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Multistate Measles Outbreak Associated with an International Youth Sporting Event — Pennsylvania, Michigan, and Texas, August–September 2007

Measles, a highly infectious viral illness, is no longer endemic in the United States because of high coverage rates with an effective vaccine (1). However, imported cases continue to cause illness and outbreaks among susceptible U.S. residents (2–5). In August 2007, a participant in an international youth sporting event who traveled from Japan to the United States became ill with measles. Because he traveled while infectious to an event with thousands of participants and spectators, an outbreak investigation was conducted in multiple states by state and local health departments in coordination with CDC, using standard measles surveillance case definitions and classifications.* This report summarizes the results of that investigation, which identified six additional measles cases that were linked epidemiologically to the index case and two generations of secondary transmission. Viral genotyping supported a single chain of transmission; six of the seven cases were linked by genetic sequencing (Figure). U.S. organizers of large-scale events attended by international travelers, especially youths, should consider documentation of adequate participant vaccination. This outbreak highlights the need to maintain the highest possible vaccination coverage in the United States, along with disease surveillance and outbreak-containment capabilities.

A sporting event held in central Pennsylvania during August 17–26, 2007, included eight U.S. teams and eight international teams representing Canada, Chinese Taipei, Curaçao, Japan, Netherlands, Mexico, Saudi Arabia, and Venezuela. Combined participant and spectator attendance for the event was approximately 265,000. Team members (boys aged 10–13 years) and coaches resided in the same compound during the event, with a common area shared

by all teams. Access to the compound was restricted to a small number of officials, corporate sponsors, and event staff members.

Cases 1 and 2: Pennsylvania, Imported from Japan

A boy aged 12 years on the Japanese team (the index patient), who had unknown vaccination status, had been exposed to a sibling with measles-like illness in Japan in late July 2007. The boy had a sore throat and malaise on August 11 and traveled to the United States on August 13. The Japanese and Chinese Taipei teams traveled together by aircraft from Tokyo, Japan, to Detroit, Michigan, where they cleared immigration and customs, and then traveled by aircraft to Baltimore, Maryland, where they chartered a bus to Pennsylvania. On August 14, the patient visited the event infirmary to be evaluated for his sore throat. On August 16, he had a measles-compatible rash, cough, Koplik's spots, fever (102.4°F [39.1°C]), and coryza. The infectious period for measles extends from 5 days before to 4 days after rash onset. The Pennsylvania Department of Health (PADOH) was notified, and the patient was isolated. Measles-specific immunoglobulin M (IgM) antibodies were detected in his serum sample; urine culture yielded measles virus, genotype D5.

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* Available at http://www.cdc.gov/ncphi/diss/nndss/casedef/measles_current.htm.

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PADOH reviewed vaccination records for 481 players, coaches, translators, and event staff members at the compound; 292 (61%) either had documentation of 2 doses of measles-containing vaccine or history of measles disease, or were born before 1957 and were, therefore, considered immune. The remaining 189 (39%) were offered measles, mumps, and rubella (MMR) vaccine or serologic testing; 104 chose to be vaccinated, and 85 chose serologic testing. Sixteen (19%) of those tested lacked evidence of immunity and subsequently were vaccinated. Public health staff members and health-care providers in Pennsylvania were alerted through the state Health Alert Network, and public announcements were issued. State health departments in California, Georgia, and Texas were informed of potential measles exposures among visiting corporate representatives who had already attended the event and departed from Pennsylvania.

A second boy aged 12 years with unknown vaccination status who had direct contact with the index patient only on August 12 in Japan, arrived in the United States on August 15 to watch the competition. On August 20, he had a sore throat and fever, followed by cough and rash on August 23. On August 24, nasopharyngeal, urine, and blood specimens were collected from the boy at a local emergency department. He was placed in isolation in his hotel room. His serum sample was positive for measles-specific IgM antibodies. Nasopharyngeal culture yielded measles virus genotype D5. The boy had minimal public interaction during his infectious period and was deemed not infectious during his airline travel.

The 29 members of his travel group and all 27 hotel staff members were interviewed; 38 (68%) persons without adequate evidence of immunity (6) received MMR vaccine. Guests registered at the hotel during the boy's infectious period were advised to contact their physicians and local health departments in the event of illness. No measles cases were identified among these groups.

Cases 3 and 4: Michigan

In accordance with CDC protocol (CDC, unpublished document, 2008), passenger manifests for the August 13 Tokyo–Detroit and Detroit–Baltimore flights were obtained to contact persons seated within one row of the index patient. A woman aged 53 years seated one row in front of the index patient on the Detroit–Baltimore flight acquired measles (case 3). Although born in 1954, she recalled no history of measles or receiving measles-containing vaccine and was administered immunoglobulin prophylaxis after being identified as a contact. On August 25, she had fever, cough, and coryza, followed by rash on August 28. Serum

initially was negative for measles IgM and immunoglobulin G antibodies, but she subsequently seroconverted. Measles viral RNA, detected in urine by reverse transcription–polymerase chain reaction (RT-PCR), had an identical sequence to the genotype D5 sequences obtained from the two patients in Pennsylvania.

Case 4 was identified in a U.S.-born man aged 25 years who was employed as a federal airport officer and had no documented measles vaccination. The officer and the index patient had been present in the same Detroit customs area on August 13. On August 23, the officer had wheezing, abdominal pain, and sweating, followed by rash on August 27. A serum sample obtained August 30 was positive for measles IgM antibodies. Measles virus RNA was detected by RT-PCR from a throat swab; however, attempts to amplify the larger region of the *N* gene necessary for genotyping were unsuccessful in this case.

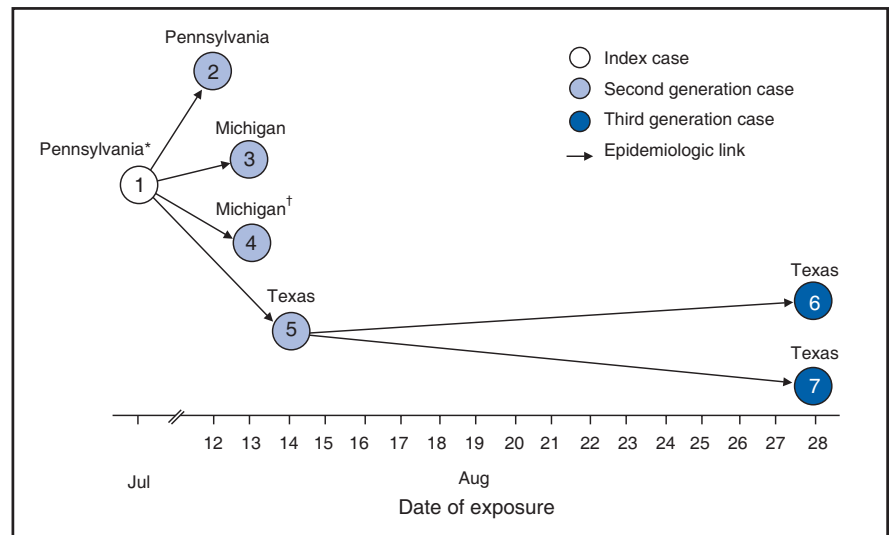
A coworker of the officer at the same airport had measles 1 month later. The source of this infection could not be determined; the coworker's measles might have been linked to case 4 through an unrecognized chain of transmission (because the incubation period for measles ranges from 7 to 18 days) or might have resulted from a separate, unrelated exposure.

Cases 5, 6, and 7: Texas

Case 5 was identified in a U.S.-born man aged 40 years who was employed as a corporate sales representative and had no documented measles vaccination. The sales representative had met the index patient on August 14 in Pennsylvania and had cough, conjunctivitis, coryza, and fever on August 26. He had rash on August 28 and was hospitalized the next day with a seizure, fever of 105.7°F (40.9°C), and pneumonia. Measles was confirmed by serum IgM antibodies and viral RNA detected in urine by RT-PCR. He recovered and was discharged from the hospital after 4 days.

Before his hospitalization, the man had made sales visits to three Houston-area colleges. Cases 6 and 7 were identified among male college roommates, aged 18 and 19 years, who had attended one of the sales events on August 28. Both students were born in the United States and had received 2 documented doses of MMR vaccine. They had fever, chills, and myalgia on September 9 and 10, respec-

FIGURE. Chain of measles transmission associated with an international youth sporting event, by date of exposure — Pennsylvania, Michigan, and Texas, 2007



* Date of exposure in late July is unknown.

† Measles virus RNA was detected by reverse transcription–polymerase chain reaction from a throat swab; however, attempts to amplify the larger region of the *N* gene necessary for genotyping were unsuccessful in case 4.

tively; one had conjunctivitis. Both had rash on September 11, detectable measles IgM antibodies in serum, and measles virus RNA by RT-PCR in throat swab specimens. No additional cases were identified. The genotype D5 sequences obtained from the three Texas patients were identical to those of the two patients from Pennsylvania and to one of the two patients (case 3) from Michigan. On August 30, the outbreak was reported to the World Health Organization under the revised International Health Regulations[†] as a public health emergency of international concern.

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[†] World Health Organization. International health regulations (2005). Geneva, Switzerland: World Health Organization; 2005. Available at <http://www.who.int/csr/ihr/en>.

Editorial Note: Measles is no longer endemic in the United States because of high 2-dose MMR vaccination coverage rates among children and adolescents (1) in conjunction with effective surveillance and outbreak response. Today, measles among U.S. residents typically is linked to imported cases, although source cases are not always detected (2). Imported cases have caused outbreaks resulting in morbidity and substantial expenditure of local, state, and federal public health resources (5,7). This importation-associated outbreak demonstrates the highly infectious nature of measles, the potential severity of the disease (case 5), and the possibility that illness can occur among persons not considered at high risk for measles (cases 3, 6, and 7).

Although the risk for measles transmission through air travel in the United States is considered low because of high U.S. population immunity (8), infection was transmitted to an airline passenger and at least one airport worker. Persons in routine contact with international travelers entering the United States can be exposed to persons with measles. All persons aged ≥ 12 months without adequate evidence of immunity should receive 1 or 2 doses of measles or MMR vaccine in accordance with current recommendations (6). Vaccination records should be actively maintained for adults and children. Although 2 doses of measles vaccine are 99% effective, cases can still occur in appropriately vaccinated persons, as observed in this investigation (cases 6 and 7). Likewise, persons born before 1957 might also remain susceptible to measles. Health-care providers should consider measles in any person with clinically compatible illness.

As endemic measles has disappeared in the United States, viral genotyping has become an increasingly important component of measles surveillance. The variety of measles genotypes now detected in the United States reflects measles activity in countries of visitor origin and countries visited by U.S. travelers. Genotype D5 was associated with a large, concurrent outbreak in Japan.[§] The identical genotype D5 sequences obtained from the index patient, who came from Japan, and from five of six patients with secondary cases suggests that Japan was the source of the virus and confirms the epidemiologic link between the cases.

Because international events provide opportunities for measles transmission (3,9), organizers of large gatherings attended by international travelers, especially youths, should consider documentation of adequate participant vaccination. To prevent spread of measles, international trav-

elers are encouraged to be fully vaccinated. MMR vaccine, administered to susceptible persons within 72 hours of measles exposure, is a recommended intervention for measles outbreak containment.[¶]

Ongoing circulation of measles virus outside the United States necessitates continued measures by national and international health agencies to achieve and maintain high vaccination coverage rates. After success in eliminating endemic measles virus transmission in the Pan-American Health Organization Region in 2002, three other World Health Organization regions have established target dates for measles elimination: the European and Eastern Mediterranean regions by 2010, and the Western Pacific Region (of which Japan is a member) by 2012.

The attack rate of measles among susceptible persons has been documented as $>90\%$ (10). Previous imported measles cases have demonstrated the potential for larger outbreaks in U.S. communities with poor vaccination coverage (3). The small number of identified cases in this outbreak, despite the large number of exposed persons, demonstrates the value of maintaining high measles vaccination coverage in the U.S. population through adherence to routine vaccination recommendations. This outbreak also highlights the continuing importance of promoting measles control and elimination in other countries and sustaining strong surveillance and response measures in the United States.

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Emergence of Fluoroquinolone-Resistant *Neisseria meningitidis* — Minnesota and North Dakota, 2007–2008

Meningococcal disease causes substantial morbidity and mortality; approximately 10% of cases are fatal. Among those who survive, 10%–15% have long-term sequelae. Nasopharyngeal carriage of *Neisseria meningitidis* is a precursor to disease; however, the majority of carriers do not develop disease. Household and other close contacts of persons with meningococcal disease have a higher risk for carriage and therefore invasive disease. These persons should receive antibiotic chemoprophylaxis to eliminate nasopharyngeal carriage of *N. meningitidis* as soon as possible (1). The rate of secondary disease for close contacts is highest immediately after onset of disease in the index patient; secondary cases rarely occur after 14 days (1). Ciprofloxacin, a second-generation fluoroquinolone, is an effective single-dose oral chemoprophylaxis agent. Although isolated cases of ciprofloxacin-resistant meningococcal disease have been described in Argentina, Australia, China, France, India, and

Spain, resistance has not been reported in North America (2–4). This report describes a cluster of three cases of fluoroquinolone-resistant meningococcal disease that occurred among residents of the border area of North Dakota and Minnesota during January 2007–January 2008. The first of these cases was epidemiologically linked and had closely related molecular features to a 2006 case of fluoroquinolone-susceptible meningococcal disease that occurred in the same geographic region. Until further notice, ciprofloxacin should not be used for chemoprophylaxis of close contacts of persons with meningococcal disease in selected counties in North Dakota and Minnesota. Ceftriaxone, rifampin, and azithromycin are alternative agents.

Case Reports

In August 2006, a worker in a day care center in eastern North Dakota became ill with fever, rash, headache, and abdominal pain. The patient had a precipitous clinical decline and died on the first day of hospitalization. *N. meningitidis* was not isolated from postmortem samples of cerebrospinal fluid (CSF), but polymerase chain reaction (PCR) results were positive for serogroup B *N. meningitidis* (5). DNA sequencing of the *gyrA* gene revealed none of the mutations previously associated with fluoroquinolone resistance, consistent with fluoroquinolone susceptibility (3). The majority of children at the day care center received rifampin, and staff members received ciprofloxacin for antibiotic prophylaxis.

Case 1. A child from eastern North Dakota, who was a student in the same classroom in the day care center of the worker who died, received rifampin prophylaxis in 2006. In January 2007, the child was hospitalized with meningitis and treated with ceftriaxone; the patient made a full recovery. Serogroup B *N. meningitidis* was isolated from CSF culture. Subsequently, the isolate was determined to be resistant to ciprofloxacin by epsilometer test (E-test), an agar diffusion method, with a minimum inhibitory concentration (MIC) of 0.19 µg/mL at the North Dakota Department of Health (NDDH). Broth microdilution testing at the Minnesota Department of Health (MDH) laboratory indicated an MIC of 0.25 µg/mL for ciprofloxacin and levofloxacin, indicating fluoroquinolone resistance (6). The isolate was susceptible to ceftriaxone, rifampin, and azithromycin by broth microdilution at the MDH laboratory. Sequencing of the *gyrA* gene revealed a threonine to isoleucine change at amino acid 91, which had been associated previously with fluoroquinolone resistance in *N. meningitidis* (3). Except for differences in the *gyrA* gene, isolates from this patient and the worker who died in 2006 were indistinguishable on further molecular characteriza-

tion, including multilocus sequence typing (MLST) and *porA* and *porB* typing. Day care attendants and staff members and household contacts of the child were administered antibiotic prophylaxis with rifampin (for children) and ciprofloxacin (for adults) before antibiotic susceptibility results were available.

Case 2. On January 7, 2008, an adult resident of western Minnesota had meningococcal disease and died. Serogroup B *N. meningitidis* was isolated from CSF culture. Antibiotic susceptibility testing by broth microdilution on the isolate at the MDH laboratory revealed identical results to the isolate in case 1, and results of MLST and pulsed-field gel electrophoresis (PFGE) testing were indistinguishable from the isolate in case 1. DNA sequencing revealed the same *gyrA* sequence detected in the isolate in case 1. Household contacts were administered ciprofloxacin or rifampin for chemoprophylaxis. When antibiotic susceptibility results were available, more than 2 weeks had passed, and adults were not offered chemoprophylaxis with another agent.

Case 3. On January 24, 2008, a college senior from western Minnesota had headache, fever, and rash; the student recovered completely. Serogroup B *N. meningitidis* was isolated from CSF culture. Antibiotic susceptibility of the isolate was identical to that in cases 1 and 2 by broth microdilution at the MDH laboratory. MLST, *porA* and *porB* typing, and PFGE of this isolate were indistinguishable from the isolates in cases 1 and 2. DNA sequencing revealed the same *gyrA* sequence detected in isolates from cases 1 and 2. Close contacts initially received ciprofloxacin but were offered azithromycin after the isolate was determined to be fluoroquinolone resistant.

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Editorial Note: This report describes three cases of fluoroquinolone-resistant serogroup B meningococcal disease among residents of the North Dakota–Minnesota border during 2007–2008. Case 1 was epidemiologically linked to a 2006 case in the same geographical region and had closely related molecular features to that case. However, the 2006 case lacked the *gyrA* mutation that confers fluoroquinolone resistance.

This report is the first description of ciprofloxacin-resistant meningococcal disease reported in North America. The three fluoroquinolone-resistant cases were caused by serogroup B *N. meningitidis*. Serogroup B accounts for 35% of meningococcal disease cases in the United States. No licensed vaccine against serogroup B *N. meningitidis* is available in the United States. Many public health laboratories do not routinely test *N. meningitidis* isolates for antibiotic susceptibility. Therefore, other cases of fluoroquinolone-resistant meningococcal disease might have occurred in the United States that have not been detected. *Neisseria gonorrhoeae* and *N. meningitidis* are closely related pathogens; fluoroquinolone-resistant gonococcal disease emerged rapidly in North America and now accounts for 13.6% of clinical isolates (7).

Ciprofloxacin is 95% effective in eliminating nasopharyngeal carriage of *N. meningitidis*, but the effectiveness of 500 mg of ciprofloxacin in eliminating carriage of fluoroquinolone-resistant *N. meningitidis* is unknown. Ciprofloxacin should not be used in areas where resistant strains have been identified; effective alternative antimicrobial chemoprophylaxis agents are available (Table).

TABLE. Interim recommendations for chemoprophylaxis against meningococcal disease in certain areas of North Dakota and Minnesota* where fluoroquinolone-resistant meningococcal disease has been identified

Drug	Age group	Dosage	Duration and route of administration
Rifampin	<1 mo	5 mg/kg body weight every 12 hrs	2 days of oral doses
	1 mo to <15 yrs	10 mg/kg body weight every 12 hrs	2 days of oral doses
	≥15 yrs	600 mg every 12 hrs	2 days of oral doses
Ceftriaxone	<15 yrs	125 mg	Single IM [†] dose
	≥15 yrs	250 mg	Single IM dose
Azithromycin [§]	<15 yrs	10 mg/kg body weight	Single oral dose
	≥15 yrs	500 mg	Single oral dose

*North Dakota counties of Barnes, Cass, Cavalier, Grand Forks, Nelson, Pembina, Ramsey, Ransom, Richland, Sargent, Steele, Traill, and Walsh; Minnesota counties of Becker, Beltrami, Clay, Clearwater, Douglas, Grant, Hubbard, Kittson, Lake of the Woods, Mahnommen, Marshall, Norman, Otter Trail, Pennington, Polk, Pope, Red Lake, Roseau, Stevens, Traverse, and Wilkin.

[†]Intramuscular.

[§]One study indicated that a single dose of azithromycin (500 mg) is equivalent to rifampin for eradication of nasopharyngeal carriage of *Neisseria meningitidis*. Source: Girgis N, Sultan Y, Frenck RW Jr, El-Gendy A, Farid Z, Mateczun A. Azithromycin compared with rifampin for eradication of nasopharyngeal colonization by *Neisseria meningitidis*. *Pediatr Infect Dis J* 1998;17:816–9.

Of 142 isolates tested at MDH from cases that occurred during 2002–2007, all were sensitive to ceftriaxone and azithromycin, and one isolate in 2002 was resistant to rifampin (8). Azithromycin is not recommended routinely for chemoprophylaxis, but one study determined that azithromycin was equivalent to rifampin for chemoprophylaxis (9). In decisions regarding prophylaxis of close contacts, all antibiotics should be used cautiously because of possible resistance resulting from widespread use.

A survey of pharyngeal carriage to determine the extent of fluoroquinolone-resistant meningococcus among residents of the North Dakota–Minnesota border area is being conducted jointly by NDDH, MDH, and CDC. Additionally, susceptibility testing of existing isolates from other regions of the United States and prospective surveillance are under way at CDC. The following are interim recommendations to state and local health departments and public health laboratories.

Until further notice, ciprofloxacin should no longer be prescribed for empiric antimicrobial chemoprophylaxis of meningococcal disease in the North Dakota counties of Barnes, Cass, Cavalier, Grand Forks, Nelson, Pembina, Ramsey, Ransom, Richland, Sargent, Steele, Traill, and Walsh, and in the Minnesota counties of Becker, Beltrami, Clay, Clearwater, Douglas, Grant, Hubbard, Kittson, Lake of the Woods, Mahnommen, Marshall, Norman, Otter Trail, Pennington, Polk, Pope, Red Lake, Roseau, Stevens, Traverse, and Wilkin. Ceftriaxone, rifampin, and azithromycin are alternative agents (Table). Ciprofloxacin may continue to be used for chemoprophylaxis of adults outside this region (1). If an isolate is tested and determined to be resistant to ciprofloxacin within 2 weeks of illness onset in the index patient, close contacts should be offered an alternative agent for antibiotic chemoprophylaxis.

Laboratories are encouraged to conduct surveillance for antibiotic-resistant isolates of meningococcal disease, especially in serogroup B isolates. Laboratories that seek support for such testing should contact CDC. Health departments should enhance surveillance for chemoprophylaxis failure among reported cases of meningococcal disease.

All cases of ciprofloxacin-resistant meningococcal disease and ciprofloxacin prophylaxis failures should be reported to local and state health authorities and to CDC. Laboratories that routinely test meningococcal isolates for resistance to ciprofloxacin should report any ciprofloxacin-resistant isolates identified retrospectively to the Meningitis and Vaccine Preventable Diseases Branch at 404-639-3158.

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Disparities in Adult Awareness of Heart Attack Warning Signs and Symptoms — 14 States, 2005

In 2005, approximately 920,000 persons in the United States had a myocardial infarction (i.e., heart attack); in 2004, approximately 157,000 heart attacks were fatal (1). One study indicated that approximately half of cardiac deaths occur within 1 hour of symptom onset, before patients reach a hospital (2). Timely access to emergency cardiac care, receipt of advanced treatment, and potential for surviving a heart attack all depend on 1) early recognition of warning signs and symptoms of a heart attack by persons who are having a heart attack and bystanders and 2) immediately calling 9-1-1. *Healthy People 2010* includes an objective to increase from 46% to 50% the proportion of adults aged ≥ 20 years who are aware of the early warning signs and symptoms of a heart attack and the importance of accessing rapid emergency care by calling 9-1-1 (objective 12-2) (3,4). To update estimates of public awareness of heart attack warning signs and symptoms and knowledge of the importance of calling 9-1-1, CDC analyzed 2005 Behavioral Risk Factor Surveillance System (BRFSS) data from the 14 states that included questions on signs and symptoms of a heart attack. This report describes the

results of that analysis, which indicated that although the awareness of certain individual warning signs was as high as 93% (i.e., for shortness of breath), awareness of all five warning signs was 31%, underscoring the need for public health measures to increase public awareness of heart attack warning signs and symptoms. In addition, disparities in awareness were observed by race/ethnicity, sex, and level of education, suggesting that new public health measures should target populations with the lowest levels of awareness.

BRFSS is a state-based, random-digit-dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥ 18 years. The survey is administered in all 50 states, the District of Columbia (DC), and the three U.S. territories (Guam, Puerto Rico, and the U.S. Virgin Islands). In 2005, 13 states and DC included modules on heart attack and stroke in their surveys. The median response rate for the 13 states and DC was 54.5% (range: 45.1%–61.3%). Data were weighted according to 2005 state population estimates. Nonoverlapping 95% confidence intervals were used to identify statistically significant prevalence differences.

A total of 71,994 respondents answered questions* regarding signs and symptoms of heart attack (with response options of “yes,” “no,” and “don’t know/not sure”). An incorrect symptom (i.e., sudden trouble seeing in one or both eyes) was included to assess whether respondents would answer “yes” to all the items in a series of closed-ended questions. Respondents also were asked to choose the one action that they would take first, from the following list of actions, if they thought that a person was having a heart attack or stroke: take the person to the hospital, advise the person to call a doctor, call 9-1-1, call a spouse or family member, or do something else.

In 2005, respondent awareness of each of the five major warning signs and symptoms of heart attack varied: pain or discomfort in the jaw, neck, or back (48%); feeling weak, lightheaded, or faint (62%); chest pain or discomfort (92%); pain or discomfort in the arms or shoulder (85%); and shortness of breath (93%). A total of 86% of respondents reported that they would call 9-1-1 if they thought someone was having a heart attack or stroke.

Awareness of each of the five major heart attack warning signs and symptoms varied by race/ethnicity, sex, and level of education. Non-Hispanic whites, women, and those with higher levels of education were significantly more likely to

be aware of heart attack warning signs and symptoms and more likely to call 9-1-1 if they thought someone was having a heart attack than non-Hispanic blacks, Hispanics, men, and persons with a lower level of education (Table 1). Awareness of the signs and symptoms also varied by state: pain or discomfort in the jaw, neck, or back ranged from 34% in DC to 59% in West Virginia; feeling weak, lightheaded, or faint ranged from 53% in DC to 70% in Iowa; chest pain or discomfort ranged from 86% in Tennessee to 96% in West Virginia; pain or discomfort in the arms or shoulder ranged from 77% in DC to 92% in West Virginia; and shortness of breath ranged from 90% in DC to 96% in West Virginia. The proportion of respondents who reported they would call 9-1-1 if they thought that someone was having a heart attack or stroke ranged from 78% in Mississippi to 89% in Minnesota (Table 1).

Awareness of all five heart attack warning signs and symptoms was low among respondents (Table 2); 31% of the respondents knew all five signs, 18% were aware of all five signs and the one incorrect symptom, and 27% were both aware of all heart attack warning signs and symptoms and indicated that they would first call 9-1-1 if they thought someone was having a heart attack or stroke. In addition, 16% of respondents were both aware of all five heart attack warning signs and symptoms but also knew that sudden trouble seeing in one or both eyes was not a warning sign and also indicated that they would call 9-1-1 if they thought someone was having a heart attack or stroke.

Awareness of all five heart attack warning signs and symptoms and calling 9-1-1 was significantly higher among non-Hispanic whites (30.2%), women (30.8%), and those with a college education or more (33.4%) than among non-Hispanic blacks and Hispanics (16.2% and 14.3%, respectively), men (22.5%), and those with less than a high school education (15.7%), respectively. By state, awareness of all five signs and symptoms and calling 9-1-1 was highest in West Virginia (35.5%) and lowest in DC (16.0%).

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Editorial Note: Persons who have a heart attack can benefit from new treatments, such as thrombolytic drugs that can stop certain heart attacks in progress. However, to be effective, these drugs ideally should be administered within 1 hour of symptom onset (5). In 2001, the American Heart Association and the National Heart, Lung, and Blood Institute launched the Act in Time campaign to increase awareness of heart attack warning signs and symptoms and

* “Do you think pain or discomfort in the jaw, neck, or back are symptoms of a heart attack?” “Do you think feeling weak, lightheaded, or faint are symptoms of a heart attack?” “Do you think chest pain or discomfort are symptoms of a heart attack?” “Do you think pain or discomfort in the arms or shoulder are symptoms of a heart attack?” “Do you think shortness of breath is a symptom of a heart attack?”

TABLE 1. Age-adjusted percentage of persons aware of certain heart attack warning signs and symptoms and who indicated “call 9-1-1” as the first action to take if they thought a person was having a heart attack or stroke, by selected characteristics — Behavioral Risk Factor Surveillance System, 13 states and the District of Columbia, 2005

Characteristic	No. of respondents	Heart attack sign or symptom								Calling 9-1-1 identified as first action % (95% CI)			
		Pain or discomfort in jaw, neck, or back		Weak, lightheaded, or faint		Chest pain or discomfort		Pain or discomfort in arms or shoulder			Shortness of breath		
		%	(95% CI)*	%	(95% CI)	%	(95% CI)	%	(95% CI)		%	(95% CI)	
Total	71,994	47.6	(47.0–48.2)	61.7	(61.1–62.4)	92.1	(91.7–92.5)	85.1	(84.5–85.6)	93.4	(93.0–93.7)	85.9	(85.4–86.4)
Race/Ethnicity													
White, non-Hispanic	57,761	51.6	(50.9–52.3)	64.9	(64.2–65.6)	94.4	(94.1–94.7)	89.1	(88.6–89.6)	94.3	(93.3–94.6)	86.8	(86.3–87.3)
Black, non-Hispanic	7,673	33.6	(31.8–35.4)	50.7	(48.8–52.6)	85.7	(84.3–87.1)	73.0	(71.1–74.7)	90.3	(89.2–91.4)	83.7	(82.3–85.1)
Hispanic	2,548	29.3	(26.4–32.3)	51.8	(48.5–55.1)	80.9	(77.9–83.5)	68.8	(65.5–71.9)	89.2	(86.7–91.3)	83.1	(80.3–85.6)
Other	3,351	41.0	(37.4–44.7)	55.8	(52.1–59.5)	86.5	(83.8–88.8)	77.5	(74.3–80.4)	90.6	(87.8–92.7)	83.1	(79.9–85.9)
Sex													
Male	27,163	41.5	(40.5–42.5)	61.0	(60.0–62.0)	90.9	(90.2–91.5)	82.1	(81.2–83.0)	93.1	(92.5–93.7)	83.7	(82.9–84.5)
Female	44,831	53.1	(52.3–53.9)	62.3	(61.5–63.8)	93.1	(92.7–93.5)	87.7	(87.1–88.2)	93.5	(93.1–93.9)	87.9	(87.4–88.4)
Education													
Less than high school diploma	8,744	34.7	(32.7–36.7)	50.3	(48.1–52.5)	83.0	(81.2–84.7)	71.7	(69.6–73.8)	86.0	(84.2–87.6)	82.7	(81.0–84.3)
High school diploma	23,728	42.9	(41.8–44.1)	57.3	(56.1–58.5)	90.2	(89.4–91.0)	82.2	(81.2–83.2)	92.8	(92.2–93.3)	85.1	(84.2–86.0)
Some college	18,505	51.3	(50.1–52.5)	64.8	(63.6–66.0)	94.2	(93.6–94.8)	88.8	(87.1–88.9)	94.6	(94.0–95.1)	86.5	(85.6–87.3)
College or more	20,839	53.9	(52.7–55.0)	67.6	(66.5–68.7)	95.7	(95.1–96.2)	90.3	(89.6–91.1)	95.4	(94.9–95.9)	87.4	(86.6–88.2)
State													
Alabama	3,197	47.4	(45.2–49.7)	61.3	(59.0–63.5)	93.2	(92.0–94.2)	86.1	(84.1–87.9)	94.1	(93.0–95.0)	86.2	(84.4–87.9)
District of Columbia	3,743	33.5	(31.5–35.5)	53.0	(50.8–55.2)	89.5	(88.1–90.7)	76.6	(74.7–78.3)	89.8	(88.2–91.1)	86.4	(84.8–87.9)
Florida	8,190	44.4	(42.8–46.0)	60.9	(59.3–62.5)	90.7	(89.5–91.7)	82.3	(80.8–83.6)	93.2	(92.3–94.0)	87.0	(85.7–88.2)
Iowa	5,051	54.6	(52.9–56.3)	69.9	(68.4–71.5)	95.2	(94.5–95.9)	89.5	(88.3–90.6)	94.3	(93.3–95.1)	86.9	(85.6–88.0)
Louisiana	2,936	43.6	(41.4–45.7)	53.6	(51.4–55.8)	86.1	(84.5–87.5)	78.1	(76.1–80.0)	91.5	(90.0–92.8)	80.4	(78.5–82.1)
Maine	3,960	50.4	(48.4–52.3)	62.2	(60.2–64.1)	93.1	(92.0–94.0)	88.7	(87.3–90.0)	93.8	(92.8–94.7)	88.2	(86.8–89.5)
Minnesota	2,829	52.8	(50.6–55.0)	68.2	(66.1–70.3)	96.5	(95.6–97.1)	89.6	(87.9–91.0)	95.1	(94.0–96.0)	89.0	(87.6–90.3)
Mississippi	4,439	43.2	(41.4–45.1)	56.4	(54.5–58.3)	91.2	(90.1–92.1)	82.8	(81.2–84.2)	90.7	(89.5–91.8)	77.7	(76.0–79.3)
Missouri	5,164	52.7	(50.6–54.9)	65.4	(63.3–67.4)	95.2	(94.1–96.0)	88.4	(86.8–89.9)	92.8	(91.6–93.8)	85.9	(84.4–87.2)
Montana	4,983	53.9	(52.0–55.9)	66.2	(64.3–68.1)	93.2	(92.2–94.2)	88.4	(86.8–89.8)	94.4	(93.4–95.2)	83.8	(82.1–85.3)
Oklahoma	13,707	49.8	(48.3–51.3)	60.2	(58.8–61.7)	91.9	(90.9–92.8)	84.6	(83.3–85.8)	91.9	(91.0–92.7)	80.6	(79.4–81.8)
Tennessee	4,749	44.3	(42.2–46.4)	58.3	(56.1–60.4)	85.8	(84.3–87.3)	81.9	(80.1–83.6)	91.8	(90.6–92.9)	87.1	(85.5–88.4)
Virginia	5,493	46.3	(44.4–48.1)	59.9	(57.9–61.8)	94.5	(93.6–95.3)	87.3	(85.8–88.6)	94.7	(93.7–95.6)	87.8	(86.5–89.0)
West Virginia	3,553	58.5	(56.5–60.4)	69.3	(67.4–71.0)	95.8	(95.0–96.5)	91.5	(90.2–92.6)	96.1	(95.3–96.8)	85.4	(84.0–86.7)

* Confidence interval.

the importance of calling 9-1-1 immediately at the onset of such symptoms. In addition, certain states with heart disease and stroke prevention programs are conducting activities to increase public awareness of the signs and symptoms of heart attack and the importance of calling 9-1-1 (6).

The disparities observed in this report by race/ethnicity, sex, and education level, with higher levels of awareness among whites, women, and persons with a college education, suggest that public health measures should target blacks, Hispanics, men, and persons with less education. In addition, the state and local departments of health in states with lower awareness should collaborate to implement general public awareness campaigns to increase the percentage of persons aware of all five heart attack signs and symptoms and the percentage of persons who are both aware of all five signs and symptoms and who know to call 9-1-1 immediately if a person is having a heart attack or stroke.

BRFSS data from 2001 indicated that the proportion of respondents who were aware of all five heart attack signs

and symptoms and the one incorrect heart attack warning signs and symptoms and who indicated that they would to call 9-1-1 as their first action, also was low (11%) (7). However, the states participating in the heart attack and stroke module from BRFSS differed in 2001 and 2005; therefore, the data cannot be compared directly.

The findings in this report are subject to at least four limitations. First, BRFSS data are based on self-reports and subject to recall bias. Second, BRFSS excludes households without landline telephones, so the results might not be representative of certain segments of the U.S. population. Third, only 13 states and DC included the BRFSS question on heart attack warning signs and symptoms in 2005, so the results might not be generalizable to the entire U.S. population. Finally, although the *Healthy People 2010* objective (i.e., to increase from 46% to 50% the proportion of adults aged ≥ 20 years who are aware of the early warning signs and symptoms of a heart attack and the importance of calling 9-1-1) is being used as a gauge of current levels of awareness, the BRFSS findings in this report cannot

TABLE 2. Age-adjusted percentage of respondents aware of all five heart attack warning signs and symptoms and who indicated “call 9-1-1” as the first action to take if they thought a person was having a heart attack or stroke, by selected characteristics — Behavioral Risk Factor Surveillance System, 13 states and the District of Columbia, 2005

Characteristic	No. of respondents	Aware of all five signs and symptoms*		Aware of all five signs and symptoms and one incorrect symptom†		Aware of all five signs and symptoms and indicated calling 9-1-1 as first action		Aware of all five signs and symptoms and one incorrect symptom and indicated calling 9-1-1 as first action	
		%	(95% CI‡)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Total	71,994	30.6	(30.1–31.2)	17.8	(17.4–18.3)	26.9	(26.3–27.4)	15.7	(15.3–16.1)
Race/Ethnicity									
White, non-Hispanic	57,761	34.3	(33.7–34.9)	20.6	(20.0–21.1)	30.2	(29.6–30.9)	18.2	(17.7–18.7)
Black, non-Hispanic	7,673	18.8	(17.5–20.2)	8.4	(7.5–9.4)	16.2	(14.9–17.5)	7.3	(6.5–8.3)
Hispanic	2,548	16.0	(14.0–18.3)	7.8	(6.5–9.4)	14.3	(12.3–16.6)	6.8	(5.5–8.4)
Other	3,351	25.0	(22.0–28.2)	13.1	(10.7–15.9)	20.2	(17.7–22.9)	10.9	(9.1–13.0)
Sex									
Male	27,163	26.2	(25.3–27.0)	14.6	(14.0–15.3)	22.5	(21.7–23.3)	12.6	(12.0–13.2)
Female	44,831	34.6	(33.9–35.4)	20.7	(20.1–21.3)	30.8	(30.1–31.5)	18.5	(18.0–19.1)
Education									
Less than high school diploma	8,744	18.0	(16.6–19.6)	10.3	(9.3–11.5)	15.7	(14.3–17.1)	8.9	(7.9–10.1)
High school diploma	23,728	25.7	(24.7–26.6)	14.8	(14.1–15.5)	22.2	(21.3–23.1)	12.8	(12.1–13.4)
Some college	18,505	33.7	(32.6–34.9)	19.1	(18.2–20.0)	29.6	(28.6–30.7)	16.7	(16.0–17.6)
College or more	20,839	37.6	(36.6–38.7)	22.7	(21.8–23.6)	33.4	(32.4–34.5)	20.4	(19.5–21.3)
State									
Alabama	3,197	28.8	(26.9–30.7)	18.4	(16.9–20.0)	25.1	(23.3–27.0)	16.1	(14.6–17.6)
District of Columbia	3,743	18.4	(16.9–19.9)	10.3	(9.2–11.6)	16.0	(14.6–17.5)	8.9	(7.9–10.1)
Florida	8,190	28.0	(26.6–29.3)	15.5	(14.4–16.6)	25.2	(23.9–26.5)	14.0	(13.0–15.0)
Iowa	5,051	39.0	(37.4–40.5)	22.5	(21.2–23.8)	34.3	(32.8–35.8)	20.0	(18.8–21.3)
Louisiana	2,936	26.4	(24.6–28.2)	14.2	(12.8–15.6)	21.5	(19.8–23.2)	11.4	(10.2–12.8)
Maine	3,960	32.4	(30.7–34.2)	20.3	(18.9–21.9)	28.9	(27.2–30.6)	18.0	(16.6–19.5)
Minnesota	2,829	38.7	(36.7–40.8)	22.0	(20.4–23.7)	34.7	(32.7–36.7)	19.9	(18.3–21.5)
Mississippi	4,439	26.5	(24.9–28.1)	15.3	(14.2–16.5)	20.8	(19.4–22.4)	12.5	(11.4–13.6)
Missouri	5,164	33.6	(31.8–35.5)	22.0	(20.4–23.7)	29.2	(27.4–31.0)	19.3	(17.8–20.9)
Montana	4,983	35.4	(33.6–37.2)	21.5	(20.1–23.1)	30.0	(28.3–31.7)	18.4	(17.0–19.9)
Oklahoma	13,707	30.0	(28.7–31.3)	17.5	(16.5–18.5)	25.0	(23.8–26.2)	14.8	(13.9–15.7)
Tennessee	4,749	29.5	(27.8–31.3)	16.0	(14.7–17.4)	26.2	(24.5–27.9)	14.1	(12.9–15.4)
Virginia	5,493	28.1	(26.5–29.7)	17.5	(16.2–18.8)	25.2	(23.7–26.7)	15.6	(14.4–16.9)
West Virginia	3,553	41.4	(39.5–43.3)	22.9	(21.3–24.5)	35.5	(33.6–37.3)	19.4	(17.0–20.9)

* Five signs and symptoms: 1) pain or discomfort in jaw, neck, or back; 2) weak, lightheaded, or faint; 3) chest pain or discomfort; 4) pain or discomfort in arms or shoulder; and 5) shortness of breath.

† An incorrect symptom (i.e., sudden trouble seeing in one or both eyes) was included in the survey to assess the possibility that respondents would answer “yes” to all the items in a series of closed-ended questions.

‡ Confidence interval.

be compared with baseline data of *Healthy People 2010* from the 2001 National Health Interview Survey (NHIS) (4). NHIS is conducted with in-person interviews of a representative U.S. population, whereas BRFSS is a telephone survey that only includes households with telephones, and the heart attack module questions were asked in only 13 states and DC.

Mortality from heart attack would decrease if patients received medical assistance more quickly (8). The time between symptom onset and treatment depends on several factors, including actions taken by the patient or bystanders, prehospital emergency care, transport systems, and in-hospital systems. Research suggests that patient delays in seeking help are a major factor related to delay in care (9). Although emergency care and medical therapies for acute events have improved, studies have shown that the time from symptom onset to treatment overall has not decreased (10). Because only approximately one third of the surveyed population knew all five correct heart attack signs

and symptoms, and only 16% of the population knew 1) all five signs and symptoms, 2) the one incorrect symptom, and 3) to call 9-1-1 immediately, state and local public health measures should be developed to improve public awareness of heart attack warning signs and symptoms.

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Update: Influenza Activity — United States, September 30, 2007–February 9, 2008

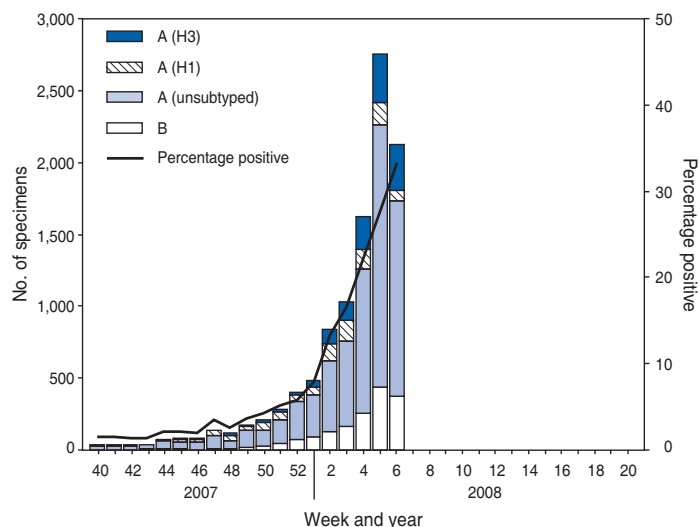
On February 15, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

This report summarizes U.S. influenza activity* since the beginning of the 2007–08 influenza season (September 30, 2007) and updates the previous summary (1). From September through early December, influenza activity remained low in the United States. Activity increased from early December through the end of the year and has continued to increase in January and February.

Viral Surveillance

During September 30, 2007–February 9, 2008,† World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories in the United States reported testing 94,502 specimens for influenza viruses, and 10,568 (11%) tested positive (Figure 1). Of these positive specimens, 8,889 (84%) were influenza A viruses, and 1,679 (16%) were influenza B viruses. A total of 2,299 (26%) of the influenza A viruses have been subtyped: 1,033 (45%) were

FIGURE 1. Number* and percentage of respiratory specimens testing positive for influenza reported by World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories, by type, week, and year — United States, September 30, 2007–February 9, 2008



* N = 10,568 (of 94,502 tested).

influenza A (H1N1) viruses, and 1,266 (55%) were influenza A (H3N2) viruses. Although influenza A (H1N1) viruses predominated through mid-January, an increasing proportion of subtyped influenza A viruses are influenza A (H3N2) viruses. Influenza A (H3N2) viruses were reported more frequently than influenza A (H1N1) viruses during January 20–February 9. During the week ending February 9, H3N2 became the predominant virus for the season overall.

This season, more influenza A viruses than influenza B viruses have been identified in all regions. Among influenza A viruses, influenza A (H1N1) has predominated in the New England, Mid-Atlantic, West North Central, Mountain, and Pacific regions, and influenza A (H3N2) has predominated in the East North Central, South Atlantic, East South Central, and West South Central regions. This season, laboratory-confirmed influenza has been reported by the District of Columbia and 47 states from all nine surveillance regions.§

*The CDC influenza surveillance system collects five categories of information from 10 data sources. *Viral surveillance*: U.S. World Health Organization collaborating laboratories, the National Respiratory and Enteric Virus Surveillance System, and novel influenza A virus case reporting. *Outpatient illness surveillance*: U.S. Influenza Sentinel Provider Surveillance Network and the U.S. Department of Veterans Affairs/U.S. Department of Defense BioSense Outpatient Surveillance System. *Mortality*: 122 Cities Mortality Reporting System and influenza-associated pediatric mortality reports. *Hospitalizations*: Emerging Infections Program and New Vaccine Surveillance Network. Summary of geographic spread of influenza: state and territorial epidemiologist reports.

† As of February 9, 2008. Data are preliminary and might change as more reports are received.

§ New England (Connecticut, Maine, Massachusetts, New Hampshire, Vermont, and Rhode Island); Mid-Atlantic (New Jersey, New York City, upstate New York, and Pennsylvania); East North Central (Illinois, Indiana, Michigan, Ohio, and Wisconsin); West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota); South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia); East South Central (Alabama, Kentucky, Mississippi, and Tennessee); West South Central (Arkansas, Louisiana, Oklahoma, and Texas); Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming); Pacific (Alaska, California, Hawaii, Oregon, and Washington).

Antigenic Characterization

Since September 30, 2007, CDC has antigenically characterized 250 influenza viruses submitted by U.S. laboratories: 117 influenza A (H1N1), 65 influenza A (H3N2), and 68 influenza B viruses. One hundred seven (91%) of the 117 influenza A (H1N1) viruses were characterized as A/Solomon Islands/3/2006-like, the influenza A (H1N1) component of the 2007–08 influenza vaccine for the Northern Hemisphere and the 2008 influenza A (H1N1) component of the vaccine for the Southern Hemisphere; 10 (9%) of the 117 influenza A (H1N1) viruses were observed to have somewhat reduced titers with antisera produced against A/Solomon Islands/3/2006. Nine (14%) of the 65 influenza A (H3N2) viruses were characterized as A/Wisconsin/67/2005-like, the influenza A (H3N2) component of the 2007–08 influenza vaccine for the Northern Hemisphere. Fifty-three (81%) of the 65 influenza A (H3N2) viruses were characterized as A/Brisbane/10/2007-like, a recent antigenic variant that has evolved from A/Wisconsin/67/2005-like. A/Brisbane/10/2007-like virus is the recommended influenza A (H3N2) component for the 2008 Southern Hemisphere vaccine. Three (5%) of the 65 influenza A (H3N2) viruses were observed to have somewhat reduced titers with antisera produced against A/Wisconsin/67/2005 and A/Brisbane/10/2007.

Influenza B viruses currently circulating can be divided into two antigenically distinct lineages represented by B/Victoria/02/87 and B/Yamagata/16/88. Four (6%) of the 68 influenza B viruses characterized belong to the B/Victoria lineage of viruses. One virus with B/Victoria lineage, B/Malaysia/2506/2004, is the influenza B component of the 2007–08 influenza vaccine. Sixty-four (94%) of the 68 influenza B viruses belong to the B/Yamagata lineage of viruses.

Outpatient Illness Surveillance

For the week ending February 9, the percentage of outpatient visits for influenza-like illness (ILI)[‡] reported by approximately 1,400 U.S. sentinel providers in 50 states, Chicago, the District of Columbia, and New York City was 5.7%. This marks the seventh consecutive week that the percentage of outpatient visits for ILI exceeded the national baseline of 2.2%.** ILI was reported above region-

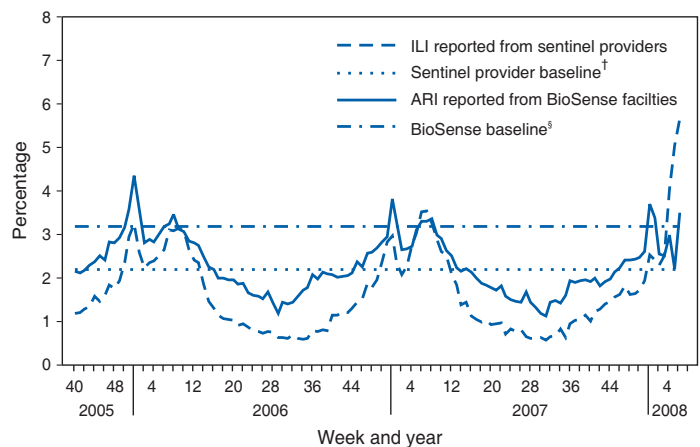
specific baselines in all nine influenza surveillance regions. Also for the week ending February 9, the percentage of outpatient visits for acute respiratory illness (ARI)^{††} reported by approximately 800 U.S. Department of Defense (DoD) and Department of Veterans' Affairs (VA) BioSense^{§§} outpatient treatment facilities was 3.5%,^{¶¶} which was above the national baseline of 3.2% (Figure 2).

^{††} Based on *International Classification of Diseases, Ninth Revision* codes for ARI: 460–66 and 480–88.

^{§§} BioSense is a national surveillance system that receives, analyzes, and evaluates health data from multiple sources, including 1) approximately 1,150 VA/DoD hospitals and ambulatory-care clinics; 2) multihospital systems, local hospitals, and state and regional syndromic surveillance systems in 37 states; and 3) Laboratory Corporation of America (LabCorp) test orders.

^{¶¶} The national, regional, and age-specific baselines are the mean percentage of visits for ARI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. Use of the national baseline for regional data is not appropriate.

FIGURE 2. Percentage of outpatient visits for influenza-like illness (ILI) and acute respiratory illness (ARI) reported by the Sentinel Provider Surveillance Network and the U.S. Department of Veterans Affairs/U.S. Department of Defense BioSense Outpatient Surveillance System, by week and year — United States, 2005–06, 2006–07, and 2007–08 influenza seasons*



* As of February 9, 2008.

[†] The national and regional baselines are the mean percentage of visits for ILI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. National and regional percentages of patient visits for ILI are weighted on the basis of state population. Use of the national baseline for regional data is not appropriate.

[§] The national and regional baselines are the mean percentage of visits for ARI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. Use of the national baseline for regional data is not appropriate.

[‡] Defined as a temperature of $\geq 100.0^{\circ}\text{F}$ ($\geq 37.8^{\circ}\text{C}$), oral or equivalent, and cough and/or sore throat, in the absence of a known cause other than influenza

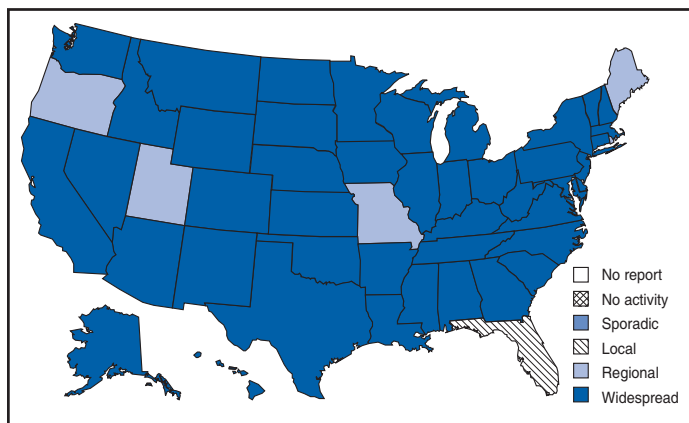
** The national and regional baselines are the mean percentage of visits for ILI during noninfluenza weeks for the previous three seasons plus two standard deviations. A noninfluenza week is a week during which <10% of specimens tested positive for influenza. National and regional percentages of patient visits for ILI are weighted on the basis of state population. Use of the national baseline for regional data is not appropriate.

State-Specific Activity Levels

Until the week ending January 5, widespread*** influenza activity had not been reported in any state. During the week ending January 5, widespread influenza activity was reported in Colorado. The number of states reporting widespread activity has increased each week. For the week ending February 9, widespread activity was reported by 44 states, and regional activity was reported by five states (Figure 3).

*** Levels of activity are 1) *no activity*; 2) *sporadic*: isolated laboratory-confirmed influenza cases or laboratory-confirmed outbreak in one institution, with no increase in ILI activity; 3) *local*: increased ILI or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region with recent laboratory evidence of influenza in that region; virus activity no greater than sporadic in other regions; 4) *regional*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least two but fewer than half of the regions in the state with recent laboratory evidence of influenza in those regions; and 5) *widespread*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state with recent laboratory evidence of influenza in the state.

FIGURE 3. Estimated influenza activity levels reported by state epidemiologists, by state and level of activity* — United States, week ending February 9, 2008



* Levels of activity are 1) *no activity*; 2) *sporadic*: isolated laboratory-confirmed influenza cases or a laboratory-confirmed outbreak in one institution, with no increase in activity; 3) *local*: increased influenza-like illness (ILI), or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region with recent laboratory evidence of influenza in that region; virus activity no greater than sporadic in other regions; 4) *regional*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least two but less than half of the regions in the state with recent laboratory evidence of influenza in those regions; and 5) *widespread*: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state with recent laboratory evidence of influenza in the state.

Pneumonia and Influenza-Related Mortality

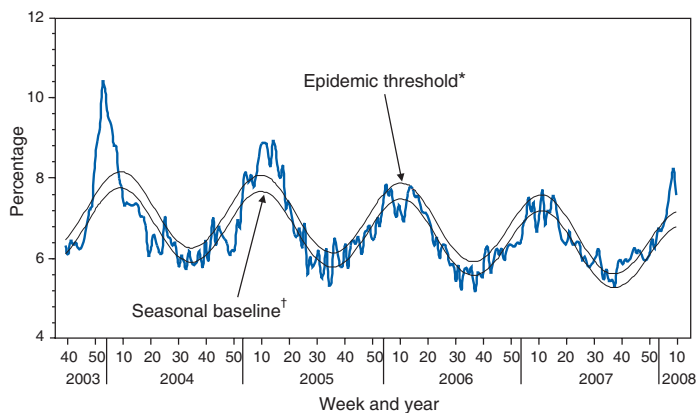
Pneumonia and influenza (P&I) was listed as an underlying or contributing cause of death for 7.6% of all deaths reported through the 122 Cities Mortality Reporting System for the week ending February 9. This percentage was above the epidemic threshold of 7.2% for the week††† and marked the fifth consecutive week that P&I deaths were above the epidemic threshold since influenza activity began rising in the United States (Figure 4).

Influenza-Associated Pediatric Hospitalizations

Pediatric hospitalizations associated with laboratory-confirmed influenza infections are monitored by two population-based surveillance networks, the Emerging Infections Program (EIP) and the New Vaccine Surveillance Network (NVSN). During November 4, 2007–January 26, 2008, the preliminary laboratory-confirmed influenza-associated hospitalization rate reported by NVSN for children aged 0–4 years was 0.73 per 10,000. During

††† The expected seasonal baseline proportion of P&I deaths reported by the 122 Cities Mortality Reporting System is projected using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I that occurred during the preceding 5 years. The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

FIGURE 4. Percentage of all deaths attributed to pneumonia and influenza (P&I) reported by the 122 Cities Mortality Reporting System, by week and year — United States, 2003–2008



* The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

† The seasonal baseline is projected using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from P&I during the preceding 5 years.

September 30, 2007–February 2, 2008, EIP sites reported a preliminary laboratory-confirmed influenza-associated hospitalization rate of 0.36 per 10,000 for children aged 0–17 years. For children aged 0–4 years, the rate was 1.0 per 10,000, and for children aged 5–17 years, the rate was 0.1 per 10,000.^{§§§}

Influenza-Related Pediatric Mortality

As of February 9, a total of 10 pediatric deaths among children with laboratory-confirmed influenza had been reported to CDC through the National Notifiable Diseases Surveillance System for the 2007–08 influenza season. Ages of children who died ranged from 4 months to 14 years, with a median of 5.5 years. During the preceding three influenza seasons, the numbers of influenza-related pediatric deaths reported to CDC have ranged from 46 to 74.

Resistance to Antiviral Medications

During this influenza season, a small increase in the number of influenza viruses resistant to the neuraminidase inhibitor, oseltamivir, has been observed. Among the 350 influenza A and B viruses tested during the 2007–08 influenza season, 16 (4.6%) have been found to be resistant to oseltamivir. All of the oseltamivir-resistant viruses have been influenza A viruses (16 of 270, 5.9%). Of the resistant viruses, all are of the H1N1 subtype and have been determined to share the same genetic mutation that confers oseltamivir resistance. These 16 viruses represent 8.1% of the 198 influenza A (H1N1) viruses that have been tested, an increase from four (0.7%) of 588 influenza A (H1N1) viruses tested during the 2006–07 season. No resistance to oseltamivir has been determined among the 72 influenza A (H3N2) or the 80 influenza B viruses tested, and no antiviral resistance to zanamivir has been detected in any subtype. Adamantane resistance continues to be

high; 87 (32%) of 271 influenza A viruses tested were resistant to adamantanes (i.e., amantadine or rimantadine), including 99% of influenza A (H3N2) viruses and 7.6% of influenza A (H1N1) viruses tested. Adamantanes are not recommended for the prevention or treatment of influenza this season because of the high rate of resistance among circulating influenza A viruses.

Reported by: WHO Collaborating Center for the Surveillance, Epidemiology, and Control of Influenza. L Brammer, MPH, S Epperson, MPH, R Dhara, MPH, T Wallis, MS, L Finelli, DrPH, L Gubareva, PhD, J Bresee, MD, A Klimov, PhD, N Cox, PhD, Influenza Div, National Center for Immunization and Respiratory Diseases; N Dharan, MD, EIS Officer, CDC.

Editorial Note: During October–December 2007, the United States experienced low but increasing levels of influenza activity. During January and early February, influenza activity increased more rapidly. For the week ending February 9, a total of 49 states reported either widespread or regional activity. During the most recent three influenza seasons (2004–05, 2005–06, and 2006–07), the number of states reporting regional or widespread activity peaked at 41–48 states. During this season, influenza virus isolates have been reported in all nine surveillance regions in the United States and, during the week ending February 9, 33% of specimens tested for influenza were positive. The peak percentage of specimens testing positive for influenza during the preceding three seasons ranged from 23% to 28%. During the week ending February 9, 5.7% of outpatient visits to sentinel providers were for influenza-like illness (ILI). The peak percentage of visits for ILI in the three previous seasons ranged from 3.3% to 5.4%.

Since 1977, influenza A (H1N1), influenza A (H3N2), and influenza B viruses have circulated globally. Each year's influenza vaccine contains a virus representing each of these three distinct influenza virus groups. The three viruses selected to be included in this season's vaccine were selected in February 2007 as the viruses that appeared most likely to be circulating during this influenza season (2). The degree of antigenic match between current influenza vaccine strains and the influenza viruses that are circulating this season will continue to be assessed as more viruses become available for analysis. To date, 91% of influenza A (H1N1) viruses sent to CDC for antigenic characterization were similar to A/Solomon Islands/3/2006, the influenza A (H1N1) component of the 2007–08 influenza vaccine. Although the majority of influenza A (H3N2) and influenza B viruses are not optimally matched, vaccination with the trivalent influenza vaccine continues to be recommended because the vaccine can provide partial protection against related strains and reduce the risk for influenza-related complications and deaths (3–6). In addition, the vaccine contains three strains, and

^{§§§} NVSN conducts surveillance in Monroe County, New York; Hamilton County, Ohio; and Davidson County, Tennessee. NVSN provides population-based estimates of laboratory-confirmed influenza hospitalization rates in children aged <5 years admitted to NVSN hospitals with fever or respiratory symptoms. Children are prospectively enrolled, and respiratory samples are collected and tested by viral culture and reverse transcription–polymerase chain reaction (RT-PCR). EIP conducts surveillance in 60 counties associated with 12 metropolitan areas: San Francisco, California; Denver, Colorado; New Haven, Connecticut; Atlanta, Georgia; Baltimore, Maryland; Minneapolis/St. Paul, Minnesota; Albuquerque, New Mexico; Las Cruces, New Mexico; Albany, New York; Rochester, New York; Portland, Oregon; and Nashville, Tennessee. EIP conducts surveillance for laboratory-confirmed, influenza-related hospitalizations in persons aged <18 years. Hospital laboratory and admission databases and infection-control logs are reviewed to identify children with a positive influenza test (i.e., viral culture, direct fluorescent antibody assays, RT-PCR, or a commercial rapid antigen test) from testing conducted as a part of their routine care.

communities can experience outbreaks with more than one strain of influenza in a given year.

Vaccination with trivalent influenza vaccines remains the best method for preventing influenza and its potentially severe complications. Although influenza activity is on the rise, vaccination during the current season still can provide benefit. Because persons require approximately 2 weeks after vaccination to develop immune response to vaccination, use of neuraminidase inhibitors for prevention of influenza in the 2 weeks after vaccination might be considered, especially for persons at high risk during a documented influenza outbreak (7).

Antiviral medications are an important tool for treatment of influenza and also can be used for prevention. Recent studies have identified a considerable protective effect of antiviral treatment against complications associated with influenza (8), including death among older adults hospitalized with laboratory-confirmed influenza (9). This season, a low level of resistance to the influenza antiviral drug oseltamivir among influenza A viruses (16 of 270 tested, 5.9%) has been detected. All 16 resistant viruses identified this season were of the influenza A (H1N1) subtype and share the same genetic mutation; this mutation is the most common mutation in this subtype that confers resistance to oseltamivir. Given the low level of resistance to oseltamivir, the finding of resistance only in influenza A (H1N1) viruses, and no resistance to zanamivir, these drugs continue to be recommended for the treatment and prophylaxis of influenza (10). Although recommendations for use of antiviral medications have not changed, enhanced surveillance for detection of oseltamivir-resistant viruses is ongoing and will enable continued monitoring for changing trends over time. In addition to vaccination and antivirals, other means of decreasing the spread and impact of influenza include frequent handwashing, staying home from work or school when ill, and covering the nose or mouth with a tissue when coughing or sneezing. Additional information is available at <http://www.cdc.gov/flu/protect/habits.htm>.

Acknowledgments

This report is based, in part, on data contributed by participating state and territorial health departments and state public health laboratories, WHO collaborating laboratories, National Respiratory and Enteric Virus Surveillance System collaborating laboratories, the U.S. Influenza Sentinel Provider Surveillance Network, the New Vaccine Surveillance Network, the Emerging Infections Program, the Influenza-Associated Pediatric Mortality Surveillance System, and the 122 Cities Mortality Reporting System.

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Notice to Readers

Beginning and Intermediate/ Advanced Courses in Epi Info

Emory University's Rollins School of Public Health and CDC's Office of Workforce and Career Development will cosponsor two training courses for Epi Info (CDC statistical software for public health practitioners) in March 2008: a basic-level course, March 10–12, and an intermediate-to advanced-level course, March 13–15. Courses will be held at Emory University; tuition will be charged.

These courses are designed for practitioners of epidemiology and computing who would like to develop software applications using Epi Info for Windows. The basic-level course covers MakeView, Analysis, Enter, Epi Map, and Epi Report. The intermediate- to advanced-level course covers importing or converting other data formats; creating relational databases; advanced check-coding and use of Epi Info functions; advanced analysis, including linear regression, logistic regression, Kaplan Meier, Cox proportional hazards, complex sample frequencies, tables, and means; special topics on Epi Map and Epi Report; and skills related to student projects.

Additional information and applications are available by mail: Emory University, Rollins School of Public Health, 1518 Clifton Road NE, Room 746, Atlanta, GA 30322; by fax: 404-727-4590; online: <http://www.sph.emory.edu/epicourses>; or via e-mail: pvaleri@sph.emory.edu.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending February 16, 2008 (7th Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2007	2006	2005	2004	2003	
Anthrax	—	—	0	—	1	—	—	—	
Botulism:									
foodborne	—	1	0	20	20	19	16	20	
infant	—	5	2	84	97	85	87	76	
other (wound & unspecified)	—	—	1	25	48	31	30	33	
Brucellosis	1	4	2	126	121	120	114	104	CA (1)
Chancroid	1	4	1	31	33	17	30	54	TX (1)
Cholera	—	—	0	7	9	8	6	2	
Cyclosporiasis§	5	7	1	99	137	543	160	75	FL (5)
Diphtheria	—	—	—	—	—	—	—	1	
Domestic arboviral diseases§¶:									
California serogroup	—	—	—	44	67	80	112	108	
eastern equine	—	—	—	4	8	21	6	14	
Powassan	—	—	—	1	1	1	1	—	
St. Louis	—	—	—	7	10	13	12	41	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§:									
<i>Ehrlichia chaffeensis</i>	1	1	—	N	N	N	N	N	MD (1)
<i>Ehrlichia ewingii</i>	—	—	—	N	N	N	N	N	
<i>Anaplasma phagocytophilum</i>	—	—	—	N	N	N	N	N	
undetermined	—	—	—	N	N	N	N	N	
<i>Haemophilus influenzae</i> **									
invasive disease (age <5 yrs):									
serotype b	—	3	0	21	29	9	19	32	
nonserotype b	2	18	3	170	175	135	135	117	OH (1), FL (1)
unknown serotype	4	29	4	190	179	217	177	227	OH (3), GA (1)
Hansen disease§	1	6	1	65	66	87	105	95	CA (1)
Hantavirus pulmonary syndrome§	—	—	0	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	—	3	2	259	288	221	200	178	
Hepatitis C viral, acute	2	54	16	772	766	652	720	1,102	CO (1), WA (1)
HIV infection, pediatric (age <13 yrs)††	—	—	5	—	—	380	436	504	
Influenza-associated pediatric mortality§§§	12	21	2	76	43	45	—	N	AR (1), CA (1), CO (2), FL (1), IL (1), IN (1), MS (1), NYC (1), TX (2), WI (1)
Listeriosis	2	45	8	767	884	896	753	696	NC (1), TN (1)
Measles¶¶	—	1	1	36	55	66	37	56	
Meningococcal disease, invasive***:									
A, C, Y, & W-135	2	13	7	277	318	297	—	—	CT (1), WA (1)
serogroup B	1	11	4	141	193	156	—	—	FL (1)
other serogroup	—	3	1	31	32	27	—	—	
unknown serogroup	7	38	18	595	651	765	—	—	NY (2), OH (1), MO (1), FL (1), TX (1), AZ (1)
Mumps	14	62	12	757	6,584	314	258	231	OH (13), MD (1)
Novel influenza A virus infections	—	—	—	4	N	N	N	N	
Plague	—	—	0	6	17	8	3	1	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Poliovirus infection, nonparalytic§	—	—	—	—	N	N	N	N	
Psittacosis§	—	—	0	10	21	16	12	12	
Q fever§:									
acute	1	2	—	—	—	—	—	—	NYC (1)
chronic	—	—	—	—	—	—	—	—	
Rabies, human	—	—	—	—	3	2	7	2	
Rubella†††	—	—	0	11	11	11	10	7	
Rubella, congenital syndrome	—	—	0	—	1	1	—	1	
SARS-CoV§§§	—	—	0	—	—	—	—	8	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	7	3	104	125	129	132	161	
Syphilis, congenital (age <1 yr)	—	5	7	268	349	329	353	413	
Tetanus	—	—	0	23	41	27	34	20	

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

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

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.

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

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

†† Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. 22 cases occurring during the 2007–08 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.

††† No rubella cases were reported for the current week.

§§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending February 16, 2008 (7th Week)*

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2007	2006	2005	2004	2003	
Toxic-shock syndrome (staphylococcal)§	—	5	2	78	101	90	95	133	
Trichinellosis	—	1	0	6	15	16	5	6	
Tularemia	—	1	0	114	95	154	134	129	
Typhoid fever	6	32	5	350	353	324	322	356	NYC (1), NC (1), TN (1), TX (1), CO (1), WA (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> §	—	—	—	28	6	2	—	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> §	—	—	—	—	1	3	1	N	
Vibriosis (noncholera <i>Vibrio</i> species infections)§	—	12	1	360	N	N	N	N	
Yellow fever	—	—	—	—	—	—	—	—	

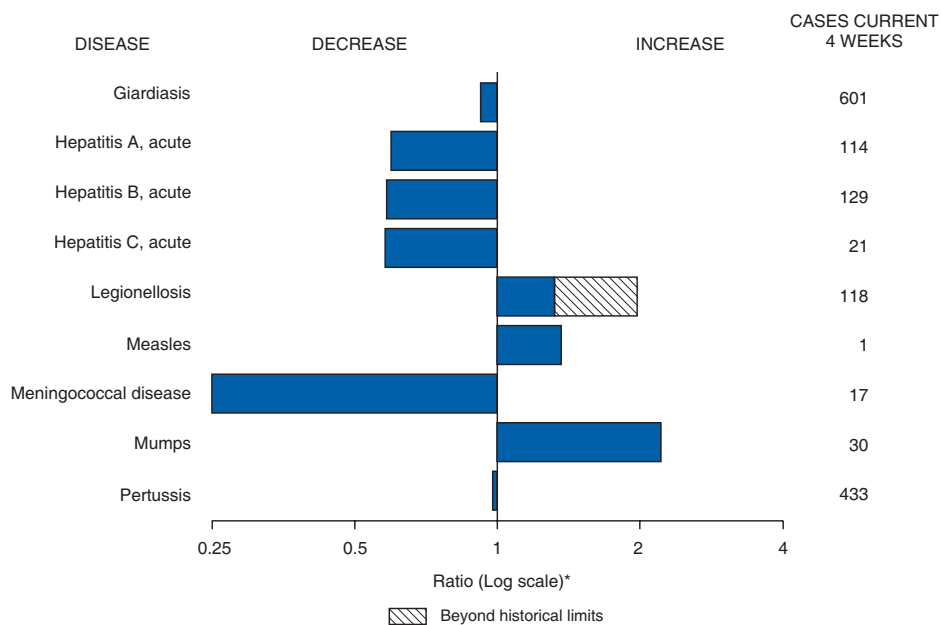
—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.

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

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals February 16, 2008, with historical data



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

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	9,558	20,855	25,187	104,629	133,966	53	138	276	730	1,056	27	84	975	310	388
New England	574	690	1,493	4,077	3,929	—	0	1	1	—	—	4	16	12	59
Connecticut	—	223	1,065	464	531	N	0	0	N	N	—	0	2	2	42
Maine§	53	49	74	353	354	—	0	0	—	—	—	1	5	—	4
Massachusetts	426	305	661	2,537	2,143	—	0	0	—	—	—	2	11	—	4
New Hampshire	47	38	73	316	275	—	0	1	1	—	—	1	5	3	7
Rhode Island§	48	62	98	401	477	—	0	0	—	—	—	0	3	—	—
Vermont§	—	17	32	6	149	N	0	0	N	N	—	1	4	7	2
Mid. Atlantic	1,328	2,870	4,196	13,500	19,969	—	0	0	—	—	—	10	118	43	43
New Jersey	130	406	524	1,492	3,001	N	0	0	N	N	—	0	8	—	2
New York (Upstate)	410	548	2,013	2,414	2,213	N	0	0	N	N	—	3	20	8	5
New York City	788	976	2,206	5,165	6,943	N	0	0	N	N	—	1	10	4	15
Pennsylvania	—	809	1,764	4,429	7,812	N	0	0	N	N	—	6	103	31	21
E.N. Central	684	3,228	6,197	14,222	23,575	—	1	3	4	6	5	20	134	67	83
Illinois	4	1,012	2,149	2,647	6,546	—	0	0	—	—	—	2	13	3	17
Indiana	259	395	629	2,568	3,087	—	0	0	—	—	—	2	32	7	1
Michigan	348	703	971	4,747	5,634	—	0	2	3	5	1	4	11	19	15
Ohio	73	801	3,620	2,634	5,558	—	0	1	1	1	4	5	61	27	28
Wisconsin	—	364	463	1,626	2,750	N	0	0	N	N	—	7	59	11	22
W.N. Central	176	1,203	1,462	5,586	8,467	—	0	1	—	2	7	14	125	45	43
Iowa	—	156	251	597	1,235	N	0	0	N	N	2	2	61	14	9
Kansas	—	149	394	650	1,061	N	0	0	N	N	—	2	16	6	5
Minnesota	—	262	478	824	1,854	—	0	0	—	—	3	3	34	12	8
Missouri	133	460	551	2,766	3,099	—	0	1	—	2	1	2	13	3	7
Nebraska§	—	92	183	336	625	N	0	0	N	N	1	1	24	7	3
North Dakota	—	27	61	37	257	N	0	0	N	N	—	0	6	1	—
South Dakota	43	52	81	376	336	N	0	0	N	N	—	2	16	2	11
S. Atlantic	3,289	4,012	5,960	24,133	21,846	—	0	1	—	1	11	19	69	92	90
Delaware	83	64	140	459	504	—	0	0	—	—	—	0	4	4	1
District of Columbia	105	113	182	748	704	—	0	0	—	—	—	0	0	—	3
Florida	1,221	1,253	1,565	8,258	3,387	N	0	0	N	N	4	9	35	39	45
Georgia	7	513	1,502	45	4,805	N	0	0	N	N	2	5	17	32	22
Maryland§	457	412	696	2,672	2,061	—	0	1	—	1	—	0	2	—	3
North Carolina	478	376	2,595	4,829	3,658	—	0	0	—	—	5	1	18	7	2
South Carolina§	534	533	3,030	3,919	3,399	N	0	0	N	N	—	1	15	5	5
Virginia§	391	490	628	2,859	2,918	N	0	0	N	N	—	1	5	2	8
West Virginia	13	60	94	344	410	N	0	0	N	N	—	0	5	3	1
E.S. Central	322	1,522	1,982	7,686	11,049	—	0	0	—	—	1	4	65	11	20
Alabama§	31	490	604	2,174	3,551	N	0	0	N	N	—	2	14	6	6
Kentucky	268	181	357	1,560	927	N	0	0	N	N	—	1	40	2	5
Mississippi	23	279	1,174	922	2,674	N	0	0	N	N	—	0	11	1	8
Tennessee§	—	514	719	3,030	3,897	N	0	0	N	N	1	1	18	2	1
W.S. Central	1,254	2,499	3,496	15,989	13,891	—	0	1	—	—	1	6	28	19	18
Arkansas§	289	202	395	1,738	938	N	0	0	N	N	—	0	8	1	2
Louisiana	81	358	851	1,077	2,219	—	0	1	—	—	—	1	4	1	6
Oklahoma	224	248	467	1,533	1,494	N	0	0	N	N	1	1	11	6	4
Texas§	660	1,685	3,059	11,641	9,240	N	0	0	N	N	—	3	16	11	6
Mountain	456	1,257	1,667	3,008	8,133	46	93	169	602	671	2	8	572	17	22
Arizona	61	452	665	393	2,676	46	91	168	599	653	—	1	6	6	3
Colorado	259	185	384	423	1,467	N	0	0	N	N	—	2	26	—	10
Idaho§	—	56	233	380	522	N	0	0	N	N	2	1	72	8	1
Montana§	4	44	329	296	394	N	0	0	N	N	—	1	7	3	—
Nevada§	—	178	293	238	1,148	—	1	5	1	3	—	0	6	—	—
New Mexico§	—	163	394	467	1,154	—	0	2	—	5	—	2	9	—	6
Utah	132	114	215	800	608	—	1	7	2	10	—	1	488	—	1
Wyoming§	—	22	35	11	164	—	0	1	—	—	—	0	8	—	1
Pacific	1,475	3,365	4,046	16,428	23,107	7	41	176	123	376	—	1	16	4	10
Alaska	58	87	124	488	602	N	0	0	N	N	—	0	2	—	—
California	1,143	2,688	3,408	13,847	18,233	7	41	176	123	376	—	0	0	—	—
Hawaii	—	108	134	541	772	N	0	0	N	N	—	0	0	—	—
Oregon§	274	181	403	1,444	1,288	N	0	0	N	N	—	1	16	4	10
Washington	—	150	621	108	2,212	N	0	0	N	N	—	0	0	—	—
American Samoa	—	0	32	29	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	13	34	12	109	—	0	0	—	—	—	0	0	—	—
Puerto Rico	225	116	612	597	967	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	3	10	—	28	—	0	0	—	—	—	0	0	—	—

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

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

* Incidence data for reporting years 2007 and 2008 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Giardiasis					Gonorrhea					<i>Haemophilus influenzae</i> , invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	130	295	842	1,267	1,873	2,428	6,784	7,951	30,668	44,961	21	42	106	321	391
New England	3	23	54	75	134	35	106	220	542	635	—	3	8	8	37
Connecticut	—	6	18	29	38	—	42	192	102	117	—	0	7	—	15
Maine [§]	—	3	10	12	17	3	2	8	9	14	—	0	4	2	—
Massachusetts	—	8	29	—	62	28	51	127	372	396	—	1	6	—	18
New Hampshire	—	0	3	7	2	1	2	6	9	18	—	0	2	1	4
Rhode Island [§]	1	0	15	10	—	3	7	14	50	79	—	0	2	2	—
Vermont [§]	2	3	8	17	15	—	1	5	—	11	—	0	1	3	—
Mid. Atlantic	17	59	113	236	343	231	677	1,013	2,942	5,367	2	9	26	65	84
New Jersey	—	7	15	11	50	35	119	159	571	852	—	1	4	11	13
New York (Upstate)	15	23	96	92	96	89	131	513	626	599	2	3	19	17	18
New York City	2	16	29	49	122	107	183	376	655	1,617	—	2	6	10	19
Pennsylvania	—	14	29	84	75	—	248	586	1,090	2,299	—	3	10	27	34
E.N. Central	17	47	89	196	291	264	1,284	2,580	5,111	9,751	5	6	14	44	54
Illinois	—	14	33	28	80	3	375	745	906	2,418	—	2	6	8	17
Indiana	N	0	0	N	N	126	162	308	1,140	1,242	—	1	7	4	5
Michigan	4	10	20	37	88	117	283	482	1,692	2,120	—	0	3	3	6
Ohio	13	15	37	108	81	18	345	1,559	924	2,931	5	2	6	29	21
Wisconsin	—	6	21	23	42	—	121	210	449	1,040	—	0	1	—	5
W.N. Central	13	22	384	115	123	46	368	445	1,556	2,798	1	3	22	36	15
Iowa	—	4	23	31	28	—	33	56	96	293	—	0	1	1	—
Kansas	1	3	11	16	13	—	39	102	169	325	—	0	1	1	4
Minnesota	10	0	379	11	2	—	67	117	231	522	—	1	20	9	—
Missouri	1	8	23	31	57	41	188	255	935	1,463	—	1	5	17	9
Nebraska [§]	1	3	8	19	14	—	25	57	95	145	1	0	3	7	2
North Dakota	—	0	3	4	1	—	2	4	2	14	—	0	1	1	—
South Dakota	—	1	6	3	8	5	5	11	28	36	—	0	0	—	—
S. Atlantic	25	53	94	285	313	1,010	1,560	2,339	8,100	9,007	7	12	30	98	89
Delaware	—	1	6	5	3	22	25	43	159	217	—	0	3	1	1
District of Columbia	—	0	6	—	11	43	46	71	256	318	—	0	1	—	1
Florida	19	23	47	130	140	428	490	623	3,109	1,672	4	3	10	27	25
Georgia	1	12	36	92	67	3	204	643	18	2,062	1	2	8	29	20
Maryland [§]	5	4	18	25	33	115	117	234	763	709	2	1	6	25	23
North Carolina	—	0	0	—	—	26	231	1,170	1,389	1,921	—	1	9	7	3
North Carolina [§]	—	2	6	12	6	228	203	1,361	1,485	1,475	—	1	4	5	6
Virginia [§]	—	10	39	20	52	142	129	224	842	512	—	1	23	2	8
West Virginia	—	0	8	1	1	3	17	38	79	121	—	0	3	2	2
E.S. Central	3	10	23	41	67	112	582	868	2,903	4,243	1	2	8	16	27
Alabama [§]	1	4	11	27	41	9	209	281	926	1,509	—	0	3	4	6
Kentucky	N	0	0	N	N	92	64	161	614	353	—	0	1	—	2
Mississippi	N	0	0	N	N	11	112	402	390	1,021	—	0	2	1	2
Tennessee [§]	2	5	16	14	26	—	178	261	973	1,360	1	1	6	11	17
W.S. Central	2	7	21	15	34	373	1,004	1,310	5,646	6,100	4	2	15	11	11
Arkansas [§]	1	1	9	4	12	74	77	138	592	539	—	0	2	—	1
Louisiana	—	2	14	3	11	60	208	384	666	1,402	—	0	2	—	2
Oklahoma	1	3	9	8	11	56	92	235	638	539	3	1	8	10	8
Texas [§]	N	0	0	N	N	183	619	926	3,750	3,620	1	0	3	1	—
Mountain	11	31	68	67	182	36	234	322	453	1,705	1	4	13	34	49
Arizona	1	3	11	14	36	13	99	130	123	587	1	2	8	25	25
Colorado	5	10	26	6	69	11	36	85	24	448	—	1	4	—	9
Idaho [§]	5	3	19	19	13	—	5	19	18	23	—	0	1	—	1
Montana [§]	—	2	8	7	9	—	1	48	10	21	—	0	1	1	—
Nevada [§]	—	2	8	—	10	—	43	87	62	291	—	0	1	1	2
New Mexico [§]	—	2	5	—	15	—	31	64	143	216	—	0	4	—	6
Utah	—	7	33	17	25	12	13	36	73	110	—	0	6	7	5
Wyoming [§]	—	1	4	4	5	—	1	5	—	9	—	0	1	—	1
Pacific	39	61	199	237	386	321	672	799	3,415	5,355	—	2	6	9	25
Alaska	2	1	5	8	11	10	9	18	53	65	—	0	4	2	4
California	21	43	83	171	295	273	586	712	3,085	4,538	—	0	5	—	5
Hawaii	—	0	2	1	1	—	12	23	67	85	—	0	1	1	—
Oregon [§]	11	8	17	46	62	38	23	63	195	156	—	1	4	6	16
Washington	5	8	113	11	17	—	23	142	15	511	—	0	1	—	—
American Samoa	—	0	0	—	—	—	0	2	1	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	1	13	4	10	—	0	0	—	—
Puerto Rico	—	4	21	—	34	9	5	23	42	38	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	1	3	—	11	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
 U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Incidence data for reporting years 2007 and 2008 are provisional.
 † Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
 § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Hepatitis (viral, acute), by type [†]										Legionellosis				
	A					B									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
	Med	Max				Med	Max				Med	Max			
United States	22	53	117	276	308	32	78	127	299	496	8	46	91	207	211
New England	—	2	6	10	5	—	1	5	—	6	1	2	14	12	8
Connecticut	—	0	3	3	1	—	0	5	—	3	1	0	4	3	1
Maine [§]	—	0	1	1	—	—	0	2	—	—	—	0	2	—	—
Massachusetts	—	1	4	—	3	—	0	1	—	—	—	0	2	—	6
New Hampshire	—	0	3	—	1	—	0	1	—	1	—	0	2	1	—
Rhode Island [§]	—	0	2	6	—	—	0	3	—	2	—	0	6	6	—
Vermont [§]	—	0	1	—	—	—	0	1	—	—	—	0	2	2	1
Mid. Atlantic	1	9	21	35	49	2	8	15	27	84	—	13	37	47	50
New Jersey	—	2	6	4	16	—	1	4	—	27	—	1	11	4	12
New York (Upstate)	1	1	5	8	6	2	2	7	4	6	—	4	15	10	6
New York City	—	3	9	8	16	—	2	6	1	23	—	2	11	1	9
Pennsylvania	—	2	5	15	11	—	3	10	22	28	—	5	21	32	23
E.N. Central	2	5	12	27	42	1	7	15	30	77	3	9	28	44	61
Illinois	—	2	5	2	21	—	2	6	4	16	—	1	12	1	12
Indiana	—	0	4	1	—	—	0	8	1	1	—	1	7	1	4
Michigan	1	2	5	18	12	—	2	6	3	31	—	3	10	11	19
Ohio	1	1	4	6	8	1	2	7	20	22	3	4	17	31	22
Wisconsin	—	0	3	—	1	—	0	2	2	7	—	0	1	—	4
W.N. Central	2	3	18	37	8	—	2	8	9	22	1	1	9	10	11
Iowa	—	1	4	12	3	—	0	2	—	5	—	0	2	2	1
Kansas	—	0	3	4	—	—	0	2	2	1	—	0	1	—	—
Minnesota	—	0	17	2	—	—	0	4	—	—	—	0	6	—	1
Missouri	—	0	3	9	2	—	1	5	5	13	1	1	3	3	6
Nebraska [§]	2	0	2	9	1	—	0	1	2	2	—	0	2	4	2
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	1	1	2	—	0	1	—	1	—	0	1	1	1
S. Atlantic	10	10	21	53	54	15	19	42	103	126	2	8	26	49	48
Delaware	—	0	1	—	—	—	0	2	—	2	—	0	2	—	1
District of Columbia	—	0	5	—	4	—	0	1	—	—	—	0	1	—	—
Florida	8	3	8	22	23	11	6	12	51	45	1	3	12	21	21
Georgia	—	1	4	7	12	1	2	6	11	22	—	1	3	12	4
Maryland [§]	2	1	5	10	5	2	2	6	8	15	1	1	5	10	12
North Carolina	—	0	9	9	1	—	0	16	18	16	—	0	4	3	3
South Carolina [§]	—	0	4	1	2	1	1	6	7	6	—	0	2	1	3
Virginia [§]	—	2	5	4	7	—	2	14	6	17	—	1	5	1	3
West Virginia	—	0	2	—	—	—	0	13	2	3	—	0	5	1	1
E.S. Central	1	2	5	6	11	1	7	14	34	37	—	2	6	7	10
Alabama [§]	—	0	4	1	2	—	2	6	10	13	—	0	1	—	2
Kentucky	—	0	2	2	2	—	1	7	15	4	—	1	3	5	4
Mississippi	—	0	1	—	4	1	0	3	1	8	—	0	0	—	—
Tennessee [§]	1	1	5	3	3	—	3	8	8	12	—	1	4	2	4
W.S. Central	3	5	32	18	25	12	18	45	53	59	—	2	8	7	1
Arkansas [§]	—	0	2	—	2	—	1	4	—	6	—	0	3	1	—
Louisiana	—	0	3	—	3	—	1	6	2	13	—	0	1	—	—
Oklahoma	—	0	8	—	—	4	1	38	4	1	—	0	2	—	—
Texas [§]	3	3	31	18	20	8	12	28	47	39	—	2	7	6	1
Mountain	—	4	15	19	33	—	2	5	4	19	—	2	6	12	13
Arizona	—	3	11	16	26	—	0	1	1	—	—	0	5	8	2
Colorado	—	0	2	—	3	—	0	3	1	5	—	0	2	—	3
Idaho [§]	—	0	2	2	—	—	0	1	—	2	—	0	1	1	1
Montana [§]	—	0	2	—	—	—	0	1	—	—	—	0	1	1	—
Nevada [§]	—	0	2	—	1	—	1	3	—	10	—	0	2	—	2
New Mexico [§]	—	0	1	—	1	—	0	2	—	2	—	0	1	—	2
Utah	—	0	2	1	1	—	0	2	2	—	—	0	3	2	2
Wyoming [§]	—	0	1	—	1	—	0	1	—	—	—	0	1	—	1
Pacific	3	12	45	71	81	1	10	31	39	66	1	3	15	19	9
Alaska	—	0	1	—	—	—	0	2	2	2	—	0	0	—	—
California	2	11	36	58	77	—	7	22	27	47	1	2	13	18	9
Hawaii	—	0	1	—	—	—	0	2	1	—	—	0	0	—	—
Oregon [§]	—	1	3	8	3	—	1	4	7	15	—	0	2	1	—
Washington	1	1	7	5	1	1	1	9	2	2	—	0	2	—	—
American Samoa	—	0	0	—	—	—	0	13	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	1	—	0	0	—	—
Puerto Rico	—	0	4	—	10	—	1	5	2	10	—	0	1	—	2
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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

[†] Incidence data for reporting years 2007 and 2008 are provisional.[‡] Data for acute hepatitis C, viral are available in Table I.[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	28	315	1,302	578	978	4	24	81	83	131	10	18	47	65	159
New England	—	44	301	11	72	—	1	16	—	6	1	0	3	1	7
Connecticut	—	12	214	—	12	—	0	16	—	—	1	0	1	1	1
Maine§	—	5	61	—	1	—	0	2	—	1	—	0	1	—	1
Massachusetts	—	0	31	—	27	—	0	3	—	5	—	0	2	—	4
New Hampshire	—	8	88	8	28	—	0	4	—	—	—	0	1	—	—
Rhode Island§	—	0	74	—	—	—	0	0	—	—	—	0	1	—	—
Vermont§	—	1	13	3	4	—	0	2	—	—	—	0	1	—	1
Mid. Atlantic	5	157	664	352	540	—	7	18	14	29	2	2	8	6	17
New Jersey	—	36	177	25	165	—	0	4	—	2	—	0	2	1	3
New York (Upstate)	5	54	192	26	48	—	1	8	2	2	2	1	3	4	4
New York City	—	3	25	—	14	—	4	9	8	20	—	0	4	1	3
Pennsylvania	—	51	321	301	313	—	0	4	4	5	—	1	5	—	7
E.N. Central	—	12	169	10	34	1	2	7	18	25	1	3	9	13	28
Illinois	—	1	16	—	2	—	1	6	6	13	—	1	3	2	7
Indiana	—	0	7	—	1	—	0	2	—	—	—	0	4	1	6
Michigan	—	0	5	3	2	1	0	2	4	4	—	0	2	4	6
Ohio	—	0	4	1	2	—	0	3	7	3	1	1	2	6	5
Wisconsin	—	10	149	6	27	—	0	2	1	5	—	0	1	—	4
W.N. Central	—	5	483	1	15	—	0	8	1	8	1	1	8	12	10
Iowa	—	1	11	1	2	—	0	1	—	1	—	0	3	2	1
Kansas	—	0	2	—	1	—	0	1	—	—	—	0	1	—	2
Minnesota	—	1	483	—	12	—	0	8	—	4	—	0	7	7	—
Missouri	—	0	4	—	—	—	0	1	—	1	1	0	2	2	5
Nebraska§	—	0	2	—	—	—	0	1	1	2	—	0	2	1	—
North Dakota	—	0	2	—	—	—	0	1	—	—	—	0	1	—	1
South Dakota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	1
S. Atlantic	19	69	213	174	298	2	5	14	28	30	2	3	11	10	22
Delaware	2	11	34	42	54	—	0	1	—	1	—	0	1	—	—
District of Columbia	—	0	7	—	—	—	0	1	—	1	—	0	0	—	—
Florida	2	1	11	9	3	2	1	7	13	8	2	1	7	3	7
Georgia	—	0	3	1	—	—	1	3	6	1	—	0	3	—	4
Maryland§	15	34	130	106	212	—	1	5	7	9	—	0	2	1	5
North Carolina	—	0	8	2	—	—	0	4	2	2	—	0	4	3	—
South Carolina§	—	0	4	1	2	—	0	1	—	—	—	0	2	3	2
Virginia§	—	17	62	13	27	—	1	7	—	8	—	0	2	—	4
West Virginia	—	0	9	—	—	—	0	1	—	—	—	0	1	—	—
E.S. Central	—	1	5	—	3	—	1	3	2	5	—	1	3	7	12
Alabama§	—	0	3	—	1	—	0	1	1	—	—	0	2	—	3
Kentucky	—	0	2	—	—	—	0	1	1	1	—	0	2	4	1
Mississippi	—	0	1	—	—	—	0	1	—	1	—	0	2	—	4
Tennessee§	—	0	4	—	2	—	0	2	—	3	—	0	2	3	4
W.S. Central	—	1	6	1	4	—	2	35	3	9	1	2	9	6	16
Arkansas§	—	0	1	—	—	—	0	1	—	—	—	0	2	—	—
Louisiana	—	0	1	—	1	—	0	2	—	2	—	0	3	3	6
Oklahoma	—	0	0	—	—	—	0	2	1	1	—	0	4	2	4
Texas§	—	1	6	1	3	—	1	34	2	6	1	1	4	1	6
Mountain	—	1	3	1	2	—	1	6	1	6	1	1	4	3	11
Arizona	—	0	1	—	—	—	0	3	—	—	1	0	2	1	2
Colorado	—	0	1	1	—	—	0	2	1	6	—	0	2	—	1
Idaho§	—	0	2	—	—	—	0	2	—	—	—	0	2	1	1
Montana§	—	0	2	—	1	—	0	1	—	—	—	0	1	—	1
Nevada§	—	0	2	—	1	—	0	1	—	—	—	0	1	—	1
New Mexico§	—	0	1	—	—	—	0	1	—	—	—	0	1	—	1
Utah	—	0	2	—	—	—	0	3	—	—	—	0	2	—	4
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	—
Pacific	4	3	10	28	10	1	3	9	16	13	1	4	19	7	36
Alaska	—	0	2	—	1	—	0	0	—	2	—	0	1	—	1
California	4	2	9	28	9	1	2	8	11	7	—	3	11	1	31
Hawaii	N	0	0	N	N	—	0	1	1	—	—	0	1	—	—
Oregon§	—	0	1	—	—	—	0	2	3	3	—	0	3	3	3
Washington	—	0	7	—	—	—	0	3	1	1	1	0	7	3	1
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2007 and 2008 are provisional.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	56	174	407	701	1,288	23	103	191	268	579	1	34	147	33	48
New England	—	24	45	10	236	6	11	22	25	66	—	0	1	—	—
Connecticut	—	0	5	—	10	4	4	10	13	29	—	0	0	—	—
Maine†	—	1	5	4	18	—	1	5	1	12	—	0	1	—	—
Massachusetts	—	18	33	—	183	—	0	0	—	N	—	0	1	—	—
New Hampshire	—	1	5	1	11	1	1	4	4	7	—	0	1	—	—
Rhode Island†	—	0	8	3	—	—	1	4	3	4	—	0	0	—	—
Vermont†	—	0	9	2	14	1	2	13	4	14	—	0	0	—	—
Mid. Atlantic	9	22	38	96	250	3	26	56	32	125	—	1	7	2	6
New Jersey	—	2	6	—	39	N	0	0	N	N	—	0	3	—	1
New York (Upstate)	9	8	23	33	132	3	9	20	32	36	—	0	1	—	—
New York City	—	2	7	—	22	—	0	5	—	12	—	0	3	1	2
Pennsylvania	—	7	22	63	57	—	16	44	—	77	—	0	3	1	3
E.N. Central	25	25	181	331	271	—	4	48	—	2	—	1	4	—	3
Illinois	—	2	8	7	48	—	1	15	—	1	—	0	3	—	1
Indiana	—	0	9	2	—	—	0	1	—	—	—	0	2	—	—
Michigan	—	4	16	11	58	—	1	27	—	1	—	0	1	—	1
Ohio	25	12	176	311	129	—	1	11	—	—	—	0	2	—	1
Wisconsin	—	0	24	—	36	N	0	0	N	N	—	0	0	—	—
W.N. Central	1	12	67	71	88	—	4	13	8	18	—	5	37	8	5
Iowa	—	2	8	5	32	—	0	3	1	2	—	0	4	—	—
Kansas	—	2	8	1	39	—	2	7	—	10	—	0	2	—	2
Minnesota	—	0	65	—	—	—	0	6	5	2	—	0	2	—	—
Missouri	1	2	15	55	6	—	0	3	—	1	—	5	29	8	3
Nebraska†	—	1	12	9	3	—	0	0	—	—	—	0	2	—	—
North Dakota	—	0	4	—	—	—	0	5	2	3	—	0	0	—	—
South Dakota	—	0	7	1	8	—	0	2	—	—	—	0	1	—	—
S. Atlantic	6	16	48	64	105	14	40	65	180	321	1	15	111	20	18
Delaware	—	0	2	—	—	—	0	0	—	—	—	0	2	—	2
District of Columbia	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
Florida	1	3	17	13	41	6	0	3	16	124	1	0	3	1	—
Georgia	—	0	3	1	10	—	5	31	42	21	—	0	6	3	3
Maryland†	—	2	6	9	22	—	8	18	8	46	—	1	5	4	6
North Carolina	5	5	34	32	—	8	9	19	50	42	—	7	96	11	—
South Carolina†	—	1	11	3	15	—	0	11	—	12	—	0	7	—	3
Virginia†	—	2	11	6	16	—	12	31	57	70	—	2	11	1	4
West Virginia	—	0	12	—	—	—	0	11	7	6	—	0	3	—	—
E.S. Central	—	6	35	28	43	—	3	6	2	12	—	5	16	3	14
Alabama†	—	1	6	5	15	—	0	0	—	—	—	1	10	2	7
Kentucky	—	0	4	4	1	—	0	3	2	4	—	0	2	—	—
Mississippi	—	3	32	15	11	—	0	1	—	—	—	0	2	—	1
Tennessee†	—	1	5	4	16	—	2	6	—	8	—	2	10	1	6
W.S. Central	5	20	79	30	38	—	1	23	5	10	—	1	30	—	1
Arkansas†	1	2	17	7	2	—	1	3	5	2	—	0	15	—	—
Louisiana	—	0	2	—	3	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	26	1	—	—	0	22	—	8	—	0	20	—	—
Texas†	4	16	69	22	33	—	0	0	—	—	—	1	5	—	1
Mountain	7	19	40	40	177	—	3	14	9	7	—	0	4	—	1
Arizona	1	2	13	4	54	—	2	12	8	6	—	0	1	—	—
Colorado	6	5	14	11	53	—	0	0	—	—	—	0	2	—	—
Idaho†	—	0	4	1	9	—	0	0	—	—	—	0	1	—	1
Montana†	—	1	7	9	5	—	0	3	—	—	—	0	1	—	—
Nevada†	—	0	6	—	5	—	0	2	—	—	—	0	0	—	—
New Mexico†	—	1	7	—	7	—	0	2	—	—	—	0	1	—	—
Utah	—	6	27	15	35	—	0	2	—	1	—	0	0	—	—
Wyoming†	—	0	2	—	9	—	0	4	1	—	—	0	2	—	—
Pacific	3	14	131	31	80	—	4	10	7	18	—	0	2	—	—
Alaska	2	1	6	12	9	—	0	3	4	14	N	0	0	N	N
California	—	6	24	—	43	—	3	8	3	4	—	0	2	—	—
Hawaii	—	0	1	—	2	N	0	0	N	N	N	0	0	N	N
Oregon†	1	1	14	7	13	—	0	3	—	—	—	0	1	—	—
Washington	—	3	113	12	13	—	0	0	—	—	N	0	0	N	N
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	—	—	—	0	5	1	7	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2007 and 2008 are provisional.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
United States	286	850	1,319	2,717	4,332	26	70	214	176	265	96	358	555	1,547	1,341
New England	1	31	74	69	577	—	4	11	9	62	—	3	11	8	68
Connecticut	—	0	32	32	430	—	0	2	2	45	—	0	2	2	44
Maine§	—	2	14	13	14	—	0	4	2	1	—	0	4	—	2
Massachusetts	—	21	58	—	113	—	2	10	—	12	—	2	8	—	21
New Hampshire	—	2	10	6	11	—	0	4	2	4	—	0	1	1	1
Rhode Island§	1	2	15	11	5	—	0	2	1	—	—	0	9	4	—
Vermont§	—	1	5	7	4	—	0	3	2	—	—	0	1	1	—
Mid. Atlantic	16	108	190	316	577	1	9	27	18	34	—	14	119	80	68
New Jersey	—	19	48	9	119	—	2	7	—	10	—	3	10	18	4
New York (Upstate)	16	27	63	90	107	1	3	12	8	9	—	3	19	19	8
New York City	—	25	51	87	148	—	1	5	3	3	—	5	11	25	47
Pennsylvania	—	34	69	130	203	—	2	11	7	12	—	2	108	18	9
E.N. Central	23	104	255	268	503	1	9	35	17	39	13	54	133	284	129
Illinois	—	32	188	38	187	—	1	13	—	5	—	14	25	65	78
Indiana	—	12	34	25	24	—	1	13	2	—	—	3	81	104	8
Michigan	1	18	41	67	88	—	1	8	5	8	—	1	7	7	7
Ohio	22	25	64	123	120	1	2	9	6	24	13	18	104	95	18
Wisconsin	—	15	50	15	84	—	3	11	4	2	—	4	13	13	18
W.N. Central	24	49	103	181	236	7	12	38	26	23	7	31	80	83	184
Iowa	—	9	18	27	45	—	2	13	4	—	—	2	6	5	5
Kansas	—	7	20	19	35	—	1	4	2	2	—	0	3	2	4
Minnesota	11	13	41	46	38	7	4	17	12	12	6	4	12	11	34
Missouri	10	15	29	64	67	—	2	12	6	4	1	21	72	45	125
Nebraska§	3	5	13	22	20	—	2	6	2	5	—	0	3	—	2
North Dakota	—	0	9	2	2	—	0	1	—	—	—	0	5	9	2
South Dakota	—	3	11	1	29	—	0	5	—	—	—	0	30	11	12
S. Atlantic	133	229	436	1,020	1,151	9	13	38	50	51	36	82	154	402	442
Delaware	—	2	8	7	11	—	0	2	1	3	—	0	2	—	1
District of Columbia	—	0	4	—	6	—	0	1	—	—	—	0	1	—	2
Florida	68	87	181	533	494	2	3	18	20	14	18	36	75	153	270
Georgia	7	33	82	172	172	—	1	6	2	7	14	28	86	178	142
Maryland§	10	14	44	65	91	3	1	6	11	12	1	2	7	7	13
North Carolina	45	25	191	122	182	4	1	24	10	4	—	0	12	12	—
South Carolina§	2	18	51	73	86	—	0	3	3	—	3	4	20	44	6
Virginia§	1	22	50	40	103	—	3	9	2	11	—	3	14	8	8
West Virginia	—	4	20	8	6	—	0	3	1	—	—	0	62	—	—
E.S. Central	19	59	145	218	322	—	4	26	17	11	10	49	177	216	113
Alabama§	3	16	50	71	87	—	1	19	4	1	1	13	42	51	36
Kentucky	3	10	23	37	52	—	1	12	3	2	2	8	35	31	10
Mississippi	—	13	57	38	101	—	0	1	1	1	—	18	111	74	27
Tennessee§	13	17	35	72	82	—	2	11	9	7	7	4	32	60	40
W.S. Central	9	88	249	127	177	1	4	13	7	9	20	44	135	319	72
Arkansas§	5	13	50	29	24	—	0	3	1	4	4	1	11	11	9
Louisiana	—	16	42	24	53	—	0	2	—	1	—	9	22	11	22
Oklahoma	4	9	43	27	26	1	0	3	2	1	6	3	9	17	4
Texas§	—	46	181	47	74	—	3	11	4	3	10	32	126	280	37
Mountain	21	49	83	137	280	3	10	42	23	25	3	17	41	49	101
Arizona	8	17	40	89	106	2	2	8	9	6	1	10	29	43	46
Colorado	8	10	24	13	62	—	1	17	—	6	2	2	6	3	11
Idaho§	4	3	10	15	18	1	2	16	14	1	—	0	2	1	1
Montana§	1	2	9	5	12	—	0	0	—	—	—	0	2	—	2
Nevada§	—	5	12	—	23	—	0	3	—	3	—	0	10	—	9
New Mexico§	—	5	13	—	27	—	0	3	—	7	—	1	6	—	17
Utah	—	4	17	7	21	—	1	9	—	2	—	0	5	—	3
Wyoming§	—	1	5	8	11	—	0	0	—	—	—	0	5	2	12
Pacific	40	113	351	381	509	4	9	38	9	11	7	27	70	106	164
Alaska	1	1	5	3	4	N	0	0	N	N	—	0	1	—	3
California	21	85	227	300	447	—	5	33	4	5	6	21	61	93	145
Hawaii	—	1	13	23	—	—	0	1	1	—	—	0	3	5	—
Oregon§	1	6	16	29	34	1	1	11	1	3	—	1	6	6	8
Washington	17	11	124	26	24	3	1	18	3	3	1	2	20	2	8
American Samoa	—	0	1	1	—	—	0	0	—	—	—	0	1	1	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	1	—	N	0	0	N	N	—	0	3	1	1
Puerto Rico	—	12	55	5	75	—	0	0	—	—	—	0	2	—	8
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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2007 and 2008 are provisional.
 † Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Streptococcal disease, invasive, group A					<i>Streptococcus pneumoniae</i> , invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max		
United States	82	85	168	555	667	14	32	107	156	235
New England	—	5	28	4	47	—	1	7	2	29
Connecticut	—	0	22	—	2	—	0	1	—	4
Maine§	—	0	3	1	3	—	0	1	—	—
Massachusetts	—	2	12	—	31	—	1	4	—	19
New Hampshire	—	0	4	2	5	—	0	2	2	3
Rhode Island§	—	0	1	—	—	—	0	1	—	2
Vermont§	—	0	1	1	6	—	0	1	—	1
Mid. Atlantic	4	16	40	99	129	1	5	38	16	37
New Jersey	—	2	12	5	24	—	1	5	2	10
New York (Upstate)	4	6	20	46	25	1	2	13	14	18
New York City	—	3	13	10	37	—	1	35	—	9
Pennsylvania	—	4	11	38	43	N	0	0	N	N
E.N. Central	8	16	34	107	158	2	4	17	25	40
Illinois	—	4	11	20	59	—	1	6	—	6
Indiana	—	2	10	17	11	—	0	11	2	3
Michigan	—	3	10	24	32	—	1	5	8	18
Ohio	8	4	14	46	49	2	1	5	14	9
Wisconsin	—	0	5	—	7	—	0	2	1	4
W.N. Central	28	5	32	54	32	2	3	15	20	8
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	3	8	9	—	0	1	2	—
Minnesota	17	0	29	17	—	—	1	14	6	—
Missouri	8	2	4	20	18	2	0	2	10	6
Nebraska§	3	0	3	7	1	—	0	3	2	1
North Dakota	—	0	3	—	2	—	0	0	—	1
South Dakota	—	0	2	2	2	—	0	0	—	—
S. Atlantic	18	23	49	157	132	2	6	14	24	45
Delaware	—	0	1	1	1	—	0	0	—	—
District of Columbia	—	0	3	—	1	—	0	0	—	—
Florida	7	6	16	47	29	1	1	5	5	4
Georgia	5	5	12	40	28	—	0	5	—	15
Maryland§	6	4	9	35	26	1	1	5	13	13
North Carolina	—	1	22	9	14	—	0	0	—	—
South Carolina§	—	1	7	10	13	—	1	4	6	5
Virginia§	—	3	12	13	17	—	0	3	—	8
West Virginia	—	0	3	2	3	—	0	1	—	—
E.S. Central	2	4	13	16	31	—	2	11	5	16
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	1	1	3	4	8	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	—	2
Tennessee§	1	3	13	12	23	—	2	9	5	14
W.S. Central	8	6	38	44	33	4	5	37	26	27
Arkansas§	—	0	2	—	5	—	0	2	3	3
Louisiana	—	0	4	1	4	—	0	3	—	10
Oklahoma	4	1	8	18	14	3	1	5	12	6
Texas§	4	5	29	25	10	1	2	32	11	8
Mountain	12	9	21	63	88	2	4	12	31	28
Arizona	3	4	10	36	39	1	2	8	24	17
Colorado	9	3	8	17	18	1	1	4	4	6
Idaho§	—	0	2	3	2	—	0	1	1	—
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	—	1	—	0	1	1	—
New Mexico§	—	1	4	—	10	—	0	4	—	2
Utah	—	1	6	7	17	—	0	2	1	3
Wyoming§	—	0	1	—	1	—	0	0	—	—
Pacific	2	3	7	11	17	1	0	4	7	5
Alaska	1	0	3	2	3	1	0	4	7	4
California	N	0	0	N	N	N	0	0	N	N
Hawaii	1	2	5	9	14	—	0	1	—	1
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	4	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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

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

* Incidence data for reporting years 2007 and 2008 are provisional.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	<i>Streptococcus pneumoniae</i> , invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years					Current week	Previous 52 weeks		Cum 2008	Cum 2007
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007		Med	Max		
		Med	Max				Med	Max							
United States	31	40	97	378	488	6	7	23	44	80	96	215	279	1,074	1,252
New England	—	1	7	7	32	—	0	2	1	2	4	5	14	27	27
Connecticut	—	0	5	—	21	—	0	2	—	2	—	0	5	—	5
Maine§	—	0	1	2	3	—	0	1	1	—	—	0	2	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	2	3	8	23	15
New Hampshire	—	0	0	—	—	—	0	0	—	—	2	0	3	3	3
Rhode Island§	—	0	3	2	4	—	0	1	—	—	—	0	5	1	4
Vermont§	—	0	2	3	4	—	0	1	—	—	—	0	5	—	—
Mid. Atlantic	1	2	9	24	28	—	0	5	1	5	20	35	46	210	209
New Jersey	—	0	0	—	—	—	0	0	—	—	5	4	9	33	25
New York (Upstate)	1	1	5	7	6	—	0	4	—	2	2	3	8	8	9
New York City	—	0	0	—	—	—	0	0	—	—	13	18	35	135	121
Pennsylvania	—	1	6	17	22	—	0	2	1	3	—	8	17	34	54
E.N. Central	7	10	36	82	140	—	2	11	8	20	20	15	25	82	113
Illinois	—	1	7	5	27	—	0	5	—	8	—	7	14	5	54
Indiana	—	3	22	17	19	—	0	9	1	2	3	1	6	15	5
Michigan	—	0	1	2	—	—	0	1	1	—	12	2	9	13	18
Ohio	7	5	23	58	94	—	1	3	6	10	5	4	10	43	29
Wisconsin	N	0	0	N	N	—	0	0	—	—	—	1	4	6	7
W.N. Central	2	2	49	24	32	—	0	3	—	3	1	7	14	42	27
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	—	1
Kansas	—	0	7	2	20	—	0	1	—	2	—	0	2	—	3
Minnesota	—	0	46	—	—	—	0	3	—	—	—	1	4	6	10
Missouri	2	1	8	22	11	—	0	1	—	—	1	5	10	35	13
Nebraska§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	1	—	0	1	—	1	—	0	3	—	—
S. Atlantic	16	19	43	174	184	4	4	12	26	39	27	50	86	240	234
Delaware	—	0	1	1	—	—	0	1	—	1	1	0	3	1	2
District of Columbia	—	0	1	—	2	—	0	0	—	—	2	2	12	14	22
Florida	13	11	27	109	100	3	2	7	19	18	7	17	34	88	61
Georgia	3	5	19	62	75	1	1	5	6	16	—	9	68	6	21
Maryland§	—	0	1	1	—	—	0	1	1	—	5	6	15	39	43
North Carolina	—	0	0	—	—	—	0	0	—	—	11	5	23	53	42
South Carolina§	—	0	0	—	—	—	0	0	—	—	1	1	11	15	14
Virginia§	N	0	0	N	N	—	0	0	—	—	—	4	16	24	28
West Virginia	—	1	9	1	7	—	0	1	—	4	—	0	1	—	1
E.S. Central	5	4	12	55	28	1	1	3	4	4	7	19	31	119	79
Alabama§	N	0	0	N	N	—	0	0	—	—	7	7	17	54	26
Kentucky	1	0	2	8	6	—	0	1	1	—	—	1	7	7	10
Mississippi	—	0	0	—	—	—	0	0	—	—	—	2	15	13	14
Tennessee§	4	3	12	47	22	1	0	3	3	4	—	7	15	45	29
W.S. Central	—	2	12	8	34	1	0	3	3	3	12	37	55	185	204
Arkansas§	—	0	1	1	—	1	0	0	1	—	—	2	10	7	13
Louisiana	—	1	4	7	15	—	0	2	2	1	2	10	23	17	42
Oklahoma	—	0	10	—	19	—	0	2	—	2	1	1	3	9	12
Texas§	—	0	0	—	—	—	0	0	—	—	9	24	39	152	137
Mountain	—	1	5	4	10	—	0	2	—	4	1	7	25	18	57
Arizona	—	0	0	—	—	—	0	0	—	—	—	3	17	2	31
Colorado	—	0	0	—	—	—	0	0	—	—	1	1	5	9	6
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	3	—	1
Nevada§	—	0	3	3	8	—	0	2	—	1	—	2	6	3	11
New Mexico§	—	0	1	—	—	—	0	0	—	—	—	1	3	4	5
Utah	—	0	5	1	1	—	0	2	—	2	—	0	2	—	2
Wyoming§	—	0	2	—	1	—	0	1	—	1	—	0	1	—	1
Pacific	—	0	0	—	—	—	0	1	1	—	4	40	60	151	302
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	—	2
California	N	0	0	N	N	—	0	0	—	—	3	37	57	118	282
Hawaii	—	0	0	—	—	—	0	1	1	—	—	0	2	3	1
Oregon§	N	0	0	N	N	—	0	0	—	—	1	0	2	3	2
Washington	N	0	0	N	N	—	0	0	—	—	—	3	13	27	15
American Samoa	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	1	3	10	11	10
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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2007 and 2008 are provisional.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending February 16, 2008, and February 17, 2007 (7th Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Neuroinvasive				Nonneuroinvasive§					
		Med	Max			Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks			
							Med	Max				Med	Max	Cum 2008	Cum 2007
United States	464	582	1,282	3,092	5,966	—	1	141	—	—	—	2	299	—	1
New England	7	12	47	64	104	—	0	2	—	—	—	0	2	—	—
Connecticut	—	0	1	—	1	—	0	2	—	—	—	0	1	—	—
Maine¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
New Hampshire	1	6	17	22	44	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Vermont¶	6	5	38	42	59	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	68	154	300	982	—	0	3	—	—	—	0	3	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	3	—	—	—	0	3	—	—
Pennsylvania	—	68	154	300	982	—	0	1	—	—	—	0	1	—	—
E.N. Central	91	164	358	897	2,229	—	0	18	—	—	—	0	12	—	1
Illinois	—	2	11	13	25	—	0	13	—	—	—	0	8	—	—
Indiana	N	0	0	N	N	—	0	4	—	—	—	0	2	—	—
Michigan	31	73	146	387	911	—	0	5	—	—	—	0	0	—	—
Ohio	60	74	208	497	1,049	—	0	4	—	—	—	0	3	—	1
Wisconsin	—	12	80	—	244	—	0	2	—	—	—	0	2	—	—
W.N. Central	25	25	114	196	307	—	0	41	—	—	—	1	117	—	—
Iowa	N	0	0	N	N	—	0	4	—	—	—	0	3	—	—
Kansas	20	6	29	81	158	—	0	3	—	—	—	0	7	—	—
Minnesota	—	0	0	—	—	—	0	9	—	—	—	0	12	—	—
Missouri	5	13	78	112	131	—	0	9	—	—	—	0	3	—	—
Nebraska¶	N	0	0	N	N	—	0	5	—	—	—	0	15	—	—
North Dakota	—	0	60	1	—	—	0	11	—	—	—	0	49	—	—
South Dakota	—	0	14	2	18	—	0	9	—	—	—	0	32	—	—
S. Atlantic	84	89	214	461	751	—	0	12	—	—	—	0	6	—	—
Delaware	—	1	4	1	7	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	8	—	—	—	0	0	—	—	—	0	0	—	—
Florida	83	26	76	240	174	—	0	1	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	8	—	—	—	0	5	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
North Carolina	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
South Carolina¶	1	16	55	80	230	—	0	2	—	—	—	0	1	—	—
Virginia¶	—	17	85	15	115	—	0	1	—	—	—	0	1	—	—
West Virginia	—	22	66	125	225	—	0	0	—	—	—	0	0	—	—
E.S. Central	6	12	82	116	60	—	0	11	—	—	—	0	14	—	—
Alabama¶	6	12	82	115	58	—	0	2	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	1	2	—	0	7	—	—	—	0	12	—	—
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	229	169	530	966	1,046	—	0	34	—	—	—	0	18	—	—
Arkansas¶	24	12	46	75	44	—	0	5	—	—	—	0	2	—	—
Louisiana	—	1	8	5	31	—	0	5	—	—	—	0	3	—	—
Oklahoma	—	0	0	—	—	—	0	11	—	—	—	0	7	—	—
Texas¶	205	155	484	886	971	—	0	18	—	—	—	0	10	—	—
Mountain	21	40	130	91	472	—	0	36	—	—	—	1	143	—	—
Arizona	—	0	0	—	—	—	0	8	—	—	—	0	10	—	—
Colorado	19	13	62	28	200	—	0	17	—	—	—	0	65	—	—
Idaho¶	N	0	0	N	N	—	0	3	—	—	—	0	22	—	—
Montana¶	2	6	40	32	52	—	0	10	—	—	—	0	30	—	—
Nevada¶	—	0	1	—	1	—	0	1	—	—	—	0	3	—	—
New Mexico¶	—	4	37	—	47	—	0	8	—	—	—	0	6	—	—
Utah	—	8	72	30	172	—	0	8	—	—	—	0	8	—	—
Wyoming¶	—	0	9	1	—	—	0	4	—	—	—	0	33	—	—
Pacific	1	0	4	1	15	—	0	18	—	—	—	0	23	—	—
Alaska	1	0	4	1	15	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	17	—	—	—	0	21	—	—
Hawaii	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	3	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	3	21	4	54	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	11	37	11	78	—	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
‡: Incidence data for reporting years 2007 and 2008 are provisional.
† 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 notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending February 16, 2008 (7th Week)

Reporting Area	All causes, by age (years)							Reporting Area	All causes, by age (years)							
	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total		All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total	
New England	512	357	105	18	18	14	52	S. Atlantic	1,251	786	310	85	27	42	73	
Boston, MA	128	82	31	2	6	7	15	Atlanta, GA	139	70	43	11	8	7	—	
Bridgeport, CT	43	29	12	2	—	—	5	Baltimore, MD	187	109	56	15	5	2	17	
Cambridge, MA	15	12	—	2	1	—	1	Charlotte, NC	144	109	27	5	—	3	15	
Fall River, MA	28	21	6	—	1	—	3	Jacksonville, FL	169	121	32	14	—	2	13	
Hartford, CT	44	32	7	3	2	—	1	Miami, FL	73	47	12	10	1	3	5	
Lowell, MA	27	19	6	—	1	1	—	Norfolk, VA	49	31	12	3	—	3	4	
Lynn, MA	10	7	3	—	—	—	1	Richmond, VA	56	32	16	5	1	2	4	
New Bedford, MA	32	27	4	1	—	—	2	Savannah, GA	52	39	11	—	1	1	3	
New Haven, CT	26	14	6	2	3	1	7	St. Petersburg, FL	69	45	20	1	—	3	2	
Providence, RI	U	U	U	U	U	U	U	Tampa, FL	205	131	51	14	6	3	9	
Somerville, MA	3	3	—	—	—	—	—	Washington, D.C.	100	47	28	6	5	13	—	
Springfield, MA	54	37	8	3	1	5	6	Wilmington, DE	8	5	2	1	—	—	1	
Waterbury, CT	27	20	6	1	—	—	5	E.S. Central	900	577	224	55	25	19	78	
Worcester, MA	75	54	16	2	3	—	6	Birmingham, AL	187	121	43	7	7	9	13	
Mid. Atlantic	1,992	1,414	422	82	39	35	117	Chattanooga, TN	92	56	26	4	5	1	4	
Albany, NY	53	41	10	—	1	1	3	Knoxville, TN	103	76	20	6	—	1	5	
Allentown, PA	39	31	8	—	—	—	—	Lexington, KY	56	46	5	1	3	1	5	
Buffalo, NY	37	28	3	1	4	1	2	Memphis, TN	164	106	41	13	3	1	22	
Camden, NJ	17	12	2	1	1	1	1	Mobile, AL	86	49	25	7	3	2	5	
Elizabeth, NJ	19	14	4	1	—	—	4	Montgomery, AL	52	28	15	6	—	3	6	
Erie, PA	55	41	9	1	2	2	2	Nashville, TN	160	95	49	11	4	1	18	
Jersey City, NJ	17	9	7	—	—	1	1	W.S. Central	1,672	1,128	355	107	40	42	128	
New York City, NY	1,098	760	255	49	17	17	51	Austin, TX	131	94	22	10	3	2	13	
Newark, NJ	44	20	18	3	—	3	3	Baton Rouge, LA	64	45	15	2	—	2	—	
Paterson, NJ	19	12	4	2	—	1	3	Corpus Christi, TX	64	47	9	7	—	1	2	
Philadelphia, PA	172	116	35	13	6	2	9	Dallas, TX	211	135	46	12	8	10	16	
Pittsburgh, PA‡	28	22	6	—	—	—	—	El Paso, TX	96	74	12	5	1	4	12	
Reading, PA	37	32	4	1	—	—	6	Fort Worth, TX	128	88	28	8	1	3	10	
Rochester, NY	124	92	21	5	2	4	11	Houston, TX	422	253	107	35	16	11	31	
Schenectady, NY	28	24	3	—	—	1	5	Little Rock, AR	97	66	20	5	3	3	5	
Scranton, PA	25	21	3	1	—	—	—	New Orleans, LA†	U	U	U	U	U	U	U	
Syracuse, NY	122	98	17	4	3	—	12	San Antonio, TX	222	152	51	13	3	3	24	
Trenton, NJ	19	13	2	—	3	1	2	Shreveport, LA	52	37	9	3	2	1	4	
Utica, NY	15	10	5	—	—	—	1	Tulsa, OK	185	137	36	7	3	2	11	
Yonkers, NY	24	18	6	—	—	—	1	Mountain	1,243	811	294	79	26	33	107	
E.N. Central	2,180	1,475	490	118	47	50	194	Albuquerque, NM	154	103	36	10	1	4	8	
Akron, OH	57	35	13	3	2	4	2	Boise, ID	62	41	14	3	2	2	3	
Canton, OH	44	31	9	2	—	2	7	Colorado Springs, CO	85	63	13	3	4	2	4	
Chicago, IL	301	189	76	23	5	8	27	Denver, CO	81	50	23	4	—	4	9	
Cincinnati, OH	134	80	38	5	4	7	27	Las Vegas, NV	288	179	77	25	7	—	32	
Cleveland, OH	255	190	42	14	4	5	11	Ogden, UT	46	31	9	6	—	—	2	
Columbus, OH	209	135	53	11	4	6	24	Phoenix, AZ	196	113	53	10	4	16	21	
Dayton, OH	133	101	24	6	2	—	13	Pueblo, CO	28	23	4	—	1	—	1	
Detroit, MI	180	85	60	22	8	5	19	Salt Lake City, UT	136	91	27	11	2	5	16	
Evansville, IN	46	38	6	1	1	—	3	Tucson, AZ	167	117	38	7	5	—	11	
Fort Wayne, IN	77	63	7	2	3	2	5	Pacific	1,655	1,184	324	76	44	27	195	
Gary, IN	8	4	1	2	—	1	—	Berkeley, CA	12	9	2	—	—	1	—	
Grand Rapids, MI	69	56	11	2	—	—	5	Fresno, CA	158	112	35	7	1	3	23	
Indianapolis, IN	176	110	46	11	6	3	10	Glendale, CA	38	29	8	—	—	1	9	
Lansing, MI	52	40	11	1	—	—	6	Honolulu, HI	72	52	12	3	2	3	6	
Milwaukee, WI	118	90	21	3	—	4	15	Long Beach, CA	86	59	22	4	1	—	15	
Peoria, IL	54	42	7	1	3	1	9	Los Angeles, CA	269	196	45	17	10	1	47	
Rockford, IL	57	33	18	5	1	—	1	Pasadena, CA	20	16	3	1	—	—	1	
South Bend, IN	49	30	13	1	3	2	2	Portland, OR	152	106	32	8	3	3	18	
Toledo, OH	99	71	24	3	1	—	4	Sacramento, CA	U	U	U	U	U	U	U	
Youngstown, OH	62	52	10	—	—	—	4	San Diego, CA	177	126	39	4	5	3	21	
W.N. Central	730	516	145	32	21	16	55	San Francisco, CA	146	96	35	8	4	3	13	
Des Moines, IA	128	99	23	3	2	1	11	San Jose, CA	197	156	28	3	5	5	19	
Duluth, MN	40	33	6	—	—	1	3	Santa Cruz, CA	U	U	U	U	U	U	U	
Kansas City, KS	25	17	6	—	1	1	2	Seattle, WA	139	99	25	6	5	4	11	
Kansas City, MO	125	87	23	6	5	4	2	Spokane, WA	53	36	14	2	1	—	9	
Lincoln, NE	50	39	8	3	—	—	8	Tacoma, WA	136	92	24	13	7	—	3	
Minneapolis, MN	70	53	8	5	1	3	2	Total	12,135**	8,248	2,669	652	287	278	999	
Omaha, NE	79	56	19	2	2	—	11									
St. Louis, MO	76	36	21	10	6	3	3									
St. Paul, MN	72	52	16	1	1	2	9									
Wichita, KS	65	44	15	2	3	1	4									

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.

§ Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

** Total includes unknown ages.

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