were identical to isolates from both ice machines. Before the investigation, *L. pneumophila* serogroup 6 also was detected in a specimen collected on July 25 by flushing sterile water through the bronchoscope that had been used for all four patients. Sequence-based typing patterns of isolates from the back-up ice machine matched the serogroup 6 bronchoscope isolate.

A series of control measures were established to prevent hospital-acquired LD, remediate contamination, and prevent subsequent *Legionella* colonization. High-risk patients, including hematopoietic stem-cell or solid-organ transplant recipients, were restricted from using potable water until point-of-use filters were installed on August 27. Chlorine injection into the cold water system was initiated on August 18,

TABLE 1. Legionnaires disease pseudo-cases reported after isolation of *Legionella* from bronchoalveolar lavage specimens obtained during bronchoscopies at a medical center — Arizona, June–July 2008

Patient no.	Age (yrs)	Sex	Admission diagnosis	Underlying medical condition	Date of bronchoscopy	Reason for bronchoscopy	Organisms isolated	Antimicrobial therapy	Discharge diagnosis
1	50	Female	Leg fractures secondary to fall, altered level of consciousness	Chronic lung disease, pulmonary fibrosis	June 4	Hypoxia and lung infiltrate on chest computed tomography (CT) scan	<i>L. pneumophila</i> serogroup 8, MRSA,* yeast	Levofloxacin	Acute and chronic respiratory failure
2	67	Male	Lung nodule (tuberculosis vs. malignancy vs. pneumonia)	Prior tuberculosis	July 9	Lung consolidation and 15 mm nodule on CT scan	<i>L. pneumophila</i> serogroup 8	Azithromycin and ceftriaxone	Community-acquired pneumonia
3	25	Male	Leukemia, malignant lymphoma, coccidioidomycosis	Preexisting coccidiomycosis	July 15	Enlargement of lung nodule from coccidioidomycosis	<i>L. pneumophila</i> serogroup 8, [†] viridans group <i>Streptococcus</i> , [†] yeast	Levofloxacin	Legionellosis
4	41	Male	Pneumonia, infiltrates [§]	Persistent pneumonia	July 15	Lung infiltrates detected on chest radiograph	<i>L. pneumophila</i> serogroup 8 [†]	None	Pneumonia, infiltrates [§]

* Methicillin-resistant *Staphylococcus aureus*.

[†] Scant growth.

[§] Outpatient visit.

and the autochlorination system was reset to reach a routine, maximum disinfectant level of 1.5–2.0 ppm, which was within Environmental Protection Agency safety standards (4.0 ppm). To eliminate potential contamination from ice, the technicians began using a sterile, plastic bag to contain ice and serve as a barrier. By mid-August, endoscopy staff members were refrigerating saline bottles and had stopped using ice during bronchoscopies. In addition, the contaminated ice machines were disassembled for cleaning, including disinfection using a chlorine flush and replacement of filters. Extensive sampling performed on August 27 indicated that control and remediation efforts were effective; no *L. pneumophila* was detected among 115 potable water samples, and the potable water system continues to be routinely monitored semiannually by a commercially contracted *Legionella* specialist. No cases of LD have been detected at the medical center since the investigation.

Reported by: C Kioski, MPH, K Montefour, M Saubolle, PhD, T Johnson, MHA, J Faidley, M Williams, MSN, MBA, A Khalsa, M Rudinsky, MD, Banner Good Samaritan Medical Center, Banner Health, Phoenix; C Ogden, Office of Infectious Disease Svcs, Arizona Dept of Health Svcs. R Sunenshine, MD, Div of State and Local Readiness, Coordinating Office for Terrorism Preparedness and Emergency Response; L Hicks, DO, N Kozak, PhD, E Brown, M Buss, MS, B Fields, PhD, Div of Bacterial Diseases, National Center for Immunization and Respiratory Diseases; M Arduino, DrPH, Div of Healthcare Quality and Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases; B Silk, PhD, S Chen, PhD, EIS officers, CDC.

Editorial Note: Water stagnation, low residual disinfection, and warm temperatures can promote *Legionella* colonization in large, complex potable water systems at hospitals and other facilities (4). Persons of advanced age, or who smoke, have chronic pulmonary disease, immunosuppression, malignancy, or certain other underlying conditions (e.g., end-stage renal disease or diabetes mellitus) are at increased risk for LD (2). This investigation determined that none of the four patients had LD and that the most likely cause of the pseudo-outbreak was the use of contaminated, nonsterile ice for cooling saline-filled syringes during bronchoalveolar lavage. Taken alone, certain radiographic evidence from the patients could be suggestive of LD; each had a pulmonary abnormality (e.g., infiltrate or nodule) or pneumonia diagnosis on admission that was an indication for the bronchoscopy. However, the clinical presentations and courses of illness for each patient were inconsistent with LD. None of the patients had high fever and severe illness, which are hallmarks of LD. Patient 1 did not have a definitive discharge diagnosis (i.e., acute and chronic respiratory failure), and her illness was not compatible with a diagnosis of LD. Patients 2 and 4 also had courses inconsistent with LD; patient 4 did not receive specific antimicrobial treatment for LD and subsequently was not admitted to the center's health-care system. Although patient 3 received a discharge diagnosis of legionellosis based on findings from the bronchoalveolar lavage specimen, he did not have a clinical course or radiographic findings compatible with LD. In addition, the isolation of multiple pathogens in patients 1 and 3 and scant

TABLE 2. *Legionella* culture results from environmental sampling at a medical center — Arizona, August 2008

Collection date	No. of samples collected	Sample location	Sample type*	<i>Legionella</i> species (serogroup) detected
August 1	3	Primary ice machine	Swab	Not detected
	4	Hand-washing and back-up sink faucets and aerators, reprocessing room	Swab, water	Not detected
August 4	4	Bay, automatic endoscope reprocessing machine	Swab	Not detected
	2	Bronchoscope†	Swab, water	Not detected
	4	Reverse osmosis filter tubing and canister, reprocessing room	Swab, water	Not detected
	2	Eye-wash sink faucets, reprocessing room	Swab, water	<i>L. pneumophila</i> (6)
	2	Main sink faucets, reprocessing room	Swab, water	<i>L. pneumophila</i> (10)
	5	Primary ice machine	Swab, water, ice, filter	<i>L. pneumophila</i> (1, 8)
	4	Back-up ice machine	Swab, water, ice	<i>L. pneumophila</i> (1, 6, 8)
August 13	6	Showerheads/sink faucets, patient rooms	Swab, water	<i>L. pneumophila</i> (10)
	5	Bronchoscope†	Swab, water	Not detected

* Types of samples primarily included a biofilm swab and a 1-liter bulk water sample, except as noted.

† *L. pneumophila* (serogroup 6) was detected in sterile water flushed through the bronchoscope and collected on July 25.

Legionella growth in patients 3 and 4 suggest that the source of *Legionella* was contamination of the bronchoalveolar lavage specimens, and not infection.

Widespread *Legionella* colonization within the medical center's potable water system was documented between February and July of 2008, and the pseudo-outbreak was ultimately attributable to this colonization because the system supplied water to the ice machines. A copper-silver ionization system, which was installed in 2006 to prevent *Legionella* growth in the potable water system of the medical center, might have provided false assurances for *Legionella* control. The investigation did not determine whether pH or water temperatures were maintained within recommended ranges for optimum system functionality, but failures of copper-silver ionization systems have been reported elsewhere (5; personal communication, Carol Genese, New Jersey Department of Health and Senior Services, 2009). Ice machines were the only sources of *L. pneumophila* serogroup 6 and 8 identified that also were linked epidemiologically to bronchoscopy procedures. Sequence-based typing of *Legionella* isolates from the machines that supplied ice matched the patients' clinical isolates and the bronchoscope isolate. Although serogroup 8 also might have been present within the bronchoscope, drying likely prevented *Legionella* detection during the investigation. The bronchoscopy suite continued services during the period between the first patient's bronchoscopy on June 4 and the subsequent patients' bronchoscopies in July, but the absence of additional cases during that period remains unexplained. The gap in cases might have resulted from inconsistent supplying and use of ice from the two contaminated ice machines among the endoscopy technicians.

This is the second published report of *Legionella* contamination in clinical specimens associated with the use of nonsterile ice during bronchoscopies. In 2007, a similar pseudo-outbreak occurred among 13 patients whose bronchoalveolar lavage specimens were contaminated with *L. pneumophila* serogroup 8 by nonsterile ice for saline cooling during bronchoscopies (6). One actual case of a lower respiratory tract infection was subsequently attributed to *Legionella* infection, demonstrating that the use of nonsterile ice during bronchoscopies creates a risk for *Legionella* infection. Reports that *Legionella* amplification occurs between temperatures of 77°F (25°C) and 108°F (42°C) might have created the perception that ice could not support *Legionella* growth. Although low temperatures inhibit *Legionella* growth, the bacteria can remain viable in ice for extended periods (7).

If sterile ice is not available for use during bronchoscopy, precautions should be taken to ensure that nonsterile ice does not directly contact equipment or patient specimens (e.g., refrigeration of the saline bottle or use of a sterile bag containing ice as a barrier). Ice machines can be reservoirs for *Legionella* contamination and should be disinfected. Health-care facilities should regularly monitor and address conditions that can promote *Legionella* colonization of the potable water supply (e.g., inadequate levels of halogen-based disinfectants). Because of the inherent risk for infection associated with reuse of medical devices (8), health-care facilities also should adhere to guidelines on proper use, reprocessing, and high-level disinfection or sterilization of medical equipment; regularly inspect and test reusable devices; and conduct surveillance for clusters of unusual infections to ensure patient safety (9,10).

References

1. Kool JL, Fiore AE, Kioski CM, et al. More than 10 years of unrecognized nosocomial transmission of Legionnaires' disease among transplant patients. *Infect Control Hosp Epidemiol* 1998;19:898–904.
2. CDC. Guidelines for preventing health-care-associated pneumonia, 2003: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee. *MMWR* 2004;53(No. RR-3).
3. CDC. Procedures for the recovery of *Legionella* from the environment. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at <http://www.cdc.gov/legionella/files/legionellaprocedures-508.pdf>.
4. Kool JL, Bergmire-Sweat D, Butler JC, et al. Hospital characteristics associated with colonization of water systems by *Legionella* and risk of nosocomial legionnaires' disease: a cohort study of 15 hospitals. *Infect Control Hosp Epidemiol* 1999;20:798–805.
5. Graman PS, Fine L, Hardy D. Nosocomial legionellosis and the emergence of *Legionella pneumophila* (Lp) in a water system during treatment with copper-silver ionization. Abstract K-4110. In: 48th Annual ICAAC/IDSA 46th Annual Meeting abstracts book; October 25–28, 2008; Washington, DC. Washington, DC: American Society for Microbiology, 2008: 573. Available at <http://www.icaacidsa2008.org/documents/icaacidsaabstracts2008.pdf>.
6. Schuetz AN, Hughes RL, Howard RM, et al. Pseudo-outbreak of *Legionella pneumophila* serogroup 8 infection associated with a contaminated ice machine in a bronchoscopy suite. *Infect Control Hosp Epidemiol* 2009;30:461–6.
7. Paszko-Kolva C, Shahamat M, Colwell RR. Effect of temperature on survival of *Legionella pneumophila* in the aquatic environment. *Microb Releases* 1993;2:73–9.
8. Weber DJ, Rutala WA. Lessons from outbreaks associated with bronchoscopy. *Infect Control Hosp Epidemiol* 2001;22:403–8.
9. Rutala WA, Weber DJ, HICPAC. Guideline for disinfection and sterilization in healthcare facilities, 2008. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/disinfection_nov_2008.pdf.
10. CDC. Guidelines for environmental infection control in health care facilities. *MMWR* 2003;52(No. RR-10).

Hepatitis Temporally Associated with an Herbal Supplement Containing Artemisinin – Washington, 2008

Artemisinins are a class of compounds that include artesunate, artemether, and artemisinin and have potent antimalarial activity. In combination with other drugs (artemisinin combination therapy), these compounds are the first-line treatment recommended by the World Health Organization for *Plasmodium falciparum* infections. Artemisinins have been available in the United States without a prescription as herbal supplements for at least 10 years; these supplements are marketed for general health maintenance and for treatment of parasitic infections and cancers. On August 27, 2008, CDC was notified of a patient who developed hepatitis after a 1-week course of an herbal supplement containing artemisinin. The

patient had abdominal pain, dark urine, and laboratory results consistent with hepatitis (e.g., serum alanine aminotransferase of 898 IU/L [normal: 10–55 IU/L]). Samples of the supplement were sent to CDC and the Georgia Institute of Technology for analysis to determine the amount of artemisinin and to identify any contaminants. Analysis indicated that the supplement contained 94%–97% of the 100 mg of artemisinin stated on the packaging and the supplement contained no other common pharmaceutical active ingredients. Given the patient's clinical course and laboratory evaluation, CDC investigators concluded that the hepatitis might have been associated with ingestion of the herbal supplement containing artemisinin. More data are needed to establish any causal connection between artemisinin and hepatitis. Health-care providers should be aware of the possibility of hepatic toxicity in patients taking herbal supplements containing artemisinin.

Case Report

On August 21, 2008, a man aged 52 years in Seattle, Washington, went to his primary-care physician with symptoms of severe fatigue and dark urine. His medical history included lactose intolerance and irritable bowel syndrome but no known hepatic dysfunction or alcohol abuse. His only medication was a multivitamin. Two weeks earlier, the patient had visited a naturopathic provider for long-standing abdominal discomfort that the provider attributed to a parasitic infection after stool studies reportedly showed an "unidentifiable protozoan." The naturopathic provider had started him on a 6-week course of an herbal supplement containing 100 mg of artemisinin, two capsules orally three times a day, resulting in a dose of 7.5 mg/kg/day of artemisinin. The supplement was manufactured and sold through a company in the United States. Approximately 1 week into therapy, the patient developed worsening abdominal pain and dark urine. Three days later, on August 18, he stopped taking the supplement when his symptoms did not abate, and 3 days after that, he went to his primary-care physician.

Physical examination by the primary-care physician revealed mild scleral icterus and upper abdominal tenderness. The patient reported no fever, cough, diarrhea, or other symptoms. He reported no significant alcohol use, additional use of over-the-counter medications (e.g., acetaminophen), ill contacts, recent international travel, or exposure to unsafe food or water. Laboratory findings were consistent with hepatitis: a serum alanine aminotransferase of 898 IU/L (normal: 10–55 IU/L), aspartate aminotransferase of 280 IU/L (normal: 10–40 IU/L), bilirubin of 3.1 mg/dL (normal: 0.2–1.2 mg/dL), and alkaline phosphatase of 258 IU/L (normal: 40–150 IU/L). Five months earlier, on March 12, as part of an evaluation for

inflammatory bowel disease, all laboratory values had been found within normal ranges.

Among laboratory findings on August 21, the following were within normal ranges: white blood cell count, hemoglobin, hematocrit, platelets, sodium chloride, serum creatinine, glucose, and calcium. The patient's potassium (3.4 mmol/L [normal: 3.4–5.2 mmol/L]) and carbon dioxide content (22 mmol/L [normal: 22–31 mmol/L]) were borderline normal, and blood urea nitrogen was just below the normal range (8 mg/dL [normal: 9–25 mg/dL]). Laboratory analysis for hepatitis A antibody total and antibody IgM; hepatitis B core antibody, core antibody IgM, surface antigen, and surface antibody; and hepatitis C antibody all were negative. Laboratory testing detected no acetaminophen. Examination of the patient's stool for ova and parasites was negative.

The patient was admitted to the hospital on August 21, for continued monitoring and supportive care and discharged home on hospital day 3. During the next 2 weeks, the patient's liver function test results and symptoms gradually improved and had returned to normal by September 4.

Herbal Supplement Analysis

On September 8, two samples from the patient's home supply of the herbal supplement were sent to CDC for analysis with high-performance liquid chromatography to determine whether the supplement contained 100 mg of artemisinin as stated on the packaging. Additional samples from the same bottle were sent to the Georgia Institute of Technology to identify any other clinically relevant organic contaminants by mass spectrometry. The CDC analysis indicated 94 mg and 97 mg of artemisinin in the supplement; no contaminants or additional organic active pharmaceutical ingredients were found in the other samples.

Reported by: U Malhotra, MD, R Rakita, MD, *Infectious Diseases Section, Virginia Mason Medical Center, Seattle, Washington.* F Fernandez, PhD, G Harris, *School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, Georgia.* P Arguin, MD, R Bronzan, MD, L Slutsker, MD, M Green, PhD, *Div of Parasitic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases;* D Townes, MD, *EIS Officer, CDC.*

Editorial Note: Artemisinin (called qinghaosu in Chinese) is found in the leaves of *Artemisia annua* (the sweet wormwood shrub) and has long been used as an herbal treatment in China. Although widely used in herbal supplements of U.S. manufacturers, until recently artemisinins were not available for medical use in the United States except from CDC under an investigational new drug protocol (1). In April 2009, an artemisinin combination therapy, artemether-lumefantrine (Coartem [Novartis]), was approved by the Food and

Drug Administration (FDA) for the treatment of malaria.* Artemisinin-containing therapies generally are considered safe, effective, and well-tolerated medications for the treatment of malaria caused by *P. falciparum* with no major side effects (2–4). Although hepatic toxicity in humans has been reported from ingestion of a wide range of herbal preparations, a search of the literature revealed no previously published reports of hepatic toxicity from an herbal supplement containing artemisinin. However, FDA's Center for Food Safety and Applied Nutrition has additional reports of adverse events involving ingestion of artemisinin-containing dietary supplement products that were not included in this review (FDA, unpublished data, 2009).

In the case described in this report, the patient's presentation, history, and clinical course suggest that his hepatitis might have resulted from ingestion of an artemisinin-containing herbal supplement over a 10-day period. An investigation did not identify any other etiology for the hepatitis, and after the patient stopped taking the herbal supplement (7.5 mg/kg/day), a gradual but complete resolution of the patient's signs and symptoms resulted. However, further study is needed to delineate any causal connection between artemisinin and hepatitis.

In a review of 108 trials of artemisinins involving 9,241 patients, only 0.9% had isolated elevated aspartate aminotransferase associated with artemisinin derivatives (3,5). Elevated liver enzymes have been observed in patients treated for malaria with artemisinins but are generally thought to have resulted from the underlying malaria rather than the artemisinins. In other countries, the commonly recommended oral therapeutic dose of artesunate is 4 mg/kg/day for 3 days when used in combination with other drugs for treatment of acute malaria. Because the chemical structures of the artemisinins (i.e., artesunate, artemether, and artemisinin) are similar and they are metabolized into the same active compound in the body (dihydroartemisinin), the therapeutic windows for these compounds are similar. Therefore, the 10-day regimen of artemisinin herbal supplement at 7.5 mg/kg/day described in this report is substantially more than the dosage of artesunate routinely used for treatment of malaria.

In laboratory testing, rats given 600 mg/kg/day of artemisinin for 7 days demonstrated slight degenerative changes in the liver, heart, spleen, lung, and kidney, and dogs given 100 mg/kg/day of artemisinin for 7 days had minimal observable physiologic effects (6). The only reports of hepatic toxicity caused by artemisinin compounds in laboratory animals were in guinea pigs exposed to 16 mg/kg/day of artesunate for 7

* Additional information available at http://www.accessdata.fda.gov/drugsatfda_docs/label/2009/0222681bl.pdf.

days and in rats exposed to 4 mg/kg/day of artesunate for 5 days (7,8). However, limitations exist in comparing animal ingestions of artesunate with human ingestion of artemisinin, although they are closely related compounds.

FDA regulates herbal supplements under a different standard than food, over-the-counter medications, and prescription medications. Under the Dietary Supplement Health and Education Act of 1994, the manufacturer is responsible for ensuring the safety of a dietary supplement, and FDA takes action against unsafe supplements after they reach the market. Because federal regulation of dietary supplements differs from that for pharmaceuticals, potential concerns arise about quality control, recommended indications, and unsupervised usage. Herbal supplements also can potentially interact with other medications and reduce or potentiate their effects, which can include toxicity (9). Health-care providers should be aware that patients might be taking herbal supplements containing artemisinin and consider inquiring about their use in patients being evaluated for hepatitis without a clear etiology. Adverse events or illnesses thought related to the use of artemisinin-containing dietary supplements should be reported to FDA by telephone (1-800-FDA-1088) or via the Internet (<http://www.fda.gov/safety/medwatch/howtoreport/ucm053074.htm>). Additional information is available at <http://www.fda.gov/food/dietarysupplements/alerts/ucm111110.htm>.

References

1. CDC. New medication for severe malaria available under an investigational new drug protocol. *MMWR* 2007;56:769–70.
2. Price R, Van Vugt M, Phaipun L, et al. Adverse effects in patients with acute falciparum malaria treated with artemisinin derivatives. *Am J Trop Med Hyg* 1999;60:547–55.
3. Efferth T, Romero MR, Wolf DG, Stamminger T, Marin JJ, Marschall M. The antiviral activities of artemisinin and artesunate. *Clin Infect Dis* 2008;47:804–11.
4. Taylor WR, White NJ. Antimalarial drug toxicity: a review. *Drug Saf* 2004;27:25–61.
5. Ribeiro IR, Olliaro P. Safety of artemisinin and its derivatives. A review of published and unpublished clinical trials. *Med Trop (Mars)* 1998;58(3 suppl):50–3.
6. China Cooperative Research Group. Studies on the toxicity of qinghaosu and its derivatives. *J Tradit Chin Med* 1982;2:31–8.
7. Nwanjo HU, Oze G. Acute hepatotoxicity following administration of artesunate in guinea pigs. *The Internet Journal of Toxicology* 2007;4(1).
8. Omotuyi IO, Nwangwu SC, Okugbo OT, Okoye OT, Ojeh GC, Wogu DM. Hepatotoxic and hemolytic effects of acute exposure of rats to artesunate overdose. *Afr J Biochem Res* 2008;2:107–10.
9. Kober M, Pohl K, Efferth T. Molecular mechanisms underlying St. John's wort drug interactions. *Curr Drug Metab* 2008;9:1027–37.

Notice to Readers

National Labor Day Drunk Driving Enforcement Crackdown – August 21–September 7, 2009

In 2007, a total of 12,998 persons died in motor-vehicle crashes in which at least one driver had a blood alcohol concentration of >0.08 g/dL, above the legal limit for drivers in the United States. These alcohol-impaired-driving fatalities accounted for 32% of all motor-vehicle traffic fatalities in 2007 (1).

During August 21–September 7, 2009, the national Labor Day enforcement crackdown, “Drunk Driving. Over the Limit. Under Arrest.” will be conducted. Coordinated by the National Highway Traffic Safety Administration, this campaign combines high-visibility enforcement of laws against alcohol-impaired driving with heightened public awareness through advertising and publicity. A program planner, which includes sample public service announcements, media tool kits, and program guidance is available at <http://www.trafficsafetymarketing.gov>. Additional information regarding evidence-based strategies to reduce alcohol-impaired driving is available from CDC at <http://www.thecommunityguide.org/mvoi/aid/index.html>.

Reference

1. National Highway Traffic Safety Administration. Traffic safety facts, 2007 data: alcohol-impaired driving. Washington, DC: National Highway Traffic Safety Administration; 2008. DOT HS 810 985. Available at <http://www-nrd.nhtsa.dot.gov/pubs/810985.pdf>.

Notice to Readers

Final 2008 Reports of Nationally Notifiable Infectious Diseases

The tables listed on pages 859–869 summarize finalized data for 2008, as of June 30, 2009, from the National Notifiable Diseases Surveillance System (NNDSS). These data will be published in more detail in the Summary of Notifiable Diseases — United States, 2008 (1). During 2008, no cases of anthrax; diphtheria; nonneuroinvasive eastern equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus disease, nonneuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease; smallpox, vancomycin-resistant *Staphylococcus aureus* infection; neuroinvasive and

nonneuroinvasive western equine encephalitis virus disease; and yellow fever were reported in the United States; therefore, these diseases do not appear in these early release tables. Policies for reporting NNDSS data to CDC can vary by disease or reporting jurisdiction, depending on case status classification (i.e., confirmed, probable, or suspected).

The publication criteria used for the 2008 finalized tables are listed in the "Print Criteria" column of the NNDSS event code list, available at http://www.cdc.gov/ncphi/diss/nndss/phs/files/nndss_event_code_list_january_2008.pdf. The NNDSS website is updated annually to include the latest national surveillance case definitions approved by the Council of State and Territorial Epidemiologists for enumerating data on nationally notifiable infectious diseases.

Population estimates for the states are from the National Center for Health Statistics. Estimates of the July 1, 2000–July 1, 2007, United States resident population are from the Vintage 2007 postcensal series by year, county, age, sex, race, and Hispanic ethnicity, prepared under a collaborative arrangement with the U.S. Census Bureau and available at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>. Population estimates for territories are 2007 estimates from the U.S. Census Bureau available at <http://www.census.gov/ipc/www/idb/summaries.html>.

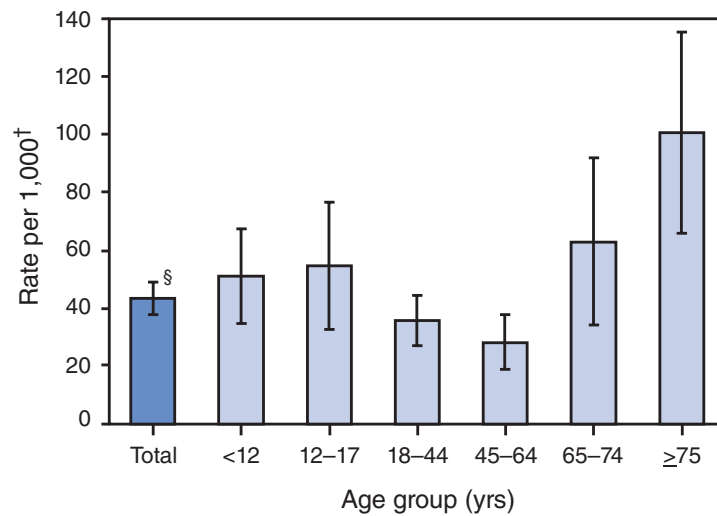
Reference

1. CDC. Summary of notifiable diseases, United States, 2008. *MMWR* 2008;57(53)(in press).

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Annual Rate of Nonfatal, Medically Attended Fall Injury Episodes,* by Age Group — National Health Interview Survey, United States, 2007



* A medically attended injury is one for which a health-care professional was contacted either in person or by telephone for advice or treatment. An injury episode refers to a traumatic event in which the person experienced one or more injuries because of an external cause. Based on household interviews of a sample of the civilian, noninstitutionalized U.S. population.

† Age group populations based on 2000 U.S. Census and quarterly updates.

§ 95% confidence interval.

During 2007, the annual rate of nonfatal, medically attended fall injury episodes was 43 per 1,000 population. Adults aged ≥75 years had higher rates of these episodes compared with persons aged <65 years. Adults aged 45–64 years had lower rates of these episodes compared with children aged <18 years and adults aged ≥65 years.

SOURCE: Adams PF, Barnes PM, Vickerie JL. Summary health statistics for the U.S. population: National Health Interview Survey, 2007. Vital Health Stat 2008;10(238). Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_238.pdf.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Total resident population (in thousands)	AIDS†	Botulism				Brucellosis
			Total	Foodborne	Infant	Other‡	
United States	301,621	39,202¶	145	17	109	19	80
New England	14,264	1,188	4	—	4	—	—
Connecticut	3,502	408	2	—	2	—	—
Maine	1,317	30	—	—	—	—	—
Massachusetts	6,450	622	1	—	1	—	—
New Hampshire	1,316	30	—	—	—	—	—
Rhode Island	1,058	88	1	—	1	—	—
Vermont	621	10	—	—	—	—	—
Mid. Atlantic	40,417	7,042	23	—	23	—	7
New Jersey	8,686	1,627	3	—	3	—	2
New York (Upstate)	11,023	1,522	1	—	1	—	1
New York City	8,275	2,649	1	—	1	—	2
Pennsylvania	12,433	1,244	18	—	18	—	2
E.N. Central	46,339	3,310	6	4	2	—	6
Illinois	12,853	1,360	1	—	1	—	1
Indiana	6,345	424	1	1	—	—	1
Michigan	10,072	651	—	—	—	—	1
Ohio	11,467	701	4	3	1	—	—
Wisconsin	5,602	174	—	—	—	—	3
W.N. Central	20,051	913	5	1	4	—	4
Iowa	2,988	71	1	—	1	—	2
Kansas	2,776	122	—	—	—	—	—
Minnesota	5,198	207	1	—	1	—	1
Missouri	5,878	417	2	—	2	—	—
Nebraska	1,775	73	1	1	—	—	1
North Dakota	640	12	—	—	—	—	—
South Dakota	796	11	—	—	—	—	—
S. Atlantic	57,860	13,411	13	1	12	—	14
Delaware	865	166	—	—	—	—	—
District of Columbia	588	767	—	—	—	—	1
Florida	18,251	5,064	1	—	1	—	10
Georgia	9,545	2,153	—	—	—	—	1
Maryland	5,618	2,389	5	—	5	—	—
North Carolina	9,061	1,384	1	—	1	—	1
South Carolina	4,408	723	1	—	1	—	1
Virginia	7,712	698	3	—	3	—	—
West Virginia	1,812	67	2	1	1	—	—
E.S. Central	17,945	1,640	—	—	—	—	1
Alabama	4,628	402	—	—	—	—	—
Kentucky	4,241	293	—	—	—	—	—
Mississippi	2,919	356	—	—	—	—	—
Tennessee	6,157	589	—	—	—	—	1
W.S. Central	34,649	4,001	8	—	8	—	10
Arkansas	2,835	100	—	—	—	—	—
Louisiana	4,293	903	—	—	—	—	1
Oklahoma	3,617	137	—	—	—	—	—
Texas	23,904	2,861	8	—	8	N	9
Mountain	21,361	1,486	19	1	17	1	9
Arizona	6,339	570	4	1	2	1	3
Colorado	4,862	343	3	—	3	—	2
Idaho	1,499	31	1	—	1	—	—
Montana	958	48	3	—	3	—	—
Nevada	2,565	307	—	—	—	N	1
New Mexico	1,970	109	2	—	2	—	1
Utah	2,645	65	5	—	5	—	1
Wyoming	523	13	1	—	1	—	1
Pacific	48,735	5,539	67	10	39	18	29
Alaska	684	27	7	7	—	—	—
California	36,553	4,818	55	3	36	16	23
Hawaii	1,283	97	—	—	—	—	4
Oregon	3,747	207	2	—	2	—	1
Washington	6,468	390	3	—	1	2	1
American Samoa	64	—	—	—	—	—	—
C.N.M.I.	59	1	—	—	—	—	—
Guam	174	7	—	U	U	U	U
Puerto Rico	3,942	704	—	—	—	—	—
U.S. Virgin Islands	110	12	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* No cases of anthrax, diphtheria, Eastern equine encephalitis virus disease, non-neuroinvasive, poliomyelitis, paralytic, poliovirus infection, nonparalytic, Powassan virus disease, non-neuroinvasive, rubella, congenital syndrome, severe acute respiratory syndrome-associated coronavirus disease, Smallpox, Vancomycin-resistant *Staphylococcus aureus* infection, western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive, and Yellow fever were reported in 2008. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), through December 31, 2008.

‡ Includes cases reported as wound and unspecified botulism.

¶ Includes 672 cases of AIDS in persons with unknown state or area of residence that were reported in 2008.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Chancroid**	Chlamydia**	Cholera	Coccidioidomycosis	Cryptosporidiosis	Cyclosporiasis
United States	25	1,210,523	5	7,523	9,113	139
New England	4	39,246	—	1	393	10
Connecticut	—	12,519	—	N	41	4
Maine	—	2,608	—	N	46	N
Massachusetts	4	17,503	—	N	172	5
New Hampshire	—	2,109	—	1	60	1
Rhode Island	—	3,317	—	—	10	—
Vermont	—	1,190	—	N	64	N
Mid. Atlantic	2	152,997	1	—	742	33
New Jersey	—	22,405	1	N	40	9
New York (Upstate)	2	31,881	—	N	269	6
New York City	—	56,478	—	N	107	18
Pennsylvania	—	42,233	—	N	326	N
E.N. Central	1	194,359	1	44	2,163	9
Illinois	—	59,169	1	N	205	4
Indiana	—	22,154	—	N	203	2
Michigan	—	44,923	—	31	280	1
Ohio	1	47,117	—	13	689	1
Wisconsin	—	20,996	—	N	786	1
W.N. Central	—	68,198	—	3	1,002	4
Iowa	—	9,372	—	N	284	—
Kansas	—	9,208	—	N	84	—
Minnesota	—	14,351	—	—	236	3
Missouri	—	24,817	—	3	181	—
Nebraska	—	5,573	—	N	113	N
North Dakota	—	1,921	—	N	16	N
South Dakota	—	2,956	—	N	88	1
S. Atlantic	5	247,480	—	5	1,071	70
Delaware	—	3,868	—	2	12	—
District of Columbia	—	6,924	—	—	15	3
Florida	—	71,017	—	N	486	58
Georgia	—	42,629	—	N	263	2
Maryland	—	24,669	—	3	54	3
North Carolina	4	37,516	—	N	78	1
South Carolina	1	26,323	—	N	57	1
Virginia	—	31,218	—	N	81	2
West Virginia	—	3,316	—	N	25	—
E.S. Central	—	86,214	—	—	174	3
Alabama	—	24,760	—	N	74	N
Kentucky	—	12,163	—	N	36	N
Mississippi	—	21,253	—	N	17	N
Tennessee	—	28,038	—	N	47	3
W.S. Central	8	152,468	2	3	2,545	6
Arkansas	—	14,136	—	N	95	—
Louisiana	—	22,659	1	3	67	—
Oklahoma	—	14,803	—	N	143	—
Texas	8	100,870	1	N	2,240	6
Mountain	2	77,774	—	4,870	580	3
Arizona	—	24,769	—	4,768	89	—
Colorado	2	19,180	—	N	112	1
Idaho	—	4,194	—	N	72	N
Montana	—	3,101	—	N	44	N
Nevada	—	9,670	—	52	17	N
New Mexico	—	9,262	—	35	175	2
Utah	—	6,021	—	12	48	—
Wyoming	—	1,577	—	3	23	—
Pacific	3	191,787	1	2,597	443	1
Alaska	—	4,861	—	N	3	—
California	2	148,798	—	2,597	275	—
Hawaii	—	5,982	—	N	2	—
Oregon	—	10,744	1	N	64	—
Washington	1	21,402	—	N	99	1
American Samoa	—	—	—	N	N	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	687	U	U	U	U
Puerto Rico	—	6,874	—	N	N	N
U.S. Virgin Islands	—	587	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

** Totals reported to the Division of STD Prevention, NCHHSTP, as of May 8, 2009.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Domestic arboviral diseases††							
	California serogroup virus disease		Eastern equine encephalitis virus disease	Powassan virus disease	St. Louis encephalitis virus disease		West Nile virus disease	
	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Neuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	55	7	4	2	8	5	689	667
New England	—	—	1	—	—	—	7	3
Connecticut	—	—	—	—	—	—	5	3
Maine	—	—	—	—	—	—	—	—
Massachusetts	—	—	1	—	—	—	1	—
New Hampshire	—	—	—	—	—	—	—	—
Rhode Island	—	—	—	—	—	—	1	—
Vermont	—	—	—	—	—	—	—	—
Mid. Atlantic	5	1	—	1	—	1	50	20
New Jersey	—	—	—	—	—	—	6	4
New York (Upstate)	5	1	—	1	—	—	24	7
New York City	—	—	—	—	—	—	8	7
Pennsylvania	—	—	—	—	—	1	12	2
E.N. Central	13	2	—	—	—	—	44	20
Illinois	—	—	—	—	—	—	12	8
Indiana	—	—	—	—	—	—	3	1
Michigan	—	—	—	—	—	—	11	6
Ohio	9	—	—	—	—	—	14	1
Wisconsin	4	2	—	—	—	—	4	4
W.N. Central	1	—	—	1	—	1	51	134
Iowa	—	—	—	—	—	—	3	3
Kansas	—	—	—	—	—	—	14	17
Minnesota	1	—	—	1	—	—	2	8
Missouri	—	—	—	—	—	1	12	3
Nebraska	—	—	—	—	—	—	7	40
North Dakota	—	—	—	—	—	—	2	35
South Dakota	—	—	—	—	—	—	11	28
S. Atlantic	27	1	2	—	3	—	20	20
Delaware	—	—	—	—	—	—	—	1
District of Columbia	—	—	—	—	—	—	4	4
Florida	—	1	1	—	—	—	3	—
Georgia	2	—	—	—	—	—	4	4
Maryland	—	—	—	—	—	—	6	8
North Carolina	9	—	1	—	3	—	2	1
South Carolina	—	—	—	—	—	—	—	1
Virginia	2	—	—	—	—	—	—	1
West Virginia	14	—	—	—	—	—	1	—
E.S. Central	8	3	1	—	—	—	48	57
Alabama	—	—	1	—	—	—	11	7
Kentucky	1	—	—	—	—	—	3	—
Mississippi	1	3	—	—	—	—	22	43
Tennessee	6	—	—	—	—	—	12	7
W.S. Central	1	—	—	—	5	2	69	62
Arkansas	—	—	—	—	4	—	7	2
Louisiana	1	—	—	—	1	2	18	31
Oklahoma	—	—	—	—	—	—	4	5
Texas	—	—	—	—	—	—	40	24
Mountain	—	—	—	—	—	—	103	184
Arizona	—	—	—	—	—	—	62	52
Colorado	—	—	—	—	—	—	17	54
Idaho	—	—	—	—	—	—	4	35
Montana	—	—	—	—	—	—	—	5
Nevada	—	—	—	—	—	—	9	7
New Mexico	—	—	—	—	—	—	5	3
Utah	—	—	—	—	—	—	6	20
Wyoming	—	—	—	—	—	—	—	8
Pacific	—	—	—	—	—	1	297	167
Alaska	—	—	—	—	—	—	—	—
California	—	—	—	—	—	—	292	153
Hawaii	—	—	—	—	—	—	—	—
Oregon	—	—	—	—	—	1	3	13
Washington	—	—	—	—	—	—	2	1
American Samoa	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	—	—	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

†† Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of May 1, 2009.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Ehrlichiosis/Anaplasmosis				Giardiasis	Gonorrhea**
	<i>Ehrlichia chaffeensis</i>	<i>Ehrlichia ewingii</i>	<i>Anaplasma phagocytophilum</i>	Undetermined		
United States	957	9	1,009	132	18,908	336,742
New England	42	—	197	1	1,660	5,470
Connecticut	2	—	45	—	334	2,801
Maine	1	—	17	—	188	96
Massachusetts	21	—	85	—	678	2,129
New Hampshire	7	—	14	—	160	100
Rhode Island	11	—	36	1	90	307
Vermont	—	—	—	—	210	37
Mid. Atlantic	123	1	303	10	3,532	33,477
New Jersey	54	—	45	3	520	5,298
New York (Upstate)	61	—	239	3	1,282	6,615
New York City	5	1	17	—	851	10,493
Pennsylvania	3	—	2	4	879	11,071
E.N. Central	58	—	205	31	2,743	69,397
Illinois	28	—	3	3	705	20,674
Indiana	4	—	—	—	N	8,769
Michigan	3	—	—	—	611	17,064
Ohio	11	—	1	—	904	16,803
Wisconsin	12	—	201	28	523	6,087
W.N. Central	212	6	281	69	2,106	17,003
Iowa	N	N	N	N	326	1,700
Kansas	—	—	—	—	162	2,274
Minnesota	14	1	278	43	769	3,037
Missouri	195	5	1	26	468	8,014
Nebraska	3	N	1	N	209	1,460
North Dakota	N	N	N	N	36	143
South Dakota	—	—	1	—	136	375
S. Atlantic	207	1	15	5	3,119	86,462
Delaware	19	1	4	—	42	1,045
District of Columbia	N	N	N	N	72	2,656
Florida	10	—	2	—	1,391	23,326
Georgia	19	—	1	—	691	16,272
Maryland	61	—	4	1	284	6,666
North Carolina	34	—	2	4	N	15,972
South Carolina	1	—	—	—	136	9,442
Virginia	63	—	2	—	432	10,337
West Virginia	—	—	—	—	71	746
E.S. Central	86	—	—	14	506	30,562
Alabama	9	—	N	N	281	9,740
Kentucky	13	—	—	—	N	4,548
Mississippi	—	—	—	—	N	7,494
Tennessee	64	—	—	14	225	8,780
W.S. Central	229	1	8	—	473	51,353
Arkansas	87	—	N	N	143	4,514
Louisiana	—	1	—	—	150	9,455
Oklahoma	114	—	7	—	180	5,185
Texas	28	—	1	—	N	32,199
Mountain	—	—	—	2	1,661	11,691
Arizona	—	—	—	2	142	3,449
Colorado	N	N	N	N	564	3,757
Idaho	N	N	N	N	211	187
Montana	N	N	N	N	93	122
Nevada	N	N	N	N	121	2,172
New Mexico	N	N	N	N	107	1,403
Utah	—	—	—	—	374	477
Wyoming	—	—	—	—	49	124
Pacific	—	—	—	—	3,108	31,327
Alaska	N	N	N	N	108	578
California	—	—	N	N	2,017	25,787
Hawaii	N	N	N	N	42	610
Oregon	—	—	—	—	455	1,225
Washington	N	N	N	N	486	3,127
American Samoa	N	N	N	N	—	—
C.N.M.I.	—	—	—	—	—	—
Guam	U	U	U	U	U	109
Puerto Rico	N	N	N	N	227	273
U.S. Virgin Islands	N	N	N	N	—	120

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	<i>Haemophilus influenzae</i> , invasive disease				Hansen disease (leprosy)	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal
	All ages, serotypes	Age <5 yrs					
		Serotype b	Nonserotype b	Unknown serotype			
United States	2,886	30	244	163	80	18	330
New England	196	1	10	2	8	—	15
Connecticut	54	—	4	—	3	N	5
Maine	21	—	2	—	N	—	1
Massachusetts	83	1	3	1	5	—	6
New Hampshire	12	—	—	1	—	—	1
Rhode Island	17	—	1	—	—	—	—
Vermont	9	—	—	—	N	—	2
Mid. Atlantic	554	2	16	38	9	—	15
New Jersey	98	—	—	10	1	—	3
New York (Upstate)	171	2	15	2	N	—	7
New York City	90	—	—	9	8	—	5
Pennsylvania	195	—	1	17	—	—	N
E.N. Central	483	8	35	30	3	—	28
Illinois	157	—	—	16	1	—	3
Indiana	93	2	6	5	—	—	1
Michigan	31	2	6	—	—	—	6
Ohio	135	2	11	9	2	—	7
Wisconsin	67	2	12	—	—	—	11
W.N. Central	211	5	5	21	4	2	48
Iowa	2	—	—	—	1	1	16
Kansas	20	—	—	2	—	—	3
Minnesota	71	5	5	2	1	—	11
Missouri	72	—	—	15	1	—	13
Nebraska	30	—	—	2	—	—	1
North Dakota	16	—	—	—	N	1	1
South Dakota	—	—	—	—	1	—	3
S. Atlantic	714	4	77	22	11	—	36
Delaware	8	—	—	2	—	—	—
District of Columbia	8	—	—	—	—	—	—
Florida	191	1	22	2	10	—	5
Georgia	149	—	14	10	N	—	19
Maryland	97	1	12	—	—	—	1
North Carolina	81	1	11	2	—	—	7
South Carolina	62	—	8	3	1	—	2
Virginia	92	1	8	3	—	—	2
West Virginia	26	—	2	—	N	—	—
E.S. Central	151	2	7	11	—	—	25
Alabama	25	1	2	—	—	N	5
Kentucky	10	—	—	1	—	—	N
Mississippi	14	1	1	—	—	—	—
Tennessee	102	—	4	10	—	—	20
W.S. Central	132	2	11	4	3	2	69
Arkansas	15	—	3	1	—	—	5
Louisiana	13	—	1	3	2	2	1
Oklahoma	93	—	7	—	1	—	51
Texas	11	2	—	—	—	—	12
Mountain	297	5	49	16	4	12	32
Arizona	107	3	23	3	—	1	6
Colorado	60	—	6	2	1	6	6
Idaho	12	—	3	3	—	—	4
Montana	5	—	1	2	—	2	—
Nevada	16	—	1	—	—	—	N
New Mexico	50	1	3	6	1	2	6
Utah	43	1	12	—	2	1	10
Wyoming	4	—	—	—	—	—	—
Pacific	148	1	34	19	38	2	62
Alaska	21	—	—	8	—	N	N
California	46	1	32	6	20	—	46
Hawaii	22	—	—	1	18	—	1
Oregon	57	—	—	4	N	—	13
Washington	2	—	2	—	N	2	2
American Samoa	—	—	—	—	1	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	U	U	U	U	U	U
Puerto Rico	1	—	—	—	—	N	N
U.S. Virgin Islands	N	—	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Hepatitis, viral, acute			Influenza-associated pediatric mortality ^{§§}	Legionellosis	Listeriosis	Lyme disease ^{¶¶}			Malaria
	A	B	C				Total	Confirmed	Probable	
United States	2,585	4,033	877	90	3,181	759	35,198	28,921	6,277	1,255
New England	128	81	37	9	231	63	11,601	9,205	2,396	61
Connecticut	26	30	19	2	47	16	3,896	2,738	1,158	14
Maine	18	15	3	1	11	5	908	780	128	1
Massachusetts	58	21	13	4	91	30	4,582	3,960	622	33
New Hampshire	12	8	N	1	30	6	1,601	1,211	390	5
Rhode Island	12	4	1	—	47	5	210	186	24	3
Vermont	2	3	1	1	5	1	404	330	74	5
Mid. Atlantic	333	448	131	13	1,061	168	15,097	12,773	2,324	337
New Jersey	86	118	61	1	150	34	3,485	3,214	271	65
New York (Upstate)	66	73	43	3	360	48	6,986	5,203	1,783	42
New York City	113	100	—	5	143	30	808	538	270	188
Pennsylvania	68	157	27	4	408	56	3,818	3,818	—	42
E.N. Central	335	536	195	12	667	104	2,321	1,759	562	152
Illinois	112	184	10	6	121	28	108	108	—	77
Indiana	20	67	13	1	60	10	42	42	—	5
Michigan	119	149	129	1	179	20	92	76	16	18
Ohio	51	118	40	1	268	29	45	40	5	31
Wisconsin	33	18	3	3	39	17	2,034	1,493	541	21
W.N. Central	255	107	27	5	145	31	1,438	1,172	266	72
Iowa	109	24	—	2	21	1	109	85	24	12
Kansas	15	9	1	—	2	6	16	16	—	9
Minnesota	49	25	22	3	25	8	1,282	1,046	236	29
Missouri	35	38	2	—	70	11	6	6	—	14
Nebraska	41	9	2	—	21	4	12	8	4	8
North Dakota	2	2	—	—	3	—	10	8	2	—
South Dakota	4	—	—	—	3	1	3	3	—	—
S. Atlantic	393	981	150	13	508	147	4,331	3,732	599	303
Delaware	7	U	U	—	13	2	772	772	—	3
District of Columbia	U	U	U	—	16	—	74	71	3	7
Florida	146	344	32	4	148	50	88	72	16	65
Georgia	57	187	16	4	43	26	35	35	—	57
Maryland	44	85	22	1	143	17	2,218	1,746	472	80
North Carolina	63	81	46	1	37	25	47	16	31	31
South Carolina	19	71	4	—	12	7	29	14	15	9
Virginia	51	130	8	3	66	17	933	886	47	49
West Virginia	6	83	22	—	30	3	135	120	15	2
E.S. Central	81	409	109	7	119	29	46	19	27	27
Alabama	12	109	13	—	18	4	9	6	3	5
Kentucky	30	101	68	1	58	7	5	5	—	6
Mississippi	7	50	—	4	1	4	1	1	—	1
Tennessee	32	149	28	2	42	14	31	7	24	15
W.S. Central	294	852	89	12	117	60	158	109	49	97
Arkansas	10	67	1	1	14	5	—	—	—	1
Louisiana	12	94	9	—	11	11	3	3	—	4
Oklahoma	13	129	20	2	11	7	2	1	1	5
Texas	259	562	59	9	81	37	153	105	48	87
Mountain	219	202	62	9	100	28	65	32	33	36
Arizona	118	80	—	2	26	8	8	2	6	15
Colorado	36	33	14	2	14	8	3	2	1	5
Idaho	17	12	3	—	3	1	9	5	4	3
Montana	1	2	6	—	4	1	17	6	11	—
Nevada	13	43	22	2	13	1	12	9	3	5
New Mexico	18	12	5	1	11	5	8	4	4	3
Utah	13	14	12	2	29	2	5	3	2	5
Wyoming	3	6	—	—	—	2	3	1	2	—
Pacific	547	417	77	10	233	129	141	120	21	170
Alaska	5	10	—	1	3	3	6	6	—	6
California	446	303	29	6	185	88	74	74	—	125
Hawaii	20	7	—	—	8	3	N	—	—	3
Oregon	25	41	23	1	18	6	38	18	20	4
Washington	51	56	25	2	19	29	23	22	1	32
American Samoa	—	—	—	—	N	N	N	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	U	U	U	—	U	U	—	—	—	U
Puerto Rico	27	50	—	—	—	—	N	—	—	2
U.S. Virgin Islands	—	—	—	—	—	—	N	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2008.

¶¶ National Surveillance Case Definition revised in 2008; probable cases not previously reported.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Measles			Meningococcal disease				
	Total	Indigenous	Imported***	All serogroups	Serogroup A, C, Y, and W-135	Serogroup B	Other serogroup	Serogroup unknown
United States	140	115	25	1,172	330	188	38	616
New England	2	1	1	38	15	20	—	3
Connecticut	—	—	—	1	1	—	—	—
Maine	—	—	—	6	3	3	—	—
Massachusetts	2	1	1	24	8	14	—	2
New Hampshire	—	—	—	5	1	3	—	1
Rhode Island	—	—	—	2	2	—	—	—
Vermont	—	—	—	—	—	—	—	—
Mid. Atlantic	32	23	9	128	27	12	—	89
New Jersey	1	—	1	17	—	—	—	17
New York (Upstate)	2	—	2	33	21	11	—	1
New York City	28	22	6	28	—	—	—	28
Pennsylvania	1	1	—	50	6	1	—	43
E.N. Central	42	40	2	211	64	32	3	112
Illinois	32	32	—	88	—	—	—	88
Indiana	—	—	—	27	18	8	—	1
Michigan	4	4	—	35	15	4	1	15
Ohio	—	—	—	40	23	11	1	5
Wisconsin	6	4	2	21	8	9	1	3
W.N. Central	1	1	—	105	39	23	2	41
Iowa	—	—	—	19	12	6	—	1
Kansas	—	—	—	8	1	—	—	7
Minnesota	—	—	—	30	13	13	1	3
Missouri	1	1	—	26	8	—	—	18
Nebraska	—	—	—	13	4	3	1	5
North Dakota	—	—	—	6	—	—	—	6
South Dakota	—	—	—	3	1	1	—	1
S. Atlantic	4	1	3	157	64	43	10	40
Delaware	—	—	—	2	—	—	—	2
District of Columbia	1	1	—	—	—	—	—	—
Florida	1	—	1	51	24	16	2	9
Georgia	1	—	1	18	6	10	—	2
Maryland	—	—	—	19	8	3	3	5
North Carolina	—	—	—	16	6	2	2	6
South Carolina	—	—	—	22	6	10	3	3
Virginia	1	—	1	24	9	2	—	13
West Virginia	—	—	—	5	5	—	—	—
E.S. Central	—	—	—	55	11	7	10	27
Alabama	—	—	—	10	2	2	4	2
Kentucky	—	—	—	10	—	—	—	10
Mississippi	—	—	—	12	7	1	4	—
Tennessee	—	—	—	23	2	4	2	15
W.S. Central	3	2	1	131	58	28	9	36
Arkansas	2	2	—	16	6	2	1	7
Louisiana	1	—	1	26	9	4	1	12
Oklahoma	—	—	—	19	9	4	6	—
Texas	—	—	—	70	34	18	1	17
Mountain	15	14	1	60	36	10	3	11
Arizona	14	13	1	9	6	2	—	1
Colorado	—	—	—	16	12	4	—	—
Idaho	—	—	—	6	1	1	—	4
Montana	—	—	—	4	1	—	—	3
Nevada	—	—	—	7	3	1	1	2
New Mexico	1	1	—	8	7	—	1	—
Utah	—	—	—	8	6	1	1	—
Wyoming	—	—	—	2	—	1	—	1
Pacific	41	33	8	287	16	13	1	257
Alaska	—	—	—	8	—	—	—	8
California	17	13	4	204	—	—	—	204
Hawaii	4	1	3	5	—	2	—	3
Oregon	1	—	1	39	—	—	—	39
Washington	19	19	—	31	16	11	1	3
American Samoa	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	U	U	U	U	U	U	U	U
Puerto Rico	—	—	—	3	—	—	—	3
U.S. Virgin Islands	—	—	—	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

*** Imported cases include only those directly related to importation from other countries.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Mumps	Novel influenza A virus infections	Pertussis	Plague	Psittacosis	Q Fever			Rabies	
						Total	Acute	Chronic	Animal	Human
United States	454	2	13,278	3	8	120	106	14	4,196	2
New England	18	—	1,052	1	2	—	—	—	433	—
Connecticut	—	—	55	1	N	—	—	—	202	—
Maine	5	—	49	—	—	—	—	—	64	—
Massachusetts	7	—	800	—	1	—	—	—	—	—
New Hampshire	5	—	49	—	—	—	N	N	58	—
Rhode Island	—	—	87	—	1	—	—	—	34	—
Vermont	1	—	12	—	—	—	N	N	75	—
Mid. Atlantic	71	—	1,311	—	1	17	15	2	944	—
New Jersey	13	—	246	—	1	2	2	—	—	—
New York (Upstate)	19	—	456	—	—	9	7	2	500	—
New York City	18	—	114	—	—	6	6	—	19	—
Pennsylvania	21	—	495	—	—	—	—	—	425	—
E.N. Central	151	—	2,252	—	—	7	6	1	256	—
Illinois	91	—	628	—	—	—	—	—	104	—
Indiana	2	—	270	—	—	1	—	1	10	—
Michigan	22	—	317	—	—	2	2	—	78	—
Ohio	23	—	845	—	—	1	1	—	64	—
Wisconsin	13	—	192	—	—	3	3	—	N	—
W.N. Central	50	1	2,327	—	—	15	15	—	323	1
Iowa	24	—	257	—	—	—	N	N	29	—
Kansas	2	—	106	—	—	2	2	—	68	—
Minnesota	9	—	1,034	—	—	5	5	—	70	—
Missouri	8	—	561	—	—	5	5	—	64	1
Nebraska	4	—	277	—	—	2	2	—	34	—
North Dakota	2	—	25	—	—	—	—	—	34	—
South Dakota	1	1	67	—	—	1	1	—	24	—
S. Atlantic	49	—	1,068	—	3	9	7	2	1,650	—
Delaware	1	—	18	—	—	—	—	—	—	—
District of Columbia	2	—	7	—	—	1	1	—	—	—
Florida	16	—	314	—	2	1	1	—	138	—
Georgia	3	—	115	—	—	2	2	—	386	—
Maryland	11	—	164	—	—	1	1	—	420	—
North Carolina	6	—	94	—	—	2	2	—	N	—
South Carolina	—	—	147	—	1	—	—	—	—	—
Virginia	9	—	198	—	—	2	—	2	620	—
West Virginia	1	—	11	—	—	—	—	—	86	—
E.S. Central	7	—	473	—	—	3	3	—	181	—
Alabama	5	—	69	N	—	2	2	—	—	—
Kentucky	—	—	183	—	—	1	1	—	45	—
Mississippi	—	—	105	—	—	—	—	—	7	—
Tennessee	2	—	116	—	—	—	—	—	129	—
W.S. Central	27	1	2,438	—	—	26	22	4	94	—
Arkansas	5	—	197	—	—	2	2	—	49	—
Louisiana	1	—	95	—	—	—	—	—	—	—
Oklahoma	1	—	100	—	—	—	N	N	43	—
Texas	20	1	2,046	—	N	24	20	4	2	—
Mountain	26	—	885	2	—	19	16	3	108	—
Arizona	5	—	218	1	—	4	3	1	N	—
Colorado	8	—	161	—	—	5	5	—	—	—
Idaho	2	—	40	—	—	1	1	—	11	—
Montana	1	—	84	—	—	1	1	—	13	—
Nevada	6	—	28	—	—	2	2	—	12	—
New Mexico	—	—	94	1	—	3	3	—	30	—
Utah	4	—	242	—	—	3	1	2	14	—
Wyoming	—	—	18	—	—	—	—	—	28	—
Pacific	55	—	1,472	—	2	24	22	2	207	1
Alaska	5	—	277	—	—	—	—	—	15	—
California	31	—	534	—	1	20	18	2	179	1
Hawaii	4	—	20	—	—	3	3	—	—	—
Oregon	1	—	181	—	1	1	1	—	13	—
Washington	14	—	460	—	—	—	—	—	—	—
American Samoa	25	—	—	—	N	—	—	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	U	U	U	U	U	—	U	U	U	U
Puerto Rico	3	—	—	—	N	—	—	—	59	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—	N	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Rocky Mountain spotted fever†††			Rubella	Salmonellosis	Shiga toxin-producing <i>E. Coli</i> (STEC)§§§		Shigellosis	Streptococcal disease, invasive, group A	Streptococcal toxic-shock syndrome
	Total	Confirmed	Probable			<i>E. Coli</i> (STEC)§§§	Shigellosis			
United States	2,563	190	2,367	16	51,040	5,309	22,625	5,674	157	
New England	7	—	7	2	2,244	264	243	397	23	
Connecticut	—	—	—	1	491	47	40	118	21	
Maine	1	—	1	—	159	26	20	28	N	
Massachusetts	2	—	2	1	1,227	117	160	176	1	
New Hampshire	1	—	1	—	155	34	6	30	—	
Rhode Island	3	—	3	—	115	10	12	29	—	
Vermont	—	—	—	—	97	30	5	16	1	
Mid. Atlantic	154	5	149	4	5,827	476	2,572	1,097	23	
New Jersey	85	3	82	—	1,297	138	925	191	4	
New York (Upstate)	43	1	42	—	1,491	187	596	347	18	
New York City	11	1	10	1	1,276	58	738	207	—	
Pennsylvania	15	—	15	3	1,763	93	313	352	1	
E.N. Central	150	9	141	2	5,252	876	4,339	1,018	61	
Illinois	110	3	107	—	1,522	135	990	279	36	
Indiana	6	6	—	—	652	96	607	150	10	
Michigan	3	—	3	—	960	219	257	186	1	
Ohio	31	—	31	—	1,366	204	1,923	262	13	
Wisconsin	—	—	—	2	752	222	562	141	1	
W.N. Central	439	22	417	1	2,878	837	953	401	10	
Iowa	8	1	7	—	425	208	214	—	—	
Kansas	—	—	—	—	467	52	67	41	—	
Minnesota	—	—	—	—	748	191	311	185	6	
Missouri	407	12	395	—	764	153	227	96	2	
Nebraska	20	7	13	—	243	150	16	44	2	
North Dakota	1	1	—	1	79	30	42	12	—	
South Dakota	3	1	2	—	152	53	76	23	—	
S. Atlantic	961	109	852	3	12,837	844	3,248	1,177	19	
Delaware	33	1	32	—	148	15	12	11	2	
District of Columbia	6	3	3	—	62	6	21	15	—	
Florida	19	1	18	3	5,312	146	801	275	N	
Georgia	78	78	—	—	2,302	88	1,103	273	—	
Maryland	92	8	84	—	884	128	138	198	N	
North Carolina	511	10	501	—	1,570	142	275	136	6	
South Carolina	57	7	50	—	1,185	46	554	78	—	
Virginia	155	1	154	—	1,165	241	310	150	—	
West Virginia	10	—	10	—	209	32	34	41	11	
E.S. Central	338	13	321	—	3,533	286	1,959	197	4	
Alabama	93	2	91	—	1,013	65	427	N	N	
Kentucky	1	1	—	—	485	100	264	46	4	
Mississippi	11	—	11	—	1,087	5	296	N	N	
Tennessee	233	10	219	—	948	116	972	151	—	
W.S. Central	465	17	448	—	8,401	535	6,127	598	—	
Arkansas	129	2	127	—	797	59	585	11	—	
Louisiana	6	2	4	—	1,115	9	640	19	—	
Oklahoma	268	10	258	—	906	135	237	142	N	
Texas	62	3	59	—	5,583	332	4,665	426	—	
Mountain	46	12	32	—	3,425	635	1,261	606	17	
Arizona	17	11	6	—	1,154	69	650	204	—	
Colorado	1	—	1	—	718	204	150	150	1	
Idaho	1	—	1	—	200	149	14	16	—	
Montana	3	—	3	—	130	38	8	N	N	
Nevada	3	1	2	—	241	19	228	13	3	
New Mexico	4	—	4	—	521	52	161	148	—	
Utah	7	—	6	—	377	91	42	66	13	
Wyoming	10	—	9	—	84	13	8	9	—	
Pacific	3	3	—	4	6,643	556	1,923	183	—	
Alaska	N	—	—	1	58	6	1	41	—	
California	—	—	—	3	5,034	280	1,665	N	N	
Hawaii	N	—	—	—	269	13	46	142	—	
Oregon	3	3	—	—	436	68	95	N	N	
Washington	—	—	—	—	846	189	116	N	N	
American Samoa	N	—	—	1	3	—	1	30	N	
C.N.M.I.	—	—	—	—	—	—	—	—	—	
Guam	U	—	—	U	U	U	U	U	U	
Puerto Rico	N	—	—	—	847	—	31	N	N	
U.S. Virgin Islands	N	—	—	—	—	—	—	—	—	

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

††† Revision of National Surveillance Case Definition distinguishing between confirmed and probable cases. Total count includes six unknown case status reports.

§§§ Includes *E. coli* O157:H7; shiga toxin-positive, serogroup non-O157; and shiga toxin positive, not serogrouped.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	<i>Streptococcus pneumoniae</i> , invasive disease, drug-resistant		<i>Streptococcus pneumoniae</i> , invasive disease, nondrug-resistant age <5 yrs	Syphilis**			Tetanus	Toxic-shock syndrome	Trichinellosis
	All ages	Age <5 yrs		All stages ^{†††}	Congenital (age <1 yr)	Primary and secondary			
United States	3,448	532	1,998	46,277	431	13,500	19	71	39
New England	135	19	105	793	2	309	—	3	—
Connecticut	70	7	15	173	2	34	—	N	—
Maine	18	2	3	27	—	10	—	N	—
Massachusetts	—	—	66	479	—	216	—	1	—
New Hampshire	—	—	11	41	—	20	—	2	—
Rhode Island	31	8	10	55	—	18	—	—	—
Vermont	16	2	—	18	—	11	—	—	—
Mid. Atlantic	315	33	277	7,426	35	1,715	4	8	3
New Jersey	—	—	70	1,009	4	226	—	—	1
New York (Upstate)	78	10	116	778	5	146	—	3	1
New York City	127	6	91	4,737	18	1,071	—	—	1
Pennsylvania	110	17	N	902	8	272	4	5	—
E.N. Central	660	85	354	3,412	34	1,320	1	20	1
Illinois	N	N	98	1,565	20	554	—	4	1
Indiana	242	29	44	351	—	140	—	2	—
Michigan	23	2	90	546	10	210	1	10	—
Ohio	395	54	67	763	3	351	—	4	—
Wisconsin	—	—	55	187	1	65	—	—	—
W.N. Central	368	44	124	1,053	2	402	2	10	2
Iowa	—	—	—	75	—	16	—	1	—
Kansas	79	6	N	125	—	30	—	1	—
Minnesota	185	32	51	265	—	116	1	4	1
Missouri	93	3	39	542	2	224	—	2	—
Nebraska	—	—	9	36	—	15	1	1	—
North Dakota	2	—	12	4	—	—	—	—	1
South Dakota	9	3	13	6	—	1	—	1	—
S. Atlantic	1,378	254	375	11,178	68	3,162	2	1	3
Delaware	3	—	—	59	—	16	—	—	—
District of Columbia	N	N	N	370	—	146	—	—	—
Florida	792	161	70	4,585	17	1,044	2	N	1
Georgia	462	79	106	2,833	11	914	—	1	N
Maryland	7	1	62	1,088	23	378	—	N	1
North Carolina	N	N	N	998	10	287	—	—	—
South Carolina	—	—	72	412	2	98	—	—	—
Virginia	N	N	52	789	4	266	—	—	1
West Virginia	114	13	13	44	1	13	—	—	—
E.S. Central	350	61	96	3,424	23	1,139	—	9	—
Alabama	N	N	N	1,187	12	449	—	1	—
Kentucky	80	11	N	218	1	93	—	2	N
Mississippi	44	14	12	736	—	184	—	N	—
Tennessee	226	36	84	1,283	10	413	—	6	—
W.S. Central	108	16	348	9,125	162	2,404	4	1	—
Arkansas	23	5	17	508	9	206	—	1	N
Louisiana	85	11	17	2,024	23	707	1	—	—
Oklahoma	N	N	76	257	3	86	—	N	—
Texas	—	—	238	6,336	127	1,405	3	N	—
Mountain	132	18	270	2,345	43	608	2	9	—
Arizona	—	—	117	1,394	30	317	—	1	—
Colorado	—	—	62	352	—	128	—	4	—
Idaho	N	N	6	26	—	7	1	2	—
Montana	1	—	N	10	—	7	1	N	—
Nevada	55	6	6	325	9	77	—	2	—
New Mexico	—	—	40	189	4	44	—	—	—
Utah	73	12	37	40	—	25	—	—	—
Wyoming	3	—	2	9	—	3	—	—	—
Pacific	2	2	49	7,521	62	2,441	4	10	30
Alaska	—	—	29	9	—	1	—	N	—
California	N	N	N	6,909	62	2,204	4	10	30
Hawaii	2	2	20	68	—	29	—	N	—
Oregon	N	N	N	97	—	26	—	N	—
Washington	N	N	N	438	—	181	—	N	—
American Samoa	N	N	N	—	—	—	—	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	U	U	U	45	—	6	U	U	U
Puerto Rico	—	—	N	797	8	167	3	N	N
U.S. Virgin Islands	—	—	N	1	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

^{†††} Includes the following categories: primary, secondary, latent (including neurosyphilis, early latent, late latent, late with clinical manifestations other than neurosyphilis, and unknown latent), and congenital syphilis.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

Area	Tuberculosis****	Tularemia	Typhoid fever	Vancomycin-intermediate <i>Staphylococcus aureus</i>	Varicella		Vibriosis
					Morbidity	Mortality††††	
United States	12,904	123	449	63	30,386	2	588
New England	429	19	23	9	1,729	—	19
Connecticut	98	—	3	2	857	—	14
Maine	9	—	—	—	269	—	3
Massachusetts	261	19	16	7	—	—	—
New Hampshire	19	—	2	N	280	—	2
Rhode Island	36	—	1	—	—	—	—
Vermont	6	—	1	—	323	—	—
Mid. Atlantic	2,009	3	124	22	2,409	2	22
New Jersey	422	2	31	N	N	N	17
New York (Upstate)	305	—	12	6	N	1	N
New York City	895	1	57	16	—	1	5
Pennsylvania	387	—	24	—	2,409	—	N
E.N. Central	1,056	2	44	11	7,805	—	30
Illinois	469	1	18	2	1,489	—	11
Indiana	118	—	1	N	—	—	5
Michigan	188	—	9	6	3,053	—	N
Ohio	213	—	8	3	2,403	—	9
Wisconsin	68	1	8	—	860	—	5
W.N. Central	476	45	25	4	1,418	—	8
Iowa	49	—	6	—	N	N	N
Kansas	57	2	2	N	481	—	N
Minnesota	211	2	7	3	—	—	8
Missouri	107	21	2	1	774	—	N
Nebraska	33	7	3	—	N	N	N
North Dakota	3	3	3	—	108	—	N
South Dakota	16	10	2	—	55	—	N
S. Atlantic	2,630	5	78	7	4,863	—	205
Delaware	23	—	4	—	47	—	4
District of Columbia	54	—	—	N	24	—	2
Florida	954	—	18	3	1,735	—	94
Georgia	478	—	9	1	N	N	18
Maryland	278	1	17	N	N	—	33
North Carolina	335	3	6	3	N	N	13
South Carolina	188	—	4	—	886	—	12
Virginia	292	1	19	—	1,489	—	29
West Virginia	28	—	1	—	682	—	N
E.S. Central	677	4	7	2	1,127	—	42
Alabama	176	—	4	N	1,113	—	23
Kentucky	101	2	—	N	N	N	2
Mississippi	118	—	—	2	14	N	7
Tennessee	282	2	3	—	N	—	10
W.S. Central	1,911	18	39	2	8,688	—	63
Arkansas	83	11	4	—	777	—	N
Louisiana	227	—	—	—	72	—	—
Oklahoma	100	7	3	—	N	N	6
Texas	1,501	—	32	2	7,839	—	57
Mountain	544	17	10	3	2,203	—	24
Arizona	227	—	3	2	—	—	14
Colorado	103	2	4	N	874	—	8
Idaho	11	2	—	N	N	N	N
Montana	9	—	1	N	336	—	N
Nevada	102	2	—	—	N	N	N
New Mexico	60	1	1	N	219	—	2
Utah	27	8	1	1	763	—	—
Wyoming	5	2	—	—	11	—	—
Pacific	3,172	10	99	3	144	—	175
Alaska	50	—	1	N	76	N	1
California	2,695	2	75	N	—	—	104
Hawaii	124	—	7	3	68	—	30
Oregon	75	4	1	N	N	N	11
Washington	228	4	15	N	N	N	29
American Samoa	3	—	6	N	N	N	N
C.N.M.I.	34	—	—	—	—	1	—
Guam	90	U	U	U	U	—	U
Puerto Rico	95	—	—	—	600	N	N
U.S. Virgin Islands	4	—	—	N	—	—	N

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

**** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of May 15, 2009.

†††† Totals reported to the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases (NCIRD), as of June 30, 2009.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 8, 2009 (31st week)*

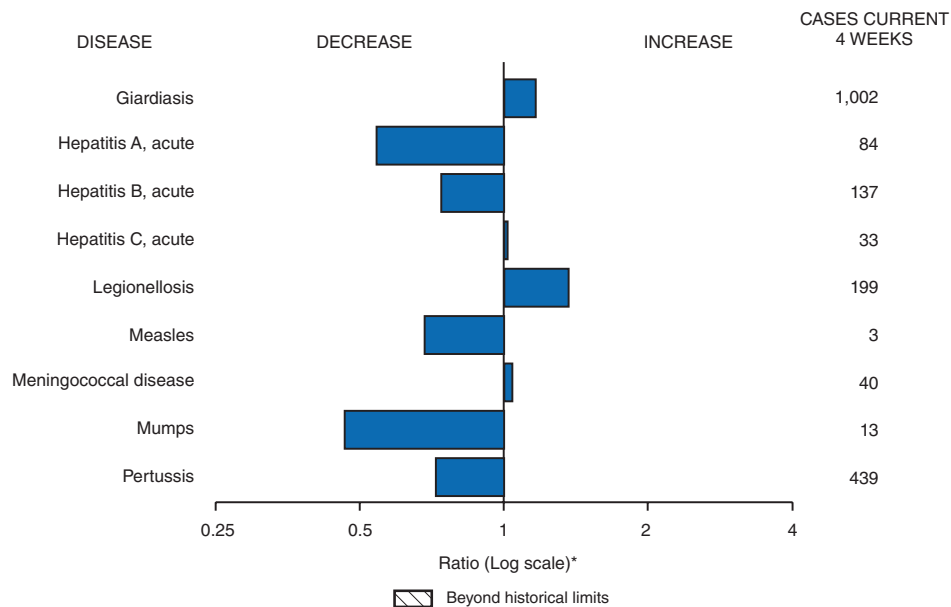
Disease	Current week	Cum 2009	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2008	2007	2006	2005	2004	
Anthrax	—	—	—	—	1	1	—	—	
Botulism:									
foodborne	—	11	0	17	32	20	19	16	
infant	—	29	2	109	85	97	85	87	
other (wound and unspecified)	1	14	1	19	27	48	31	30	CA (1)
Brucellosis	3	57	3	80	131	121	120	114	CA (3)
Chancroid	1	23	0	25	23	33	17	30	WA (1)
Cholera	—	2	0	5	7	9	8	6	
Cyclosporiasis§	—	79	5	139	93	137	543	160	
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup	—	2	5	62	55	67	80	112	
eastern equine	—	1	1	4	4	8	21	6	
Powassan	—	—	0	2	7	1	1	1	
St. Louis	—	5	1	13	9	10	13	12	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
<i>Ehrlichia chaffeensis</i>	12	350	27	1,137	828	578	506	338	NY (1), OH (1), MO (2), MD (2), TN (5), AR (1)
<i>Ehrlichia ewingii</i>	1	2	1	9	—	—	—	—	MO (1)
<i>Anaplasma phagocytophilum</i>	17	260	26	1,026	834	646	786	537	NY (16), OH (1)
undetermined	1	73	6	180	337	231	112	59	MO (1)
<i>Haemophilus influenzae</i> ,††									
invasive disease (age <5 yrs):									
serotype b	—	13	0	30	22	29	9	19	
nonserotype b	—	128	3	244	199	175	135	135	
unknown serotype	2	137	4	163	180	179	217	177	NY (1), FL (1)
Hansen disease§	—	36	2	80	101	66	87	105	
Hantavirus pulmonary syndrome§	—	6	1	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	6	111	7	330	292	288	221	200	CT (1), OH (3), MN (1), CA (1)
Hepatitis C viral, acute	6	972	16	878	845	766	652	720	NY (2), MO (1), MD (1), CO (1), CA (1)
HIV infection, pediatric (age <13 years)§§	—	—	3	—	—	—	380	436	
Influenza-associated pediatric mortality§,¶¶	3	102	0	90	77	43	45	—	MS (1), AZ (1), UT (1)
Listeriosis	7	349	21	759	808	884	896	753	NY (1), MN (1), FL (1), WA (1), CA (3)
Measles***	—	46	0	140	43	55	66	37	
Meningococcal disease, invasive†††:									
A, C, Y, and W-135 serogroup B	3	177	4	330	325	318	297	—	NC (2), TX (1)
other serogroup	—	100	2	188	167	193	156	—	
unknown serogroup	—	18	0	38	35	32	27	—	
unknown serogroup	3	289	8	616	550	651	765	—	ND (1), CA (2)
Mumps	3	206	14	454	800	6,584	314	258	MO (1), CO (1), CA (1)
Novel influenza A virus infections	—	§§§	0	2	4	N	N	N	
Plague	—	4	0	3	7	17	8	3	
Poliomyelitis, paralytic	—	—	—	—	—	—	1	—	
Polio virus infection, nonparalytic§	—	—	—	—	—	N	N	N	
Psittacosis§	—	7	0	8	12	21	16	12	
Q fever total§,¶¶¶:	1	47	3	124	171	169	136	70	
acute	—	40	1	110	—	—	—	—	
chronic	1	7	0	14	—	—	—	—	MI (1)
Rabies, human	—	1	0	2	1	3	2	7	
Rubella****	—	3	0	16	12	11	11	10	
Rubella, congenital syndrome	—	1	—	—	—	1	1	—	
SARS-CoV§,††††	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	4	95	1	157	132	125	129	132	CT (2), OH (1), MN (1)
Syphilis, congenital (age <1 yr)	—	105	8	434	430	349	329	353	
Tetanus	—	6	1	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	—	48	2	71	92	101	90	95	
Trichinellosis	1	12	0	39	5	15	16	5	CO (1)
Tularemia	4	39	5	123	137	95	154	134	NE (1), FL (1), OK (2)
Typhoid fever	5	196	8	449	434	353	324	322	FL (2), WA (1), CA (2)
Vancomycin-intermediate <i>Staphylococcus aureus</i> §	1	43	0	63	37	6	2	—	NY (1)
Vancomycin-resistant <i>Staphylococcus aureus</i> §	—	—	—	—	2	1	3	1	
Vibriosis (noncholera <i>Vibrio</i> species infections)§	10	204	11	492	549	N	N	N	MN (1), VA (1), GA (1), FL (1), CA (5), HI (1)
Yellow fever	—	—	—	—	—	—	—	—	

See Table I 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 August 8, 2009 (31st week)*

—: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts.
 * Incidence data for reporting year 2008 and 2009 are provisional, whereas data for 2004, 2005, 2006, and 2007 are finalized.
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. The total sum of incident cases is then divided by 25 weeks. Additional information is available at <http://www.cdc.gov/epo/dphsi/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 domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
 ** The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).
 †† Data for *H. influenzae* (all ages, all serotypes) are available in Table II.
 §§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.
 ¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. One hundred and one influenza-associated pediatric deaths occurring during the 2008–09 influenza season have been reported.
 *** No measles cases were reported for the current week.
 ††† Data for meningococcal disease (all serogroups) are available in Table II.
 §§§ CDC discontinued reporting of individual confirmed and probable cases of novel influenza A (H1N1) viruses infections on July 24, 2009. CDC will report the total number of novel influenza A (H1N1) hospitalizations and deaths weekly on the CDC H1N1 influenza website (<http://www.cdc.gov/h1n1flu>).
 ¶¶¶ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.
 **** No rubella cases were reported for the current week.
 †††† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 8, 2009, with historical data



* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

Notifiable Disease Data Team and 122 Cities Mortality Data Team
 Patsy A. Hall
 Deborah A. Adams Rosaline Dhara
 Willie J. Anderson Michael S. Wodajo
 Jose Aponte Pearl C. Sharp
 Lenee Blanton

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 week		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	13,102	22,674	25,706	656,489	697,499	62	149	474	6,033	3,934	116	126	482	3,372	3,076
New England	690	770	1,655	23,753	21,485	—	0	1	1	1	2	5	25	178	212
Connecticut	133	228	1,306	6,873	6,008	N	0	0	N	N	—	0	18	18	41
Maine§	—	48	72	1,416	1,463	N	0	0	N	N	—	0	6	16	16
Massachusetts	448	323	945	11,644	10,485	N	0	0	N	N	2	2	13	73	80
New Hampshire	2	37	63	980	1,189	—	0	1	1	1	—	1	4	33	39
Rhode Island§	78	61	244	2,148	1,636	—	0	0	—	—	—	0	3	4	4
Vermont§	29	21	53	692	704	N	0	0	N	N	—	1	7	34	32
Mid. Atlantic	2,652	2,887	6,734	91,406	87,251	—	0	0	—	—	20	13	35	390	364
New Jersey	213	429	846	12,944	13,196	N	0	0	N	N	—	0	4	8	20
New York (Upstate)	579	571	4,563	17,462	16,009	N	0	0	N	N	6	4	17	99	111
New York City	1,297	1,137	3,130	35,804	33,535	N	0	0	N	N	—	1	8	39	57
Pennsylvania	563	812	1,072	25,196	24,511	N	0	0	N	N	14	7	17	244	176
E.N. Central	1,415	3,517	4,382	98,382	114,141	—	0	4	22	32	13	30	126	826	809
Illinois	418	1,092	1,356	30,303	34,604	N	0	0	N	N	—	2	13	69	88
Indiana	269	413	713	13,407	12,887	N	0	0	N	N	—	5	18	184	95
Michigan	533	858	1,332	27,104	26,878	—	0	3	11	25	1	5	13	139	132
Ohio	84	785	1,300	17,391	26,996	—	0	2	11	7	11	9	59	237	164
Wisconsin	111	363	494	10,177	12,776	N	0	0	N	N	1	8	46	197	330
W.N. Central	294	1,330	1,586	37,852	39,328	—	0	1	4	1	28	18	68	504	436
Iowa	207	192	256	5,746	5,136	N	0	0	N	N	7	4	30	118	112
Kansas	4	171	549	5,189	5,432	N	0	0	N	N	—	1	8	47	38
Minnesota	—	267	338	7,191	8,525	—	0	0	—	—	8	4	19	141	97
Missouri	—	500	633	14,723	14,327	—	0	1	4	1	9	3	13	88	93
Nebraska§	18	95	219	2,611	3,185	N	0	0	N	N	3	2	8	49	60
North Dakota	12	22	60	617	1,088	N	0	0	N	N	1	0	10	7	2
South Dakota	53	58	85	1,775	1,635	N	0	0	N	N	—	2	9	54	34
S. Atlantic	2,482	4,309	5,670	114,839	141,048	—	0	1	5	3	20	21	49	549	465
Delaware	74	81	180	2,821	2,204	—	0	1	1	1	—	0	1	2	9
District of Columbia	—	128	227	3,849	4,171	—	0	0	—	—	—	0	2	—	9
Florida	556	1,403	1,597	43,045	42,557	N	0	0	N	N	12	8	35	185	195
Georgia	2	753	1,909	16,869	24,810	N	0	0	N	N	6	6	20	219	132
Maryland§	422	431	772	12,713	13,603	—	0	1	4	2	—	1	5	22	21
North Carolina	—	0	1,309	—	17,934	N	0	0	N	N	—	1	16	58	17
South Carolina§	582	543	1,424	14,544	15,564	N	0	0	N	N	—	1	6	24	28
Virginia§	812	616	924	18,796	18,307	N	0	0	N	N	—	1	4	30	40
West Virginia	34	69	101	2,202	1,898	N	0	0	N	N	2	0	3	9	14
E.S. Central	1,043	1,735	2,184	53,728	49,234	—	0	0	—	—	4	3	10	105	78
Alabama§	—	476	624	14,173	15,090	N	0	0	N	N	1	1	6	35	32
Kentucky	369	253	458	7,476	6,713	N	0	0	N	N	2	1	4	30	17
Mississippi	—	444	841	14,026	11,429	N	0	0	N	N	—	0	2	5	7
Tennessee§	674	569	809	18,053	16,002	N	0	0	N	N	1	1	5	35	22
W.S. Central	2,035	2,913	5,308	91,216	88,919	—	0	1	1	2	11	10	271	199	212
Arkansas§	328	275	418	8,420	8,463	N	0	0	N	N	1	1	10	21	19
Louisiana	192	422	1,134	13,172	12,941	—	0	1	1	2	1	1	5	18	31
Oklahoma	281	177	2,737	8,442	7,824	N	0	0	N	N	4	2	16	53	26
Texas§	1,234	1,965	2,527	61,182	59,691	N	0	0	N	N	5	7	258	107	136
Mountain	815	1,268	2,145	35,024	43,857	—	99	368	4,505	2,641	12	9	38	263	273
Arizona	106	390	627	7,212	14,617	—	97	364	4,442	2,572	—	1	6	22	42
Colorado	360	342	728	9,668	10,474	N	0	0	N	N	10	2	12	79	50
Idaho§	—	67	314	1,999	2,248	N	0	0	N	N	1	1	7	44	37
Montana§	41	56	88	1,769	1,843	N	0	0	N	N	—	0	4	23	32
Nevada§	128	175	366	5,732	5,811	—	1	3	35	36	—	0	4	11	8
New Mexico§	107	167	540	4,894	4,464	—	0	2	8	22	—	2	23	57	69
Utah	33	106	251	2,536	3,544	—	0	2	20	9	1	0	6	12	22
Wyoming§	40	33	97	1,214	856	—	0	1	—	2	—	0	2	15	13
Pacific	1,676	3,660	4,763	110,289	112,236	62	40	172	1,495	1,254	6	11	22	358	227
Alaska	—	116	233	4,923	2,785	N	0	0	N	N	—	0	2	5	2
California	1,222	2,815	3,599	85,890	87,222	62	40	172	1,495	1,254	5	6	15	202	129
Hawaii	—	118	247	3,469	3,434	N	0	0	N	N	—	0	1	1	1
Oregon§	138	198	631	5,712	6,007	N	0	0	N	N	—	2	8	106	46
Washington	316	377	557	10,295	12,788	N	0	0	N	N	1	1	7	44	49
American Samoa	—	0	0	—	73	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	3	8	—	103	—	0	0	—	—	—	0	0	—	—
Puerto Rico	180	133	333	4,686	4,201	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	8	17	205	423	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	243	324	641	9,250	9,627	3,246	5,525	7,164	155,548	196,871	33	55	124	1,770	1,833
New England	11	27	64	753	831	81	97	301	2,889	2,993	3	3	16	131	104
Connecticut	—	6	14	149	188	28	46	275	1,318	1,345	3	0	12	40	22
Maine§	6	4	12	109	81	—	2	9	78	54	—	0	2	14	9
Massachusetts	4	11	27	318	356	43	38	112	1,200	1,305	—	2	5	64	52
New Hampshire	—	3	10	76	77	1	2	6	62	67	—	0	2	7	8
Rhode Island§	—	1	8	35	52	8	6	19	204	200	—	0	7	3	6
Vermont§	1	3	15	66	77	1	1	4	27	22	—	0	1	3	7
Mid. Atlantic	50	58	116	1,661	1,794	559	588	1,138	18,129	19,400	8	11	25	385	339
New Jersey	—	6	21	108	293	37	91	127	2,626	3,185	—	2	7	73	55
New York (Upstate)	34	24	81	699	592	111	102	664	3,059	3,604	6	3	20	90	97
New York City	—	16	30	413	485	286	210	577	6,789	6,048	—	2	11	82	59
Pennsylvania	16	16	46	441	424	125	186	267	5,655	6,563	2	4	10	140	128
E.N. Central	23	44	90	1,233	1,458	532	1,106	1,627	30,471	40,718	2	8	27	255	299
Illinois	—	9	25	222	406	140	347	494	9,232	11,979	—	3	9	90	91
Indiana	N	0	11	N	N	113	146	252	4,468	5,276	—	1	22	74	52
Michigan	—	12	22	339	313	204	288	493	8,827	9,947	—	0	3	15	17
Ohio	20	16	31	453	468	37	251	482	5,336	9,739	2	1	6	67	96
Wisconsin	3	9	19	219	271	38	94	149	2,608	3,777	—	0	4	9	43
W.N. Central	25	25	143	873	1,062	56	289	393	7,989	9,987	3	3	15	100	134
Iowa	9	6	18	174	173	24	32	53	951	914	—	0	0	—	2
Kansas	—	3	11	67	76	21	36	83	1,189	1,317	—	0	2	11	17
Minnesota	—	0	106	250	342	—	43	66	1,171	1,917	2	0	10	32	39
Missouri	13	7	22	234	274	—	136	184	3,715	4,754	1	1	4	34	50
Nebraska§	3	3	10	97	115	3	22	51	706	847	—	0	4	18	18
North Dakota	—	0	16	8	10	—	2	7	36	68	—	0	4	5	8
South Dakota	—	2	7	43	72	8	7	20	221	170	—	0	0	—	—
S. Atlantic	57	68	108	2,140	1,580	743	1,203	2,042	32,527	49,410	13	12	30	474	469
Delaware	—	0	3	17	26	12	16	37	542	681	—	0	1	3	6
District of Columbia	—	0	5	—	40	—	50	88	1,524	1,544	—	0	2	—	5
Florida	42	35	60	1,135	664	190	416	507	12,447	14,347	3	4	10	163	118
Georgia	8	13	67	546	395	—	251	876	5,698	9,066	1	3	9	101	97
Maryland§	2	5	10	140	150	99	120	212	3,367	3,663	—	1	6	56	72
North Carolina	N	0	0	N	N	—	0	542	—	7,978	9	1	17	57	45
South Carolina§	—	2	8	53	69	185	167	414	4,521	5,719	—	1	5	31	42
Virginia§	5	8	31	223	198	254	150	308	4,118	5,953	—	1	6	42	66
West Virginia	—	1	5	26	38	3	11	26	310	459	—	0	3	21	18
E.S. Central	5	8	22	201	249	324	521	714	15,473	17,863	1	3	9	103	92
Alabama§	2	4	12	94	142	—	149	216	3,945	5,951	—	0	4	25	15
Kentucky	N	0	0	N	N	111	80	153	2,178	2,625	—	0	5	15	6
Mississippi	N	0	0	N	N	—	144	253	4,392	4,215	—	0	1	—	11
Tennessee§	3	4	13	107	107	213	160	273	4,958	5,072	1	2	6	63	60
W.S. Central	8	9	22	228	217	544	875	1,382	26,491	30,711	1	2	22	75	86
Arkansas§	3	2	8	72	69	91	83	134	2,578	2,785	—	0	2	13	11
Louisiana	1	2	8	73	84	50	155	420	4,270	5,744	—	0	1	11	8
Oklahoma	4	3	18	83	64	60	69	613	2,947	2,886	1	1	20	50	60
Texas§	N	0	0	N	N	343	563	725	16,696	19,296	—	0	1	1	7
Mountain	19	27	62	739	807	78	171	313	4,207	6,959	2	5	11	157	207
Arizona	—	3	10	101	68	14	47	82	846	2,086	—	1	7	53	84
Colorado	17	9	27	255	294	12	57	152	1,453	2,076	1	1	6	51	39
Idaho§	1	3	14	88	95	—	2	13	53	100	1	0	1	3	12
Montana§	—	2	10	66	46	1	2	6	47	69	—	0	1	1	2
Nevada§	1	2	8	57	66	26	31	86	1,008	1,415	—	0	2	12	11
New Mexico§	—	1	8	50	55	23	24	52	632	828	—	0	3	15	31
Utah	—	5	18	91	162	2	5	15	120	312	—	1	2	19	27
Wyoming§	—	1	4	31	21	—	2	7	48	73	—	0	2	3	1
Pacific	45	52	130	1,422	1,629	329	561	775	17,372	18,830	—	2	8	90	103
Alaska	—	2	10	84	43	—	18	40	796	307	—	0	4	20	14
California	30	35	59	970	1,105	289	473	658	14,481	15,494	—	0	3	20	38
Hawaii	—	0	4	8	23	—	13	19	376	359	—	0	3	18	13
Oregon§	—	7	17	165	266	12	21	48	596	724	—	1	3	29	36
Washington	15	7	74	195	192	28	45	81	1,123	1,946	—	0	2	3	2
American Samoa	—	0	0	—	—	—	0	0	—	3	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	—	45	—	0	0	—	—
Puerto Rico	—	2	15	49	109	5	4	24	161	164	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	2	7	63	80	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting year 2008 and 2009 are provisional.

† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	Hepatitis (viral, acute), by type†										Legionellosis				
	A				B										
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
	Med	Max				Med	Max				Med	Max			
United States	16	37	89	1,091	1,601	32	67	197	1,845	2,243	56	49	110	1,411	1,578
New England	—	2	8	52	77	—	1	4	20	48	2	3	18	71	95
Connecticut	—	0	4	14	14	—	0	3	8	18	2	1	5	31	16
Maine§	—	0	5	1	4	—	0	2	7	9	—	0	2	2	4
Massachusetts	—	1	3	29	41	—	0	2	3	14	—	1	6	25	41
New Hampshire	—	0	2	3	6	—	0	2	2	3	—	0	4	7	15
Rhode Island§	—	0	2	3	10	—	0	1	—	3	—	0	14	4	14
Vermont§	—	0	1	2	2	—	0	1	—	1	—	0	1	2	5
Mid. Atlantic	—	5	13	124	177	—	7	17	190	279	21	15	57	514	482
New Jersey	—	1	5	21	40	—	1	5	44	80	—	2	14	82	62
New York (Upstate)	—	1	4	29	38	—	1	11	37	39	18	5	24	163	130
New York City	—	2	6	34	61	—	1	4	36	61	—	2	18	91	62
Pennsylvania	—	1	4	40	38	—	2	8	73	99	3	5	24	178	228
E.N. Central	—	5	16	154	221	2	10	21	264	293	14	9	29	241	371
Illinois	—	1	11	68	82	—	2	7	29	110	—	1	13	24	45
Indiana	—	0	3	16	12	—	1	18	70	23	—	1	5	18	32
Michigan	—	1	5	39	78	2	3	8	83	80	1	2	10	52	110
Ohio	—	1	4	26	27	—	2	13	60	66	13	4	17	142	166
Wisconsin	—	0	3	5	22	—	0	4	22	14	—	0	6	5	18
W.N. Central	—	2	16	76	192	5	2	16	90	48	2	2	8	46	75
Iowa	—	1	3	22	90	—	0	3	16	13	—	0	2	13	9
Kansas	—	0	1	7	12	—	0	2	4	6	—	0	1	2	1
Minnesota	—	0	12	13	26	3	0	11	17	4	—	0	3	6	8
Missouri	—	0	3	16	23	2	1	5	41	19	1	1	5	17	41
Nebraska§	—	0	3	16	39	—	0	2	11	5	1	0	1	7	15
North Dakota	—	0	2	—	—	—	0	1	—	1	—	0	3	1	—
South Dakota	—	0	1	2	2	—	0	1	1	—	—	0	1	—	1
S. Atlantic	4	7	15	245	214	7	18	32	564	561	12	9	22	267	255
Delaware	—	0	1	3	6	U	0	1	U	U	—	0	5	8	6
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	2	—	9
Florida	3	4	8	115	84	5	6	11	184	196	5	3	7	91	82
Georgia	1	1	4	40	29	1	3	9	91	105	—	1	5	32	20
Maryland§	—	1	4	26	28	—	1	5	44	52	3	2	10	61	72
North Carolina	—	1	7	24	35	—	1	19	128	51	3	0	7	39	12
South Carolina§	—	0	3	22	7	—	1	4	24	45	—	0	1	3	6
Virginia§	—	1	6	15	22	1	1	10	47	66	—	1	5	30	31
West Virginia	—	0	1	—	3	—	1	19	46	46	1	0	3	3	17
E.S. Central	2	1	5	27	47	2	7	11	173	225	2	2	5	59	76
Alabama§	1	0	2	7	8	1	2	7	55	60	—	0	1	6	10
Kentucky	1	0	2	5	16	1	2	7	46	57	2	1	3	27	38
Mississippi	—	0	1	7	4	—	0	3	8	23	—	0	1	1	1
Tennessee§	—	0	4	8	19	—	2	6	64	85	—	1	4	25	27
W.S. Central	1	3	43	99	155	6	11	99	267	450	—	1	21	42	45
Arkansas§	—	0	1	4	4	—	1	5	23	32	—	0	2	3	6
Louisiana	1	0	2	3	8	—	1	4	26	56	—	0	1	2	8
Oklahoma	—	0	6	1	7	4	2	17	56	62	—	0	6	3	3
Texas§	—	3	37	91	136	2	6	76	162	300	—	1	19	34	28
Mountain	3	3	8	96	145	1	3	7	77	124	1	2	8	59	46
Arizona	—	2	6	44	75	—	1	4	28	48	—	0	3	24	13
Colorado	3	0	5	30	26	—	0	2	15	21	—	0	2	6	3
Idaho§	—	0	1	2	14	—	0	2	4	5	—	0	1	1	2
Montana§	—	0	1	5	—	—	0	1	—	1	—	0	2	4	4
Nevada§	—	0	3	6	5	1	0	3	17	28	1	0	2	9	6
New Mexico§	—	0	1	5	15	—	0	2	5	7	—	0	2	—	3
Utah	—	0	2	4	7	—	0	3	5	9	—	0	4	14	15
Wyoming§	—	0	0	—	3	—	0	2	3	5	—	0	1	1	—
Pacific	6	7	18	218	373	9	7	36	200	215	2	3	13	112	133
Alaska	—	0	1	6	3	—	0	2	5	7	—	0	1	3	1
California	5	6	17	167	303	5	5	28	146	149	2	3	9	87	101
Hawaii	—	0	2	4	10	—	0	1	3	5	—	0	1	1	5
Oregon§	—	0	2	12	22	—	0	3	23	28	—	0	2	7	12
Washington	1	1	4	29	35	4	1	8	23	26	—	0	4	14	14
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	2	15	18	—	0	5	10	31	—	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. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Incidence data for reporting year 2008 and 2009 are provisional.
 † Data for acute hepatitis C, viral are available in Table I.
 § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All groups				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	538	539	1,637	13,330	18,735	16	23	46	614	639	6	17	48	584	813
New England	72	106	394	2,095	7,416	—	1	5	25	32	—	0	4	20	23
Connecticut	—	0	105	—	2,698	—	0	4	4	7	—	0	1	2	1
Maine§	62	8	73	374	165	—	0	1	1	1	—	0	1	3	4
Massachusetts	5	30	175	1,041	3,213	—	0	4	16	15	—	0	3	11	15
New Hampshire	—	14	57	452	1,060	—	0	1	1	3	—	0	1	1	2
Rhode Island§	—	0	78	54	114	—	0	1	1	2	—	0	1	2	1
Vermont§	5	5	35	174	166	—	0	1	2	4	—	0	1	1	—
Mid. Atlantic	369	240	1,401	8,045	7,322	1	5	17	132	161	—	2	5	62	85
New Jersey	1	37	225	2,080	2,495	—	0	4	—	38	—	0	2	8	11
New York (Upstate)	227	87	1,368	2,177	2,114	1	1	10	28	15	—	0	2	16	22
New York City	—	1	40	7	424	—	3	11	75	85	—	0	2	9	18
Pennsylvania	141	53	444	3,781	2,279	—	1	4	29	23	—	1	4	29	34
E.N. Central	6	21	115	927	1,504	3	3	6	85	99	—	3	9	109	140
Illinois	—	0	7	44	85	—	1	4	31	51	—	1	6	25	50
Indiana	—	0	6	15	19	—	0	2	11	4	—	0	6	35	17
Michigan	1	1	10	37	31	3	0	3	17	11	—	0	5	17	23
Ohio	1	1	6	21	14	—	1	5	23	21	—	0	3	26	32
Wisconsin	4	17	108	810	1,355	—	0	2	3	12	—	0	1	6	18
W.N. Central	—	6	336	113	294	—	1	7	32	36	1	1	9	45	72
Iowa	—	1	10	49	82	—	0	3	5	3	—	0	1	6	14
Kansas	—	0	4	13	6	—	0	2	3	3	—	0	2	8	3
Minnesota	—	1	326	39	197	—	0	7	13	17	—	0	4	9	21
Missouri	—	0	2	4	2	—	0	2	7	7	—	0	2	14	22
Nebraska§	—	0	3	7	4	—	0	1	3	6	—	0	1	5	10
North Dakota	—	0	10	—	—	—	0	0	—	—	1	0	3	1	1
South Dakota	—	0	1	1	3	—	0	1	1	—	—	0	1	2	1
S. Atlantic	80	65	223	1,979	2,025	7	6	15	200	167	2	2	9	106	114
Delaware	9	12	62	572	526	—	0	1	2	2	—	0	1	2	1
District of Columbia	—	0	5	—	41	—	0	2	—	2	—	0	0	—	—
Florida	3	1	6	26	26	2	1	7	59	27	—	1	4	39	40
Georgia	5	0	6	34	26	5	1	4	43	39	—	0	2	20	14
Maryland§	39	30	163	936	966	—	1	8	48	47	—	0	1	5	12
North Carolina	14	1	7	52	6	—	0	5	21	17	2	0	5	18	10
South Carolina§	—	0	3	15	15	—	0	1	1	6	—	0	1	8	17
Virginia§	10	13	61	280	324	—	1	4	24	26	—	0	2	9	16
West Virginia	—	1	17	64	95	—	0	1	2	1	—	0	2	5	4
E.S. Central	—	0	3	13	30	—	1	3	21	11	—	0	3	19	38
Alabama§	—	0	1	2	8	—	0	3	6	3	—	0	1	5	5
Kentucky	—	0	1	1	4	—	0	2	8	3	—	0	1	4	7
Mississippi	—	0	0	—	1	—	0	0	—	1	—	0	1	1	9
Tennessee§	—	0	3	10	17	—	0	3	7	4	—	0	1	9	17
W.S. Central	—	1	21	18	56	—	1	10	25	36	1	1	12	52	86
Arkansas§	—	0	0	—	—	—	0	1	1	—	—	0	2	5	13
Louisiana	—	0	1	—	1	—	0	1	1	2	—	0	3	10	19
Oklahoma	—	0	2	—	—	—	0	2	2	2	—	0	3	4	10
Texas§	—	1	21	18	55	—	1	10	21	32	1	1	9	33	44
Mountain	1	1	13	24	28	1	0	4	15	17	—	1	4	44	43
Arizona	—	0	2	2	4	—	0	2	3	6	—	0	2	10	5
Colorado	1	0	1	3	2	1	0	3	7	3	—	0	2	13	9
Idaho§	—	0	2	8	5	—	0	1	1	—	—	0	1	5	4
Montana§	—	0	13	2	2	—	0	1	1	—	—	0	2	4	4
Nevada§	—	0	2	8	5	—	0	1	—	4	—	0	2	4	7
New Mexico§	—	0	2	—	6	—	0	1	—	2	—	0	1	3	6
Utah	—	0	1	—	2	—	0	2	3	2	—	0	1	1	6
Wyoming§	—	0	1	1	2	—	0	0	—	—	—	0	2	4	2
Pacific	10	3	13	116	60	4	3	10	79	80	2	4	14	127	212
Alaska	—	0	2	3	3	—	0	1	3	3	—	0	2	2	5
California	10	2	7	103	35	3	2	8	58	60	2	2	8	82	157
Hawaii	N	0	0	N	N	—	0	1	1	2	—	0	1	3	4
Oregon§	—	0	3	7	18	—	0	2	7	4	—	0	7	27	25
Washington	—	0	12	3	4	1	0	3	10	11	—	0	6	13	21
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	1	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	2	—	0	1	—	2
U.S. Virgin Islands	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting year 2008 and 2009 are provisional.

† 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 August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	122	263	1,697	7,341	4,996	59	66	138	2,054	2,445	27	31	179	804	1,120
New England	1	16	30	374	581	2	8	15	201	225	—	0	2	7	3
Connecticut	—	0	4	19	37	—	3	10	85	107	—	0	0	—	—
Maine†	—	1	10	63	21	—	1	5	33	31	—	0	2	4	—
Massachusetts	1	10	26	224	451	—	0	0	—	—	—	0	1	3	1
New Hampshire	—	1	7	49	20	—	1	7	23	24	—	0	0	—	1
Rhode Island†	—	0	5	11	45	—	1	3	27	19	—	0	2	—	1
Vermont†	—	0	2	8	7	2	1	4	33	44	—	0	0	—	—
Mid. Atlantic	18	24	64	642	576	12	15	27	359	533	—	1	29	36	78
New Jersey	—	4	12	111	119	—	0	0	—	—	—	0	6	—	55
New York (Upstate)	7	5	41	115	205	12	8	20	241	278	—	0	29	5	10
New York City	—	0	21	48	49	—	0	2	—	11	—	0	4	20	6
Pennsylvania	11	12	33	368	203	—	5	17	118	244	—	0	2	11	7
E.N. Central	44	50	238	1,578	851	9	2	28	120	108	—	2	15	42	87
Illinois	—	13	45	260	143	5	1	20	50	37	—	1	9	27	66
Indiana	—	5	158	186	28	—	0	12	12	3	—	0	3	2	2
Michigan	8	10	21	353	126	2	1	9	36	40	—	0	2	4	2
Ohio	36	18	57	701	483	2	0	7	22	28	—	0	3	9	17
Wisconsin	—	3	10	78	71	N	0	0	N	N	—	0	0	—	—
W.N. Central	9	33	872	1,086	422	6	5	17	157	170	7	4	24	126	275
Iowa	—	6	21	112	66	—	0	5	9	12	—	0	1	2	6
Kansas	—	4	12	118	33	—	1	6	55	44	—	0	1	1	—
Minnesota	—	0	808	165	126	3	0	11	32	33	—	0	0	—	—
Missouri	7	18	51	568	140	3	1	8	30	26	6	3	24	116	254
Nebraska†	1	4	32	93	39	—	0	2	—	25	1	0	2	7	12
North Dakota	1	0	24	16	1	—	0	9	4	16	—	0	1	—	—
South Dakota	—	0	10	14	17	—	0	4	27	14	—	0	0	—	3
S. Atlantic	23	27	71	942	476	20	25	111	922	1,074	11	14	54	331	345
Delaware	—	0	3	8	7	—	0	0	—	—	—	0	3	6	21
District of Columbia	—	0	2	—	1	—	0	0	—	—	—	0	0	—	6
Florida	18	8	32	326	136	—	0	95	104	138	—	0	3	4	5
Georgia	—	3	11	106	52	—	3	71	225	238	1	1	5	27	50
Maryland†	4	3	10	67	62	—	6	13	184	270	—	1	7	27	44
North Carolina	—	0	65	199	77	N	2	4	N	N	9	9	36	212	124
South Carolina†	—	3	16	128	66	—	0	0	—	—	—	0	9	14	18
Virginia†	—	4	24	94	69	18	10	24	338	367	1	2	9	38	71
West Virginia	1	0	5	14	6	2	2	6	71	61	—	0	1	3	6
E.S. Central	7	14	33	450	180	2	2	7	67	109	5	4	19	145	177
Alabama†	—	3	19	169	23	—	0	0	—	—	4	1	6	34	46
Kentucky	6	5	15	140	45	2	1	4	33	25	—	0	0	—	1
Mississippi	—	1	4	30	70	—	0	2	—	2	—	0	1	5	7
Tennessee†	1	3	14	111	42	—	2	6	34	82	1	3	17	106	123
W.S. Central	1	53	389	1,270	718	—	0	7	31	66	4	2	161	98	131
Arkansas†	—	4	38	126	51	—	0	5	23	39	3	0	61	44	16
Louisiana	1	2	7	69	47	—	0	0	—	—	—	0	2	2	3
Oklahoma	—	0	45	18	19	—	0	6	7	25	1	0	98	41	86
Texas†	—	41	304	1,057	601	—	0	1	1	2	—	0	6	11	26
Mountain	7	17	31	503	517	1	2	9	54	44	—	1	3	17	22
Arizona	—	3	8	107	143	N	0	0	N	N	—	0	2	3	7
Colorado	5	5	12	175	91	—	0	0	—	—	—	0	0	—	1
Idaho†	1	1	5	47	22	—	0	2	—	6	—	0	0	—	1
Montana†	—	0	4	12	64	—	0	4	15	4	—	0	2	8	3
Nevada†	1	0	3	8	21	—	0	5	3	3	—	0	2	1	—
New Mexico†	—	1	10	33	28	—	0	2	15	21	—	0	1	1	2
Utah	—	4	19	113	138	1	0	6	4	2	—	0	1	1	3
Wyoming†	—	0	5	8	10	—	0	4	17	8	—	0	2	3	5
Pacific	12	22	98	496	675	7	4	13	143	116	—	0	1	2	2
Alaska	—	4	21	56	70	—	0	4	19	12	N	0	0	N	N
California	—	6	19	128	326	7	4	12	122	99	—	0	1	2	—
Hawaii	1	0	3	19	6	—	0	0	—	—	N	0	0	N	N
Oregon†	—	3	14	125	102	—	0	2	2	5	—	0	1	—	2
Washington	11	6	76	168	171	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	1	—	—	1	3	24	37	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
 U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Incidence data for reporting year 2008 and 2009 are provisional.
 † Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	681	888	2,323	22,396	24,646	54	82	255	1,980	2,567	188	317	1,268	8,892	11,081
New England	8	32	264	1,252	1,435	—	3	43	123	159	5	3	28	143	141
Connecticut	—	0	238	238	491	—	0	43	43	47	—	0	23	23	40
Maine§	2	2	7	77	89	—	0	3	10	7	—	0	6	3	11
Massachusetts	5	22	41	631	661	—	1	6	41	74	5	2	15	101	76
New Hampshire	1	3	42	184	88	—	1	3	21	14	—	0	3	5	4
Rhode Island§	—	2	11	87	53	—	0	1	—	7	—	0	1	8	8
Vermont§	—	1	6	35	53	—	0	6	8	10	—	0	2	3	2
Mid. Atlantic	53	91	182	2,432	3,146	5	6	19	130	282	38	55	76	1,668	1,422
New Jersey	—	12	44	221	758	—	1	5	21	92	—	16	35	344	445
New York (Upstate)	32	24	66	691	733	5	3	12	66	80	8	5	23	131	391
New York City	—	19	49	589	696	—	1	5	37	32	—	9	23	233	478
Pennsylvania	21	29	66	931	959	—	0	5	6	78	30	21	58	960	108
E.N. Central	46	96	156	2,747	2,919	3	14	74	357	405	33	77	132	1,719	2,045
Illinois	—	25	50	661	865	—	1	10	62	75	—	13	34	334	594
Indiana	—	11	50	313	324	—	2	13	55	42	—	2	21	52	448
Michigan	8	18	38	547	540	—	3	43	78	79	2	5	24	136	70
Ohio	38	27	52	873	763	3	3	15	71	96	31	39	80	883	715
Wisconsin	—	12	30	353	427	—	3	16	91	113	—	11	42	314	218
W.N. Central	62	52	109	1,551	1,612	15	12	37	358	476	8	15	49	522	553
Iowa	6	7	16	241	261	3	2	13	95	128	—	2	12	45	97
Kansas	—	7	19	213	255	—	1	7	25	26	—	3	11	145	15
Minnesota	17	13	51	366	429	10	2	14	110	94	—	3	14	48	176
Missouri	25	11	48	311	407	—	2	10	62	109	8	3	39	264	158
Nebraska§	6	5	41	235	144	2	2	12	49	88	—	0	3	15	2
North Dakota	8	0	30	40	27	—	0	28	3	1	—	0	9	3	30
South Dakota	—	4	22	145	89	—	0	5	14	30	—	0	1	2	75
S. Atlantic	266	262	457	6,055	5,875	7	13	48	349	420	36	47	85	1,380	1,964
Delaware	1	2	8	54	86	—	0	2	8	8	3	0	8	55	7
District of Columbia	—	0	2	—	42	—	0	1	—	5	—	0	2	—	11
Florida	189	103	180	2,803	2,473	5	2	10	94	86	18	9	24	269	558
Georgia	41	39	96	1,092	1,143	—	1	8	37	48	6	13	30	395	754
Maryland§	19	16	35	400	473	1	2	11	47	67	4	6	13	222	48
North Carolina	6	27	106	749	504	—	2	21	70	47	—	6	27	240	63
South Carolina§	—	16	57	357	508	—	0	3	16	26	—	4	17	71	397
Virginia§	10	19	88	480	519	—	3	27	62	107	5	5	59	123	105
West Virginia	—	4	23	120	127	1	0	3	15	26	—	0	3	5	21
E.S. Central	47	52	140	1,342	1,648	4	5	12	129	156	4	21	58	530	1,233
Alabama§	8	16	49	380	453	1	1	4	30	42	—	4	12	94	293
Kentucky	17	10	18	281	255	2	2	7	44	46	2	2	25	134	203
Mississippi	6	12	57	290	525	—	0	1	6	4	—	1	6	17	257
Tennessee§	16	14	62	391	415	1	2	6	49	64	2	12	48	285	480
W.S. Central	56	96	1,333	2,023	3,307	1	3	139	70	192	39	66	967	1,620	2,464
Arkansas§	20	12	38	322	363	—	1	5	20	31	5	9	21	212	301
Louisiana	18	18	54	404	574	—	0	1	—	6	2	5	20	95	426
Oklahoma	18	14	102	324	374	1	0	82	14	18	11	5	61	160	66
Texas§	—	51	1,204	973	1,996	—	2	55	36	137	21	46	889	1,153	1,671
Mountain	22	57	103	1,568	1,880	8	10	40	256	293	4	27	54	651	474
Arizona	—	19	43	509	547	—	1	4	30	40	—	17	40	479	217
Colorado	18	12	26	377	442	6	3	18	100	83	3	2	11	55	56
Idaho§	2	3	9	95	99	2	2	15	42	53	—	0	2	5	6
Montana§	—	2	7	72	65	—	0	3	14	24	—	0	5	13	4
Nevada§	1	4	12	145	137	—	0	3	16	13	1	1	13	37	125
New Mexico§	—	6	22	166	356	—	1	4	18	32	—	2	12	51	47
Utah	1	6	15	161	191	—	1	7	31	38	—	1	3	11	16
Wyoming§	—	1	6	43	43	—	0	2	5	10	—	0	1	—	3
Pacific	121	125	537	3,426	2,824	11	9	31	208	184	21	28	82	659	785
Alaska	—	2	9	68	27	—	0	1	—	4	—	0	1	3	—
California	88	95	516	2,621	2,052	4	5	15	129	95	13	24	75	528	678
Hawaii	4	5	13	146	157	—	0	1	2	11	3	0	3	19	25
Oregon§	—	7	20	216	247	—	1	7	16	25	—	1	10	21	40
Washington	29	11	85	375	341	7	3	16	61	49	5	3	11	88	42
American Samoa	—	0	1	—	1	—	0	0	—	—	—	0	2	3	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	—	8	—	0	0	—	—	—	0	1	—	14
Puerto Rico	3	11	40	188	377	—	0	0	—	—	—	0	4	5	15
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting year 2008 and 2009 are provisional.

† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	Streptococcal diseases, invasive, group A				<i>Streptococcus pneumoniae</i> , invasive disease, nondrug resistant† Age <5 years					
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max		
United States	64	102	239	3,663	3,786	12	36	122	1,100	1,147
New England	10	5	28	219	282	1	1	12	40	57
Connecticut	9	0	21	62	78	—	0	11	—	—
Maine§	—	0	2	13	20	1	0	1	3	1
Massachusetts	1	3	10	91	134	—	1	4	28	42
New Hampshire	—	1	4	31	18	—	0	2	7	7
Rhode Island§	—	0	2	9	20	—	0	2	—	7
Vermont§	—	0	3	13	12	—	0	1	2	—
Mid. Atlantic	5	19	43	732	781	3	4	33	165	149
New Jersey	—	3	6	92	142	—	1	4	28	44
New York (Upstate)	2	7	25	243	247	3	2	17	79	68
New York City	—	4	12	139	141	—	0	31	58	37
Pennsylvania	3	6	18	258	251	N	0	2	N	N
E.N. Central	5	17	42	752	743	—	6	18	168	209
Illinois	—	5	12	182	199	—	1	5	19	60
Indiana	—	3	23	185	96	—	0	13	32	21
Michigan	—	3	11	109	127	—	1	5	45	55
Ohio	3	4	13	173	205	—	1	6	48	37
Wisconsin	2	2	10	103	116	—	1	4	24	36
W.N. Central	15	6	37	306	281	4	2	11	97	57
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	1	5	37	32	N	0	1	N	N
Minnesota	14	0	34	139	136	4	0	10	54	14
Missouri	1	2	8	67	64	—	1	4	29	26
Nebraska§	—	1	3	32	25	—	0	1	5	6
North Dakota	—	0	4	11	8	—	0	3	4	5
South Dakota	—	0	3	20	16	—	0	2	5	6
S. Atlantic	16	22	47	798	760	—	6	16	205	220
Delaware	—	0	1	9	6	—	0	0	—	—
District of Columbia	—	0	2	—	8	N	0	0	N	N
Florida	5	6	12	190	170	—	1	6	48	41
Georgia	3	5	13	188	174	—	2	6	49	59
Maryland§	3	3	12	128	136	—	1	4	46	43
North Carolina	2	2	12	81	96	N	0	0	N	N
South Carolina§	—	2	5	49	43	—	1	6	32	37
Virginia§	—	3	9	120	98	—	0	4	18	35
West Virginia	3	1	4	33	29	—	0	3	12	5
E.S. Central	3	4	10	138	128	—	1	6	42	59
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	2	1	5	25	28	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	—	8
Tennessee§	1	3	9	113	100	—	1	6	42	51
W.S. Central	9	9	79	299	322	3	6	46	187	177
Arkansas§	1	0	2	14	7	—	0	4	19	10
Louisiana	—	0	3	9	13	—	0	3	13	10
Oklahoma	5	3	20	103	74	1	1	7	36	48
Texas§	3	6	59	173	228	2	4	34	119	109
Mountain	1	10	22	314	397	1	4	16	161	185
Arizona	—	3	7	102	140	—	2	10	82	85
Colorado	1	3	9	104	100	1	1	4	31	41
Idaho§	—	0	2	4	12	—	0	2	6	3
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	5	6	—	0	1	—	3
New Mexico§	—	2	7	58	97	—	0	4	15	25
Utah	—	1	6	40	36	—	0	5	27	27
Wyoming§	—	0	1	1	6	—	0	1	—	1
Pacific	—	4	10	105	92	—	1	6	35	34
Alaska	—	1	3	28	23	—	0	5	29	22
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	3	8	77	69	—	0	2	6	12
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	0	—	30	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N

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U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting year 2008 and 2009 are provisional.

† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDS event code 11717).

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	<i>Streptococcus pneumoniae</i> , invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages				Aged <5 years										
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
	Med	Max				Med	Max				Med	Max			
United States	10	61	276	1,967	2,093	3	9	21	301	315	119	261	452	7,546	7,425
New England	—	1	48	33	45	—	0	5	2	6	7	5	15	195	191
Connecticut	—	0	48	—	—	—	0	5	—	—	3	1	5	39	17
Maine§	—	0	2	8	14	—	0	1	—	—	—	0	1	1	8
Massachusetts	—	0	1	2	—	—	0	1	2	—	4	4	11	134	137
New Hampshire	—	0	3	5	—	—	0	0	—	—	—	0	2	11	10
Rhode Island§	—	0	6	7	18	—	0	1	—	4	—	0	5	10	14
Vermont§	—	0	2	11	13	—	0	0	—	2	—	0	2	—	5
Mid. Atlantic	1	4	14	112	217	—	0	3	19	18	25	35	51	1,111	990
New Jersey	—	0	0	—	—	—	0	0	—	—	1	4	13	136	129
New York (Upstate)	—	1	10	49	46	—	0	2	10	6	2	2	8	73	85
New York City	—	0	4	3	90	—	0	2	—	1	19	23	40	700	606
Pennsylvania	1	1	8	60	81	—	0	2	9	11	3	6	12	202	170
E.N. Central	3	12	41	503	455	2	1	7	68	62	10	24	44	608	674
Illinois	N	0	0	N	N	N	0	0	N	N	6	8	19	180	265
Indiana	—	4	32	224	158	—	0	6	27	19	3	2	10	90	79
Michigan	—	0	2	18	15	—	0	1	2	2	—	3	18	141	124
Ohio	3	7	18	261	282	2	1	4	39	41	—	6	15	170	176
Wisconsin	—	0	0	—	—	—	0	0	—	—	1	1	4	27	30
W.N. Central	—	2	161	90	150	—	0	3	20	30	—	6	14	172	242
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	12	12
Kansas	—	1	5	38	58	—	0	2	13	3	—	0	3	18	19
Minnesota	—	0	156	—	22	—	0	3	—	22	—	2	6	40	61
Missouri	—	1	5	40	64	—	0	1	5	2	—	3	10	83	143
Nebraska§	—	0	0	—	—	—	0	0	—	—	—	0	3	15	7
North Dakota	—	0	3	10	2	—	0	0	—	—	—	0	1	3	—
South Dakota	—	0	2	2	4	—	0	2	2	3	—	0	1	1	—
S. Atlantic	4	26	53	894	834	—	4	14	133	133	40	63	262	1,860	1,617
Delaware	—	0	2	13	3	—	0	0	—	—	—	0	3	22	10
District of Columbia	N	0	0	N	N	N	0	0	N	N	—	3	9	96	83
Florida	2	15	36	526	461	—	2	13	84	85	1	19	31	581	612
Georgia	—	8	25	271	284	—	1	5	42	40	4	14	227	409	343
Maryland§	—	0	1	4	4	—	0	0	—	1	6	6	16	176	198
North Carolina	N	0	0	N	N	N	0	0	N	N	17	8	19	325	162
South Carolina§	—	0	0	—	—	—	0	0	—	—	1	2	6	62	51
Virginia§	N	0	0	N	N	N	0	0	N	N	11	5	16	185	151
West Virginia	2	2	13	80	82	—	0	3	7	7	—	0	2	4	7
E.S. Central	1	5	25	187	230	—	1	3	27	42	13	22	36	674	632
Alabama§	N	0	0	N	N	N	0	0	N	N	—	8	16	257	266
Kentucky	1	1	5	52	56	—	0	2	7	9	5	1	10	36	50
Mississippi	—	0	3	—	28	—	0	1	—	8	—	3	18	122	89
Tennessee§	—	3	23	135	146	—	0	3	20	25	8	8	19	259	227
W.S. Central	—	1	6	66	73	—	0	3	14	12	18	50	80	1,459	1,246
Arkansas§	—	0	5	37	13	—	0	3	9	3	—	4	35	123	98
Louisiana	—	1	5	29	60	—	0	1	5	9	—	13	40	298	324
Oklahoma	N	0	0	N	N	N	0	0	N	N	1	1	7	35	46
Texas§	—	0	0	—	—	—	0	0	—	—	17	31	46	1,003	778
Mountain	1	2	7	80	88	1	0	3	17	11	2	7	18	170	392
Arizona	—	0	0	—	—	—	0	0	—	—	—	2	8	22	200
Colorado	—	0	0	—	—	—	0	0	—	—	1	1	5	55	97
Idaho§	N	0	1	N	N	N	0	1	N	N	—	0	2	3	2
Montana§	—	0	1	—	—	—	0	0	—	—	—	0	7	—	—
Nevada§	1	1	4	29	43	1	0	2	7	5	1	1	7	60	50
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	1	5	28	25
Utah	—	1	6	42	44	—	0	3	9	6	—	0	2	—	16
Wyoming§	—	0	2	9	1	—	0	1	1	—	—	0	1	2	2
Pacific	—	0	1	2	1	—	0	1	1	1	4	46	67	1,297	1,441
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
California	N	0	0	N	N	N	0	0	N	N	2	41	59	1,193	1,305
Hawaii	—	0	1	2	1	—	0	1	1	1	—	0	3	18	14
Oregon§	N	0	0	N	N	N	0	0	N	N	—	1	4	26	8
Washington	N	0	0	N	N	N	0	0	N	N	2	2	8	60	113
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	—	—	1	3	11	121	91
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. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting year 2008 and 2009 are provisional.

† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 8, 2009, and August 2, 2008 (31st week)*

Reporting area	West Nile virus disease†														
	Varicella (chickenpox)				Neuroinvasive				Nonneuroinvasive§						
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
	Med	Max				Med	Max				Med	Max			
United States	43	490	1,035	13,799	19,858	—	1	75	41	158	—	0	77	16	210
New England	—	11	46	184	1,075	—	0	2	—	—	—	0	1	—	2
Connecticut	—	0	21	—	546	—	0	2	—	—	—	0	1	—	2
Maine¶	—	0	11	—	172	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	1	—	—	0	1	—	—	—	0	0	—	—
New Hampshire	—	4	11	136	170	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	1	4	—	—	0	1	—	—	—	0	0	—	—
Vermont¶	—	3	17	43	187	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	8	38	58	989	1,576	—	0	8	1	6	—	0	4	—	1
New Jersey	N	0	0	N	N	—	0	2	—	—	—	0	1	—	1
New York (Upstate)	N	0	0	N	N	—	0	5	1	2	—	0	2	—	—
New York City	—	0	0	—	—	—	0	2	—	3	—	0	2	—	—
Pennsylvania	8	38	58	989	1,576	—	0	2	—	1	—	0	1	—	—
E.N. Central	13	157	254	4,209	4,828	—	0	8	—	5	—	0	3	—	5
Illinois	—	33	73	835	670	—	0	4	—	1	—	0	2	—	3
Indiana	—	0	35	332	—	—	0	1	—	1	—	0	1	—	—
Michigan	3	48	90	1,288	2,055	—	0	4	—	1	—	0	2	—	—
Ohio	8	42	91	1,380	1,556	—	0	3	—	2	—	0	1	—	—
Wisconsin	2	13	55	374	547	—	0	2	—	—	—	0	1	—	2
W.N. Central	4	22	114	654	784	—	0	6	2	15	—	0	21	3	50
Iowa	N	0	0	N	N	—	0	1	—	2	—	0	1	—	2
Kansas	—	6	22	176	308	—	0	2	—	5	—	0	3	—	6
Minnesota	—	0	0	—	—	—	0	2	1	—	—	0	2	—	5
Missouri	2	10	51	421	446	—	0	3	—	1	—	0	1	—	—
Nebraska¶	N	0	0	N	N	—	0	1	—	1	—	0	6	1	9
North Dakota	2	0	108	57	—	—	0	0	—	2	—	0	11	—	15
South Dakota	—	0	4	—	30	—	0	5	1	4	—	0	5	2	13
S. Atlantic	14	56	146	1,376	3,225	—	0	4	—	4	—	0	4	—	3
Delaware	—	0	4	8	26	—	0	0	—	—	—	0	1	—	—
District of Columbia	—	0	3	—	18	—	0	2	—	—	—	0	1	—	—
Florida	8	28	67	905	1,146	—	0	2	—	1	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	1	—	2
Maryland¶	N	0	0	N	N	—	0	2	—	1	—	0	3	—	—
North Carolina	N	0	0	N	N	—	0	1	—	1	—	0	1	—	—
South Carolina¶	—	4	54	154	575	—	0	0	—	—	—	0	1	—	—
Virginia¶	—	2	119	28	981	—	0	0	—	—	—	0	0	—	1
West Virginia	6	9	32	281	479	—	0	0	—	1	—	0	0	—	—
E.S. Central	—	14	28	372	829	—	0	7	8	10	—	0	7	3	24
Alabama¶	—	14	28	370	819	—	0	3	—	—	—	0	2	—	3
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	2	10	—	0	4	7	6	—	0	7	3	17
Tennessee¶	N	0	0	N	N	—	0	2	1	4	—	0	3	—	4
W.S. Central	—	122	747	4,991	6,021	—	0	8	14	20	—	0	6	1	26
Arkansas¶	—	4	47	96	468	—	0	1	1	5	—	0	0	—	2
Louisiana	—	1	6	58	55	—	0	3	3	3	—	0	5	—	9
Oklahoma	N	0	0	N	N	—	0	1	—	2	—	0	1	—	4
Texas¶	—	115	721	4,837	5,498	—	0	6	10	10	—	0	4	1	11
Mountain	4	33	83	918	1,438	—	0	12	13	21	—	0	22	7	50
Arizona	—	0	0	—	—	—	0	10	6	9	—	0	8	1	5
Colorado	4	13	44	349	575	—	0	4	1	4	—	0	10	3	17
Idaho¶	N	0	0	N	N	—	0	1	1	2	—	0	6	—	13
Montana¶	—	2	20	105	216	—	0	1	1	—	—	0	2	—	2
Nevada¶	N	0	0	N	N	—	0	2	3	4	—	0	3	3	3
New Mexico¶	—	3	20	134	153	—	0	1	—	1	—	0	1	—	—
Utah	—	12	31	330	484	—	0	2	—	1	—	0	5	—	8
Wyoming¶	—	0	1	—	10	—	0	1	1	—	—	0	2	—	2
Pacific	—	3	12	106	82	—	0	38	3	77	—	0	23	2	49
Alaska	—	2	11	83	41	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	37	3	77	—	0	18	2	46
Hawaii	—	1	4	23	41	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	—	—	0	4	—	3
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	1	3	—	55	—	0	0	—	—	—	0	0	—	—
Puerto Rico	2	8	23	276	389	—	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. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, 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/epo/dphsi/phs/infdis.htm>.

¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending August 8, 2009 (31st week)

Reporting area	All causes, by age (years)							P&I†	Total	Reporting area	All causes, by age (years)							P&I†	Total
	All Ages	≥65	45-64	25-44	1-24	<1	All Ages				≥65	45-64	25-44	1-24	<1				
New England	427	276	91	39	9	12	39		S. Atlantic	1,168	728	320	79	16	24	77			
Boston, MA	132	75	36	13	1	7	9		Atlanta, GA	137	86	41	7	1	2	12			
Bridgeport, CT	40	26	8	2	1	3	9		Baltimore, MD	122	67	39	12	3	1	6			
Cambridge, MA	9	9	—	—	—	—	1		Charlotte, NC	118	70	38	6	2	2	10			
Fall River, MA	26	22	2	2	—	—	2		Jacksonville, FL	169	116	36	10	2	4	11			
Hartford, CT	53	33	10	8	2	—	5		Miami, FL	109	65	27	10	4	3	9			
Lowell, MA	22	16	4	2	—	—	—		Norfolk, VA	48	30	13	3	1	1	3			
Lynn, MA	9	6	1	2	—	—	—		Richmond, VA	49	24	18	3	1	3	3			
New Bedford, MA	31	23	7	—	1	—	1		Savannah, GA	53	34	13	4	—	2	4			
New Haven, CT	13	8	4	1	—	—	2		St. Petersburg, FL	52	34	15	3	—	—	5			
Providence, RI	U	U	U	U	U	U	U		Tampa, FL	185	120	50	13	—	2	10			
Somerville, MA	3	1	1	1	—	—	—		Washington, D.C.	110	70	27	7	2	4	2			
Springfield, MA	24	8	9	4	1	2	—		Wilmington, DE	16	12	3	1	—	—	2			
Waterbury, CT	21	16	4	1	—	—	4		E.S. Central	802	513	200	54	25	10	61			
Worcester, MA	44	33	5	3	3	—	6		Birmingham, AL	155	102	29	15	4	5	11			
Mid. Atlantic	1,674	1,133	367	101	43	30	72		Chattanooga, TN	89	65	13	6	5	—	9			
Albany, NY	39	26	8	2	3	—	3		Chattanooga, TN	110	74	28	7	—	1	11			
Allentown, PA	31	25	6	—	—	—	2		Lexington, KY	69	41	24	3	—	1	5			
Buffalo, NY	82	43	27	7	4	1	6		Memphis, TN	104	63	32	5	4	—	8			
Camden, NJ	28	18	6	1	2	1	—		Mobile, AL	77	47	21	5	3	1	3			
Elizabeth, NJ	14	12	1	1	—	—	—		Montgomery, AL	39	24	11	1	2	1	4			
Erie, PA	46	33	9	3	1	—	2		Nashville, TN	159	97	42	12	7	1	10			
Jersey City, NJ	29	19	9	1	—	—	2		W.S. Central	1,066	626	298	85	31	26	47			
New York City, NY	907	615	199	59	19	15	36		Austin, TX	67	41	17	4	3	2	3			
Newark, NJ	34	14	11	5	3	1	—		Baton Rouge, LA	70	49	17	3	1	—	—			
Paterson, NJ	4	3	—	—	—	—	1		Corpus Christi, TX	52	37	12	3	—	—	5			
Philadelphia, PA	117	63	37	6	7	4	2		Dallas, TX	168	96	49	9	9	5	9			
Pittsburgh, PA§	35	24	5	2	1	3	1		El Paso, TX	69	42	15	6	4	2	1			
Reading, PA	37	31	4	2	—	—	5		Fort Worth, TX	U	U	U	U	U	U	U			
Rochester, NY	111	91	13	3	1	3	4		Houston, TX	243	108	93	26	5	11	8			
Schenectady, NY	18	13	4	1	—	—	2		Little Rock, AR	78	44	26	6	1	1	3			
Scranton, PA	25	21	3	1	—	—	1		New Orleans, LA	U	U	U	U	U	U	U			
Syracuse, NY	71	54	12	4	—	1	4		San Antonio, TX	168	116	33	12	3	4	10			
Trenton, NJ	20	11	6	1	2	—	—		Shreveport, LA	59	35	16	6	2	—	5			
Utica, NY	11	8	2	1	—	—	1		Tulsa, OK	92	58	20	10	3	1	3			
Yonkers, NY	15	9	5	1	—	—	1		Mountain	1,031	655	245	81	28	20	56			
E.N. Central	1,799	1,143	436	119	52	49	117		Albuquerque, NM	104	64	21	13	4	2	2			
Akron, OH	56	28	18	4	2	4	1		Boise, ID	27	18	7	2	—	—	1			
Canton, OH	36	24	9	3	—	—	2		Colorado Springs, CO	167	108	40	9	9	1	9			
Chicago, IL	402	186	120	60	21	15	33		Denver, CO	67	37	19	8	2	1	5			
Cincinnati, OH	113	64	30	9	6	4	9		Las Vegas, NV	228	150	50	17	5	5	17			
Cleveland, OH	180	125	43	8	1	3	10		Ogden, UT	35	24	9	1	—	1	4			
Columbus, OH	199	146	33	8	9	3	18		Phoenix, AZ	165	91	51	12	4	7	7			
Dayton, OH	107	75	25	3	—	4	5		Pueblo, CO	35	21	10	4	—	—	3			
Detroit, MI	U	U	U	U	U	U	U		Salt Lake City, UT	87	57	17	7	3	3	5			
Evansville, IN	41	36	4	1	—	—	3		Tucson, AZ	116	85	21	8	1	—	3			
Fort Wayne, IN	63	40	19	3	—	1	2		Pacific	1,526	1,046	323	87	33	36	128			
Gary, IN	9	8	—	—	—	1	3		Berkeley, CA	9	6	3	—	—	—	1			
Grand Rapids, MI	38	24	8	1	3	2	2		Fresno, CA	135	98	24	7	4	2	20			
Indianapolis, IN	195	123	45	9	7	11	15		Glendale, CA	36	25	10	1	—	—	6			
Lansing, MI	39	28	10	1	—	—	3		Honolulu, HI	73	43	13	8	3	6	7			
Milwaukee, WI	91	57	31	2	1	—	—		Long Beach, CA	69	48	17	2	1	1	8			
Peoria, IL	U	U	U	U	U	U	U		Los Angeles, CA	237	150	45	21	11	10	26			
Rockford, IL	47	34	10	2	1	—	2		Pasadena, CA	11	8	3	—	—	—	1			
South Bend, IN	35	27	6	1	1	—	2		Portland, OR	112	76	28	5	2	1	6			
Toledo, OH	102	76	23	2	—	1	2		Sacramento, CA	155	113	32	6	1	3	9			
Youngstown, OH	46	42	2	2	—	—	5		San Diego, CA	149	106	28	7	3	4	9			
W.N. Central	489	321	103	34	13	17	13		San Francisco, CA	90	54	26	4	1	5	9			
Des Moines, IA	U	U	U	U	U	U	U		San Jose, CA	154	121	22	7	3	1	11			
Duluth, MN	22	17	5	—	—	—	1		Santa Cruz, CA	27	15	8	3	1	—	1			
Kansas City, KS	23	10	9	3	—	1	—		Seattle, WA	116	76	32	4	1	3	6			
Kansas City, MO	109	69	28	8	—	4	2		Spokane, WA	52	37	14	1	—	—	3			
Lincoln, NE	35	26	7	1	1	—	1		Tacoma, WA	101	70	18	11	2	—	5			
Minneapolis, MN	58	41	8	5	2	2	4		Total¶	9,982	6,441	2,383	679	250	224	610			
Omaha, NE	53	34	11	5	—	3	3												
St. Louis, MO	87	55	17	6	4	4	—												
St. Paul, MN	43	30	10	2	—	1	2												
Wichita, KS	59	39	8	4	6	2	—												

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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