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Surveillance for Foodborne Disease Outbreaks — United States, 2006

Foodborne illnesses are a major health burden in the United States (*1*). Most of these illnesses are preventable, and analysis of outbreaks helps identify control measures. Although most cases are sporadic, investigation of the portion that occur as part of recognized outbreaks can provide insights into the pathogens, food vehicles, and food-handling practices associated with foodborne infections. CDC collects data on foodborne disease outbreaks (FBDOs) from all states and territories through the Foodborne Disease Outbreak Surveillance System (FBDSS). This report summarizes epidemiologic data on FBDOs reported during 2006 (the most recent year for which data have been analyzed). A total of 1,270 FBDOs were reported, resulting in 27,634 cases and 11 deaths. Among the 624 FBDOs with a confirmed etiology, norovirus was the most common cause, accounting for 54% of outbreaks and 11,879 cases, followed by *Salmonella* (18% of outbreaks and 3,252 cases). Among the 11 reported deaths, 10 were attributed to bacterial etiologies (six *Escherichia coli* O157:H7, two *Listeria monocytogenes*, one *Salmonella* serotype Enteritidis, and one *Clostridium botulinum*), and one was attributed to a chemical (mushroom toxin). Among outbreaks caused by a single food vehicle, the most common food commodities to which outbreak-related cases were attributed were poultry (21%), leafy vegetables (17%), and fruits/nuts (16%). Public health professionals can use this information to 1) target control strategies for specific pathogens in particular foods along the farm-to-table continuum and 2) support good food-handling practices among restaurant workers and the public.

State, local, and territorial health departments voluntarily submit reports of FBDOs using a web-based standard form to the electronic Foodborne Outbreak Reporting System (eFORS). An FBDO is defined as the occurrence of two or more cases of a similar illness resulting from the ingestion of a common food. Information regarding clinical syndromes, incubation period, and laboratory testing for various etiologic agents is available to guide reporting officials.* Officials report an etiology as either confirmed (at least one etiologic agent found) or suspected (based on clinical and epidemiologic information) (*2*). Analysis was limited to FBDOs with a single etiology (i.e., suspected or confirmed). Food vehicles are food items linked to illnesses by an outbreak investigation. CDC classifies the foods vehicles implicated in outbreak reports into the following 17 food commodities: fish, crustaceans, mollusks, dairy, eggs, beef, game, pork, poultry, grains/beans, oils/sugars, fruits/nuts, fungi, leafy vegetables, root vegetables, sprouts, and vegetables from a vine or stalk.

During 2006, public health officials reported a total of 1,270 FBDOs from 48 states. A confirmed or suspected single etiologic agent was indentified in 884 (70%) FBDOs (621 confirmed and 263 suspected), accounting for 22,510 (81%) cases (Table 1). The number of outbreaks reported by each state or territory ranged from zero to 76. The median rate was 0.21 (range: zero to 1.3) per 100,000 population. For seven states (Hawaii, Maine, Minnesota, North Dakota, Oregon, Vermont, and Wisconsin), the rate of reporting was greater than three times the median. Rates of reported outbreaks varied markedly by etiology group (Figure). Among the 621 outbreaks (with 18,111 cases) with a confirmed single etiologic agent, 343 (55%) outbreaks and 11,981 (66%) cases were caused by viruses, 217 (35%) outbreaks and 5,781 (32%) cases were

* Available at http://www.cdc.gov/foodborneoutbreaks/guide_fd.htm.

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caused by bacteria, 52 (8%) outbreaks and 219 (1%) cases were caused by chemical agents, and nine (1%) outbreaks and 29 (1%) cases were caused by parasites. Calicivirus caused 337 (98%) of the confirmed FBDOs attributed to viruses; all calicivirus outbreaks reported in 2006 were attributed to norovirus. *Salmonella*, the most commonly reported bacterial etiologic agent, caused 112 (52%) of the confirmed FBDOs attributed to bacteria; *Salmonella* serotype Enteritidis caused the most outbreaks (28 [13%]). Shiga toxin–producing *E. coli* (STEC) caused 29 (13%) of confirmed FBDOs attributed to bacteria, of which 27 were serogroup O157.

Eleven multistate outbreaks, defined as outbreaks in which exposures occurred in more than one state, were detected; 10 of these were attributed to bacteria. One attributed to chemical agents was transmitted by baked goods contaminated by a floor sealant (11 cases). Four of the bacterial outbreaks were attributed to *E. coli* O157, of which three were transmitted by leafy vegetables (395 cases) and one was transmitted by beef (44 cases). Four were attributed to *Salmonella*, of which two were transmitted by tomatoes (307 cases), one by peanut butter (715 cases), and one by fruit salad (41 cases) (*3*). An outbreak of *Vibrio parahaemolyticus* infections was transmitted by oysters (177 cases). An outbreak attributed to *C. botulinum* toxin was transmitted by carrot juice (four cases) (*4*).

Public health officials identified a food vehicle in 528 (42%) FBDOs, of which 243 (46%) outbreaks with 6,395 (50%) cases were classified as having ingredients belonging to only one of the 17 commodities (Table 2). Among the 243 outbreaks attributed to a single commodity, the most outbreaks were attributed to fish (47 outbreaks), poultry (35 outbreaks), and beef (25 outbreaks), and the most cases were attributed to poultry (1,355 cases), leafy vegetables (1,081 cases), and fruits/nuts (1,021 cases). Pathogen-commodity pairs responsible for the most outbreak-related cases were *Clostridium perfringens* in poultry (902 cases), *Salmonella* in fruits/nuts (776 cases), norovirus in leafy vegetables (657 cases), STEC in leafy vegetables (398 cases), *Salmonella* in vine-stalk vegetables (331 cases), and *V. parahaemolyticus* in mollusks (223 cases).[†]

Although the dairy commodity accounted for only 3% of single commodity outbreak-related cases (16 outbreaks and 193 cases), 71% of dairy outbreak cases were attributed to unpasteurized (raw) milk (10 outbreaks and 137 cases). A wide range of bacterial pathogens were associated with unpasteurized milk outbreaks, including *Campylobacter* (six outbreaks), STEC O157 (two outbreaks), *Salmonella* (one outbreak),

[†] Additional information on FBDOs and illnesses associated with the 17 food commodities is available at http://www.cdc.gov/outbreaknet/surveillance_data.html.

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TABLE 1. Number and percentage of reported foodborne disease outbreaks and outbreak-associated illnesses, by etiology* — United States, 2006, and 2001–2005 mean annual totals

	Outbreaks						Illnesses					
	2006				2001–2005 Mean annual total		2006				2001–2005 Mean annual total	
	Confirmed etiology	Suspected etiology	Total				Confirmed etiology	Suspected etiology	Total			
Etiology			No.	(%)	No.	(%)			No.	(%)	No.	(%)
Bacterial												
Salmonella†	112	5	**117**	**(9)**	**127**	**(11)**	3,252	44	**3,296**	**(12)**	**3,393**	**(13)**
Clostridium perfringens	16	18	**34**	**(3)**	**51**	**(4)**	732	1,148	**1,880**	**(7)**	**2,077**	**(8)**
Staphylococcus enterotoxin§	12	17	**29**	**(2)**	**49**	**(4)**	380	48	**428**	**(2)**	**659**	**(3)**
Escherichia coli, Shiga toxin–producing (STEC)¶	29	—	**29**	**(2)**	**24**	**(2)**	592	—	**592**	**(2)**	**470**	**(2)**
*Campylobacter***	22	3	**25**	**(2)**	**19**	**(2)**	283	18	**301**	**(1)**	**299**	**(1)**
Bacillus cereus	3	10	**13**	**(1)**	**21**	**(2)**	35	37	**72**	**(0)**	**160**	**(1)**
Shigella††	9	1	**10**	**(1)**	**12**	**(1)**	183	2	**185**	**(1)**	**659**	**(3)**
Vibrio parahaemolyticus	6	2	**8**	**(1)**	**7**	**(1)**	300	22	**322**	**(1)**	**57**	**(0)**
Listeria§§	3	1	**4**	**(0)**	**1**	**(0)**	7	3	**10**	**(0)**	**24**	**(0)**
Clostridium botulinum toxin	4	—	**4**	**(0)**	**3**	**(0)**	13	—	**13**	**(0)**	**13**	**(0)**
Brucella spp.	1	—	**1**	**(0)**	**0**	**(0)**	5	—	**5**	**(0)**	**1**	**(0)**
Escherichia coli, enterotoxigenic	—	1	**1**	**(0)**	**0**	**(0)**	—	2	**2**	**(0)**	**—**	**—**
Yersinia enterocolitica	—	—	**—**	**—**	**2**	**(0)**	—	—	**—**	**—**	**15**	**(0)**
Other bacteria	—	20	**20**	**(2)**	**11**	**(1)**	—	135	**135**	**(0)**	**112**	**(0)**
Bacterial total	**217**	**78**	**295**	**(23)**	**327**	**(28)**	**5,782**	**1,459**	**7,241**	**(26)**	**7,939**	**(31)**
Chemical												
Scombroid toxin/Histamine	31	1	**32**	**(3)**	**30**	**(3)**	111	2	**113**	**(0)**	**117**	**(0)**
Ciguatoxin	10	—	**10**	**(1)**	**17**	**(1)**	45	—	**45**	**(0)**	**59**	**(0)**
Mushroom toxins	4	—	**4**	**(0)**	**1**	**(0)**	16	—	**16**	**(0)**	**6**	**(0)**
Cleaning agents	—	2	**2**	**(0)**	**—**	**—**	—	4	**4**	**(0)**	**—**	**—**
Neurotoxic shellfish poison	2	—	**2**	**(0)**	**1**	**(0)**	15	—	**15**	**(0)**	**2**	**(0)**
Monosodium glutamate (MSG)	1	—	**1**	**(0)**	**—**	**—**	2	—	**2**	**(0)**	**0**	**(0)**
Plant toxins (herbal toxins)	1	—	**1**	**(0)**	**—**	**—**	15	—	**15**	**(0)**	**—**	**—**
Puffer fish tetrodotoxin	—	1	**1**	**(0)**	**—**	**—**	—	2	**2**	**(0)**	**—**	**—**
Heavy metals	—	—	**—**	**—**	**1**	**(0)**	—	—	**—**	**—**	**4**	**(0)**
Paralytic shellfish poison	—	—	**—**	**—**	**1**	**(0)**	—	—	**—**	**—**	**2**	**(0)**
Other natural toxins	—	—	**—**	**—**	**0**	**(0)**	—	—	**—**	**—**	**0**	**(0)**
Other chemicals	3	10	**13**	**(1)**	**14**	**(1)**	15	40	**55**	**(0)**	**178**	**(1)**
Chemical total	**52**	**14**	**66**	**(5)**	**65**	**(6)**	**219**	**48**	**267**	**(1)**	**368**	**(1)**
Parasitic												
Cryptosporidium	2	2	**4**	**(0)**	**1**	**(0)**	16	14	**30**	**(0)**	**39**	**(0)**
Cyclospora	3	—	**3**	**(0)**	**3**	**(0)**	37	—	**37**	**(0)**	**244**	**(1)**
Giardia	2	1	**3**	**(0)**	**2**	**(0)**	56	4	**60**	**(0)**	**28**	**(0)**
Trichinella	1	—	**1**	**(0)**	**1**	**(0)**	2	—	**2**	**(0)**	**4**	**(0)**
Other parasites	1	—	**1**	**(0)**	**0**	**(0)**	18	—	**18**	**(0)**	**0**	**(0)**
Parasitic total	**9**	**3**	**12**	**(1)**	**7**	**(1)**	**129**	**18**	**147**	**(1)**	**315**	**(1)**
Viral												
Calicivirus¶¶	337	168	**505**	**(40)**	**345**	**(29)**	11,879	2,874	**14,753**	**(53)**	**9,877**	**(38)**
Hepatitis A	5	—	**5**	**(0)**	**6**	**(1)**	50	—	**50**	**(0)**	**251**	**(1)**
Astrovirus	—	—	**—**	**—**	**0**	**(0)**	—	—	**—**	**—**	**3**	**(0)**
Rotavirus	—	—	**—**	**—**	**1**	**(0)**	—	—	**—**	**—**	**15**	**(0)**
Other viruses	1	—	**1**	**(0)**	**7**	**(1)**	52	—	**52**	**(0)**	**213**	**(1)**
Viral total	**343**	**168**	**511**	**(40)**	**359**	**(30)**	**11,981**	**2,874**	**14,855**	**(54)**	**10,359**	**(40)**
Single etiology (subtotal)	**621**	**263**	**884**	**(70)**	**758**	**(64)**	**18,111**	**4,399**	**22,510**	**(81)**	**18,981**	**(74)**
Unknown etiology***	**—**	**—**	**363**	**(29)**	**373**	**(32)**	**—**	**—**	**4,330**	**(16)**	**4,106**	**(16)**
Multiple etiologies	**3**	**20**	**23**	**(2)**	**48**	**(4)**	**260**	**534**	**794**	**(3)**	**2,615**	**(10)**
Total	**624**	**283**	**1,270**	**(100)**	**1,179**	**(100)**	**18,371**	**4,933**	**27,634**	**(100)**	**25,702**	**(100)**

* If at least one etiology was confirmed, the outbreak was counted as confirmed etiology. If no etiology was confirmed, it was counted as suspected etiology based on clinical or epidemiologic features.

† *Salmonella* serotypes accounting for more than five outbreaks reported include: Enteriditis (28 outbreaks), Typhimurium (24), Newport (nine), and Heidelberg (nine).

§ *S. aureus* (12 confirmed outbreaks and 12 suspected outbreaks) and *Staphylococcus* of unknown species (five suspected outbreaks).

¶ STEC O157 (27 confirmed outbreaks), STEC O121 (one confirmed outbreak), and STEC O26 (one confirmed outbreak).

** *C. fetus* (one confirmed outbreak), *C. jejuni* (14 confirmed outbreaks), and *Campylobacter* of unknown species (seven confirmed outbreaks and three suspected outbreaks).

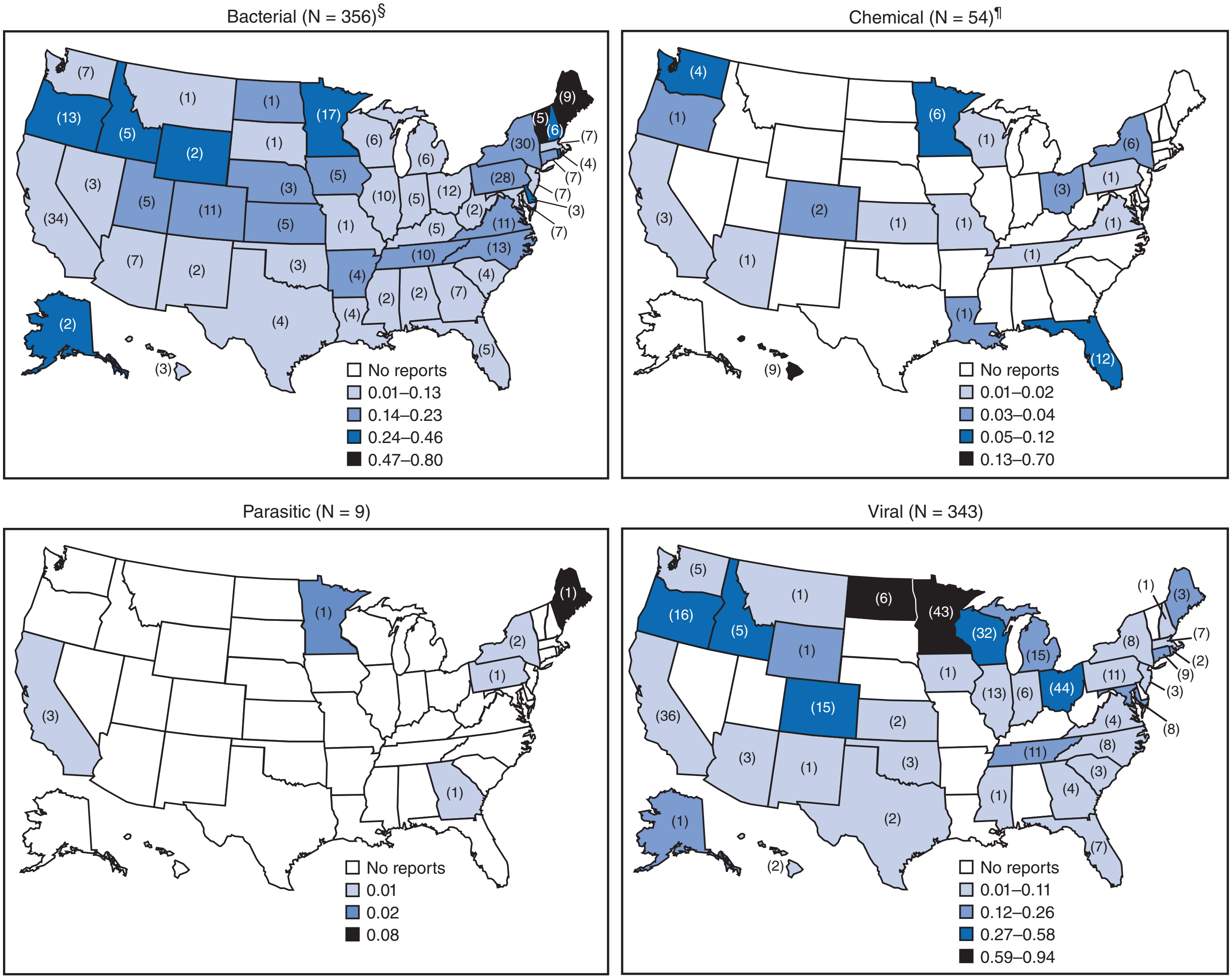
†† *S. flexneri* (one confirmed outbreak) and *S. sonnei* (eight confirmed outbreaks and one suspected outbreak).

§§ *L. monocytogenes* (two confirmed outbreaks and one suspected outbreak) and *Listeria* of unknown species (one confirmed outbreak).

¶¶ All outbreaks reported in 2006 were norovirus.

*** An etiologic agent was not found or suspected based on clinical and epidemiologic information.

FIGURE. Rate of reported foodborne disease outbreaks per 100,000 standard population and number of outbreaks,* by state and major etiology group† — United States, 2006



* Number of outbreaks reported is shown in parentheses.
† Analysis restricted to outbreaks attributed to a single confirmed etiology.
§ Includes 10 multistate outbreaks that are assigned as an outbreak to each state involved.
¶ Includes one multistate outbreak that is assigned as an outbreak to each state involved.

and *Listeria* (one outbreak), resulting in 11 hospitalizations and one death.

The largest outbreaks with a known etiology and single food commodity were attributed to baked chicken contaminated with *C. perfringens* (741 cases), peanut butter contaminated with *Salmonella* (714 cases), and spinach contaminated with *E. coli* O157 (238 cases). In the spinach outbreak, 31 persons developed hemolytic uremic syndrome, and five died, including a child (*5*). The contaminated spinach was traced back to a single farm, where the outbreak strain was isolated from nearby cattle feces and feral swine feces (*6*).

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Editorial Note: Timely reporting of findings of investigations is an important step in efforts to better understand and define the epidemiology of foodborne disease in the United States and to identify gaps in the food-safety system. Many factors in detection and reporting likely contribute to variations in

TABLE 2. Number of reported foodborne disease outbreaks and outbreak-associated illnesses, by confirmed or suspected etiology* and type of food commodity† — United States, 2006§

Etiology (confirmed or suspected)	Outbreaks (illnesses) attributed to a single commodity		Outbreaks (illnesses) attributed to vehicle containing >1 commodity		Outbreaks (illnesses) attributed to unknown commodity		Total outbreaks (illnesses)	
Bacterial								
Salmonella¶	31	(1,761)	21	(700)	65	(835)	**117**	**(3,296)**
Clostridium perfringens	12	(1,228)	15	(518)	7	(134)	**34**	**(1,880)**
Staphylococcus enterotoxin**	13	(181)	12	(229)	4	(18)	**29**	**(428)**
Escherichia coli, Shiga toxin–producing (STEC)††	14	(496)	4	(17)	11	(79)	**29**	**(592)**
Campylobacter§§	9	(123)	3	(46)	13	(132)	**25**	**(301)**
Bacillus cereus	5	(35)	5	(20)	3	(17)	**13**	**(72)**
Shigella¶¶	3	(48)	2	(44)	5	(93)	**10**	**(185)**
Vibrio parahaemolyticus	7	(303)	1	(19)	0	(0)	**8**	**(322)**
*Listeria****	2	(6)	1	(2)	1	(2)	**4**	**(10)**
Clostridium botulinum toxin	3	(8)	0	(0)	1	(5)	**4**	**(13)**
Brucella spp.	1	(5)	0	(0)	0	(0)	**1**	**(5)**
Escherichia coli, Enterotoxigenic	0	(0)	0	(0)	1	(2)	**1**	**(2)**
Yersinia enterocolitica	0	(0)	0	(0)	0	(0)	**0**	**(0)**
Other bacteria	5	(45)	4	(24)	11	(66)	**20**	**(135)**
Bacterial total	**105**	**(4,239)**	**68**	**(1,619)**	**122**	**(1,383)**	**295**	**(7,241)**
Chemical								
Scombroid toxin/Histamine	31	(107)	1	(6)	0	(0)	**32**	**(113)**
Ciguatoxin	10	(45)	0	(0)	0	(0)	**10**	**(45)**
Mushroom toxins	4	(16)	0	(0)	0	(0)	**4**	**(16)**
Cleaning agents	0	(0)	0	(0)	2	(4)	**2**	**(4)**
Neurotoxic shellfish poison	2	(15)	0	(0)	0	(0)	**2**	**(15)**
Monosodium glutamate (MSG)	0	(0)	0	(0)	1	(2)	**1**	**(2)**
Plant toxins (herbal toxins)	0	(0)	1	(15)	0	(0)	**1**	**(15)**
Puffer fish tetrodotoxin	0	(0)	1	(2)	0	(0)	**1**	**(2)**
Heavy metals	0	(0)	0	(0)	0	(0)	**0**	**(0)**
Paralytic shellfish poison	0	(0)	0	(0)	0	(0)	**0**	**(0)**
Other natural toxins	0	(0)	0	(0)	0	(0)	**0**	**(0)**
Other chemicals	4	(9)	2	(15)	7	(31)	**13**	**(55)**
Chemical total	**51**	**(192)**	**5**	**(38)**	**10**	**(37)**	**66**	**(267)**
Parasitic								
Cryptosporidium	0	(0)	0	(0)	4	(30)	**4**	**(30)**
Cyclospora	1	(14)	0	(0)	2	(23)	**3**	**(37)**
Giardia	0	(0)	0	(0)	3	(60)	**3**	**(60)**
Trichinella	1	(2)	0	(0)	0	(0)	**1**	**(2)**
Other parasites	1	(18)	0	(0)	0	(0)	**1**	**(18)**
Parasitic total	**3**	**(34)**	**0**	**(0)**	**9**	**(113)**	**12**	**(147)**
Viral								
Calicivirus†††	55	(1,335)	127	(3,063)	323	(10,355)	**505**	**(14,753)**
Hepatitis A	0	(0)	0	(0)	5	(50)	**5**	**(50)**
Astrovirus	0	(0)	0	(0)	0	(0)	**0**	**(0)**
Rotavirus	0	(0)	0	(0)	0	(0)	**0**	**(0)**
Other viruses	0	(0)	0	(0)	1	(52)	**1**	**(52)**
Viral total	**55**	**(1,335)**	**127**	**(3,063)**	**329**	**(10,457)**	**511**	**(14,855)**
Single etiology (subtotal)	**214**	**(5,800)**	**200**	**(4,720)**	**470**	**(11,990)**	**884**	**(22,510)**
Unknown etiology§§§	**24**	**(528)**	**75**	**(1,028)**	**264**	**(2,774)**	**363**	**(4,330)**
Multiple etiologies	**5**	**(67)**	**10**	**(524)**	**8**	**(203)**	**23**	**(794)**
Total	**243**	**(6,395)**	**285**	**(6,272)**	**742**	**(14,967)**	**1,270**	**(27,634)**

* If at least one etiology was confirmed, the outbreak was counted as confirmed etiology. If no etiology was confirmed, it was counted as suspected etiology based on clinical or epidemiologic features.

§ Additional data on outbreaks attributed to specific food commodities are available at http://www.cdc.gov/outbreaknet/surveillance_data.html.

† CDC classifies food vehicles (food items linked to illnesses by an outbreak investigation) into the following 17 food commodities: fish, crustaceans, mollusks, dairy, eggs, beef, game, pork, poultry, grains/beans, oils/sugars, fruits/nuts, fungi, leafy vegetables, root vegetables, sprouts, and vegetables from a vine or stalk.

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*** *L. monocytogenes* (two confirmed outbreaks and one suspected outbreak) and *Listeria* of unknown species (one confirmed outbreak).

††† All outbreaks reported in 2006 were norovirus.

§§§ An etiologic agent was not found or suspected based on clinical and epidemiologic information.

the rate of reported FBDOs among states. An increasing rate of FBDOs reported from a state can be attributed to better surveillance, investigation, or reporting, and might not be indicative of an actual higher rate of outbreaks. For example, the increased availability of diagnostic tests for norovirus in state public health laboratories likely has contributed to an increased proportion of norovirus outbreaks of confirmed etiology in 2006 (*7*). However, the increase in the number of norovirus outbreaks reported in 2006 compared with the previous 5-year average is thought to reflect an actual increase and not merely an improvement in diagnosis (*8*). Furthermore, with 12 states not reporting any viral FBDOs in 2006 primarily because of a lack of diagnostic capabilities, the proportion of FBDOs attributable to norovirus likely is underestimated.

The large and increasing number of outbreaks attributed to norovirus indicates a need for improved attention to preventing food contamination at the point of service, because such outbreaks are largely attributed to transmission by infected food handlers. Adhering to the recommended measures (e.g., hand washing) for prevention and control of norovirus infections could greatly reduce the number of outbreak-related cases (*8*). Additionally, the importance of norovirus contamination at the farm level or during processing remains largely unknown because of limitations in the current national surveillance systems. Although the number of outbreaks and cases attributed to *C. perfringens* declined in 2006 compared with the mean annual total during 2001–2005, the continued large number of outbreaks indicates a need for improved attention to holding temperatures of cooked meat and poultry. Illnesses associated with raw milk continue to occur, and additional efforts are needed to educate consumers and dairy farmers about illnesses associated with this preventable risk.

Both the number of foodborne *Salmonella* Enteritidis outbreaks (28) and *E. coli* O157:H7 outbreaks (27) in 2006 remained above their *Healthy People 2010* targets of 22 and 11 outbreaks, respectively, for all modes of transmission. However, the number of *Salmonella* Enteritidis outbreak-associated cases per year decreased from an average of 974 during 1998–2000 to 692 during 2004–2006 (CDC, unpublished data, 2009). The number of *E. coli* O157:H7 outbreak-associated cases per year decreased from an average of 829 during 1998–2000 to 353 during 2004–2006 (CDC, unpublished data, 2009).[§]

The findings in this report are subject to at least five limitations. First, only a small proportion of all foodborne illnesses reported each year are identified as associated with outbreaks. For example, in FoodNet[¶] sites during 2006, only 6.1% of *Salmonella* infection cases were part of a recognized outbreak (*9*). Some foodborne illnesses reported as sporadic cases likely are part of outbreaks that are not recognized; also, smaller outbreaks might not come to the attention of public health authorities. Second, not all recognized outbreaks are reported to CDC. Some outbreaks are not investigated because of competing priorities in health departments. Third, for many reported FBDOs, information on certain aspects of the outbreak, such as the etiology or the implicated food vehicle, is incomplete. Fourth, only approximately half of the reported outbreaks in 2006 had a confirmed etiology and thus might not be representative of those with a suspected or unknown etiology. Finally, because of variations in outbreak detection, investigation, and reporting, comparisons with previous years of the number of reported FBDOs attributed to a specific etiology or food vehicle should be made with caution.

The capacity to perform serotyping and pulsed-field gel electrophoresis at the state and local public health laboratories and to rapidly share information through PulseNet (the national molecular subtyping network for foodborne disease surveillance) is critically important for detecting FDBOs. The recent development and ongoing implementation of a similar national network for norovirus molecular sequences (CaliciNet) might help identify the emergence of new variant strains, link multijurisdictional FBDOs associated with norovirus, and determine the role of contamination before food preparation and serving.

Ensuring adequate epidemiologic and regulatory investigative capacity at the state and federal levels also is essential to identify sources and implement timely control measures. Outbreak investigations, especially multistate outbreaks, can rapidly strain public health system resources. Enhancing capacity at local, state, and federal levels could make outbreak detection and investigation even faster. Additional information on FBDOs is available at http://www.cdc.gov/foodborneoutbreaks.

Acknowledgments

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Outbreak of Cryptosporidiosis Associated with a Splash Park — Idaho, 2007

On August 6, 2007, Idaho's Central District Health Department (CDHD) received a complaint of several ill persons with watery diarrhea consistent with cryptosporidiosis after attendance at a municipal splash park on July 26. *Cryptosporidium* spp. is a protozoan that causes diarrheal illness and has been implicated previously in recreational water illness outbreaks at splash parks (*1–3*). CDHD and the Idaho Department of Health and Welfare (IDHW) initiated an investigation of illness among municipal park visitors who attended reservation-only gatherings at an onsite pavilion July 23–August 10. The investigation revealed five immunofluorescence assay (IFA)-confirmed and 45 clinically compatible cases of cryptosporidiosis among 154 persons interviewed (32% attack rate). Patients were more likely than non-ill park visitors to have been exposed to water from a splash feature (relative risk [RR] = 4.7). Water samples collected from splash features and an adjacent drinking fountain tested positive for *Cryptosporidium hominis*. This report summarizes the investigation of the outbreak and highlights the importance of splash park design, operation, access to hygiene facilities, and public education in prevention of waterborne cryptosporidiosis and other infectious agents. Educational efforts and enactment of regulations requiring enhanced disinfection technology, exclusion of persons with diarrhea, adequate hygiene facilities, and preconstruction consultation with health departments might decrease the risk for recreational water illness at splash parks.

The exposures occurred at a recently constructed splash park located within a municipal park in a suburban community in Idaho with a surrounding population of 550,000. Splash parks are increasingly popular venues associated with recreational water illness (*1–4*) and are often easily accessible, unmonitored, and charge no admission (*5*). Splash parks have multiple, interactive water features that spray, splash, or pour water on visitors, without pools or standing water. Typically, a municipal system supplies the water, which flows from the features onto impermeable surfaces (e.g., concrete), through drains, and recirculates through high-flow sand filters back to the water features. In Idaho, splash park design, construction, and operation are not regulated by the Idaho pool code.

The initial investigation by CDHD and IDHW began on August 7 with interviews of 20 persons who attended a party at the splash park on July 26. Among those 20 persons, 12 reported gastrointestinal illness that began August 1–6 (6–11 days after exposure), including eight persons who reported watery diarrhea. All 12 ill persons reported exposure to splash-feature water, and six reported exposure to water from a nearby drinking fountain. No food items at the party were implicated as the source of the outbreak. Investigators hypothesized that swallowing contaminated splash park water was the source of illness.

To find additional cases, identify risk factors, and implement control measures, CDHD and IDHW initiated telephone interviews of municipal park visitors who attended reservation-only gatherings at an onsite pavilion July 23–August 10, the only dates for which reservation listings were available. Reservations for 12 separate groups encompassing approximately 600 persons were identified. Information about visitors without reservations was not recorded by the municipal park; consequently, the total number of visitors during the study period could not be determined. To enable prompt intervention, interviews were limited to the first 154 respondents contacted, representing nine (75%) of the 12 reservation parties. Respondents were contacted in order of their position on the reservation listings.

A clinical case was defined as the onset of diarrhea (three or more loose stools in 24 hours) or four or more symptoms consistent with gastroenteritis (i.e., abdominal cramps, nausea, vomiting, fever, or body aches) in a person within 1–12 days after visiting the municipal park. A confirmed case was defined as illness in a person with a positive IFA stool test result for *Cryptosporidium*. Non-ill park visitors were identified from attendees who did not meet either case definition. Study participants were administered a standardized questionnaire by telephone.

The 154 respondents represented 51 separate households and 12 different days of exposure. For respondents reporting multiple days of exposure to the municipal park, the latest day of exposure was used for the analysis. Fifty (32%) of 154 attendees had illness meeting the clinical (n = 45) or confirmed (n = 5) case definition; 26 (52%) were males (Table 1). The median age of patients was 7 years (range: 10 months–58 years). Illness onset ranged from July 28 to August 20 (Figure), and the median time from exposure to onset of illness was 6 days (range: 1–14 days). One patient with a confirmed case reported splash park exposure on August 1 and illness onset

TABLE 1. Number and percentage of cryptosporidiosis cases* among visitors (N = 154) to a municipal park, by sex and age group — Idaho, July–August 2007

				Exposed to splash features†		Exposed to adjacent drinking fountain	
Characteristic	Ill	Total	Ill (%)	No.	(%)	No.	(%)
Total	**50**	**154**	**(32)**	**93**	**(60)**	**22**	**(14)**
Sex							
Male	26	69	(38)	44	(64)	12	(17)
Female	24	85	(28)	49	(58)	10	(12)
Age group (yrs)§							
<1	2	3	(67)	2	(67)	0	(0)
1–3	9	18	(50)	15	(83)	5	(28)
4–6	14	25	(56)	23	(92)	6	(24)
7–11	9	28	(32)	23	(82)	8	(29)
12–17	2	10	(20)	6	(60)	1	(10)
≥18	14	68	(21)	24	(35)	2	(3)

* A clinical case of cryptosporidiosis was defined as three or more loose stools in 24 hours, or four or more symptoms consistent with gastroenteritis (i.e., abdominal cramps, nausea, vomiting, fever, or body aches) in a person within 1–12 days after visiting the municipal park. A confirmed case was defined as illness in a person with a positive immunofluorescence assay stool test result for *Cryptosporidium*.
† Above or in-ground water fountains, buckets, and other play items that spray, pour, or splash water onto visitors.
§ Two persons did not report their age; neither person had illness consistent with the case definition.

August 15. Among 29 patients whose illness was resolved at the time of interview, the median duration of illness was 3 days (range: 1–9 days). The most common symptoms reported were diarrhea (86%), vomiting (64%), abdominal cramps (62%), nausea (62%), fever (52%), headache (46%), and body aches (40%). No hospitalizations or deaths associated with illness were reported. Treatment information for patients was not available.

A retrospective cohort analysis was used to identify risk factors for illness, after combining confirmed and clinical cases. Patients were more likely to have been exposed to splash-feature water only than were non-ill persons (RR = 4.7; 95% confidence interval [CI] = 1.8–11.9) (Table 2). Patients also were more likely to report exposure to both splash-feature water and adjacent drinking fountain water than were non-ill persons (RR = 8.6; CI = 3.2–23.3). In a second analysis, to limit the possibility of including secondary cases in the risk factor analysis, household contacts who also had visited the municipal park were excluded if they reported exposure to the splash park after August 4 or illness onset >4 days after the household index case. The remaining household patients (n = 32) were more likely to have been exposed to the splash park (RR = 18.4; CI = 2.6–128.2) and to an adjacent drinking fountain (RR = 1.5; CI = 1.1–2.0) than were non-ill persons.

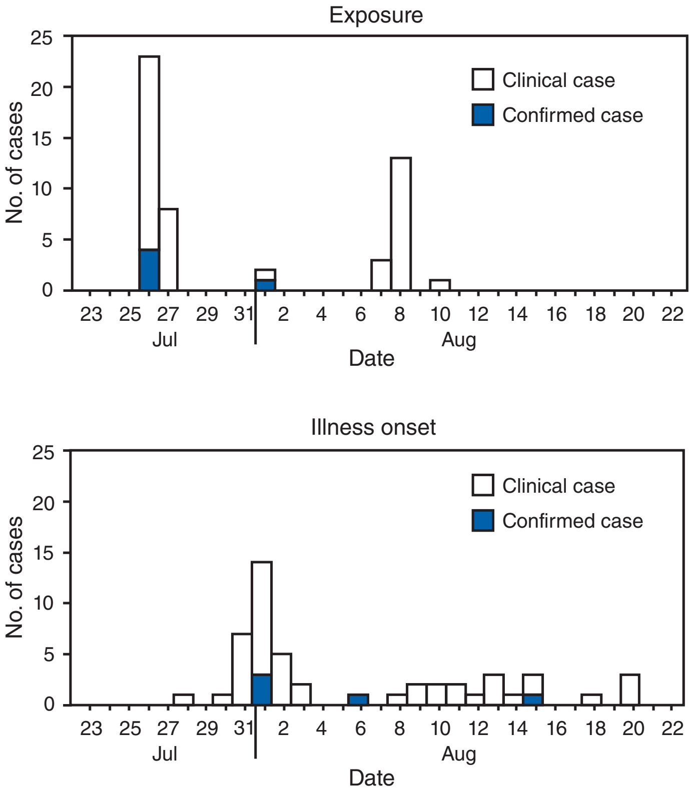
An environmental investigation was begun August 9. During an initial site inspection, young children were observed to be the predominant users of the splash park, and diapered children frequently sat on top of splash features. Soap was not available in nearby restrooms, nor were showers. Public health education signs were not posted at the park. The splash park did not have any standing water; investigators noted that water drained from a concrete deck, passed through a high-flow sand filter, and was chlorinated before recirculation through several splash features.

On August 9, CDHD collected water samples from the splash park, and those samples were analyzed for total coliforms and *Escherichia coli* using the 9223B substrate Colilert method. Water samples collected on August 20 from the high-flow sand filter backwash and adjacent drinking fountain were tested at the Environmental Protection Agency (EPA) Region 10 laboratory following EPA method 1623* (*6*). *C. hominis* was identified in the sample by polymerase chain reaction-restriction fragment length polymorphism analysis of the 18S rRNA gene in DNA extracted from microscopy-positive slides. Oocysts in both samples were further subtyped by DNA sequencing of the gp60 gene as IaA28R4 (*7*). Two *Cryptosporidium* isolates from patients also were genotyped and subtyped *C. hominis* IaA28R4.

The splash park was closed August 17, and the municipal park drinking fountains were turned off August 23. An engineering investigation determined no source of drinking water contamination; however, after the outbreak, two return backflow-prevention devices designed to prevent retrograde flow of splash park water into municipal water lines failed inspection and were replaced. Although the municipal water supply is maintained at a higher pressure than the splash park, a decrease in water pressure could have allowed a potential retrograde flow of contaminated water into the municipal water

* EPA method 1623 (available at http://www.epa.gov/microbes/1623de05.pdf) is a laboratory method for detection of the genera *Cryptosporidium* and *Giardia* by use of concentration, immunomagnetic separation, and immunofluorscence assay microscopy.

FIGURE. Number of cryptosporidiosis cases,* by dates of exposure at a municipal splash park and illness onset — Idaho, July–August 2007



* A clinical case of cryptosporidiosis was defined as three or more loose stools in 24 hours, or four or more symptoms consistent with gastroenteritis (i.e., abdominal cramps, nausea, vomiting, fever, or body aches) in a person within 1–12 days after visiting the municipal park. A confirmed case was defined as illness in a person with an immunofluorescence assay positive stool test result for *Cryptosporidium*.

line. Repeat testing of the drinking-fountain water on August 29 and upstream municipal water on August 31 yielded no *Cryptosporidium* oocysts. The drinking fountains were turned back on September 11. The municipality reopened the splash park in 2008 after installation of an ultraviolet treatment system, improvement of hygiene facilities, hiring of attendants to monitor for nonhygienic behaviors by visitors, and posting of educational signs instructing visitors not to drink the splash-feature water.

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Editorial Note: *Cryptosporidium*, a chlorine-resistant parasite, can cause illness after ingestion of as few as 10 oocysts, and can remain infectious for up to 6 months in moist environments (*8*). In this outbreak investigation, detection of identical subtypes of *C. hominis*, a species primarily restricted to humans (*9*), in the stool specimens of patients and in water samples from the sand filters and drinking fountain implicated ingestion of fecally contaminated splash-feature and drinking fountain water as the cause of the illnesses. Because reported exposures occurred during July 23–August 10 and splash park water collected on August 20 tested positive for *Cryptosporidium,* initial contamination of splash park water by an ill visitor likely caused persistent contamination of the splash park system and resulted in ongoing transmission. Similar outbreaks have occurred at other splash parks that lacked ultraviolet or ozone treatment systems that can inactivate *Cryptosporidium* (*1,3*). Splash park operators cannot rely solely upon high-flow sand filtration and chlorine disinfection to protect patrons from *Cryptosporidium.*

The findings in this report are subject to at least four limitations. First, reservations at the on-site pavilion represented a small percentage of daily attendance at the splash park; the total number of visitors to the splash park during the study period could not be determined, nor could the total number of cryptosporidiosis cases associated with the splash park among nontallied visitors. Second, limited staff resources might have led to selection bias by restricting interviews to those persons able to be contacted most quickly, perhaps biasing the study toward persons more likely to be at home and ill. Third, a statewide cryptosporidiosis outbreak involving multiple recreational water venues was occurring at the same time as the municipal splash park outbreak, and ill persons might have been exposed to other contaminated sources of recreational water, potentially confounding the results. Finally, despite an engineering investigation, the specific source of drinking water contamination could not be determined. Although failed backflow prevention devices might have allowed contaminated splash park water to enter the municipal drinking water line supplying the drinking fountain, most ill person (27/40) did not have exposure to the drinking fountain.

The outbreak described in this report involved a recently constructed, unregulated splash park, with contributing factors related to design and operation that prior consultation with health department staff might have identified and corrected. State and local governments should consider including splash parks in the pool code and requiring preconstruction health department consultation, supplemental disinfection technology (e.g., ultraviolet light), appropriate hygiene facilities, and education of splash park operators and the public. Furthermore, research on splash park design and operation is needed to develop engineering and operational guidelines specific to these facilities.

TABLE 2. Number of cryptosporidiosis cases* among visitors (N = 154) to a municipal park, by reported exposure to splash feature† and drinking fountain water — Idaho, July–August 2007

	Exposed			Not exposed					
Type of exposure	Ill	Total	Ill (%)	Ill	Total	Ill (%)	Relative risk	(95% CI§)	p value
Splash feature and drinking fountain	13	20	(65.0)	4	53	(7.5)	8.6	(3.2–23.3)	<0.01
Splash feature only	27	59	(45.8)	4	53	(7.5)	4.7	(1.8–11.9)	<0.01
Drinking fountain only	0	2	(0.0)	4	53	(7.5)	0.0	—	1.0

* A clinical case of cryptosporidiosis was defined as three or more loose stools in 24 hours, or four or more symptoms consistent with gastroenteritis (i.e., abdominal cramps, nausea, vomiting, fever, or body aches) in a person within 1–12 days after visiting the municipal park. A confirmed case was defined as illness in a person with a positive immunofluorescence assay stool test result for *Cryptosporidium*.
† Above or in-ground water fountains, buckets, and other play items that spray, pour, or splash water onto visitors.
§ Confidence interval.

Regulation without education is unlikely to reduce substantially the risk for recreational water illness outbreaks. Splash parks are relatively new, and operator knowledge of appropriate disinfection and maintenance requirements might be inadequate (*10*); public health officials and industry associations should make regular efforts to educate operators. Additionally, splash park operators and public health officials should work jointly to educate visitors about prevention of recreational water illness. Persons using splash park and other water park facilities are the primary source of contamination, and even water in well-maintained and treated recreational water venues can transmit *Cryptosporidium*. Posted signs should guide patrons to wash young children's bottoms with soap in the shower before splash park entry, refrain from drinking the splash-feature water, discourage children from sitting on top of splash features, and change diapers only in designated areas. Persons with diarrhea should be prohibited from entering recreational water venues. Behavioral restrictions, however, might not be enforceable at splash parks that have unrestricted and unmonitored public access.

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Brucella suis Infection Associated with Feral Swine Hunting — Three States, 2007–2008

Historically, brucellosis from *Brucella suis* infection occurred among workers in swine slaughterhouses. In 1972, the U.S. Department of Agriculture National Brucellosis Eradication Program was expanded to cover swine herds. Subsequent elimination of brucellosis in commercial swine resulted in a decrease in *B. suis*-associated illness in humans. Currently, swine-associated brucellosis in humans in the United States is predominantly associated with exposure to infected feral swine (i.e., wild boar or wild hogs).* In May and July 2008, CDC was contacted by the state health departments in South Carolina and Pennsylvania regarding two cases of brucellosis possibly linked to feral swine hunts. Both state health departments contacted the state health department in Florida, where

* Swine that have lived any part of their lives as free-roaming animals.

the hunts took place. The subsequent investigation, conducted jointly by the three state health departments and CDC, determined that the two patients had confirmed brucellosis from *B. suis* infection and the brother of one patient had probable brucellosis.† All three exposures were associated with feral swine hunting, and at least two patients did not have symptoms until 4–6 months after exposure (Table). The findings from this investigation suggest that clinicians treating patients with unexplained febrile illness should consider brucellosis in the differential diagnosis and obtain a thorough history of travel (e.g., to enzootic areas), food consumption, occupation, and recreational activities, including feral swine hunting. Cross-agency collaboration by state health departments and agriculture agencies is needed on brucellosis investigations to reduce the risk for illness through contact with infected animals.

Case Reports

Patient A. On May 7, 2008, a man aged 67 years from South Carolina (patient A) was referred by his private physician to a local emergency department after 1 week of fever (cyclic daily range: 99.2°–102.5°F [37.3°C–39.2°C]), malaise, anorexia, painful swollen left knee, and headaches. Patient A had a left total knee arthroplasty in 2004 and uneventful treatment in 2005 for septic arthritis in the same knee. Before onset of symptoms for his acute illness, patient A reported that he felt well except for an unintended 13-pound weight loss over a 16-week period and night sweats that began the day before he sought treatment. In the emergency department, blood and synovial fluid were obtained for culture, and the patient was empirically treated with intravenous nafcillin for septic arthritis.

Two days later, on May 9, the man was referred to a hospital with chills, persistent fever, continuing left knee arthralgia, and edema. He was admitted with a diagnosis of left knee infection and sepsis and treated initially with vancomyin. Knee aspirate cell count results were 16,700 white blood cells/mm^3 (normal: <150/mm^3) and 1,322 red blood cells/mm^3 (normal: <1/mm^3). Specimens of blood and a knee aspirate were collected for culture. Initial microbiologic examination indicated *Corynebacterium urealyticum*. Upon infectious disease consultation, the patient was started on doxycycline and naprosyn; on May 11, he developed epididymo-orchitis and was changed to levofloxacin and daptomycin on May 12 for a 6-week course. *Brucella* spp. subsequently were identified from isolates from the blood and synovial specimens collected from patient A on May 7. Isolates were sent to the South Carolina state public health laboratory and CDC for confirmatory testing. On May 29, *B. suis* biovar 1 was identified.

The epidemiologic investigation revealed that patient A had hunted feral swine in southwestern and south central Florida with two companions during December 23–29, 2007. All three participated in field dressing and butchering eight or nine feral swine at two locations. While field dressing one of the swine, patient A cut his hand with a knife. No personal protective equipment was worn during the field dressing and butchering. The meat was brought back to South Carolina, stored in a freezer, and boiled before being consumed by patient A over several months. No one else prepared or ate the meat, and no meat was collected for testing. No other risk factors for brucellosis were identified.

Because patient A's hunting companions were well, serologic testing for brucellosis was not performed. Patient A recovered with no permanent knee joint damage after antimicrobial therapy with levofloxacin and daptomycin for 6 weeks.

Patient B. On July 14, 2008, a previously healthy man aged 37 years from Pennsylvania (patient B) went to a local emergency department after 1 week of morning fevers, chills, myalgia, shortness of breath, and night sweats. He also reported an unintended 30-pound weight loss over a 1-month period, beginning 3 weeks before illness onset. A blood chemistry profile was within normal limits with the exception of glucose of 121 mg/dL (normal: 74–100 mg/dL). A complete blood cell count was within normal limits with the exception of mean

† *Probable:* a clinically compatible case that is epidemiologically linked to a confirmed case or that has supportive serology (i.e., *Brucella* agglutination titer of ≥160 in one or more serum specimens obtained after onset of symptoms). *Confirmed:* a clinically compatible illness that is laboratory confirmed. Laboratory criteria for diagnosis: 1) isolation of *Brucella* spp. from a clinical specimen, 2) fourfold or greater rise in *Brucella* agglutination titer between acute- and convalescent-phase serum specimens obtained ≥2 weeks apart and studied at the same laboratory, or 3) demonstration by immunofluorescence of *Brucella* spp. in a clinical specimen. Case definitions available at http://www.cdc.gov/ncphi/disss/nndss/casedef/brucellosis_current.htm.

TABLE. Timeline of key events for three patients with confirmed or probable brucellosis from *Brucella suis* infection — three states, 2007–2008

Date	Patient	Event
December 23–29, 2007	Patients A, B, and C	Exposed to feral swine carcasses during hunts in Florida.
April 2008	Patient C	Becomes ill but attributes illness to scorpion bite and does not seek care.
May 9	Patient A	Admitted to a hospital after 1-week febrile illness.
May 29	Patient A	Receives a diagnosis of confirmed brucellosis.
July 14	Patient B	Seeks care at an emergency department after 1-week febrile illness.
July 23	Patient B	Receives a diagnosis of confirmed brucellosis.
September 12	Patient C	Receives a diagnosis of probable brucellosis based on exposure and April illness.

platelet volume of 7.2 fL (normal: 7.4–10.4 fL); eosinophils on the differential were 0.2% (normal: 0.7%–5.2%). Urinalysis was positive for trace white blood cell esterase and for a white blood cell count of 1–4/mm^3 (normal: 0–1/mm^3). A chest radiograph was within normal limits, and a blood specimen for culture was obtained.

Clinical impression was acute viral syndrome; patient B was discharged with instructions to use an albuterol metered-dose inhaler three times daily for 1–2 days for his shortness of breath and to follow up with his private physician in 2–3 days. On July 23, the Pennsylvania state public health laboratory received patient B's blood specimen from the local hospital and isolated and identified *B. suis* using Laboratory Response Network[§] standardized biochemical tests and polymerase chain reaction.

Epidemiologic investigation revealed that, on December 29, 2007, patient B had hunted feral swine in Florida with his brother (patient C), a Florida resident. Both men participated in field dressing and butchering four feral swine. No personal protective equipment was worn during these procedures, and no other risk factors for brucellosis were identified. Patient B brought the meat back to Pennsylvania and stored it in a freezer. The meat was prepared and consumed by patient B and his family members over a 7-month period. According to patient B, the meat was cooked adequately (i.e., to an internal temperature of 160°F [71.1°C]).

CDC received three *B. suis* isolates for confirmation and further molecular characterization. One isolate was from the blood of patient B, and the other two were recovered from frozen sausage and tenderloin of a feral swine from the December 29 hunt. All three *B. suis* isolates were analyzed at CDC by molecular genotyping assay, using multiple-locus variable-number tandem repeat analysis. The assay indicated that the two meat isolates had identical signatures at all of the 15 genomic markers, and the patient B isolate matched the meat isolates at all but one of 15 markers, suggesting that the three isolates were linked.

Patient B reported that his wife and children were not ill; however, his brother (patient C) had experienced similar symptoms in April. Although asymptomatic, initial serologic testing for brucellosis was performed on all household family members, and no antibody elevation was noted. Patient B recovered after 6 weeks of treatment with rifampin and doxycycline.

Patient C. In August, the Pennsylvania state health department reported the association between patient B's infection and feral swine hunting to the Florida state health department, which, on August 21, contacted patient C (patient B's brother who had accompanied him on feral swine hunts). At the time, neither patient C nor his family members reported experiencing symptoms of brucellosis. However, patient C recalled feeling ill in April with night sweats and shortness of breath. He did not seek treatment because he attributed his symptoms to a recent scorpion sting.

Other than feral swine hunting, no other brucellosis risk factors were identified for patient C. He reported that all the meat he received from the December 2007 feral swine hunts was either smoked, roasted, or barbequed and was consumed at one family cookout. On September 12, a serum specimen from patient C was tested at CDC for anti-*Brucella* antibodies using the *Brucella* microagglutination test. The resulting immunoglobulin G titer of 1:640 met the case definition for probable brucellosis.

Because patient C's family was well, serologic testing for brucellosis was not performed. Treatment was recommended for patient C, but he was lost to follow-up.

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Editorial Note: Brucellosis is a bacterial zoonotic infection usually caused by *Brucella abortus*, *B. melitensis*, *B. suis*, or rarely *B. canis*. Humans are infected through occupational or recreational exposure to infected animals, inhalation of infectious aerosols, laboratory exposure (*1*), consumption of contaminated unpasteurized dairy products, or consumption of inadequately cooked contaminated meat. The average incubation period for brucellosis is 2–10 weeks but, as seen in this report, can range to 6 months. Symptoms can be nonspecific and influenza-like: intermittent fever, chills, malaise, diaphoresis, arthralgia, myalgia, headache, anorexia, and fatigue (*2,3*). Because of its nonspecific clinical syndrome, *B. suis* infection likely is underreported. Clinicians should inquire about travel, food consumption, occupation, and recreational activities (including feral swine hunting) of patients with nonspecific influenza-like symptoms with intermittent fever.

Patient A likely was infected through the hand wound he acquired while field dressing feral swine. The investigations suggest that patient B and patient C also were infected during the field dressing or butchering process because family members consumed the meat and were not affected clinically. Clinicians should order brucellosis testing for persons who are symptomatic and have a history of feral swine hunting. Duration and type of therapy is dependent upon multiple factors such as health status or age of patient and the manifestation of disease.

[§] Additional information available at http://www.bt.cdc.gov/lrn.

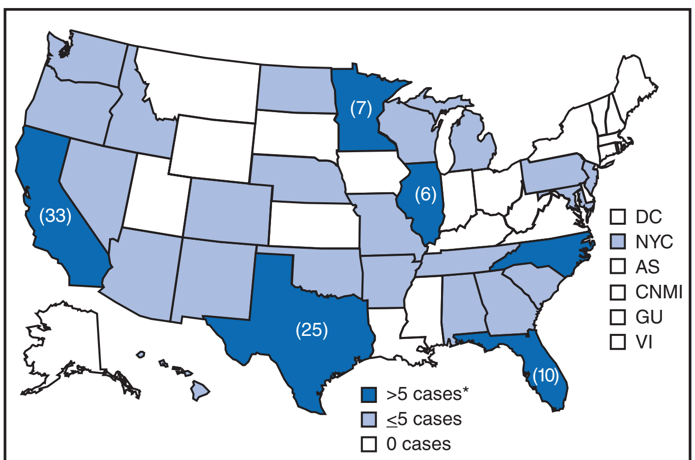
Untreated brucellosis can last from several weeks to several years. Chronic untreated brucellosis can lead to abscesses in the liver, spleen, heart valves, brain, or bone; osteoarticular complications; and, in rare cases, death (*2,3*).

Human brucellosis is a nationally notifiable disease in all 50 states, New York City, the District of Columbia, and all U.S. territories except Puerto Rico. In 2007, 131 brucellosis cases were reported in the United States (Figure). States with the highest numbers of reported cases were California (33), Texas (25), and Florida (10) (*4*).

Feral swine have been reported in 35 states (J. Corn, PhD, personal communication, Southeastern Cooperative Wildlife Disease Study, 2009). The national feral swine population is estimated at approximately 4–5 million, with the largest populations in Texas (1.5 million), California, Florida, and Hawaii. Serologic surveys have detected endemic feral swine infection with *B. suis* in 10 states (Arkansas, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, Missouri, South Carolina, and Texas) (*5–9*). Feral swine hunting is allowed in most states with feral swine presence, and most states require some form of license to hunt feral swine. Out-of-state hunters, as in this report, often bring swine meat back to their home states.

Efforts to prevent *B. suis* infection should focus on education of hunters and partnerships between state and local public health, wildlife, and agricultural agencies, and sportsmen's associations. Educational materials for feral swine hunters should include recommendations for safe field dressing, butchering, and cooking (*9*). All human brucellosis cases should be investigated jointly by state health departments and agriculture agencies to determine the sources of infection and prevent further illness in humans.

FIGURE. Reported cases of brucellosis (N = 131) — United States, 2007



SOURCE: CDC. Summary of notifiable diseases—United States, 2007. MMWR 2009;56(53). In press.
* Actual totals for states with >5 cases are shown in parentheses.

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Notice to Readers

National Men's Health Week — June 15–21, 2009

June 15–21 is Men's Health Week, the goal of which is to heighten awareness of preventable health problems and encourage early detection and treatment of disease among men and boys. In 2005, males had higher age-adjusted death rates for all causes of death than did females (1,106.5 deaths versus 663.4 deaths per 100,000 population). Males also had higher age-adjusted death rates for selected causes, including heart disease, stroke, cancer, chronic lower respiratory diseases, influenza and pneumonia, diabetes mellitus, human immunodeficiency virus, unintentional injuries, suicide, and homicide (*1*). When considering sex and race, black males have the lowest life expectancy at birth (69.7 years), followed by white males (75.7 years), black females (76.5 years), and white females (80.6 years) (*1*).

Population-based approaches are needed to improve men's access to and use of preventive health services early in their lives. Ensuring that all men and their families receive services recommended in evidence-based clinical guidelines, such as those available from the National Guideline Clearinghouse (http://www.guideline.gov), can facilitate early detection and treatment of diseases and other causes of death.

More information about Men's Health Week is available at http://www.menshealthmonth.org/week. CDC's Men's Health website can be accessed at http://www.cdc.gov/men.

Reference

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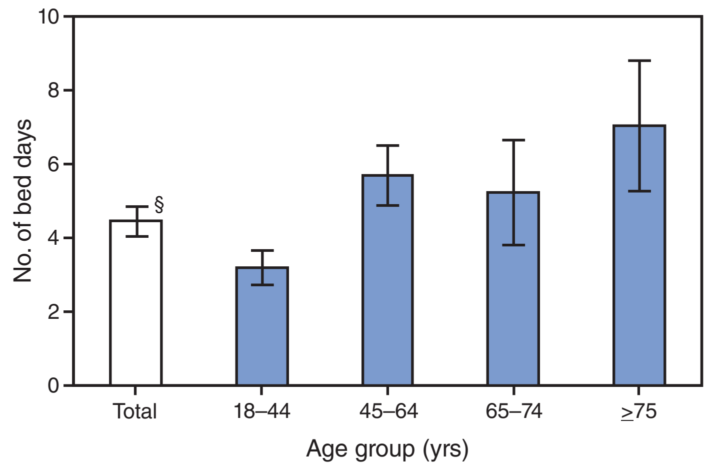
QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Average Number of Illness or Injury Bed Days* During the Preceding 12 Months Among Adults Aged ≥18 Years, by Age Group — National Health Interview Survey, United States, 2007†



* Respondents were asked, "During the past 12 months . . . about how many days did illness or injury keep you in bed more than half of the day (include days while an overnight patient in a hospital)?"

† Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. population and are derived from the National Health Interview Survey sample adult component.

§ 95% confidence interval.

In 2007, U.S. adults spent an average of 4.5 days in bed during the 12 months preceding the interview because of illness or injury. On average, adults aged 18–44 years had fewer bed days (3.2) than adults aged 45–64 years (5.7), 65–74 years (5.2), and ≥75 years (7.1).

SOURCE: Pleis JR, Lucas JW. Summary health statistics for U.S. adults: National Health Interview Survey, 2007. Vital Health Stat 2009;10(240). Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_240.pdf.

Errata: Vol. 58, No. 14

In the report "Chlamydia Screening Among Sexually Active Young Female Enrollees of Health Plans — United States, 2000–2007," errors occurred in the 2005 and 2006 data presented in the table on page 364 and in the percentage change reported for Colorado. The corrected table follows. In addition, the fifth sentence in the paragraph before "Reported by" on page 363 should read, **"Screening decreased in several states from 2006 to 2007."**

TABLE. Percentage of sexually active female enrollees aged 16–25 years* who were screened for *Chlamydia trachomatis* infection, by region, state,† and year — Healthcare Effectiveness Data and Information Set, United States, 2000–2007

Region/State	No. of health plans reporting in 2007	No. of sexually active enrollees in 2007§	Year								% change from 2000–2007
			2000	2001	2002	2003	2004	2005	2006	2007	
United States	**583**	**2,809,100**	**25.3**	**26.7**	**29.8**	**35.5**	**38.3**	**41.7**	**43.6**	**41.6**	**64.4**
Midwest	**158**	**567,400**	**23.0**	**24.5**	**28.1**	**32.3**	**34.1**	**36.8**	**38.3**	**38.5**	**67.4**
Iowa	8	16,700	20.1	20.2	—	—	—	**—**	**29.9**	30.8	53.2
Illinois	22	94,700	16.2	15.0	18.8	22.3	25.3	**28.4**	**30.0**	28.3	74.7
Indiana	17	40,500	19.0	19.9	22.2	28.0	30.4	**35.0**	**36.6**	36.4	91.6
Kansas	14	37,600	17.3	16.5	22.7	22.6	24.2	**30.0**	**30.3**	32.2	86.1
Michigan	24	92,600	30.6	29.3	33.4	38.9	40.6	**43.6**	**45.1**	46.4	51.6
Minnesota	17	70,400	19.1	21.5	26.4	29.2	29.8	**36.2**	**40.2**	43.1	125.7
Missouri	14	26,600	—	46.1	45.2	50.6	51.7	**49.7**	**48.6**	45.7	—
Ohio	21	129,400	25.7	30.1	35.0	35.8	36.0	**33.8**	**34.8**	38.7	50.6
Wisconsin	21	58,900	32.6	33.4	29.8	33.0	35.4	**35.6**	**40.4**	41.3	26.7
Northeast	**116**	**711,500**	**22.5**	**23.6**	**27.6**	**34.3**	**36.5**	**40.9**	**43.4**	**45.5**	**102.2**
Connecticut	15	58,200	23.1	27.1	32.6	37.6	39.7	**42.6**	**45.8**	47.3	104.8
Massachusetts	17	102,600	20.9	25.9	34.3	40.0	44.5	**47.1**	**50.8**	53.4	155.5
Maine	7	31,800	27.6	25.2	28.6	37.3	—	**43.3**	**46.0**	48.1	74.3
New Hampshire	5	12,400	—	—	—	—	—	**—**	**—**	45.9	—
New Jersey	18	118,900	15.2	16.2	16.6	26.4	31.9	**36.0**	**38.6**	40.6	167.1
New York	33	223,800	26.4	27.8	31.4	38.3	40.0	**44.5**	**47.4**	47.8	81.1
Pennsylvania	21	163,700	19.7	18.9	24.3	29.7	30.4	**35.6**	**38.0**	39.8	102.0
South	**173**	**803,900**	**25.1**	**25.8**	**26.9**	**33.1**	**35.6**	**40.0**	**41.2**	**37.3**	**48.6**
Alabama	5	5,700	—	—	—	—	—	**—**	**—**	23.1	—
Arkansas	6	12,500	—	—	—	—	—	**—**	**—**	26.2	—
Delaware	11	23,900	21.1	23.4	29.0	32.1	33.4	**36.8**	**36.1**	41.7	97.6
Florida	26	134,500	24.7	20.3	19.3	27.8	29.8	**35.4**	**37.5**	38.6	56.3
Georgia	12	79,700	31.1	31.7	34.5	39.8	39.4	**40.5**	**43.3**	38.0	22.2
Kentucky	7	23,000	—	—	—	32.9	—	**—**	**—**	36.1	—
Louisiana	7	18,400	—	—	—	—	—	**—**	**—**	28.5	—
Maryland	19	88,700	36.9	39.8	41.1	44.7	49.2	**48.6**	**50.4**	49.1	33.1
North Carolina	8	32,200	20.1	21.8	21.6	—	28.0	**31.7**	**34.6**	34.7	72.6
Oklahoma	6	7,100	10.6	13.6	15.4	—	—	**—**	**—**	25.3	138.7
South Carolina	5	15,400	—	—	—	—	—	**—**	**—**	29.8	—
Tennessee	19	114,000	19.3	—	20.3	—	41.9	**47.1**	**43.1**	38.0	96.9
Texas	25	152,600	20.9	18.9	24.7	28.8	32.2	**34.3**	**35.8**	34.4	64.6
Virginia	11	89,800	25.2	31.3	30.3	31.5	32.0	**38.2**	**42.2**	33.8	34.1
West Virginia	6	6,400	—	—	—	—	—	**—**	**39.0**	32.5	—
West	**136**	**726,300**	**30.8**	**32.6**	**35.9**	**40.4**	**45.5**	**47.4**	**49.2**	**45.0**	**46.1**
Arizona	12	59,300	23.3	16.5	26.0	34.7	39.2	**40.9**	**42.6**	41.4	77.7
California	43	448,800	32.2	35.5	38.7	41.9	47.3	**51.0**	**52.9**	48.6	50.9
Colorado	18	45,100	27.6	26.3	29.6	36.5	43.9	**44.3**	**42.3**	43.4	**57.2**
Hawaii	5	8,200	—	—	—	—	—	**—**	**—**	57.8	—
Idaho	7	42,100	—	—	—	—	—	**28.2**	**26.7**	29.0	—
New Mexico	13	30,100	33.4	32.8	30.5	31.4	32.8	**34.9**	**44.6**	46.9	40.4
Nevada	6	9,400	—	31.4	—	42.2	37.4	**—**	**—**	50.2	—
Oregon	9	35,500	34.5	38.9	—	—	—	**—**	**44.1**	35.8	3.8
Utah	8	7,900	—	13.8	15.1	16.8	19.4	**21.2**	**—**	20.8	—
Washington	15	39,900	17.9	31.3	29.7	39.5	40.0	**44.3**	**46.6**	36.2	102.2

* 16–26 years during 2000–2002.
† States and U.S. Territories not listed in the table had either no health plans or fewer than five health plans that reported chlamydia screening to the National Committee for Quality Assurance.
§ Rounded to 100s.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 6, 2009 (22nd week)*

Disease	Current week	Cum 2009	5-year weekly average†	Total cases reported for previous years 2008	2007	2006	2005	2004	States reporting cases during current week (No.)
Anthrax	—	—	—	—	1	1	—	—	
Botulism:									
foodborne	—	8	1	17	32	20	19	16	
infant	—	21	2	109	85	97	85	87	
other (wound and unspecified)	1	12	1	19	27	48	31	30	CA (1)
Brucellosis	—	36	2	77	131	121	120	114	
Chancroid	1	18	0	25	23	33	17	30	WA (1)
Cholera	—	2	0	3	7	9	8	6	
Cyclosporiasis§	1	34	13	139	93	137	543	160	FL (1)
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	1	62	55	67	80	112	
eastern equine	—	—	0	4	4	8	21	6	
Powassan	—	—	0	2	7	1	1	1	
St. Louis	—	—	0	13	9	10	13	12	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
Ehrlichia chaffeensis	6	85	14	1,126	828	578	506	338	OH (1), MD (1), FL (1), TN (3)
Ehrlichia ewingii	—	—	0	9	—	—	—	—	
Anaplasma phagocytophilum	2	39	14	825	834	646	786	537	NY (2)
undetermined	1	18	6	158	337	231	112	59	TN (1)
Haemophilus influenzae,††									
invasive disease (age <5 yrs):									
serotype b	—	12	0	28	22	29	9	19	
nonserotype b	—	83	3	238	199	175	135	135	
unknown serotype	—	95	4	166	180	179	217	177	
Hansen disease§	1	24	2	80	101	66	87	105	CA (1)
Hantavirus pulmonary syndrome§	—	3	1	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	1	54	4	329	292	288	221	200	CA (1)
Hepatitis C viral, acute	11	348	16	875	845	766	652	720	PA (1), IA (3), NC (1), FL (3), KY (1), OK (1), WA (1)
HIV infection, pediatric (age <13 years)§§	—	—	3	—	—	—	380	436	
Influenza-associated pediatric mortality§,¶¶	3	71	1	88	77	43	45	—	TX (1), OK (1), NYC (1)
Listeriosis	3	193	11	760	808	884	896	753	AR (1), NV (1), CA (1)
Measles***	—	25	3	140	43	55	66	37	
Meningococcal disease, invasive†††:									
A, C, Y, and W-135	—	123	6	318	325	318	297	—	
serogroup B	—	61	3	185	167	193	156	—	
other serogroup	—	10	1	34	35	32	27	—	
unknown serogroup	5	233	14	627	550	651	765	—	NY (1), OH (1), GA (1), FL (1), CA (1)
Mumps	3	147	45	450	800	6,584	314	258	MI (1), FL (1), NV (1)
Novel influenza A virus infections§§§	—	13,217	—	2	4	N	N	N	
Plague	—	—	0	1	7	17	8	3	
Poliomyelitis, paralytic	—	—	—	—	—	—	1	—	
Polio virus infection, nonparalytic§	—	—	—	—	—	N	N	N	
Psittacosis§	—	6	0	9	12	21	16	12	
Q fever total§,¶¶¶:	—	26	4	123	171	169	136	70	
acute	—	24	2	109	—	—	—	—	
chronic	—	2	0	14	—	—	—	—	
Rabies, human	—	—	0	1	1	3	2	7	
Rubella****	—	1	0	17	12	11	11	10	
Rubella, congenital syndrome	—	1	—	—	—	1	1	—	
SARS-CoV§,††††	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	2	72	3	158	132	125	129	132	CT (1), NC (1)
Syphilis, congenital (age <1 yr)	—	66	8	420	430	349	329	353	
Tetanus	—	4	1	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	1	34	2	73	92	101	90	95	CA (1)
Trichinellosis	—	9	0	38	5	15	16	5	
Tularemia	1	13	4	122	137	95	154	134	TN (1)
Typhoid fever	2	129	6	444	434	353	324	322	CT (1), TN (1)
Vancomycin-intermediate *Staphylococcus aureus*§	—	26	0	62	37	6	2	—	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	0	—	2	1	3	1	
Vibriosis (noncholera *Vibrio* species infections)§	3	83	4	491	549	N	N	N	FL (1), WA (1), CA (1)
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending June 6, 2009 (22nd week)*

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

* Incidence data for reporting year 2008 and 2009 are provisional, whereas data for 2004, 2005, 2006, and 2007 are finalized.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. 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 starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

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

** The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).

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

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

¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Seventy influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.

*** No measles cases were reported for the current week.

††† Data for meningococcal disease (all serogroups) are available in Table II.

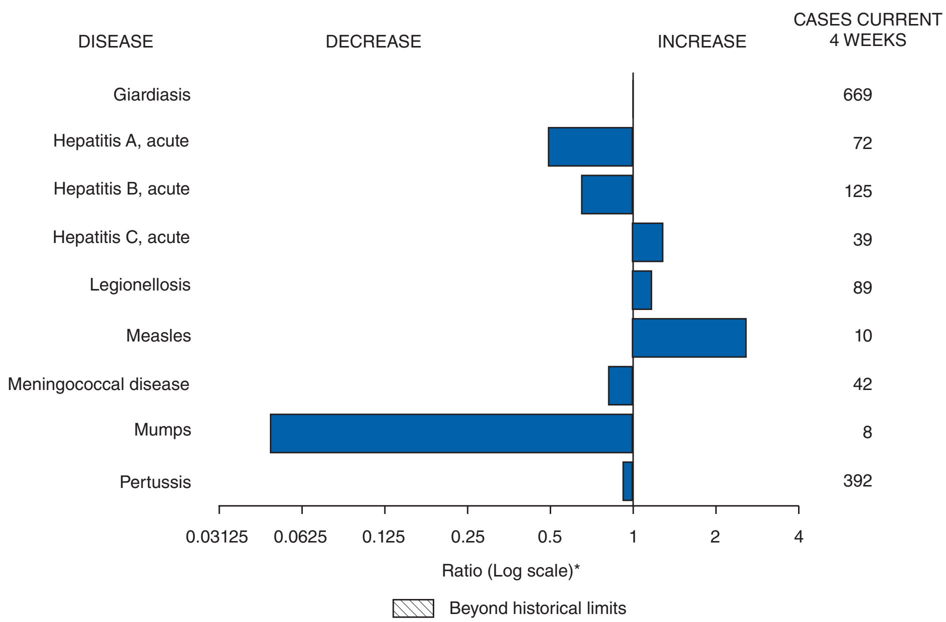
§§§ These cases were obtained from state and territorial health departments in response to novel Influenza A (H1N1) infections and include cases in addition to those reported to the National Notifiable Diseases Surveillance System (NNDSS). Because of the volume of cases and the method by which they are being collected, a 5-year weekly average for this disease is not calculated.

¶¶¶ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

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

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

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals June 6, 2009, with historical data



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

Notifiable Disease Data Team and 122 Cities Mortality Data Team

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

Reporting area	Chlamydia†					Coccidiodomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	9,911	22,713	25,700	444,733	492,320	147	131	333	3,155	2,836	64	110	481	1,794	1,708
New England	714	761	1,655	16,630	14,803	—	0	1	1	1	1	5	23	103	142
Connecticut	274	229	1,306	4,914	3,919	N	0	0	N	N	—	0	12	12	41
Maine§	—	48	72	1,034	1,056	N	0	0	N	N	—	1	6	13	8
Massachusetts	361	326	949	8,144	7,230	N	0	0	N	N	—	2	13	35	39
New Hampshire	5	32	63	520	871	—	0	1	1	1	1	1	4	17	28
Rhode Island§	49	55	244	1,517	1,250	—	0	0	—	—	—	0	3	2	3
Vermont§	25	21	53	501	477	N	0	0	N	N	—	1	7	24	23
Mid. Atlantic	2,037	2,855	6,734	64,040	62,944	—	0	0	—	—	9	13	35	220	202
New Jersey	365	397	883	8,448	9,644	N	0	0	N	N	—	0	4	1	16
New York (Upstate)	503	578	4,563	12,533	11,045	N	0	0	N	N	1	4	17	55	54
New York City	713	1,090	3,130	25,618	24,410	N	0	0	N	N	—	1	8	29	39
Pennsylvania	456	794	1,072	17,441	17,845	N	0	0	N	N	8	6	15	135	93
E.N. Central	1,446	3,404	4,382	66,414	83,139	—	0	3	16	24	12	25	125	411	412
Illinois	360	1,083	1,356	20,232	24,618	N	0	0	N	N	—	2	13	38	42
Indiana	337	394	713	9,633	9,385	N	0	0	N	N	—	3	17	59	59
Michigan	520	827	1,311	19,012	20,327	—	0	3	7	18	1	5	13	81	83
Ohio	103	781	1,300	10,564	19,553	—	0	2	9	6	10	8	59	137	90
Wisconsin	126	378	494	6,973	9,256	N	0	0	N	N	1	8	46	96	138
W.N. Central	549	1,319	1,547	27,126	28,015	—	0	1	1	—	9	17	68	266	256
Iowa	91	192	257	4,036	3,649	N	0	0	N	N	3	4	30	60	53
Kansas	—	186	401	3,971	3,817	N	0	0	N	N	—	1	8	23	21
Minnesota	—	265	316	4,622	6,227	—	0	0	—	—	5	4	14	67	65
Missouri	337	496	584	11,016	10,306	—	0	1	1	—	—	3	13	47	58
Nebraska§	54	97	254	1,881	2,081	N	0	0	N	N	—	2	8	26	38
North Dakota	7	26	60	324	778	N	0	0	N	N	—	0	10	1	1
South Dakota	60	56	85	1,276	1,157	N	0	0	N	N	1	2	9	42	20
S. Atlantic	1,741	4,529	5,730	76,398	95,176	—	0	1	4	2	12	21	49	348	303
Delaware	83	73	180	2,065	1,512	—	0	1	1	—	—	0	1	—	6
District of Columbia	99	126	228	2,962	2,920	—	0	0	—	—	—	0	2	—	7
Florida	606	1,384	1,593	30,095	30,758	N	0	0	N	N	5	8	35	112	132
Georgia	6	703	1,909	8,853	17,092	N	0	0	N	N	4	6	13	136	95
Maryland§	377	444	772	9,045	9,715	—	0	1	3	2	—	1	5	15	9
North Carolina	—	786	1,814	—	8,272	N	0	0	N	N	2	1	16	45	9
South Carolina§	—	560	887	9,122	10,780	N	0	0	N	N	—	1	6	16	14
Virginia§	542	614	903	12,632	12,737	N	0	0	N	N	1	1	4	19	22
West Virginia	28	68	101	1,624	1,390	N	0	0	N	N	—	0	3	5	9
E.S. Central	752	1,694	2,166	36,026	34,201	—	0	0	—	—	4	3	9	56	48
Alabama§	—	475	581	8,884	10,662	N	0	0	N	N	1	1	6	16	18
Kentucky	120	240	380	4,389	4,629	N	0	0	N	N	2	1	4	16	10
Mississippi	—	454	841	9,982	7,437	N	0	0	N	N	—	0	2	4	5
Tennessee§	632	562	796	12,771	11,473	N	0	0	N	N	1	1	5	20	15
W.S. Central	534	2,856	3,987	55,074	62,682	—	0	1	—	2	5	8	271	64	78
Arkansas§	329	278	417	6,291	5,974	N	0	0	N	N	—	1	10	12	16
Louisiana	205	428	1,114	7,725	8,436	—	0	1	—	2	—	1	5	6	13
Oklahoma	—	185	1,753	2,349	5,581	N	0	0	N	N	5	2	16	32	16
Texas§	—	1,955	2,511	38,709	42,691	N	0	0	N	N	—	3	258	14	33
Mountain	324	1,358	2,145	25,425	31,112	54	92	211	2,190	1,933	1	8	38	117	132
Arizona	82	449	627	6,558	10,316	54	90	209	2,156	1,881	—	1	10	11	14
Colorado	—	321	1,109	7,202	7,644	N	0	0	N	N	—	2	12	34	28
Idaho§	16	69	314	1,579	1,541	N	0	0	N	N	—	1	5	16	24
Montana§	21	58	89	1,290	1,311	N	0	0	N	N	—	1	4	14	17
Nevada§	65	177	365	4,071	4,221	—	1	3	27	27	—	0	4	6	5
New Mexico§	108	159	540	2,629	2,885	—	0	2	2	16	—	2	23	25	26
Utah	1	85	251	1,175	2,598	—	0	1	5	8	—	0	6	1	10
Wyoming§	31	33	97	921	596	—	0	1	—	1	1	0	2	10	8
Pacific	1,814	3,660	4,606	77,600	80,248	93	37	172	943	874	11	9	34	209	135
Alaska	106	89	199	1,948	1,994	N	0	0	N	N	—	0	1	2	1
California	1,310	2,869	3,583	61,309	62,288	93	37	172	943	874	5	6	14	114	83
Hawaii	27	115	247	2,408	2,438	N	0	0	N	N	—	0	1	1	1
Oregon§	131	197	631	3,927	4,395	N	0	0	N	N	—	1	32	65	27
Washington	240	403	557	8,008	9,133	N	0	0	N	N	6	2	10	27	23
American Samoa	—	0	8	—	62	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	4	9	—	81	—	0	0	—	—	—	0	0	—	—
Puerto Rico	103	134	269	3,169	2,906	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	1	9	22	156	287	—	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 year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	167	317	640	5,957	6,238	2,198	5,884	7,164	103,387	137,754	25	51	126	1,171	1,346
New England	2	28	64	409	525	112	97	301	2,040	2,063	—	3	18	78	71
Connecticut	—	5	14	76	127	44	51	275	923	845	—	0	12	24	13
Maine§	2	4	12	77	45	—	2	9	58	41	—	0	2	12	7
Massachusetts	—	11	27	150	225	57	37	112	855	960	—	1	5	32	38
New Hampshire	—	2	10	36	45	1	1	6	45	55	—	0	2	5	5
Rhode Island§	—	1	8	21	34	10	5	16	136	147	—	0	7	2	2
Vermont§	—	3	15	49	49	—	1	4	23	15	—	0	1	3	6
Mid. Atlantic	27	61	116	1,097	1,230	373	607	1,138	12,380	13,559	7	11	25	244	242
New Jersey	—	8	21	85	200	62	93	144	1,699	2,238	—	1	7	25	39
New York (Upstate)	16	23	81	445	397	68	116	664	2,238	2,515	5	3	20	59	65
New York City	2	15	30	292	357	138	209	577	4,653	4,133	—	2	11	56	41
Pennsylvania	9	17	46	275	276	105	190	267	3,790	4,673	2	4	10	104	97
E.N. Central	16	46	89	838	952	401	1,136	1,627	20,097	29,592	1	6	27	142	209
Illinois	—	10	32	135	250	145	364	499	6,020	8,323	—	2	9	53	67
Indiana	N	0	11	N	N	107	153	256	3,168	3,812	—	1	22	21	40
Michigan	1	12	22	232	214	109	293	493	6,070	7,521	—	0	3	13	14
Ohio	12	16	31	320	331	—	251	482	2,993	7,207	1	1	6	48	70
Wisconsin	3	8	20	151	157	40	102	149	1,846	2,729	—	0	2	7	18
W.N. Central	12	26	143	547	632	108	306	393	5,765	6,967	—	3	15	72	98
Iowa	7	6	18	104	106	13	32	53	652	630	—	0	0	—	2
Kansas	—	3	11	48	43	—	41	83	915	916	—	0	2	9	12
Minnesota	—	0	106	137	191	—	49	78	744	1,379	—	0	10	15	18
Missouri	—	8	22	174	175	74	143	184	2,718	3,324	—	1	4	34	45
Nebraska§	5	3	10	53	80	14	27	50	546	568	—	0	2	11	14
North Dakota	—	0	16	3	8	1	2	7	21	47	—	0	4	3	7
South Dakota	—	2	11	28	29	6	8	20	169	103	—	0	0	—	—
S. Atlantic	69	66	108	1,484	1,026	447	1,520	2,142	21,211	32,978	14	14	26	349	336
Delaware	—	1	3	12	17	18	16	35	358	493	—	0	2	3	3
District of Columbia	—	0	5	—	22	33	53	89	1,231	1,034	—	0	2	—	2
Florida	39	31	57	742	458	196	418	527	8,645	10,374	10	4	9	127	88
Georgia	27	14	66	424	228	—	257	876	2,870	6,128	1	2	9	70	72
Maryland§	—	6	10	95	97	115	121	212	2,354	2,535	—	1	6	41	55
North Carolina	N	0	0	N	N	—	277	647	—	4,108	3	1	17	44	31
South Carolina§	—	2	8	39	52	—	173	316	2,731	3,990	—	1	5	24	32
Virginia§	3	9	31	155	122	84	156	321	2,792	3,988	—	1	6	24	43
West Virginia	—	1	5	17	30	1	12	26	230	328	—	0	3	16	10
E.S. Central	3	8	22	127	166	205	541	771	10,351	12,341	1	3	6	64	80
Alabama§	—	4	12	54	90	—	164	216	2,567	4,234	—	0	4	18	11
Kentucky	N	0	0	N	N	31	83	153	1,295	1,791	—	0	2	7	6
Mississippi	N	0	0	N	N	—	144	253	3,044	2,767	—	0	1	—	12
Tennessee§	3	4	13	73	76	174	160	301	3,445	3,549	1	2	5	39	51
W.S. Central	4	7	22	117	117	166	930	1,307	15,820	21,446	1	2	22	53	66
Arkansas§	1	2	8	44	48	91	83	167	1,859	1,865	—	0	2	8	5
Louisiana	—	2	10	37	41	75	151	421	2,338	3,930	—	0	1	8	7
Oklahoma	3	3	18	36	28	—	70	437	1,185	2,038	1	1	20	37	49
Texas§	N	0	0	N	N	—	590	725	10,438	13,613	—	0	1	—	5
Mountain	—	27	62	416	488	58	195	372	3,326	5,173	1	5	11	114	166
Arizona	—	3	10	74	48	11	57	82	754	1,521	—	1	7	45	69
Colorado	—	9	27	135	184	—	62	293	1,275	1,597	—	1	5	31	28
Idaho§	—	3	14	40	49	1	3	13	42	71	—	0	2	2	8
Montana§	—	2	9	40	25	2	2	6	37	46	—	0	1	1	1
Nevada§	—	2	8	31	44	13	34	86	749	1,071	1	0	2	10	9
New Mexico§	—	2	8	32	36	28	23	52	377	572	—	1	3	14	26
Utah	—	7	18	47	87	—	5	15	63	254	—	0	2	11	25
Wyoming§	—	1	4	17	15	3	2	8	29	41	—	0	2	—	—
Pacific	34	54	130	922	1,102	328	575	755	12,397	13,635	—	2	14	55	78
Alaska	1	2	10	25	29	15	13	24	311	216	—	0	3	7	10
California	22	34	59	655	773	275	480	657	10,514	11,213	—	0	3	7	28
Hawaii	—	0	4	5	14	5	13	19	264	242	—	0	2	13	9
Oregon§	—	7	66	126	184	14	23	48	428	546	—	1	13	25	29
Washington	11	7	74	111	102	19	51	81	880	1,418	—	0	2	3	2
American Samoa	—	0	0	—	—	—	0	1	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	2	15	—	23	—	0	0	—	—
Puerto Rico	—	3	15	25	56	3	5	16	91	117	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	2	7	49	55	N	0	0	N	N

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

	Hepatitis (viral, acute), by type†														
	A					B					Legionellosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
Reporting area		Med	Max				Med	Max				Med	Max		
United States	10	39	89	689	1,158	36	71	196	1,321	1,596	24	50	152	592	789
New England	—	2	8	31	58	—	1	4	15	35	1	2	18	15	39
Connecticut	—	0	4	9	10	—	0	3	6	12	1	0	5	7	8
Maine§	—	0	5	1	3	—	0	2	6	6	—	0	2	—	1
Massachusetts	—	1	3	14	30	—	0	2	1	11	—	1	7	6	13
New Hampshire	—	0	2	3	5	—	0	2	2	2	—	0	5	—	4
Rhode Island§	—	0	2	3	9	—	0	1	—	3	—	0	14	1	9
Vermont§	—	0	1	1	1	—	0	1	—	1	—	0	1	1	4
Mid. Atlantic	1	5	13	70	129	2	6	17	118	205	4	14	60	150	187
New Jersey	—	1	5	5	28	—	1	5	19	60	—	1	14	8	24
New York (Upstate)	1	1	4	20	29	2	1	11	29	29	—	5	24	58	48
New York City	—	2	6	19	38	—	1	4	25	43	—	2	12	15	26
Pennsylvania	—	1	4	26	34	—	2	8	45	73	4	5	35	69	89
E.N. Central	—	5	11	78	167	2	9	21	170	204	5	8	41	107	164
Illinois	—	1	5	17	60	—	2	7	22	75	—	2	13	8	24
Indiana	—	0	3	5	10	—	1	18	28	12	—	1	6	7	11
Michigan	—	1	5	28	64	1	2	8	52	65	—	2	16	19	45
Ohio	—	1	4	23	17	1	2	13	52	46	5	4	18	68	76
Wisconsin	—	0	3	5	16	—	0	3	16	6	—	0	3	5	8
W.N. Central	1	2	16	50	153	—	2	16	71	30	1	2	8	20	36
Iowa	—	1	5	9	73	—	0	3	10	9	—	0	2	8	8
Kansas	—	0	1	4	9	—	0	3	4	3	—	0	1	1	1
Minnesota	—	0	12	12	16	—	0	11	11	3	—	0	4	—	4
Missouri	—	0	3	15	17	—	1	5	36	13	—	1	7	7	13
Nebraska§	1	0	2	9	36	—	0	3	9	2	1	0	3	3	9
North Dakota	—	0	2	—	—	—	0	1	—	—	—	0	3	1	—
South Dakota	—	0	1	1	2	—	0	1	1	—	—	0	1	—	1
S. Atlantic	1	7	15	169	143	13	20	32	433	412	7	9	22	148	161
Delaware	—	0	1	1	3	—	0	2	12	10	—	0	1	1	4
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	2	—	7
Florida	—	3	8	86	63	8	7	11	136	142	4	3	7	64	56
Georgia	—	1	4	24	25	1	3	9	61	69	—	1	5	18	14
Maryland§	—	0	4	16	17	—	2	6	39	36	—	2	9	24	40
North Carolina	1	1	9	20	9	2	0	19	115	43	3	0	7	28	8
South Carolina§	—	0	3	11	6	—	1	5	16	32	—	0	2	2	2
Virginia§	—	1	6	11	17	—	2	10	31	44	—	1	5	11	19
West Virginia	—	0	1	—	3	2	1	6	23	36	—	0	3	—	11
E.S. Central	—	1	5	13	33	2	8	13	129	154	3	2	10	31	42
Alabama§	—	0	2	3	5	—	2	7	41	41	—	0	2	4	5
Kentucky	—	0	2	2	13	1	2	7	36	46	3	1	3	15	22
Mississippi	—	0	2	5	1	—	1	3	5	14	—	0	1	—	—
Tennessee§	—	0	4	3	14	1	3	8	47	53	—	0	5	12	15
W.S. Central	—	4	43	65	107	4	11	98	192	333	—	1	21	22	26
Arkansas§	—	0	1	4	3	—	1	5	14	19	—	0	2	2	3
Louisiana	—	0	2	2	6	—	1	4	16	44	—	0	2	1	3
Oklahoma	—	0	6	1	3	3	2	17	48	34	—	0	6	2	1
Texas§	—	3	37	58	95	1	6	75	114	236	—	1	19	17	19
Mountain	—	3	31	55	91	3	3	10	52	77	2	2	8	36	36
Arizona	—	1	28	31	36	—	1	5	25	30	2	0	3	20	9
Colorado	—	0	2	7	19	—	0	3	8	12	—	0	2	1	3
Idaho§	—	0	1	—	12	—	0	2	2	3	—	0	1	—	1
Montana§	—	0	1	3	—	—	0	1	—	—	—	0	2	4	3
Nevada§	—	0	3	6	3	3	0	3	10	19	—	0	2	6	6
New Mexico§	—	0	1	5	14	—	0	2	4	7	—	0	2	—	3
Utah	—	0	2	3	4	—	0	3	3	3	—	0	2	5	11
Wyoming§	—	0	0	—	3	—	0	1	—	3	—	0	0	—	—
Pacific	7	8	25	158	277	10	7	36	141	146	1	3	9	63	98
Alaska	—	0	1	3	2	—	0	1	3	4	—	0	1	2	1
California	7	6	25	120	226	7	5	28	105	102	—	3	9	53	77
Hawaii	—	0	2	3	4	—	0	1	2	3	—	0	1	1	4
Oregon§	—	0	3	9	19	—	0	9	15	19	—	0	2	3	9
Washington	—	1	4	23	26	3	1	8	16	18	1	0	3	4	7
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	2	7	14	—	0	5	2	25	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All groups				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	108	530	1,859	3,225	4,883	10	22	46	349	356	5	18	48	427	616
New England	5	106	834	384	1,787	—	1	6	8	13	—	0	4	15	17
Connecticut	—	27	264	—	778	—	0	4	1	—	—	0	1	1	1
Maine§	—	5	73	75	51	—	0	0	—	1	—	0	1	2	3
Massachusetts	—	25	400	117	626	—	0	4	6	8	—	0	3	9	12
New Hampshire	—	12	145	131	211	—	0	1	—	2	—	0	1	1	1
Rhode Island§	—	0	78	12	101	—	0	1	—	1	—	0	1	1	—
Vermont§	5	4	41	49	20	—	0	1	1	1	—	0	1	1	—
Mid. Atlantic	81	229	1,401	1,777	1,834	—	5	17	77	92	1	2	5	45	68
New Jersey	3	29	231	341	872	—	0	4	—	14	—	0	1	2	9
New York (Upstate)	37	99	1,368	659	346	—	0	10	17	12	1	0	2	11	19
New York City	—	9	54	—	131	—	3	11	46	53	—	0	2	8	11
Pennsylvania	41	49	338	777	485	—	1	3	14	13	—	1	4	24	29
E.N. Central	—	8	147	89	185	—	2	7	42	59	1	3	8	70	102
Illinois	—	0	13	1	10	—	1	5	14	29	—	1	6	17	36
Indiana	—	0	8	7	2	—	0	1	7	3	—	0	4	14	14
Michigan	—	1	10	9	—	—	0	2	6	9	—	0	3	12	14
Ohio	—	0	6	6	7	—	1	2	14	14	1	0	3	21	26
Wisconsin	—	5	129	66	166	—	0	3	1	4	—	0	1	6	12
W.N. Central	—	7	336	40	101	1	1	10	20	20	—	1	9	35	55
Iowa	—	1	9	5	32	—	0	3	4	2	—	0	1	2	11
Kansas	—	0	4	5	3	—	0	2	1	3	—	0	2	7	2
Minnesota	—	3	326	28	63	1	0	8	10	6	—	0	4	8	15
Missouri	—	0	1	—	1	—	0	2	4	5	—	0	2	13	16
Nebraska§	—	0	2	1	1	—	0	1	—	4	—	0	1	3	9
North Dakota	—	0	10	—	—	—	0	0	—	—	—	0	3	—	1
South Dakota	—	0	1	1	1	—	0	1	1	—	—	0	1	2	1
S. Atlantic	21	65	225	828	890	4	7	16	131	88	2	3	9	82	77
Delaware	12	11	36	207	262	—	0	1	1	1	—	0	1	2	—
District of Columbia	—	0	7	—	15	—	0	2	—	—	—	0	0	—	—
Florida	—	1	6	14	12	1	1	7	35	20	1	1	4	30	29
Georgia	—	0	6	15	10	1	1	4	27	25	1	0	2	13	9
Maryland§	3	29	165	393	437	1	2	8	34	26	—	0	3	4	7
North Carolina	1	1	6	17	2	—	1	7	17	2	—	0	5	15	3
South Carolina§	—	0	2	9	9	—	0	1	1	3	—	0	1	5	14
Virginia§	5	14	61	139	112	1	1	3	15	10	—	0	2	9	13
West Virginia	—	1	17	34	31	—	0	1	1	1	—	0	2	4	2
E.S. Central	—	0	5	7	13	—	0	2	11	8	—	0	3	15	35
Alabama§	—	0	1	1	6	—	0	1	3	3	—	0	1	3	3
Kentucky	—	0	2	1	1	—	0	2	4	3	—	0	1	3	7
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	1	1	9
Tennessee§	—	0	3	5	6	—	0	2	4	2	—	0	1	8	16
W.S. Central	—	2	21	10	31	1	1	10	9	19	—	2	12	36	66
Arkansas§	—	0	0	—	—	—	0	1	—	—	—	0	2	5	9
Louisiana	—	0	1	—	—	—	0	1	1	1	—	0	3	9	17
Oklahoma	—	0	2	—	—	1	0	2	1	1	—	0	3	2	9
Texas§	—	2	21	10	31	—	1	10	7	17	—	1	9	20	31
Mountain	—	1	13	12	9	1	0	3	4	10	—	1	4	35	34
Arizona	—	0	2	1	2	—	0	2	1	3	—	0	2	7	4
Colorado	—	0	1	2	2	—	0	1	1	3	—	0	2	10	6
Idaho§	—	0	2	4	1	1	0	1	1	—	—	0	1	4	4
Montana§	—	0	13	1	1	—	0	0	—	—	—	0	2	4	4
Nevada§	—	0	2	4	—	—	0	1	—	4	—	0	2	3	6
New Mexico§	—	0	2	—	3	—	0	1	—	—	—	0	1	3	4
Utah	—	0	1	—	—	—	0	1	1	—	—	0	1	1	4
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	2	3	2
Pacific	1	3	13	78	33	3	3	10	47	47	1	4	14	94	162
Alaska	—	0	2	1	—	—	0	1	1	2	—	0	2	2	2
California	1	2	6	66	25	3	2	8	35	36	1	2	8	57	127
Hawaii	N	0	0	N	N	—	0	1	1	2	—	0	1	3	1
Oregon§	—	0	6	9	8	—	0	4	5	4	—	0	9	23	18
Washington	—	0	12	2	—	—	0	3	5	3	—	0	6	9	14
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	1	—	0	1	—	2
U.S. Virgin Islands	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
		Previous 52 weeks					Previous 52 weeks					Previous 52 weeks			
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	106	235	1,697	4,579	3,134	97	69	120	1,337	1,610	10	38	179	349	245
New England	—	18	35	183	374	12	8	15	133	159	—	0	2	4	2
Connecticut	—	1	4	10	27	10	3	8	59	79	—	0	0	—	—
Maine†	—	1	7	34	14	—	1	5	20	26	—	0	2	4	—
Massachusetts	—	12	30	105	294	—	0	0	—	—	—	0	1	—	1
New Hampshire	—	1	5	23	9	1	1	7	14	14	—	0	1	—	—
Rhode Island†	—	1	6	5	25	1	0	3	14	11	—	0	2	—	1
Vermont†	—	0	2	6	5	—	1	6	26	29	—	0	0	—	—
Mid. Atlantic	10	24	64	398	365	14	17	30	268	317	1	1	29	10	34
New Jersey	—	3	12	27	59	—	0	0	—	—	—	0	6	—	23
New York (Upstate)	3	6	41	77	110	14	9	20	150	153	—	0	29	1	3
New York City	—	0	21	40	40	—	0	2	—	10	—	0	2	6	5
Pennsylvania	7	10	33	254	156	—	7	17	118	154	1	0	2	3	3
E.N. Central	33	38	238	923	633	5	2	28	37	37	—	1	15	11	17
Illinois	—	14	45	193	65	—	1	20	6	11	—	1	10	6	13
Indiana	—	2	158	76	20	—	0	6	6	1	—	0	3	—	1
Michigan	3	8	21	208	79	1	1	9	16	17	—	0	1	1	1
Ohio	30	14	57	412	437	4	0	7	9	8	—	0	4	4	2
Wisconsin	—	2	7	34	32	N	0	0	N	N	—	0	1	—	—
W.N. Central	2	31	872	861	244	2	5	17	99	103	1	4	33	43	49
Iowa	—	4	21	54	35	—	0	5	9	9	—	0	2	—	1
Kansas	—	2	12	76	26	—	1	6	37	35	—	0	0	—	—
Minnesota	1	1	808	161	49	2	0	11	20	17	—	0	0	—	—
Missouri	—	14	51	476	102	—	1	8	17	7	—	4	32	41	46
Nebraska†	1	4	32	81	20	—	0	2	—	15	1	0	4	2	—
North Dakota	—	0	24	2	1	—	0	9	3	10	—	0	1	—	—
South Dakota	—	0	10	11	11	—	0	4	13	10	—	0	1	—	2
S. Atlantic	21	26	71	608	294	57	27	66	591	789	3	16	72	200	69
Delaware	—	0	3	6	5	—	0	0	—	—	—	0	5	3	3
District of Columbia	—	0	2	—	1	—	0	0	—	—	—	0	1	—	1
Florida	7	7	20	204	68	—	0	22	55	138	—	0	3	4	3
Georgia	—	3	9	79	23	52	5	47	154	172	—	1	9	9	17
Maryland†	1	3	10	37	44	—	7	16	130	190	2	1	7	18	13
North Carolina	10	0	65	163	59	N	4	4	N	N	1	9	55	137	11
South Carolina†	—	2	10	56	44	—	0	0	—	—	—	1	9	9	7
Virginia†	3	3	24	58	45	—	10	24	205	238	—	2	15	19	10
West Virginia	—	0	2	5	5	5	1	6	47	51	—	0	1	1	4
E.S. Central	11	11	33	278	98	1	3	7	59	72	—	4	23	53	41
Alabama†	5	2	19	103	19	—	0	0	—	—	—	1	8	10	11
Kentucky	4	4	15	96	16	1	1	4	25	13	—	0	1	—	—
Mississippi	—	1	5	17	42	—	0	2	—	1	—	0	3	1	4
Tennessee†	2	2	14	62	21	—	2	6	34	58	—	3	19	42	26
W.S. Central	14	40	389	736	302	—	0	9	21	42	5	2	161	21	23
Arkansas†	2	2	38	33	34	—	0	6	16	24	3	0	61	6	1
Louisiana	—	2	7	34	11	—	0	0	—	—	—	0	2	—	2
Oklahoma	—	0	45	12	8	—	0	9	4	16	2	0	98	5	13
Texas†	12	35	304	657	249	—	0	1	1	2	—	1	6	10	7
Mountain	—	14	31	314	413	—	2	9	41	23	—	1	3	6	9
Arizona	—	2	10	51	117	N	0	0	N	N	—	0	2	1	3
Colorado	—	4	12	111	63	—	0	0	—	—	—	0	1	—	—
Idaho†	—	1	5	36	20	—	0	2	—	—	—	0	1	—	—
Montana†	—	0	4	9	58	—	0	4	13	—	—	0	1	3	1
Nevada†	—	0	3	6	15	—	0	5	—	1	—	0	2	—	—
New Mexico†	—	1	10	30	23	—	0	2	14	15	—	0	1	1	1
Utah	—	4	19	70	111	—	0	6	1	1	—	0	1	1	2
Wyoming†	—	0	2	1	6	—	0	4	13	6	—	0	2	—	2
Pacific	15	24	98	278	411	6	4	13	88	68	—	0	1	1	1
Alaska	—	3	21	28	34	—	0	2	9	12	N	0	0	N	N
California	—	5	24	22	201	6	4	12	79	55	—	0	1	1	—
Hawaii	1	0	3	13	5	—	0	0	—	—	N	0	0	N	N
Oregon†	—	3	45	97	66	—	0	2	—	1	—	0	1	—	1
Washington	14	6	76	118	105	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	1	—	—	1	5	15	27	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)[†]					Shigellosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	464	978	2,321	12,413	13,024	34	83	256	1,036	1,195	178	438	1,269	5,814	6,721
New England	2	32	180	647	960	—	3	25	66	101	—	3	13	60	98
Connecticut	—	0	154	154	491	—	0	25	25	47	—	0	8	8	40
Maine[§]	—	2	8	39	57	—	0	3	8	3	—	0	6	2	2
Massachusetts	—	22	51	263	319	—	1	11	15	31	—	2	9	40	46
New Hampshire	1	3	33	119	44	—	1	3	14	10	—	0	1	1	2
Rhode Island[§]	—	2	9	50	27	—	0	1	—	6	—	0	1	6	7
Vermont[§]	1	1	7	22	22	—	0	6	4	4	—	0	2	3	1
Mid. Atlantic	47	88	201	1,399	1,638	1	7	27	79	129	23	55	93	1,055	810
New Jersey	—	17	55	110	395	—	1	12	14	52	—	19	38	240	188
New York (Upstate)	19	29	65	386	375	1	3	12	34	33	4	7	28	78	228
New York City	3	22	49	358	395	—	1	5	26	17	—	10	23	179	349
Pennsylvania	25	28	78	545	473	—	0	8	5	27	19	15	37	558	45
E.N. Central	35	95	194	1,582	1,647	4	12	75	163	156	22	82	128	1,151	1,220
Illinois	—	26	71	414	464	—	1	10	29	30	—	15	34	221	406
Indiana	—	8	53	87	138	—	1	14	16	11	—	4	39	24	334
Michigan	5	18	38	348	307	1	3	43	40	23	—	5	24	104	38
Ohio	29	27	49	525	467	3	3	17	42	35	19	42	80	629	324
Wisconsin	1	12	50	208	271	—	3	20	36	57	3	8	33	173	118
W.N. Central	25	52	148	970	858	3	12	58	152	161	—	14	43	287	388
Iowa	6	7	16	146	151	1	3	21	38	40	—	3	12	40	65
Kansas	1	7	29	102	90	—	1	7	11	10	—	3	8	75	6
Minnesota	14	11	69	237	235	1	2	21	41	30	—	3	25	29	92
Missouri	—	13	48	198	225	—	2	11	38	51	—	3	31	133	126
Nebraska[§]	4	5	41	176	94	1	2	30	22	17	—	0	3	7	—
North Dakota	—	0	30	9	17	—	0	28	—	1	—	0	9	1	26
South Dakota	—	4	22	102	46	—	0	4	2	12	—	0	1	2	73
S. Atlantic	206	262	459	3,238	3,147	11	14	49	232	221	48	48	86	876	1,419
Delaware	1	2	9	26	49	—	0	2	5	6	3	0	8	32	5
District of Columbia	—	0	2	—	32	—	0	1	—	3	—	0	2	—	6
Florida	155	97	174	1,417	1,408	7	2	10	69	61	7	11	26	178	389
Georgia	17	37	96	518	524	—	2	8	21	19	9	13	40	227	587
Maryland[§]	6	17	37	226	227	1	2	11	28	36	4	4	12	119	26
North Carolina	16	25	106	517	295	2	2	21	56	19	21	5	27	178	40
South Carolina[§]	1	18	57	210	276	—	1	3	8	14	—	5	28	58	284
Virginia[§]	10	21	88	266	253	1	3	27	37	45	4	4	59	79	63
West Virginia	—	3	10	58	83	—	0	3	8	18	—	0	3	5	19
E.S. Central	21	59	140	735	798	2	5	12	61	93	11	28	58	405	895
Alabama[§]	—	16	49	207	228	—	1	3	10	32	—	5	16	65	209
Kentucky	5	10	18	156	128	2	1	7	19	18	4	2	25	112	152
Mississippi	7	13	57	165	205	—	0	1	4	4	—	1	6	12	215
Tennessee[§]	9	14	62	207	237	—	2	6	28	39	7	14	48	216	319
W.S. Central	18	142	1,327	829	1,220	—	6	139	46	111	49	96	967	1,104	1,178
Arkansas[§]	6	14	39	160	123	—	0	5	7	21	13	10	27	137	137
Louisiana	—	14	54	103	241	—	0	2	—	2	—	7	26	57	246
Oklahoma	12	14	101	187	156	—	1	82	6	6	6	4	61	85	43
Texas[§]	—	95	1,199	379	700	—	5	55	33	82	30	65	889	825	752
Mountain	17	58	110	912	1,103	1	10	40	114	148	9	27	54	415	252
Arizona	9	23	43	343	286	1	1	4	13	23	8	16	35	296	105
Colorado	—	12	20	189	322	—	3	18	54	41	—	3	11	36	28
Idaho[§]	2	3	12	59	54	—	2	15	13	30	—	0	2	3	5
Montana[§]	—	2	7	49	40	—	0	3	6	17	—	0	5	11	1
Nevada[§]	2	4	14	98	79	—	0	3	5	5	1	3	13	29	83
New Mexico[§]	1	7	26	83	181	—	1	4	15	18	—	3	12	37	19
Utah	2	6	19	73	110	—	1	9	7	10	—	1	3	3	8
Wyoming[§]	1	1	5	18	31	—	0	2	1	4	—	0	1	—	3
Pacific	93	119	537	2,101	1,653	12	10	31	123	75	16	32	82	461	461
Alaska	4	1	4	24	17	—	0	1	—	3	—	0	1	2	—
California	72	86	516	1,599	1,247	7	5	15	79	46	12	26	75	357	393
Hawaii	4	5	15	102	82	—	0	2	2	3	—	1	3	8	16
Oregon[§]	—	7	72	153	131	—	1	7	9	8	—	1	10	23	24
Washington	13	11	85	223	176	5	3	16	33	15	4	2	13	71	28
American Samoa	—	0	1	—	1	—	0	0	—	—	—	0	2	3	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	—	5	—	0	0	—	—	—	0	2	—	9
Puerto Rico	—	13	40	76	219	—	0	0	—	—	—	0	4	1	7
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
[†] Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

Reporting area	Streptococcal diseases, invasive, group A					*Streptococcus pneumoniae,* invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	54	99	241	2,671	2,942	14	34	121	821	936
New England	1	5	29	152	216	—	1	12	22	45
Connecticut	—	0	21	43	54	—	0	11	—	—
Maine§	1	0	3	10	14	—	0	1	—	1
Massachusetts	—	2	10	60	115	—	1	3	15	35
New Hampshire	—	1	4	25	15	—	0	1	5	7
Rhode Island§	—	0	8	4	9	—	0	2	—	2
Vermont§	—	0	3	10	9	—	0	1	2	—
Mid. Atlantic	19	18	38	507	627	3	4	33	119	115
New Jersey	—	1	6	3	112	—	1	4	14	33
New York (Upstate)	12	6	25	190	197	3	2	17	64	49
New York City	—	3	12	102	122	—	0	31	41	33
Pennsylvania	7	6	18	212	196	N	0	2	N	N
E.N. Central	7	17	43	545	591	3	5	18	121	173
Illinois	—	5	12	144	168	—	1	5	14	52
Indiana	—	3	23	91	77	—	0	13	13	19
Michigan	—	3	10	87	109	3	1	5	39	46
Ohio	7	4	13	150	161	—	1	6	41	32
Wisconsin	—	1	10	73	76	—	0	3	14	24
W.N. Central	—	6	37	218	222	—	2	11	66	42
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	1	5	32	25	N	0	1	N	N
Minnesota	—	0	34	84	101	—	0	7	28	9
Missouri	—	2	8	58	56	—	1	4	28	20
Nebraska§	—	1	3	27	21	—	0	1	3	4
North Dakota	—	0	2	2	7	—	0	3	3	4
South Dakota	—	0	3	15	12	—	0	2	4	5
S. Atlantic	21	22	46	601	568	4	7	16	172	183
Delaware	—	0	1	8	6	—	0	0	—	—
District of Columbia	—	0	2	—	6	N	0	0	N	N
Florida	12	6	12	148	129	2	1	6	39	33
Georgia	—	5	13	139	120	—	2	6	47	52
Maryland§	1	3	10	86	104	2	1	3	36	36
North Carolina	3	2	12	62	73	N	0	0	N	N
South Carolina§	—	1	5	37	36	—	1	6	27	29
Virginia§	5	3	9	97	73	—	0	4	15	28
West Virginia	—	1	4	24	21	—	0	2	8	5
E.S. Central	1	4	10	109	100	—	1	6	33	58
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	5	20	20	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	—	15
Tennessee§	1	3	8	89	80	—	1	6	33	43
W.S. Central	4	10	79	242	236	3	6	46	148	134
Arkansas§	—	0	2	9	6	—	0	4	16	8
Louisiana	—	0	2	6	11	—	0	3	12	6
Oklahoma	1	2	20	83	59	—	1	7	28	42
Texas§	3	6	59	144	160	3	4	34	92	78
Mountain	1	9	22	232	322	1	4	16	125	159
Arizona	1	3	8	71	107	1	2	10	74	69
Colorado	—	3	8	90	82	—	1	4	24	38
Idaho§	—	0	2	3	10	—	0	2	4	2
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	4	6	—	0	1	—	2
New Mexico§	—	2	7	42	81	—	0	4	12	24
Utah	—	1	6	21	31	—	0	4	11	23
Wyoming§	—	0	1	1	5	—	0	1	—	1
Pacific	—	3	9	65	60	—	1	3	15	27
Alaska	—	0	4	8	13	—	0	3	10	16
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	3	8	57	47	—	0	2	5	11
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	8	—	19	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N

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 year 2008 and 2009 are provisional.
† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS 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 June 6, 2009, and May 31, 2008 (22nd week)*

	Streptococcus pneumoniae, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Aged <5 years									
		Previous 52 weeks					Previous 52 weeks					Previous 52 weeks			
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	22	56	276	1,526	1,746	3	9	20	229	244	97	260	452	5,110	5,128
New England	—	1	48	26	33	—	0	5	1	4	4	5	15	140	133
Connecticut	—	0	48	—	—	—	0	5	—	—	—	1	5	29	8
Maine§	—	0	2	7	11	—	0	1	—	—	—	0	2	1	5
Massachusetts	—	0	1	1	—	—	0	1	1	—	4	4	11	96	104
New Hampshire	—	0	3	5	—	—	0	0	—	—	—	0	2	10	6
Rhode Island§	—	0	6	5	10	—	0	1	—	2	—	0	5	4	5
Vermont§	—	0	1	8	12	—	0	0	—	2	—	0	2	—	5
Mid. Atlantic	1	4	14	91	181	—	0	3	17	15	21	33	51	782	727
New Jersey	—	0	0	—	—	—	0	0	—	—	4	4	13	99	89
New York (Upstate)	—	1	10	38	33	—	0	2	10	4	4	2	8	46	55
New York City	—	1	4	2	76	—	0	2	—	—	8	22	36	490	451
Pennsylvania	1	1	8	51	72	—	0	2	7	11	5	5	12	147	132
E.N. Central	7	10	41	332	383	1	1	7	47	53	18	24	44	424	470
Illinois	N	0	0	N	N	N	0	0	N	N	5	9	19	110	173
Indiana	—	2	32	97	134	—	0	6	16	17	—	2	10	68	62
Michigan	—	0	2	15	13	—	0	1	2	2	13	4	18	107	86
Ohio	7	7	18	220	236	1	1	4	29	34	—	6	28	118	128
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	4	21	21
W.N. Central	—	3	161	58	129	—	0	4	16	23	1	6	14	128	180
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	10	8
Kansas	—	1	5	18	54	—	0	2	9	3	—	0	3	10	14
Minnesota	—	0	156	—	15	—	0	4	—	15	—	2	6	29	43
Missouri	—	1	5	33	55	—	0	1	5	2	—	3	10	66	110
Nebraska§	—	0	1	1	—	—	0	0	—	—	—	0	2	10	5
North Dakota	—	0	2	4	2	—	0	0	—	—	1	0	1	2	—
South Dakota	—	0	2	2	3	—	0	2	2	3	—	0	1	1	—
S. Atlantic	12	24	53	744	709	2	4	14	103	102	32	62	262	1,184	1,047
Delaware	—	0	2	9	2	—	0	0	—	—	—	0	3	14	5
District of Columbia	N	0	0	N	N	N	0	0	N	N	4	3	9	77	60
Florida	10	15	36	457	374	1	3	13	70	60	—	20	31	411	409
Georgia	1	8	25	205	254	—	1	5	26	35	2	12	227	171	173
Maryland§	—	0	1	4	4	—	0	0	—	1	—	7	16	121	133
North Carolina	N	0	0	N	N	N	0	0	N	N	11	8	19	221	113
South Carolina§	—	0	0	—	—	—	0	0	—	—	—	2	6	39	35
Virginia§	N	0	0	N	N	N	0	0	N	N	15	4	16	128	115
West Virginia	1	2	13	69	75	1	0	3	7	6	—	0	1	2	4
E.S. Central	—	5	25	168	177	—	1	3	24	28	3	22	36	470	432
Alabama§	N	0	0	N	N	N	0	0	N	N	—	8	17	167	185
Kentucky	—	1	5	47	46	—	0	2	7	8	—	1	10	24	41
Mississippi	—	0	2	—	1	—	0	1	—	—	—	3	18	86	55
Tennessee§	—	3	22	121	130	—	0	3	17	20	3	8	19	193	151
W.S. Central	2	1	7	51	61	—	0	3	10	11	5	48	80	921	855
Arkansas§	2	0	5	32	11	—	0	3	7	3	5	3	35	81	54
Louisiana	—	1	6	19	50	—	0	1	3	8	—	14	40	223	202
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	7	23	39
Texas§	—	0	0	—	—	—	0	0	—	—	—	29	40	594	560
Mountain	—	2	7	54	72	—	0	3	10	7	6	9	18	125	278
Arizona	—	0	0	—	—	—	0	0	—	—	—	4	11	21	142
Colorado	—	0	0	—	—	—	0	0	—	—	—	2	5	39	78
Idaho§	N	0	1	N	N	N	0	1	N	N	1	0	2	3	1
Montana§	—	0	1	—	—	—	0	0	—	—	—	0	7	—	—
Nevada§	—	1	4	26	34	—	0	2	6	2	4	1	7	42	32
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	1	5	19	12
Utah	—	1	6	22	38	—	0	3	4	5	—	0	2	—	12
Wyoming§	—	0	2	6	—	—	0	0	—	—	1	0	1	1	1
Pacific	—	0	1	2	1	—	0	1	1	1	7	47	66	936	1,006
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
California	N	0	0	N	N	N	0	0	N	N	4	42	60	858	915
Hawaii	—	0	1	2	1	—	0	1	1	1	—	0	3	14	11
Oregon§	N	0	0	N	N	N	0	0	N	N	2	0	3	14	4
Washington	N	0	0	N	N	N	0	0	N	N	1	3	9	50	76
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	4	3	11	88	62
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 year 2008 and 2009 are provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending June 6, 2009, and May 31, 2008 (22nd week)*

	Varicella (chickenpox)					West Nile virus disease† Neuroinvasive					West Nile virus disease† Nonneuroinvasive§				
	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum	Current	Previous 52 weeks		Cum	Cum
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008	week	Med	Max	2009	2008
United States	160	362	772	7,373	16,626	—	1	75	—	6	—	0	77	1	16
New England	4	18	49	141	835	—	0	2	—	—	—	0	1	—	1
Connecticut	—	11	23	—	414	—	0	2	—	—	—	0	1	—	1
Maine¶	—	1	11	—	143	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
New Hampshire	4	4	11	98	142	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Vermont¶	—	4	17	43	136	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	43	38	61	828	1,304	—	0	8	—	—	—	0	4	—	—
New Jersey	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	2	—	—
New York City	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
Pennsylvania	43	38	61	828	1,304	—	0	2	—	—	—	0	1	—	—
E.N. Central	79	145	241	3,519	4,031	—	0	8	—	—	—	0	3	—	—
Illinois	1	33	73	819	578	—	0	4	—	—	—	0	2	—	—
Indiana	—	0	14	83	—	—	0	1	—	—	—	0	1	—	—
Michigan	19	48	90	1,096	1,705	—	0	4	—	—	—	0	2	—	—
Ohio	58	42	91	1,297	1,386	—	0	3	—	—	—	0	1	—	—
Wisconsin	1	6	22	224	362	—	0	2	—	—	—	0	1	—	—
W.N. Central	—	22	114	591	693	—	0	6	—	1	—	0	21	1	1
Iowa	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Kansas	—	6	22	165	284	—	0	2	—	1	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	2	—	—	—	0	4	—	—
Missouri	—	12	51	390	385	—	0	3	—	—	—	0	1	—	—
Nebraska¶	N	0	0	N	N	—	0	1	—	—	—	0	6	—	—
North Dakota	—	0	108	36	—	—	0	2	—	—	—	0	11	—	1
South Dakota	—	0	4	—	24	—	0	5	—	—	—	0	6	1	—
S. Atlantic	34	58	133	1,144	2,625	—	0	4	—	1	—	0	4	—	—
Delaware	—	0	5	2	13	—	0	0	—	—	—	0	1	—	—
District of Columbia	—	0	1	—	17	—	0	2	—	—	—	0	1	—	—
Florida	25	28	67	803	963	—	0	2	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	—
North Carolina	N	0	0	N	N	—	0	1	—	1	—	0	1	—	—
South Carolina¶	—	6	39	82	507	—	0	0	—	—	—	0	1	—	—
Virginia¶	—	9	60	28	743	—	0	0	—	—	—	0	1	—	—
West Virginia	9	10	32	229	382	—	0	1	—	—	—	0	0	—	—
E.S. Central	—	4	28	17	765	—	0	7	—	—	—	0	9	—	5
Alabama¶	—	4	28	16	757	—	0	3	—	—	—	0	2	—	1
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	1	8	—	0	4	—	—	—	0	8	—	2
Tennessee¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	2
W.S. Central	—	61	355	481	5,014	—	0	8	—	2	—	0	7	—	5
Arkansas¶	—	4	47	19	401	—	0	1	—	—	—	0	1	—	—
Louisiana	—	1	5	27	42	—	0	3	—	—	—	0	5	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	2	—	0	1	—	2
Texas¶	—	49	345	435	4,571	—	0	6	—	—	—	0	4	—	3
Mountain	—	24	83	596	1,302	—	0	12	—	2	—	0	22	—	3
Arizona	—	0	0	—	—	—	0	10	—	1	—	0	8	—	—
Colorado	—	11	44	288	534	—	0	4	—	—	—	0	10	—	1
Idaho¶	N	0	0	N	N	—	0	1	—	1	—	0	6	—	1
Montana¶	—	3	27	70	175	—	0	0	—	—	—	0	2	—	—
Nevada¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	—
New Mexico¶	—	2	10	67	131	—	0	1	—	—	—	0	1	—	—
Utah	—	10	31	171	453	—	0	2	—	—	—	0	5	—	—
Wyoming¶	—	0	1	—	9	—	0	0	—	—	—	0	2	—	1
Pacific	—	3	7	56	57	—	0	38	—	—	—	0	23	—	1
Alaska	—	2	6	36	21	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	37	—	—	—	0	20	—	1
Hawaii	—	1	4	20	36	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	1	4	—	50	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	8	17	114	300	—	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 year 2008 and 2009 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 starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending June 6, 2009 (22nd week)

Reporting area	All causes, by age (years) All Ages	≥65	45–64	25–44	1–24	<1	P&I† Total
New England	489	328	107	32	12	10	41
Boston, MA	125	74	30	13	5	3	7
Bridgeport, CT	37	29	7	—	1	—	2
Cambridge, MA	13	12	—	1	—	—	1
Fall River, MA	16	12	3	1	—	—	2
Hartford, CT	52	36	12	3	—	1	4
Lowell, MA	19	13	3	3	—	—	8
Lynn, MA	8	4	4	—	—	—	1
New Bedford, MA	18	12	6	—	—	—	—
New Haven, CT	22	12	8	1	—	1	1
Providence, RI	59	51	3	2	1	2	2
Somerville, MA	2	2	—	—	—	—	—
Springfield, MA	30	14	8	1	4	3	5
Waterbury, CT	20	14	3	3	—	—	2
Worcester, MA	68	43	20	4	1	—	6
Mid. Atlantic	2,014	1,357	489	96	46	26	113
Albany, NY	44	34	8	1	1	—	4
Allentown, PA	28	19	6	2	—	1	2
Buffalo, NY	81	43	27	4	5	2	8
Camden, NJ	23	12	5	2	3	1	2
Elizabeth, NJ	14	12	2	—	—	—	1
Erie, PA	49	42	5	2	—	—	2
Jersey City, NJ	15	12	3	—	—	—	2
New York City, NY	970	652	242	51	16	9	42
Newark, NJ	40	22	10	3	1	4	2
Paterson, NJ	2	2	—	—	—	—	—
Philadelphia, PA	353	212	102	20	15	4	25
Pittsburgh, PA§	32	19	11	1	1	—	—
Reading, PA	25	18	4	—	1	2	1
Rochester, NY	113	80	25	4	2	2	9
Schenectady, NY	23	17	6	—	—	—	1
Scranton, PA	26	21	5	—	—	—	1
Syracuse, NY	129	104	19	4	1	1	8
Trenton, NJ	19	12	7	—	—	—	—
Utica, NY	10	7	1	2	—	—	—
Yonkers, NY	18	17	1	—	—	—	3
E.N. Central	1,894	1,221	473	126	28	46	115
Akron, OH	44	26	11	4	2	1	2
Canton, OH	46	30	8	8	—	—	1
Chicago, IL	311	179	81	37	8	6	24
Cincinnati, OH	97	70	19	4	2	2	8
Cleveland, OH	207	134	57	12	1	3	6
Columbus, OH	45	32	11	1	—	1	4
Dayton, OH	128	87	33	4	2	2	11
Detroit, MI	170	90	58	14	1	7	8
Evansville, IN	49	33	14	1	1	—	3
Fort Wayne, IN	80	56	18	4	1	1	7
Gary, IN	5	2	2	—	1	—	1
Grand Rapids, MI	62	41	12	2	—	7	4
Indianapolis, IN	208	131	55	12	5	5	14
Lansing, MI	47	34	11	2	—	—	1
Milwaukee, WI	110	67	26	12	1	4	4
Peoria, IL	—	—	—	—	—	—	—
Rockford, IL	49	34	10	2	2	1	3
South Bend, IN	46	36	7	1	—	2	7
Toledo, OH	90	63	22	2	—	3	2
Youngstown, OH	59	47	10	1	—	1	3
W.N. Central	538	361	119	34	10	14	33
Des Moines, IA	6	4	2	—	—	—	1
Duluth, MN	36	31	5	—	—	—	2
Kansas City, KS	34	24	7	2	1	—	3
Kansas City, MO	84	58	16	6	4	—	5
Lincoln, NE	46	36	7	2	—	1	5
Minneapolis, MN	62	34	19	4	2	3	3
Omaha, NE	87	50	24	9	2	2	7
St. Louis, MO	64	37	16	6	1	4	4
St. Paul, MN	47	36	10	1	—	—	3
Wichita, KS	72	51	13	4	—	4	—
S. Atlantic	1,080	663	292	80	22	23	69
Atlanta, GA	149	92	38	8	5	6	2
Baltimore, MD	181	106	56	10	4	5	24
Charlotte, NC	U	U	U	U	U	U	U
Jacksonville, FL	155	102	44	9	—	—	14
Miami, FL	79	46	18	9	3	3	5
Norfolk, VA	42	27	12	1	1	1	3
Richmond, VA	66	35	23	5	—	3	5
Savannah, GA	57	37	11	5	1	3	1
St. Petersburg, FL	48	31	11	6	—	—	3
Tampa, FL	195	120	53	15	5	2	7
Washington, D.C.	94	59	21	12	2	—	4
Wilmington, DE	14	8	5	—	1	—	1
E.S. Central	807	523	200	47	24	13	50
Birmingham, AL	164	105	40	10	6	3	5
Chattanooga, TN	104	72	22	7	2	1	7
Knoxville, TN	100	63	28	7	2	—	8
Lexington, KY	81	53	20	6	—	2	3
Memphis, TN	168	104	49	9	5	1	13
Mobile, AL	30	20	2	2	4	2	2
Montgomery, AL	41	29	9	1	2	—	4
Nashville, TN	119	77	30	5	3	4	8
W.S. Central	1,409	868	348	112	45	35	88
Austin, TX	90	58	23	6	1	2	6
Baton Rouge, LA	64	38	11	10	5	—	3
Corpus Christi, TX	U	U	U	U	U	U	U
Dallas, TX	196	115	44	25	4	7	11
El Paso, TX	86	56	23	5	2	—	6
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	408	239	116	28	10	15	25
Little Rock, AR	92	57	22	9	2	2	6
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	234	159	50	15	8	2	14
Shreveport, LA	68	40	18	1	5	4	5
Tulsa, OK	171	106	41	13	8	3	12
Mountain	1,127	728	258	88	27	26	54
Albuquerque, NM	155	103	31	16	4	1	8
Boise, ID	78	56	18	3	1	—	5
Colorado Springs, CO	85	57	16	7	4	1	2
Denver, CO	82	45	25	8	1	3	1
Las Vegas, NV	252	153	74	14	4	7	13
Ogden, UT	32	24	6	1	—	1	3
Phoenix, AZ	175	102	43	20	6	4	6
Pueblo, CO	31	27	1	2	1	—	—
Salt Lake City, UT	127	82	24	12	3	6	7
Tucson, AZ	110	79	20	5	3	3	9
Pacific	1,504	1,033	323	87	31	30	136
Berkeley, CA	8	6	2	—	—	—	4
Fresno, CA	117	78	22	11	4	2	13
Glendale, CA	31	24	5	1	1	—	7
Honolulu, HI	61	45	9	5	1	1	5
Long Beach, CA	U	U	U	U	U	U	U
Los Angeles, CA	265	160	72	18	6	9	32
Pasadena, CA	15	11	3	1	—	—	2
Portland, OR	148	99	31	10	4	4	5
Sacramento, CA	182	130	37	8	5	2	16
San Diego, CA	173	114	34	15	4	6	10
San Francisco, CA	122	86	30	4	1	1	14
San Jose, CA	192	142	37	6	3	4	12
Santa Cruz, CA	39	24	9	4	1	1	6
Seattle, WA	U	U	U	U	U	U	U
Spokane, WA	62	43	15	3	1	—	6
Tacoma, WA	89	71	17	1	—	—	4
Total¶	**10,821**	**7,053**	**2,601**	**699**	**244**	**223**	**697**

U: Unavailable. —:No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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