

## Outbreak of Shiga Toxin–Producing *Escherichia coli* O111 Infections Associated with a Correctional Facility Dairy — Colorado, 2010

On April 20, 2010, the Colorado Department of Public Health and Environment (CDPHE) was notified by correctional authorities regarding three inmates with bloody diarrhea at a minimum-security correctional facility. The facility, which houses approximately 500 inmates, is a designated work center where inmates are employed or receive vocational training. Approximately 70 inmates work at an onsite dairy, which provides milk to all state-run correctional facilities in Colorado. CDPHE immediately began an investigation and was later assisted by the High Plains Intermountain Center for Agricultural Health and Safety at Colorado State University and by CDC. This report describes the results of the investigation, which determined that the illnesses were caused by Shiga toxin–producing *Escherichia coli* O111 (STEC O111) infections. During April–July, 10 inmates at the facility received a diagnosis of laboratory-confirmed STEC O111 infection, and a retrospective prevalence study of 100 inmates found that, during March–April, 14 other inmates had experienced diarrheal illness suspected of being STEC O111 infection. Pulsed-field gel electrophoresis (PFGE) testing indicated that STEC O111 isolates from inmates matched STEC O111 isolates from cattle at the onsite dairy. An environmental investigation determined that inmates employed at the dairy might have acquired STEC O111 infection on the job or transported contaminated clothing or other items into the main correctional facility and kitchen, thereby exposing other inmates. To prevent similar outbreaks in correctional facilities, authorities should consult with public health officials to design and implement effective infection control measures.

### Epidemiologic and Environmental Investigations

On April 21, stool specimens from the initial three inmates reported as ill tested positive for Shiga toxin at a reference clinical laboratory and subsequently were identified as STEC O111 at the state public health laboratory. CDPHE and correctional

facility health staff members conducted surveillance for other persons with recent illness through cell checks and interviews with all food-service workers, resulting in identification of five additional laboratory-confirmed STEC O111 cases. A confirmed case was defined as STEC O111 isolated from an inmate's stool specimen. Illness onset dates for the eight inmates with confirmed STEC O111 ranged from April 11 to April 22 (Figure).

Of the eight inmates with confirmed STEC O111, six had indistinguishable PFGE patterns, and two had patterns differing by one band. The inmates were housed in four different living units at the correctional facility, and each had a different job. No staff members reported symptoms consistent with STEC infection, and diarrheal illness was not reported at other Colorado correctional facilities.

On April 27, CDPHE conducted a retrospective illness prevalence study among 100 inmates (approximately 20% of the inmate population); all 100 inmates had the option to refuse to participate in the study and could refuse to answer any questions. A number generator was used to systematically select every fifth inmate listed on the census of inmates residing at the correctional facility. The goal of the study was to determine the timeframe of the outbreak, estimate the total number of cases, and identify the source and mechanism of spread to prevent further cases of STEC O111. A suspected case in the prevalence study was defined as diarrheal illness

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with onset after March 1, characterized by three or more loose stools within 24 hours, and lasting  $\geq 2$  days. Fourteen inmates reported symptoms that met the definition for a suspected case (four other inmates met the definition but were eliminated from the findings because they also were among those inmates with laboratory-confirmed STEC O111). Illness onset dates for the 14 inmates ranged from March 14 to April 23 (Figure). No common food exposures or living units were found among the 14 inmates identified in the prevalence study; however, two of the 14 inmates worked at the onsite dairy.

CDPHE staff also inspected the correctional facility's kitchens and living areas and identified the following conditions conducive to STEC O111 transmission: poor adherence to standard food-service protocols and hygiene practices, including food handlers working while ill with diarrhea; inconsistent availability of hand soap throughout the facility; dairy employees wearing soiled work clothes into the kitchen and living areas; and transport of potentially fecally contaminated lunch coolers and water containers from the dairy into the kitchen. CDPHE hypothesized that the outbreak was associated with environmental contamination and propagated by person-to-person transmission, possibly through food preparation. On learning of these results, the correctional facility immediately implemented the following public health recommendations: 1) prohibiting potentially contaminated material (e.g., lunch coolers, water containers, and work clothing from the dairy) in the kitchen area, 2) excluding from work all food handlers reporting diarrheal illness since April 1, 3) requiring food

handlers with a confirmed STEC O111 test result to have two consecutive negative stool specimens before returning to work, and 4) limiting transfers of inmates to other facilities until they were cleared by the medical staff.

In July, two additional inmates received diagnoses of laboratory-confirmed STEC O111 matching the predominant outbreak strain. This prompted further investigation, including testing of dairy environmental surfaces and cattle feces for STEC at the U.S. Department of Agriculture's Agricultural Research Service Laboratory in Nebraska. A convenience sample of 100 dairy cattle fecal specimens was collected; three specimens tested positive for STEC O111:H8 and matched the PFGE pattern for eight of the 10 human isolates. Based on these results, investigators suspected that animal-to-human STEC O111 transmission might be occurring at the correctional facility dairy and that fecally contaminated items might be transported unknowingly into the main facility by dairy workers and security personnel.

In October, after initiating a new occupational health program, CDPHE collaborated with the High Plains Intermountain Center for Agricultural Health and Safety and CDC to identify transmission pathways of STEC O111 between the dairy and the correctional facility and provide recommendations for prevention. Investigators identified considerable contact with animals in the dairy and inconsistent implementation of infection control practices. Some workers washed their hands infrequently, consumed food and beverages in contaminated areas, and did not wear proper personal

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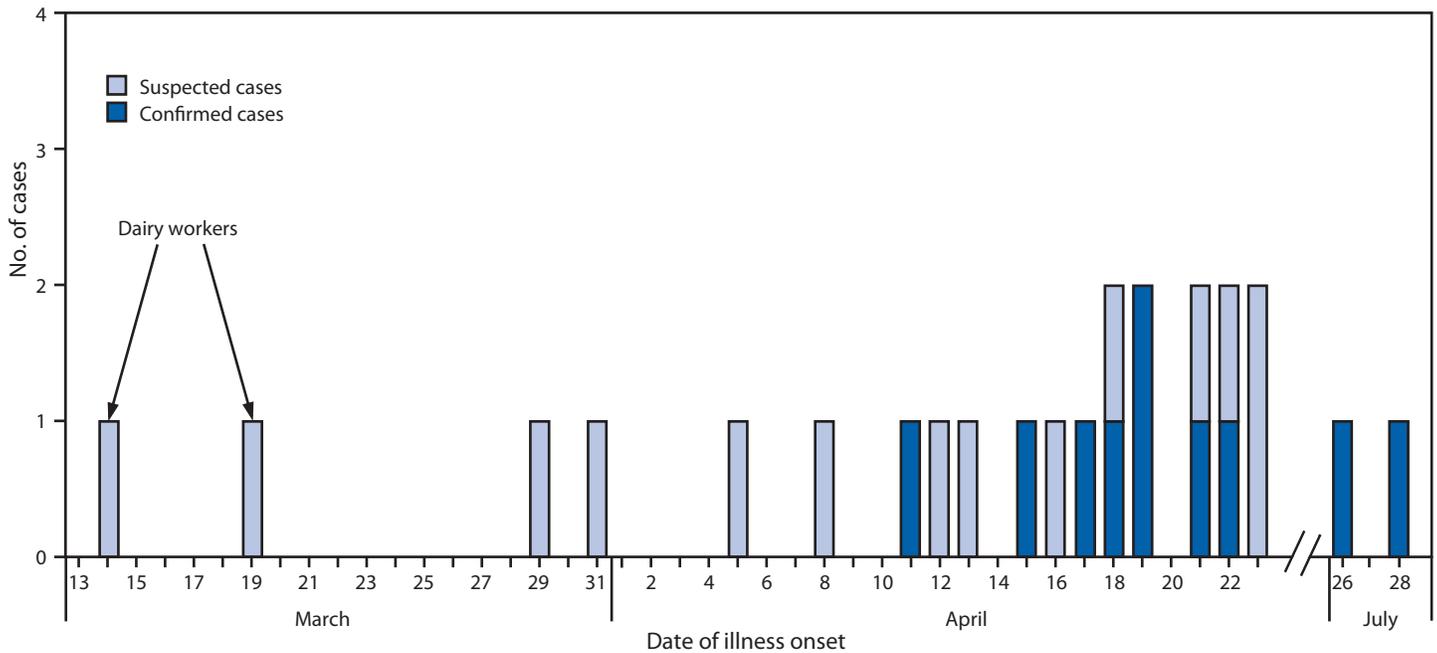
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FIGURE. Number of confirmed (n = 10) and suspected (n = 14) cases of Shiga toxin–producing *Escherichia coli* O111 infection associated with a correctional facility dairy, by date of illness onset — Colorado, March–July 2010



protective equipment (e.g., boots, gloves, and coveralls). Even when such clothing was worn, some workers would move through contaminated areas to access the main facility after changing their clothing, thus risking recontamination. Investigators concluded that numerous transmission pathways between the cattle and the workers existed, as well as the potential for transport of contaminated clothing and other items into the main facility.

### Control Measures

Recommendations for controlling the transmission of infectious diseases were developed, taking into consideration the correctional facility environment, space limitations, security, and substance-control restrictions (e.g., alcohol-based hand sanitizers often are prohibited in correctional settings because of the potential for misuse [1]). Recommendations included 1) ensuring consistent use of proper personal protective equipment; 2) providing training on transmission pathways, recognizing illness, and appropriate precautions when working with animals; 3) modifying work flow patterns and designating contaminated, transition, and clean areas; and 4) implementing hygiene practices (e.g., hand washing, consuming food only in designated areas, and not wearing contaminated clothing in the kitchen and main facility) to reduce the likelihood of disease transmission. Recommendations also were made regarding facility infrastructure, including eliminating the need to reenter the contaminated area before exiting the dairy,

providing additional hand washing and shower facilities, and providing separate laundry services for contaminated dairy clothing. The facility has reported no additional cases of STEC O111 since July 2010.

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### Editorial Note

This report describes the investigation of a prolonged outbreak of STEC O111 infections in a correctional facility. Although enteric pathogen outbreaks have been reported in correctional facilities, most have been attributed to foodborne and person-to-person transmission of bacterial and viral agents (2). Contact with animals in a correctional facility dairy resulting in human illness, or illness resulting from inmate exposure to environmental contamination transferred from a dairy have not been reported previously.

**What is already known on this topic?**

Shiga toxin–producing *Escherichia coli* (STEC) has been reported to have caused illness in correctional facilities. Typically, STEC O111 outbreaks are caused by ingestion of contaminated food or water. STEC O111 also can infect cattle and other ruminant animals, and human contact with infected animals or their environment can cause human illness.

**What is added by this report?**

An outbreak of STEC O111 at a correctional facility in Colorado was associated with an onsite dairy. Ten inmates had laboratory-confirmed infection, including eight with the same strain found in fecal specimens from dairy cows, suggesting that inmates employed at the dairy might have acquired STEC O111 infection on the job or transported contaminated items into contact with other inmates. Several conditions conducive to STEC O111 transmission were found, including poor adherence to standard food-service protocols and other infection control and hygiene practices.

**What are the implications for public health practice?**

Dairy operations are a source of STEC O111 infection. A correctional facility that operates a dairy should institute infection control practices and employee training programs that reduce the risk for acquiring and transmitting STEC.

Approximately 100 serotypes of STEC infection have been associated with human disease (3,4). Many reported illnesses are caused by ingestion of contaminated food or water; however, direct transmission of STEC from ruminant animals and their environment via the fecal-oral route can occur (4,5). Healthy cattle are the best-known animal reservoir for STEC (4,6,7). Persons with occupational exposure to cattle also might be at increased risk for STEC exposure (8).

During 2000–2009, STEC O157 was the most common type of STEC infection reported in Colorado (CDPHE, unpublished data, 2012). However, beginning in 2010, non-O157 STEC infections have been reported more frequently than STEC O157 infections, likely because more types of STEC can be identified as a result of advances in laboratory testing techniques. In 2010, a total of 25 STEC O111 infections in Colorado residents were reported to CDPHE, including the 10 confirmed cases described in this report.

Infection control is important to protect the health of incarcerated populations. The investigation described in this report found that, because of inadequate infection control policies and poor hygienic practices, inmates at the correctional facility were at increased risk for acquiring STEC O111. To prevent disease outbreaks in other correctional facilities, public health officials should consider environmental and occupational health factors and work with correctional authorities to ensure appropriate measures are implemented.

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## Outbreak of Cryptosporidiosis Associated with a Firefighting Response — Indiana and Michigan, June 2011

On June 20, 2011, the Indiana Department of Homeland Security notified the Indiana State Department of Health (ISDH) of an Indiana fire station that reported gastrointestinal illness among a substantial percentage of their workers, causing missed workdays and one hospitalization as a result of cryptosporidiosis. All ill firefighters had responded to a barn fire in Michigan, 15 miles from the Michigan-Indiana border on June 6; responding firefighters from Michigan also had become ill. ISDH immediately contacted the Michigan Department of Community Health (MDCH) concerning this outbreak. The investigation was led by MDCH in partnership with ISDH and the Michigan local health department (LHD). Among 34 firefighters who responded to the fire, 33 were interviewed, and 20 (61%) reported gastrointestinal illness  $\leq 12$  days after the fire. *Cryptosporidium parvum* was identified in human stool specimens, calf fecal samples, and a swimming pond. Based on these findings, the following public health recommendations were issued: 1) discontinue swimming in the pond, 2) practice thorough hygiene to reduce fecal contamination and fecal-oral exposures, and 3) decontaminate firefighting equipment properly. No additional primary or secondary cases associated with this exposure have been reported. The findings highlight a novel work-related disease exposure for firefighters and the need for public education regarding cryptosporidiosis prevention.

On June 6, 2011, a fire occurred in a barn housing approximately 240 week-old calves. A total of 34 firefighters responded from three Michigan fire stations and one Indiana fire station. Local hydrant water and onsite swimming pond water were used to extinguish the fire. Investigators hypothesized that exposures to calves or contaminated drinking water were potential infection sources. A retrospective cohort study was performed among responding firefighters to identify additional ill persons, assess possible risk factors, and guide implementation of control measures. A clinical case was defined as diarrhea (three or more loose stools in a 24-hour period) or gastrointestinal illness (four or more symptoms [e.g., abdominal cramps, nausea, vomiting, or fever]) in a person within 12 days after the fire response. Using CDC case definitions (1), a confirmed case was defined as a clinical case with *Cryptosporidium* organisms detected in stool, intestinal fluid, or tissue samples; *Cryptosporidium* antigens in stool or intestinal fluid; or *Cryptosporidium* nucleic acid in stool. A probable case was defined as a clinical case that lacked laboratory confirmation but was linked epidemiologically to a confirmed case.

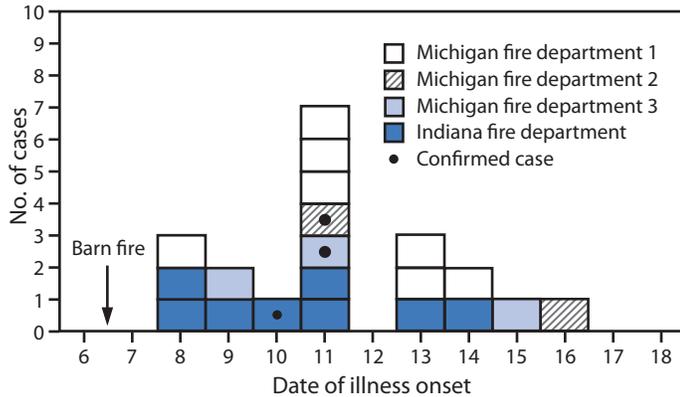
Beginning on June 22, MDCH and LHD interviewed firefighters using a standardized telephone questionnaire. Of 34 firefighters from all four fire stations, 33 (97%) completed the interview. Twenty (61%) of 33 study participants had illness meeting the probable (n = 17) or confirmed (n = 3) case definition (Figure). All patients were men; median age was 33 years (range: 21–58 years). Median time from exposure to illness onset was 5 days (range: 2–10 days). Common symptoms included diarrhea (n = 20 [100%]), abdominal cramps (n = 15 [75%]), fatigue (n = 11 [55%]), gas/bloating (n = 11 [55%]), nausea (n = 10 [50%]), and weight loss (n = 10 [50%]). Among 17 (85%) patients whose symptoms had resolved before interview, median illness duration was 4 days (range: 0.5–15 days). Nine (45%) ill firefighters sought medical care; six submitted stool specimens to their health-care providers. A previously healthy immunocompetent man was hospitalized and underwent a cholecystectomy for acalculous cholecystitis secondary to cryptosporidiosis. No deaths were reported.

In bivariate analysis, patients were statistically more likely than nonpatients to have had direct calf contact (e.g., carrying or leading calves from the barn) (relative risk = 2.88; 95% confidence interval = 1.04–12.76); patients also were more likely to have been from the Indiana fire station, had exposure to pond water through drinking or washing themselves, or drunk from a cooler filled with water from an undetermined source, but these associations did not reach statistical significance (Table 1).

The environmental investigation began on June 27. LHD requested stool specimens from symptomatic or recently recovered Michigan patients for confirmatory *Cryptosporidium* testing (Table 2). Five firefighters provided stool specimens, which were split into three sample tubes (formalin, polyvinyl alcohol, and Cary-Blair) and submitted to MDCH's Bureau of Laboratories and CDC. Twenty-five calf fecal specimens were collected from stalls and submitted to CDC for *Cryptosporidium* and *Giardia* testing. Water samples from the swimming pond and drinking well were submitted to CDC's Waterborne Disease Prevention Branch and the Michigan State University Environmental and Molecular Microbiology Laboratory for *Cryptosporidium* (both laboratories) and *Giardia* (Michigan State University only) testing. Additionally, a well water sample was submitted to a local water quality-testing laboratory for standard bacterial testing.

*Cryptosporidium* antigen was detected in one human stool specimen (from the hospitalized patient). *Cryptosporidium parvum*

**FIGURE. Number of probable and confirmed cryptosporidiosis cases\* among firefighters who responded to a barn fire, by date of illness onset and fire department — Indiana and Michigan, June 2011**



\* A clinical case was defined as diarrhea (three or more loose stools in a 24-hour period) or gastrointestinal illness (four or more symptoms [e.g., abdominal cramps, nausea, vomiting, or fever]) in a person within 12 days after the fire response. A confirmed case was defined as a clinical case with *Cryptosporidium* organisms detected in stool, intestinal fluid, or tissue samples; antigens in stool or intestinal fluid; or nucleic acid in stool. A probable case was defined as a clinical case that lacked positive laboratory confirmation but was linked epidemiologically to a confirmed case. Cases not marked as confirmed are probable cases.

#### What is already known on this topic?

Cryptosporidiosis has been implicated in outbreaks involving recreational water use, contaminated municipal water, and exposure to infected animals.

#### What is added by this report?

This is the first report of cryptosporidiosis being a potential occupational hazard for rural firefighters. Twenty of 34 firefighters responding to a fire in a barn housing week-old calves became ill with gastrointestinal symptoms; three of six tested were positive for *Cryptosporidium*. *Cryptosporidium parvum* was identified in samples from two of the firefighters, the calves, and a nearby swimming pond.

#### What are the implications for public health practice?

Firefighters, like other visitors to facilities housing livestock, are at potential risk for *Cryptosporidium* infection. This investigation highlights the continued importance of public education regarding cryptosporidiosis prevention and control, in particular the importance of minimizing contact with animal feces, practicing thorough hygiene, and not drinking from untreated water sources.

**TABLE 1. Number, percentage, and relative risk for cryptosporidiosis cases\* among firefighters (N = 33) responding to a barn fire, by reported exposure to calves, pond water, and cooler water — Indiana and Michigan, June 2011**

Exposure	Exposed			Not exposed			Relative risk	(95% CI)	p value
	Ill	Total	Ill (%)	Ill	Total	Ill (%)			
Calves at farm	18	25	(72)	2	8	(25)	2.88	(1.04–12.76)	0.023
Michigan fire department 1	7	11	(64)	13	22	(59)	1.08	(0.61–1.90)	1.000
Michigan fire department 2	2	7	(29)	18	26	(69)	0.41	(0.12–1.37)	0.084
Michigan fire department 3	3	6	(50)	17	27	(63)	0.79	(0.34–1.86)	0.659
Indiana fire department	8	9	(89)	12	24	(50)	1.78	(1.12–2.82)	0.056
Drinking cooler water†	13	18	(72)	5	12	(42)	1.73	(0.90–4.17)	0.100
Drinking bottled water‡	14	22	(64)	5	10	(50)	1.27	(0.68–2.92)	0.522
Drinking or other contact with pond water¶	5	9	(56)	1	6	(17)	3.33	(0.73–44.31)	0.182

Abbreviation: CI = confidence interval.

\* A case was either a probable or confirmed case of cryptosporidiosis. A clinical case was defined as diarrhea (three or more loose stools in a 24-hour period) or gastrointestinal illness (four or more symptoms [e.g., abdominal cramps, nausea, vomiting, or fever]) in a person within 12 days after the fire response. A confirmed case was defined as a clinical case with *Cryptosporidium* organisms detected in stool, intestinal fluid, or tissue samples; antigens in stool or intestinal fluid; or nucleic acid in stool. A probable case was defined as a clinical case that lacked positive laboratory confirmation but was linked epidemiologically to a confirmed case.

† Three persons did not answer the question about drinking water from the cooler. The source of the water used to fill the cooler could not be determined.

‡ One person did not answer.

¶ Only 15 of 33 persons interviewed were asked if they had contact (e.g., drinking or washing/cooling themselves) with the pond water.

was identified in two human stool specimens, 10 calf fecal samples, and pond water samples (Table 2). *Giardia* species were detected in pond water. Four calf fecal samples tested positive for *Giardia duodenalis*. No human specimens tested positive for *Giardia*. Although well water tested negative for *Cryptosporidium* and *Giardia*, LHD testing revealed that well water had high bacterial (non-*Escherichia coli*) concentrations and was unsafe for drinking.

LHD recommended that the farmer who owned the barn treat the well water with chlorine and, until the water was declared safe, boil water used for human consumption. On the basis of the presence of *Giardia* and *Cryptosporidium* in the swimming pond, difficulty of decontamination, and likely continued contamination with wildlife and livestock fecal matter, LHD recommended the farmer's family no longer use the pond for swimming. The family also was notified by LHD

TABLE 2. Laboratory analysis methods and results from an investigation of gastrointestinal illness among firefighters responding to a barn fire — Indiana and Michigan, June 2011

Type of sample	Laboratory	Method	Results
<b>Human samples</b>			
Stool from hospitalized patient	Local hospital	Antigen test	Positive for <i>Cryptosporidium</i> spp.
Stool in buffered 10% formalin (n = 5)	MDCH BOL	Modified Ziehl-Neelsen acid-fast stain Direct immunofluorescent stain	All negative for <i>Cryptosporidium</i> spp. All negative for <i>Cryptosporidium</i> spp.
Stool in Cary-Blair (n = 5)	CDC	PCR-RFLP for <i>Cryptosporidium</i> spp. Nested PCR for <i>Giardia</i> spp.	Two positive for <i>C. parvum</i> All negative for <i>Giardia</i> spp.
<b>Calf samples</b>			
Calf feces in preservative-free tubes (n = 25)	CDC	PCR-RFLP for <i>Cryptosporidium</i> PCR-RFLP for <i>Giardia</i>	10 positive for <i>C. parvum</i> ; one subtyped as IIaA16G2R2 Four positive for <i>G. duodenalis</i> assemblage A*
<b>Water samples</b>			
Pond water (one 20L sample to each laboratory; two total)	CDC	UF, fluorescence microscopy and RT-PCR	Positive for <i>C. parvum</i>
	MSU	EPA Method 1623	Positive for <i>Cryptosporidium</i> spp. Positive for <i>Giardia</i> spp.
Well water (one 20L sample to each laboratory; two total)	CDC	UF, fluorescence microscopy and RT-PCR	Negative for <i>Cryptosporidium</i> spp.
	MSU	EPA Method 1623	Negative for <i>Cryptosporidium</i> spp. Negative for <i>Giardia</i> spp.
Well water (estimated 0.2 L; n = 1)	Local lab	Bacterial testing	Positive for high concentrations of non- <i>Escherichia coli</i> bacteria

**Abbreviations:** MDCH BOL = Michigan Department of Community Health Bureau of Laboratories; MSU = Michigan State University Environmental and Molecular Microbiology Laboratory; PCR = polymerase chain reaction; PCR-RFLP = polymerase chain reaction restriction fragment length polymorphism; RT-PCR = real-time polymerase chain reaction; UF = ultrafiltration; EPA Method 1623 = U.S. Environmental Protection Agency Method 1623: *Cryptosporidium* and *Giardia* in water by filtration/immunomagnetic separation/immunofluorescence assay.

\* One calf fecal sample was positive for both *Cryptosporidium parvum* and *Giardia duodenalis*.

and MDCH of the presence of *Cryptosporidium* and *Giardia* in their calf population. Practicing thorough hygiene to reduce fecal contamination and fecal-oral exposures was recommended to the family and firefighters. Furthermore, recommendations were provided to decontaminate firefighter tanker trucks, clothing, and other equipment to prevent further exposure. No secondary cases were identified through firefighter interviews or state disease surveillance system reports.

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#### Editorial Note

The cryptosporidiosis outbreak described in this report involved 20 firefighters who responded to a fire in a barn housing preweaned calves. *Cryptosporidium parvum*, the protozoan isolated in this outbreak, can infect humans and ruminants and is more prevalent among preweaned calves than older calves (2). *Cryptosporidium* previously has been implicated in gastrointestinal illness outbreaks associated with recreational waterparks, contaminated municipal water sources, and exposure to young livestock (1,3). This is the first reported occupational exposure of firefighters to *Cryptosporidium* species.

*Cryptosporidium* was detected in the stool of three of six patients tested; two specimens were identified as containing *C. parvum*, and one was identified only as positive for *Cryptosporidium* spp. *C. parvum* also was detected in swimming pond water and calf fecal samples. Failure to detect *Cryptosporidium* in some infected patients is typical; the parasite is shed intermittently, and often only one stool specimen is collected per patient. Health-care providers do not request

*Cryptosporidium* testing regularly, and routine laboratory testing of stool specimens often does not include *Cryptosporidium* (1). The actual number of infected firefighters might have been larger than reported because healthy persons infected with *Cryptosporidium* frequently are asymptomatic and thus they would not have met the case definition. Symptoms typically are self-limiting and can include watery diarrhea, abdominal cramps, low-grade fever, nausea, vomiting, and weight loss (1,4). In this outbreak, the immunocompetent hospitalized patient who experienced cholecystitis likely received an excess of the infectious dose of *Cryptosporidium*, having fallen into a manure pit while rescuing calves.

Direct contact with calves was linked epidemiologically to illness. Among 20 ill persons, only two did not report direct calf contact. These two patients had both washed themselves at the farm using water that might have been contaminated with *Cryptosporidium* oocysts. Only 15 of 33 firefighters were asked about pond water exposure because that question was added to the interview tool after interviews had begun. Five of nine firefighters who reported pond water exposure became ill. Although other gastrointestinal pathogens might have contributed to the symptoms experienced by some of the firefighters, the fact that *Cryptosporidium* was found in stool specimens from three of six firefighters tested suggests that *Cryptosporidium* was the primary cause of the outbreak.

General prevention and control measures for *Cryptosporidium* include 1) practicing proper hygiene (e.g., thorough hand washing, not swimming while experiencing diarrhea, and minimizing contact with animal feces); 2) treating or avoiding contaminated water (e.g., not swallowing water while swimming and not drinking untreated water); 3) exercising caution while traveling; and 4) avoiding fecal exposure during sexual activity (1,4). *Cryptosporidium* is a chlorine-tolerant organism and is not inactivated readily by alcohol-based hand sanitizers.

Although occupationally acquired cryptosporidiosis has been reported among veterinary personnel (5,6), this is the first report of cryptosporidiosis transmitted during a firefighting response. To prevent similar outbreaks, adequate drinking water during firefighting responses and decontamination of firefighting equipment are recommended. Firefighters should only consume treated or bottled water, or sports drinks. Firefighting equipment and clothing should be decontaminated at the

scene whenever possible, especially if grossly contaminated with feces, to reduce transmission of *Cryptosporidium*, *Giardia*, and other zoonotic enteric pathogens (e.g., *E. coli*, *Salmonella*, and *Campylobacter*). Clothing contaminated with feces should be machine-washed and heat-dried on the highest clothes dryer heat setting for 30 minutes whenever possible (7); all other non-machine-washable items and equipment should be cleaned with soap and water to remove gross fecal contamination, air-dried, and left in the sun for at least 4 hours after drying. For equipment that cannot be cleaned with soap and water or equipment that contacts the mouth (e.g., respirator pieces), soaking in 3% hydrogen peroxide solution for 20 minutes is recommended after consulting manufacturer guidelines (7).

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## Vital Signs: Preventing *Clostridium difficile* Infections

On March 6, 2012, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

### Abstract

**Background:** *Clostridium difficile* infection (CDI) is a common and sometimes fatal health-care–associated infection; the incidence, deaths, and excess health-care costs resulting from CDIs in hospitalized patients are all at historic highs. Meanwhile, the contribution of nonhospital health-care exposures to the overall burden of CDI, and the ability of programs to prevent CDIs by implementing CDC recommendations across a range of hospitals, have not been demonstrated previously.

**Methods:** Population-based data from the Emerging Infections Program were analyzed by location and antecedent health-care exposures. Present-on-admission and hospital-onset, laboratory-identified CDIs reported to the National Healthcare Safety Network (NHSN) were analyzed. Rates of hospital-onset CDIs were compared between two 8-month periods near the beginning and end of three CDI prevention programs that focused primarily on measures to prevent intrahospital transmission of *C. difficile* in three states (Illinois, Massachusetts, and New York).

**Results:** Among CDIs identified in Emerging Infections Program data in 2010, 94% were associated with receiving health care; of these, 75% had onset among persons not currently hospitalized, including recently discharged patients, outpatients, and nursing home residents. Among CDIs reported to NHSN in 2010, 52% were already present on hospital admission, although they were largely health-care related. The pooled CDI rate declined 20% among 71 hospitals participating in the CDI prevention programs.

**Conclusions:** Nearly all CDIs are related to various health-care settings where predisposing antibiotics are prescribed and *C. difficile* transmission occurs. Hospital-onset CDIs were prevented through an emphasis on infection control.

**Implications for Public Health:** More needs to be done to prevent CDIs; major reductions will require antibiotic stewardship along with infection control applied to nursing homes and ambulatory-care settings as well as hospitals. State health departments and partner organizations have shown leadership in preventing CDIs in hospitals and can prevent more CDIs by extending their programs to cover other health-care settings.

### Introduction

*Clostridium difficile* is an anaerobic, spore-forming bacillus that causes pseudomembranous colitis, manifesting as diarrhea that often recurs and can progress to toxic megacolon, sepsis, and death. Infection is spread by the fecal-oral route; spores, the infective form, can persist on fomites and environmental surfaces for months. *Clostridium difficile* infection (CDI) often occurs in patients in health-care settings, where antibiotics are prescribed and symptomatic patients, an important source for transmission, are concentrated. From 2000 to 2009, the number of hospitalized patients with any CDI discharge diagnoses more than doubled, from approximately 139,000 to 336,600, and the number with a primary CDI diagnosis more than tripled, from 33,000 to 111,000 (1). Although the incidence of other health-care–associated infections has declined (2), CDIs have increased and only recently plateaued (1). Evidence-based guidelines for the prevention of CDIs in hospitals have been published (3). However, because the evidence for many

of these recommendations is weak (4) the degree to which they can prevent CDIs effectively across a range of hospitals is unknown, as is the relative burden of CDIs in nonhospital and hospital health-care settings.

### Methods

In this investigation, three data sources were used to identify health-care exposures for CDIs, determine the proportion of CDIs occurring outside hospital settings, and assess whether prevention programs can effectively reduce CDIs. CDC's Emerging Infections Program conducted active, population-based surveillance for CDIs from eight diverse geographic areas in 2010 (5). Program surveillance coordinators received laboratory reports of positive stool *C. difficile* tests from residents of catchment areas. Cases were defined by a positive *C. difficile* test in a person without a positive test during the previous 8 weeks (repeat positive tests during this period suggest recurrence) (6). Medical records were reviewed to confirm the presence of

symptoms consistent with CDI and to record all health-care exposures during the 12 weeks preceding specimen collection (i.e., minimum duration of antibiotic-induced susceptibility to CDI). CDIs were classified by the patient's location at the time of stool specimen collection and divided into three groups: 1) hospital-onset CDI, occurring in a hospitalized patient with a positive stool specimen collected more than 3 days after admission; 2) nursing home–onset CDI, occurring in a nursing home resident with a positive stool specimen collected at any time during their stay; and 3) community-onset CDI, occurring in an outpatient or an inpatient of any health-care facility with a positive stool specimen collected within 3 days (the median incubation period of *C. difficile*) after admission. Community-onset CDI cases were subcategorized based on previous health-care exposures during the 12 weeks preceding specimen collection; previous inpatient exposures took precedence over outpatient exposures when classifying cases.

A second data source was the National Healthcare Safety Network (NHSN) Multidrug-Resistant Organism and *Clostridium difficile* Infection module for laboratory-identified (LabID)-CDI events, which became available in March 2009 (7). Incident LabID-CDI events in NHSN are based on positive *C. difficile* test results from hospital patients who did not have a previous positive test result reported within that facility during the preceding 8 weeks. LabID-CDI events present on admission were defined by a positive stool specimen collected within the first 3 days of admission; a subset was delineated further if patients were discharged from the reporting hospital in the preceding 4 weeks, during which time previous hospitalization is most likely to influence the risk for CDI (6,7). Rates of hospital-onset CDI cases were calculated per 10,000 patient-days.

The third set of data included early results from three state-led programs (Illinois, Massachusetts, and New York) similar to other programs in which hospitals collaborated with one another to prevent health-care–associated infections (8) (in this case, hospital-onset CDIs). The three programs included a total of 71 hospitals focused on preventing CDIs during three different periods ranging from 19 to 22 months.\* Although the systems for data collection and behavioral change strategies

\*The Illinois prevention program, led by the Department of Public Health and the Iowa Foundation for Medical Care–Illinois (a health-care quality improvement organization headquartered in West Des Moines, Iowa), included 11 hospitals with complete data from the beginning of March 2010 through October 2011. The Massachusetts program, led by the Massachusetts Coalition for the Prevention of Medical Errors and the Massachusetts Department of Public Health, included 27 hospitals with complete data from January 2010 through September 2011. The New York program, led by the Greater New York Hospital Association and the United Hospital Fund in collaboration with the New York State Department of Health, included 33 hospitals with complete data from March 2008 through December 2009.

varied among programs, all three used CDC surveillance definitions (6) and focused primarily on infection control interventions to prevent transmission of *C. difficile*; the Massachusetts program did include antibiotic stewardship as a minor component. Using a negative binomial model, rates of hospital-onset CDI from hospitals participating in the three programs were compared between two same-calendar-month, 8-month periods (to control for seasonal variation in rates), one earlier and the other later in the conduct of each program.

## Results

The Emerging Infections Program population under surveillance included persons in the catchment areas of 111 acute-care hospitals and 310 nursing homes. A total of 10,342 CDIs were identified; 44% of patients were aged <65 years. CDIs were classified by inpatient or outpatient status at time of stool collection and type/location of exposures (Figure 1). Overall, 94% of all CDIs were related to various precedent and concurrent health-care exposures; of these, 75% had their onset outside of hospitals. In addition, some cases occurred in patients who were exposed to multiple settings. For example, 20% of hospital-onset CDIs occurred in recent (i.e., <12 weeks) residents of a nursing home, and 67% of nursing home–onset CDI cases occurred in patients recently discharged from an acute-care hospital.

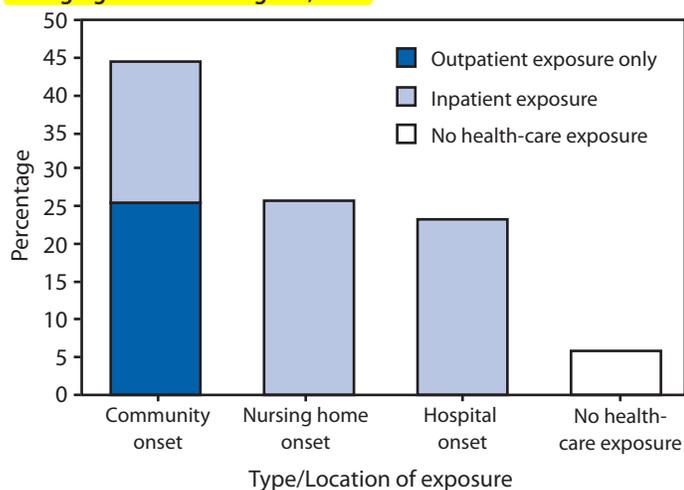
A total of 711 acute care hospitals in 28 states conducted facility-wide inpatient LabID-CDI event reporting to NHSN in 2010 (Table 1). A total of 42,157 incident LabID-CDI events were reported (Figure 2). Overall, 52% of LabID-CDI events were already present on admission to hospitals. The pooled rate of hospital-onset CDI was 7.4 per 10,000 patient-days, with a median hospital rate of 5.4 per 10,000 and an interquartile range of 6.2.

The pooled hospital-onset CDI rate across the three prevention programs declined 20%, from 9.3 per 10,000 patient-days during the early comparison period to 7.5 during the later comparison period (rate ratio: 0.80) (Table 2).

## Conclusions and Comment

The incidence, mortality, and medical care costs of CDIs have reached historic highs (1,3,9,10). The estimated number of deaths attributed to CDI, based on multiple cause-of-death mortality data, increased from 3,000 deaths per year during 1999–2000 to 14,000 during 2006–2007, with more than 90% of deaths in persons aged ≥65 years (10). Recent excess health-care costs of hospital-onset CDI are estimated to be \$5,042–\$7,179 per case with a national annual estimate (limited to the subset of hospital-onset CDIs only) of \$897 million to \$1.3 billion (11). Much of the recent increase in the incidence and mortality of CDIs is attributed to the emergence

**FIGURE 1. Percentage of *Clostridium difficile* infection (CDI) cases (N = 10,342), by inpatient or outpatient status at time of stool collection and type/location of exposures\* — United States, Emerging Infections Program, 2010**



\* CDIs were classified by the patient's location at the time of stool specimen collection and divided into three groups: 1) hospital-onset CDI, occurring in a hospitalized patient with a positive stool specimen collected more than 3 days after admission; 2) nursing home-onset CDI, occurring in a nursing home resident with a positive stool specimen collected at any time during their stay; and 3) community-onset CDI, occurring in an outpatient or an inpatient of any health-care facility with a positive stool specimen collected within 3 days (the median incubation period of *C. difficile*) after admission. Community-onset CDI cases were subcategorized based on previous health-care exposures during the 12 weeks preceding specimen collection; previous inpatient exposures took precedence over outpatient exposures when classifying cases.

and spread of a hypervirulent, resistant strain of *C. difficile* that produces greater quantities of principal virulence toxins A and B and has additional factors enhancing its virulence (9,12). Nonetheless, many of these infections can be prevented, as demonstrated by the 20% reduction in incidence of hospital-onset CDI among three state prevention programs conducted over approximately 21 months. In England, where a national campaign to publicly report and prevent CDIs was implemented in 2007 through an emphasis on antibiotic stewardship as well as infection control (13), pooled hospital-onset CDI rates declined 56% during a 3-year period (2008–2011) (14). In the United States, the National Action Plan for Prevention of HAIs has targeted a 30% reduction of CDIs in acute-care hospitals by 2015 (15).

Principal recommendations to prevent CDI include improving antibiotic use, early and reliable detection of CDI, isolation of symptomatic patients, and reducing *C. difficile* contamination of health-care environmental surfaces (3). Good antibiotic stewardship is an important aspect of quality health care that prevents CDI. Antibiotic use increases the risk for developing CDI by seven- to 10-fold while the patient is taking the antibiotic and for 1 month after discontinuation, and by approximately three-fold for the subsequent 2 months

**TABLE 1. Number and percentage of hospitals reporting laboratory-identified *Clostridium difficile* infections, by selected characteristics — United States, National Healthcare Safety Network, 2010**

Characteristic	No.	(%)
<b>Total</b>	<b>711</b>	<b>(100)</b>
<b>Bed size</b>		
≤200	429	(61)
201–500	232	(33)
501–1000	46	(6)
>1000	1	(<0.5)
<b>Medical school affiliation</b>	226	(31)
<b>Primary diagnostic assay used</b>		
Enzyme immunoassay for toxin A and/or B	364	(51)
Nucleic acid amplification test	238	(33)
Other	88	(12)
Missing data	21	(3)

(16). CDC provides tools for facilities to develop antibiotic stewardship programs.<sup>†</sup>

To prevent transmission of *C. difficile*, early detection and isolation of patients with CDI is essential. Nucleic acid amplification tests can be as much as twice as sensitive as enzyme immunoassays and can detect CDI more accurately when used in populations with an appropriate pretest probability (i.e., patients with more than three unformed stools in a 24-hour period without an identified cause) (3,17). Because of their increased sensitivity, nucleic acid amplification tests will yield higher hospital-onset CDI rates. Currently, 35% of NHSN hospitals are using nucleic acid amplification tests (Table 1); risk adjustment will be necessary to compare rates accurately where diagnostic testing practices vary.

*C. difficile* frequently is transmitted between patients via hands of health-care personnel transiently contaminated after contact with symptomatic patients or their surrounding environment. Glove use, with strict adherence to changing between patient contacts, is the best proven method for preventing hand contamination with *C. difficile* from symptomatic patients (3,4). Health-care environmental services have a key role in reducing contamination that can directly transmit to patients or contaminate the hands of health-care personnel.<sup>§</sup> Because *C. difficile* spores resist killing by usual hospital disinfectants, an Environmental Protection Agency–registered disinfectant with a *C. difficile* sporicidal label claim<sup>¶</sup> should be used to augment thorough physical cleaning.

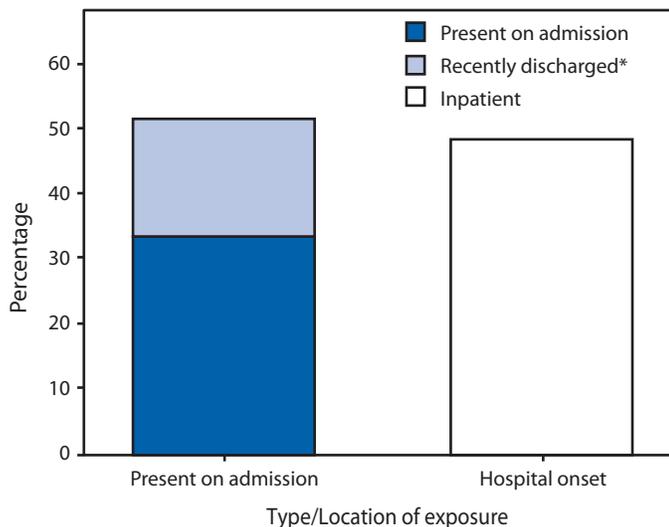
These findings emphasize how the risk for CDI from antibiotic exposure and transmission moves with patients across

<sup>†</sup> Additional information available at <http://www.cdc.gov/getsmart/healthcare/improve-efforts/clinicians.html>.

<sup>§</sup> Additional information available at <http://www.cdc.gov/hai/toolkits/evaluating-environmental-cleaning.html>.

<sup>¶</sup> Additional information available at <http://www.epa.gov/oppad001/cdif-guidance.html>.

**FIGURE 2. Percentage of laboratory-identified *Clostridium difficile* infections (N = 42,157), by hospitalization status at time of stool collection and type/location of exposure — United States, National Healthcare Safety Network, 2010**



\* From reporting hospital during the preceding 4 weeks.

multiple health-care settings, leading to the interdependence of health-care settings in a region to lower their CDI rates. Because antibiotics disrupt the normally protective bacterial populations of the lower intestine in a manner that increases risk for CDI for 3 or more months, antibiotics received in one setting often predispose a patient to develop CDI in another. In contrast, because the incubation period is a median of only 2–3 days (3), acquisition of *C. difficile* is overall more likely to have occurred in the setting where symptoms have their onset and CDI is diagnosed. Meanwhile, CDIs present on hospital admission are most often related to the care delivered in other inpatient or outpatient facilities; because they are an important source for intrahospital transmission, CDIs present on admission are a risk factor for higher hospital-onset CDI rates (18).

The findings of this report are subject to at least six limitations. First, data on antibiotic exposure, which are important for targeting prevention efforts, were not available. An NHSN

option designed to address this problem is undergoing piloting with electronic health record vendors.\*\* Second, data on potential underlying temporal trends in prevention program hospitals were not available. Third, the various methods used to implement prevention strategies in the prevention hospitals were not described (e.g., staff training, assessment and feedback of compliance with isolation precautions, or adequacy of environmental cleaning). Although the pooled rate toward the end of these programs (7.5 per 10,000 patient-days) was similar to the rate across all NHSN hospitals in 2010 (7.4), the three programs started and ended at different rates, suggesting that locally tailored approaches to prevention might be beneficial. Fourth, the impact of ongoing CDI prevention initiatives under way during the early phase of evaluation also was not assessed. Fifth, the potential impact of any shifts in test sensitivity between different methods used (e.g., nucleic acid amplification versus enzyme immunoassay) was not assessed. Finally, in both the Emerging Infections Program and NHSN, the setting of onset was based on where the patient was located at the time of stool specimen collection; therefore, there might have been misclassification of cases if a marked delay occurred between onset of symptoms and stool specimen collection.

Because nearly 75% of all CDIs related to U.S. health care have their onset outside of hospitals, more needs to be done to prevent CDIs across all health-care settings. For its part, CDC is working to improve NHSN LabID-CDI event reporting for nursing homes as well as hospitals. Clinical document architecture specifications are available for electronic health record system vendors to use in enabling their systems to serve as electronic data sources for LabID-CDI event reporting to NHSN.†† The option to report electronically will take on greater importance as increasing numbers of hospitals are required to report LabID-CDI events to NHSN. Currently, six states (California, Illinois, New York, Oregon, Tennessee, and Utah) mandate public reporting of facility-wide LabID-CDI

\*\* Additional information available at [http://www.cdc.gov/nhsn/psc\\_ma.html](http://www.cdc.gov/nhsn/psc_ma.html).

†† Additional information available at [http://www.cdc.gov/nhsn/cda\\_esurveillance.html](http://www.cdc.gov/nhsn/cda_esurveillance.html).

**TABLE 2. Reductions in hospital-onset *Clostridium difficile* infection rates — Illinois, Massachusetts, and New York, May 2008–October 2011\***

State	Period	Patient days	Rate	(95% CI)*	Rate ratio	(95% CI)
Illinois	Mar 2010–Oct 2010	637,135	11.6	(10.3–13.0)	0.84	(0.70–1.00)
	Mar 2011–Oct 2011	578,121	9.9	(8.4–11.4)		
Massachusetts	Feb 2010–Sep 2010	823,939	7.6	(6.7–8.5)	0.75	(0.63–0.90)
	Feb 2011–Sep 2011	830,023	5.7	(4.9–6.5)		
New York	May 2008–Dec 2008	2,607,464	9.2	(8.5–9.9)	0.81	(0.73–0.89)
	May 2009–Dec 2009	2,575,514	7.5	(7.0–8.0)		
Overall	Pooled baseline	4,068,538	9.3	(8.7–9.8)	0.80	(0.73–0.86)
	Pooled post	3,983,658	7.5	(7.0–7.9)		

Abbreviation: CI = confidence interval.

\* Study periods vary by state.

## Key Points

- *Clostridium difficile* infections (CDIs) increased several fold in the past decade and became more serious, but are nonetheless preventable.
- Of all CDIs, 94% are related to health-care exposures and are potentially preventable by reducing unnecessary antibiotic use and interrupting patient-to-patient transmission of *C. difficile*.
- CDIs were reduced by 20% over approximately 21 months by 71 hospitals participating in prevention programs focused primarily on infection control strategies (e.g. early reliable detection, isolation, and enhanced environmental cleaning).
- Of all health-care-associated CDIs, 75% have their onset outside of hospitals, and 52% of the CDIs treated in hospitals are present on admission; these infections are a potential source for intrahospital transmission.
- More must be done to prevent CDIs by various stakeholders working together to expand prevention strategies, including a greater focus on antibiotic stewardship and extending prevention strategies in settings across the continuum of health-care delivery.

events. Beginning in 2013, all hospitals participating in the Centers for Medicare and Medicaid Services' Inpatient Prospective Payment System Quality Reporting Program will be required to report facility-wide LabID-CDI events using NHSN to qualify for their 2015 annual payment update; public reporting of hospital rates will begin in 2014 at the Hospital Compare website (19).

Clinicians and other health-care providers, as well as inpatient and outpatient health-care facilities, state and federal public health officials (e.g., the Partnership for Patients), and partner patient safety organizations, could benefit from increased collaboration in preventing CDIs. Such collaborations could broaden and enhance the use of prevention strategies and do so across the entire spectrum of U.S. health-care delivery. State health departments, working with regional quality improvement organizations, hospital associations, and other nongovernmental patient safety partners, are positioned uniquely to work across these multiple settings.<sup>§§</sup> Given the emphasis of current health-care reform efforts to improve patient safety while reducing costs, now is an opportune time to begin to eliminate health-care-associated CDIs.

<sup>§§</sup> Additional information available at <http://www.cdc.gov/hai/stateplans/haistateplans-map.html>.

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## Announcements

### Brain Injury Awareness Month — March 2012

This year, in recognition of Brain Injury Awareness Month, CDC encourages parents, athletes, coaches, athletic trainers, and school professionals to take action to reduce the risk for traumatic brain injury (TBI) while participating in sports. An estimated 1.7 million TBI-related deaths, hospitalizations, and emergency department visits occur in the United States each year (1). Most TBIs are concussions caused by the head hitting an object, a moving object striking the head, or by a sudden movement of the body causing the head to move violently. When the head moves violently, the brain bounces back and forth within the skull, damaging brain cells and occasionally causing unconsciousness.

Although most persons who sustain a TBI (including concussion) recover quickly and fully, some have symptoms for days or even weeks. In more serious cases, a person might have headaches, have trouble concentrating, be irritable, be unable to remember things, or have some other symptom of brain injury for months after the initial injury.

During the past decade, emergency department visits for sports and recreation-related TBIs (including concussions) increased 60% among children and adolescents. Bicycling, football, playground activities, basketball, and soccer were the most common activities involved (2). This increase might be the result of a growing public awareness of the advisability of seeking medical attention when a suspected TBI occurs.

CDC is developing guidance for health-care professionals on the diagnosis and management of mild TBI in children. Information about how to prevent, recognize, and respond to concussions is available at <http://www.cdc.gov/concussion>.

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### Ground Water Awareness Week — March 11–17, 2012

CDC is collaborating with the National Ground Water Association to highlight National Ground Water Awareness Week, March 11–17, 2012. Water is essential for life. However, many persons are not aware that much of the water they use flows from below ground to the surface, where it is used by public water systems and private wells. The National Ground Water Association uses this week to stress ground water's importance to the health and well-being of humans and the environment (1).

The majority of public water systems in the United States use ground water as their primary source, providing drinking water to almost 90 million persons (2). An additional 15 million U.S. homes use private wells, which also rely on ground water (3).

Usually, ground water in the United States is safe to use. However, ground water sources can be contaminated naturally or as a result of imperfect agricultural, manufacturing, or sanitary practices. The presence of contaminants such as pesticides, factory waste, and sewage can lead to acute and chronic illness (4).

The U.S. Environmental Protection Agency has worked with individual states to develop new regulations to provide increased protection against microbial pathogens in public water systems that use ground water sources (5). Private ground water wells (serving fewer than 25 persons) might not be regulated but nonetheless must be properly maintained by well owners to ensure that the water remains free from harmful chemicals and pathogens.\* Resources are available from state and local health departments to help homeowners protect their ground water.†

\* Additional information available at <http://www.cdc.gov/healthywater/drinking/private/wells/index.html>

† Additional information available at <http://www.apha.org/about/public+health+links/linksstateandlocalhealthdepartments.htm>.

#### References

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2. US Environmental Protection Agency. Factoids: drinking water and ground water statistics for 2009. Washington, DC: US Environmental Protection Agency, Office of Water; 2009. Available at [http://www.epa.gov/ogwdw/databases/pdfs/data\\_factoids\\_2009.pdf](http://www.epa.gov/ogwdw/databases/pdfs/data_factoids_2009.pdf). Accessed March 7, 2012.
3. US Census Bureau. Current housing reports: American housing survey for the United States: 2009. Washington, DC: US Government Printing Office; 2011. Available at <http://www.census.gov/prod/2011pubs/h150-09.pdf>. Accessed March 7, 2012.
4. US Environmental Protection Agency. Drinking water contaminants. Washington, DC: US Environmental Protection Agency; 2012. Available at <http://www.epa.gov/safewater/contaminants/index.html>. Accessed March 7, 2012.
5. US Environmental Protection Agency. Ground water rule (GWR). Washington, DC: US Environmental Protection Agency; 2012. Available at <http://water.epa.gov/lawsregs/rulesregs/sdwa/gwr/index.cfm>. Accessed March 7, 2012.

## Announcements

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### Introduction to Public Health Surveillance Course

CDC and Rollins School of Public Health at Emory University will cosponsor the course, Introduction to Public Health Surveillance, May 7–11, 2012, at Emory University in Atlanta, Georgia. The course is designed for state and local public health professionals.

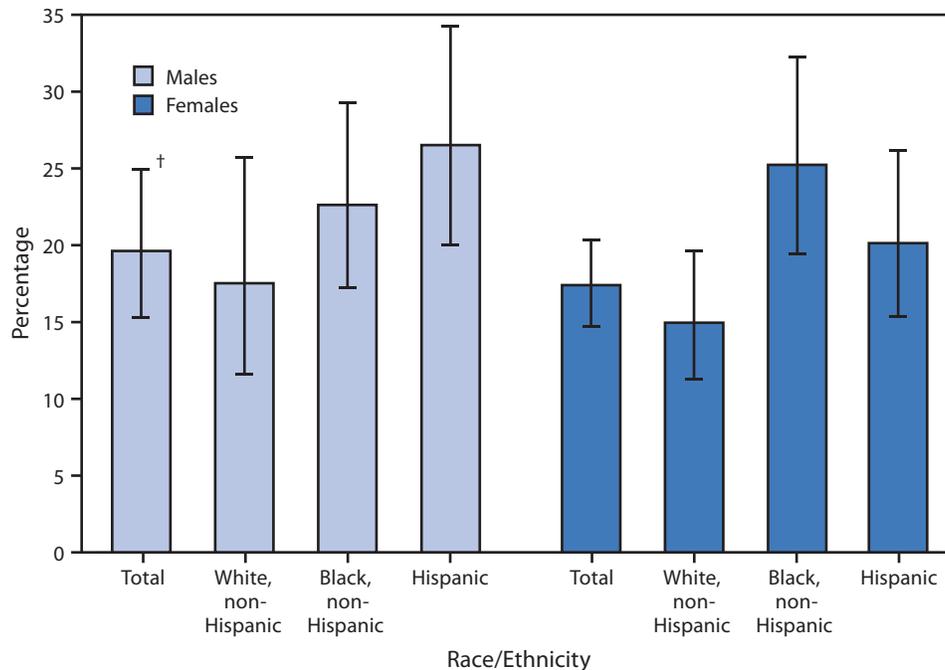
The course will provide theoretical and practical knowledge to design, implement, and evaluate effective public health surveillance programs. Topics scheduled for presentation include an overview and history of surveillance systems; planning considerations; sources and collection of data; analysis, interpretation, and communication of data; surveillance systems technology; ethics and legalities; state and local concerns; and future considerations. Tuition is charged.

Additional information and applications are available by mail (Emory University, Hubert Department of Global Health [Attn: Pia Valeriano], 1518 Clifton Rd. NE, CNR Bldg., Rm. 7038, Atlanta, GA 30322); telephone (404-727-3485); fax (404-727-4590); Internet (<http://www.sph.emory.edu/epicourses>); or e-mail ([pvaleri@emory.edu](mailto:pvaleri@emory.edu)).

## QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Prevalence of Obesity\* Among Persons Aged 12–19 Years, by Race/Ethnicity and Sex — National Health and Nutrition Examination Survey, United States, 2009–2010



\* Obesity defined as body mass index (weight [kg] / height [m]<sup>2</sup>)  $\geq$ 95th sex- and age-specific percentile from the 2000 CDC growth charts.

† 95% confidence interval.

During 2009–2010, 19.6% of males and 17.1% of females aged 12–19 years were obese. More than one quarter (26.5%) of Hispanic males were obese, compared with 22.6% of non-Hispanic black males and 17.5% of non-Hispanic white males. Prevalence of obesity was higher among non-Hispanic black females (24.8%) than among non-Hispanic white females (14.7%); 19.8% of Hispanic females were obese.

**Sources:** Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity in the United States, 2009–2010. NCHS data brief no. 82. Hyattsville, MD: National Center for Health Statistics; 2012.

Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999–2010. JAMA 2012;307:483–90.

National Health and Nutrition Examination Survey, 2009–2010. Available at <http://www.cdc.gov/nchs/nhanes.htm>.

## Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending March 3, 2012 (9th week)\*

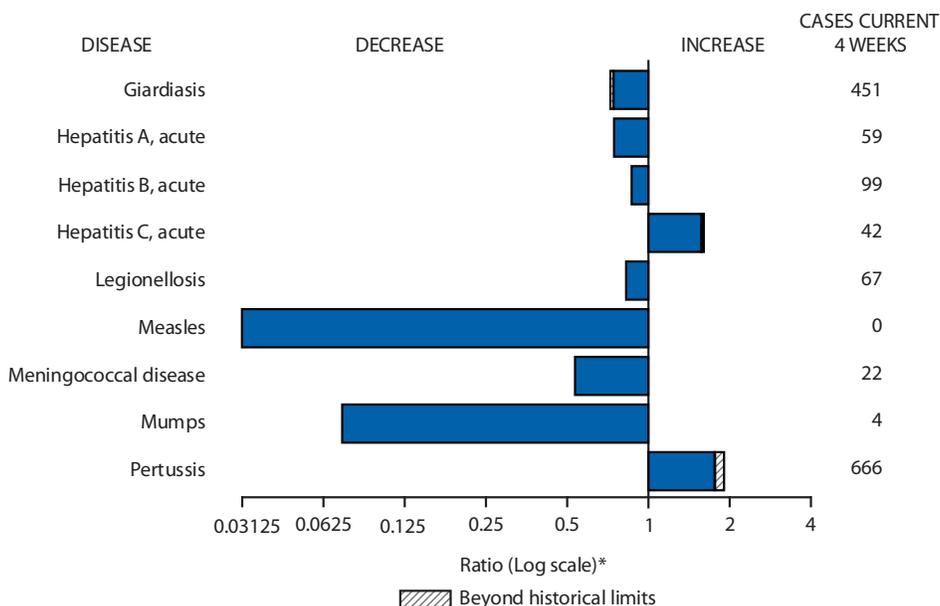
Disease	Current week	Cum 2012	5-year weekly average <sup>†</sup>	Total cases reported for previous years					States reporting cases during current week (No.)
				2011	2010	2009	2008	2007	
Anthrax	—	—	—	1	—	1	—	1	
Arboviral diseases <sup>§, ¶</sup> :									
California serogroup virus disease	—	—	0	134	75	55	62	55	
Eastern equine encephalitis virus disease	—	—	—	4	10	4	4	4	
Powassan virus disease	—	—	—	16	8	6	2	7	
St. Louis encephalitis virus disease	—	—	0	6	10	12	13	9	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	—	10	0	751	NN	NN	NN	NN	
Botulism, total	3	15	2	133	112	118	145	144	
foodborne	2	2	0	12	7	10	17	32	CA (2)
infant	—	11	2	90	80	83	109	85	
other (wound and unspecified)	1	2	0	31	25	25	19	27	CA (1)
Brucellosis	—	11	1	81	115	115	80	131	
Chancroid	—	4	1	28	24	28	25	23	
Cholera	—	—	0	31	13	10	5	7	
Cyclosporiasis <sup>§</sup>	—	5	1	153	179	141	139	93	
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	3	1	11	23	35	30	22	
nonsertotype b	—	27	5	115	200	236	244	199	
unknown serotype	2	39	4	251	223	178	163	180	OH (1), FL (1)
Hansen disease <sup>§</sup>	—	5	2	50	98	103	80	101	
Hantavirus pulmonary syndrome <sup>§</sup>	—	1	0	23	20	20	18	32	
Hemolytic uremic syndrome, postdiarrheal <sup>§</sup>	2	7	2	219	266	242	330	292	NY (1), FL (1)
Influenza-associated pediatric mortality <sup>§, ††</sup>	1	4	5	118	61	358	90	77	CA (1)
Listeriosis	3	61	9	837	821	851	759	808	PA (1), FL (1), CA (1)
Measles <sup>§§</sup>	—	13	2	216	63	71	140	43	
Meningococcal disease, invasive <sup>¶¶</sup> :									
A, C, Y, and W-135	1	15	10	196	280	301	330	325	NY (1)
serogroup B	—	6	5	121	135	174	188	167	
other serogroup	—	2	1	18	12	23	38	35	
unknown serogroup	4	67	12	391	406	482	616	550	WV (1), FL (2), WA (1)
Novel influenza A virus infections <sup>***</sup>	—	—	0	8	4	43,774	2	4	
Plague	—	—	—	2	2	8	3	7	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Polio virus Infection, nonparalytic <sup>§</sup>	—	—	—	—	—	—	—	—	
Psittacosis <sup>§</sup>	—	—	0	2	4	9	8	12	
Q fever, total <sup>§</sup>	—	9	2	118	131	113	120	171	
acute	—	6	1	93	106	93	106	—	
chronic	—	3	0	25	25	20	14	—	
Rabies, human	—	—	—	2	2	4	2	1	
Rubella <sup>†††</sup>	—	—	0	4	5	3	16	12	
Rubella, congenital syndrome	—	1	—	—	—	2	—	—	
SARS-CoV <sup>§</sup>	—	—	—	—	—	—	—	—	
Smallpox <sup>§</sup>	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome <sup>§</sup>	1	20	4	142	142	161	157	132	OH (1)
Syphilis, congenital (age <1 yr) <sup>§§§</sup>	—	4	8	288	377	423	431	430	
Tetanus	—	—	0	12	26	18	19	28	
Toxic-shock syndrome (staphylococcal) <sup>§</sup>	1	11	2	81	82	74	71	92	PA (1)
Trichinellosis	—	2	0	11	7	13	39	5	
Tularemia	1	1	0	140	124	93	123	137	NC (1)
Typhoid fever	2	34	8	376	467	397	449	434	NY (1), CA (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> <sup>§</sup>	1	5	1	66	91	78	63	37	FL (1)
Vancomycin-resistant <i>Staphylococcus aureus</i> <sup>§</sup>	—	—	—	—	2	1	—	2	
Vibriosis (noncholera <i>Vibrio</i> species infections) <sup>§</sup>	—	27	3	782	846	789	588	549	
Viral hemorrhagic fever <sup>¶¶¶</sup>	—	—	—	—	1	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

**TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending March 3, 2012 (9th week)\***

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.  
 \* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf).  
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/files/5yearweeklyaverage.pdf](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/5yearweeklyaverage.pdf).  
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/infdis.htm](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm).  
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.  
 \*\* Data for *H. influenzae* (all ages, all serotypes) are available in Table II.  
 †† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 2, 2011, five influenza-associated pediatric deaths occurring during the 2011-12 influenza season have been reported.  
 ‡‡ No measles cases were reported for the current week.  
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.  
 \*\*\* CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the eight cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts are provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).  
 ††† No rubella cases were reported for the current week.  
 §§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 ¶¶¶ There were no cases of viral hemorrhagic fever reported during the current week. See Table II for dengue hemorrhagic fever.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals March 3, 2012, with historical data**



\* No measles cases were reported for the current 4-week period yielding a ratio for week ----- of zero (0).  
 † Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

Notifiable Disease Data Team and 122 Cities Mortality Data Team	
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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	<i>Chlamydia trachomatis</i> infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	12,530	26,825	30,780	178,383	232,595	71	400	588	2,543	3,931	56	133	399	691	848
<b>New England</b>	499	898	1,593	5,252	6,058	—	0	1	—	—	—	6	22	30	46
Connecticut	—	240	869	—	481	N	0	0	N	N	—	1	9	5	10
Maine	53	59	101	520	524	N	0	0	N	N	—	1	4	2	6
Massachusetts	230	427	860	3,233	3,370	N	0	0	N	N	—	2	8	15	20
New Hampshire	—	58	90	289	548	—	0	1	—	—	—	1	5	3	6
Rhode Island	150	80	187	1,009	863	—	0	0	—	—	—	0	1	—	1
Vermont	66	27	62	201	272	N	0	0	N	N	—	1	5	5	3
<b>Mid. Atlantic</b>	2,150	3,172	4,034	25,101	28,367	—	0	0	—	—	5	15	44	72	114
New Jersey	167	539	898	3,960	4,145	N	0	0	N	N	—	1	4	1	9
New York (Upstate)	830	715	1,963	5,486	5,590	N	0	0	N	N	—	4	16	17	26
New York City	322	1,023	1,315	6,423	9,720	N	0	0	N	N	—	1	6	12	13
Pennsylvania	831	1,043	1,598	9,232	8,912	N	0	0	N	N	5	8	27	42	66
<b>E.N. Central</b>	1,022	4,211	4,684	26,589	39,156	—	1	5	9	5	14	33	148	159	183
Illinois	28	1,220	1,470	5,393	11,148	N	0	0	N	N	—	3	26	10	20
Indiana	187	564	731	4,045	5,314	N	0	0	N	N	—	2	14	—	28
Michigan	456	941	1,210	7,105	9,308	—	1	3	5	1	2	7	14	38	36
Ohio	161	1,028	1,180	6,661	9,187	—	0	2	4	4	11	11	95	79	57
Wisconsin	190	466	560	3,385	4,199	N	0	0	N	N	1	8	65	32	42
<b>W.N. Central</b>	94	1,501	1,818	3,385	13,189	—	0	2	—	—	4	15	85	59	99
Iowa	15	211	439	1,785	1,913	N	0	0	N	N	1	6	19	17	42
Kansas	—	208	281	114	1,737	N	0	0	N	N	—	0	11	4	—
Minnesota	—	318	404	—	2,997	—	0	0	—	—	—	0	0	—	—
Missouri	—	526	759	—	4,490	—	0	0	—	—	2	5	61	19	25
Nebraska	58	127	213	923	1,028	—	0	2	—	—	1	2	12	8	23
North Dakota	—	46	76	5	392	N	0	0	N	N	—	0	12	—	—
South Dakota	21	62	89	558	632	N	0	0	N	N	—	2	13	11	9
<b>S. Atlantic</b>	4,367	5,463	7,445	46,127	48,063	—	0	2	—	—	21	22	61	168	179
Delaware	94	85	182	679	733	—	0	0	—	—	—	0	4	6	2
District of Columbia	136	111	217	1,151	973	—	0	0	—	—	—	0	1	—	3
Florida	811	1,505	1,697	12,440	12,929	N	0	0	N	N	10	8	17	76	74
Georgia	742	1,099	1,563	8,857	7,625	N	0	0	N	N	4	5	12	35	44
Maryland	278	482	769	2,112	3,957	—	0	2	—	—	4	1	7	20	14
North Carolina	812	991	1,688	8,178	8,289	N	0	0	N	N	—	0	46	—	9
South Carolina	502	535	1,344	5,210	6,195	N	0	0	N	N	—	2	6	14	22
Virginia	885	662	1,778	6,632	6,594	N	0	0	N	N	3	2	8	16	11
West Virginia	107	81	146	868	768	N	0	0	N	N	—	0	5	1	—
<b>E.S. Central</b>	1,453	1,924	2,804	17,200	15,455	—	0	0	—	—	4	8	25	45	26
Alabama	570	542	1,566	4,275	4,399	N	0	0	N	N	1	2	7	19	14
Kentucky	346	315	557	2,779	1,723	N	0	0	N	N	—	2	17	4	6
Mississippi	312	424	792	4,942	4,050	N	0	0	N	N	1	1	4	8	3
Tennessee	225	605	812	5,204	5,283	N	0	0	N	N	2	2	6	14	3
<b>W.S. Central</b>	432	3,295	4,311	18,844	29,232	—	0	1	—	1	4	9	44	56	46
Arkansas	353	317	439	2,962	2,583	N	0	0	N	N	—	0	2	3	1
Louisiana	—	356	1,071	1,566	3,409	—	0	1	—	1	1	1	9	13	5
Oklahoma	79	109	675	771	2,030	N	0	0	N	N	—	2	6	10	9
Texas	—	2,368	3,108	13,545	21,210	N	0	0	N	N	3	5	40	30	31
<b>Mountain</b>	1,172	1,724	2,417	12,954	16,078	55	308	460	2,176	3,033	2	10	29	52	82
Arizona	88	546	791	4,027	4,780	53	304	457	2,151	2,990	—	1	4	2	4
Colorado	555	402	846	3,261	4,265	N	0	0	N	N	—	2	11	5	23
Idaho	103	86	274	653	650	N	0	0	N	N	—	1	9	12	8
Montana	89	67	87	675	582	N	0	0	N	N	2	1	6	11	7
Nevada	192	204	319	1,293	2,383	2	2	5	19	17	—	0	2	2	2
New Mexico	144	220	336	1,834	1,873	—	1	4	—	15	—	2	9	15	23
Utah	1	135	190	1,103	1,184	—	0	4	4	8	—	1	5	2	7
Wyoming	—	30	67	108	361	—	0	2	2	3	—	0	3	3	8
<b>Pacific</b>	1,341	4,050	5,447	22,931	36,997	16	93	169	358	892	2	9	23	50	73
Alaska	60	109	152	964	1,098	N	0	0	N	N	—	0	3	—	3
California	550	3,054	4,518	16,209	28,541	16	93	169	358	892	—	6	16	44	37
Hawaii	—	112	142	143	1,068	N	0	0	N	N	—	0	1	2	—
Oregon	332	279	412	2,581	2,195	N	0	0	N	N	—	2	8	1	23
Washington	399	434	612	3,034	4,095	N	0	0	N	N	2	1	17	3	10
<b>Territories</b>															
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	11	44	—	132	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	109	348	1,009	963	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	16	27	—	127	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/ndss/pfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/ndss/pfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Dengue Virus Infection									
	Dengue Fever <sup>†</sup>					Dengue Hemorrhagic Fever <sup>§</sup>				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max			
<b>United States</b>	—	2	17	—	37	—	0	1	—	—
<b>New England</b>	—	0	1	—	1	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island	—	0	0	—	—	—	0	0	—	—
Vermont	—	0	1	—	1	—	0	0	—	—
<b>Mid. Atlantic</b>	—	1	6	—	10	—	0	0	—	—
New Jersey	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	2	—	1	—	0	0	—	—
New York City	—	0	4	—	5	—	0	0	—	—
Pennsylvania	—	0	2	—	4	—	0	0	—	—
<b>E.N. Central</b>	—	0	2	—	5	—	0	1	—	—
Illinois	—	0	1	—	1	—	0	1	—	—
Indiana	—	0	1	—	1	—	0	0	—	—
Michigan	—	0	2	—	1	—	0	0	—	—
Ohio	—	0	1	—	—	—	0	0	—	—
Wisconsin	—	0	1	—	2	—	0	0	—	—
<b>W.N. Central</b>	—	0	2	—	1	—	0	0	—	—
Iowa	—	0	1	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	1	—	1	—	0	0	—	—
Missouri	—	0	0	—	—	—	0	0	—	—
Nebraska	—	0	0	—	—	—	0	0	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	—	1	9	—	8	—	0	1	—	—
Delaware	—	0	2	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	7	—	5	—	0	0	—	—
Georgia	—	0	1	—	1	—	0	0	—	—
Maryland	—	0	2	—	—	—	0	0	—	—
North Carolina	—	0	1	—	1	—	0	0	—	—
South Carolina	—	0	1	—	—	—	0	0	—	—
Virginia	—	0	1	—	1	—	0	1	—	—
West Virginia	—	0	0	—	—	—	0	0	—	—
<b>E.S. Central</b>	—	0	3	—	—	—	0	0	—	—
Alabama	—	0	1	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee	—	0	2	—	—	—	0	0	—	—
<b>W.S. Central</b>	—	0	2	—	—	—	0	0	—	—
Arkansas	—	0	0	—	—	—	0	0	—	—
Louisiana	—	0	1	—	—	—	0	0	—	—
Oklahoma	—	0	0	—	—	—	0	0	—	—
Texas	—	0	1	—	—	—	0	0	—	—
<b>Mountain</b>	—	0	1	—	2	—	0	0	—	—
Arizona	—	0	1	—	1	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho	—	0	0	—	—	—	0	0	—	—
Montana	—	0	0	—	—	—	0	0	—	—
Nevada	—	0	1	—	—	—	0	0	—	—
New Mexico	—	0	1	—	1	—	0	0	—	—
Utah	—	0	1	—	—	—	0	0	—	—
Wyoming	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	—	0	4	—	10	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	2	—	3	—	0	0	—	—
Hawaii	—	0	1	—	4	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	1	—	3	—	0	0	—	—
<b>Territories</b>										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	9	83	—	170	—	0	3	—	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

<sup>†</sup> Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.

<sup>§</sup> DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	<i>Ehrlichia chaffeensis</i>					<i>Anaplasma phagocytophilum</i>					Undetermined				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	5	9	90	14	12	2	16	58	17	23	—	2	8	3	2
<b>New England</b>	—	0	1	1	—	1	3	28	3	15	—	0	1	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Maine	—	0	1	—	—	—	0	3	1	1	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	1	18	—	1	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	4	—	—	—	0	1	—	—
Rhode Island	—	0	1	1	—	1	0	15	2	13	—	0	1	—	—
Vermont	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	—	1	5	—	1	1	6	43	12	3	—	0	2	1	—
New Jersey	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	4	—	—	1	3	43	9	2	—	0	2	1	—
New York City	—	0	2	—	1	—	1	5	3	1	—	0	0	—	—
Pennsylvania	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
<b>E.N. Central</b>	—	0	5	—	2	—	0	2	—	1	—	0	6	—	2
Illinois	—	0	4	—	1	—	0	2	—	—	—	0	1	—	1
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	4	—	1
Michigan	—	0	2	—	—	—	0	0	—	—	—	0	2	—	—
Ohio	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	0	0	—	—	—	0	1	—	1	—	0	1	—	—
<b>W.N. Central</b>	—	1	16	1	1	—	0	6	—	—	—	0	6	—	—
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Missouri	—	1	16	1	1	—	0	5	—	—	—	0	6	—	—
Nebraska	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
<b>S. Atlantic</b>	5	3	33	12	8	—	1	8	2	3	—	0	2	2	—
Delaware	—	0	2	—	1	—	0	1	—	—	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	2	0	3	2	1	—	0	3	—	—	—	0	0	—	—
Georgia	2	0	3	6	1	—	0	2	2	—	—	0	1	1	—
Maryland	1	0	3	1	3	—	0	2	—	1	—	0	1	1	—
North Carolina	—	0	17	1	2	—	0	6	—	2	—	0	0	—	—
South Carolina	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Virginia	—	1	13	2	—	—	0	3	—	—	—	0	1	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
<b>E.S. Central</b>	—	1	8	—	—	—	0	2	—	1	—	0	3	—	—
Alabama	—	0	2	—	—	—	0	1	—	1	N	0	0	N	N
Kentucky	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Tennessee	—	0	5	—	—	—	0	1	—	—	—	0	3	—	—
<b>W.S. Central</b>	—	0	30	—	—	—	0	3	—	—	—	0	0	—	—
Arkansas	—	0	13	—	—	—	0	3	—	—	—	0	0	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	25	—	—	—	0	1	—	—	—	0	0	—	—
Texas	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
<b>Mountain</b>	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Colorado	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Idaho	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Montana	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Nevada	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
New Mexico	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Utah	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Wyoming	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	—	0	0	—	—	—	0	1	—	—	—	0	2	—	—
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
American Samoa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† Cumulative total *E. ewingii* cases reported for year 2011 = 13 and 0 case reports for 2012.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	113	283	453	1,681	2,299	2,901	6,005	6,815	42,230	52,909	36	65	112	541	614
<b>New England</b>	4	26	64	104	217	45	108	202	542	958	—	4	9	36	41
Connecticut	—	4	10	24	43	—	44	162	—	509	—	1	5	13	10
Maine	—	3	10	12	16	4	5	18	59	27	—	0	2	4	5
Massachusetts	—	12	29	47	108	23	47	80	362	340	—	2	7	16	20
New Hampshire	1	2	8	7	15	—	2	8	17	19	—	0	2	2	2
Rhode Island	3	0	10	5	12	14	7	35	95	58	—	0	2	1	3
Vermont	—	3	19	9	23	4	0	6	9	5	—	0	2	—	1
<b>Mid. Atlantic</b>	33	56	91	320	495	560	735	998	6,168	6,408	6	15	31	126	116
New Jersey	—	1	14	—	62	52	149	217	1,083	1,113	—	2	6	6	23
New York (Upstate)	20	20	50	112	129	173	116	379	973	852	3	3	16	34	22
New York City	5	16	29	125	164	93	240	315	1,479	2,188	1	4	10	37	22
Pennsylvania	8	15	30	83	140	242	268	492	2,633	2,255	2	5	15	49	49
<b>E.N. Central</b>	26	51	92	309	398	247	1,088	1,288	6,723	10,231	3	11	22	59	107
Illinois	—	11	20	47	90	8	306	406	1,298	2,794	—	3	11	2	31
Indiana	—	6	13	20	55	42	136	172	971	1,368	—	2	6	8	12
Michigan	6	10	22	87	81	107	237	375	1,828	2,414	—	1	5	12	16
Ohio	16	15	30	113	108	51	313	403	1,896	2,884	3	4	7	32	33
Wisconsin	4	8	21	42	64	39	92	118	730	771	—	1	4	5	15
<b>W.N. Central</b>	6	18	50	120	161	18	313	382	625	2,587	3	2	9	22	20
Iowa	2	4	15	31	39	3	36	110	321	334	—	0	1	—	—
Kansas	—	2	9	13	19	—	42	65	35	321	—	0	2	3	2
Minnesota	—	0	0	—	—	—	44	61	—	370	—	0	0	—	—
Missouri	1	6	17	43	57	—	149	204	—	1,224	3	1	5	14	11
Nebraska	3	3	11	24	33	14	27	52	195	196	—	0	2	5	7
North Dakota	—	0	12	—	—	—	5	14	—	36	—	0	6	—	—
South Dakota	—	1	8	9	13	1	11	20	74	106	—	0	1	—	—
<b>S. Atlantic</b>	24	53	115	368	409	1,117	1,500	1,946	12,050	12,977	14	15	31	150	154
Delaware	1	0	3	3	5	23	15	35	144	177	—	0	2	—	1
District of Columbia	—	1	5	2	8	42	38	105	427	385	—	0	1	—	—
Florida	15	23	69	157	206	173	373	473	3,042	3,273	7	4	12	42	49
Georgia	—	13	51	117	70	199	322	456	2,439	2,335	1	2	6	24	36
Maryland	4	6	15	46	53	70	115	176	587	1,032	1	2	6	21	17
North Carolina	N	0	0	N	N	286	318	548	2,528	2,922	—	1	7	15	17
South Carolina	—	2	8	16	17	147	156	421	1,430	1,677	1	1	5	20	10
Virginia	4	5	16	27	50	167	125	353	1,337	1,018	1	2	8	18	24
West Virginia	—	0	8	—	—	10	14	29	116	158	3	0	5	10	—
<b>E.S. Central</b>	1	3	8	27	21	387	524	789	4,554	4,135	2	4	12	37	31
Alabama	1	3	8	27	21	167	168	408	1,177	1,329	—	1	3	5	10
Kentucky	N	0	0	N	N	74	82	151	660	461	2	1	4	11	6
Mississippi	N	0	0	N	N	78	118	242	1,358	1,072	—	0	3	6	3
Tennessee	N	0	0	N	N	68	148	255	1,359	1,273	—	2	8	15	12
<b>W.S. Central</b>	—	5	15	41	33	137	865	1,173	4,962	7,703	5	2	10	34	38
Arkansas	—	3	8	14	11	123	87	138	813	771	1	0	3	5	7
Louisiana	—	2	10	27	22	—	106	255	453	1,002	—	1	4	11	19
Oklahoma	—	0	0	—	—	14	30	196	196	665	4	1	9	18	12
Texas	N	0	0	N	N	—	587	828	3,500	5,265	—	0	1	—	—
<b>Mountain</b>	1	22	41	99	185	134	209	325	1,673	1,961	1	5	10	47	68
Arizona	—	2	6	11	21	24	91	131	770	649	1	1	6	15	29
Colorado	—	7	23	39	50	66	40	77	374	446	—	1	3	4	18
Idaho	—	3	9	11	33	—	2	15	3	22	—	0	2	4	2
Montana	1	2	5	8	7	2	1	4	18	15	—	0	1	2	2
Nevada	—	1	4	10	20	33	38	77	206	492	—	0	2	3	3
New Mexico	—	1	6	4	14	9	35	73	252	280	—	1	3	12	9
Utah	—	3	9	10	33	—	6	10	46	41	—	0	3	6	5
Wyoming	—	0	2	6	7	—	0	3	4	16	—	0	1	1	—
<b>Pacific</b>	18	47	187	293	380	256	638	759	4,933	5,949	2	4	9	30	39
Alaska	1	2	7	11	11	7	18	31	114	155	—	0	3	2	5
California	7	31	51	197	262	206	523	619	4,236	4,954	—	1	5	9	13
Hawaii	—	0	4	2	4	—	12	24	23	122	—	0	3	4	5
Oregon	1	6	20	44	73	9	27	60	212	212	2	1	6	15	16
Washington	9	6	150	39	30	34	50	79	348	506	—	0	1	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	5	—	6	—	0	0	—	—
Puerto Rico	—	0	3	—	12	—	6	14	38	68	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	2	10	—	25	—	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.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Hepatitis (viral, acute), by type														
	A				B				C						
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	16	23	41	156	212	29	49	102	365	482	8	21	42	147	147
<b>New England</b>	—	1	5	4	13	—	1	8	2	21	—	1	5	3	12
Connecticut	—	0	3	3	5	—	0	2	1	5	—	0	4	3	11
Maine	—	0	2	1	—	—	0	2	1	1	—	0	3	—	—
Massachusetts	—	0	3	—	4	—	0	6	—	14	—	0	2	—	1
New Hampshire	—	0	0	—	—	—	0	1	—	1	N	0	0	N	N
Rhode Island	—	0	1	—	2	U	0	0	U	U	U	0	0	U	U
Vermont	—	0	2	—	2	—	0	0	—	—	—	0	1	—	—
<b>Mid. Atlantic</b>	4	4	8	28	41	4	5	11	34	52	1	2	5	16	9
New Jersey	—	1	3	—	6	—	1	4	12	10	—	0	2	2	—
New York (Upstate)	3	1	4	12	6	2	1	4	6	10	1	1	4	6	5
New York City	—	1	4	6	16	—	1	5	8	17	—	0	1	—	1
Pennsylvania	1	1	5	10	13	2	2	4	8	15	—	1	3	8	3
<b>E.N. Central</b>	—	4	7	16	40	4	6	37	47	78	2	3	8	20	29
Illinois	—	1	5	5	8	—	1	3	1	19	—	0	2	1	1
Indiana	—	0	1	1	6	—	1	4	4	11	—	0	5	3	20
Michigan	—	1	6	8	12	1	1	6	10	20	2	1	5	15	7
Ohio	—	0	2	1	12	3	1	30	27	22	—	0	1	1	—
Wisconsin	—	0	1	1	2	—	1	3	5	6	—	0	1	—	1
<b>W.N. Central</b>	2	1	7	12	10	1	2	9	17	17	—	0	4	1	—
Iowa	—	0	1	—	1	—	0	1	1	2	—	0	0	—	—
Kansas	—	0	1	1	1	—	0	2	—	3	—	0	1	1	—
Minnesota	—	0	7	—	—	—	0	7	—	—	—	0	2	—	—
Missouri	1	0	3	7	4	1	1	4	15	7	—	0	0	—	—
Nebraska	1	0	1	4	2	—	0	2	1	4	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	2	—	0	0	—	1	—	0	0	—	—
<b>S. Atlantic</b>	5	4	11	30	39	13	13	57	118	117	1	5	14	47	32
Delaware	—	0	1	1	1	—	0	2	3	—	U	0	0	U	U
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	1	1	8	13	12	4	4	7	35	35	—	1	5	20	7
Georgia	2	1	5	4	12	—	2	7	18	27	—	1	3	2	10
Maryland	—	0	4	2	3	—	1	5	15	8	—	1	3	4	3
North Carolina	—	0	3	4	4	1	1	8	10	25	1	1	7	7	9
South Carolina	—	0	2	1	2	1	1	3	8	7	—	0	1	—	—
Virginia	2	0	3	4	5	—	2	5	10	15	—	0	3	4	3
West Virginia	—	0	2	1	—	7	0	43	19	—	—	0	7	10	—
<b>E.S. Central</b>	—	1	6	4	5	4	10	21	82	83	2	5	10	32	29
Alabama	—	0	2	2	—	—	2	6	12	16	—	0	3	2	1
Kentucky	—	0	2	—	2	1	3	10	28	30	—	2	8	14	15
Mississippi	—	0	1	—	1	—	1	4	6	5	U	0	0	U	U
Tennessee	—	0	5	2	2	3	4	10	36	32	2	1	5	16	13
<b>W.S. Central</b>	1	3	7	24	11	2	6	14	38	47	1	1	5	6	14
Arkansas	—	0	2	1	—	—	1	4	5	7	—	0	0	—	—
Louisiana	—	0	2	—	1	—	0	2	6	12	—	0	1	—	4
Oklahoma	—	0	2	—	—	1	1	9	6	9	1	1	4	1	6
Texas	1	3	7	23	10	1	3	11	21	19	—	0	4	5	4
<b>Mountain</b>	2	1	5	18	16	1	1	4	9	23	—	1	5	4	12
Arizona	—	0	2	6	4	—	0	3	1	3	U	0	0	U	U
Colorado	—	0	2	4	6	—	0	2	—	5	—	0	2	—	4
Idaho	1	0	1	4	1	—	0	0	—	2	—	0	1	1	5
Montana	—	0	1	—	3	—	0	0	—	—	—	0	3	—	—
Nevada	1	0	3	3	—	1	0	3	8	8	—	0	2	3	—
New Mexico	—	0	1	1	1	—	0	2	—	2	—	0	2	—	1
Utah	—	0	1	—	—	—	0	1	—	3	—	0	2	—	2
Wyoming	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
<b>Pacific</b>	2	3	12	20	37	—	3	8	18	44	1	2	10	18	10
Alaska	—	0	1	—	—	—	0	1	—	1	U	0	0	U	U
California	—	3	7	13	31	—	2	7	10	33	—	1	5	9	5
Hawaii	—	0	2	2	1	—	0	1	2	2	U	0	0	U	U
Oregon	—	0	2	1	1	—	0	4	5	6	1	0	2	6	3
Washington	2	0	4	4	4	—	0	4	1	2	—	0	9	3	2
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	—	6	—	2	7	—	22	—	0	3	—	9
Puerto Rico	—	0	1	—	1	—	0	2	—	1	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	17	72	179	287	348	74	551	2,190	1,749	1,797	5	26	51	127	205
<b>New England</b>	—	4	40	13	26	2	85	506	132	465	—	1	7	6	14
Connecticut	—	1	11	5	5	—	38	236	49	184	—	0	2	—	1
Maine	—	0	3	—	1	—	13	67	26	40	—	0	2	—	—
Massachusetts	—	3	24	4	16	—	12	106	16	155	—	0	6	5	10
New Hampshire	—	0	3	—	1	1	10	90	14	64	—	0	1	—	1
Rhode Island	—	0	9	4	2	—	1	31	6	3	—	0	2	—	—
Vermont	—	0	2	—	1	1	6	70	21	19	—	0	1	1	2
<b>Mid. Atlantic</b>	3	18	88	73	85	65	352	1,234	1,328	927	—	6	13	19	52
New Jersey	—	2	16	4	20	26	159	543	743	324	—	0	2	—	6
New York (Upstate)	2	6	27	21	23	22	57	215	128	72	—	1	4	2	6
New York City	1	3	14	17	20	—	10	41	2	76	—	4	11	14	32
Pennsylvania	—	5	43	31	22	17	116	536	455	455	—	1	5	3	8
<b>E.N. Central</b>	7	14	51	61	68	—	28	332	20	118	—	3	10	13	20
Illinois	—	2	11	6	8	—	1	21	—	6	—	1	5	2	7
Indiana	—	2	8	10	13	—	1	12	1	—	—	0	2	3	2
Michigan	—	2	15	9	15	—	1	13	2	—	—	0	4	2	3
Ohio	7	7	34	36	32	—	1	6	6	3	—	0	4	5	7
Wisconsin	—	0	1	—	—	—	25	290	11	109	—	0	2	1	1
<b>W.N. Central</b>	—	1	8	6	7	—	1	16	3	2	—	1	5	7	4
Iowa	—	0	2	—	1	—	0	13	1	1	—	0	3	1	—
Kansas	—	0	2	—	1	—	0	2	—	—	—	0	2	3	1
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	—	1	5	6	4	—	0	2	—	1	—	0	2	3	2
Nebraska	—	0	2	—	—	—	0	2	2	—	—	0	1	—	1
North Dakota	—	0	1	—	—	—	0	9	—	—	—	0	0	—	—
South Dakota	—	0	1	—	1	—	0	2	—	—	—	0	1	—	—
<b>S. Atlantic</b>	4	11	30	66	50	7	66	180	246	266	2	9	26	48	72
Delaware	—	0	4	4	1	1	13	48	66	73	—	0	3	1	—
District of Columbia	—	0	3	1	—	—	0	3	1	3	—	0	2	—	3
Florida	4	3	13	32	25	2	3	8	20	7	2	2	6	15	16
Georgia	—	1	4	5	4	—	0	5	5	1	—	1	6	6	11
Maryland	—	2	15	9	8	4	20	115	90	103	—	2	16	12	21
North Carolina	—	1	7	5	6	—	0	13	1	6	—	0	7	1	8
South Carolina	—	0	5	3	1	—	0	6	3	1	—	0	1	3	—
Virginia	—	1	7	7	5	—	18	75	54	69	—	1	8	10	13
West Virginia	—	0	5	—	—	—	0	20	6	3	—	0	1	—	—
<b>E.S. Central</b>	—	2	11	5	12	—	1	5	1	4	—	1	4	—	2
Alabama	—	0	2	2	2	—	0	2	—	3	—	0	3	—	1
Kentucky	—	1	4	—	4	—	0	1	1	—	—	0	2	—	—
Mississippi	—	0	3	—	2	—	0	1	—	—	—	0	1	—	—
Tennessee	—	1	8	3	4	—	0	4	—	1	—	0	3	—	1
<b>W.S. Central</b>	2	3	8	13	15	—	1	6	2	4	1	1	5	7	7
Arkansas	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	2	1	7	—	0	1	1	—	—	0	1	—	—
Oklahoma	—	0	3	—	1	—	0	0	—	—	1	0	3	5	1
Texas	2	2	7	12	7	—	1	6	1	4	—	0	5	2	6
<b>Mountain</b>	1	2	9	12	22	—	1	5	6	3	—	1	5	7	12
Arizona	—	1	4	4	6	—	0	4	1	1	—	0	4	1	3
Colorado	1	0	4	1	7	—	0	1	—	—	—	0	3	—	5
Idaho	—	0	1	1	1	—	0	2	2	—	—	0	1	1	—
Montana	—	0	1	—	—	—	0	3	—	—	—	0	1	—	—
Nevada	—	0	2	3	1	—	0	1	1	—	—	0	2	4	2
New Mexico	—	0	2	—	1	—	0	2	—	1	—	0	1	—	2
Utah	—	0	2	2	5	—	0	1	1	1	—	0	1	1	—
Wyoming	—	0	2	1	1	—	0	1	1	—	—	0	0	—	—
<b>Pacific</b>	—	5	17	38	63	—	3	8	11	8	2	3	11	20	22
Alaska	—	0	0	—	—	—	0	3	1	—	—	0	1	1	2
California	—	4	11	32	56	—	1	7	10	3	2	2	7	18	14
Hawaii	—	0	2	—	1	N	0	0	N	N	—	0	1	—	—
Oregon	—	0	3	6	1	—	0	2	—	5	—	0	4	1	4
Washington	—	0	13	—	5	—	0	5	—	—	—	0	2	—	2
<b>Territories</b>															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	1	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	5	12	26	90	162	1	6	21	27	70	212	314	856	2,905	3,061
<b>New England</b>	—	0	3	1	5	—	0	2	—	1	—	17	33	159	98
Connecticut	—	0	1	—	1	—	0	0	—	—	—	1	7	5	15
Maine	—	0	1	—	1	—	0	2	—	—	—	3	19	20	26
Massachusetts	—	0	2	1	3	—	0	1	—	1	—	4	10	24	39
New Hampshire	—	0	1	—	—	—	0	0	—	—	—	2	13	10	9
Rhode Island	—	0	1	—	—	—	0	2	—	—	—	1	10	16	8
Vermont	—	0	3	—	—	—	0	1	—	—	—	1	18	84	1
<b>Mid. Atlantic</b>	1	2	5	15	21	—	0	7	—	8	59	44	190	645	277
New Jersey	—	0	2	2	2	—	0	1	—	7	—	5	12	28	28
New York (Upstate)	1	0	4	4	6	—	0	3	—	1	45	18	143	337	75
New York City	—	0	2	4	7	—	0	6	—	—	—	4	42	67	—
Pennsylvania	—	0	2	5	6	—	0	1	—	—	14	13	31	213	174
<b>E.N. Central</b>	—	2	6	8	19	—	1	12	4	14	22	70	219	808	711
Illinois	—	0	3	—	7	—	1	10	—	6	—	21	123	129	136
Indiana	—	0	2	1	2	—	0	2	1	—	—	4	21	14	67
Michigan	—	0	2	1	3	—	0	2	2	1	2	11	38	107	189
Ohio	—	0	2	5	5	—	0	2	1	6	18	12	22	117	227
Wisconsin	—	0	2	1	2	—	0	1	—	1	2	17	86	441	92
<b>W.N. Central</b>	—	1	3	5	12	—	0	3	2	6	15	22	119	201	160
Iowa	—	0	1	—	3	—	0	2	—	—	—	4	9	25	43
Kansas	—	0	1	1	1	—	0	1	—	2	1	2	8	35	23
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	110	—	—
Missouri	—	0	2	4	4	—	0	2	2	3	1	8	33	119	70
Nebraska	—	0	2	—	3	—	0	1	—	1	1	1	5	7	19
North Dakota	—	0	1	—	—	—	0	3	—	—	12	0	10	12	3
South Dakota	—	0	1	—	1	—	0	0	—	—	—	0	7	3	2
<b>S. Atlantic</b>	3	2	8	14	24	1	1	4	6	2	13	27	55	219	309
Delaware	—	0	1	—	—	—	0	0	—	—	—	0	5	7	5
District of Columbia	—	0	1	—	—	—	0	1	—	—	—	0	2	1	1
Florida	2	1	5	10	7	1	0	2	3	—	10	6	17	75	50
Georgia	—	0	1	1	2	—	0	2	—	—	—	3	7	11	50
Maryland	—	0	2	2	2	—	0	1	1	—	—	2	10	28	28
North Carolina	—	0	2	—	7	—	0	2	—	—	—	3	20	13	68
South Carolina	—	0	1	—	3	—	0	1	—	—	—	2	9	9	38
Virginia	—	0	2	—	3	—	0	4	1	2	3	6	25	53	69
West Virginia	1	0	3	1	—	—	0	1	1	—	—	0	15	22	—
<b>E.S. Central</b>	—	0	3	—	9	—	0	1	1	3	1	9	19	89	94
Alabama	—	0	2	—	5	—	0	1	—	1	2	11	18	24	24
Kentucky	—	0	2	—	—	—	0	0	—	—	—	3	10	38	43
Mississippi	—	0	1	—	1	—	0	1	1	2	—	1	4	11	4
Tennessee	—	0	1	—	3	—	0	1	—	—	—	2	7	22	23
<b>W.S. Central</b>	—	1	5	7	15	—	1	4	6	30	6	19	113	107	135
Arkansas	—	0	2	—	4	—	0	2	—	—	—	1	6	2	8
Louisiana	—	0	2	1	3	—	0	0	—	—	—	0	3	2	8
Oklahoma	—	0	2	1	1	—	0	2	—	—	—	0	11	—	2
Texas	—	0	2	5	7	—	1	4	6	30	6	18	107	103	117
<b>Mountain</b>	—	1	4	7	14	—	0	2	3	1	2	40	91	320	473
Arizona	—	0	1	1	4	—	0	0	—	—	1	14	63	159	190
Colorado	—	0	1	—	3	—	0	1	1	—	—	7	25	60	106
Idaho	—	0	1	1	3	—	0	2	—	—	1	3	12	18	22
Montana	—	0	2	2	—	—	0	1	1	—	—	1	32	19	41
Nevada	—	0	1	2	—	—	0	0	—	—	—	0	5	10	7
New Mexico	—	0	1	1	—	—	0	1	—	1	—	3	24	19	30
Utah	—	0	1	—	4	—	0	1	1	—	—	6	17	32	75
Wyoming	—	0	0	—	—	—	0	1	—	—	—	0	3	3	2
<b>Pacific</b>	1	3	10	33	43	—	1	11	5	5	94	57	266	357	804
Alaska	—	0	1	—	1	—	0	1	—	—	—	0	3	12	13
California	—	2	7	23	31	—	0	11	4	—	—	33	78	47	707
Hawaii	—	0	1	1	1	—	0	1	—	2	—	2	10	37	7
Oregon	—	0	4	8	7	—	0	1	—	3	—	5	23	33	37
Washington	1	0	3	1	3	—	0	1	1	—	94	12	213	228	40
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	3	—	4	—	3	14	—	20
Puerto Rico	—	0	0	—	—	—	0	1	1	—	—	0	1	—	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) <sup>†</sup>				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	36	61	105	390	422	233	899	1,910	3,588	4,242	16	94	208	331	359
<b>New England</b>	8	5	16	59	18	1	37	107	114	203	—	3	13	11	15
Connecticut	2	3	10	28	4	—	8	30	36	57	—	1	4	6	7
Maine	—	1	6	15	4	—	2	7	9	20	—	0	3	—	1
Massachusetts	—	0	0	—	—	—	19	44	46	93	—	1	9	5	2
New Hampshire	3	0	3	6	2	—	3	8	6	18	—	0	3	—	5
Rhode Island	—	0	6	5	2	—	1	62	5	8	—	0	2	—	—
Vermont	3	0	2	5	6	1	1	8	12	7	—	0	3	—	—
<b>Mid. Atlantic</b>	13	15	36	77	119	27	96	209	392	453	1	11	34	36	63
New Jersey	—	0	0	—	—	—	21	48	57	95	—	2	7	1	18
New York (Upstate)	7	7	20	33	40	19	25	67	103	83	1	3	13	9	13
New York City	—	0	3	—	2	—	19	42	107	119	—	2	6	9	10
Pennsylvania	6	8	21	44	77	8	31	114	125	156	—	3	16	17	22
<b>E.N. Central</b>	—	2	20	3	8	18	89	184	276	501	3	16	54	57	75
Illinois	—	0	6	—	4	—	27	80	76	173	—	4	14	9	11
Indiana	—	0	7	—	—	—	8	27	21	52	—	2	10	4	12
Michigan	—	1	6	2	3	3	15	42	67	88	—	3	19	33	16
Ohio	—	1	5	1	1	15	20	46	103	122	3	3	9	11	20
Wisconsin	N	0	0	N	N	—	11	46	9	66	—	3	21	—	16
<b>W.N. Central</b>	—	1	8	14	5	12	39	99	195	203	2	11	40	47	30
Iowa	—	0	0	—	—	—	8	19	35	53	—	2	15	7	8
Kansas	—	1	4	7	2	1	8	27	54	36	—	2	8	5	6
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	—	0	4	3	—	8	15	42	78	81	2	5	32	23	7
Nebraska	—	0	3	—	3	3	4	13	18	18	—	1	7	7	8
North Dakota	—	0	4	4	—	—	0	15	—	—	—	0	4	—	—
South Dakota	—	0	0	—	—	—	3	10	10	15	—	1	4	5	1
<b>S. Atlantic</b>	4	19	48	127	233	99	276	741	1,286	1,195	3	12	32	74	62
Delaware	—	0	0	—	—	—	2	12	11	17	—	0	2	2	2
District of Columbia	—	0	0	—	—	—	1	6	—	6	—	0	1	1	1
Florida	4	0	13	19	120	52	107	203	550	467	2	3	9	31	10
Georgia	—	0	0	—	—	3	43	139	157	234	—	2	8	6	12
Maryland	—	7	13	41	38	16	19	46	105	89	—	1	4	5	11
North Carolina	—	0	0	—	—	16	34	251	251	162	1	2	26	16	16
South Carolina	N	0	0	N	N	5	27	71	106	102	—	0	4	3	—
Virginia	—	11	27	60	75	7	20	54	98	118	—	2	8	10	10
West Virginia	—	0	30	7	—	—	0	18	8	—	—	0	2	—	—
<b>E.S. Central</b>	3	3	11	12	21	11	64	190	253	299	—	4	18	23	18
Alabama	2	2	7	10	11	4	18	70	67	98	—	1	15	9	2
Kentucky	1	0	2	2	1	—	11	30	45	51	—	1	5	5	5
Mississippi	—	0	1	—	—	—	22	66	64	56	—	0	4	5	2
Tennessee	—	1	4	—	9	7	15	51	77	94	—	1	11	4	9
<b>W.S. Central</b>	8	1	21	70	3	16	134	250	393	404	2	10	61	25	25
Arkansas	3	0	10	14	3	2	13	52	31	53	—	1	6	3	1
Louisiana	—	0	0	—	—	2	14	44	79	67	—	0	1	—	1
Oklahoma	—	0	21	7	—	4	13	31	50	37	1	1	10	6	4
Texas	5	0	11	49	—	8	93	159	233	247	1	7	61	16	19
<b>Mountain</b>	—	1	4	17	—	5	46	93	207	335	1	11	27	24	40
Arizona	N	0	0	N	N	2	15	35	88	112	—	2	7	5	10
Colorado	—	0	0	—	—	—	9	23	34	77	—	3	9	4	14
Idaho	—	0	1	—	—	—	2	8	10	32	—	1	8	3	5
Montana	N	0	0	N	N	1	2	10	12	7	—	1	4	1	1
Nevada	—	0	3	—	—	2	3	7	13	25	1	1	7	3	2
New Mexico	—	0	4	17	—	—	5	22	25	36	—	1	3	3	4
Utah	—	0	2	—	—	—	6	15	20	41	—	1	7	2	4
Wyoming	—	0	0	—	—	—	1	9	5	5	—	0	7	3	—
<b>Pacific</b>	—	4	14	11	15	44	93	173	472	649	4	9	28	34	31
Alaska	—	0	2	3	7	2	1	6	10	9	—	0	1	—	—
California	—	4	13	8	5	27	71	141	350	503	1	5	14	15	18
Hawaii	—	0	0	—	—	—	6	14	14	55	—	0	2	—	—
Oregon	—	0	2	—	3	1	6	12	35	48	1	2	11	9	6
Washington	—	0	0	—	—	14	9	43	63	34	2	2	22	10	7
<b>Territories</b>															
American Samoa	N	0	0	N	N	1	0	0	1	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	4	—	0	0	—	—
Puerto Rico	—	0	6	13	5	—	2	12	6	25	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF) <sup>†</sup>									
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Confirmed					Probable				
		Med	Max			Current week	Med	Max	Cum 2012	Cum 2011	Current week	Med	Max	Cum 2012	Cum 2011
<b>United States</b>	128	258	379	1,543	1,393	4	3	14	18	9	7	31	138	74	51
<b>New England</b>	—	4	21	13	30	—	0	1	—	—	—	0	1	—	1
Connecticut	—	1	4	5	6	—	0	0	—	—	—	0	0	—	—
Maine	—	0	8	—	1	—	0	0	—	—	—	0	1	—	—
Massachusetts	—	3	20	8	22	—	0	0	—	—	—	0	1	—	—
New Hampshire	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Rhode Island	—	0	3	—	—	—	0	0	—	—	—	0	1	—	1
Vermont	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	19	27	86	245	98	—	0	2	3	—	—	1	8	8	3
New Jersey	—	6	39	49	22	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	15	7	41	96	17	—	0	1	—	—	—	0	3	1	—
New York City	4	8	28	86	41	—	0	0	—	—	—	0	3	2	2
Pennsylvania	—	2	13	14	18	—	0	2	3	—	—	0	3	5	1
<b>E.N. Central</b>	15	15	41	192	114	—	0	2	1	—	—	2	10	4	4
Illinois	—	4	16	12	38	—	0	1	—	—	—	1	4	1	3
Indiana	—	1	6	5	11	—	0	1	1	—	—	1	5	1	—
Michigan	1	4	11	33	24	—	0	1	—	—	—	0	1	—	—
Ohio	14	6	27	142	41	—	0	2	—	—	—	0	2	2	1
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>W.N. Central</b>	1	5	18	52	72	—	0	4	—	—	1	4	24	5	8
Iowa	—	0	3	4	4	—	0	0	—	—	—	0	2	—	1
Kansas	—	1	8	28	17	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	1	3	14	17	48	—	0	2	—	—	1	4	22	5	7
Nebraska	—	0	2	3	2	—	0	3	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	2	—	1	—	0	1	—	—	—	0	0	—	—
<b>S. Atlantic</b>	44	75	134	367	467	3	2	8	11	4	4	7	57	31	18
Delaware	—	0	2	—	—	—	0	1	—	—	—	0	4	4	1
District of Columbia	—	0	5	1	5	—	0	1	—	—	—	0	1	—	—
Florida	34	49	98	217	297	—	0	1	—	1	1	0	2	5	1
Georgia	7	13	26	93	81	3	1	8	11	1	—	0	0	—	—
Maryland	2	2	10	25	19	—	0	1	—	1	1	0	3	3	1
North Carolina	—	3	19	16	41	—	0	4	—	1	—	0	49	5	9
South Carolina	—	1	54	3	10	—	0	2	—	—	1	0	2	1	1
Virginia	1	2	7	12	14	—	0	1	—	—	1	3	14	13	5
West Virginia	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
<b>E.S. Central</b>	17	20	51	247	89	—	0	2	1	—	1	4	25	11	7
Alabama	1	6	21	50	40	—	0	1	—	—	—	1	8	4	3
Kentucky	13	5	22	115	10	—	0	1	—	—	1	0	2	1	—
Mississippi	3	5	24	55	14	—	0	0	—	—	—	0	2	—	2
Tennessee	—	4	11	27	25	—	0	2	1	—	—	4	20	6	2
<b>W.S. Central</b>	22	54	138	281	205	—	0	3	—	—	1	2	52	6	1
Arkansas	—	2	7	10	4	—	0	3	—	—	—	2	52	4	—
Louisiana	—	4	21	27	27	—	0	0	—	—	—	0	2	1	—
Oklahoma	7	4	28	71	15	—	0	1	—	—	1	0	25	1	—
Texas	15	43	108	173	159	—	0	1	—	—	—	0	4	—	1
<b>Mountain</b>	—	13	41	42	123	—	0	3	—	5	—	1	7	7	9
Arizona	—	6	27	27	41	—	0	3	—	5	—	0	6	3	9
Colorado	—	1	8	2	16	—	0	0	—	—	—	0	1	—	—
Idaho	—	0	3	2	5	—	0	0	—	—	—	0	2	2	—
Montana	—	1	15	3	18	—	0	0	—	—	—	0	1	—	—
Nevada	—	0	4	1	6	—	0	0	—	—	—	0	1	—	—
New Mexico	—	2	6	6	31	—	0	0	—	—	—	0	0	—	—
Utah	—	1	4	1	6	—	0	0	—	—	—	0	1	2	—
Wyoming	—	0	1	—	—	—	0	0	—	—	—	0	2	—	—
<b>Pacific</b>	10	19	44	104	195	1	0	2	2	—	—	0	1	2	—
Alaska	1	0	2	3	1	N	0	0	N	N	N	0	0	N	N
California	7	14	41	84	163	1	0	2	2	—	—	0	1	2	—
Hawaii	—	0	3	1	15	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	10	9	—	0	0	—	—	—	0	0	—	—
Washington	2	1	11	6	7	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	1	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	1	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	<i>Streptococcus pneumoniae</i> , <sup>†</sup> invasive disease										Syphilis, primary and secondary				
	All ages					Age <5									
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	230	262	506	2,619	3,648	10	21	43	179	221	77	269	306	1,541	2,253
<b>New England</b>	1	14	31	102	200	—	1	4	6	8	6	7	23	52	68
Connecticut	—	6	20	54	93	—	0	3	2	2	—	0	12	—	12
Maine	—	2	8	17	28	—	0	1	1	1	2	0	2	2	2
Massachusetts	—	0	3	5	7	—	0	2	2	3	2	5	10	33	39
New Hampshire	—	1	8	13	31	—	0	1	1	—	—	0	3	4	4
Rhode Island	—	1	5	—	34	—	0	1	—	1	2	0	7	13	9
Vermont	1	1	6	13	7	—	0	2	—	1	—	0	2	—	2
<b>Mid. Atlantic</b>	43	29	66	415	408	2	2	11	22	19	8	29	48	173	281
New Jersey	1	12	26	90	201	—	1	4	8	11	—	4	11	5	35
New York (Upstate)	37	2	33	216	15	2	1	10	10	8	4	4	9	19	24
New York City	5	12	23	109	192	—	0	9	4	—	1	14	24	75	163
Pennsylvania	N	0	0	N	N	N	0	0	N	N	3	7	17	74	59
<b>E.N. Central</b>	53	63	122	561	711	4	3	10	33	35	1	31	49	97	293
Illinois	N	0	0	N	N	—	0	0	—	—	—	12	25	30	125
Indiana	1	13	36	83	178	—	1	4	3	8	—	3	8	26	31
Michigan	4	13	26	116	139	—	1	2	7	9	—	5	12	10	47
Ohio	41	27	43	274	301	2	1	7	14	14	1	7	17	27	79
Wisconsin	7	8	23	88	93	2	0	2	9	4	—	1	6	4	11
<b>W.N. Central</b>	7	2	28	38	34	1	0	2	2	2	—	5	13	4	74
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	3	3	3
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	4	—	3
Minnesota	—	0	0	—	—	—	0	0	—	—	—	2	8	—	33
Missouri	N	0	0	N	N	—	0	0	—	—	—	2	8	—	32
Nebraska	7	2	5	38	34	1	0	2	2	2	—	0	2	1	3
North Dakota	—	0	25	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	72	65	143	705	1,049	2	6	15	52	70	33	67	85	481	527
Delaware	—	0	5	8	21	—	0	0	—	—	—	0	4	7	3
District of Columbia	—	0	5	1	15	—	0	1	1	2	4	3	9	33	35
Florida	25	21	48	248	431	2	2	8	19	34	—	24	36	169	208
Georgia	14	19	38	215	289	—	2	6	19	20	15	12	46	88	55
Maryland	8	9	25	73	159	—	1	3	3	9	3	8	20	42	66
North Carolina	N	0	0	N	N	N	0	0	N	N	2	8	21	68	78
South Carolina	12	8	22	109	134	—	0	3	4	5	2	4	11	37	48
Virginia	N	0	0	N	N	—	0	0	—	—	7	4	13	37	34
West Virginia	13	1	48	51	—	—	0	4	6	—	—	0	2	—	—
<b>E.S. Central</b>	10	23	45	212	310	1	2	4	11	19	9	15	31	80	119
Alabama	N	0	0	N	N	N	0	0	N	N	1	4	10	16	41
Kentucky	2	4	12	44	52	—	0	3	1	5	5	2	8	18	18
Mississippi	N	0	0	N	N	—	0	0	—	—	—	3	22	24	20
Tennessee	8	19	42	168	258	1	1	4	10	14	3	5	11	22	40
<b>W.S. Central</b>	26	32	139	296	412	—	3	10	26	31	6	37	51	253	272
Arkansas	4	4	14	41	58	—	0	3	5	5	3	4	15	50	29
Louisiana	—	2	14	39	73	—	0	2	3	5	—	7	25	17	46
Oklahoma	N	0	0	N	N	—	0	0	—	—	3	1	6	13	8
Texas	22	24	125	216	281	—	3	10	18	21	—	23	39	173	189
<b>Mountain</b>	16	26	67	271	486	—	2	8	20	35	3	12	20	52	109
Arizona	15	12	33	176	250	—	1	5	12	17	—	5	11	20	37
Colorado	—	8	23	44	118	—	0	4	4	5	—	2	6	13	23
Idaho	N	0	0	N	N	—	0	0	—	—	—	0	4	3	3
Montana	N	0	0	N	N	N	0	0	N	N	—	0	1	—	4
Nevada	N	0	0	N	N	N	0	0	N	N	3	2	9	9	26
New Mexico	1	4	12	47	65	—	0	2	4	5	—	1	4	4	12
Utah	—	1	7	—	48	—	0	1	—	8	—	0	2	3	4
Wyoming	—	0	3	4	5	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	2	2	9	19	38	—	0	2	7	2	11	58	76	349	510
Alaska	2	2	9	19	37	—	0	2	7	2	—	0	2	3	—
California	N	0	0	N	N	N	0	0	N	N	6	46	64	292	403
Hawaii	—	0	1	—	1	—	0	1	—	—	—	0	3	—	1
Oregon	N	0	0	N	N	N	0	0	N	N	—	4	14	26	36
Washington	N	0	0	N	N	N	0	0	N	N	5	5	12	28	70
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	5	15	33	33
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).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 3, 2012, and March 5, 2011 (9th week)\*

Reporting area	Varicella (chickenpox)					West Nile virus disease <sup>†</sup>									
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Neuroinvasive					Nonneuroinvasive <sup>§</sup>				
		Med	Max			Current week	Med	Max	Cum 2012	Cum 2011	Current week	Med	Max	Cum 2012	Cum 2011
<b>United States</b>	204	293	413	2,068	2,477	—	0	64	—	1	—	0	33	—	1
<b>New England</b>	4	23	54	143	212	—	0	3	—	—	—	0	1	—	—
Connecticut	—	6	20	35	46	—	0	2	—	—	—	0	1	—	—
Maine	—	4	11	35	39	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	9	18	47	74	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	2	10	—	19	—	0	0	—	—	—	0	0	—	—
Rhode Island	—	0	6	1	8	—	0	1	—	—	—	0	0	—	—
Vermont	4	2	9	25	26	—	0	1	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	21	55	80	416	267	—	0	11	—	—	—	0	6	—	—
New Jersey	6	34	70	251	95	—	0	1	—	—	—	0	2	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	4	—	—
New York City	—	0	0	—	—	—	0	4	—	—	—	0	1	—	—
Pennsylvania	15	20	42	165	172	—	0	2	—	—	—	0	1	—	—
<b>E.N. Central</b>	37	63	118	523	663	—	0	13	—	—	—	0	7	—	—
Illinois	1	16	38	122	154	—	0	6	—	—	—	0	5	—	—
Indiana	5	5	20	65	57	—	0	2	—	—	—	0	1	—	—
Michigan	9	18	45	153	220	—	0	7	—	—	—	0	2	—	—
Ohio	22	21	47	183	231	—	0	3	—	—	—	0	3	—	—
Wisconsin	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
<b>W.N. Central</b>	6	13	32	117	129	—	0	9	—	1	—	0	7	—	—
Iowa	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Kansas	5	7	21	85	67	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Missouri	—	4	18	25	51	—	0	2	—	1	—	0	2	—	—
Nebraska	—	0	3	3	6	—	0	4	—	—	—	0	3	—	—
North Dakota	—	0	7	—	1	—	0	1	—	—	—	0	1	—	—
South Dakota	1	1	6	4	4	—	0	0	—	—	—	0	1	—	—
<b>S. Atlantic</b>	30	36	66	227	327	—	0	12	—	—	—	0	6	—	—
Delaware	—	0	2	—	3	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	2	—	4	—	0	3	—	—	—	0	3	—	—
Florida	24	16	38	141	162	—	0	4	—	—	—	0	2	—	—
Georgia	N	0	0	N	N	—	0	4	—	—	—	0	1	—	—
Maryland	N	0	0	N	N	—	0	5	—	—	—	0	3	—	—
North Carolina	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
South Carolina	—	0	9	—	—	—	0	0	—	—	—	0	0	—	—
Virginia	6	10	27	57	64	—	0	2	—	—	—	0	1	—	—
West Virginia	—	5	32	29	94	—	0	1	—	—	—	0	0	—	—
<b>E.S. Central</b>	3	5	15	41	56	—	0	11	—	—	—	0	5	—	1
Alabama	3	5	14	37	52	—	0	2	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Mississippi	—	0	2	4	4	—	0	5	—	—	—	0	4	—	1
Tennessee	N	0	0	N	N	—	0	3	—	—	—	0	1	—	—
<b>W.S. Central</b>	70	54	177	404	379	—	0	4	—	—	—	0	3	—	—
Arkansas	—	4	26	15	51	—	0	1	—	—	—	0	0	—	—
Louisiana	—	2	6	10	16	—	0	1	—	—	—	0	2	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas	70	48	171	379	312	—	0	3	—	—	—	0	3	—	—
<b>Mountain</b>	31	23	68	182	400	—	0	11	—	—	—	0	5	—	—
Arizona	4	9	50	49	125	—	0	7	—	—	—	0	4	—	—
Colorado	25	6	32	63	107	—	0	2	—	—	—	0	2	—	—
Idaho	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Montana	2	2	7	8	71	—	0	1	—	—	—	0	0	—	—
Nevada	N	0	0	N	N	—	0	4	—	—	—	0	2	—	—
New Mexico	—	1	8	19	11	—	0	1	—	—	—	0	0	—	—
Utah	—	4	26	41	83	—	0	1	—	—	—	0	1	—	—
Wyoming	—	0	1	2	3	—	0	1	—	—	—	0	1	—	—
<b>Pacific</b>	2	2	9	15	44	—	0	18	—	—	—	0	8	—	—
Alaska	1	1	4	8	19	—	0	0	—	—	—	0	0	—	—
California	1	0	4	4	14	—	0	18	—	—	—	0	8	—	—
Hawaii	—	0	4	3	11	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	2	4	—	5	—	0	0	—	—	—	0	0	—	—
Puerto Rico	2	3	10	27	38	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 are provisional and subject to change. For further information on interpretation of these data, see [http://www.cdc.gov/osels/ph\\_surveillance/ndss/pfs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf](http://www.cdc.gov/osels/ph_surveillance/ndss/pfs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

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

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

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TABLE III. Deaths in 122 U.S. cities,\* week ending March 3, 2012 (9th week)

Reporting area	All causes, by age (years)						P&I†	Reporting area (Continued)	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1			Total	All Ages	≥65	45-64	25-44	1-24	
<b>New England</b>	545	395	102	25	4	19	62	<b>S. Atlantic</b>	982	635	243	68	19	17	64
Boston, MA	115	80	22	8	1	4	14	Atlanta, GA	129	80	37	11	1	—	10
Bridgeport, CT	30	24	6	—	—	—	4	Baltimore, MD	120	77	33	9	—	1	5
Cambridge, MA	16	12	3	1	—	—	—	Charlotte, NC	162	110	35	10	5	2	10
Fall River, MA	32	29	3	—	—	—	5	Jacksonville, FL	7	4	3	—	—	—	1
Hartford, CT	51	33	14	2	1	1	9	Miami, FL	99	66	21	8	2	2	3
Lowell, MA	13	10	2	1	—	—	1	Norfolk, VA	64	36	18	5	3	2	2
Lynn, MA	6	6	—	—	—	—	—	Richmond, VA	56	33	15	4	4	—	5
New Bedford, MA	38	29	8	1	—	—	3	Savannah, GA	54	35	14	3	—	2	4
New Haven, CT	33	25	5	2	—	1	3	St. Petersburg, FL	53	46	6	—	—	1	8
Providence, RI	80	59	12	3	1	5	9	Tampa, FL	112	74	30	7	—	1	7
Somerville, MA	4	3	1	—	—	—	—	Washington, D.C.	105	57	28	10	4	6	7
Springfield, MA	26	12	6	4	—	4	2	Wilmington, DE	21	17	3	1	—	—	2
Waterbury, CT	26	20	5	—	1	—	—	<b>E.S. Central</b>	852	512	250	54	22	14	81
Worcester, MA	75	53	15	3	—	4	12	Birmingham, AL	139	87	40	6	4	2	11
<b>Mid. Atlantic</b>	2,087	1,442	474	92	32	47	109	Chattanooga, TN	91	60	23	4	2	2	8
Albany, NY	52	34	15	2	—	1	5	Knoxville, TN	110	75	27	6	2	—	13
Allentown, PA	38	29	7	2	—	—	4	Lexington, KY	62	34	23	4	—	1	4
Buffalo, NY	80	57	22	1	—	—	8	Memphis, TN	188	111	50	17	7	3	24
Camden, NJ	31	18	7	4	1	1	2	Mobile, AL	64	34	22	4	3	1	1
Elizabeth, NJ	12	10	2	—	—	—	—	Montgomery, AL	40	28	10	1	1	—	6
Erie, PA	32	29	2	1	—	—	3	Nashville, TN	158	83	55	12	3	5	14
Jersey City, NJ	16	11	4	—	1	—	—	<b>W.S. Central</b>	1,314	859	289	89	39	37	89
New York City, NY	1,041	748	228	42	9	14	50	Austin, TX	76	57	8	7	4	—	6
Newark, NJ	55	28	20	4	2	1	4	Baton Rouge, LA	72	54	12	3	—	3	—
Paterson, NJ	25	15	7	2	1	—	2	Corpus Christi, TX	82	51	24	3	1	3	14
Philadelphia, PA	347	188	98	24	10	27	9	Dallas, TX	229	133	65	14	5	11	12
Pittsburgh, PA <sup>§</sup>	40	32	5	2	1	—	—	El Paso, TX	111	78	26	3	3	1	4
Reading, PA	38	32	6	—	—	—	4	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	71	53	10	2	5	1	1	Houston, TX	143	84	24	19	10	6	5
Schenectady, NY	31	25	4	2	—	—	3	Little Rock, AR	91	59	17	8	3	4	4
Scranton, PA	33	29	2	1	1	—	—	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	95	70	21	1	1	2	11	San Antonio, TX	269	174	59	23	10	3	23
Trenton, NJ	U	U	U	U	U	U	U	Shreveport, LA	113	81	24	3	—	5	10
Utica, NY	19	13	5	1	—	—	—	Tulsa, OK	128	88	30	6	3	1	11
Yonkers, NY	31	21	9	1	—	—	3	<b>Mountain</b>	1,128	740	280	65	25	18	75
<b>E.N. Central</b>	2,081	1,409	487	109	38	38	146	Albuquerque, NM	125	75	41	3	3	3	11
Akron, OH	56	34	20	1	—	1	6	Boise, ID	42	31	8	2	1	—	2
Canton, OH	42	29	12	—	—	1	1	Colorado Springs, CO	91	64	22	3	1	1	2
Chicago, IL	256	167	59	15	12	3	22	Denver, CO	122	81	26	8	4	3	7
Cincinnati, OH	80	42	28	3	3	4	6	Las Vegas, NV	321	221	75	18	4	3	29
Cleveland, OH	303	228	52	17	3	3	20	Ogden, UT	42	29	12	—	1	—	2
Columbus, OH	159	108	33	9	4	5	12	Phoenix, AZ	216	124	61	22	7	2	10
Dayton, OH	119	96	17	5	—	1	10	Pueblo, CO	35	28	7	—	—	—	2
Detroit, MI	153	74	57	15	2	5	7	Salt Lake City, UT	134	87	28	9	4	6	10
Evansville, IN	49	29	14	5	1	—	1	Tucson, AZ	U	U	U	U	U	U	U
Fort Wayne, IN	88	66	16	3	2	1	6	<b>Pacific</b>	2,260	1,567	495	114	48	35	222
Gary, IN	12	6	6	—	—	—	—	Berkeley, CA	14	10	3	—	—	1	1
Grand Rapids, MI	46	35	7	2	1	1	5	Fresno, CA	153	110	35	5	2	1	16
Indianapolis, IN	214	132	64	11	3	4	15	Glendale, CA	37	30	6	—	—	1	11
Lansing, MI	61	50	7	3	1	—	5	Honolulu, HI	72	53	15	2	—	2	8
Milwaukee, WI	98	59	29	6	2	2	3	Long Beach, CA	84	46	25	6	4	3	10
Peoria, IL	50	39	7	3	—	1	7	Los Angeles, CA	274	180	66	13	11	4	33
Rockford, IL	44	28	14	—	2	—	—	Pasadena, CA	19	16	3	—	—	—	2
South Bend, IN	63	41	14	2	2	4	7	Portland, OR	114	77	26	7	3	1	7
Toledo, OH	127	98	21	6	—	2	6	Sacramento, CA	240	170	50	13	3	4	24
Youngstown, OH	61	48	10	3	—	—	7	San Diego, CA	186	136	34	7	5	4	18
<b>W.N. Central</b>	685	452	171	33	8	21	53	San Francisco, CA	499	339	113	31	8	8	52
Des Moines, IA	67	51	10	5	—	1	6	San Jose, CA	225	172	34	11	3	4	19
Duluth, MN	30	25	5	—	—	—	1	Santa Cruz, CA	32	26	5	1	—	—	3
Kansas City, KS	24	16	5	2	—	1	6	Seattle, WA	122	76	35	10	1	—	4
Kansas City, MO	116	77	29	4	2	4	5	Spokane, WA	80	51	23	4	1	1	5
Lincoln, NE	40	25	11	—	—	4	2	Tacoma, WA	109	75	22	4	7	1	9
Minneapolis, MN	72	42	22	4	2	2	10	<b>Total¶</b>	<b>11,934</b>	<b>8,011</b>	<b>2,791</b>	<b>649</b>	<b>235</b>	<b>246</b>	<b>901</b>
Omaha, NE	87	66	12	6	—	3	10								
St. Louis, MO	87	44	33	5	2	3	7								
St. Paul, MN	53	35	16	2	—	—	3								
Wichita, KS	109	71	28	5	2	3	3								

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.

## Morbidity and Mortality Weekly Report

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