

Invasive Group A *Streptococcus* in a Skilled Nursing Facility — Pennsylvania, 2009–2010

In September 2010, the Pennsylvania Department of Health was notified of a cluster of invasive group A *Streptococcus* (GAS) infections among residents of a skilled nursing facility specializing in neurologic and pulmonary care. The Montgomery County Health Department, the Pennsylvania Department of Health, and CDC conducted an investigation to identify additional cases and GAS carriers, assess risk factors and infection prevention practices, implement control measures, and prevent further infections. The investigators determined that, during October 12, 2009–September 22, 2010, 10 residents at the facility had noninvasive GAS infection, and 13 had invasive GAS infection; two residents with invasive infection died. An additional seven culture-confirmed GAS infections could not be characterized as cases because the residents' symptoms were unknown. Staff members and residents were screened by culture to identify GAS carriers, who were then administered antibiotics. Multiple infection prevention deficiencies were noted at the facility, including ineffective hand hygiene practices among staff members. Education on infection prevention practices was provided, and active surveillance was implemented. Invasive GAS outbreaks in long-term-care facilities often result in high death rates (1). Long-term-care facilities, including skilled nursing facilities, should investigate single cases of invasive GAS infection and ensure that infection prevention measures are fully implemented.

Identification of Cases and Carriers

On September 29, 2010, the Pennsylvania Department of Health was notified of three laboratory-confirmed invasive GAS infections in a skilled nursing facility. Review of Pennsylvania's reportable disease surveillance data, which includes invasive GAS cases, identified eight additional invasive GAS infections at the facility since October 2009. The 150-bed facility specializes in ventilator weaning, spinal cord injury care, and short-term rehabilitation. Cases were defined as symptomatic, culture-confirmed GAS infections in residents

of the facility during January 1, 2009–September 30, 2010. Signs or symptoms consistent with GAS infection included fever $\geq 100.5^{\circ}\text{F}$ ($\geq 38.1^{\circ}\text{C}$), upper-respiratory symptoms (e.g., cough or sore throat), and purulent discharge, skin redness, or swelling. Cases were categorized as invasive (GAS cultured from a normally sterile site) or noninvasive. Reports of positive GAS cultures from facility residents were obtained from three area hospitals and the skilled nursing facility's reference laboratory and were cross-referenced with the facility's census.

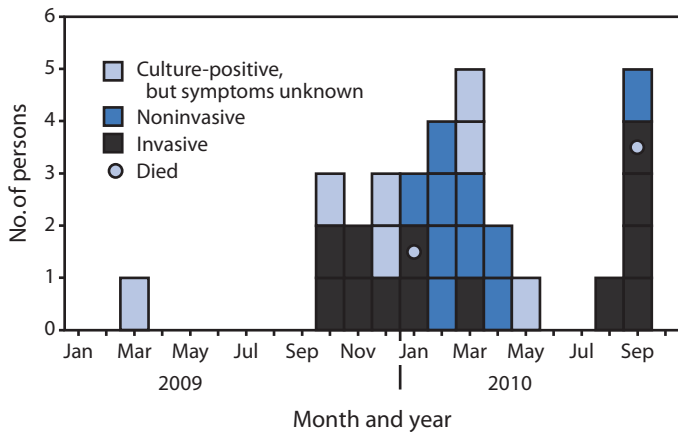
Case-finding confirmed 11 cases of invasive GAS disease that previously had been reported to the county and identified two other invasive and 10 noninvasive cases (five respiratory, four wound, and one eye infection) during October 12, 2009–September 22, 2010. No cases were identified for the periods January 1–October 11, 2009, and September 23–30, 2010. Seven additional residents had culture-positive test results from nonsterile sites; however, these results could not be characterized as cases because symptom data were unavailable in the patients' medical records (Figure).

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FIGURE. Number of persons with culture-confirmed group A streptococcus infection (N = 30), by infection type and month of positive culture — skilled nursing facility, Pennsylvania, 2009–2010



The 23 GAS patients ranged in age from 31 to 97 years (median: 55 years); 52% were male, and 48% were black. All 13 patients with invasive GAS were hospitalized and had GAS isolated from blood cultures obtained on the date of hospitalization; two hospitalized patients also had GAS isolated from respiratory specimens. Two deaths were associated with invasive GAS infection (case-fatality rate: 15%). Among the 13 patients, at the time of hospitalization, six had fever, six had respiratory distress, and seven had tachycardia. Eleven patients had leukocytosis identified, four had pneumonia based on radiography, and one had cellulitis.

Carriers were defined as residents or staff members who had GAS cultured from nonsterile sites with no clinical evidence of GAS infection at the time of culturing. Beginning October 5, 2011, a total of 436 persons (139 residents and 297 staff members) were screened for GAS carriage. Specimens were obtained from the oropharynx, wounds, and the skin surrounding patients' tracheostomies, gastrostomies, jejunostomies, central lines, and indwelling urinary catheters. One (0.7%) resident had a positive GAS culture from his urinary catheter insertion site, and four (1.3%) staff members (two nurses and two housekeepers) had positive GAS oropharyngeal cultures. All five GAS carriers received antibiotics recommended for GAS decolonization (2); staff members identified as GAS carriers were furloughed until they had received 48 hours of antibiotic therapy. Facility admissions were suspended during October 5–18 until carriers had been treated and infection prevention audits completed.

Assessment of Infection Prevention Practices

Beginning October 13, 2010, audits of infection prevention practices were performed in all clinical units of the facility. Interviews were conducted with administrative personnel, the facility's full-time infection preventionist, and staff members; front-line staff members were observed in daily practice. An assessment of available infection prevention resources (e.g., gloves, sinks, and alcohol-based hand rub dispensers) was completed. Compliance with contact precautions and

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hand hygiene was measured by using a mobile telephone application.* Hand hygiene was defined as hand washing or alcohol-based hand rub use, in accordance with CDC guidelines (3) and the World Health Organization's five opportunities for hand hygiene (4).

Multiple infection prevention deficiencies were observed. Hand hygiene compliance was 32% (17 of 53 observed opportunities), and the facility lacked recommended hand-hygiene resources. Although alcohol-based hand rub dispensers were located in every resident's room, the manufacturer had stopped producing refills approximately 1 month before the evaluation, and staff members reported that even when refills had been available, in-room dispensers were often empty or malfunctioning. Sinks were located in resident rooms but not in central locations (e.g., nursing stations). During wound care treatments, potentially infectious materials (e.g., open, unused gauze and biohazard bags containing discarded wound supplies) were moved from room to room. Contact precaution signage was not implemented in a timely manner after identification of infectious organisms.

At the time of the investigation, a full-time infection preventionist, who had been hired in August 2010, was in the process of assessing and improving infection prevention practices. The infection preventionist, along with CDC and state and county health department personnel, provided training to staff members regarding standardized infection prevention practices, including hand hygiene, timely contact precaution implementation, and proper wound care practices. After training and placement of functioning alcohol-based hand rub dispensers on a wall in every resident room, hand hygiene compliance improved to 70% (56 of 80 observed opportunities).

Typing to Determine Strain Relatedness

Eight GAS isolates, three collected from patients during September 2010 and all five isolates collected from carriers during October, were available for *emm* typing at CDC to assess strain relatedness.† Four of the isolates (from one patient, one resident carrier, and the two nurse carriers) were *emm* 89.0; two isolates from patients were *emm* 11.0, and the isolates from the two housekeeper carriers were *emm* 3.6 and *emm* 2.0.

Associations with Risk Factors

In October 2010, a matched case-control study was performed at the facility to identify associations between potential risk factors and GAS infection. All 23 patients with invasive and noninvasive disease were included as case-patients. Residents were chosen randomly from the resident census

What is already known on this topic?

Group A *Streptococcus* (GAS) is transmitted by direct person-to-person contact or by respiratory droplets and can result in severe invasive infections.

What is added by this report?

This large, prolonged outbreak of GAS infection at a skilled nursing facility, with 23 cases, including 13 invasive infections and two deaths, over a 12-month period demonstrated that deficiencies in infection prevention and control can contribute to extended outbreaks of both invasive and noninvasive GAS infection, especially among residents with two or more wounds.

What are the implications for public health practice?

Nursing facilities need strong infection prevention programs, with emphasis on hand hygiene and wound care, to prevent health-care-associated outbreaks of GAS infection. Single cases of invasive GAS should be investigated by long-term-care facilities, with ongoing communication with local and state health departments and acute care facilities. Efforts to prevent and control GAS infections should include methods to identify deficiencies in infection prevention and rapid remediation of any deficiencies.

as control subjects if they had no evidence of positive GAS culture or symptoms consistent with GAS infection in the 3 days before or after the matched case-patient's positive culture date. Control subjects were matched 3:1 to case-patients. Chart reviews were conducted for case-patients and control subjects by using a standardized data collection form focusing on potential risk factors during the month before the date of positive GAS culture.

Bivariate analysis indicated that GAS case-patients were significantly more likely than control subjects to have the following risk factors: length of stay ≤ 10 months (matched odds ratio [mOR] = 7.0), having a wound (mOR = 4.6), having two or more wounds (mOR = 7.0), having an indwelling urinary catheter (mOR = 3.9), residing in a pulmonary unit (mOR = 3.7), receiving physical therapy (mOR = 4.1), and receiving occupational therapy (mOR = 2.3) (Table). Statistically significant variables from bivariate analysis were considered for inclusion in a multivariate model to assess their independent association with GAS infection. In the final model, adjusted for physical therapy and length of stay, case-patients were significantly more likely to have two or more wounds (adjusted odds ratio = 3.9; 95% confidence interval = 1.1–13.3) than control subjects.

Subsequent Developments

In December 2010, two new invasive GAS infections were identified in residents of the pulmonary units, prompting rescreening of all 59 pulmonary unit residents and 112 staff members who had direct contact with the newly infected

* Additional information available at <https://compepi.cs.uiowa.edu/isrub/home>.

† Additional information available at http://www.cdc.gov/ncidod/biotech/strep/m-proteingene_typing.htm.

TABLE. Comparison between group A *Streptococcus* (GAS) case-patients and control subjects, by selected potential risk factors — skilled nursing facility, Pennsylvania, 2009–2010

Risk factor	Case-patients (n = 23)		Control subjects (n = 69)		Matched odds ratio	p-value
	No.	(%)	No.	(%)		
Age ≥65 yrs	8	(35)	20	(29)	1.3	0.6
Male	12	(52)	41	(59)	0.7	0.5
Black race	11	(48)	40	(58)	0.7	0.4
Length of stay ≤10 months	19	(83)	28	(41)	7.0	<0.01
Roommate with GAS infection or colonization	2	(9)	13	(19)	0.5	0.5
Reside in pulmonary unit	19	(83)	41	(59)	3.7	0.05
Bedbound	4	(17)	16	(23)	0.6	0.5
Had surgical procedure	5	(22)	8	(12)	2.4	0.2
Physical therapy	17	(74)	26	(38)	4.1	<0.01
Occupational therapy	14	(61)	25	(36)	2.3	0.05
Devices						
Tracheostomy tube	17	(74)	41	(59)	1.9	0.2
Peripherally inserted central catheter or midline catheter	6	(26)	7	(10)	2.6	0.07
Indwelling urinary catheter	19	(83)	38	(55)	3.9	0.03
Gastrostomy or jejunostomy	15	(65)	41	(59)	1.3	0.6
No device	0	(0)	7	(10)	0.5	0.1
Comorbidities						
Two or more underlying conditions*	13	(56)	29	(42)	1.7	0.2
Asthma or chronic obstructive pulmonary disease	8	(35)	12	(17)	2.5	0.08
Congestive heart failure or myocardial infarction	13	(57)	5	(7)	1.3	0.7
Dementia	3	(13)	10	(14)	0.9	0.9
Diabetes	12	(52)	28	(41)	1.7	0.3
Paraplegia/Quadriplegia	7	(30)	21	(30)	1.0	1.0
Wound present	20	(87)	35	(51)	4.6	<0.01
Two or more wounds present	16	(70)	18	(26)	7.0	<0.01

* Including asthma or chronic obstructive pulmonary disease, congestive heart failure or myocardial infarction, dementia, diabetes, paraplegia or quadriplegia, peripheral vascular disease, stroke, chronic leg edema, recent herpes zoster, cellulitis, cancer, renal insufficiency, or hypertension.

residents. Three residents (5.1%) and four staff members (3.6%) were newly identified as asymptomatic carriers and administered antibiotics. Facility administrators were advised to engage a consultant to assist the infection preventionist in optimizing implementation of previously recommended measures. Since December 2010, no additional cases have been identified.

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Editorial Note

GAS infections are transmitted by person-to-person contact or by respiratory droplets and can result in severe invasive infection. Identification of 13 cases of invasive GAS infection during a 12-month period represents one of the largest and most prolonged invasive GAS outbreaks in a nursing facility. The four different *emm* types from case-patients and carriers and the long duration of the outbreak suggest it did not arise from a single source. The investigation identified infection prevention lapses and an association between two or more wounds and GAS infection.

Consistent with previous GAS outbreaks in nursing facilities, this extended outbreak likely was initiated by separate introductions of GAS into a vulnerable population and perpetuated by suboptimal infection prevention practices (5,6). GAS can colonize in the throats of asymptomatic children and adults; staff members, visitors, or newly admitted residents who are asymptomatic carriers or who have pharyngitis can introduce GAS into long-term-care facilities.

Because of the multiple opportunities for GAS to be introduced into long-term-care facilities and the potential for invasive GAS to cause severe morbidity and mortality among vulnerable populations, facility managers should emphasize the importance of infection prevention and control practices among staff members, particularly hand hygiene and wound care practices, as a crucial means of preventing GAS outbreaks among skilled nursing facility residents (1,7). The findings from this investigation are consistent with previous findings that nonintact skin remains a key risk factor for GAS transmission. However, previously documented risk factors such as advanced age, black race, and having a roommate with GAS infection or carriage (8,9) were not significantly associated with GAS infection in this investigation.

Early identification of invasive GAS infection through surveillance and communication with acute care facilities is essential in preventing and controlling GAS outbreaks and reducing the need for extensive public health responses. Before this facility hired a full-time infection preventionist in August 2010, infection control expertise was limited. Furthermore, the observed infection prevention lapses late in the course of the outbreak demonstrate that the risk for invasive GAS infections was not fully appreciated at this facility, despite ongoing communication from the county health department. This emphasizes the need for improved education regarding the increased risk for severe GAS infections among long-term-care facility residents.

Given the magnitude of this outbreak, the carriage rate among staff members and residents was lower than expected. Although previously published outbreaks in nursing facilities identified carriage rates ranging from 0% to 34% among residents and from 2% to 9% among staff members (1), the low carriage rate in this study might have resulted from deficiencies in swabbing technique, resulting from an effort by staff members to complete a large number of swabbings over a short period, or from other unidentified factors.

This prolonged outbreak occurred in a specialized facility with ventilator-dependent residents and residents with neurologic impairments. The observed infection prevention deficiencies highlight the need for a strong infection prevention program that might include a full-time infection preventionist in facilities providing similarly complex care to vulnerable populations. Skilled nursing facilities should have programs to ensure education, compliance, and resources for infection prevention, with emphasis on hand hygiene, standard and transmission-based precautions, and wound care practices

to prevent health-care-associated outbreaks of GAS. Long-term-care facilities, including skilled nursing facilities, should investigate single cases of invasive GAS because of the possibility of unrecognized GAS transmission among staff members and residents. Such investigations should include communication with local and state health departments and acute-care facilities, identification of additional cases through active surveillance and retrospective chart review, identification of potential carriers by screening close contacts of patients and symptomatic health-care workers, and enhanced infection control.

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Progress Toward Global Eradication of Dracunculiasis, January 2010–June 2011

In 1986, the World Health Assembly (WHA) called for the elimination of dracunculiasis (Guinea worm disease), a parasitic infection in humans caused by *Dracunculus medinensis* (1). At the time, an estimated 3.5 million cases were occurring annually in 20 countries in Africa and Asia, and 120 million persons were at risk for the disease (1,2). Because of slow mobilization in countries with endemic disease, the 1991 WHA goal to eradicate dracunculiasis globally by 1995 was not achieved (3). In 2004, WHA established a new target date of 2009 for global eradication*; despite considerable progress, that target date also was not met. This report updates published (4–6) and previously unpublished data and describes progress towards global eradication of dracunculiasis since January 2010. The number of indigenous cases of dracunculiasis worldwide decreased 44%, from 3,185 cases in 2009 to 1,793 in 2010. As of June 2011, dracunculiasis remained endemic in three countries (Ethiopia, Mali, and South Sudan). Of the 814 cases that occurred during January–June 2011, a total of 801 (98%) were reported from 358 villages in South Sudan. By October 2010, Ghana had gone 12 months without an indigenous case, thereby interrupting transmission; Ethiopia and Mali are close to interrupting transmission, as indicated by the small and declining numbers of cases in these two countries. An outbreak of 10 cases was discovered in Chad in 2010. The current target is to interrupt transmission in the remaining countries as soon as possible. Insecurity (e.g., sporadic violence or civil unrest) in areas of South Sudan and Mali, where dracunculiasis is endemic, poses the greatest threat to the success of the global dracunculiasis eradication campaign.

Persons become infected with the parasite by drinking water from stagnant sources (e.g., ponds) containing copepods (water fleas) that harbor *D. medinensis* larvae. Currently, no effective drug to treat or vaccine to prevent the disease is available, and persons who contract *D. medinensis* infections do not become immune. After a 1-year incubation period, adult female worms 24–40 inches (60–100 centimeters) long migrate under the skin to partially emerge, usually through the skin of the foot or lower leg. On contact with water, these worms release larvae that can then be ingested by copepods and infect persons who drink the water. The emerging worm can be removed by manual traction and rolling it up on a stick or gauze a few centimeters each day. Complete removal requires an average of approximately 4 weeks. Disabilities caused by dracunculiasis

are secondary to bacterial infections that frequently develop in the skin, causing pain and swelling (7,8).

Dracunculiasis can be prevented by 1) educating persons from whom worms are emerging to avoid immersing affected parts in sources of drinking water, 2) filtering potentially contaminated drinking water through a cloth filter, 3) treating potentially contaminated surface water with the larvicide temephos (Abate), and 4) providing safe drinking water from bore-hole or hand-dug wells (3). Containment of transmission,[†] achieved through 1) voluntary isolation of each patient to prevent contamination of drinking water sources, 2) provision of first aid, 3) manual extraction of the worm, and 4) application of occlusive bandages, is complementary to the four main interventions.

Countries enter the World Health Organization (WHO) precertification stage of eradication approximately 1 year (i.e., one incubation period for *D. medinensis*) after reporting of their last indigenous case. A case of dracunculiasis is defined as occurring in a person exhibiting a skin lesion or lesions with emergence of one or more Guinea worms. Each person is counted only once during a calendar year. An imported case is an infection acquired in a place (another country or village within the same country) other than the community where it is detected and reported. Eight countries where transmission of dracunculiasis previously was endemic (Burkina Faso, Cote d'Ivoire, Ghana, Kenya, Niger, Nigeria, Sudan,[§] and Togo) are in the precertification stage of eradication.

In each country affected by dracunculiasis, a national eradication program receives monthly reports of cases from each village that has endemic transmission. Reporting rates are calculated by dividing the number of villages with endemic dracunculiasis that report each month by the total number of villages with endemic disease. All villages with endemic dracunculiasis are kept under active surveillance,

[†] Transmission from a patient with dracunculiasis is contained if all of the following conditions are met: 1) the disease is detected <24 hours after worm emergence; 2) the patient has not entered any water source since the worm emerged; 3) a volunteer has managed the patient properly, by cleaning and bandaging the lesion until the worm has been fully removed manually and by providing health education to discourage the patient from contaminating any water source (if two or more emerging worms are present, transmission is not contained until the last worm is removed); and 4) the containment process, including verification of dracunculiasis, is validated by a supervisor within 7 days of emergence of the worm.

[§] On July 9, 2011, the former country of Sudan officially separated into two countries: the Republic of the Sudan and the Republic of South Sudan. Currently, South Sudan is endemic for dracunculiasis. The area comprising the new country of Sudan, located north of South Sudan, has been free from dracunculiasis since 2002.

* Additional information available at http://www.who.int/gb/ebwha/pdf_files/wha57/a57_r9-en.pdf.

What is already known on this topic?

The number of new cases of dracunculiasis (Guinea worm disease) occurring worldwide each year has decreased from 3.5 million to fewer than 1,800 since the 1986 World Health Assembly proclaimed global elimination as a goal.

What is added by this report?

The total number of dracunculiasis cases reported worldwide in 2010 declined by 44% compared with 2009 but increased by 6% from January–June 2010 to January–June 2011. Transmission remains endemic in only three countries, with just one, South Sudan, accounting for 98% of all reported cases. An outbreak with 12 reported cases occurred in a fourth African country, Chad, during January 2010–June 2011.

What are the implications for public health practice?

Although earlier target dates for global dracunculiasis eradication were missed, progress continues, and eradication within the next few years is likely if disruptions of program operations can be minimized, particularly in South Sudan and Mali.

with daily searches of households for persons with signs and symptoms suggestive of dracunculiasis. This is done to ensure that detection occurs within 24 hours of worm emergence so that patient management can begin to prevent contamination of water. Villages where endemic transmission of dracunculiasis is interrupted (i.e., zero cases reported for ≥ 12 consecutive months) also are kept under active surveillance for 3 consecutive years.

WHO certifies a country free from dracunculiasis after it maintains adequate nationwide surveillance for 3 consecutive years and demonstrates that no cases of indigenous dracunculiasis occurred during that period. As of the end of 2010, WHO had certified 187 countries and territories as free from dracunculiasis (4); 18 African countries, including three with endemic disease and one with an outbreak of dracunculiasis, remained to be certified.

Country Reports

South Sudan. After a referendum held in January 2011, the 10 southern states of Sudan became the independent Republic of South Sudan on July 9, 2011. Since 2002, all indigenous cases of dracunculiasis in Sudan were reported from the states that are now in the Republic of South Sudan, making the northern states the newest dracunculiasis-free country (Sudan), which is awaiting certification. The South Sudan Guinea Worm Eradication Program (SSGWEP) reported 1,698 cases of dracunculiasis in 2010, of which 1,264 (74%) were contained (Table 1). In January–June 2011, SSGWEP reported a provisional total of 801 cases (77% contained, compared with 72% contained during January–June 2010), an increase of 8% compared with the 745 cases reported for the

same period in 2010 (Table 2). All of South Sudan's increase in cases occurred in the state of Eastern Equatoria, which had 27% more cases than the same period a year before. Endemic areas outside of Eastern Equatoria reported 72% fewer cases during January–June 2011. In June 2011, South Sudan's cases were fewer than the same month the previous year for the first time this year (171 cases in June 2011 compared with 241 cases in June 2010, a reduction of 29%). During 2010, a total of 732 villages reported one or more indigenous cases; during January–June 2011, a total of 366 villages reported indigenous cases. During January–June 2011, three security incidents (e.g., civil disorder, banditry, and other violence) disrupted Guinea worm program operations in South Sudan, compared with 14 such incidents during January–June 2010. The peak transmission season in South Sudan is March through October.

Mali. Mali's Guinea Worm Eradication Program reported 57 indigenous cases in 2010, which was a reduction of 69% from the 186 indigenous cases reported in 2009. Of the 57 cases reported for 2010, 45 (79%) were contained. Mali reported three cases, of which one was contained, during January–June 2011, compared with one case reported during January–June 2010. The two uncontained cases were detected more than 24 hours after the worms began to emerge, but neither patient appears to have contaminated water. Insecurity attributed to Al Qaeda-associated groups is an increasing problem in the areas of Mali that are endemic or previously endemic. Mali's peak Guinea worm transmission season is June through October.

Ethiopia. Ethiopia reported 20 indigenous cases and one imported case from South Sudan in 2010, of which 19 (90%) were contained. This was a reduction of 17% from the 24 indigenous cases reported in 2009. During January–June 2011, Ethiopia reported six indigenous cases and two cases imported from South Sudan, of which seven cases (88%) were contained, for a reduction of 54% from the 13 indigenous cases reported during January–June 2010. All of the indigenous cases in 2010 and so far in 2011 were from Gog District in the Gambella Region. The program extended surveillance to all 71 known inhabited settlements in Gog District beginning in January 2010. The peak transmission season in Ethiopia is March through May.

Ghana. Ghana reported eight indigenous cases in 2010, all of which were contained. Ghana has reported no case of dracunculiasis since May 2010. The peak transmission season in Ghana was October through March.

Chad. After a decade with no reported cases and three assessments by WHO teams in 2001, 2006, and 2008, a visiting WHO team in 2010 investigated rumors of cases and confirmed an outbreak that involved a total of 10 known indigenous cases in eight villages during 2010. None of the

TABLE 1. Number of reported dracunculiasis cases, by country and local interventions — worldwide, 2010

Country	No. of reported cases*		Villages/Localities reporting cases				Villages/Localities and interventions†					
	Indigenous	Imported	% of cases reported that were contained	No. reporting ≥1 cases	No. reporting only imported cases [§]	No. reporting indigenous cases	Endemic villages (2009–2010)	% reporting monthly*	% with cloth filters in all households*	% using temephos*	% with ≥1 sources of safe water*	% provided with health education*
Sudan	1,698	0	74	732	505	227	676	99	98	60	22	90
Ghana	8	0	100	4	0	4	19	100	95	100	84	100
Mali	57	0	79	22	3	19	53	100	100	93	17	100
Ethiopia¶	20	1	90	9	4	5	9	100	100	100	78	100
Niger¶	0	3	66	3	3	0	0	—	—	—	—	—
Chad	10	—	0	7	0	7	—	—	—	—	—	—
Total	1,793	4	76	777	515	262	757	98	98	63	23	90

* Definitions of indigenous and imported cases as they relate to villages/localities are available at http://www.cartercenter.org/health/guinea_worm/program_definition.html.

† Interventions included distribution of filters, use of temephos (Abate) larvicide, provision of one or more sources of safe water, and provision of health education.

§ All cases reported in these villages/localities were traced to sources of transmission elsewhere, usually from within the same country.

¶ The case imported into Ethiopia was from South Sudan; the three cases imported into Niger were from Mali.

TABLE 2. Number of reported indigenous dracunculiasis cases, by country — worldwide, January 2010–June 2011*

Country	2009	2010	% change	January–June 2010	January–June 2011†	% change	% of cases contained during January–June 2011
Sudan	2,733	1,698	-38	745	801	8	77
Ghana	242	8	-97	8	0	-100	—
Mali	186	57	-69	1	3	200	33
Ethiopia	24	20	-17	12	6	-50	100
Chad	0	10	—	2	2	0	50
Total	3,185	1,793	-44	768	812	6	77

* Excludes four cases imported from one country to another in 2010.

† Provisional case counts; excludes two cases imported into Ethiopia from South Sudan.

cases were contained. Worm specimens taken from several patients in 2010 were confirmed at CDC as *D. medinensis*. Two cases were reported during January–June 2011 (compared with two cases during January–June 2010), of which one was contained, in two additional villages. A total of 36 villages are associated (i.e., visited by or the residence of a patient 10–14 months before the emergence of the worm) with the 12 cases reported during January 2010–June 2011. WHO staff members and two CDC Epidemic Intelligence Service officers conducted an investigation during January–February 2011, the outcomes of which were reported in June 2011 (9). The Carter Center opened an office in Chad in March 2011, and has provided a resident technical advisor and two expatriate technical advisors to assist the program. Active surveillance and outbreak control measures are being taken to help ensure rapid detection and containment of cases. The peak transmission season in Chad appears to be June through August.

Reported by

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Editorial Note

With fewer than 1,800 cases reported in 2010 (the lowest annual total ever), only three endemic countries remaining, and 98% of cases in shrinking endemic areas of South Sudan, the global Guinea Worm Eradication Program is closer than ever to the goal of stopping transmission by the end of 2012.

Since last year's update, Guinea worm disease transmission has ended in Ghana, once the country with the second highest dracunculiasis prevalence in the world. Unfortunately, Chad experienced an outbreak after more than 10 years in the precertification stage. The source of that outbreak, whether it originated from an externally imported case or was the result of undetected endemic transmission, is still unknown and likely will never be known. The outbreak in Chad follows the previous setback in Ethiopia in 2008, after 20 consecutive months with no reported indigenous cases there. The setbacks in Chad and Ethiopia (10) underscore the perils of inadequate vigilance after transmission of dracunculiasis is believed to have been interrupted, as well as the importance of adequate surveillance and response to suspected cases in Guinea worm-free areas of endemic countries. Other remaining challenges include the problem of insecurity in Guinea worm-endemic areas of South Sudan and Mali, and the need to focus improvements in safe water supplies on priority endemic villages.

In May 2011, the WHA adopted a resolution (WHA64.16) on eradication of dracunculiasis,[¶] its first since 2004. This resolution requires the secretariat of WHO to report on the status of Guinea worm eradication to the WHA annually until the disease is eradicated.

[¶]Additional information available at http://apps.who.int/gb/ebwha/pdf_files/wha64/a64_r16-en.pdf.

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Notice of CDC's Discontinuation of Investigational Pentavalent (ABCDE) Botulinum Toxoid Vaccine for Workers at Risk for Occupational Exposure to Botulinum Toxins

Effective November 30, 2011, CDC will no longer provide investigational pentavalent (ABCDE) botulinum toxoid (PBT) for vaccination of workers at risk for occupational exposure to botulinum serotypes A, B, C, D, and E. This change might affect persons working in public health laboratories, research facilities, and manufacturing institutions who work with botulinum toxin or neurotoxin-producing species of *Clostridium*. CDC's decision is based on an assessment of the available data, which indicate a decline in immunogenicity of some of the toxin serotypes. The occurrence of moderate local reactions related to annual booster doses also has increased, which was noted in the 1990s at the U.S. Army Medical Research Institute for Infectious Diseases and resulted in a change in boosting from an annual requirement to only boosting when antibody titers have declined significantly (1–4). Additionally, the PBT was manufactured more than 30 years ago. CDC, therefore, has decided not to continue offering this investigational product.

Summary of PBT Uses and CDC's Rationale for Discontinuation

PBT has been available through CDC since 1965 under an Investigational New Drug (IND) Application (BB-IND 161) for nonresearch use of PBT for workers at risk for occupational exposure. Routine annual potency testing of PBT and adverse event reporting have guided CDC's risk-benefit assessments for continuing to offer PBT to eligible recipients under the IND, which is regulated by the Food and Drug Administration. Until 1976, the primary vaccination series included injections at 0, 2, and 12 weeks, followed by annual booster injections. An assessment of adverse events reported from 1966 to 1975 showed that approximately 10% of vaccinees who received booster injections experienced moderate local reactions, defined as edema or induration measuring 30–120 mm. An additional 3% experienced severe local reactions defined as a reaction size >120 mm, marked limitation of arm movement, or marked axillary node tenderness. Systemic reactions were reported in <0.3% of approximately 4,200 persons who received injections.

Starting in 1976, the interval for booster injections was increased to ≥ 2 years. To reduce the rate and severity of local reactions, vaccinees with continued potential for occupational exposure to botulinum toxins were given booster injections at the 2-year interval only if a 1:16 dilution of their serum did

not protect mice in serotypes B and E toxin challenge studies (indicative of an antibody concentration of ≥ 0.2 IU/mL). In an evaluation of this schedule in 2002, adverse events were less frequent (7% and 0.3% moderate and severe local reactions, respectively) than when annual boosters were given routinely.

Until the mid-1990s, nearly 50% of vaccinees had anti-PBT antibody levels ≥ 0.2 IU/mL at the 2-year post-booster assessment. However, by 2004, this was true of <15% of vaccinees. Additionally, potency studies conducted in guinea pigs demonstrated that the PBT lots then in use, which were manufactured in 1976 and had been distributed since 1982, no longer protected guinea pigs challenged with serotypes D and E, and were associated with a decline in antibody induction for toxin serotypes C, D, and E (1–3). A study of one lot of vaccine designed to assess the need for a 6-month dose demonstrated that an additional injection at 6 months was required to achieve potentially protective antibody levels against all toxin serotypes (1–3). Because antibody levels declined rapidly, the 12-month booster also was required. Higher titers were observed after the 12-month booster and were generally 10-fold higher than what had been observed after the third dose of the primary series. Because of the decline in immune response to toxin serotypes C, D, and E, the PBT vaccine schedule was modified in 2004 to include a 6-month injection in the primary series (0, 2 weeks, 12 weeks, and 6 months) and an annual booster was reinstated to achieve a more robust immune response.

The decline in immunogenicity might be related to the age of the available product (>30 years). CDC's review of adverse events from 3,125 injections following the modified schedule showed a steady increase in moderate local reactions in booster recipients, from 12.4% in 2005 to 31.0% in 2010. No increase in severe local reactions was observed. The increase in moderate local reactions might be the result of reinstatement of the annual booster schedule in 2004. CDC data demonstrated some increase in moderate reactions in persons receiving the primary series in both 2009 (17.7%) and 2010 (17.9%) compared with reaction rates each year from 2003 to 2008 (4.3%, 5.2%, 6.0%, 9.0%, 7.7%, and 4.4%, respectively). However, this increase in moderate reactions in primary series vaccine recipients was not observed at the U.S. Army Medical Research Institute for Infectious Diseases. Studies by the U.S. Department of Defense (DoD) show that persons receiving this investigational product might still respond to toxin serotype A, and potency tests suggest that

the PBT has not declined in recent years to toxin serotypes A and B (1), but evidence suggests this product is declining in immunogenicity for at least toxin serotypes C, D, and E because of its age. Although investigational PBT was provided on recognition of its potential protective benefit, a serologic correlate of protection was never defined. Based on evidence of declining immunogenicity, decreased product potency, increased occurrence of injection site–related adverse reactions, and the age of the product, CDC no longer recommends PBT and will no longer distribute PBT after November 30, 2011.

On average, approximately 200–300 persons received PBT annually during 2008–2010 under the CDC-sponsored IND for PBT (BB-IND 161). To allow recent vaccinees to complete the primary series, the IND will remain in effect through May 31, 2012 (6 months from the date of this notice). No replacement investigational or licensed botulism vaccine is available in the United States; however, a vaccine using recombinant technologies is under development by the DoD Chemical Biological Medical Systems Joint Project Management Office.

Laboratory Safety Recommendations

Laboratory workers performing research on botulinum toxin should continue to adhere strictly to study-specific safety protocols designed to prevent exposures. Laboratory directors should review carefully all recommended practices identified in *Biosafety in Microbiological and Biomedical Laboratories* (5) and within relevant Occupational Safety and Health Administration standards,* and ensure that all workers are adequately trained in the safe handling of botulinum toxin and early symptoms of intoxication. Laboratory workers with suspected exposure to botulinum toxin should follow their employer's postexposure protocols and immediately notify their health-care provider at the first symptoms of

botulism. Select agent–registered facilities should follow National Select Agent Registry requirements[†] for reporting potential environmental releases or personnel exposures to botulinum toxin or botulinum neurotoxin–producing species of *Clostridium*. Suspected occupational exposures to botulinum toxin also must be reported to the appropriate local or state health department; all states maintain 24-hour telephone services for reporting suspected botulism cases and other public health emergencies. Emergency consultation also is available from the CDC botulism duty officer via the CDC Emergency Operations Center; telephone: 770-488-7100. Exposure to concentrated preparations of botulinum toxin might warrant hospitalization and administration of botulinum antitoxin, which is available from CDC (6); decisions about antitoxin use are made on a case-by-case basis in consultation with CDC.

[†] Available at <http://www.selectagents.gov>.

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*Occupational Exposure to Hazardous Chemicals in Laboratories. 29 CFR 1910.1450 (2006).

Notes from the Field

Outbreaks of Rotavirus Gastroenteritis Among Elderly Adults in Two Retirement Communities — Illinois, 2011

In February 2011, three residents of a retirement community in Illinois were hospitalized for acute gastroenteritis. The admitting physicians ordered testing of stool specimens for several pathogens, including rotavirus. The hospital laboratory detected rotavirus antigen in specimens from each patient, and the hospital infection control practitioner reported that information to the Cook County Department of Public Health. Two additional residents were hospitalized for rotavirus gastroenteritis shortly thereafter. The health department sent stool specimens from the five patients to CDC for testing for rotavirus and norovirus. Rotavirus was detected in each specimen; norovirus was not detected. During a subsequent investigation, all available residents were queried regarding recent diarrheal symptoms. Preliminary data indicated that 22% of residents had confirmed or probable rotavirus disease and 10 residents were hospitalized. In May 2011, another outbreak of rotavirus gastroenteritis was detected at a second retirement community in the county. On preliminary analysis, the overall attack rate in the second retirement community was 11%, and 20 residents were hospitalized. No deaths were identified in either outbreak. Based on preliminary results of the investigations and general knowledge of rotavirus transmission, within each community, rotavirus likely was transmitted from person to person via contaminated hands or fomites (e.g., environmental surfaces). The outbreaks lasted ≥ 4 weeks.

Rotavirus is well recognized as a major cause of severe gastroenteritis in young children. Rotavirus also can cause gastroenteritis in adults (1), but estimates of the disease burden are imprecise because rotavirus testing of adults rarely is performed. The extent to which rotavirus outbreaks occur among elderly adults in residential facilities (e.g., retirement communities and assisted living facilities) in the United States (2,3) also is unknown because rotavirus testing usually is not performed during outbreak investigations of diarrheal disease in these settings and rotavirus outbreaks are not nationally reportable. Norovirus, however, frequently has been reported as a cause of diarrhea outbreaks among elderly persons in assisted

living or long-term-care facilities. From 1998 to 2000, CDC screened specimens from 263 gastroenteritis outbreaks (not restricted to outbreaks among elderly adults). Specimens from all but 32 (12%) of those outbreaks tested positive for norovirus, and rotavirus was identified as the causative agent in three of the remaining 32 outbreaks (1% of the overall 263 outbreaks) (3).

Health professionals who care for elderly persons in residential facilities or who investigate diarrheal disease outbreaks should consider rotavirus as a possible cause of acute diarrhea, especially during the months when rotavirus circulates (usually January to June). If an outbreak of rotavirus gastroenteritis is identified, good hand hygiene practices among residents and staff members should be reinforced. Environmental surfaces should be disinfected using a freshly made solution of 1 part household bleach to 2 parts water (providing approximately 20,000 ppm of free chlorine) or another product that has confirmed virucidal activity against rotavirus (4,5). Surfaces visibly contaminated with fecal material should be cleaned to remove the material and then disinfected. CDC is gathering information about rotavirus outbreaks among elderly adults in residential facilities. State and local public health agencies involved in these investigations of suspected or confirmed rotavirus outbreaks are encouraged to contact the CDC's Division of Viral Diseases at 404-639-8253.

Reported by

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Notes from the Field

Risk Factors for Hepatitis C Virus Infections Among Young Adults — Massachusetts, 2010

During 2002–2009, rates of newly diagnosed hepatitis C virus (HCV) infection increased from 65 to 113 cases per 100,000 population among persons aged 15–24 years in Massachusetts (1). Accordingly, the Massachusetts Department of Public Health (MDPH) and CDC interviewed persons aged 18–24 years with HCV infection reported to MDPH during July 1–December 31, 2010, to elicit detailed information regarding demographic, clinical, and risk characteristics.

Of the 394 patients indentified, 193 (49%) had a valid telephone number; of those 193 patients, 101 (52%) did not answer after three call attempts, 19 (10%) were either in a drug treatment facility or incarcerated, 19 (10%) refused to participate, 31 (16%) agreed to participate but did not come on the scheduled interview day, and 23 (12%) completed the interview. An additional five persons aged 18–24 years with diagnosed HCV infection during July 1–December 31, 2010, but not reported to MDPH, were interviewed in a correctional facility, where they were incarcerated.

Mean age of the 28 respondents was 21.9 years (range: 19–24 years); 15 (54%) patients were female, 23 (82%) were white, nine (32%) did not finish high school, nine (32%) were unemployed, and 25 (89%) had health insurance. Twenty-six (93%) had used drugs; of these, 100% reported marijuana use, with a median age of initiation of 13 years (range: 9–17 years); 92% reported opioid analgesic abuse (oxycodone and/or Oxycontin), with a median age of initiation of 17 years (range: 12–23 years); and 89% reported heroin use, with a median age of initiation of 18 years (range: 14–21 years). Nearly all respondents (95%) used opioid analgesics before switching to heroin. During the preceding 6 months, the most frequently injected drugs among respondents were heroin (50%) and opioid analgesics (30%).

Medical record reviews showed that five respondents had visited emergency departments on multiple occasions complaining of pain and were prescribed opioid analgesics. Most respondents (70%) reported sharing syringes and drug paraphernalia within networks of injection drug users that included persons with known HCV infection (43%). One in four respondents reported never being informed of their HCV infection by their health-care provider, and 11 (39%) were tested for HCV in a drug treatment program or during incarceration.

The findings in this report are subject to at least three limitations. First, only a small number of persons agreed to be interviewed, which limits the ability to generalize these findings. The low response rate might be attributed, in part, to

the characteristics of the targeted population (young injection drug users) coupled with lack of provision of incentives. Second, comparison of the demographic and clinical characteristics of persons who were interviewed with those who could not be interviewed was not possible because information was lacking for nearly 60% of the 394 hepatitis C cases reported during July 1–December 31, 2010. However, of those cases with available information, 229 (58%) occurred among females and approximately 80% occurred among whites, which is consistent with the demographic characteristics of interviewed respondents. Finally, persons with HCV infection who were in drug rehabilitation centers could not be interviewed because of federal confidentiality regulations specific to these centers.

Consistent with other studies, most respondents reported opioid analgesics abuse before switching to heroin (which is less expensive) (2,3). Health-care providers should routinely ask about prescription and illicit drug use and screen all persons with risk factors for HCV infection, regardless of age (4). They also need to be aware of warning signs of prescription opioid and drug abuse, such as frequent complaints of pain and request for opioids. Drug treatment programs and prisons are potential venues for education regarding the risk for hepatitis C from sharing needles and other injection paraphernalia and for providing vaccination against hepatitis A and B. School and community-based education programs also are needed to prevent initiation of illicit and prescription drug use (5). Several harm reduction interventions have been conducted to assess the effectiveness of reducing incidence of both human immunodeficiency virus and HCV infection. Overall results from a recent meta-analysis did not indicate a statistically significant decrease in incident HCV infection from a single programmatic strategy; however, the results did indicate that combined interventions were effective (6). Thus, combining current interventions and identifying new evidence-based approaches to preventing drug use and unsafe injection practices in young adults are needed to control and prevent HCV infections.

Reported by

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Announcements

World Stroke Day — October 29, 2011

October 29 is World Stroke Day 2011. Stroke is one of the leading causes of disability. Approximately 795,000 strokes occur annually in the United States. Stroke occurs among all age groups, including newborns, children, young adults, and older adults (1). One in six persons worldwide will have a stroke in his or her lifetime, and every 6 seconds someone will die from a stroke (2,3).

Although a common occurrence, strokes are preventable. The following actions can reduce the likelihood of having a stroke: 1) know your personal risk factors (i.e., high blood pressure, diabetes, high blood cholesterol, atrial fibrillation, or a history of transient ischemic attack or previous stroke); 2) engage in physical activity regularly; 3) avoid obesity by keeping to a healthy diet; 4) limit alcohol consumption; 5) avoid cigarette smoke and, if you smoke, seek help to stop now; 6) learn to recognize the warning signs* of a stroke, and call 9-1-1 right away if someone appears to be having a stroke. With timely care and support, most stroke survivors can recover and regain their quality of life.

CDC addresses stroke prevention through state-based programs to prevent heart disease and stroke, through the Paul Coverdell National Acute Stroke Registry, and through many partnerships. Information on stroke prevention is available at <http://www.cdc.gov/stroke>. Additional information about World Stroke Day is available at <http://www.worldstrokecampaign.org/2011/pages/home.aspx>.

*Sudden numbness or weakness of the face, arm, or leg, especially on one side of the body; sudden confusion, trouble speaking, or understanding; sudden trouble seeing in one or both eyes; sudden trouble walking, dizziness, loss of balance, or coordination; and sudden severe headache.

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Release of *Healthy People 2020* Leading Health Indicators

The U.S. Department of Health and Human Services will present the leading health indicators for *Healthy People 2020* at 10:30 a.m. October 31, 2011, at the 139th annual meeting of the American Public Health Association at the Washington Convention Center in Washington, D.C. *Healthy People 2020* provides a comprehensive set of 10-year national goals and objectives for improving the health of all persons in the United States. Introduced in 1979, the Healthy People initiative has grown to contain 42 topic areas, with approximately 600 objectives and nearly 1,200 targeted measures (1).

With guidance from the Institute of Medicine (2) and the Secretary's Advisory Committee, the Federal Interagency Workgroup developed the leading health indicators for *Healthy People 2020*. The indicators help communicate high-priority health issues to the public and actions that can be taken to address them. Additional information regarding *Healthy People 2020* and the leading health indicators is available at <http://www.healthypeople.gov>, which will link to the streaming live broadcast of the October 31 event at <http://nmr.rampard.com/apha/20111031>.

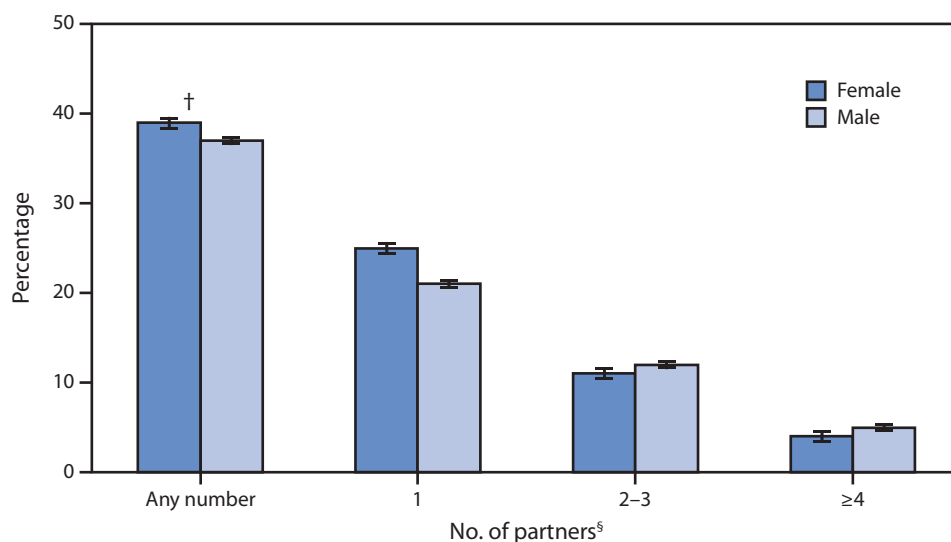
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QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Teens Aged 15–19 Years Who Had Opposite-Sex Sexual Partners* in the Past 12 Months, by Number of Partners — United States, 2006–2010



* Includes heterosexual vaginal sexual intercourse only.

[†] 95% confidence interval.[§] Subgroups do not add to "any number" because of rounding.

During 2006–2010, among U.S. teens aged 15–19 years, 39% of females and 37% of males had sexual intercourse with a person of the opposite sex within the past 12 months. Among females in that age group, 25% had sex with only one sexual partner, compared with 21% of males. Approximately 11% of females in that age group had sex with two or three partners, and 4% had sex with four or more partners. Among males in that age group, 12% had sex with two or three partners, and 5% had sex with four or more partners in the past 12 months. In addition, approximately 4% of males and 4% of females reported having sexual intercourse with a person of the opposite sex, but not in the past 12 months.

Source: Martinez GM, Copen CE, Abma JC. Teenagers in the United States: sexual activity, contraceptive use, and childbearing, 2006–2010 National Survey of Family Growth. *Vital Health Stat* 2011;23(31). Available at http://www.cdc.gov/nchs/data/series/sr_23/sr23_031.pdf. Additional information is available at <http://www.cdc.gov/nchs/nsfg.htm>.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending October 22, 2011 (42nd week)*

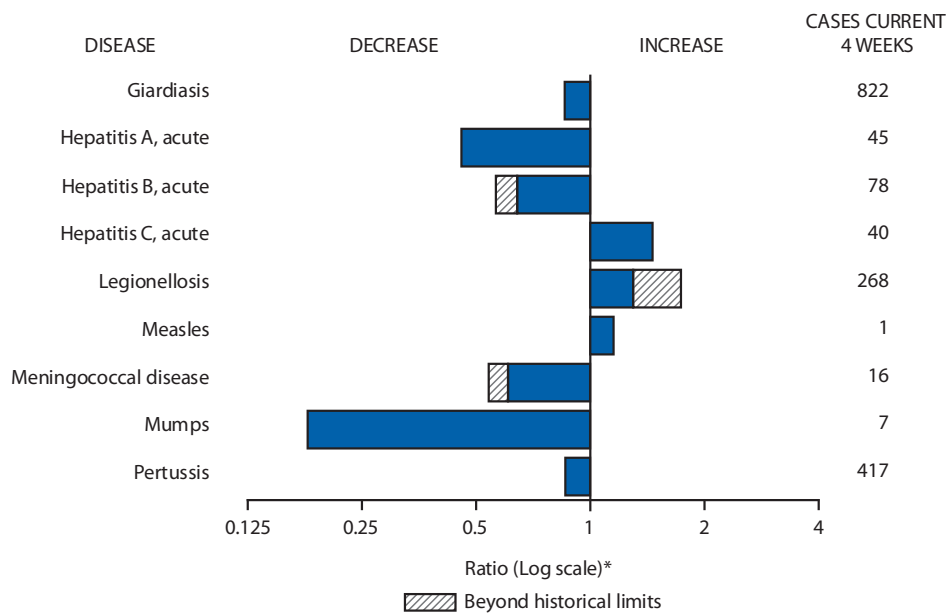
Disease	Current week	Cum 2011	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	—	—	1	—	1	1	
Arboviral diseases ^{§, ¶} :									
California serogroup virus disease	—	97	1	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	3	0	10	4	4	4	8	
Powassan virus disease	—	13	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	2	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	9	576	1	NN	NN	NN	NN	NN	NY (8), PA (1)
Botulism, total	1	79	2	112	118	145	144	165	
foodborne	—	8	1	7	10	17	32	20	
infant	1	63	1	80	83	109	85	97	TN (1)
other (wound and unspecified)	—	8	0	25	25	19	27	48	
Brucellosis	—	68	2	115	115	80	131	121	
Chancroid	—	26	1	24	28	25	23	33	
Cholera	—	28	0	13	10	5	7	9	
Cyclosporiasis [§]	1	144	1	179	141	139	93	137	FL (1)
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	6	1	23	35	30	22	29	
nonsertotype b	2	88	3	200	236	244	199	175	OH (1), MD (1)
unknown serotype	1	189	3	223	178	163	180	179	PA (1)
Hansen disease [§]	—	38	2	98	103	80	101	66	
Hantavirus pulmonary syndrome [§]	—	18	0	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal [§]	—	139	7	266	242	330	292	288	
Influenza-associated pediatric mortality ^{§, ††}	—	112	4	61	358	90	77	43	
Listeriosis	8	596	18	821	851	759	808	884	PA (1), OH (2), NE (1), MD (1), FL (1), TN (1), WA (1)
Measles ^{§§}	—	202	0	63	71	140	43	55	
Meningococcal disease, invasive ^{¶¶} :									
A, C, Y, and W-135	2	143	5	280	301	330	325	318	OK (2)
serogroup B	1	74	2	135	174	188	167	193	VA (1)
other serogroup	—	10	0	12	23	38	35	32	
unknown serogroup	2	322	8	406	482	616	550	651	OH (1), AR (1)
Novel influenza A virus infections ^{***}	—	7	0	4	43,774	2	4	NN	
Plague	—	2	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic [§]	—	—	—	—	—	—	—	NN	
Psittacosis [§]	—	2	0	4	9	8	12	21	
Q fever, total [§]	1	87	2	131	113	120	171	169	
acute	1	66	1	106	93	106	—	—	MI (1)
chronic	—	21	0	25	20	14	—	—	
Rabies, human	—	1	0	2	4	2	1	3	
Rubella ^{†††}	—	3	0	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV [§]	—	—	—	—	—	—	—	—	
Smallpox [§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome [§]	—	91	2	142	161	157	132	125	
Syphilis, congenital (age <1 yr) ^{§§§}	—	169	8	377	423	431	430	349	
Tetanus	—	7	1	26	18	19	28	41	
Toxic-shock syndrome (staphylococcal) [§]	—	65	2	82	74	71	92	101	
Trichinellosis	1	10	0	7	13	39	5	15	CA (1)
Tularemia	2	117	2	124	93	123	137	95	MO (1), TN (1)
Typhoid fever	4	306	8	467	397	449	434	353	NY (1), WA (1), CA (2)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	1	52	1	91	78	63	37	6	MI (1)
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	0	2	1	—	2	1	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	11	585	13	846	789	588	549	NN	MD (2), SC (1), FL (3), WA (3), CA (2)
Viral hemorrhagic fever ^{¶¶¶}	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending October 22, 2011 (42nd week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.
 * Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf.
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/5yearweeklyaverage.pdf.
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
 ** Data for H. influenzae (all ages, all serotypes) are available in Table II.
 †† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 2, 2011, no influenza-associated pediatric deaths occurring during the 2011-12 influenza season have been reported.
 ‡‡ No measles cases were reported for the current week.
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.
 *** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the seven cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts are provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).
 ††† No rubella cases were reported for the current week.
 §§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
 ¶¶¶ There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals October 22, 2011, with historical data



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

Notifiable Disease Data Team and 122 Cities Mortality Data Team

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Dengue Virus Infection†									
	Dengue Fever§					Dengue Hemorrhagic Fever¶				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max			
United States	—	4	18	156	633	—	0	1	1	9
New England	—	0	3	1	9	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	5	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island**	—	0	0	—	1	—	0	0	—	—
Vermont**	—	0	1	1	3	—	0	0	—	—
Mid. Atlantic	—	1	6	50	211	—	0	0	—	5
New Jersey	—	0	1	—	28	—	0	0	—	—
New York (Upstate)	—	0	1	—	30	—	0	0	—	2
New York City	—	1	4	36	133	—	0	0	—	3
Pennsylvania	—	0	2	14	20	—	0	0	—	—
E.N. Central	—	0	4	9	61	—	0	0	—	1
Illinois	—	0	2	1	18	—	0	0	—	—
Indiana	—	0	1	2	13	—	0	0	—	—
Michigan	—	0	1	2	9	—	0	0	—	—
Ohio	—	0	1	2	15	—	0	0	—	—
Wisconsin	—	0	2	2	6	—	0	0	—	1
W.N. Central	—	0	2	5	31	—	0	1	—	—
Iowa	—	0	1	3	2	—	0	0	—	—
Kansas	—	0	1	1	4	—	0	0	—	—
Minnesota	—	0	1	—	13	—	0	0	—	—
Missouri	—	0	1	1	4	—	0	0	—	—
Nebraska**	—	0	1	—	7	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	8	63	222	—	0	1	1	2
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	7	47	175	—	0	0	—	2
Georgia	—	0	1	3	11	—	0	0	—	—
Maryland**	—	0	2	4	—	—	0	0	—	—
North Carolina	—	0	1	2	7	—	0	0	—	—
South Carolina**	—	0	0	—	13	—	0	0	—	—
Virginia**	—	0	1	7	14	—	0	1	1	—
West Virginia	—	0	0	—	2	—	0	0	—	—
E.S. Central	—	0	2	3	6	—	0	0	—	—
Alabama**	—	0	1	2	3	—	0	0	—	—
Kentucky	—	0	0	—	2	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	1	1	1	—	0	0	—	—
W.S. Central	—	0	2	6	25	—	0	0	—	1
Arkansas**	—	0	0	—	—	—	0	0	—	1
Louisiana	—	0	1	3	4	—	0	0	—	—
Oklahoma	—	0	1	—	4	—	0	0	—	—
Texas**	—	0	1	3	17	—	0	0	—	—
Mountain	—	0	2	4	20	—	0	0	—	—
Arizona	—	0	2	2	10	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	2	—	0	0	—	—
Montana**	—	0	1	—	3	—	0	0	—	—
Nevada**	—	0	1	1	4	—	0	0	—	—
New Mexico**	—	0	0	—	1	—	0	0	—	—
Utah	—	0	1	1	—	—	0	0	—	—
Wyoming**	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	4	15	48	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	2	5	33	—	0	0	—	—
Hawaii	—	0	4	5	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	1	5	14	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	28	192	983	9,837	—	0	3	16	225
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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

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

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

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance).

§ Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.

¶ DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	<i>Ehrlichia chaffeensis</i>					<i>Anaplasma phagocytophilum</i>					Undetermined				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
United States	4	6	109	608	587	11	16	53	592	1,549	2	1	13	94	80
New England	—	0	2	4	5	—	2	24	196	94	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	5	—	32	—	0	0	—	—
Maine [§]	—	0	1	1	3	—	0	2	14	15	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	17	135	—	—	0	0	—	—
New Hampshire	—	0	1	2	2	—	0	4	14	16	—	0	1	1	2
Rhode Island [§]	—	0	1	1	—	—	0	10	30	29	—	0	0	—	—
Vermont [§]	—	0	0	—	—	—	0	1	3	2	—	0	0	—	—
Mid. Atlantic	1	1	7	54	80	9	4	29	272	227	—	0	2	11	10
New Jersey	—	0	1	—	48	—	0	3	—	63	—	0	0	—	1
New York (Upstate)	1	0	7	46	25	9	3	25	233	152	—	0	2	11	6
New York City	—	0	1	8	5	—	0	5	35	11	—	0	0	—	—
Pennsylvania	—	0	0	—	2	—	0	1	4	1	—	0	0	—	3
E.N. Central	—	0	3	24	41	—	0	9	15	472	2	0	4	40	42
Illinois	—	0	2	14	15	—	0	2	6	8	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	2	0	3	32	15
Michigan	—	0	2	4	2	—	0	1	—	3	—	0	2	4	—
Ohio	—	0	1	6	6	—	0	1	6	2	—	0	1	1	—
Wisconsin	—	0	1	—	18	—	0	9	3	459	—	0	1	1	24
W.N. Central	—	1	19	151	117	—	0	20	33	679	—	0	11	15	9
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	1	3	6	—	0	1	2	1	—	0	0	—	—
Minnesota	—	0	12	—	—	—	0	20	1	666	—	0	11	—	—
Missouri	—	1	19	146	109	—	0	7	27	12	—	0	7	14	9
Nebraska [§]	—	0	1	1	2	—	0	1	1	—	—	0	1	1	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	1	1	—	—	0	1	2	—	—	0	0	—	—
S. Atlantic	2	2	33	208	235	1	1	8	52	55	—	0	1	10	6
Delaware	—	0	2	15	17	—	0	1	1	4	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	—	0	3	13	8	1	0	3	9	3	—	0	0	—	—
Georgia	—	0	3	16	20	—	0	2	7	1	—	0	1	1	1
Maryland [§]	1	0	3	24	21	—	0	2	7	13	—	0	0	—	2
North Carolina	—	0	17	55	92	—	0	6	17	22	—	0	0	—	—
South Carolina [§]	—	0	1	1	4	—	0	0	—	1	—	0	1	1	—
Virginia [§]	1	1	13	84	71	—	0	3	11	11	—	0	1	7	3
West Virginia	—	0	1	—	2	—	0	0	—	—	—	0	1	1	—
E.S. Central	1	0	8	68	86	—	0	2	15	19	—	0	3	11	8
Alabama [§]	—	0	2	4	10	—	0	1	4	7	N	0	0	N	N
Kentucky	—	0	3	10	16	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	3	3	—	0	1	1	2	—	0	0	—	1
Tennessee [§]	1	0	6	51	57	—	0	2	10	10	—	0	3	11	6
W.S. Central	—	0	87	99	22	1	0	9	6	3	—	0	0	—	1
Arkansas [§]	—	0	12	42	4	1	0	2	5	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	82	56	14	—	0	7	1	2	—	0	0	—	—
Texas [§]	—	0	1	1	3	—	0	1	—	1	—	0	0	—	1
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	4	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	3	—
Colorado	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Idaho [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Montana [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Nevada [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
New Mexico [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Utah	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
Wyoming [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	1	3	—	—	0	1	2	2
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	1	—	1	—	0	0	—	—	—	0	1	2	2
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	1	3	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Cumulative total *E. ewingii* cases reported for year 2011 = 13.

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
United States	9	22	74	924	1,322	21	47	167	1,907	2,666	8	18	39	796	666
New England	1	1	5	55	84	—	1	8	62	47	—	1	5	44	48
Connecticut	—	0	3	15	23	—	0	4	10	20	—	0	3	25	33
Maine†	—	0	2	6	7	—	0	2	8	12	—	0	2	4	2
Massachusetts	—	0	3	25	44	—	1	6	42	8	—	0	2	11	12
New Hampshire	—	0	1	—	1	—	0	1	2	5	N	0	0	N	N
Rhode Island†	—	0	1	3	9	U	0	0	U	U	U	0	0	U	U
Vermont†	1	0	2	6	—	—	0	0	—	2	—	0	1	4	1
Mid. Atlantic	1	4	10	167	226	5	5	12	210	239	1	1	6	71	84
New Jersey	—	1	4	27	64	—	1	4	34	67	—	0	4	1	18
New York (Upstate)	1	1	4	40	50	4	1	9	41	38	1	1	4	40	40
New York City	—	1	6	54	67	—	1	5	65	72	—	0	2	2	3
Pennsylvania	—	1	3	46	45	1	2	4	70	62	—	0	4	28	23
E.N. Central	—	4	8	158	173	2	6	37	267	403	—	3	12	152	74
Illinois	—	1	4	47	44	—	1	6	52	103	—	0	2	6	1
Indiana	—	0	3	12	11	—	1	3	41	62	—	1	5	49	24
Michigan	—	1	6	60	60	—	1	6	68	105	—	2	7	91	33
Ohio	—	1	3	34	41	2	1	30	84	86	—	0	1	5	8
Wisconsin	—	0	2	5	17	—	0	3	22	47	—	0	1	1	8
W.N. Central	—	1	25	34	65	—	2	16	108	98	—	0	6	8	15
Iowa	—	0	1	5	9	—	0	1	9	13	—	0	0	—	—
Kansas	—	0	2	3	10	—	0	2	10	8	—	0	1	3	2
Minnesota	—	0	22	9	14	—	0	15	9	7	—	0	6	2	6
Missouri	—	0	1	10	17	—	2	5	67	57	—	0	1	—	5
Nebraska†	—	0	1	5	14	—	0	3	12	11	—	0	1	3	2
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	1	—	0	1	1	2	—	0	0	—	—
S. Atlantic	2	5	13	184	282	7	12	55	526	730	3	4	11	193	151
Delaware	—	0	1	2	7	—	0	2	8	24	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	2	1	6	65	114	2	4	8	166	243	2	1	4	50	44
Georgia	—	1	4	36	34	1	2	8	77	140	—	1	3	30	23
Maryland†	—	0	4	21	18	1	1	4	44	56	—	0	3	29	20
North Carolina	—	0	3	23	43	1	2	12	89	84	1	1	7	47	33
South Carolina†	—	0	2	9	22	—	1	4	27	49	—	0	1	1	1
Virginia†	—	1	3	20	41	—	1	7	49	71	—	0	2	14	11
West Virginia	—	0	5	8	2	2	0	43	66	60	—	0	6	22	17
E.S. Central	1	0	6	40	33	5	9	14	341	301	1	3	7	141	131
Alabama†	—	0	2	5	6	1	2	5	90	59	—	0	3	16	5
Kentucky	—	0	6	8	13	—	2	6	80	106	—	1	6	58	89
Mississippi	—	0	1	7	2	—	1	3	37	28	U	0	0	U	U
Tennessee†	1	0	5	20	12	4	4	8	134	108	1	1	5	67	37
W.S. Central	4	3	15	104	117	2	7	67	239	472	3	2	11	72	57
Arkansas†	—	0	0	—	2	—	1	4	41	49	—	0	0	—	1
Louisiana	—	0	1	2	10	—	1	4	26	44	—	0	2	5	2
Oklahoma	—	0	4	3	2	—	1	16	60	82	3	1	10	37	23
Texas†	4	2	11	99	103	2	3	45	112	297	—	0	3	30	31
Mountain	—	1	5	52	129	—	1	4	56	114	—	1	4	45	52
Arizona	—	0	2	14	56	—	0	3	13	21	U	0	0	U	U
Colorado	—	0	2	17	34	—	0	2	15	39	—	0	3	14	13
Idaho†	—	0	1	6	6	—	0	1	2	6	—	0	2	8	9
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	3	2
Nevada†	—	0	3	5	13	—	0	3	16	34	—	0	1	6	5
New Mexico†	—	0	1	5	4	—	0	2	5	5	—	0	1	11	13
Utah	—	0	2	1	9	—	0	1	5	8	—	0	1	1	10
Wyoming†	—	0	1	2	3	—	0	1	—	1	—	0	1	2	—
Pacific	—	3	15	130	213	—	3	25	98	262	—	1	12	70	54
Alaska	—	0	1	2	1	—	0	1	4	3	U	0	0	U	U
California	—	2	15	93	173	—	1	22	45	180	—	1	5	32	22
Hawaii	—	0	2	7	7	—	0	1	5	5	U	0	0	U	U
Oregon	—	0	2	8	16	—	0	4	26	35	—	0	3	11	14
Washington	—	0	4	20	16	—	0	4	18	39	—	0	5	27	18
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	4	—	1	8	28	68	—	0	4	10	56
Puerto Rico	—	0	2	6	14	—	0	3	8	23	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	48	53	166	2,937	2,757	311	361	1,874	25,390	27,046	8	26	114	1,079	1,418
New England	—	4	42	292	229	4	74	425	5,269	8,121	—	2	20	76	88
Connecticut	—	1	10	55	38	—	29	218	2,129	2,758	—	0	20	10	2
Maine†	—	0	2	14	11	—	12	66	731	604	—	0	1	4	5
Massachusetts	—	2	27	181	115	—	21	72	1,082	3,090	—	1	5	51	66
New Hampshire	—	0	3	18	21	—	9	64	689	1,196	—	0	1	2	4
Rhode Island†	—	0	2	14	35	—	1	31	112	161	—	0	4	3	8
Vermont†	—	0	2	10	9	4	5	66	526	312	—	0	1	6	3
Mid. Atlantic	19	15	76	996	780	263	153	1,190	15,838	9,628	—	7	17	239	430
New Jersey	—	2	13	147	125	71	56	570	6,630	3,326	—	0	6	8	88
New York (Upstate)	10	5	27	305	238	80	35	214	3,083	2,259	—	1	4	41	66
New York City	—	3	12	161	144	—	2	17	100	631	—	3	10	142	225
Pennsylvania	9	5	33	383	273	112	63	499	6,025	3,412	—	1	4	48	51
E.N. Central	12	10	51	626	591	1	19	106	1,137	3,607	1	3	7	124	142
Illinois	—	1	11	91	137	—	1	18	143	132	—	1	4	45	53
Indiana	—	1	5	76	53	—	0	15	89	78	—	0	2	9	13
Michigan	1	3	15	158	157	1	1	13	98	88	—	0	4	29	28
Ohio	11	4	34	300	187	—	1	9	43	25	1	1	4	35	37
Wisconsin	—	0	2	1	57	—	14	66	764	3,284	—	0	2	6	11
W.N. Central	—	2	9	71	101	9	2	21	119	2,011	—	1	45	28	61
Iowa	—	0	2	10	14	—	0	11	76	84	—	0	3	18	11
Kansas	—	0	2	9	10	—	0	2	12	10	—	0	2	6	10
Minnesota	—	0	8	—	27	—	0	20	—	1,888	—	0	45	—	3
Missouri	—	1	5	43	30	—	0	0	—	4	—	0	1	—	19
Nebraska†	—	0	1	5	9	—	0	2	8	8	—	0	1	3	15
North Dakota	—	0	1	2	4	9	0	10	20	16	—	0	1	—	—
South Dakota	—	0	1	2	7	—	0	1	3	1	—	0	1	1	3
S. Atlantic	10	9	28	420	446	33	52	168	2,784	3,356	5	8	23	367	378
Delaware	—	0	3	17	14	5	12	47	714	568	—	0	3	6	2
District of Columbia	—	0	3	9	16	—	0	2	13	37	—	0	1	5	11
Florida	7	3	9	140	135	1	2	7	91	73	4	2	7	88	107
Georgia	—	1	3	30	55	—	0	5	22	10	—	1	5	67	62
Maryland†	1	1	14	89	100	17	16	112	1,017	1,472	1	2	13	99	85
North Carolina	1	1	7	57	51	3	0	8	54	71	—	0	6	34	46
South Carolina†	—	0	5	17	11	—	0	6	29	27	—	0	1	4	4
Virginia†	1	1	9	55	53	2	15	76	771	987	—	1	8	64	58
West Virginia	—	0	2	6	11	5	0	14	73	111	—	0	0	—	3
E.S. Central	2	2	10	128	117	—	1	5	47	42	—	1	4	27	27
Alabama†	—	0	2	22	16	—	0	2	14	2	—	0	3	6	7
Kentucky	—	0	3	26	26	—	0	1	1	5	—	0	1	7	6
Mississippi	1	0	3	13	12	—	0	1	3	—	—	0	1	1	2
Tennessee†	1	1	8	67	63	—	0	3	29	35	—	0	3	13	12
W.S. Central	3	2	13	107	140	—	1	29	32	94	—	1	18	28	87
Arkansas†	1	0	2	12	16	—	0	0	—	—	—	0	1	5	4
Louisiana	—	0	3	14	9	—	0	1	1	3	—	0	1	1	5
Oklahoma	—	0	3	9	12	—	0	0	—	—	—	0	1	5	5
Texas†	2	2	11	72	103	—	1	29	31	91	—	0	17	17	73
Mountain	2	2	5	77	146	—	0	4	34	26	—	1	4	54	56
Arizona	—	1	3	25	54	—	0	2	10	2	—	0	4	22	23
Colorado	1	0	2	5	27	—	0	1	1	3	—	0	3	18	19
Idaho†	1	0	1	6	5	—	0	2	3	8	—	0	1	2	3
Montana†	—	0	1	1	4	—	0	3	9	4	—	0	1	1	2
Nevada†	—	0	2	12	19	—	0	1	3	1	—	0	2	7	5
New Mexico†	—	0	2	10	7	—	0	2	6	5	—	0	1	3	1
Utah	—	0	2	14	23	—	0	1	1	3	—	0	1	1	3
Wyoming†	—	0	2	4	7	—	0	1	1	—	—	0	0	—	—
Pacific	—	5	21	220	207	1	2	11	130	161	2	3	11	136	149
Alaska	—	0	0	—	2	—	0	2	7	6	—	0	2	5	3
California	—	4	15	185	173	1	2	10	106	104	—	2	8	94	99
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	5	3
Oregon	—	0	3	15	12	—	0	2	11	38	—	0	4	13	13
Washington	—	0	6	19	19	—	0	4	6	13	2	0	3	19	31
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	1	1	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	0	—	5
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	5	13	53	549	641	—	7	47	260	2,444	84	280	2,925	11,014	18,490
New England	—	0	3	24	16	—	0	1	7	24	—	11	25	472	428
Connecticut	—	0	1	3	2	—	0	0	—	11	—	1	3	36	97
Maine [§]	—	0	1	4	3	—	0	1	—	1	—	2	19	145	39
Massachusetts	—	0	2	11	6	—	0	1	4	9	—	4	10	177	231
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	7	71	14
Rhode Island [§]	—	0	1	—	—	—	0	1	2	—	—	0	4	23	35
Vermont [§]	—	0	3	5	5	—	0	1	1	—	—	0	4	20	12
Mid. Atlantic	—	1	6	61	65	—	1	23	30	2,069	24	31	125	1,282	1,227
New Jersey	—	0	1	5	19	—	0	2	10	345	—	3	7	121	142
New York (Upstate)	—	0	4	19	11	—	0	3	8	661	19	13	81	559	414
New York City	—	0	3	23	16	—	0	22	10	1,037	—	0	36	74	73
Pennsylvania	—	0	2	14	19	—	0	16	2	26	5	13	70	528	598
E.N. Central	1	2	6	77	109	—	2	7	73	59	12	59	198	2,305	4,190
Illinois	—	0	3	23	19	—	1	5	48	22	—	17	50	625	722
Indiana	—	0	2	13	24	—	0	0	—	4	—	4	26	162	591
Michigan	—	0	2	9	21	—	0	2	10	17	3	14	53	555	1,192
Ohio	1	0	2	22	27	—	0	5	12	13	9	14	80	595	1,294
Wisconsin	—	0	2	10	18	—	0	1	3	3	—	10	25	368	391
W.N. Central	—	1	4	40	45	—	0	4	31	80	5	22	501	926	1,854
Iowa	—	0	1	9	9	—	0	1	5	38	—	4	36	154	495
Kansas	—	0	1	2	6	—	0	1	4	4	—	2	10	80	148
Minnesota	—	0	2	—	5	—	0	4	1	4	—	0	469	326	639
Missouri	—	0	3	16	18	—	0	3	12	9	5	6	43	251	333
Nebraska [§]	—	0	2	10	5	—	0	1	5	23	—	1	11	46	171
North Dakota	—	0	1	1	2	—	0	3	4	—	—	0	10	41	41
South Dakota	—	0	1	2	—	—	0	0	—	2	—	0	7	28	27
S. Atlantic	1	2	8	114	115	—	0	4	23	48	11	28	106	1,076	1,427
Delaware	—	0	1	1	1	—	0	0	—	—	—	0	5	21	11
District of Columbia	—	0	1	1	1	—	0	0	—	3	—	0	2	3	8
Florida	—	1	5	45	51	—	0	2	7	8	9	6	17	269	261
Georgia	—	0	1	13	9	—	0	2	4	2	—	3	13	139	200
Maryland [§]	—	0	1	11	9	—	0	1	1	11	1	1	6	64	112
North Carolina	—	0	3	13	12	—	0	2	7	8	1	3	35	147	260
South Carolina [§]	—	0	1	9	11	—	0	0	—	4	—	3	25	120	301
Virginia [§]	1	0	2	14	19	—	0	2	4	10	—	6	41	255	193
West Virginia	—	0	3	7	2	—	0	0	—	2	—	0	41	58	81
E.S. Central	—	0	3	21	36	—	0	1	4	9	1	8	28	280	643
Alabama [§]	—	0	2	9	6	—	0	1	1	6	—	3	11	109	171
Kentucky	—	0	2	2	16	—	0	0	—	1	1	1	16	59	216
Mississippi	—	0	1	3	4	—	0	1	3	—	—	0	10	24	70
Tennessee [§]	—	0	2	7	10	—	0	1	—	2	—	2	10	88	186
W.S. Central	3	1	12	46	69	—	1	15	56	100	5	21	297	745	2,423
Arkansas [§]	1	0	1	9	5	—	0	2	3	5	—	2	16	53	175
Louisiana	—	0	2	10	12	—	0	2	—	6	—	0	3	16	37
Oklahoma	2	0	2	9	15	—	0	2	3	—	1	0	92	30	54
Texas [§]	—	0	10	18	37	—	1	14	50	89	4	19	187	646	2,157
Mountain	—	1	4	38	48	—	0	2	7	18	13	40	100	1,454	1,266
Arizona	—	0	1	10	12	—	0	0	—	5	2	14	29	572	381
Colorado	—	0	1	9	18	—	0	1	3	7	10	9	63	333	207
Idaho [§]	—	0	1	5	5	—	0	1	1	1	—	2	11	107	173
Montana [§]	—	0	2	4	1	—	0	0	—	—	1	1	16	76	68
Nevada [§]	—	0	1	1	8	—	0	0	—	1	—	0	5	24	30
New Mexico [§]	—	0	1	1	3	—	0	2	2	—	—	2	12	122	119
Utah	—	0	2	8	1	—	0	0	—	3	—	5	16	211	276
Wyoming [§]	—	0	1	—	—	—	0	1	1	1	—	0	1	9	12
Pacific	—	3	26	128	138	—	0	9	29	37	13	63	1,710	2,474	5,032
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	4	22	35
California	—	2	17	92	90	—	0	9	22	23	—	48	1,569	1,706	4,347
Hawaii	—	0	1	4	1	—	0	1	2	4	—	1	9	73	59
Oregon	—	0	3	17	26	—	0	1	4	3	1	5	18	247	243
Washington	—	0	8	13	20	—	0	1	—	6	12	8	131	426	348
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	5	12	471	—	0	14	31	3
Puerto Rico	—	0	0	—	2	—	0	1	1	1	—	0	1	2	2
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.

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

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	29	59	119	2,391	3,701	693	889	1,822	38,124	44,065	51	95	264	4,066	4,277
New England	1	4	16	176	254	1	34	352	2,049	2,077	—	3	37	212	189
Connecticut	—	0	10	69	110	—	9	333	709	491	—	0	37	79	60
Maine [§]	1	1	6	56	55	—	3	8	114	106	—	0	3	27	16
Massachusetts	—	0	0	—	—	—	19	45	886	1,115	—	1	9	67	73
New Hampshire	—	0	3	17	15	1	3	8	141	154	—	0	3	22	20
Rhode Island [§]	—	0	4	15	27	—	0	62	135	145	—	0	2	4	3
Vermont [§]	—	0	2	19	47	—	1	7	64	66	—	0	3	13	17
Mid. Atlantic	8	16	35	726	911	46	92	205	4,498	5,011	8	9	32	481	473
New Jersey	—	0	0	—	—	—	17	48	797	1,022	—	2	6	73	104
New York (Upstate)	8	7	20	316	429	32	25	67	1,183	1,218	4	3	12	180	161
New York City	—	0	3	9	142	1	20	42	956	1,144	—	2	6	71	59
Pennsylvania	—	8	21	401	340	13	31	111	1,562	1,627	4	2	18	157	149
E.N. Central	1	2	16	156	222	25	87	150	3,693	5,043	4	12	47	734	706
Illinois	—	0	6	46	112	—	28	74	1,291	1,712	—	3	13	168	134
Indiana	—	0	6	21	—	—	9	19	350	646	—	2	8	86	116
Michigan	—	1	6	49	66	—	14	41	691	815	1	2	18	137	135
Ohio	1	0	5	40	44	25	21	46	1,043	1,133	3	2	10	162	121
Wisconsin	N	0	0	N	N	—	8	45	318	737	—	2	20	181	200
W.N. Central	1	2	40	68	223	33	44	102	1,986	2,537	3	13	39	619	783
Iowa	—	0	1	—	25	1	9	19	381	456	—	2	15	171	151
Kansas	1	0	4	28	55	6	7	25	378	378	—	2	8	89	65
Minnesota	—	0	34	—	25	—	0	16	—	638	—	0	7	—	250
Missouri	—	0	1	—	60	18	17	45	835	684	2	4	14	214	203
Nebraska [§]	—	0	3	29	44	8	4	13	218	209	1	1	7	89	65
North Dakota	—	0	6	11	14	—	0	15	37	46	—	0	4	12	17
South Dakota	—	0	0	—	—	—	3	17	137	126	—	1	4	44	32
S. Atlantic	15	19	93	917	971	383	279	721	11,579	12,402	6	14	27	524	570
Delaware	—	0	0	—	—	2	3	11	146	154	—	0	2	14	5
District of Columbia	—	0	0	—	—	—	1	5	47	82	—	0	1	3	9
Florida	—	0	84	95	121	201	107	201	4,603	5,040	5	3	15	120	180
Georgia	—	0	0	—	—	46	42	127	2,023	2,400	—	2	8	95	89
Maryland [§]	—	6	13	247	327	11	18	41	774	902	—	1	8	38	77
North Carolina	—	0	0	—	—	84	33	251	1,767	1,393	1	2	11	99	63
South Carolina [§]	N	0	0	N	N	29	30	68	1,254	1,327	—	0	4	15	20
Virginia [§]	13	11	27	500	458	8	21	68	920	957	—	3	9	137	111
West Virginia	2	0	30	75	65	2	0	14	45	147	—	0	4	3	16
E.S. Central	1	2	7	98	152	24	58	187	3,273	3,322	1	4	22	215	211
Alabama [§]	1	1	7	72	64	12	18	70	967	855	—	1	15	69	41
Kentucky	—	0	2	12	18	—	9	20	367	488	—	1	5	36	56
Mississippi	—	0	1	1	—	2	21	66	1,118	1,063	—	0	12	19	15
Tennessee [§]	—	0	4	13	70	10	16	49	821	916	1	2	11	91	99
W.S. Central	—	1	31	61	730	87	118	515	4,838	5,812	14	6	151	259	264
Arkansas [§]	—	0	10	47	26	18	14	53	729	668	6	0	5	44	45
Louisiana	—	0	0	—	—	5	14	44	679	1,161	—	0	2	8	16
Oklahoma	—	0	20	14	41	16	11	95	554	548	8	1	55	54	25
Texas [§]	—	0	17	—	663	48	78	381	2,876	3,435	—	4	95	153	178
Mountain	—	0	4	34	63	29	45	91	1,984	2,443	3	11	30	474	545
Arizona	N	0	0	N	N	4	14	33	602	833	—	2	14	76	57
Colorado	—	0	0	—	—	16	10	24	459	480	3	2	11	95	192
Idaho [§]	—	0	1	6	11	4	3	8	128	140	—	2	7	100	83
Montana [§]	N	0	0	N	N	1	2	10	112	83	—	0	5	35	38
Nevada [§]	—	0	2	11	7	4	2	8	114	266	—	0	7	29	31
New Mexico [§]	—	0	2	10	11	—	6	22	266	290	—	1	6	39	42
Utah	—	0	2	7	10	—	6	15	252	298	—	1	7	75	83
Wyoming [§]	—	0	0	—	24	—	1	9	51	53	—	0	7	25	19
Pacific	2	3	15	155	175	65	101	288	4,224	5,418	12	13	46	548	536
Alaska	—	0	2	9	12	—	1	6	45	71	—	0	1	3	2
California	2	3	11	136	148	54	74	232	3,248	3,999	6	9	36	344	235
Hawaii	—	0	0	—	—	—	7	14	280	287	—	0	1	6	27
Oregon	—	0	2	10	15	—	5	12	208	453	1	1	11	76	89
Washington	—	0	14	—	—	11	12	42	443	608	5	2	14	119	183
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	11	—	0	0	—	—
Puerto Rico	2	0	6	29	38	3	5	17	186	517	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

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

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF) [†]									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Confirmed					Probable				
		Med	Max			Current week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010
United States	174	231	742	8,908	11,518	1	3	15	165	129	14	21	245	1,576	1,387
New England	—	4	30	232	302	—	0	1	1	—	—	0	1	6	4
Connecticut	—	0	29	63	69	—	0	0	—	—	—	0	0	—	—
Maine [§]	—	0	4	20	6	—	0	0	—	—	—	0	0	—	2
Massachusetts	—	2	18	136	201	—	0	0	—	—	—	0	1	4	—
New Hampshire	—	0	1	3	14	—	0	1	1	—	—	0	1	1	1
Rhode Island [§]	—	0	4	6	11	—	0	0	—	—	—	0	1	1	1
Vermont [§]	—	0	1	4	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	13	15	74	674	1,427	—	0	2	13	2	—	1	4	41	91
New Jersey	—	3	8	97	334	—	0	0	—	1	—	0	2	—	54
New York (Upstate)	11	3	18	229	193	—	0	1	3	1	—	0	1	7	14
New York City	1	5	19	247	263	—	0	0	—	—	—	0	3	18	11
Pennsylvania	1	3	56	101	637	—	0	2	10	—	—	0	3	16	12
E.N. Central	8	16	40	619	1,365	—	0	2	7	3	1	1	8	93	75
Illinois	—	5	12	176	768	—	0	1	1	2	—	0	4	36	34
Indiana [§]	—	1	4	43	51	—	0	1	2	1	1	0	4	40	20
Michigan	1	3	10	138	221	—	0	1	1	—	—	0	1	1	1
Ohio	7	5	27	262	260	—	0	2	3	—	—	0	2	16	14
Wisconsin	—	0	4	—	65	—	0	0	—	—	—	0	1	—	6
W.N. Central	4	7	33	253	1,882	—	0	6	26	13	1	4	29	325	262
Iowa	—	0	4	17	46	—	0	0	—	—	—	0	2	5	5
Kansas [§]	1	1	12	50	242	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	4	—	54	—	0	0	—	—	—	0	2	—	—
Missouri	2	4	18	168	1,488	—	0	3	19	10	1	4	29	314	254
Nebraska [§]	1	0	7	14	45	—	0	3	5	3	—	0	1	5	2
North Dakota	—	0	0	—	—	—	0	1	2	—	—	0	0	—	1
South Dakota	—	0	2	4	7	—	0	0	—	—	—	0	1	1	—
S. Atlantic	77	68	134	2,993	2,085	1	1	8	89	78	9	6	54	415	423
Delaware [§]	—	0	1	4	37	—	0	1	1	1	1	0	4	18	18
District of Columbia	—	0	2	12	27	—	0	1	1	—	—	0	1	1	—
Florida [§]	64	43	98	2,127	896	—	0	1	3	3	1	0	2	11	8
Georgia	10	11	25	467	659	—	0	6	56	56	—	0	0	—	—
Maryland [§]	1	2	7	82	111	—	0	1	2	—	1	0	3	27	42
North Carolina	2	3	36	173	153	—	0	4	12	13	1	0	49	202	216
South Carolina [§]	—	1	3	42	59	1	0	2	11	1	—	0	2	20	18
Virginia [§]	—	2	8	82	117	—	0	1	3	4	4	2	9	132	121
West Virginia	—	0	66	4	26	—	0	0	—	—	1	0	1	4	—
E.S. Central	5	14	29	516	624	—	0	2	8	20	3	5	24	308	379
Alabama [§]	4	5	13	184	163	—	0	1	3	5	1	1	8	62	75
Kentucky	—	1	6	39	201	—	0	1	1	6	—	0	0	—	—
Mississippi	1	3	10	147	43	—	0	0	—	1	—	0	4	12	21
Tennessee [§]	—	4	11	146	217	—	0	2	4	8	2	4	19	234	283
W.S. Central	45	57	503	2,096	2,199	—	0	8	7	6	—	2	235	355	139
Arkansas [§]	1	2	7	65	55	—	0	2	4	2	—	0	49	305	93
Louisiana	—	4	21	194	240	—	0	0	—	—	—	0	2	5	2
Oklahoma	5	2	161	116	234	—	0	5	2	3	—	0	202	41	22
Texas [§]	39	42	338	1,721	1,670	—	0	1	1	1	—	0	5	4	22
Mountain	4	16	42	676	681	—	0	5	13	3	—	0	6	33	13
Arizona	—	6	27	296	370	—	0	4	12	1	—	0	6	18	1
Colorado [§]	1	1	8	82	84	—	0	1	—	—	—	0	1	2	1
Idaho [§]	—	0	3	16	23	—	0	1	1	—	—	0	1	1	5
Montana [§]	1	1	15	121	7	—	0	0	—	2	—	0	1	1	1
Nevada [§]	2	0	4	30	42	—	0	0	—	—	—	0	1	1	—
New Mexico [§]	—	3	9	87	115	—	0	0	—	—	—	0	1	1	1
Utah	—	1	4	42	40	—	0	0	—	—	—	0	1	1	3
Wyoming [§]	—	0	1	2	—	—	0	0	—	—	—	0	2	8	1
Pacific	18	21	63	849	953	—	0	2	1	4	—	0	0	—	1
Alaska	—	0	2	5	1	N	0	0	N	N	N	0	0	N	N
California	11	17	59	690	766	—	0	2	1	4	—	0	0	—	—
Hawaii	—	1	3	42	40	N	0	0	N	N	N	0	0	N	N
Oregon	2	1	4	39	49	—	0	0	—	—	—	0	0	—	1
Washington	5	1	7	73	97	—	0	1	—	—	—	0	0	—	—
Territories															
American Samoa	—	0	1	1	4	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	5	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	4	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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[†] Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by Rickettsia rickettsii, is the most common and well-known spotted fever.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	<i>Streptococcus pneumoniae</i> , [†] invasive disease														
	All ages					Age <5					Syphilis, primary and secondary				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
United States	126	298	937	10,768	12,177	17	27	118	975	1,703	116	257	363	10,261	11,133
New England	3	17	79	601	676	—	1	5	38	87	2	7	16	294	395
Connecticut	—	6	49	258	273	—	0	3	9	23	—	1	5	39	81
Maine [§]	1	2	13	102	96	—	0	1	3	8	—	0	3	11	26
Massachusetts	—	1	3	28	59	—	0	2	14	41	2	5	9	184	240
New Hampshire	—	2	8	82	94	—	0	1	5	5	—	0	3	16	18
Rhode Island [§]	—	2	8	73	89	—	0	1	2	6	—	0	7	36	28
Vermont [§]	2	1	6	58	65	—	0	2	5	4	—	0	2	8	2
Mid. Atlantic	3	31	81	1,067	1,256	1	2	27	90	182	7	29	52	1,201	1,374
New Jersey	—	13	35	496	560	—	0	4	30	47	—	4	13	160	200
New York (Upstate)	2	1	10	65	120	1	1	9	36	89	3	3	20	152	105
New York City	1	13	42	506	576	—	0	14	24	46	1	15	31	615	775
Pennsylvania	N	0	0	N	N	N	0	0	N	N	3	6	13	274	294
E.N. Central	23	66	114	2,332	2,499	2	5	13	196	304	6	30	48	1,219	1,582
Illinois	N	0	0	N	N	—	1	6	64	78	6	12	23	493	754
Indiana	—	16	32	522	575	—	0	4	24	45	—	3	8	125	147
Michigan	3	15	29	518	575	—	1	3	28	73	—	5	12	213	200
Ohio	20	26	45	959	944	2	2	7	67	79	—	8	21	343	440
Wisconsin	—	8	24	333	405	—	0	3	13	29	—	1	5	45	41
W.N. Central	2	3	33	140	688	3	1	6	51	134	—	6	13	228	294
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	2	14	18
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	19	18
Minnesota	—	0	18	—	522	—	0	3	—	76	—	2	8	95	114
Missouri	N	0	0	N	N	1	0	4	28	32	—	2	6	94	131
Nebraska [§]	2	2	9	96	109	1	0	2	10	14	—	0	2	5	9
North Dakota	—	0	25	44	57	—	0	1	1	2	—	0	1	1	—
South Dakota	N	0	0	N	N	1	0	2	12	10	—	0	0	—	4
S. Atlantic	47	72	170	3,002	3,266	5	7	25	256	454	51	65	178	2,719	2,575
Delaware	—	1	6	39	31	—	0	1	—	—	1	0	4	17	4
District of Columbia	—	1	3	29	60	—	0	1	4	7	2	3	8	127	113
Florida	23	23	68	1,090	1,184	3	3	13	101	161	2	23	36	946	957
Georgia	5	22	54	795	1,056	1	2	7	58	128	18	14	130	589	547
Maryland [§]	12	8	32	431	428	1	0	4	30	46	10	8	20	364	254
North Carolina	N	0	0	N	N	N	0	0	N	N	5	8	21	316	337
South Carolina [§]	7	8	25	363	409	—	0	3	23	45	8	4	11	183	120
Virginia [§]	N	0	0	N	N	—	0	3	26	48	5	4	16	175	237
West Virginia	—	0	48	255	98	—	0	6	14	19	—	0	1	2	6
E.S. Central	12	19	36	709	822	—	2	4	56	92	16	16	34	631	732
Alabama [§]	N	0	0	N	N	N	0	0	N	N	—	4	11	183	208
Kentucky	N	0	0	N	N	N	0	0	N	N	8	2	16	94	106
Mississippi	N	0	0	N	N	—	0	2	9	14	7	3	14	163	179
Tennessee [§]	12	19	36	709	822	—	1	4	47	78	1	5	11	191	239
W.S. Central	28	31	368	1,443	1,483	5	4	38	166	244	22	35	50	1,438	1,739
Arkansas [§]	3	4	26	178	137	—	0	3	11	15	—	4	10	158	178
Louisiana	—	3	11	127	96	—	0	2	11	23	1	6	25	306	473
Oklahoma	N	0	0	N	N	1	0	8	30	40	—	1	5	45	80
Texas [§]	25	25	333	1,138	1,250	4	3	27	114	166	21	23	30	929	1,008
Mountain	8	30	72	1,344	1,395	1	3	8	110	190	7	11	20	445	496
Arizona	3	12	45	634	650	—	1	5	52	83	—	4	11	178	185
Colorado	4	9	23	425	432	1	0	4	29	56	2	2	6	85	115
Idaho [§]	N	0	0	N	N	—	0	1	4	5	—	0	4	11	2
Montana [§]	N	0	0	N	N	N	0	0	N	N	—	0	1	4	3
Nevada [§]	N	0	0	N	N	N	0	0	N	N	5	2	9	108	92
New Mexico [§]	1	4	13	191	129	—	0	2	13	16	—	1	4	50	42
Utah	—	1	8	74	172	—	0	3	12	27	—	0	2	9	57
Wyoming [§]	—	0	15	20	12	—	0	1	—	3	—	0	0	—	—
Pacific	—	3	11	130	92	—	0	2	12	16	5	52	66	2,086	1,946
Alaska	—	3	11	125	92	—	0	1	9	16	—	0	1	1	3
California	N	0	0	N	N	N	0	0	N	N	2	42	57	1,691	1,659
Hawaii	—	0	3	5	—	—	0	1	3	—	—	0	5	10	28
Oregon	N	0	0	N	N	N	0	0	N	N	—	3	10	135	54
Washington	N	0	0	N	N	N	0	0	N	N	3	6	13	249	202
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	4	4	14	193	186
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending October 22, 2011, and October 23, 2010 (42nd week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease [†]									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Neuroinvasive					Nonneuroinvasive [§]				
		Med	Max			Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
United States	138	269	367	10,117	12,472	—	0	54	376	621	—	0	24	179	390
New England	1	21	50	948	954	—	0	3	14	14	—	0	1	2	5
Connecticut	—	4	16	203	285	—	0	2	8	7	—	0	1	1	4
Maine [¶]	—	4	10	170	195	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	7	18	355	227	—	0	2	4	6	—	0	1	1	1
New Hampshire	—	3	9	102	123	—	0	0	—	1	—	0	0	—	—
Rhode Island [¶]	—	0	6	33	37	—	0	1	1	—	—	0	0	—	—
Vermont [¶]	1	2	10	85	87	—	0	1	1	—	—	0	0	—	—
Mid. Atlantic	24	42	75	1,923	1,366	—	0	11	27	123	—	0	6	18	63
New Jersey	11	15	67	1,147	480	—	0	1	2	15	—	0	1	3	15
New York (Upstate)	N	0	0	N	N	—	0	5	13	56	—	0	4	13	30
New York City	—	0	0	—	—	—	0	4	9	33	—	0	1	1	9
Pennsylvania	13	19	41	776	886	—	0	1	3	19	—	0	1	1	9
E.N. Central	46	64	118	2,281	3,993	—	0	13	67	80	—	0	5	25	30
Illinois	2	15	31	578	1,019	—	0	6	19	45	—	0	3	9	16
Indiana [¶]	5	4	18	198	299	—	0	2	6	6	—	0	1	3	7
Michigan	7	19	38	716	1,175	—	0	7	32	25	—	0	1	1	4
Ohio	32	21	58	788	1,082	—	0	3	9	4	—	0	3	11	1
Wisconsin	—	0	22	1	418	—	0	1	1	—	—	0	1	1	2
W.N. Central	—	8	42	313	775	—	0	8	28	32	—	0	6	26	75
Iowa	N	0	0	N	N	—	0	2	5	5	—	0	2	4	4
Kansas [¶]	—	2	15	85	307	—	0	1	4	4	—	0	0	—	15
Minnesota	—	0	0	—	—	—	0	1	1	4	—	0	1	1	4
Missouri	—	4	24	157	364	—	0	1	4	3	—	0	1	3	—
Nebraska [¶]	—	0	4	5	21	—	0	4	13	10	—	0	3	13	29
North Dakota	—	0	10	36	39	—	0	1	1	2	—	0	1	3	7
South Dakota	—	1	5	30	44	—	0	0	—	4	—	0	1	2	16
S. Atlantic	16	31	64	1,390	1,802	—	0	8	47	38	—	0	4	15	21
Delaware [¶]	—	0	3	6	29	—	0	1	1	—	—	0	0	—	—
District of Columbia	—	0	2	12	17	—	0	1	1	3	—	0	0	—	3
Florida [¶]	13	16	38	701	841	—	0	5	19	9	—	0	2	2	2
Georgia	N	0	0	N	N	—	0	1	5	4	—	0	1	4	9
Maryland [¶]	N	0	0	N	N	—	0	5	10	17	—	0	3	9	6
North Carolina	N	0	0	N	N	—	0	1	2	—	—	0	0	—	—
South Carolina [¶]	—	0	9	12	75	—	0	0	—	1	—	0	0	—	—
Virginia [¶]	3	7	25	347	464	—	0	2	8	4	—	0	0	—	1
West Virginia	—	5	32	312	376	—	0	1	1	—	—	0	0	—	—
E.S. Central	1	5	15	211	258	—	0	8	44	8	—	0	5	26	10
Alabama [¶]	1	4	14	199	250	—	0	1	3	1	—	0	0	—	2
Kentucky	N	0	0	N	N	—	0	1	2	2	—	0	1	1	1
Mississippi	—	0	3	12	8	—	0	4	26	3	—	0	4	22	5
Tennessee [¶]	N	0	0	N	N	—	0	3	13	2	—	0	1	3	2
W.S. Central	44	44	258	2,056	2,355	—	0	3	13	101	—	0	2	7	19
Arkansas [¶]	1	4	20	217	164	—	0	1	1	6	—	0	0	—	1
Louisiana	—	1	6	68	68	—	0	2	6	18	—	0	2	4	7
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas [¶]	43	41	247	1,771	2,123	—	0	2	6	77	—	0	1	3	11
Mountain	6	18	65	904	876	—	0	8	51	155	—	0	4	23	127
Arizona	2	3	50	400	—	—	0	6	29	105	—	0	2	10	60
Colorado [¶]	3	4	31	184	330	—	0	2	2	26	—	0	2	5	55
Idaho [¶]	N	0	0	N	N	—	0	1	1	—	—	0	0	—	1
Montana [¶]	—	2	28	121	169	—	0	1	1	—	—	0	0	—	—
Nevada [¶]	N	0	0	N	N	—	0	4	12	—	—	0	2	4	2
New Mexico [¶]	1	1	3	35	88	—	0	1	4	21	—	0	0	—	4
Utah	—	3	26	156	274	—	0	1	1	1	—	0	1	2	1
Wyoming [¶]	—	0	3	8	15	—	0	1	1	2	—	0	1	2	4
Pacific	—	2	6	91	93	—	0	16	85	70	—	0	6	37	40
Alaska	—	1	4	47	34	—	0	0	—	—	—	0	0	—	—
California	—	0	2	9	30	—	0	16	85	69	—	0	6	37	39
Hawaii	—	1	4	35	29	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	0	—	1	—	0	0	—	1
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	25	—	0	0	—	—	—	0	0	—	—
Puerto Rico	2	4	21	157	533	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

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

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

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TABLE III. Deaths in 122 U.S. cities,* week ending October 22, 2011 (42nd week)

Reporting area	All causes, by age (years)						P&I†	Reporting area (Continued)	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1			Total	All Ages	≥65	45-64	25-44	1-24	
New England	531	367	115	27	9	13	54	S. Atlantic	1,169	782	273	69	31	14	72
Boston, MA	141	90	34	7	5	5	12	Atlanta, GA	158	96	44	12	6	—	7
Bridgeport, CT	17	12	4	—	—	1	1	Baltimore, MD	104	55	40	6	—	3	7
Cambridge, MA	29	25	2	2	—	—	4	Charlotte, NC	116	77	26	7	5	1	10
Fall River, MA	24	22	—	1	—	1	3	Jacksonville, FL	132	98	26	7	1	—	9
Hartford, CT	51	37	10	2	—	2	6	Miami, FL	99	63	27	9	—	—	5
Lowell, MA	18	15	2	—	1	—	2	Norfolk, VA	36	28	2	3	2	1	1
Lynn, MA	3	1	2	—	—	—	1	Richmond, VA	68	42	12	6	6	2	7
New Bedford, MA	32	24	8	—	—	—	2	Savannah, GA	74	51	19	2	1	1	4
New Haven, CT	38	29	7	2	—	—	4	St. Petersburg, FL	54	34	13	4	—	3	5
Providence, RI	61	34	21	4	1	1	2	Tampa, FL	214	164	37	7	5	1	9
Somerville, MA	2	1	—	1	—	—	—	Washington, D.C.	92	55	25	5	5	2	5
Springfield, MA	30	17	8	2	2	1	1	Wilmington, DE	22	19	2	1	—	—	3
Waterbury, CT	26	19	6	1	—	—	3	E.S. Central	828	539	214	37	17	21	68
Worcester, MA	59	41	11	5	—	2	13	Birmingham, AL	179	109	47	11	7	5	16
Mid. Atlantic	1,819	1,292	377	94	25	31	82	Chattanooga, TN	76	60	13	2	1	—	6
Albany, NY	48	36	5	5	—	2	4	Knoxville, TN	114	78	29	4	1	2	9
Allentown, PA	30	27	3	—	—	—	1	Lexington, KY	72	49	20	—	1	2	4
Buffalo, NY	93	60	23	6	1	3	10	Memphis, TN	157	94	47	7	3	6	16
Camden, NJ	21	10	2	3	3	3	2	Mobile, AL	46	27	14	4	—	1	3
Elizabeth, NJ	16	10	6	—	—	—	—	Montgomery, AL	32	23	9	—	—	—	2
Erie, PA	52	40	11	1	—	—	2	Nashville, TN	152	99	35	9	4	5	12
Jersey City, NJ	16	13	3	—	—	—	—	W.S. Central	1,180	737	308	75	34	26	57
New York City, NY	1,031	741	213	51	12	14	38	Austin, TX	85	52	22	7	1	3	5
Newark, NJ	35	17	11	6	—	1	5	Baton Rouge, LA	59	29	15	8	5	2	—
Paterson, NJ	22	17	3	1	—	1	—	Corpus Christi, TX	73	46	21	4	1	1	12
Philadelphia, PA	134	82	38	7	4	3	3	Dallas, TX	184	111	53	14	4	2	10
Pittsburgh, PA [§]	29	23	4	2	—	—	1	El Paso, TX	89	59	19	4	6	1	1
Reading, PA	42	30	5	4	2	1	—	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	75	55	13	4	1	2	3	Houston, TX	153	88	41	9	4	11	9
Schenectady, NY	28	20	8	—	—	—	—	Little Rock, AR	82	44	26	7	4	1	—
Scranton, PA	33	27	5	1	—	—	2	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	55	37	16	1	1	—	7	San Antonio, TX	247	171	55	11	6	4	16
Trenton, NJ	31	24	3	2	1	1	—	Shreveport, LA	78	56	18	3	1	—	3
Utica, NY	16	12	4	—	—	—	3	Tulsa, OK	130	81	38	8	2	1	1
Yonkers, NY	12	11	1	—	—	—	1	Mountain	1,159	769	280	65	28	16	58
E.N. Central	1,866	1,221	455	115	44	31	106	Albuquerque, NM	128	89	30	6	3	—	11
Akron, OH	83	51	17	7	4	4	3	Boise, ID	60	41	11	5	3	—	3
Canton, OH	35	25	8	2	—	—	5	Colorado Springs, CO	85	59	17	3	5	1	3
Chicago, IL	232	151	61	12	7	1	11	Denver, CO	95	59	30	3	1	2	6
Cincinnati, OH	86	54	18	5	7	2	6	Las Vegas, NV	275	184	69	16	4	2	15
Cleveland, OH	230	156	54	14	1	5	18	Ogden, UT	28	17	9	1	—	1	1
Columbus, OH	161	107	42	8	2	2	8	Phoenix, AZ	162	93	46	12	5	5	3
Dayton, OH	134	97	26	8	3	—	3	Pueblo, CO	36	28	6	1	—	1	—
Detroit, MI	91	42	33	10	4	2	5	Salt Lake City, UT	136	89	31	10	4	2	8
Evansville, IN	50	30	15	2	2	1	5	Tucson, AZ	154	110	31	8	3	2	8
Fort Wayne, IN	75	56	14	3	2	—	7	Pacific	1,773	1,231	390	92	28	30	148
Gary, IN	9	4	2	3	—	—	—	Berkeley, CA	8	5	3	—	—	—	—
Grand Rapids, MI	61	50	7	3	—	1	4	Fresno, CA	125	82	27	8	2	6	14
Indianapolis, IN	185	109	52	11	5	8	10	Glendale, CA	38	30	7	1	—	—	5
Lansing, MI	54	33	12	6	2	1	5	Honolulu, HI	78	60	9	5	1	3	12
Milwaukee, WI	78	43	25	7	2	1	3	Long Beach, CA	74	52	14	4	2	2	9
Peoria, IL	36	22	10	2	1	1	—	Los Angeles, CA	249	158	67	12	8	4	26
Rockford, IL	59	44	15	—	—	—	2	Pasadena, CA	22	20	2	—	—	—	2
South Bend, IN	49	38	8	3	—	—	4	Portland, OR	130	100	21	8	—	1	7
Toledo, OH	96	65	23	5	1	2	5	Sacramento, CA	224	151	58	10	2	3	16
Youngstown, OH	62	44	13	4	1	—	2	San Diego, CA	182	120	47	8	2	3	17
W.N. Central	566	394	120	28	14	10	32	San Francisco, CA	120	83	28	6	2	1	8
Des Moines, IA	67	45	15	4	3	—	3	San Jose, CA	195	144	34	9	2	6	13
Duluth, MN	37	28	8	—	1	—	3	Santa Cruz, CA	15	13	2	—	—	—	2
Kansas City, KS	22	10	8	3	1	—	1	Seattle, WA	124	78	33	12	1	—	5
Kansas City, MO	64	49	10	3	1	1	4	Spokane, WA	64	49	11	3	1	—	6
Lincoln, NE	41	32	5	4	—	—	1	Tacoma, WA	125	86	27	6	5	1	6
Minneapolis, MN	75	46	22	3	1	3	4	Total¶	10,891	7,332	2,532	602	230	192	677
Omaha, NE	92	73	13	4	1	1	9								
St. Louis, MO	46	24	14	3	4	1	1								
St. Paul, MN	57	42	12	2	1	—	4								
Wichita, KS	65	45	13	2	1	4	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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