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Update: Cholera Outbreak — Haiti, 2010

On October 19, 2010, the Haitian Ministry of Public Health and Population (MSPP) was notified of unusually high numbers of patients from Artibonite and Centre departments who had acute watery diarrhea and dehydration, in some cases leading to death. Within 4 days, the National Public Health Laboratory (LNSP) in Haiti isolated *Vibrio cholerae* serogroup O1, serotype Ogawa, from stool specimens obtained from patients in the affected areas by an investigation team from MSPP and CDC Haiti. This report describes the investigation of the initial cases, the ongoing outbreak of cholera in Haiti, and initial control measures. Since the initial identification of cholera, the outbreak has expanded to include cases in seven of Haiti's 10 departments and the capital city of Port-au-Prince. As of November 13, MSPP had reported 16,111 persons hospitalized with acute watery diarrhea and 992 cholera deaths, 620 of which occurred among hospitalized patients. Prevention and control measures implemented by MSPP with assistance from governmental and nongovernmental partners include 1) providing better access to treated drinking water; 2) providing education on improvement of sanitation, hygiene, and food preparation practices; 3) advising ill persons to begin using oral rehydration solution immediately and seek health care at the onset of watery diarrhea; 4) enhancing cholera treatment capacity at existing health-care institutions; and 5) establishing cholera treatment centers.

Initial Epidemiologic Investigation

During October 21–23, an investigation was conducted by MSPP and CDC Haiti at five hospitals in Artibonite Department. The first patients with diarrhea and severe dehydration were admitted to these hospitals on October 19. During October 20–22, the majority of patients at these hospitals with diarrhea and severe dehydration were aged >5 years, and the majority of the patients at these hospitals who died were aged >5 years, suggesting that the outbreak might be caused by cholera.

On October 19 and 20, stool specimens from patients in health facilities in Artibonite and Centre departments were brought to LNSP, where rapid tests on eight specimens were positive for *V. cholerae* O1. LNSP identified *V. cholerae* serogroup O1, serotype Ogawa, from three specimens on October 22. Following confirmation of cholera, hospital staff members and public health authorities advised community members, including patients and their families, to boil or chlorinate their water before drinking.

During October 21–23, the investigative team used a standardized questionnaire to interview a convenience sample of 27 patients in the five hospitals in Artibonite Department. Most of these patients resided or worked in rice fields in communities located alongside a stretch of the Artibonite River approximately 20 miles (32 kilometers) long (Figure 1). Eighteen (67%) of the 27 hospitalized patients reported consuming untreated water from the river or canals before illness onset; 18 (67%) did not routinely use chlorine for treating water, and 21 (78%) practiced open defecation.

Cholera Surveillance and Laboratory Findings

A suspected case of cholera is defined as profuse, acute watery diarrhea in a patient. A confirmed case of cholera requires laboratory confirmation by culture of *V. cholerae*. When a department reports a case of laboratory-confirmed cholera, the department is declared "cholera affected." Only reports from cholera-affected departments are tallied and included in the MSPP daily surveillance summaries.

Since the initial identification of cholera in Artibonite and Centre departments, the outbreak has expanded to include cases

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in five additional departments and the capital city; cases have been reported in seven of 10 departments (Artibonite, Centre, Nord, Nord' Ouest, Nord' Est, Ouest, and Sud) and Port-au-Prince. As of November 13, MSPP had reported 16,111 persons hospitalized with acute watery diarrhea and 992 cholera deaths, 620 of which occurred among hospitalized patients (case-fatality rate among hospitalized patients: 3.8%) (Figure 2). Cases and deaths have been reported primarily from Artibonite department (63% of cases and 62% of deaths).

At LNSP, the outbreak isolates were identified as *V. cholerae* serotype O1, serogroup Ogawa, and selected specimens were sent to CDC for confirmation and additional analyses. As of November 13, CDC had isolated *V. cholerae* from 14 specimens received from LNSP. All isolates were identified phenotypically and characterized by serotyping, biotyping, antimicrobial susceptibility testing, and by pulsed-field gel electrophoresis (PFGE), performed using a protocol developed by PulseNet International, the international molecular subtyping network for foodborne and waterborne disease surveillance. Additionally, the isolates were characterized genetically for the presence and subtype of certain virulence factors (e.g., the cholera toxin, genes specific for strains associated with the ongoing cholera pandemic, and antimicrobial resistance genes). The 14 isolates associated with the outbreak in Haiti were indistinguishable by all laboratory methods, revealing that the outbreak strain was *V. cholerae* serogroup O1, serotype Ogawa, biotype El Tor, and PulseNet PFGE pattern combination KZGN11.0092/KZGS12.0088. The strain possessed a cholera toxin variant that was first seen in cholera strains of the classical biotype. As of November 13, data indicated that a single strain caused illness among the 14 persons from Artibonite Department. If these isolates are representative of those currently circulating in Haiti, the findings suggest that *V. cholerae* was likely introduced into Haiti in one event. *V. cholerae* strains that are indistinguishable from the outbreak strain by all methods used have previously been found in countries in South Asia and elsewhere. PFGE analysis on isolates obtained from cholera patients who became ill in other departments in Haiti is ongoing.

Whole genome sequence (WGS) analysis of three isolates from the current outbreak, and other *V. cholerae* strains is under way. Comparative WGS analysis is the ultimate discriminatory subtyping tool because it detects any and all genetic difference among isolates. Limited WGS data are available currently for *V. cholerae.*

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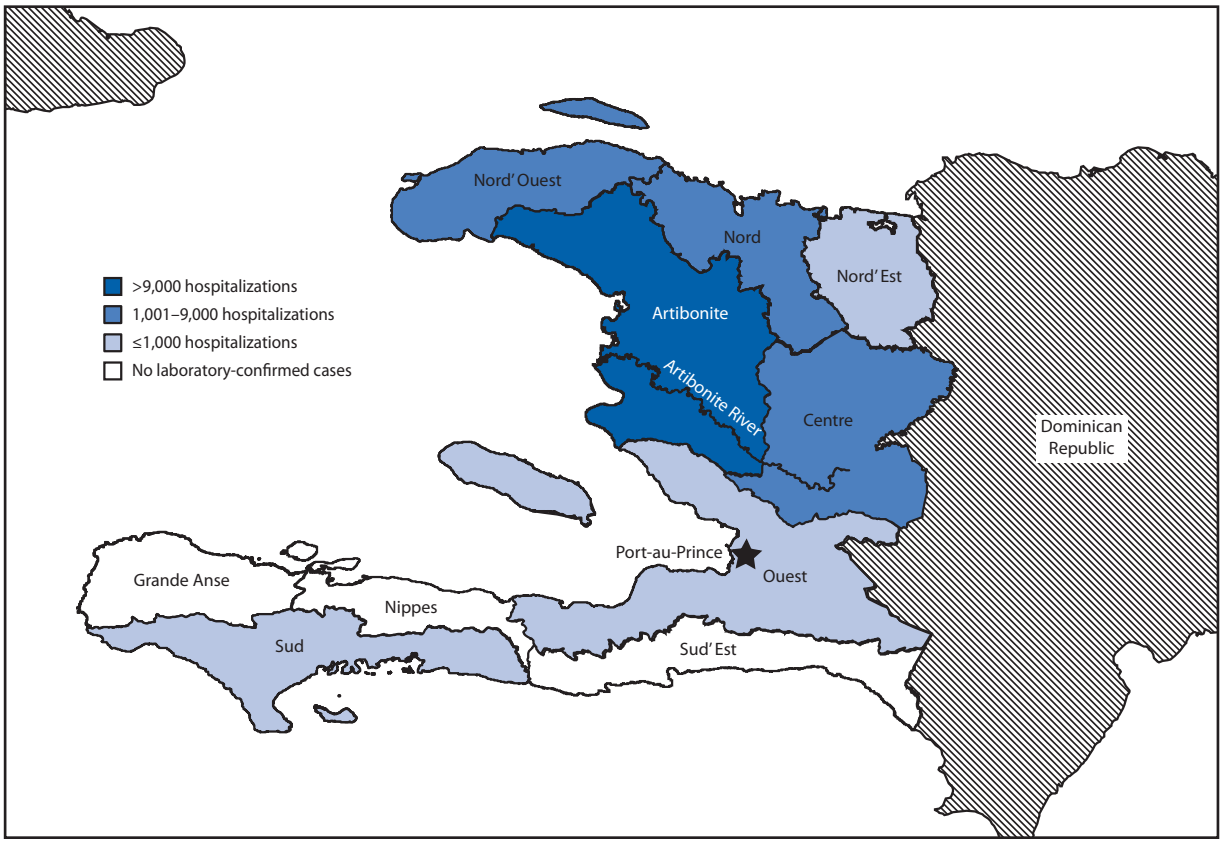
FIGURE 1. Number of persons hospitalized with cholera, by department* — Haiti, October 20–November 13, 2010



* Artibonite (10,230), Nord' Ouest (1,548), Nord (1,513), Centre (1,086), Port-au-Prince (875), Ouest outside of Port-au-Prince (794), Sud (45), and Nord' Est (1).

Comprehensive libraries of *V. cholerae* genomes from epidemiologically or geographically related and unrelated isolates are needed before the sequence data of the Haiti outbreak strain can be interpreted in the proper epidemiologic context.

A representative outbreak isolate has been deposited into the American Type Culture Collection (ATCC) under the strain number BAA- 2163, and the draft genome sequences of the three isolates have been deposited into the GenBank database under the accession numbers AELH00000000, AELI00000000, and AELJ00000000.* Genome sequences will be updated in this database as they become available. Availability of an isolate and WGS of the Haiti outbreak strain as a public resource should facilitate rapid additional characterization by the global scientific community.

Initial antimicrobial susceptibility testing performed at LNSP indicated that all isolates were susceptible to tetracycline (a proxy for doxycycline) but resistant to sulfisoxazole and nalidixic acid. Additional antimicrobial susceptibility testing at CDC on 14 isolates determined that these isolates demonstrated susceptibility to azithromycin, reduced susceptibility to ciprofloxacin, and resistance to furazolidone. Antimicrobial treatment is recommended for severe cholera cases only. Recommended regimens include single-dose doxycycline (for nonpregnant adults and children), azithromycin (for pregnant women and all others), and other antimicrobial agents.†

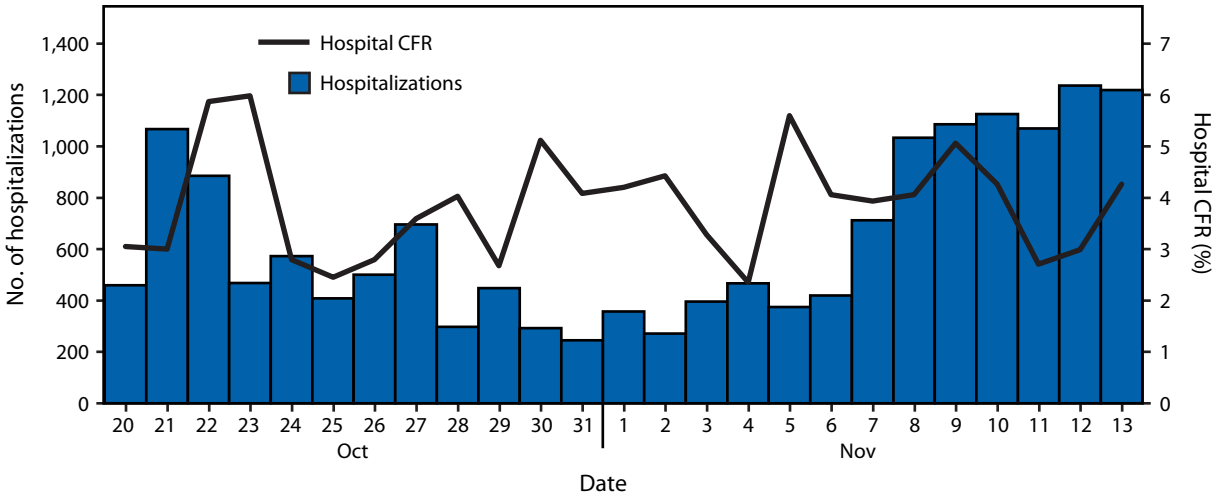
Prevention and Control Measures

MSPP, the Pan American Health Organization (PAHO), CDC, and selected health facilities have established national daily cholera surveillance and

* Information available at http://www.ncbi.nlm.nih.gov/nuccore/AELH00000000, http://www.ncbi.nlm.nih.gov/nuccore/AELI00000000, and http://www.ncbi.nlm.nih.gov/nuccore/AELJ00000000.

† Additional information available at http://www.cdc.gov/haiticholera/clinicalmanagement.

FIGURE 2. Number of persons hospitalized (N=16,111) with cholera and daily hospital case-fatality rate (CFR) — Haiti, October 20–November 13, 2010



disseminated educational messages encouraging persons with acute watery diarrhea to use oral rehydration solution (ORS) and seek immediate medical care. MSPP and partners also developed and disseminated messages on cholera prevention encouraging persons to treat drinking water and to improve handwashing, sanitation, food preparation, and cleaning practices.[§] Community surveys are under way to ascertain knowledge levels and practices among community members regarding cholera, ORS use, and safe water and sanitation practices, and to determine the need for additional prevention messages. Cholera treatment capacity was enhanced at existing health-care institutions, and new cholera treatment centers were opened with support from the Haitian government and other governmental and nongovernmental partners.

Reported by

Ministry of Public Health and Population, Haiti. Pan American Health Organization. CDC.

Editorial Note

Cholera, a gastrointestinal infection caused by toxigenic *V. cholerae* serogroup O1 or O139, can cause acute, severe, watery diarrhea, dehydration, and death. Outbreaks of cholera are frequent in Asia and Africa. During the 1990s, multiple countries in Latin America had cholera outbreaks; however, cholera was not reported from the Caribbean during or since that period. No cholera outbreaks have been reported from Haiti in more than a century (*1–3*). Known risk factors for cholera outbreaks include lack of access to safe drinking water, contaminated food, inadequate sanitation, and large numbers of refugees or internally displaced persons (IDPs).

The cholera outbreak in Haiti underscores the continuing vulnerability of much of the world's population to sudden severe illness and death from cholera. In 2009, a total of 221,226 cases of cholera and 4,946 cholera deaths were reported to the World Health Organization (WHO) from 45 countries; however, the actual number of annual cases is thought to be substantially higher (*4*). Haiti is the latest country to be affected by the ongoing cholera pandemic, which began 49 years ago in Sulawesi, Indonesia, and has lasted longer and spread farther than any previously known cholera pandemic (*5*).

Although multiple foods have been implicated as vehicles for cholera transmission, the driving forces in cholera outbreaks are contaminated drinking water and inadequate sanitation. In 2008, 63% of the 9.8 million persons in Haiti had access to an improved drinking water source[¶]; only 12% received piped, treated water, and only 17% had access to adequate sanitation (*6*). The earthquake on January 12, 2010, worsened conditions by damaging drinking water treatment facilities and piped water distribution systems, and displaced an estimated 2.3 million Haitians, further increasing the risk for waterborne outbreaks. The initial cholera

[§] Additional information available at http://new.paho.org/blogs/haiti/?p=274.

[¶] Defined as a piped household water connection located inside the user's dwelling, plot, or yard; public taps or standpipes; tube wells or boreholes; protected dug wells; protected springs; or rainwater collection.

outbreak investigation suggested that exposure to contaminated water was the likely cause of the initial cases in Artibonite Department. However, a case-control study is under way that will provide additional information about risk factors for illness in Artibonite. In addition, risk factors for illness might change as the outbreak expands over time. Contamination of food by persons who are ill, either via the use of contaminated water or poor food preparation hygiene also can contribute to the spread of disease.

Vigorous efforts to restore public health surveillance and laboratory diagnostic capacity in Haiti after the earthquake enabled rapid detection and identification of *V. cholerae* by MSPP within a few days of the first case report and determination of the antimicrobial susceptibility of circulating strains followed soon after. The Haitian government immediately declared a public health emergency and has worked closely with international organizations and governmental and nongovernmental partners to raise community awareness of and access to cholera prevention and treatment measures, strengthen staffing and treatment supplies at health centers in affected areas, and support creation of dedicated cholera treatment centers in those areas already affected and in areas not yet affected by cholera. Suspected cases in unaffected areas will be identified and reported to MSPP through enhanced daily surveillance and laboratory testing. As surveillance systems improve and outpatients with cholera are reported, the number of cases identified is likely to increase substantially.

Early administration of ORS is the mainstay of cholera treatment and should begin as soon as symptoms develop, continue while the patient seeks medical care, and be maintained until hydration returns to normal in the health-care facility. ORS, combined with intravenous rehydration for those with severe dehydration, has been shown to reduce case-fatality rates to <1% (*7*). ORS is available in Haiti, but continued emphasis on maintaining supplies at the local level, dissemination of messages about how to correctly prepare and use ORS at home, and provision of ORS for use in the home, is needed. Health-care facilities in Haiti will need considerable assistance in preparing their facilities to provide the rapid clinical assessment and aggressive rehydration treatment necessary to reduce the risk for death from severe cholera.

The course of the cholera outbreak in Haiti is difficult to predict. The Haitian population has no preexisting immunity to cholera, and environmental conditions in Haiti are favorable for its continued spread. Approximately 1.3 million Haitians remain in IDP camps (*8*), but the capacity of IDP camps to provide centrally treated drinking water, adequate sanitation, handwashing facilities, and health care varies. The number of cases might be lowered substantially if efforts to reduce transmission are implemented fully (Box), but they also might be increased substantially by delays in implementation, flooding, or other disruptions. Longer-term persistence of *V. cholerae* in the environment in Haiti and recurrent cholera outbreaks also are possible. After the January 12, 2010, earthquake, intensive efforts to provide safe drinking water and sanitation were made in some areas. Expanding these activities over the coming months and years will be critical to reducing the risk for cholera in Haiti and protecting the Haitian population from other waterborne diseases.

During November 15–16, CDC, MSPP, and the International Centre for Diarrhoeal Disease Research, Bangladesh (ICCDR,B) launched a 2-day train-the-trainer program in Port-au-Prince to educate health-care providers on cholera treatment and management techniques in Haiti. Master trainers

What is already known on this topic?

A cholera outbreak has not been reported from Haiti in more than a century.

What is added by this report?

In October 2010, an outbreak of *Vibrio cholerae* serogroup O1, serotype Ogawa, biotype El Tor, was reported from Haiti; as of November 13, the Haitian Ministry of Public Health and Population had reported 16,111 hospitalized cases of acute watery diarrhea and 992 cholera deaths, 620 of which occurred among hospitalized patients. Laboratory data suggest that *V. cholerae* was likely introduced into Haiti in one event and that the strain is indistinguishable by all methods used from strains circulating in countries in South Asia and elsewhere.

What are the implications for public health practice?

Continued cholera surveillance is required to follow the course of the outbreak and to target resources in areas of greatest need. Cholera treatment and prevention strategies need to be enhanced. Long-term improvements in water and sanitation likely will be needed to control cholera in Haiti. Travelers to Haiti are encouraged to take certain basic precautions to reduce their risk for acquiring cholera.

BOX. Recommendations for reducing the risk for cholera — Haiti, 2010*

Drink and use safe water
- Piped water sources, drinks sold in cups or bags, or ice might not be safe and should be boiled or treated with chlorine.
- Bottled water with unbroken seals and canned/bottled carbonated beverages are safe to drink and use.
- Use safe water to brush teeth, wash and prepare food, and to make ice.
- Clean food preparation areas and kitchenware with soap and safe water and let dry completely before reuse.

Be sure water is safe to drink and use
- Boil it or treat it with a chlorine product or household bleach.
- If boiling, bring water to a complete boil for at least 1 minute.
- To treat water with chlorine, use one of the locally available treatment products such as Aquatabs, Dlo Lavi, or PuR and follow the instructions.
- If a chlorine treatment product is not available, water can be treated with household bleach. Add eight drops of household bleach for every 1 gallon of water (or two drops of household bleach for every 1 liter of water) and wait 30 minutes before drinking.
- Always store treated water in a clean, covered container.

Cook food well, keep it covered, eat it hot, and peel fruits and vegetables.
- Boil it, cook it, peel it, or leave it.
- Be sure to cook seafood, especially shellfish, until it is very hot all the way through.
- Avoid raw foods other than fruits and vegetables you have peeled yourself.

Wash hands often with soap and water
- Before eating or preparing food.
- Before feeding children.
- After using the latrine or toilet.
- After cleaning a child's bottom.
- After taking care of someone ill with diarrhea.
- If no soap is available, scrub hands often with ash or sand and rinse with safe water.

Use latrines or bury feces; do not defecate in any body of water.
- Use latrines or other sanitation systems, like chemical toilets, to dispose of feces.
- Wash hands with soap and safe water after defecating.
- Clean latrines and surfaces contaminated with feces using a solution of one part household bleach to 9 parts water.

What if I don't have a latrine or chemical toilet?
- Defecate at least 30 meters away from any body of water and then bury the feces.
- Dispose of plastic bags containing feces in latrines, at collection points if available, or bury it in the ground. Do not put plastic bags in chemical toilets.
- Dig new latrines or temporary pit toilets at least a half-meter deep and at least 30 meters away from any body of water.

Clean up safely, in the kitchen and in places where the family bathes and washes clothes.
- Wash yourself, children, diapers, and clothes, 30 meters away from drinking water sources.

Source: CDC. Five basic cholera prevention messages. Available at http://www.cdc.gov/haiticholera/five_messages.htm.
*Additional information regarding cholera is available at http://www.cdc.gov/cholera.

were trained and are now prepared to train additional health-care workers in departments across Haiti in the next few weeks. The train-the-trainer program will expand beyond the persons directly trained by CDC, MSPP, and ICDDR,B to reach a much larger number of Haitians providing health-care to patients in the communities. The train-the-trainer program is designed to improve the standard of care of cholera patients and reduce the number of cholera patients dying from severe dehydration.

Travelers to Haiti are encouraged to take certain basic precautions to reduce their risk for acquiring cholera (*9*). Further spread of cholera from Haiti to other countries might occur; therefore, cholera surveillance should be enhanced in those areas. Exports from Haiti, including foods, are not likely to pose a risk for cholera transmission. However, CDC discourages travelers from bringing noncommercial, perishable "souvenir seafood" from Haiti to the United States because of the risk for contamination (*10*).

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Occupational Transmission of *Neisseria meningitidis* — California, 2009

Neisseria meningitidis is a leading cause of bacterial meningitis and sepsis (*1*). The case-fatality rate for meningococcal disease is 10%–14%; survivors can experience brain damage, hearing loss, limb loss, and learning disabilities (*1*). On December 11, 2009, the California Department of Public Health (CDPH) initiated an investigation of two secondary cases of meningococcal disease in a police officer and a respiratory therapist following occupational contact with an unconscious adult. This report describes the events surrounding occupational transmission of *N. meningitidis* and recommends measures to control and prevent secondary transmission of *N. meningitidis*. Breaches in infection control, notification delays, and lack of worker exposure assessment and postexposure chemoprophylaxis (PEP) likely contributed to secondary cases. Employers should provide adequate infection-control training to staff members, PEP to exposed workers, and report notifiable diseases promptly.

On December 3, 2009, the index patient, a man aged 36 years, was found unconscious at home by four police officers who had been asked by the patient's family to check on his welfare. The patient was supine on his bed, and his airway was partially obstructed by vomitus. Vomitus and feces were on the patient's body and clothing. While positioned near the patient's head, one of the police officers (PO1) turned the patient to the patient's side and adjusted the patient's head to aid breathing. Immediately afterward, PO1 left the patient's room, reentering only to check on the patient from a distance. After firefighters and paramedics arrived, PO1 left the scene. Firefighters measured the patient's blood pressure and heart rate, and paramedics placed an intravenous line, performed airway suctioning, placed an oropharyngeal airway, administered oxygen, and transported the patient by ambulance to hospital A at approximately 7:00 p.m. on December 3.

In the emergency department (ED) of hospital A, the patient's airway was suctioned, and an endotracheal tube was placed. Blood was drawn for culture in the ED and the patient was treated with ceftriaxone. The patient was transferred to the intensive-care unit (ICU), and the treating provider considered meningococcal disease, 2009 pandemic influenza A (H1N1), and community-acquired pneumonia as possible causes of his illness. In the ICU, cerebrospinal fluid (CSF) was collected for gram stain and culture and the patient was treated with piperacillin and tazobactam, levofloxacin, ceftriaxone, and vancomycin.

On December 4, gram-negative diplococci were identified in the patient's CSF at 9:30 a.m. and in his blood at 3:30 p.m. On December 6, *N. meningitidis* was isolated from blood and on December 7, *N. meningitidis* also was isolated from CSF. On December 7, hospital A reported this case of laboratory-confirmed meningococcal disease (*2*) to its local health authority, 3 days after a presumptive diagnosis of meningococcal meningitis was made and 1 day after the diagnosis was confirmed by blood culture. The index patient was hospitalized for 20 days and then discharged to a rehabilitation facility on December 23.

On December 5, PO1, a man aged 30 years, experienced onset of sore throat and nausea that progressed to muscle pain with fever and vomiting. On December 9, he was examined by his primary-care physician. While at the physician's office, PO1 received a phone call from a colleague who informed him of the index patient's diagnosis of meningococcal disease. The primary-care physician advised PO1 to go directly to the ED, and he was admitted to hospital B the same day. PO1 had blood and CSF collected for gram stain and culture and was treated empirically with ceftriaxone and vancomycin. On December 10, gram-negative diplococci were detected in blood from PO1, and hospital B reported the case of meningococcal disease to its local health authority and the local health authority of PO1's employer. The next day, blood and CSF from PO1 were culture positive for *N. meningitidis*. PO1 was hospitalized for 5 days, and then discharged to his home on December 14.

On December 8, a respiratory therapist (RT1), a man aged 47 years who had been present during airway suctioning and assisted with endotracheal tube placement in the ED at hospital A, began experiencing weakness, chills, and fatigue. On December 10, RT1 was transported by ambulance from his home to hospital C. RT1 was empirically treated with ceftriaxone, vancomycin, and meropenem and had blood

and CSF collected for gram stain and culture in the ED. On December 11, gram-negative diplococci were detected in blood and CSF from RT1. The next day, blood and CSF from RT1 were culture positive for *N. meningitidis*, and hospital C notified its local health authority. RT1 was hospitalized for 11 days and then discharged to his home on December 21.

On December 11, CDPH was notified of the three cases by the local health authority to which hospital B (and later hospital C) reported, and CDPH initiated an investigation. Because CDPH determined that contact tracing and postexposure follow-up of workers already had been initiated by the local health authorities and all employers, the objectives of the ensuing investigation were limited to characterizing the occupational exposure, identifying lapses in infection control, and confirming that appropriate employee health follow-up was conducted. CDPH also made recommendations on prevention and control measures. CDPH interviewed hospital A infection-control and employee health personnel and workers involved in the patient's care before his transfer to the ICU, including PO1 and RT1. Employers provided CDPH with a list of workers who participated in the emergency response. Workers were identified from employer logs and from documentation submitted by the ambulance service that describes the patient's prehospital care. Employers' records of their workers' postexposure assessment (n = 22), local health authority records, and the medical records of the patients were reviewed. Potentially exposed workers were defined as those persons reported being ≤3 feet from the patient while providing care, based on CDC guidelines (*3*). Additional information on personal protective equipment (PPE) use was collected during interviews and record reviews. *N. meningitidis* isolates from patients were typed by using multilocus sequence typing at CDPH and submitted to CDC for pulsed-field gel electrophoresis (*4,5*).

A total of 23 workers, including four police officers, three firefighters, two paramedics, and 14 health-care workers, were involved in the index patient's care. Among the 23 workers, 10 were reported to have been ≤3 feet from the patient (Table) while providing care. Among these, PO1 wore only gloves, two firefighters and two paramedics donned N95 respirators, and one of five hospital health-care workers wore a surgical mask. Lack of PPE availability in the field and lack of knowledge regarding where respirators and surgical masks were located in the ED were cited as two reasons why appropriate PPE was not worn by health-care workers.

In total, 16 workers were offered PEP by their employers 4–8 days postexposure. For the seven workers not offered PEP, two were already taking antibiotics for other medical reasons, two had no patient exposure, one was seen by his private physician and was not offered PEP, and two (PO1 and RT1) were not offered PEP by their employers.

The index patient and both secondary patients had culture-confirmed *N. meningitidis* serogroup C, ST-11 clonal complex; isolates were indistinguishable by pulsed-field gel electrophoresis. Neither secondary patient used N95 respirators or surgical masks; both did use gloves. PO1 reported no direct contact with respiratory secretions. However, PO1 reported that he heard hacking or gurgling sounds when he turned the index patient, but he could not remember feeling droplets on his skin or face. RT1 assisted with intubation and airway suctioning of the index patient. In both cases, unprotected exposure to respiratory aerosols or secretions might have resulted in transmission of *N. meningitidis*.

Reported by

B Materna, PhD, K Harriman, PhD, J Rosenberg, MD, D Shusterman, MD, G Windham, PhD, J Atwell, California Dept of Public Health. S Beckman, MPH, CDC/CSTE Applied Epidemiology Fellow; E Mortensen, MD, J Zipprich, PhD, EIS officers, CDC.

Editorial Note

Occupationally acquired meningococcal disease outside of the laboratory is rarely reported (*6–8*), perhaps in part because of rapid use of PEP. Transmission of *N. meningitidis* to health-care personnel has occurred after unprotected exposure to infected patients during endotracheal intubation, airway suctioning, and oxygen administration (*6–8*), but more than one occupationally acquired infection from the same index patient has not been reported. Findings from this investigation indicate that breaches in infection control and delays in notification to the local health authority, worker exposure assessment, and PEP administration likely contributed to secondary cases of meningococcal disease.

To decrease the risk for infectious disease transmission to health-care personnel, the Healthcare Infection Control Practices Advisory Committee recommends use of empiric infection-control precautions based

TABLE. Exposure and prophylaxis characteristics of workers who were reported to be ≤3 feet from index patient with *Neisseria meningitidis* while providing care* — California, 2009

Employer	Occupation	Exposure to patient	Type of mask/ respirator worn	Days from exposure to notification	Prophylaxis offered
City	Police officer†	Turned patient, near head	None	6§	No¶
	Firefighter	Took vital signs, assisted with patient transfer to ambulance, rode with patient in ambulance, administered oxygen	N95 respirator	6	Yes
	Firefighter	Took vital signs, assisted with patient transfer to ambulance	N95 respirator	5	No**
Private company	Paramedic	Placed intravenous line, suctioned patient, placed oropharyngeal airway, administered oxygen, rode with patient in ambulance	N95 respirator	4	Yes
	Paramedic	Performed full physical examination	N95 respirator	4	Yes
Hospital A	Respiratory therapist††	Assisted with intubation, present for suctioning	None	Not notified	No¶
	Physician	Suctioned patient, performed intubation	None	8	Yes
	Nurse	Checked pupils, pulse	None	8	Yes
	Respiratory therapist§§	Set up intubation tray, retrieved ventilator	Surgical mask (with face shield)	8	Yes
	Nurse	Injected intravenous medication	None	8	Yes

* Excludes persons who did not recall patient contact or for whom reliable data on patient contact was not available.
† Confirmed with meningococcal disease (PO1).
§ Notified by coworker.
¶ Not assessed.
** Exposure assessment was conducted by worker's private physician.
†† Confirmed with meningococcal disease (RT1).
§§ Not interviewed; information based on chart review and other employee interviews.

on the patient's apparent clinical syndrome when the diagnosis is unknown and recommends use of droplet precautions (surgical masks) for contact with patients with suspected or confirmed meningococcal disease (*3*). The California Division of Occupational Safety and Health aerosol-transmissible diseases (Cal/OSHA ATD) standard* requires droplet precautions for contact with patients with suspected or confirmed meningococcal disease and until November 2010 required N95 respirators for contact with suspected or confirmed 2009 pandemic influenza A (H1N1) patients. Given that the index patient's differential diagnosis included H1N1 infection, N95 respirators should have been used; however, among the 10 workers who had been ≤3 feet to the index patient, only four used a respirator. No health-care workers at hospital A wore respirators, and only one wore a surgical mask.

Meningococcal disease is a nationally notifiable disease (*2*). California requires health-care providers to immediately report by telephone suspected cases of meningococcal disease to the local health authority.† Hospitals A and C were late in reporting suspected cases to their respective local health authorities. Additionally, under the Cal/OSHA ATD standard and the federal reauthorization of the Ryan White Act,§ hospital A was required to notify other employers of potentially exposed nonhospital employees, such as paramedics, fire fighters, and police. Had hospital A adhered to these reporting and notification requirements, postexposure follow-up of nonhospital employees might have been more timely. Hospital A also did not conduct an exposure assessment of its own employees until 8 days postexposure, after notification of RT1's hospitalization. PEP should be initiated as soon as possible, ideally <24 hours after index patient identification (*1*). However, all 16 workers were offered prophylaxis ≥4 days postexposure and ≥3 days after the index patient was suspected to have

* Aerosol Transmissible Diseases Standard, Title 8 C.C.R. Sect. 5199 (2009), April 15, 2010. Available at http://www.dir.ca.gov/title8/5199.html.

† Reportable Disease and Conditions, Title 17 C.C.R. Sect. 2500, April 15, 2010. Available at http://www.cdph.ca.gov/programs/documents/provider_reportable_diseases+conditions.pdf.

§ Ryan White HIV/AIDS Treatment Extension Act, S. 1793, 111 Cong. (2009), April 15, 2010. Available at http://www.govtrack.us/congress/bill.xpd?bill=s111-1793.

What is already known on this topic?

Occupational transmission of meningococcal disease has been reported, rarely, after unprotected exposure to infected patients. In California, a suspect case of meningococcal disease, defined as the detection of gram-negative diplococci from a normally sterile site, is reportable immediately, by telephone to the local health authority.

What is added by this report?

A multiemployer emergency response to a patient with meningococcal disease resulted in two secondary cases that might have been prevented if infection control recommendations, postexposure chemoprophylaxis (PEP), and notification requirements had been implemented in a timely manner.

What are the implications for public health practice?

Health-care facilities should review infection control and occupational health recommendations and disease reporting requirements; clinicians should carefully evaluate worker exposures to determine whether PEP is indicated.

meningococcal disease. Neither secondary patient was offered PEP.

CDC's Advisory Committee on Immunization Practices (ACIP) recommends PEP for close contacts of patients with meningococcal disease. ACIP defines close contacts for PEP as 1) household members, 2) child-care center personnel, and 3) persons directly exposed to the patient's oral secretions (e.g., by kissing, mouth-to-mouth resuscitation, endotracheal intubation, or endotracheal tube management) (*1*). Although the majority of workers were offered PEP, albeit late, whether PEP would have been recommended for PO1 is unclear and would depend on how strictly the evaluating clinician interpreted the ACIP recommendations. Other types of exposures not defined specifically in the ACIP recommendations might warrant PEP based on the clinician's judgment. However, because PO1 was experiencing symptoms as early as December 5, timely notification and assessment could have resulted in earlier diagnosis and treatment.

Health-care facilities should review their local health authority reporting procedures to ensure timely reporting of notifiable diseases, such as *N. meningitidis*, and employers should provide infection-control training and PPE to potentially exposed workers. Employers also should conduct timely and thorough investigations to identify and evaluate workers potentially exposed to a patient suspected to have meningococcal disease.

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Smoking Restrictions in Large-Hub Airports — United States, 2002 and 2010

Secondhand smoke (SHS) exposure causes death and disease in both nonsmoking adults and children, including cancer, cardiovascular and respiratory diseases (*1*). SHS exposure causes an estimated 46,000 heart disease deaths and 3,400 lung cancer deaths among U.S. nonsmoking adults annually (*1*). Adopting policies that completely eliminate smoking in all indoor areas is the only effective way to eliminate involuntary SHS exposure (*1*). In 2009, an estimated 696 million aircraft passenger boardings occurred in the United States (*2*). A 2002 survey of airport smoking policies found that 42% of 31 large-hub U.S. airports had policies requiring all indoor areas to be smoke-free (*3*). To update that finding, CDC analyzed the smoking policies of airports categorized as large-hub in 2010. This report summarizes the results of that analysis, which found that, although 22 (76%) of the 29 large-hub airports surveyed were smoke-free indoors, seven airports permitted smoking in certain indoor locations, including three of the five busiest airports. Although a majority of airports reported having specifically designated smoking areas outdoors in 2010 (79%) and/or prohibiting smoking within a minimum distance of entryways (69%), no airport completely prohibited smoking on all airport property. Smoke-free policies at the state, local, or airport authority level are needed for all airports to protect air travelers and workers at airports from SHS.

Large-hub airports are defined by the Federal Aviation Administration as airports that accounted for ≥1% of total passenger boardings in the United States during the previous year. Combined, the 29 airports categorized as large-hub in 2010 accounted for approximately 70% of total passenger boardings in the United States in 2009 (*2*).

Smoking policies in airports can be established by state statute; county or city ordinance; or airport/transit authority rule, regulation, or policy. An airport was defined as smoke-free indoors when smoking by anyone was prohibited at all times, in all indoor areas of the airport. To determine the smoking policies in place at the 29 large-hub airports, information was collected during July–September 2010. CDC first reviewed and analyzed state and local laws from databases of current statutes and ordinances and airport authority rules and regulations available on Internet sites. Results were then compared with a list of airport smoking policies maintained by the Americans for Nonsmokers' Rights Foundation (*4*) and with other Internet resources, including policy information on airport websites. Finally, airport personnel were contacted to resolve any inconsistencies between CDC's findings and other reports and to collect additional information on smoking policies. These results were compared with information on smoking policies at the 31 airports categorized as large-hub in 2002 (*3*).*

The CDC analysis included identifying 1) whether smoking was allowed or prohibited in all indoor areas; 2) where smoking (if allowed) was permitted indoors, including the type and number of locations; 3) whether outdoor smoking areas were designated; 4) whether smoking was prohibited within a minimum distance of airport entrances; and 5) how smoking policies were communicated to aircraft passengers and airport workers and visitors (i.e., written policies, signage, or announcements on the public address system).

Twenty-two (76%) of the 29 large-hub airports were smoke-free indoors in 2010 (Table 1), compared with 13 (42%) of 31 large-hub airports in 2002 (Table 2). Among the seven large-hub airports that allowed smoking indoors in 2010, three were ranked among the top five in passenger boardings: Hartsfield-Jackson Atlanta International, Dallas/Fort Worth International, and Denver International.

None of the 29 large-hub airports completely prohibited smoking outdoors on airport property. A larger percentage (79%) of airports reported having specifically designated outdoor smoking areas in 2010 than in 2002 (68%). The percentage of airports with policies prohibiting smoking within a minimum distance of airport entrances (range: 10–30 feet) also was greater in 2010 (69%) than in 2002 (61%) (Table 2). In 2010, airports that permitted smoking indoors were less likely than those that did not to have designated outdoor smoking areas (71% versus 82%) or minimum

* Three airports that were categorized as large-hub in 2002 were categorized as medium-hub in 2010 (≥0.25% and <1% of all U.S. passenger boardings): Pittsburgh International, Lambert-St. Louis International, and Cincinnati/Northern Kentucky International. One airport, Chicago Midway International, was medium-hub in 2002 and large-hub in 2010.

TABLE 1. Indoor smoke-free status of large-hub airports (N = 29), reported number of indoor smoking areas, and locations where smoking is permitted — United States, 2010

Rank*	Airport	City, state	Smoke-free indoors	Reported no. of smoking areas	Locations where smoking is permitted
1	Hartsfield-Jackson Atlanta International	Atlanta, Georgia	No	12	Public smoking rooms; bars
2	Chicago O'Hare International	Chicago, Illinois	Yes	—	—
3	Los Angeles International	Los Angeles, California	Yes	—	—
4	Dallas/Fort Worth International	Fort Worth, Texas	No	2	Private airline clubs
5	Denver International	Denver, Colorado	No	4	Bars
6	John F. Kennedy International	New York, New York	Yes	—	—
7	McCarran International	Las Vegas, Nevada	No	1	Bar
8	George Bush Intercontinental/Houston	Houston, Texas	Yes	—	—
9	Phoenix Sky Harbor International	Phoenix, Arizona	Yes	—	—
10	San Francisco International	San Francisco, California	Yes	—	—
11	Charlotte/Douglas International	Charlotte, North Carolina	No	4	Nonpublic, leased tenant space
12	Newark Liberty International	Newark, New Jersey	Yes	—	—
13	Orlando International	Orlando, Florida	Yes	—	—
14	Miami International	Miami, Florida	Yes	—	—
15	Minneapolis-St Paul International	Minneapolis, Minnesota	Yes	—	—
16	Seattle-Tacoma International	Seattle, Washington	Yes	—	—
17	Detroit Metropolitan Wayne County	Detroit, Michigan	Yes	—	—
18	Philadelphia International	Philadelphia, Pennsylvania	Yes	—	—
19	General Edward Lawrence Logan International	Boston, Massachusetts	Yes	—	—
20	Washington Dulles International	Dulles, Virginia	No	4	Public smoking rooms
21	La Guardia	New York, New York	Yes	—	—
22	Baltimore/Washington Intl. Thurgood Marshall	Glen Burnie, Maryland	Yes	—	—
23	Fort Lauderdale/Hollywood International	Fort Lauderdale, Florida	Yes	—	—
24	Salt Lake City International	Salt Lake City, Utah	No	5	Public smoking rooms
25	Honolulu International	Honolulu, Hawaii	Yes	—	—
26	Ronald Reagan Washington National	Arlington, Virginia	Yes	—	—
27	San Diego International	San Diego, California	Yes	—	—
28	Tampa International	Tampa, Florida	Yes	—	—
29	Chicago Midway International	Chicago, Illinois	Yes	—	—

* Ranked by total number of passenger boardings in 2009 (range: 42.3 million–8.3 million), according to the Federal Aviation Administration.

distance requirements outdoors (29% versus 82%). A similar pattern was observed in 2002 (*3*).

All 29 large-hub airports reported posting signage to communicate their smoking policy; 72% of these airports also reported that announcements related to the smoking policy were made over the airport's public address system. Some large-hub airports reported that they had made such announcements previously but had discontinued them because the smoking policy was well-known.

Reported by

A Cordero, MPA, M Tynan, S Babb, MPH, G Promoff, MA, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note

The findings in this report show increases from 2002 to 2010 in the percentages of large-hub airports that are smoke-free indoors, that have designated outdoor smoking areas, and that prohibit smoking within a minimum distance of airport entrances. However, seven large-hub airports allowed smoking indoors in 2010, including three of the five busiest airports. Together, these seven airports that allowed smoking indoors accounted for approximately 151 million (22%) of the 696 million total passenger boardings in the United States in 2009 (*2*). SHS exposure causes heart disease and lung cancer in nonsmoking adults and can have immediate adverse effects on the cardiovascular system (*1*). According to the 2006 report of the Surgeon General, the scientific evidence indicates that there is no risk-free level of SHS exposure (*1*). Brief exposures to secondhand smoke can cause blood platelets to become stickier, damage the lining of blood vessels, decrease coronary flow velocity reserves, and reduce heart rate variability, potentially increasing the risk for a heart attack (*1,5*). SHS contains chemicals that can quickly irritate and damage the lining of the airways. Even brief exposure can result in upper airway changes in healthy persons and can lead to more frequent and more severe asthma attacks in children who already have asthma (*1*). Smoke-free policies not only eliminate the risk from involuntary SHS exposure, but also change social norms and motivate smokers to quit (*1*).

What is already known on this topic?

According to the 2006 Surgeon General's report, the scientific evidence indicates that there is no risk-free level of exposure to secondhand smoke (SHS); the only effective way to eliminate involuntary exposure to SHS is to completely eliminate smoking in all indoor areas.

What is added by this report?

Although 76% of 29 large-hub airports were identified as smoke-free indoors in 2010, seven large-hub airports allowed smoking in designated indoor areas; these seven airports accounted for approximately 22% of the total passenger boardings in the United States in 2009. No airport reported completely prohibiting smoking on airport property, potentially leaving air travelers, airport visitors, and workers at airports at risk for SHS exposure when entering, exiting, or working outside of airports.

What are the implications for public health practice?

Policies making indoor areas within airports completely smoke-free are needed at the state, local, or airport authority level to better protect the health of air travelers, airport visitors, and airport workers; further study is needed to evaluate how to effectively eliminate outdoor exposure to SHS.

Although smoking was prohibited on all airline flights to and from the United States in 2000, no federal policy requires airports to be smoke-free. Cigarette manufacturers have promoted separately enclosed and ventilated smoking areas to the management of airports and opposed efforts to make airports completely smoke-free (*6,7*). Enclosed and ventilated smoking rooms are not effective in eliminating SHS exposure (*1*), and air travelers or airport workers who pass by these rooms are at risk for exposure to SHS (*8,9*). A 2010 study found that, although ventilated smoking rooms in a medium-hub airport were operating properly, SHS leaked to surroundings areas where smoking was prohibited (*9*).

Air travelers and airport workers also are at risk for SHS exposure when entering or exiting an airport building. According to a study by the California Air Resources Board, nicotine concentrations adjacent to outdoor smoking areas at airports can be as high as those in some smokers' homes (*10*). Moreover, in some airports, the designated outdoor smoking areas are partially enclosed. Outdoor SHS levels might be particularly high in these partially enclosed areas or where smoking is allowed around airport entrances.

Most airports that are smoke-free indoors are located in states or cities that have laws in place prohibiting smoking in public places or places of employment with no exemptions for airports. The reported smoking policies of all 29 large-hub airports in this report appeared to be in compliance with state and local laws. For example, although state laws in Colorado[†] and Utah[§] prohibit smoking in workplaces and public places, they specifically exempt smoking rooms at airports.

The findings in this report are subject to at least three limitations. First, this study did not measure enforcement of or compliance with airport smoking policies. Second, the survey is based partially on self-report by airport personnel, rather than on firsthand observations by CDC researchers. However, self-reports were cross-checked with multiple information sources, and inconsistencies were reconciled. Finally, the findings from 2002 were based solely on self-report by airport personnel (*3*), which might yield less accurate findings than the multiple information sources used in this report.

To protect the health of air travelers and airport workers, greater efforts are needed to completely eliminate smoking inside airports through state or local laws or airport regulations and to remove

[†] Colo. Rev. Stat. Ann. § 25-14-205 (1)(f).
[§] Utah Code Ann. § 26-38-3 (2)(c).

TABLE 2. Number and percentage of large-hub airports, by restrictions on smoking indoors or outdoors — United States, 2002 and 2010

		Smoke-free indoors		Has designated outdoor smoking areas		Requires smokers to be a minimum distance* from entrances to airport buildings	
Year	No. large-hub airports	No.	(%)	No.	(%)	No.	(%)
2002	31	13	(42)	21	(68)	19	(61)
2010	29	22	(76)	23	(79)	20	(69)

Source: (2002 data) CDC. Survey of airport smoking policies—United States, 2002. MMWR 2004;53:1175–8.
* Range: 10–30 feet.

exemptions from state and local laws that prohibit smoking in workplaces and public places, yet allow smoking within airports. In addition, further research on enforcement of and compliance with airport smoking policies is needed. Further research also is needed to measure levels of tobacco smoke constituents inside and outside of airport buildings.

Acknowledgments

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Syringe Exchange Programs — United States, 2008

Persons who inject drugs should use a new, sterile needle and syringe for each injection (*1*). Syringe exchange programs (SEPs) provide free sterile syringes and collect used syringes from injection-drug users (IDUs) to reduce transmission of bloodborne pathogens, including human immunodeficiency virus (HIV), hepatitis B virus, and hepatitis C virus (HCV). As of March 2009, a total of 184 SEPs were known to be operating in 36 states, the District of Columbia (DC), and Puerto Rico (North American Syringe Exchange Network [NASEN], unpublished data, 2009). Of these, 123 (67%) SEP directors participated in a mail/telephone survey conducted by NASEN and Beth Israel Medical Center (New York, New York) that covered program operations for the calendar year 2008. To characterize SEPs in the United States, this report summarizes the findings from that survey and compares them with previous SEP survey results from the period 1994–2007 (*2–3*). In 2008, the 123 SEPs reported exchanging 29.1 million syringes and had budgets totaling $21.3 million, of which 79% came from state and local governments. Most of the SEPs reported offering preventive health and clinical services in addition to basic syringe exchange: 87% offered HIV counseling and testing, 65% offered hepatitis C counseling and testing, 55% offered sexually transmitted disease screening, and 31% offered tuberculosis screening; 89% provided referrals to substance abuse treatment. Providing comprehensive prevention services and referrals to IDUs, such as those offered by many SEPs, can help reduce the spread of bloodborne infections and should increase access to health care and substance abuse treatment, thus serving as an effective public health approach for this population.

In March 2009, staff members from Beth Israel Medical Center and NASEN mailed surveys to directors of all 184 SEPs registered with NASEN at that time. The surveys included closed-ended questions regarding the number of syringes* exchanged, the types of services provided, budgets, and funding sources during 2008. Follow-up telephone interviews were conducted with the program directors by research staff members to clarify unclear or missing responses received on hard copy surveys. To protect participant confidentiality, many SEPs do not collect client-level data (e.g., number of persons who exchanged syringes or used other services); thus, the survey did not ask for such information. The data collection and analysis methods for this report are similar to those used in previous SEP surveys (*2–3*). The analyses for this report are limited to frequencies. To assess changes in funding over time, budgets from previous years were adjusted to 2008 dollars.

Data were compiled to show the numbers of programs known to NASEN, numbers of programs completing the surveys, syringes exchanged, and budget information for the surveys conducted from 1994–1995 through 2008 (Table 1). Rapid growth occurred in the number of SEPs in the United States in the 1990s and early 2000s, followed by more incremental growth through 2008. The 123 SEPs participating in the 2008 survey reported operating in 98 cities† in 29 states and in DC.§ A total of 120 SEPs reported budget information for 2008. The reported 2008 budgets for these 120 SEPs totaled $21.3 million; individual program budgets ranged from $300 to $2.3 million, with a median of $63,258.¶ Approximately one third (32%) of SEPs operated with a budget of <$25,000, 34% with $25,000–$100,000, and 37% with >$100,000. SEPs reported multiple sources of financial support in 2008, including private (individuals and foundations) and public (state and local government); 71% of the 120 SEPs that provided budget information received public funding, totaling nearly $16.8 million. The proportion of the SEP budgets coming from public sources increased from 62% during 1994–1995 to 79% in 2008 (Table 1).

* For this report, the term "syringes" refers to both syringes and needles.

† Cities with more than one SEP: Los Angeles, Redwood City, Sacramento, and San Francisco, California; Detroit, Michigan; Minneapolis, Minnesota; New York, New York; Portland, Oregon, Seattle and Tacoma, Washington; and Madison and Milwaukee, Wisconsin.

§ States with SEPs: California (30); Washington (16); Wisconsin (14); New York (11); Connecticut (five); Illinois (five); Oregon (five); Maine, Michigan and Minnesota (three each); Alaska, DC, Louisiana, New Jersey, North Carolina, Pennsylvania, Texas, and Vermont (two each); Arizona, Colorado, Delaware, Indiana, Maryland, Massachusetts, Missouri, Montana, Ohio, and Oklahoma (one each). New Mexico and Hawaii have integrated statewide programs that operate in multiple cities/counties but were considered as single programs in this survey.

¶ Some SEPs received funding from a common source, and specific allocations of those funds to individual programs was not always possible.

TABLE 1. Characteristics of syringe exchange programs (SEPs) — United States, 1994–2008

Characteristic	1994–1995	1996	1997	1998	2000	2002	2004	2005	2006	2007	2008
No. of SEPs known to NASEN*	68	101	113	131	154	148	174	166	188	186	184
No. of known SEPs participating in survey (%)	60 (88)	87 (86)	100 (88)	110 (84)	127 (82)	126 (85)	109 (63)	118 (71)	150 (80)	131 (70)	123 (67)
No. of cities with known SEPs participating in survey	44	69	78	77	98	97	88	90	113	100	98
No. of states† with known SEPs participating in survey	21	29	33	33	36	32	32	29	32	31	30
No. of syringes exchanged (millions)	8.0	13.9	17.5	19.4	22.6	24.9	24.0	22.5	27.6	29.5	29.1
Total of SEP budgets (in millions of dollars)	6.3	7.3	8.4	8.6	12.0	13.0	11.6	14.5	17.4	19.6	21.3
Total of SEP budgets (in millions of dollars, adjusted to 2008 standard)	10.8	11.6	13.0	12.9	16.8	16.6	13.6	16.3	18.8	20.3	21.3
% of total budget from public funding	62	62	67	69	74	67	76	74	79	73	79

* North American Syringe Exchange Network.
† Includes the District of Columbia and/or Puerto Rico.

SEPs were categorized as small, medium, large, or very large based on the number of syringes exchanged during 2008 (Table 2); SEPs reported exchanging a total of 29 million syringes in 2008. The 15 largest programs exchanged approximately 18 million syringes (62% of all syringes exchanged).

In 2008, many SEPs operated multiple sites, including fixed sites and mobile units. The total number of hours that clients were served by SEPs was summed for all sites operated by each program. The total number of scheduled hours per week ranged from <1 to 168 (mean: 29 hours per week; median: 24 hours per week). Delivery of syringes and other risk-reduction supplies to residences or meeting spots was reported by 41% of SEPs. A total of 111 (90%) SEPs allowed persons to exchange syringes on behalf of other persons (i.e., secondary exchange).

In addition to exchanging syringes, SEPs provided various supplies, services, and referrals in 2008; the percentage of programs providing each type of service was similar for the period 2005–2008 (Table 3). In 2008, all SEPs provided alcohol pads, and nearly all (98%) provided male condoms. Most (89%) provided referrals to substance abuse treatment. Other services also offered by SEPs included counseling and testing for HIV (87%) and HCV (65%), and screening for sexually transmitted diseases (55%) and tuberculosis (31%). Vaccinations for hepatitis A and B were provided by nearly half the programs (47% and 49%, respectively).

Reported by

V Guardino, DC Des Jarlais, PhD, K Arasteh, PhD, Baron Edmond de Rothschild Chemical Dependency Institute, Beth Israel Medical Center; R Johnston, PhD, amfAR (Foundation for AIDS Research), New York, New York. D Purchase, A Solberg, North American Syringe Exchange Network, Tacoma, Washington. A Lansky, D Lentine, Div of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC.

Editorial Note

The findings in this report indicate that, in 2008, the number of SEPs and the number of syringes exchanged remained similar to recent years, in contrast to a period of rapid growth from the mid-1990s through the early 2000s. Budgets for SEPs increased from 1994–1995 through 2008, with the majority of funds coming from public sources. SEP budgets support syringe exchange and various prevention services, clinical care, and referral to substance abuse treatment. SEPs contribute to a comprehensive approach to the prevention of bloodborne infections among IDUs and can serve as a frontline source of health services for IDUs (*4*). The need for a comprehensive approach to HIV prevention for IDU is reflected in the implementation guidance for syringe services programs issued by the U.S. Department of Health and Human Services** and the National HIV/AIDS Strategy.††

** Available at http://www.cdc.gov/hiv/resources/guidelines/syringe.htm.
†† Available at http://www.whitehouse.gov/sites/default/files/uploads/NHAS.pdf.

TABLE 2. Number of syringes exchanged by syringe exchange programs (SEPs), by program size — United States, 2008

SEP size	No. of syringes exchanged per SEP	No. of SEPs	Total no. of syringes exchanged	% of total syringes exchanged
Small	<10,000	20	67,593	0.2
Medium	10,000–55,000	33	982,317	3.4
Large	55,001–499,999	54	9,894,182	34.1
Very large	≥500,000	15	18,113,914	62.3
Total		**122***	**29,058,006**	**100.0**

* One of 123 programs responding to the survey did not track the number of syringes exchanged in 2008.

TABLE 3. Services and supplies provided by syringe exchange programs (SEPs) — United States, 2005–2008

	Survey year (No. of SEPs)							
	2005 (n = 118)		2006 (n = 150)		2007 (n = 131)		2008 (n = 123)	
Supplies and services	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Prevention supplies								
Male condoms	115	(97)	148	(99)	130	(99)	121	(98)
Female condoms	98	(83)	115	(77)	112	(85)	97	(79)
Alcohol pads	117	(99)	148	(99)	131	(100)	123	(100)
Bleach	82	(69)	89	(59)	77	(59)	69	(56)
On-site medical screenings and services								
HIV counseling and testing	96	(81)	126	(84)	115	(88)	107	(87)
Hepatitis C counseling and testing	66	(56)	94	(63)	72	(55)	80	(65)
Hepatitis B counseling and testing	44	(37)	71	(47)	30	(23)	30	(24)
Hepatitis A counseling and testing	28	(24)	57	(38)	22	(17)	22	(18)
Hepatitis B vaccination	46	(39)	77	(51)	58	(44)	60	(49)
Hepatitis A vaccination	43	(36)	74	(49)	59	(45)	58	(47)
Sexually transmitted disease (STD) screening	57	(48)	75	(50)	64	(49)	67	(55)
Tuberculosis screening	33	(28)	39	(26)	31	(24)	38	(31)
On-site medical care	34	(29)	50	(33)	43	(33)	47	(38)
Referrals								
Substance-abuse treatment	102	(86)	133	(89)	120	(92)	110	(89)
Education								
HIV/AIDS prevention/STD prevention	116	(98)	139	(93)	124	(95)	118	(96)
Hepatitis A,B, and C prevention	114	(97)	148	(99)	127	(97)	119	(97)
Safer injection practice	113	(96)	129	(86)	126	(96)	116	(94)
Abscess care/vein care	107	(91)	141	(94)	123	(94)	113	(92)
Male condom use	112	(95)	145	(97)	125	(95)	120	(98)
Female condom use	97	(82)	119	(79)	104	(79)	91	(74)

Multiple reviews have concluded that syringe exchange leads to reductions in injecting risk behaviors among IDUs (*5,6*). HIV incidence among IDUs declined by approximately 80% from 1988–1990 to 2003–2006 in the United States (*7*). Injection-related transmission is the only adult transmission category to show a reduction of this magnitude. Despite that overall decline, IDUs continue to represent a substantial proportion of persons with new HIV diagnoses, accounting for approximately 8,700 (15%) new infections in 2006 (*7*); moreover, injection-drug use is the most common risk factor for HCV infection (*8*). Economic evaluations have concluded that SEPs are cost-effective in preventing HIV infection (*9*). Additional services offered by SEPs, such as prevention of HCV infection and referrals to substance abuse treatment, should confer even greater benefits (*10*); additional research is needed on the role of SEPs in the prevention of HCV infection.

The findings in this report are subject to at least four limitations. First, the extent of SEP activity in the United States is almost certainly underestimated because 61 (33%) of the SEPs known to NASEN did not complete the survey. Other SEPs might exist that are not known to NASEN. Second, certain SEPs operating within larger, community-based organizations were not able to report exact budget information because of difficulties in allocating shared costs across administrative units. Third, client-level information on the extent and use of preventive health services is not available. Finally, data collected were based on self-reports by program directors and were not verified independently.

The data in this report are from program operations during 2008, in the midst of an economic downturn in the United States. State and local governments continue to experience budget difficulties, which might impact public health adversely. However, the ban on federal funding of SEPs was modified for fiscal year 2010 funds, so that SEPs are now eligible for federal support, subject to provisions regarding the location of these programs. Ongoing, systematic data collection and evaluation are important for monitoring changes in the variety and volume of SEP services in the context of these types of political and economic changes.

What is already known on this topic?

Injection-drug users (IDUs) account for 15% of new human immunodeficiency virus (HIV) infections in the United States. Persons who inject drugs should use a new, sterile syringe for each injection to prevent transmission of HIV and other bloodborne infections.

What does this report add?

In 2008, 123 of 184 syringe exchange programs (SEPs) surveyed reported exchanging 29.1 million syringes; 120 SEPs reported budgets totaling $21.3 million, of which 79% came from state and local governments. Most SEPs offered preventive health services in addition to basic syringe exchange.

What are the implications for public health practice?

Given the number of SEPs providing preventive health services, as well as provision of sterile syringes, these programs contribute to a comprehensive approach to the prevention of HIV and other bloodborne infections among IDUs.

Acknowledgments

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Announcements

Adult Vaccination Coverage Estimates Online

New adult vaccination coverage estimates from the 2009 National Health Interview Survey (NHIS) are now available online at http://www.cdc.gov/vaccines/stats-surv/nhis/2009-nhis.htm. Estimates of vaccination coverage for hepatitis A, hepatitis B, herpes zoster (shingles), human papillomavirus, influenza (2008–09 season), pneumococcal disease, and tetanus with and without pertussis are presented overall and by selected characteristics (i.e., age, vaccination target group status, and race/ethnicity).

These estimates update the 2008 estimates published in July 2009 (*1*). NHIS is a national household survey of the civilian, noninstitutionalized population in the United States.

Reference

1. CDC. Vaccination coverage estimates from the National Health Interview Survey: United States, 2008. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at http://www.cdc.gov/nchs/data/hestat/vaccine_coverage/vaccine_coverage.htm. Accessed November 5, 2010.

World Day of Remembrance for Road Traffic Victims — November 21, 2010

Approximately 1.3 million persons die and 20–50 million are injured in road traffic crashes each year worldwide (*1*). World Day of Remembrance for Road Traffic Victims, November 21, 2010, is a day to remember those who died or were injured as a result of road traffic crashes and to show support to the disabled victims and their families who suffer because of road traffic injuries. Remembrance activities include memorial services and flower-laying ceremonies.

Road crashes are the leading cause of death among persons aged 5–34 years in the United States, the leading cause of death globally for persons aged 10–24 years, and the third leading cause of death globally among persons aged 30–44 years. The economic impact of road crashes also is substantial. In low- and middle-income countries, as classified by the World Bank, the annual cost of road traffic injuries is estimated at $100 billion dollars. Road traffic injuries cost countries an estimated 1%–2% of their gross national product (*2*).

Most road traffic injuries are preventable by increasing helmet, seat belt, and child restraint use; reducing drunk-driving and speeding; and developing appropriate infrastructure, such as improved road layout and design. In designating every third Sunday of November as World Day of Remembrance for Road Traffic Victims, the United Nations also invited member states to implement the recommendations of the *World Report on Road Traffic Injury Prevention* (*2*), and to establish national lead agencies on road safety, along with plans to reduce road traffic deaths and injuries. In addition, the United Nations has designated 2011–2020 as the Global Decade of Action for Road Safety to address road traffic injury prevention and victim services.

Additional information on the day of remembrance is available at (http://www.worlddayofremembrance.org. Additional information on road safety is available from the United Nations Road Safety Collaboration (http://www.who.int/roadsafety/en/index.html), the Association for Safe International Road Travel (http://www.asirt.org), Make Roads Safe http://www.makeroadssafe.org), and CDC (http://www.cdc.gov/motorvehiclesafety/index.html).

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National Amyotrophic Lateral Sclerosis (ALS) Registry Available Online

On October 19, 2010, the Agency for Toxic Substance and Disease Registry (ATSDR) launched the National Amyotrophic Lateral Sclerosis (ALS) Registry web portal. ALS, commonly known as Lou Gehrig's disease, is a fatal neurodegenerative disease. The registry provides a means of structured data collection that will help address uncertainty about the incidence and prevalence of ALS in the United States. The registry gathers patient information from existing electronic records (i.e., records from the Centers for Medicare & Medicaid Services and the U.S. Department of Veterans Affairs) as

well as from patients who enter information directly into the web portal. The data also might provide insight into the role of the environment in the etiology of ALS. The purpose of the ALS Registry is to 1) better describe the incidence and prevalence of ALS in the United States; 2) examine factors, such as environmental and occupational exposures, that might be associated with the disease; 3) better outline key demographic factors (e.g., age, race/ethnicity, sex, and family history) associated with the disease; and 4) facilitate examination of the connection between ALS and other motor neuron disorders that can be confused with ALS, misdiagnosed as ALS, and in some cases, progress to ALS.

The National ALS Registry web portal allows ALS patients to register and take online surveys about potential risk factors. ATSDR is encouraging all patients living with ALS to join the registry to help scientists learn more about the disease. In addition, clinicians can create an account to access continuing education modules. The National ALS Registry web portal is available at http://www.cdc.gov/als.

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 November 13, 2010 (45th week)*

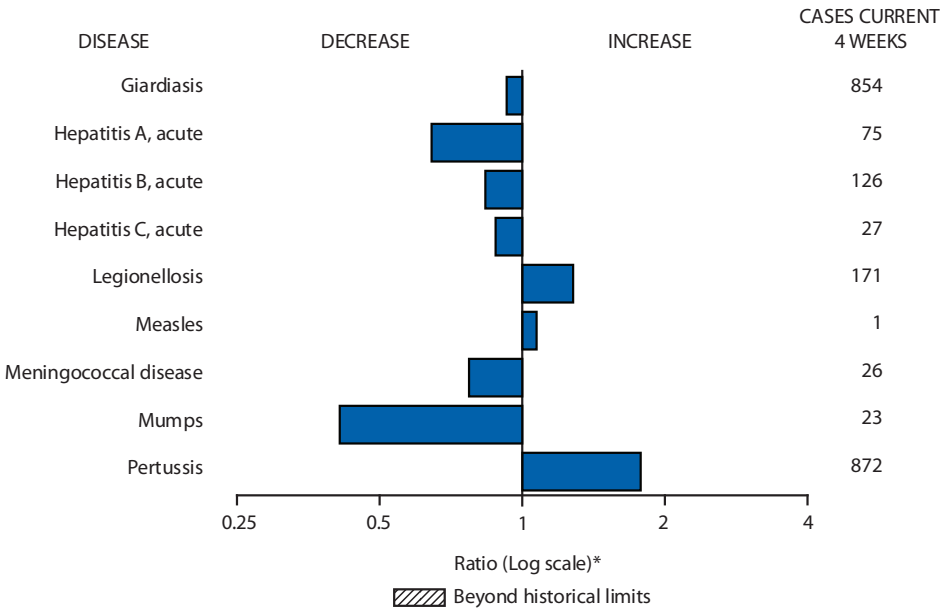
Disease	Current week	Cum 2010	5-year weekly average†	Total cases reported for previous years 2009	2008	2007	2006	2005	States reporting cases during current week (No.)
Anthrax	—	—	—	1	—	1	1	—	
Botulism, total	—	85	3	118	145	144	165	135	
foodborne	—	6	0	10	17	32	20	19	
infant	—	59	2	83	109	85	97	85	
other (wound and unspecified)	—	20	1	25	19	27	48	31	
Brucellosis	1	107	2	115	80	131	121	120	CO (1)
Chancroid	—	34	0	28	25	23	33	17	
Cholera	—	5	0	10	5	7	9	8	
Cyclosporiasis§	1	161	2	141	139	93	137	543	TX (1)
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup virus disease	—	60	0	55	62	55	67	80	
Eastern equine encephalitis virus disease	—	10	—	4	4	4	8	21	
Powassan virus disease	—	5	0	6	2	7	1	1	
St. Louis encephalitis virus disease	—	7	0	12	13	9	10	13	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Haemophilus influenzae,** invasive disease (age <5 yrs):									
serotype b	—	14	0	35	30	22	29	9	
nonserotype b	1	132	3	236	244	199	175	135	AR (1)
unknown serotype	3	214	3	178	163	180	179	217	NY (1), FL (1), CA (1)
Hansen disease§	—	42	2	103	80	101	66	87	
Hantavirus pulmonary syndrome§	—	17	0	20	18	32	40	26	
Hemolytic uremic syndrome, postdiarrheal§	7	200	4	242	330	292	288	221	NC (1), FL (1), MS (2), OK (1), ID (2)
HIV infection, pediatric (age <13 yrs)††	—	—	3	—	—	—	—	380	
Influenza-associated pediatric mortality§,§§	—	58	5	358	90	77	43	45	
Listeriosis	8	674	17	851	759	808	884	896	NY (2), NC (1), FL (1), TN (1), CA (3)
Measles¶¶	1	57	0	71	140	43	55	66	CA (1)
Meningococcal disease, invasive***:									
A, C, Y, and W-135	1	201	5	301	330	325	318	297	TX (1)
serogroup B	1	95	3	174	188	167	193	156	AR (1)
other serogroup	—	7	0	23	38	35	32	27	
unknown serogroup	2	344	10	482	616	550	651	765	FL (1), CA (1)
Mumps	4	2,461	24	1,991	454	800	6,584	314	NY (1), OH (1), LA (1), CA (1)
Novel influenza A virus infections†††	—	1	0	43,774	2	4	NN	NN	
Plague	—	2	0	8	3	7	17	8	
Poliomyelitis, paralytic	—	—	—	1	—	—	—	1	
Polio virus Infection, nonparalytic§	—	—	—	—	—	—	NN	NN	
Psittacosis§	—	4	0	9	8	12	21	16	
Q fever, total§,§§§	1	102	2	114	120	171	169	136	
acute	1	78	1	94	106	—	—	—	CA (1)
chronic	—	24	0	20	14	—	—	—	
Rabies, human	—	1	0	4	2	1	3	2	
Rubella¶¶¶	—	6	0	3	16	12	11	11	
Rubella, congenital syndrome	—	—	—	2	—	—	1	1	
SARS-CoV§,****	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	142	1	161	157	132	125	129	
Syphilis, congenital (age <1 yr)††††	—	178	7	423	431	430	349	329	
Tetanus	1	7	0	18	19	28	41	27	OH (1)
Toxic-shock syndrome (staphylococcal)§	—	64	1	74	71	92	101	90	
Trichinellosis	1	4	0	13	39	5	15	16	TN (1)
Tularemia	—	96	1	93	123	137	95	154	
Typhoid fever	3	358	5	397	449	434	353	324	CT (1), TX (1), CA (1)
Vancomycin-intermediate *Staphylococcus aureus*§	—	76	1	78	63	37	6	2	
Vancomycin-resistant *Staphylococcus aureus*§	—	1	0	1	—	2	1	3	
Vibriosis (noncholera *Vibrio* species infections)§	7	684	8	789	588	549	NN	NN	NC (2), FL (4), WA (1)
Viral hemorrhagic fever§§§§	—	1	—	NN	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending November 13, 2010 (45th week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable Cum: Cumulative year-to-date counts.
* Case counts for reporting year 2010 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/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/ncphi/disss/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 domestic 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/ncphi/disss/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 monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.
§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, one influenza-associated pediatric death occurred during the 2010–11 influenza season. Since August 30, 2009, a total of 282 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported.
¶¶ The one measles case reported for the current was imported.
*** Data for meningococcal disease (all serogroups) are available in Table II.
††† CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The two cases of novel influenza A virus infection reported to CDC during 2010 were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).
§§§ In 2009, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.
¶¶¶ No rubella cases were reported for the current week.
**** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.
†††† 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. 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 November 13, 2010, with historical data



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

Notifiable Disease Data Team and 122 Cities Mortality Data Team

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	*Chlamydia trachomatis* infection					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	10,790	23,695	26,208	1,037,706	1,086,217	57	121	339	6,783	6,581
New England	908	759	1,396	34,665	34,839	—	7	74	410	415
Connecticut	161	221	736	8,917	10,079	—	0	68	68	38
Maine†	—	50	69	1,996	2,104	—	1	7	72	46
Massachusetts	699	398	649	17,672	16,512	—	3	8	143	160
New Hampshire	27	42	114	2,101	1,860	—	1	5	48	76
Rhode Island†	—	64	120	2,899	3,244	—	0	2	13	22
Vermont†	21	23	51	1,080	1,040	—	1	5	66	73
Mid. Atlantic	2,378	3,347	4,892	147,920	137,425	11	14	37	713	739
New Jersey	377	484	691	21,905	21,255	—	0	1	—	48
New York (Upstate)	827	679	2,530	30,002	27,292	8	3	16	192	195
New York City	580	1,210	2,739	54,775	51,067	—	1	5	81	73
Pennsylvania	594	917	1,092	41,238	37,811	3	8	26	440	423
E.N. Central	640	3,485	4,127	150,764	174,242	7	30	122	1,833	1,546
Illinois	18	813	1,225	32,104	53,450	—	4	21	259	143
Indiana	—	364	796	16,615	19,446	—	3	10	140	257
Michigan	478	917	1,419	41,590	40,272	1	5	18	291	252
Ohio	130	969	1,085	42,154	42,654	5	7	24	417	342
Wisconsin	14	424	510	18,301	18,420	1	9	55	726	552
W.N. Central	239	1,353	1,565	59,073	61,901	4	23	83	1,216	1,010
Iowa	—	191	269	8,703	8,384	—	4	24	315	188
Kansas	19	189	235	8,236	9,371	3	2	9	123	95
Minnesota	—	278	331	11,424	12,638	—	0	18	98	312
Missouri	198	500	602	22,289	22,625	—	4	30	348	173
Nebraska†	—	93	237	4,286	4,693	—	3	26	217	109
North Dakota	5	33	89	1,436	1,568	1	0	18	30	11
South Dakota	17	61	77	2,699	2,622	—	2	6	85	122
S. Atlantic	2,634	4,654	5,681	206,747	220,061	14	18	51	895	1,015
Delaware	70	84	220	3,820	4,109	—	0	2	7	8
District of Columbia	—	96	177	4,141	5,916	—	0	1	3	6
Florida	428	1,460	1,737	64,788	64,403	3	7	19	333	406
Georgia	246	553	1,229	23,886	35,405	9	5	31	268	311
Maryland†	207	468	1,031	20,085	19,603	1	1	3	33	39
North Carolina	611	765	1,562	35,595	36,359	—	1	12	69	103
South Carolina†	534	524	763	24,027	23,618	1	1	8	81	55
Virginia†	433	596	902	27,070	27,420	—	2	8	85	72
West Virginia	105	72	112	3,335	3,228	—	0	3	16	15
E.S. Central	188	1,727	2,415	75,767	82,314	1	4	19	290	207
Alabama†	—	491	757	22,345	23,252	—	2	12	140	59
Kentucky	188	275	642	12,749	11,857	—	1	6	76	60
Mississippi	—	384	780	16,373	20,957	—	0	3	22	17
Tennessee†	—	571	729	24,300	26,248	1	1	5	52	71
W.S. Central	1,670	3,001	4,578	137,725	141,519	—	8	39	385	509
Arkansas†	272	259	392	10,657	12,688	—	0	3	31	51
Louisiana	371	245	1,077	12,856	24,501	—	1	6	59	53
Oklahoma	73	261	1,374	13,076	12,416	—	1	8	76	115
Texas†	954	2,205	3,194	101,136	91,914	—	4	30	219	290
Mountain	326	1,449	1,904	64,003	69,962	9	10	29	494	511
Arizona	162	498	713	21,254	22,761	1	0	3	33	33
Colorado	115	363	560	15,087	17,397	3	2	8	122	130
Idaho†	—	69	200	3,396	3,316	3	2	7	85	82
Montana†	44	60	82	2,670	2,628	2	1	4	46	51
Nevada†	—	173	337	8,065	8,710	—	0	6	31	23
New Mexico†	—	162	453	6,709	8,069	—	2	11	104	136
Utah	—	120	176	5,132	5,369	—	1	5	57	36
Wyoming†	5	36	79	1,690	1,712	—	0	2	16	20
Pacific	1,807	3,657	5,350	161,042	163,954	11	12	28	547	629
Alaska	—	112	148	4,973	4,538	—	0	1	4	6
California	1,340	2,770	4,406	123,439	125,543	9	7	19	316	374
Hawaii	—	111	158	4,946	5,333	—	0	0	—	1
Oregon	187	208	468	9,579	9,683	2	3	13	156	170
Washington	280	399	500	18,105	18,857	—	1	8	71	78
Territories										
American Samoa	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	7	31	259	324	—	0	0	—	—
Puerto Rico	86	92	265	4,777	6,586	N	0	0	N	N
U.S. Virgin Islands	—	9	29	323	452	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for HIV/AIDS, AIDS and TB, when available, are displayed in Table IV, which appears quarterly.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Dengue Virus Infection									
	Dengue Fever†					Dengue Hemorrhagic Fever§				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	—	5	30	390	NN	—	0	1	4	NN
New England	—	0	2	5	NN	—	0	0	—	NN
Connecticut	—	0	0	—	NN	—	0	0	—	NN
Maine¶	—	0	2	4	NN	—	0	0	—	NN
Massachusetts	—	0	0	—	NN	—	0	0	—	NN
New Hampshire	—	0	0	—	NN	—	0	0	—	NN
Rhode Island¶	—	0	0	—	NN	—	0	0	—	NN
Vermont¶	—	0	1	1	NN	—	0	0	—	NN
Mid. Atlantic	—	1	9	78	NN	—	0	0	—	NN
New Jersey	—	0	0	—	NN	—	0	0	—	NN
New York (Upstate)	—	0	0	—	NN	—	0	0	—	NN
New York City	—	0	7	63	NN	—	0	0	—	NN
Pennsylvania	—	0	2	15	NN	—	0	0	—	NN
E.N. Central	—	0	5	40	NN	—	0	1	1	NN
Illinois	—	0	0	—	NN	—	0	0	—	NN
Indiana	—	0	2	11	NN	—	0	0	—	NN
Michigan	—	0	2	9	NN	—	0	0	—	NN
Ohio	—	0	2	15	NN	—	0	0	—	NN
Wisconsin	—	0	2	5	NN	—	0	1	1	NN
W.N. Central	—	0	2	17	NN	—	0	0	—	NN
Iowa	—	0	1	2	NN	—	0	0	—	NN
Kansas	—	0	1	1	NN	—	0	0	—	NN
Minnesota	—	0	2	13	NN	—	0	0	—	NN
Missouri	—	0	0	—	NN	—	0	0	—	NN
Nebraska¶	—	0	0	—	NN	—	0	0	—	NN
North Dakota	—	0	1	1	NN	—	0	0	—	NN
South Dakota	—	0	0	—	NN	—	0	0	—	NN
S. Atlantic	—	2	17	202	NN	—	0	1	2	NN
Delaware	—	0	0	—	NN	—	0	0	—	NN
District of Columbia	—	0	0	—	NN	—	0	0	—	NN
Florida	—	2	14	166	NN	—	0	1	2	NN
Georgia	—	0	2	11	NN	—	0	0	—	NN
Maryland¶	—	0	0	—	NN	—	0	0	—	NN
North Carolina	—	0	1	4	NN	—	0	0	—	NN
South Carolina¶	—	0	3	10	NN	—	0	0	—	NN
Virginia¶	—	0	3	9	NN	—	0	0	—	NN
West Virginia	—	0	1	2	NN	—	0	0	—	NN
E.S. Central	—	0	2	5	NN	—	0	0	—	NN
Alabama¶	—	0	2	2	NN	—	0	0	—	NN
Kentucky	—	0	1	1	NN	—	0	0	—	NN
Mississippi	—	0	1	1	NN	—	0	0	—	NN
Tennessee¶	—	0	1	1	NN	—	0	0	—	NN
W.S. Central	—	0	1	4	NN	—	0	1	1	NN
Arkansas¶	—	0	0	—	NN	—	0	1	1	NN
Louisiana	—	0	0	—	NN	—	0	0	—	NN
Oklahoma	—	0	1	4	NN	—	0	0	—	NN
Texas¶	—	0	0	—	NN	—	0	0	—	NN
Mountain	—	0	2	16	NN	—	0	0	—	NN
Arizona	—	0	1	6	NN	—	0	0	—	NN
Colorado	—	0	0	—	NN	—	0	0	—	NN
Idaho¶	—	0	1	2	NN	—	0	0	—	NN
Montana¶	—	0	1	3	NN	—	0	0	—	NN
Nevada¶	—	0	1	4	NN	—	0	0	—	NN
New Mexico¶	—	0	1	1	NN	—	0	0	—	NN
Utah	—	0	0	—	NN	—	0	0	—	NN
Wyoming¶	—	0	0	—	NN	—	0	0	—	NN
Pacific	—	0	5	23	NN	—	0	0	—	NN
Alaska	—	0	0	—	NN	—	0	0	—	NN
California	—	0	5	11	NN	—	0	0	—	NN
Hawaii	—	0	0	—	NN	—	0	0	—	NN
Oregon	—	0	0	—	NN	—	0	0	—	NN
Washington	—	0	2	12	NN	—	0	0	—	NN
Territories										
American Samoa	—	0	0	—	NN	—	0	0	—	NN
C.N.M.I.	—	—	—	—	NN	—	—	—	—	NN
Guam	—	0	0	—	NN	—	0	0	—	NN
Puerto Rico	—	106	535	9,366	NN	—	0	3	33	NN
U.S. Virgin Islands	—	0	0	—	NN	—	0	0	—	NN

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for HIV/AIDS, AIDS and TB, when available, are displayed in Table IV, which appears quarterly.
† Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical, and unknown case classifications.
§ DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	Ehrlichia chaffeensis					*Anaplasma phagocytophilum*					Undetermined				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	3	8	181	548	881	4	11	309	688	849	—	1	35	94	160
New England	—	0	2	4	51	—	1	8	78	248	—	0	2	7	2
Connecticut	—	0	0	—	—	—	0	5	23	17	—	0	2	5	—
Maine§	—	0	1	2	4	—	0	2	16	14	—	0	0	—	—
Massachusetts	—	0	0	—	9	—	0	2	—	91	—	0	0	—	—
New Hampshire	—	0	1	2	4	—	0	3	15	17	—	0	1	2	1
Rhode Island§	—	0	1	—	33	—	0	7	24	109	—	0	0	—	1
Vermont§	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	1	15	47	183	3	2	17	183	294	—	0	2	4	44
New Jersey	—	0	2	—	98	—	0	2	1	70	—	0	0	—	—
New York (Upstate)	—	0	15	28	51	3	2	17	179	215	—	0	1	4	6
New York City	—	0	3	18	10	—	0	1	3	8	—	0	0	—	1
Pennsylvania	—	0	2	1	24	—	0	1	—	1	—	0	1	—	37
E.N. Central	—	0	4	32	83	—	3	39	339	266	—	1	6	61	71
Illinois	—	0	2	12	33	—	0	1	5	6	—	0	2	3	3
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	28	36
Michigan	—	0	1	2	5	—	0	0	—	—	—	0	1	4	—
Ohio	—	0	3	6	13	—	0	1	2	1	—	0	0	—	2
Wisconsin	—	0	1	12	32	—	3	39	332	259	—	0	4	26	30
W.N. Central	—	1	13	117	153	—	0	261	12	19	—	0	30	9	16
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	1	6	6	—	0	0	—	1	—	0	0	—	—
Minnesota	—	0	6	—	2	—	0	261	—	13	—	0	30	—	3
Missouri	—	1	13	109	143	—	0	3	12	4	—	0	3	9	13
Nebraska§	—	0	1	2	2	—	0	0	—	1	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	3	4	19	242	245	1	1	7	56	16	—	0	1	6	2
Delaware	—	0	3	17	21	—	0	1	4	2	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	2	8	11	—	0	1	3	3	—	0	0	—	—
Georgia	1	0	4	22	18	—	0	1	2	1	—	0	1	1	—
Maryland§	—	0	3	23	38	—	0	2	14	3	—	0	1	2	—
North Carolina	1	2	13	99	61	1	0	4	21	3	—	0	0	—	—
South Carolina§	—	0	2	3	11	—	0	1	1	—	—	0	0	—	—
Virginia§	1	1	13	69	84	—	0	2	11	4	—	0	1	3	2
West Virginia	—	0	1	1	1	—	0	0	—	—	—	0	1	—	—
E.S. Central	—	1	10	85	133	—	0	2	17	3	—	0	1	6	24
Alabama§	—	0	3	11	8	—	0	2	7	1	—	0	0	—	—
Kentucky	—	0	2	16	12	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	3	6	—	0	1	1	—	—	0	0	—	—
Tennessee§	—	0	6	55	107	—	0	2	9	2	—	0	1	6	24
W.S. Central	—	0	141	20	30	—	0	23	3	1	—	0	1	1	—
Arkansas§	—	0	34	2	4	—	0	6	—	—	—	0	0	—	—
Louisiana	—	0	1	1	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	105	14	24	—	0	16	2	1	—	0	0	—	—
Texas§	—	0	2	3	2	—	0	1	1	—	—	0	1	1	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming§	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	1	3	—	0	0	—	2	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	1	3	—	0	0	—	2	—	0	1	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for HIV/AIDS, AIDS and TB, when available, are displayed in Table IV, which appears quarterly.
† Cumulative total *E. ewingii* cases reported for year 2010 = 10.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	178	348	666	15,466	16,546	2,334	5,461	6,411	242,848	264,292	23	59	171	2,456	2,457
New England	5	32	54	1,395	1,559	95	102	196	4,615	4,326	1	3	21	152	171
Connecticut	—	5	13	236	259	28	42	169	1,983	2,089	—	0	15	34	48
Maine§	3	4	12	200	190	—	3	11	136	118	—	0	2	11	18
Massachusetts	—	13	24	600	672	64	46	81	2,056	1,691	—	2	8	77	81
New Hampshire	1	3	8	129	183	3	3	7	137	95	1	0	2	11	11
Rhode Island§	—	1	7	60	57	—	5	14	256	294	—	0	2	11	8
Vermont§	1	4	10	170	198	—	0	17	47	39	—	0	1	8	5
Mid. Atlantic	45	60	103	2,676	3,034	490	683	1,119	31,324	27,621	13	11	34	485	500
New Jersey	—	5	13	208	383	104	108	161	4,814	4,176	—	2	7	78	111
New York (Upstate)	29	22	84	1,018	1,164	102	103	422	4,949	5,089	6	3	20	133	130
New York City	6	17	33	782	732	112	228	529	10,524	9,617	—	2	6	92	61
Pennsylvania	10	14	27	668	755	172	245	364	11,037	8,739	7	3	9	182	198
E.N. Central	23	54	81	2,498	2,572	142	929	1,260	41,272	55,605	2	10	20	413	385
Illinois	—	12	26	510	553	9	182	380	7,625	17,721	—	3	9	127	145
Indiana	—	5	13	197	264	—	98	221	4,690	6,222	—	1	6	71	69
Michigan	2	13	23	597	587	92	246	471	11,341	13,023	—	0	4	27	19
Ohio	21	16	29	757	711	38	318	372	13,553	14,060	2	2	6	103	87
Wisconsin	—	8	30	437	457	3	94	155	4,063	4,579	—	2	5	85	65
W.N. Central	16	25	165	1,263	1,487	79	280	357	12,244	13,016	1	3	24	141	141
Iowa	4	5	11	259	263	—	33	53	1,480	1,469	—	0	1	1	—
Kansas	1	4	10	192	140	3	37	83	1,689	2,194	1	0	2	15	13
Minnesota	—	0	135	136	343	—	38	62	1,629	2,041	—	0	17	25	50
Missouri	3	8	25	377	464	75	136	174	5,965	5,693	—	1	6	70	51
Nebraska§	5	4	9	193	157	—	22	50	1,006	1,204	—	0	2	20	21
North Dakota	1	0	7	28	20	—	2	11	97	116	—	0	4	10	6
South Dakota	2	1	7	78	100	1	7	19	378	299	—	0	0	—	—
S. Atlantic	25	72	143	3,232	3,238	714	1,344	1,690	59,992	65,939	3	14	27	647	668
Delaware	—	0	5	28	23	15	18	48	867	844	—	0	1	5	3
District of Columbia	—	1	5	33	68	—	35	66	1,568	2,318	—	0	1	4	4
Florida	21	40	87	1,866	1,690	139	386	493	17,458	18,525	2	3	9	159	198
Georgia	—	10	51	485	651	81	193	421	8,102	12,116	—	3	9	149	133
Maryland§	3	5	11	232	249	46	133	237	5,827	5,348	—	1	6	57	78
North Carolina	N	0	0	N	N	197	246	596	11,923	12,352	1	2	9	108	84
South Carolina§	—	2	9	123	97	115	152	232	7,112	7,425	—	2	7	71	65
Virginia§	1	9	36	426	413	97	157	271	6,645	6,574	—	2	4	72	77
West Virginia	—	0	6	39	47	24	10	21	490	437	—	0	5	22	26
E.S. Central	—	5	15	232	363	49	477	698	20,580	23,668	—	3	12	147	142
Alabama§	—	4	11	175	172	—	145	218	6,461	6,681	—	0	3	22	35
Kentucky	N	0	0	N	N	49	75	156	3,333	3,424	—	0	2	30	19
Mississippi	N	0	0	N	N	—	110	216	4,658	6,508	—	0	2	11	8
Tennessee§	—	1	9	57	191	—	145	195	6,128	7,055	—	2	10	84	80
W.S. Central	3	8	16	339	464	462	800	1,284	37,345	41,415	1	2	20	111	108
Arkansas§	1	2	7	121	136	74	76	133	3,253	3,943	1	0	3	15	18
Louisiana	2	3	9	155	184	107	71	441	3,693	7,983	—	0	3	22	18
Oklahoma	—	2	7	63	144	12	78	359	3,833	3,938	—	1	15	66	68
Texas§	N	0	0	N	N	269	578	964	26,566	25,551	—	0	2	8	4
Mountain	18	30	50	1,405	1,479	37	175	262	7,599	8,170	1	5	15	249	213
Arizona	1	3	8	140	185	23	61	109	2,510	2,752	—	2	10	95	67
Colorado	15	13	27	597	439	11	52	95	2,305	2,475	1	1	5	68	62
Idaho§	1	4	9	184	184	—	2	6	100	92	—	0	2	16	4
Montana§	—	2	7	90	121	3	2	6	93	72	—	0	1	2	1
Nevada§	—	1	11	88	100	—	29	94	1,417	1,491	—	0	2	7	18
New Mexico§	—	2	5	81	109	—	19	41	885	938	—	1	5	35	28
Utah	—	4	11	189	280	—	6	15	261	286	—	0	4	20	30
Wyoming§	1	1	5	36	61	—	0	4	28	64	—	0	2	6	3
Pacific	43	53	133	2,426	2,350	266	606	816	27,877	24,532	1	2	21	111	129
Alaska	—	2	6	85	102	—	24	37	1,058	854	—	0	2	20	19
California	25	33	61	1,507	1,517	223	494	691	22,898	20,188	1	0	18	20	40
Hawaii	1	0	3	28	19	—	14	24	628	564	—	0	2	8	28
Oregon	5	9	20	424	365	7	19	43	871	939	—	1	5	57	39
Washington	12	8	75	382	347	36	53	80	2,422	1,987	—	0	4	6	3
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	2	3	—	0	4	30	19	—	0	0	—	—
Puerto Rico	—	1	8	63	142	12	5	14	270	212	—	0	1	1	4
U.S. Virgin Islands	—	0	0	—	—	—	1	7	78	111	—	0	0	—	—

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† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Hepatitis (viral, acute), by type														
	A					B					C				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	16	30	69	1,332	1,728	32	61	204	2,665	2,853	13	14	44	695	654
New England	1	2	5	86	98	—	1	5	47	49	—	1	4	36	59
Connecticut	1	0	3	28	18	—	0	2	18	15	—	0	4	25	46
Maine†	—	0	1	7	1	—	0	2	13	13	—	0	0	—	2
Massachusetts	—	1	5	41	62	—	0	2	8	17	—	0	1	10	10
New Hampshire	—	0	1	2	7	—	0	2	6	4	N	0	0	N	N
Rhode Island†	—	0	4	8	8	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	0	—	2	—	0	1	2	—	—	0	1	1	1
Mid. Atlantic	2	4	10	181	244	3	5	10	242	293	3	2	6	94	91
New Jersey	—	0	3	12	61	—	1	5	57	87	—	0	2	14	6
New York (Upstate)	—	1	4	53	43	2	1	6	44	47	2	1	4	52	42
New York City	1	1	5	67	78	—	2	4	75	62	—	0	0	—	5
Pennsylvania	1	1	4	49	62	1	1	5	66	97	1	0	3	28	38
E.N. Central	2	4	9	190	262	1	9	17	394	383	1	2	8	99	78
Illinois	—	1	3	44	119	—	1	5	76	105	—	0	1	2	4
Indiana	—	0	2	15	16	—	1	5	47	65	—	0	2	21	18
Michigan	—	1	4	62	63	—	3	6	105	114	1	1	4	60	28
Ohio	2	0	5	44	35	1	2	6	83	78	—	0	1	8	25
Wisconsin	—	0	3	25	29	—	1	8	83	21	—	0	2	8	3
W.N. Central	1	1	13	69	105	3	2	15	106	122	6	0	11	22	21
Iowa	—	0	3	9	32	—	0	2	13	30	—	0	1	—	10
Kansas	—	0	3	11	11	—	0	2	8	6	—	0	1	2	1
Minnesota	1	0	12	15	18	1	0	13	8	23	6	0	9	12	6
Missouri	—	0	2	21	21	2	1	3	65	41	—	0	1	6	—
Nebraska†	—	0	4	12	20	—	0	2	11	19	—	0	1	2	2
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	1
South Dakota	—	0	1	1	3	—	0	1	1	3	—	0	0	—	1
S. Atlantic	5	7	14	305	377	13	16	40	771	788	1	4	7	151	145
Delaware	—	0	1	7	3	—	0	2	22	30	U	0	0	U	U
District of Columbia	—	0	1	1	1	—	0	1	3	10	—	0	1	2	1
Florida	3	3	7	123	158	8	5	11	262	253	1	1	5	50	40
Georgia	—	1	3	35	44	—	3	7	131	132	—	0	2	8	30
Maryland†	—	0	3	20	43	3	1	6	65	67	—	0	2	23	21
North Carolina	—	1	5	45	35	—	1	16	88	97	—	1	3	38	21
South Carolina†	—	0	3	22	55	—	1	4	51	52	—	0	1	1	1
Virginia†	2	1	6	45	33	2	1	14	88	86	—	0	2	12	8
West Virginia	—	0	5	7	5	—	0	14	61	61	—	0	5	17	23
E.S. Central	1	1	3	34	36	1	7	13	312	302	—	3	8	128	92
Alabama†	—	0	1	6	10	—	1	4	59	79	—	0	1	6	7
Kentucky	1	0	2	14	8	—	2	8	110	76	—	2	5	88	55
Mississippi	—	0	1	2	8	—	1	3	35	29	U	0	0	U	U
Tennessee†	—	0	2	12	10	1	2	8	108	118	—	1	4	34	30
W.S. Central	1	3	19	123	169	7	9	109	426	503	—	1	14	65	53
Arkansas†	—	0	3	2	11	—	1	4	41	60	—	0	0	—	2
Louisiana	—	0	2	10	6	—	1	4	42	62	—	0	1	7	7
Oklahoma	—	0	3	1	3	1	2	19	82	89	—	0	12	28	12
Texas†	1	2	18	110	149	6	5	87	261	292	—	0	3	30	32
Mountain	2	3	8	124	143	—	2	8	102	116	—	1	5	44	47
Arizona	2	1	5	59	60	—	0	2	27	39	U	0	0	U	U
Colorado	—	0	3	26	47	—	0	3	22	22	—	0	2	8	26
Idaho†	—	0	2	6	4	—	0	1	6	11	—	0	2	9	5
Montana†	—	0	1	4	6	—	0	1	1	1	—	0	1	2	1
Nevada†	—	0	2	14	11	—	1	3	35	28	—	0	1	4	4
New Mexico†	—	0	1	4	8	—	0	1	5	6	—	0	2	11	6
Utah	—	0	1	8	5	—	0	1	5	5	—	0	2	10	5
Wyoming†	—	0	3	3	2	—	0	1	1	4	—	0	0	—	—
Pacific	1	5	16	220	294	4	6	20	265	297	2	1	6	56	68
Alaska	—	0	1	1	2	—	0	1	3	3	U	0	0	U	U
California	1	4	16	183	233	3	4	17	185	208	1	0	4	22	37
Hawaii	—	0	2	3	8	—	0	1	1	6	U	0	0	U	U
Oregon	—	0	2	16	14	—	1	3	34	40	—	0	3	15	17
Washington	—	0	2	17	37	1	1	4	42	40	1	0	6	19	14
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	6	18	6	—	1	6	40	54	—	1	7	35	48
Puerto Rico	—	0	2	13	21	—	0	2	17	30	—	0	0	—	—
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 November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	24	58	113	2,781	3,093	86	404	2,336	24,259	34,059	15	27	89	1,278	1,221
New England	—	3	15	210	179	1	125	468	7,083	11,667	—	2	4	65	54
Connecticut	—	1	6	43	48	—	38	200	2,257	3,938	—	0	1	1	5
Maine†	—	0	4	12	8	—	12	76	642	808	—	0	1	5	2
Massachusetts	—	1	8	103	88	—	41	200	2,639	5,002	—	1	3	45	35
New Hampshire	—	0	5	20	12	—	22	67	1,093	1,316	—	0	2	4	4
Rhode Island†	—	0	4	23	16	—	1	40	146	223	—	0	1	7	5
Vermont†	—	0	2	9	7	1	4	27	306	380	—	0	1	3	3
Mid. Atlantic	8	16	38	763	1,086	50	168	720	11,250	14,865	—	7	17	336	363
New Jersey	—	2	11	93	198	—	42	207	2,918	4,772	—	0	4	1	92
New York (Upstate)	4	5	19	255	319	40	53	577	2,642	3,672	—	1	6	67	42
New York City	—	2	10	128	214	—	2	14	67	982	—	4	14	217	181
Pennsylvania	4	6	18	287	355	10	75	382	5,623	5,439	—	1	3	51	48
E.N. Central	5	11	41	624	660	3	15	247	2,054	2,839	—	2	9	132	153
Illinois	—	1	15	119	120	—	1	16	115	135	—	1	7	47	65
Indiana	3	2	6	99	57	—	1	7	66	81	—	0	2	8	20
Michigan	1	3	20	155	153	—	1	13	89	95	—	0	4	29	26
Ohio	1	4	15	205	259	1	0	5	22	50	—	0	5	38	33
Wisconsin	—	0	11	46	71	2	12	222	1,762	2,478	—	0	1	10	9
W.N. Central	—	2	19	106	108	—	2	1,395	113	222	1	1	11	64	63
Iowa	—	0	2	13	22	—	0	10	78	106	—	0	2	12	10
Kansas	—	0	2	11	7	—	0	1	6	18	—	0	2	10	8
Minnesota	—	0	16	27	12	—	0	1,380	—	90	—	0	11	3	24
Missouri	—	0	4	32	53	—	0	1	1	3	1	0	3	21	12
Nebraska†	—	0	2	9	11	—	0	2	9	4	—	0	2	15	8
North Dakota	—	0	1	6	1	—	0	15	18	—	—	0	1	—	—
South Dakota	—	0	2	8	2	—	0	1	1	1	—	0	2	3	1
S. Atlantic	2	10	27	459	517	30	59	171	3,408	4,023	11	7	42	370	318
Delaware	—	0	3	15	19	2	10	32	564	920	—	0	1	2	5
District of Columbia	—	0	4	15	20	—	0	4	25	61	—	0	2	9	17
Florida	2	3	9	146	158	—	2	10	90	99	2	2	7	113	82
Georgia	—	1	4	46	55	—	0	2	11	38	3	0	5	41	64
Maryland†	—	2	6	99	136	10	25	100	1,479	1,888	4	1	22	91	61
North Carolina	—	1	7	51	57	2	1	9	80	91	—	0	13	45	29
South Carolina†	—	0	2	10	11	1	0	3	28	37	—	0	1	4	5
Virginia†	—	1	6	64	53	14	17	79	1,015	726	2	1	5	62	53
West Virginia	—	0	3	13	8	1	0	32	116	163	—	0	2	3	2
E.S. Central	—	2	10	116	129	—	1	4	41	35	—	0	3	28	30
Alabama†	—	0	2	15	17	—	0	1	2	3	—	0	1	8	9
Kentucky	—	0	4	26	47	—	0	1	4	1	—	0	3	6	9
Mississippi	—	0	3	9	4	—	0	0	—	—	—	0	2	2	3
Tennessee†	—	1	6	66	61	—	0	4	35	31	—	0	2	12	9
W.S. Central	—	3	14	124	110	1	2	44	93	205	—	2	31	75	60
Arkansas†	—	0	2	13	7	—	0	0	—	—	—	0	1	2	5
Louisiana	—	0	3	8	13	—	0	1	2	—	—	0	1	4	5
Oklahoma	—	0	4	13	6	—	0	2	—	—	—	0	1	5	1
Texas†	—	2	10	90	84	1	2	42	91	205	—	1	30	64	49
Mountain	1	3	10	147	130	—	0	3	21	53	—	1	4	55	45
Arizona	1	1	6	58	40	—	0	1	2	6	—	0	2	22	8
Colorado	—	1	5	31	26	—	0	1	2	1	—	0	3	18	26
Idaho†	—	0	1	6	6	—	0	2	6	15	—	0	1	3	2
Montana†	—	0	1	4	7	—	0	1	3	3	—	0	1	2	5
Nevada†	—	0	2	19	12	—	0	1	1	12	—	0	1	6	—
New Mexico†	—	0	2	7	9	—	0	2	5	5	—	0	1	1	—
Utah	—	0	2	17	26	—	0	1	2	9	—	0	1	3	4
Wyoming†	—	0	2	5	4	—	0	1	—	2	—	0	0	—	—
Pacific	8	5	19	232	174	1	4	11	196	150	3	3	19	153	135
Alaska	—	0	2	2	1	—	0	1	6	6	—	0	1	3	2
California	6	4	19	194	133	1	3	9	129	94	2	2	13	105	100
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	1	1
Oregon	—	0	3	12	16	—	1	4	48	37	—	0	3	12	11
Washington	2	0	4	23	23	—	0	3	13	13	1	0	5	32	21
Territories															
American Samoa	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	2	N	0	0	N	N	—	0	2	4	5
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 November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Meningococcal disease, invasive† All groups					Pertussis					Rabies, animal				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	4	15	43	647	822	257	321	1,756	16,710	13,482	24	65	140	2,897	4,639
New England	—	0	3	16	30	2	7	22	415	575	1	4	15	209	303
Connecticut	—	0	2	2	4	—	1	8	95	48	—	0	14	59	132
Maine§	—	0	1	3	4	2	0	5	42	77	1	1	4	57	49
Massachusetts	—	0	2	6	14	—	4	13	224	327	—	0	0	—	—
New Hampshire	—	0	0	—	3	—	0	2	17	72	—	0	5	13	29
Rhode Island§	—	0	0	—	4	—	0	9	26	40	—	1	4	31	39
Vermont§	—	0	1	5	1	—	0	4	11	11	—	1	5	49	54
Mid. Atlantic	—	1	4	60	91	33	26	64	1,328	1,052	6	18	41	886	518
New Jersey	—	0	2	16	16	—	3	8	109	218	—	0	0	—	—
New York (Upstate)	—	0	3	11	18	12	9	27	467	196	6	9	19	456	400
New York City	—	0	2	14	16	—	0	9	75	86	—	2	12	120	18
Pennsylvania	—	0	2	19	41	21	11	40	677	552	—	5	24	310	100
E.N. Central	—	2	8	110	150	59	82	173	4,150	2,795	—	2	27	221	217
Illinois	—	0	4	19	41	1	14	29	671	569	—	1	11	113	82
Indiana	—	0	3	23	32	—	9	26	468	336	—	0	0	—	25
Michigan	—	0	2	18	19	13	23	53	1,165	766	—	1	5	64	64
Ohio	—	1	2	29	37	45	26	71	1,461	968	—	0	12	44	46
Wisconsin	—	0	2	21	21	—	6	19	385	156	—	0	0	—	—
W.N. Central	—	1	6	43	69	26	32	627	1,969	1,970	6	4	16	219	357
Iowa	—	0	3	9	11	—	9	26	451	213	—	0	2	7	31
Kansas	—	0	2	6	13	—	3	9	142	223	—	1	4	58	71
Minnesota	—	0	2	2	11	—	0	601	698	420	—	0	9	26	59
Missouri	—	0	3	19	21	20	8	36	406	917	1	1	6	65	64
Nebraska§	—	0	2	5	8	6	3	13	196	130	3	1	4	48	77
North Dakota	—	0	1	2	1	—	0	30	50	26	2	0	7	15	4
South Dakota	—	0	1	—	4	—	0	5	26	41	—	0	2	—	51
S. Atlantic	1	3	7	118	149	17	28	78	1,339	1,459	11	21	73	967	1,921
Delaware	—	0	1	2	2	—	0	4	12	13	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	1	6	6	—	0	0	—	—
Florida	1	1	5	54	48	8	5	28	280	473	—	0	60	72	161
Georgia	—	0	2	9	30	—	3	18	211	211	—	0	13	—	362
Maryland§	—	0	1	8	10	2	3	8	119	131	5	6	14	331	359
North Carolina	—	0	2	14	27	—	0	32	124	181	—	0	10	—	437
South Carolina§	—	0	1	10	11	2	5	19	297	232	—	0	0	—	—
Virginia§	—	0	2	19	15	5	5	15	205	183	4	10	25	493	496
West Virginia	—	0	2	2	6	—	1	13	85	29	2	1	7	71	106
E.S. Central	—	1	4	39	30	6	14	33	659	714	—	3	7	133	134
Alabama§	—	0	2	6	8	—	4	8	170	275	—	0	4	45	—
Kentucky	—	0	2	17	5	—	5	14	231	206	—	0	4	19	45
Mississippi	—	0	1	5	3	—	1	7	62	65	—	0	1	1	4
Tennessee§	—	0	2	11	14	6	4	11	196	168	—	1	4	68	85
W.S. Central	2	1	9	75	82	35	57	753	2,483	2,878	—	0	30	61	851
Arkansas§	1	0	1	6	9	—	3	29	159	317	—	0	7	21	38
Louisiana	—	0	4	12	17	—	1	4	32	139	—	0	0	—	—
Oklahoma	—	0	7	15	12	8	0	41	63	73	—	0	30	40	32
Texas§	1	1	7	42	44	27	48	681	2,229	2,349	—	0	19	—	781
Mountain	—	1	6	48	56	47	23	56	1,232	859	—	1	8	77	101
Arizona	—	0	2	13	12	—	7	16	355	225	—	0	5	—	—
Colorado	—	0	4	15	18	43	4	30	271	202	—	0	0	—	—
Idaho§	—	0	2	7	7	4	3	19	179	69	—	0	2	11	8
Montana§	—	0	1	1	5	—	1	12	71	53	—	0	3	16	25
Nevada§	—	0	1	8	4	—	0	7	31	24	—	0	2	8	6
New Mexico§	—	0	1	3	3	—	2	11	116	64	—	0	2	11	26
Utah	—	0	1	1	2	—	4	14	199	200	—	0	2	10	12
Wyoming§	—	0	1	—	5	—	0	2	10	22	—	0	4	21	24
Pacific	1	3	16	138	165	32	40	208	3,135	1,180	—	3	12	124	237
Alaska	—	0	1	1	6	—	0	6	37	50	—	0	2	12	12
California	1	2	13	91	105	13	27	180	2,372	604	—	2	12	100	214
Hawaii	—	0	1	1	5	—	0	6	41	41	—	0	0	—	—
Oregon	—	1	2	29	36	—	6	16	294	239	—	0	2	12	11
Washington	—	0	7	16	13	19	5	38	391	246	—	0	0	—	—
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	—	—	0	1	3	1	2	1	3	40	39
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	612	906	1,701	44,403	42,748	46	85	209	4,101	4,078	145	277	527	11,897	13,719
New England	2	31	448	2,032	1,987	—	2	52	180	253	—	4	62	287	314
Connecticut	—	0	432	432	430	—	0	52	52	67	—	0	57	57	43
Maine§	2	2	7	115	113	—	0	3	17	19	—	0	1	5	5
Massachusetts	—	23	54	1,126	1,014	—	2	8	74	95	—	4	16	201	217
New Hampshire	—	3	10	151	241	—	0	2	19	35	—	0	1	12	21
Rhode Island§	—	2	17	140	129	—	0	26	2	12	—	0	3	11	23
Vermont§	—	1	5	68	60	—	0	2	16	25	—	0	1	1	5
Mid. Atlantic	32	93	219	5,114	4,913	3	9	31	455	387	6	33	53	1,399	2,540
New Jersey	—	19	57	977	1,015	—	1	6	56	96	—	6	16	288	550
New York (Upstate)	12	25	78	1,280	1,159	2	3	15	179	132	3	4	19	208	190
New York City	3	25	56	1,210	1,138	—	1	7	65	55	—	6	14	267	414
Pennsylvania	17	28	82	1,647	1,601	1	3	13	155	104	3	14	34	636	1,386
E.N. Central	21	86	238	4,593	4,633	3	10	39	666	663	6	26	238	1,501	2,304
Illinois	—	28	114	1,626	1,319	—	2	9	115	157	—	9	228	738	550
Indiana	—	9	54	379	555	—	1	9	66	88	—	1	5	33	63
Michigan	5	15	47	822	868	1	2	16	149	125	1	5	9	215	208
Ohio	16	24	47	1,190	1,283	2	2	11	129	120	5	6	23	275	1,016
Wisconsin	—	11	44	576	608	—	3	17	207	173	—	4	21	240	467
W.N. Central	17	47	98	2,194	2,367	1	12	39	598	671	9	48	88	1,888	984
Iowa	2	9	34	479	367	—	3	16	162	148	—	1	5	48	49
Kansas	5	8	19	405	356	—	1	6	64	52	2	5	14	238	181
Minnesota	—	0	32	178	499	—	0	13	31	193	—	0	4	14	73
Missouri	8	13	44	733	584	—	4	27	222	125	6	42	75	1,526	644
Nebraska§	2	4	13	223	321	1	1	6	70	81	1	1	10	55	29
North Dakota	—	0	39	48	59	—	0	10	17	7	—	0	5	—	4
South Dakota	—	3	8	128	181	—	1	4	32	65	—	0	2	7	4
S. Atlantic	345	268	599	13,570	12,458	18	13	30	637	602	55	45	97	2,230	2,120
Delaware	1	3	11	163	127	—	0	2	6	13	—	1	10	39	126
District of Columbia	—	1	6	66	90	—	0	1	5	2	—	0	4	23	22
Florida	111	127	227	5,523	5,608	6	4	13	214	155	30	14	53	976	408
Georgia	44	40	132	2,443	2,141	—	1	15	100	66	13	13	39	674	584
Maryland§	10	16	52	916	708	2	1	8	87	84	1	2	8	116	346
North Carolina	119	29	197	1,888	1,647	8	1	10	73	99	7	3	18	179	343
South Carolina§	45	20	94	1,419	1,000	—	0	3	19	27	1	1	5	61	111
Virginia§	15	17	68	994	941	2	2	15	115	128	3	2	15	126	172
West Virginia	—	2	16	158	196	—	0	4	18	28	—	0	11	36	8
E.S. Central	26	52	177	3,475	2,804	2	4	11	223	193	10	12	40	631	731
Alabama§	14	18	49	900	826	—	1	4	43	43	—	3	12	156	142
Kentucky	—	9	31	498	410	—	1	6	59	64	5	3	28	208	198
Mississippi	8	17	67	1,131	850	—	0	2	15	6	3	1	4	47	43
Tennessee§	4	14	53	946	718	2	2	7	106	80	2	5	13	220	348
W.S. Central	42	107	547	5,355	5,256	3	5	68	265	282	32	51	251	2,238	2,573
Arkansas§	13	10	43	720	561	—	1	5	45	41	2	1	9	64	280
Louisiana	2	19	48	1,099	1,084	—	0	2	17	22	—	5	13	232	165
Oklahoma	27	11	46	604	566	3	0	27	34	30	3	6	96	240	252
Texas§	—	64	477	2,932	3,045	—	3	41	169	189	27	38	144	1,702	1,876
Mountain	23	48	105	2,410	2,717	7	9	33	513	527	5	15	32	710	1,047
Arizona	1	18	42	841	952	2	1	7	74	61	1	8	19	386	752
Colorado	15	11	23	503	561	1	2	18	157	159	4	2	6	104	90
Idaho§	4	3	9	144	157	3	1	7	92	87	—	0	3	23	8
Montana§	3	2	7	81	101	1	1	5	39	33	—	0	1	6	11
Nevada§	—	4	22	266	229	—	0	5	28	34	—	1	6	44	65
New Mexico§	—	5	15	279	336	—	1	5	35	34	—	2	9	110	99
Utah	—	5	17	257	291	—	1	7	73	105	—	0	4	37	18
Wyoming§	—	1	5	39	90	—	0	2	15	14	—	0	0	—	4
Pacific	104	124	299	5,660	5,613	9	10	46	564	500	22	20	64	1,013	1,106
Alaska	—	1	5	74	63	—	0	1	2	1	—	0	2	1	2
California	81	91	227	4,281	4,183	4	6	35	250	231	20	16	51	839	890
Hawaii	4	4	14	195	297	—	0	4	18	9	—	0	3	18	38
Oregon	—	8	48	459	394	1	2	9	100	75	—	1	4	55	45
Washington	19	15	61	651	676	4	3	19	194	184	2	2	20	100	131
Territories															
American Samoa	—	0	1	2	—	—	0	0	—	—	—	1	1	4	3
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	7	11	—	0	0	—	—	—	0	3	1	13
Puerto Rico	1	11	39	456	495	—	0	0	—	—	—	0	1	4	13
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Spotted Fever Rickettsiosis (including RMSF)†									
	Confirmed					Probable				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	1	2	12	148	140	10	19	421	1,368	1,205
New England	—	0	0	—	2	—	0	1	3	10
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	0	—	—	—	0	1	2	5
Massachusetts	—	0	0	—	1	—	0	1	—	5
New Hampshire	—	0	0	—	—	—	0	1	1	—
Rhode Island§	—	0	0	—	—	—	0	0	—	—
Vermont§	—	0	0	—	1	—	0	0	—	—
Mid. Atlantic	—	0	2	16	12	—	1	4	54	91
New Jersey	—	0	0	—	2	—	0	2	—	58
New York (Upstate)	—	0	1	2	—	—	0	3	17	14
New York City	—	0	1	1	1	—	0	4	25	6
Pennsylvania	—	0	2	13	9	—	0	1	12	13
E.N. Central	—	0	1	4	9	—	1	9	91	80
Illinois	—	0	1	2	1	—	0	5	33	47
Indiana	—	0	1	2	3	—	0	5	43	10
Michigan	—	0	0	—	4	—	0	1	1	1
Ohio	—	0	0	—	—	—	0	2	13	18
Wisconsin	—	0	0	—	1	—	0	1	1	4
W.N. Central	—	0	4	17	18	—	4	21	297	249
Iowa	—	0	0	—	1	—	0	1	4	4
Kansas	—	0	1	2	1	—	0	0	—	—
Minnesota	—	0	1	—	1	—	0	1	—	1
Missouri	—	0	4	13	7	—	4	20	289	240
Nebraska§	—	0	1	2	8	—	0	1	3	4
North Dakota	—	0	0	—	—	—	0	1	1	—
South Dakota	—	0	0	—	—	—	0	0	—	—
S. Atlantic	1	1	9	76	65	9	7	60	469	365
Delaware	—	0	1	1	—	—	0	3	19	17
District of Columbia	—	0	1	1	—	—	0	1	—	—
Florida	—	0	1	3	—	—	0	2	11	7
Georgia	1	0	6	53	51	—	0	0	—	—
Maryland§	—	0	1	2	3	—	0	4	49	35
North Carolina	—	0	3	11	7	6	1	48	244	240
South Carolina§	—	0	1	1	3	—	0	2	18	15
Virginia§	—	0	2	4	1	3	2	12	128	49
West Virginia	—	0	0	—	—	—	0	0	—	2
E.S. Central	—	0	3	19	9	1	5	29	362	252
Alabama§	—	0	1	5	3	—	1	8	71	61
Kentucky	—	0	2	6	1	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	2	12	9
Tennessee§	—	0	2	8	5	1	3	20	279	182
W.S. Central	—	0	3	6	9	—	1	408	80	134
Arkansas§	—	0	2	2	—	—	0	110	37	67
Louisiana	—	0	0	—	—	—	0	1	2	2
Oklahoma	—	0	3	3	7	—	0	287	22	46
Texas§	—	0	1	1	2	—	0	11	19	19
Mountain	—	0	1	2	15	—	0	2	12	24
Arizona	—	0	1	—	9	—	0	1	2	12
Colorado	—	0	0	—	1	—	0	1	1	—
Idaho§	—	0	0	—	—	—	0	1	5	1
Montana§	—	0	1	2	4	—	0	1	1	6
Nevada§	—	0	0	—	—	—	0	0	—	1
New Mexico§	—	0	0	—	—	—	0	1	1	1
Utah	—	0	0	—	—	—	0	1	1	1
Wyoming§	—	0	0	—	1	—	0	1	1	2
Pacific	—	0	2	8	1	—	0	0	—	—
Alaska	N	0	0	N	N	N	0	0	N	N
California	—	0	2	7	1	—	0	0	—	—
Hawaii	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	1	1	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—
Territories										
American Samoa	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
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	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 November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	*Streptococcus pneumoniae*,† invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	121	220	495	12,015	2,542	18	46	156	1,862	2,052	50	241	413	10,664	12,179
New England	—	9	99	645	46	—	1	24	84	67	1	9	22	393	281
Connecticut	—	0	91	288	—	—	0	22	27	—	—	1	10	81	49
Maine§	—	2	6	105	16	—	0	1	8	7	—	0	3	23	2
Massachusetts	—	1	5	58	3	—	1	4	39	41	—	5	15	234	203
New Hampshire	—	0	7	59	—	—	0	1	3	11	1	0	2	22	13
Rhode Island§	—	0	35	68	15	—	0	2	2	4	—	1	4	31	14
Vermont§	—	1	6	67	12	—	0	1	5	4	—	0	2	2	—
Mid. Atlantic	9	24	56	1,150	175	3	7	48	308	261	17	33	45	1,479	1,542
New Jersey	—	1	8	91	—	—	1	5	48	53	3	4	12	203	196
New York (Upstate)	2	3	12	137	71	2	2	19	99	116	2	2	11	115	103
New York City	4	8	31	500	15	1	1	24	111	77	10	19	31	838	936
Pennsylvania	3	8	22	422	89	—	1	5	50	15	2	7	16	323	307
E.N. Central	31	46	98	2,444	575	3	7	18	313	345	1	27	47	1,157	1,355
Illinois	—	1	7	86	—	—	2	5	79	59	—	8	24	378	661
Indiana	—	7	24	450	218	—	1	6	39	71	—	3	14	152	135
Michigan	2	11	27	584	25	—	2	6	73	65	—	4	12	183	204
Ohio	26	18	49	1,020	332	3	2	6	89	112	1	9	18	406	314
Wisconsin	3	6	22	304	—	—	0	4	33	38	—	1	3	38	41
W.N. Central	7	8	182	643	163	—	2	12	114	165	2	6	19	292	267
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	16	21
Kansas	—	1	7	80	52	—	0	2	13	18	—	0	3	18	28
Minnesota	—	0	179	287	41	—	0	10	44	78	—	2	9	114	62
Missouri	1	2	10	96	59	—	1	3	34	42	2	3	10	133	147
Nebraska§	1	2	7	109	2	—	0	2	13	12	—	0	2	7	5
North Dakota	5	0	11	55	7	—	0	1	2	5	—	0	0	—	4
South Dakota	—	0	3	16	2	—	0	2	8	10	—	0	1	4	—
S. Atlantic	29	50	144	2,762	1,144	4	10	28	460	491	8	57	218	2,588	2,919
Delaware	1	0	3	33	18	—	0	0	—	3	—	0	2	4	27
District of Columbia	—	0	4	24	19	—	0	2	7	5	—	2	21	141	153
Florida	20	22	89	1,250	662	3	3	18	171	170	—	20	44	921	912
Georgia	2	10	28	460	349	1	3	12	126	142	1	12	167	559	697
Maryland§	5	7	31	428	4	—	1	6	46	68	2	6	14	266	270
North Carolina	—	0	0	—	—	—	0	0	—	—	4	7	31	307	481
South Carolina§	1	6	25	418	—	—	1	4	45	42	—	2	7	129	109
Virginia§	—	1	4	48	—	—	1	4	46	42	1	4	22	256	266
West Virginia	—	2	21	101	92	—	0	4	19	19	—	0	2	5	4
E.S. Central	9	21	50	1,072	230	2	2	8	106	125	—	17	39	788	1,002
Alabama§	—	0	0	—	—	—	0	0	—	—	—	5	11	212	385
Kentucky	3	3	16	165	67	—	0	2	13	8	—	3	13	117	59
Mississippi	—	1	6	48	45	—	0	2	10	23	—	4	17	193	189
Tennessee§	6	16	44	859	118	2	2	7	83	94	—	5	17	266	369
W.S. Central	18	25	91	1,558	104	4	5	41	247	305	17	39	62	1,655	2,465
Arkansas§	2	3	9	147	49	1	0	3	16	37	5	3	13	155	238
Louisiana	—	2	8	83	55	—	0	3	22	25	1	8	27	366	687
Oklahoma	—	1	5	40	—	—	1	5	40	52	—	2	7	72	82
Texas§	16	21	83	1,288	—	3	3	34	169	191	11	25	35	1,062	1,458
Mountain	16	24	82	1,487	102	2	4	12	200	264	—	9	23	427	466
Arizona	3	10	51	669	—	—	2	7	85	108	—	3	7	124	208
Colorado	10	8	20	447	—	1	1	4	56	44	—	3	8	118	84
Idaho§	1	0	2	15	—	1	0	2	9	8	—	0	1	2	3
Montana§	—	0	2	19	—	—	0	1	2	—	—	0	2	3	2
Nevada§	1	1	4	71	36	—	0	1	5	7	—	1	9	104	86
New Mexico§	1	2	9	128	—	—	0	4	15	34	—	1	4	42	54
Utah	—	2	9	127	55	—	0	3	25	61	—	1	4	34	26
Wyoming§	—	0	1	11	11	—	0	1	3	2	—	0	0	—	3
Pacific	2	5	14	254	3	—	0	7	30	29	4	42	60	1,885	1,882
Alaska	—	2	9	98	—	—	0	5	18	19	—	0	1	1	—
California	2	3	12	156	—	—	0	2	12	—	1	35	54	1,617	1,675
Hawaii	—	0	0	—	3	—	0	1	—	10	—	0	3	27	33
Oregon	—	0	0	—	—	—	0	0	—	—	—	1	7	55	45
Washington	—	0	0	—	—	—	0	0	—	—	3	4	11	185	129
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	3	3	15	196	194
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 13, 2010, and November 14, 2009 (45th week)*

Reporting area	Varicella (chickenpox)§					West Nile virus disease†: Neuroinvasive					West Nile virus disease†: Nonneuroinvasive¶				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	116	288	547	12,263	18,275	—	0	69	575	384	—	0	52	369	334
New England	1	15	36	633	965	—	0	3	13	—	—	0	1	2	—
Connecticut	—	6	20	256	440	—	0	2	6	—	—	0	1	1	—
Maine§	—	4	15	195	213	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	2	4	—	0	2	6	—	—	0	1	1	—
New Hampshire	—	2	8	114	183	—	0	1	1	—	—	0	0	—	—
Rhode Island§	—	1	12	31	36	—	0	0	—	—	—	0	0	—	—
Vermont§	1	0	10	35	89	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	24	31	62	1,391	1,835	—	0	19	124	9	—	0	13	62	1
New Jersey	—	9	30	463	399	—	0	3	15	3	—	0	6	15	—
New York (Upstate)	N	0	0	N	N	—	0	9	57	3	—	0	7	30	1
New York City	—	0	0	—	—	—	0	7	32	3	—	0	4	8	—
Pennsylvania	24	21	39	928	1,436	—	0	3	20	—	—	0	3	9	—
E.N. Central	39	99	176	4,128	5,772	—	0	14	73	9	—	0	6	28	4
Illinois	4	23	49	1,051	1,432	—	0	10	41	5	—	0	4	15	—
Indiana§	2	6	35	364	404	—	0	1	4	2	—	0	2	6	2
Michigan	11	31	62	1,227	1,686	—	0	6	25	1	—	0	1	4	—
Ohio	21	29	56	1,185	1,722	—	0	1	3	—	—	0	1	1	2
Wisconsin	1	6	22	301	528	—	0	0	—	1	—	0	1	2	—
W.N. Central	7	15	40	688	1,134	—	0	7	28	26	—	0	11	68	75
Iowa	N	0	0	N	N	—	0	1	2	—	—	0	2	4	5
Kansas§	—	5	22	228	486	—	0	1	3	4	—	0	2	10	9
Minnesota	—	0	0	—	—	—	0	1	4	1	—	0	3	4	3
Missouri	4	7	23	379	539	—	0	1	3	4	—	0	0	—	1
Nebraska§	N	0	0	N	N	—	0	3	10	11	—	0	7	27	41
North Dakota	—	0	26	37	57	—	0	2	2	—	—	0	2	7	1
South Dakota	3	0	7	44	52	—	0	2	4	6	—	0	3	16	15
S. Atlantic	19	34	98	1,854	2,329	—	0	4	32	16	—	0	4	20	2
Delaware§	—	0	3	21	12	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	4	17	29	—	0	1	1	2	—	0	1	1	—
Florida§	10	15	57	891	1,053	—	0	2	8	2	—	0	1	3	1
Georgia	N	0	0	N	N	—	0	1	4	4	—	0	3	8	—
Maryland§	N	0	0	N	N	—	0	3	16	—	—	0	2	7	1
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina§	—	0	35	75	111	—	0	1	1	3	—	0	0	—	—
Virginia§	2	11	34	448	668	—	0	1	2	5	—	0	1	1	—
West Virginia	7	8	26	402	456	—	0	0	—	—	—	0	0	—	—
E.S. Central	2	5	22	261	494	—	0	1	8	36	—	0	3	9	27
Alabama§	2	5	22	254	489	—	0	1	1	—	—	0	1	2	—
Kentucky	N	0	0	N	N	—	0	1	2	3	—	0	1	1	—
Mississippi	—	0	2	7	5	—	0	1	3	29	—	0	2	4	22
Tennessee§	N	0	0	N	N	—	0	1	2	4	—	0	2	2	5
W.S. Central	17	49	285	2,384	4,431	—	0	15	90	117	—	0	3	15	35
Arkansas§	—	2	32	122	445	—	0	3	6	6	—	0	1	1	—
Louisiana	—	1	5	40	120	—	0	3	14	10	—	0	1	6	11
Oklahoma	N	0	0	N	N	—	0	0	—	8	—	0	0	—	2
Texas§	17	41	272	2,222	3,866	—	0	15	70	93	—	0	2	8	22
Mountain	7	20	36	877	1,222	—	0	18	146	77	—	0	15	128	123
Arizona	—	0	0	—	—	—	0	13	99	12	—	0	9	59	8
Colorado§	7	8	18	361	474	—	0	5	26	36	—	0	11	55	67
Idaho§	N	0	0	N	N	—	0	0	—	9	—	0	1	3	29
Montana§	—	3	17	176	150	—	0	0	—	2	—	0	0	—	3
Nevada§	N	0	0	N	N	—	0	0	—	7	—	0	1	2	5
New Mexico§	—	2	8	90	106	—	0	5	18	6	—	0	2	4	2
Utah	—	5	17	237	492	—	0	1	1	1	—	0	1	1	1
Wyoming§	—	0	3	13	—	—	0	1	2	4	—	0	1	4	8
Pacific	—	1	5	47	93	—	0	7	61	94	—	0	5	37	67
Alaska	—	0	5	36	55	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	7	61	67	—	0	5	37	45
Hawaii	—	0	2	11	38	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	1	—	0	0	—	10
Washington	N	0	0	N	N	—	0	0	—	26	—	0	0	—	12
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	15	26	—	0	0	—	—	—	0	0	—	—
Puerto Rico	2	9	30	501	482	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Case counts for reporting year 2010 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/ncphi/disss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for HIV/AIDS, AIDS and TB, when available, are displayed in Table IV, which appears quarterly.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).
¶ 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/ncphi/disss/nndss/phs/infdis.htm.

TABLE III. Deaths in 122 U.S. cities,* week ending November 13, 2010 (45th week)

Reporting area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
New England	528	370	111	29	9	9	43
Boston, MA	124	69	37	12	4	2	6
Bridgeport, CT	34	26	5	2	—	1	6
Cambridge, MA	19	14	5	—	—	—	4
Fall River, MA	31	28	3	—	—	—	4
Hartford, CT	54	41	7	3	2	1	3
Lowell, MA	19	15	1	1	1	1	2
Lynn, MA	3	1	1	1	—	—	—
New Bedford, MA	39	28	10	1	—	—	2
New Haven, CT	31	20	10	1	—	—	2
Providence, RI	63	52	7	2	1	1	2
Somerville, MA	2	—	2	—	—	—	—
Springfield, MA	45	26	13	4	—	2	5
Waterbury, CT	23	19	4	—	—	—	2
Worcester, MA	41	31	6	2	1	1	5
Mid. Atlantic	1,749	1,241	374	94	17	23	109
Albany, NY	46	34	11	1	—	—	2
Allentown, PA	33	24	7	1	1	—	—
Buffalo, NY	93	61	25	7	—	—	10
Camden, NJ	U	U	U	U	U	U	U
Elizabeth, NJ	14	8	4	—	1	1	1
Erie, PA	33	27	5	—	—	1	3
Jersey City, NJ	35	26	9	—	—	—	3
New York City, NY	987	697	214	54	10	12	60
Newark, NJ	16	13	3	—	—	—	3
Paterson, NJ	28	19	4	3	1	1	1
Philadelphia, PA	151	92	38	13	2	6	2
Pittsburgh, PA§	41	32	7	2	—	—	6
Reading, PA	29	24	5	—	—	—	1
Rochester, NY	81	58	14	6	1	2	5
Schenectady, NY	20	16	4	—	—	—	2
Scranton, PA	23	19	3	—	1	—	1
Syracuse, NY	64	50	9	5	—	—	9
Trenton, NJ	18	11	7	—	—	—	—
Utica, NY	14	12	1	1	—	—	—
Yonkers, NY	23	18	4	1	—	—	—
E.N. Central	1,948	1,291	473	109	43	32	137
Akron, OH	49	36	8	2	1	2	8
Canton, OH	27	25	2	—	—	—	3
Chicago, IL	211	137	45	19	9	1	22
Cincinnati, OH	82	46	27	4	2	3	7
Cleveland, OH	231	154	57	17	1	2	13
Columbus, OH	220	148	60	9	2	1	20
Dayton, OH	124	90	22	10	1	1	5
Detroit, MI	143	79	41	10	6	7	5
Evansville, IN	39	29	8	2	—	—	2
Fort Wayne, IN	49	32	12	2	2	1	4
Gary, IN	14	10	2	2	—	—	1
Grand Rapids, MI	45	32	10	1	1	1	1
Indianapolis, IN	274	166	74	16	9	9	24
Lansing, MI	53	30	18	2	2	1	1
Milwaukee, WI	85	50	26	6	1	2	4
Peoria, IL	53	37	15	1	—	—	2
Rockford, IL	69	57	7	3	2	—	5
South Bend, IN	53	39	11	1	2	—	2
Toledo, OH	66	45	17	2	1	1	3
Youngstown, OH	61	49	11	—	1	—	5
W.N. Central	635	424	146	38	12	15	46
Des Moines, IA	129	94	25	7	2	1	7
Duluth, MN	24	16	5	2	—	1	2
Kansas City, KS	13	7	4	1	1	—	2
Kansas City, MO	96	60	25	5	2	4	8
Lincoln, NE	39	27	8	3	1	—	3
Minneapolis, MN	48	29	14	4	—	1	4
Omaha, NE	84	59	17	6	1	1	6
St. Louis, MO	77	44	21	4	3	5	6
St. Paul, MN	59	42	10	3	2	2	6
Wichita, KS	66	46	17	3	—	—	2
S. Atlantic	973	611	238	74	28	21	63
Atlanta, GA	124	85	28	7	3	1	4
Baltimore, MD	111	70	27	8	4	2	9
Charlotte, NC	89	58	25	5	—	1	6
Jacksonville, FL	98	57	29	8	3	1	8
Miami, FL	78	57	14	6	1	—	1
Norfolk, VA	62	34	16	5	—	7	3
Richmond, VA	57	34	14	5	1	3	5
Savannah, GA	40	26	9	3	2	—	1
St. Petersburg, FL	41	13	15	5	6	2	5
Tampa, FL	182	121	38	12	6	4	14
Washington, D.C.	75	47	17	9	2	—	7
Wilmington, DE	16	9	6	1	—	—	—
E.S. Central	771	481	197	50	25	18	51
Birmingham, AL	151	89	36	12	6	8	9
Chattanooga, TN	90	62	20	4	4	—	2
Knoxville, TN	97	65	22	5	3	2	7
Lexington, KY	53	36	10	2	4	1	3
Memphis, TN	132	84	33	10	2	3	9
Mobile, AL	72	42	23	6	1	—	7
Montgomery, AL	38	24	12	1	1	—	1
Nashville, TN	138	79	41	10	4	4	13
W.S. Central	1,099	721	232	83	33	30	63
Austin, TX	88	58	20	2	4	4	6
Baton Rouge, LA	82	49	13	10	5	5	—
Corpus Christi, TX	67	47	12	5	3	—	6
Dallas, TX	193	129	38	13	8	5	14
El Paso, TX	44	31	11	1	—	1	1
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	244	149	56	23	7	9	8
Little Rock, AR	76	51	17	7	—	1	—
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	236	157	55	16	5	3	25
Shreveport, LA	1	1	—	—	—	—	—
Tulsa, OK	68	49	10	6	1	2	3
Mountain	1,030	665	241	77	24	21	52
Albuquerque, NM	111	67	31	11	1	1	7
Boise, ID	65	43	14	2	2	4	3
Colorado Springs, CO	61	45	12	3	1	—	1
Denver, CO	90	46	29	9	2	4	7
Las Vegas, NV	281	193	63	16	5	2	15
Ogden, UT	33	23	7	2	1	—	2
Phoenix, AZ	154	85	43	16	6	4	4
Pueblo, CO	27	17	7	3	—	—	1
Salt Lake City, UT	119	77	24	8	4	6	10
Tucson, AZ	89	69	11	7	2	—	2
Pacific	1,569	1,075	355	85	22	31	159
Berkeley, CA	13	6	5	2	—	—	—
Fresno, CA	101	63	26	6	2	4	9
Glendale, CA	28	25	3	—	—	—	6
Honolulu, HI	72	47	19	3	1	2	7
Long Beach, CA	62	39	17	2	2	2	11
Los Angeles, CA	227	150	53	16	5	3	22
Pasadena, CA	15	13	1	—	—	1	1
Portland, OR	109	70	31	5	2	1	9
Sacramento, CA	279	184	73	14	5	3	29
San Diego, CA	126	87	22	9	—	7	9
San Francisco, CA	108	75	22	9	1	1	11
San Jose, CA	173	129	35	6	—	3	17
Santa Cruz, CA	34	26	7	1	—	—	5
Seattle, WA	110	78	20	7	2	3	12
Spokane, WA	65	48	12	3	1	1	10
Tacoma, WA	47	35	9	2	1	—	1
Total¶	**10,302**	**6,879**	**2,367**	**639**	**213**	**200**	**723**

U: Unavailable. —: No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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