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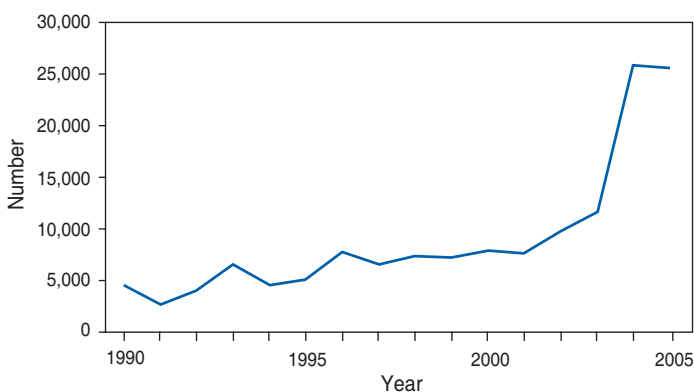
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Outbreaks of Respiratory Illness Mistakenly Attributed to Pertussis — New Hampshire, Massachusetts, and Tennessee, 2004–2006

Pertussis, or whooping cough, is a highly infectious, nationally notifiable* respiratory disease associated with prolonged cough illness and paroxysms of coughing, inspiratory “whoop,” or posttussive vomiting. Reported pertussis cases have tripled in the United States since 2001, with 25,616 probable or confirmed cases reported in 2005 (Figure 1). This increase has been attributed to increased circulation of *Bordetella pertussis*, waning vaccine-induced immunity among adults and adolescents, heightened awareness of pertussis among health-care providers, increased public health reporting, and increased use of polymerase chain reaction (PCR) testing for diagnosis (1). To minimize the spread of pertussis, control measures must be implemented early in the course of illness when the risk for transmission is highest. However, diagnosis of pertussis is complicated by nonspecific signs and symptoms, particularly in the early catarrhal stage of disease.

* Information available at <http://www.cdc.gov/epo/dphsi/nndsshis.htm>.

FIGURE 1. Number of reported pertussis cases,* by year — National Notifiable Diseases Surveillance System, United States, 1990–2005



* Probable and confirmed cases.

In addition, the lack of rapid, sensitive, and specific laboratory tests makes early and accurate identification of pertussis challenging. This report describes two hospital outbreaks and one community outbreak of respiratory illness during 2004–2006 in New Hampshire, Massachusetts, and Tennessee that were attributed initially to pertussis. However, subsequent investigations revealed negative or equivocal laboratory results and epidemiologic and clinical features atypical of pertussis, suggesting that pertussis was not the cause of these outbreaks. The findings in this report underscore the need for thorough epidemiologic and laboratory investigation of suspected pertussis outbreaks when considering extensive control measures.

New Hampshire. In March 2006, a laboratory worker from a 396-bed hospital visited the occupational medicine clinic with a 3-week history of paroxysmal cough and posttussive vomiting. The laboratory worker tested positive with the hospital’s single-target PCR assay for pertussis (IS481).[†] The worker subsequently was treated with azithromycin and furloughed for 5 days. Postexposure prophylaxis (PEP) with azithromycin was administered to all close contacts. Case investigation from mid-March to early April identified 15 additional health-care personnel (HCP) in the same laboratory with respiratory illness and either a positive or equivocal PCR test result for pertussis, leading hospital investigators to suspect an outbreak. Suspected

[†] The assays identified in this report have not been approved by the Food and Drug Administration.

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pertussis in HCP was defined as either 1) cough of any duration and at least one classic pertussis symptom (i.e., paroxysms of coughing, whoop, or posttussive vomiting) or 2) a positive or equivocal PCR test result. In April, to control the spread of the outbreak, the hospital's infection-control and occupational-medicine staff members offered PEP and vaccination with the newly licensed tetanus toxoid, reduced diphtheria toxoid, acellular pertussis vaccine (Tdap) to all personnel in the hospital's clinical laboratories. Despite these interventions, from late April to early May, 18 additional ill HCP with suspected pertussis were identified through passive surveillance in other parts of the hospital, including patient-care areas. In May, the hospital began screening all HCP for signs and symptoms of upper respiratory tract infection and began PCR testing for pertussis on symptomatic HCP. By June, 134 suspected pertussis cases had been identified: 98 (73%) by positive or equivocal PCR results and 36 (27%) by clinical symptoms alone. A total of 192 nasopharyngeal swabs or aspirates from symptomatic HCP, including specimens from 27 (20%) of the 134 HCP with suspected pertussis, were submitted for isolation of *B. pertussis* by culture throughout the course of the outbreak; none yielded *B. pertussis*.

Review of surveillance data revealed no increased pertussis activity in the surrounding community. No pertussis cases were identified among vaccinated or unvaccinated infants, either in the hospital or surrounding community. Retrospective interviews of 120 (90%) HCP with suspected pertussis indicated that 25 (21%) of those interviewed never had cough, a hallmark symptom of pertussis. Among the 95 (79%) HCP with cough, 33 (35%) reported never having a classic pertussis symptom (i.e., paroxysms, whoop, or posttussive vomiting). Myalgia, not typically associated with pertussis, was reported by 32 (34%) of 93 HCP who were asked whether they had this symptom.

Additional laboratory evaluation included retesting of initial DNA extracts at CDC using a two-target PCR assay (IS481 and *ptxS1*). Among 111 extracts available for testing, one was positive for both targets and interpreted as *B. pertussis*, and 24 extracts were positive by single target alone (IS481) and interpreted as indeterminate. Sera from 39 HCP who had not been vaccinated during the outbreak with Tdap and who met the hospital's definition for suspected pertussis were collected and tested at Vanderbilt University Medical Center in Nashville, Tennessee, for antipertussis toxin immunoglobulin G (IgG) by enzyme-linked immunosorbent assay (ELISA); one sample had a positive IgG level, one was intermediate, and 37 were negative. Samples of aspirates and DNA extracts were tested at the hospital and CDC for a panel of viral pathogens, other *Bordetella* species, *Chlamydia pneumoniae*, and

Mycoplasma pneumoniae. PCR testing yielded two specimens with results consistent with *Bordetella holmesii*.

Substantial resources were invested to control this outbreak. During March–May 2006, approximately 1,700 visits by HCP to the occupational medicine clinic for respiratory illness were reported. Among 6,289 hospital HCP, 978 (16%) ill HCP were tested by PCR, treated, and followed pending negative PCR results. An additional 1,311 contacts of HCP with suspected pertussis received PEP. Other control measures included a 1-week Tdap vaccination campaign in May, during which 4,524 (72%) HCP were vaccinated.

Massachusetts. A child aged 20 months was admitted to a 347-bed pediatric hospital on September 21, 2006, with respiratory symptoms; the child had not received all age-appropriate doses of diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine. Initial tests on September 24 were positive for respiratory syncytial virus. Subsequent testing for pertussis by two-target PCR assays (IS481 and *ptxS1*) at the Massachusetts State Laboratory Institute (MSLI) were positive for both targets on October 2, 2006. In October, the hospital initiated enhanced screening of symptomatic HCP with suspected pertussis and other HCP who had been in contact with the child.

A total of 507 HCP with upper respiratory symptoms were identified during the course of the investigation. Nasopharyngeal specimens from symptomatic HCP were tested by culture, PCR, or both during October 1–November 14. By December 2006, 36 specimens from HCP had tested positive for pertussis by PCR (33 at MSLI and three at a commercial laboratory). Twenty-eight of the 36 (78%) HCP had reported cough of fewer than 2 weeks and 33 (92%) had reported no classic pertussis symptoms. Of the 33 PCR-positive specimens tested for two targets at MSLI, 29 (88%) were positive by a single target (IS481) and four (12%) were positive by both targets (IS481 and *ptxS1*). Of the 32 PCR-positive specimens submitted for culture, none yielded *B. pertussis*. Sera were collected from 23 HCP who had positive PCR test results and were not vaccinated during the outbreak; all were negative for antipertussis toxin IgG by ELISA at MSLI.

Because a number of HCP had atypical symptoms and no culture or serologic confirmation of pertussis, repeat PCR testing was conducted at CDC and the Provincial Laboratory for Public Health in Alberta, Canada. Twenty-five initial DNA extracts with positive PCR test results were retested at CDC using two-target PCR assays (IS481 and *ptxS1*). One sample was positive by both targets (IS481 and *ptxS1*) and interpreted as positive for *B. pertussis*, and 24 were positive by a single target only (IS481) and inter-

preted as indeterminate. Six of the 25 initial DNA extracts also were retested by the Canadian laboratory; two extracts were positive by IS481 and *ptxS1* (interpreted as positive for *B. pertussis*), three were positive by IS481 only (interpreted as possibly *B. pertussis*), and one result was uninterpretable. Overall, only one of six specimens tested by MSLI, CDC, and the Canadian laboratory was interpreted as positive for *B. pertussis* by all three laboratories. Six DNA extracts were tested for *M. pneumoniae* by PCR, and none were positive.

Tennessee. In April 2004, pertussis in an infant aged 5 weeks was confirmed by isolation of *B. pertussis* from a nasopharyngeal specimen. Before diagnosis, the infant had been taken to the local health department and two other medical facilities. Aggressive contact tracing and testing of symptomatic contacts was undertaken by the local health department. For this investigation, a laboratory-confirmed case was defined as a PCR-positive case in a symptomatic contact, using a single-target repeating sequence found in *B. pertussis* (RSBP1). A clinical case was defined as either cough illness of at least 2 weeks' duration or cough of any duration with paroxysms of coughing, whoop, or posttussive vomiting and an epidemiologic link to a laboratory-confirmed case. Antimicrobial treatment was offered to all patients, and PEP was offered to all asymptomatic close contacts. Further contact tracing and control measures were implemented for all patients with laboratory-confirmed or clinical diagnoses of pertussis.

During a 2-month period, 1,459 persons in the community who visited health-care providers with pertussis symptoms were evaluated for pertussis and offered treatment or PEP with erythromycin or azithromycin. A total of 317 symptomatic persons were tested by PCR; 43 (14%) were positive. Of these, only two (5%) had cough of at least 2 weeks' duration. Among 284 samples submitted for culture, only the specimen from the infant yielded *B. pertussis*. Because of the lack of culture confirmation, serologic testing for antipertussis toxin IgG by ELISA was performed at Vanderbilt University Medical Center on 21 patients and contacts. Four of 11 patients who were positive by PCR also had serologic evidence of recent pertussis infection. Testing for alternate pathogens was not performed.

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Editorial Note: Although the respiratory outbreaks in New Hampshire, Massachusetts, and Tennessee initially were considered caused by pertussis, retrospective investigations demonstrated that pertussis was unlikely to have been the primary etiology. The results of these investigations underscore the importance of confirming pertussis as the etiology of respiratory outbreaks when control measures are being implemented, particularly when laboratory results are inconsistent and supporting clinical and epidemiologic data are lacking.

Several laboratory methods, including culture, serology, and PCR, are available for pertussis diagnosis. Culture is a reference standard and 100% specific. Its sensitivity can be as high as 56% early in the course of illness but decreases with delays in specimen collection or in patients who have received antimicrobial treatment or previous vaccination (1–3). Other factors that can affect the yield of culture include technical methods for obtaining specimens, availability of appropriate media, transport of specimens, and experience with isolation of *B. pertussis* (2,4). Isolating *B. pertussis* in culture can take 7–14 days and might not be timely for acute case management. However, confirming the etiology with culture in the early stages of a suspected pertussis outbreak will help guide the public health response (3,4), and continued isolation of *B. pertussis* from a subset of clinical samples will provide laboratory evidence of ongoing transmission. Serology using paired acute- and convalescent-phase sera requires at least a 4-week interval between specimen collections and is not useful for immediate diagnosis (4). Single-sample serology tests for antipertussis toxin IgG have been developed for research purposes but must be collected at least 2 weeks after symptom onset (5). Pertussis serology assays using commercially available reagents also are available, but these assays are not clinically validated and might not differentiate between recent and remote infection or vaccination.

In 1997, introduction of PCR test results into the pertussis case definition of the Council of State and Territorial Epidemiologists (CSTE) (Box) facilitated laboratory diagnosis of disease, particularly among adults and adolescents, who often visit health-care providers late in the course of illness when the yield of culture is lower (2). The use of PCR, a rapid and sensitive diagnostic test, has become widespread. Among confirmed pertussis cases reported to NNDSS, the percentage of cases confirmed by PCR increased from 12% in 1997 to 44% in 2005, and the percentage of cases confirmed by culture decreased from 52% in 1997 to 20% in 2005. Overall, during 1997–2005, the number of PCR-confirmed cases increased while the number of culture-confirmed cases remained

BOX. Pertussis case definitions and laboratory criteria for diagnosis of pertussis — Council of State and Territorial Epidemiologists

Clinical case definition

- A cough illness lasting at least 2 weeks with one of the following symptoms and no other apparent cause (as reported by a health professional): paroxysms of coughing, inspiratory “whoop,” or posttussive vomiting.

Laboratory criteria for diagnosis of pertussis

- Isolation of *Bordetella pertussis* from a clinical specimen, or
- Positive polymerase chain reaction (PCR) assay for *B. pertussis*.

Case classification

*Confirmed**

- An acute cough illness of any duration associated with *B. pertussis* isolation, or
- A case that meets the clinical case definition and is confirmed by PCR, or
- A case that meets the clinical definition and is epidemiologically linked directly to a case confirmed by either culture or PCR.

*Probable**

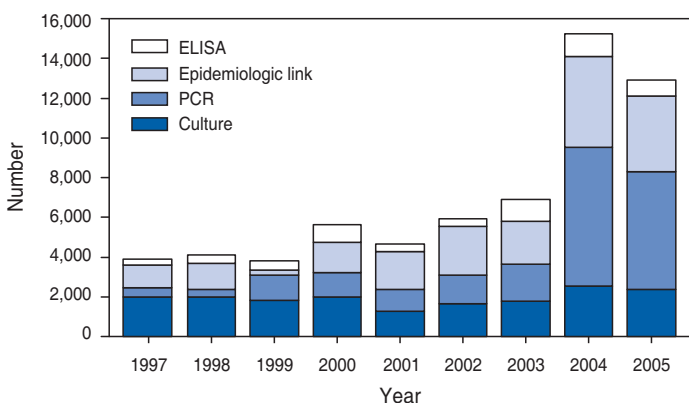
- A case that meets the clinical case definition, is not laboratory confirmed by either culture or PCR, and is not epidemiologically linked directly to a laboratory-confirmed case.

SOURCE: Council of State and Territorial Epidemiologists. CSTE position statement 1997-ID-9: public health surveillance, control, and prevention of pertussis. Atlanta, GA: CSTE, 1997. Available at <http://www.cste.org/ps/1997/1997-id-09.htm>.

* Both probable and confirmed cases should be reported to the National Notifiable Diseases Surveillance System. Information available at <http://www.cdc.gov/epo/dphsi/nndsshis.htm>.

stable (Figure 2; CDC, unpublished data, 2007). During the same period, the percentage of pertussis cases confirmed both by PCR and culture ranged from 1.1%–3.1% annually (mean: 2.3%). Presumed false-positive PCR test results in persons with nonspecific clinical features, such as rhinorrhea, sneezing, and sore throat, have raised concerns regarding the widespread application of PCR in an outbreak setting (6). No standardized PCR protocols for pertussis testing exist; approximately 100 different assays that use the IS481 target sequence have been documented (7). Laboratories vary in DNA purification techniques, primers and probes used in testing, and quality assurance procedures (1,4). Although these assays might undergo analytic sensitivity testing for technical performance standards (e.g., detection limits and reproducibility), a limited number of laboratories have established the accuracy of their PCR test

FIGURE 2. Number of confirmed pertussis cases, by confirmation method* — National Notifiable Diseases Surveillance System and Supplemental Pertussis Surveillance System, United States, 1997–2005



* Some cases were confirmed by more than one method. Cases were classified as follows: 1) all cases with a positive culture result were classified as culture confirmed; 2) cases with polymerase chain reaction (PCR) confirmation but no positive culture result were classified as PCR confirmed; 3) cases with confirmation by epidemiologic link but no positive culture or PCR results were classified as confirmed by epidemiologic link; 4) cases diagnosed in Massachusetts using the state-validated serologic assay by enzyme-linked immunosorbent assay (ELISA) with no positive culture or PCR result and no epidemiologic link were classified as ELISA confirmed.

(1). In addition, as illustrated in the Massachusetts outbreak, interpretation of PCR results can vary among laboratories. Use of standardized rapid and reliable laboratory tests to improve the specificity of the CSTE case definition is a public health priority. CDC, the Food and Drug Administration, and state and local public health partners have implemented a clinical validation study to evaluate several PCR and serologic assays. The results from that study should provide the basis for future validated laboratory assays to diagnose and manage pertussis cases and outbreaks.

The outbreaks described in this report illustrate the limitations of relying solely on PCR assays to confirm pertussis. PCR is an important tool for diagnosing individual cases of pertussis in persons for whom a high index of suspicion exists and for whom timely treatment and PEP are essential. However, the positive predictive value can be lower if PCR is used as a screening tool without culture confirmation during a suspected pertussis outbreak (3). Overreliance on the results of PCR assays can lead to implementation of unnecessary and resource-intensive control measures (e.g., case identification, antimicrobial treatment, furlough of ill persons, and administration of PEP) (8). In outbreak settings, positive PCR results should be interpreted in conjunction with epidemiologic investigation, evaluation of clinical symptoms, and confirmation by culture. CDC recommends timely collection and testing (early in the course of illness and during

the initial stages of the outbreak) of nasopharyngeal specimens for culture in at least a subset of persons who are symptomatic to confirm pertussis as the etiology of the outbreak (3). Absent or inconsistent supporting data and negative pertussis cultures in appropriately collected specimens should prompt testing for alternate pathogens.

Cocirculation of other pathogens can cause respiratory illness with symptoms similar to pertussis. Circulation of *B. pertussis* in communities is common and occurs in a background of other causes of respiratory illness. In retrospect, the culture-confirmed pertussis in the infant in Tennessee might have reflected sporadic disease rather than the beginning of an outbreak. Because confirmation of pertussis outbreaks by culture can take several weeks, simultaneous testing of acutely symptomatic persons for other pathogens (e.g., viruses or atypical bacteria) might be appropriate. Guidance on appropriate approaches to respiratory outbreaks of unknown etiology is available to state and local health departments through consultation with CDC at telephone 770-488-7100.

Considering the challenges of diagnosing pertussis and controlling outbreaks, prevention of pertussis outbreaks through widespread vaccination is an important strategy. The Advisory Committee on Immunization Practices recommends vaccination of persons aged 11–64 years with the newly licensed Tdap vaccines (1,9), which have been estimated 85%–92% effective (1,9). Achieving high coverage is expected to prevent disease and decrease the likelihood of future pertussis outbreaks. Although the effectiveness of vaccination with Tdap in interrupting transmission of pertussis during an outbreak has not been established, persons previously vaccinated with Tdap should have a lower risk for acquiring and transmitting pertussis, thereby preventing the outbreak from expanding. Investigation of suspected pertussis outbreaks should include timely consideration of clinical, laboratory, and epidemiologic data, including vaccination status of the population affected, to help health officials implement appropriate control measures.

References

1. CDC. Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine. Recommendations of the Advisory Committee on Immunization Practices (ACIP) and recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. *MMWR* 2006;55 (No. RR-17).
2. Hallander HO. Microbiological and serological diagnosis of pertussis. *Clin Infect Dis* 1999;28(Suppl 2):S99–106.
3. Sotir MJ, Cappozzo DL, Warshauer DM, et al. Evaluation of polymerase chain reaction and culture for diagnosis of pertussis in the control of a county-wide outbreak focused among adolescents and adults. *Clin Infect Dis* 2007;44:1216–9.
4. Mattoo S, Cherry JD. Molecular pathogenesis, epidemiology, and clinical manifestations of respiratory infections due to *Bordetella pertussis* and other *Bordetella* subspecies. *Clin Microbiol Rev* 2005;18:326–82.

5. Meade BD, Deforest A, Edwards KM, et al. Description and evaluation of serologic assays used in a multicenter trial of acellular pertussis vaccines. *Pediatrics* 1995;96(3 Pt 2):570–5.
6. Lievano FA, Reynolds MA, Waring AL, et al. Issues associated with and recommendations for using PCR to detect outbreaks of pertussis. *J Clin Microbiol* 2002;40:2801–5.
7. Dragsted DM, Dohn B, Madsen J, Jensen JS. Comparison of culture and PCR for detection of *Bordetella pertussis* and *Bordetella parapertussis* under routine laboratory conditions. *J Med Microbiol* 2004;53 (Pt 8):749–54.
8. CDC. Guidelines for the control of pertussis outbreaks. Atlanta, GA: US Department of Health and Human Services, CDC; 2000. Available at <http://www.cdc.gov/vaccines/pubs/pertussis-guide/guide.htm>.
9. CDC. Preventing tetanus, diphtheria, and pertussis among adolescents: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccines. Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2006;55(No. RR-3).

Norovirus Activity — United States, 2006–2007

In late 2006, CDC began receiving requests from numerous state public health departments for information about a perceived increase in the number of outbreaks of acute gastroenteritis (AGE), especially those involving person-to-person transmission in long-term-care facilities. No national surveillance system exists for AGE outbreaks, including those caused by norovirus, unless foodborne transmission is suspected. In the absence of national surveillance data, CDC attempted to better characterize the outbreaks of AGE by analyzing information from the following sources: 1) detailed data on recent AGE outbreaks in three of the states that had contacted CDC about a possible increase (North Carolina, Wisconsin, and New York); 2) emergency department (ED) syndromic surveillance data from Boston, Massachusetts; 3) basic epidemiologic data on AGE outbreaks from a CDC survey of state health departments; and 4) laboratory data from CDC. The analysis suggests that a national increase has occurred in the frequency of AGE outbreaks caused by norovirus (including fatal cases in long-term-care facilities). Two new cocirculating GII.4 norovirus strains emerged nationwide in 2006 and likely accounted for this increase in activity. Improved national surveillance of outbreaks, including those with person-to-person transmission; development of accessible, affordable, and timely clinical tests; and increased access to a norovirus strain sequencing database at CDC will lead to more accurate assessment of the morbidity and mortality associated with norovirus and more rapid identification of newly emerging norovirus strains.

North Carolina

During January–December 2006, the North Carolina Division of Public Health received 17 reports of outbreaks clinically and epidemiologically consistent with norovirus infection* (*I*) among residents of long-term-care facilities, compared with six in 2005 and three in 2004. Norovirus was confirmed by reverse transcription–polymerase chain reaction (RT-PCR) in all 12 outbreaks for which stool specimens were available. A total of 573 residents and 288 staff members were affected in the 17 outbreaks, and 36 patients required hospitalization. One patient aged 90 years died in association with an AGE outbreak in a long-term-care facility after experiencing loose stools, fever, and dehydration for 3 days; gastrointestinal illness was recorded as the primary cause of death. Outbreaks lasted from 2 to 35 days (median: 12 days). The largest confirmed norovirus outbreak at a long-term-care facility affected 77 residents and 67 staff members.

Outbreaks were preceded by illness among food handlers in four of the 17 long-term-care facilities, suggesting that these outbreaks might have been caused initially by foodborne transmission. At least two outbreaks were preceded by illness among staff members who also worked at other long-term-care facilities with reported norovirus outbreaks. Many long-term-care facilities used disinfectants that had limited effectiveness against norovirus (e.g., quaternary ammonia compounds) during these outbreaks. Although all AGE and other communicable disease outbreaks in North Carolina are reportable by long-term-care facilities to health departments, in at least four of the 17 outbreaks in 2006, health departments were notified of the outbreaks by emergency medical personnel or residents' family members rather than directly by the facilities, suggesting incomplete reporting of these outbreaks by long-term-care facilities in this state.

Wisconsin

During 2006, the Wisconsin Division of Public Health received reports of 106 AGE outbreaks, compared with 23 AGE outbreaks in 2005. Eighty-seven (82%) of the 2006 outbreaks were PCR-confirmed norovirus outbreaks; 45 (78%) of 58 norovirus-confirmed, nonfoodborne outbreaks were in long-term-care facilities, compared with three (20%) of the 15 norovirus-confirmed, nonfoodborne outbreaks in 2005.

The 45 outbreaks in long-term-care facilities reported in Wisconsin in 2006 included 2,071 clinical cases; 44 patients

* AGE outbreaks are considered consistent with norovirus if all of the following criteria are met: 1) vomiting in >50% of affected persons, 2) mean or median incubation period of 24–48 hours, 3) mean or median illness duration of 12–60 hours, and 4) no bacterial pathogens isolated from stool culture (*I*).

were hospitalized, and two died. The primary causes of death were not reported. The duration of outbreaks in long-term-care facilities ranged from 2 to 30 days (median: 11 days). Challenges in investigating these outbreaks included delayed reporting and incomplete collection of clinical data by long-term-care facilities.

New York

During October 1, 2006–January 31, 2007, a total of 333 AGE outbreaks were reported in New York, more than four times the number reported during the same period in 2005–2006 (76 outbreaks). Of these 333 outbreaks, 272 (82%) occurred in long-term-care facilities and 26 (8%) in hospitals. Of 216 health-care facility outbreaks with available data, a total of 7,907 patients and 4,317 staff members were affected. Of these, 207 (2.6%) patients and 20 (0.5%) staff members were hospitalized, and 16 deaths among patients with AGE were reported; however the cause of death was not reported. In October 2005, electronic reporting of outbreaks in health-care facilities began in New York, which might have increased the completeness of reporting from these facilities. However, the number of outbreaks reported by traditional means (i.e., fax machine or telephone) increased 298%, from 42 during the 2005–2006 period to 167 during the 2006–2007 period, suggesting a real increase in incidence.

The New York State Department of Health does not routinely perform viral testing at the state laboratory for all AGE outbreaks. Therefore, of the 298 outbreaks that occurred in long-term-care facilities, only 11 (4%) outbreaks had a laboratory-confirmed etiology; four of these had laboratory confirmation of norovirus by RT-PCR, and seven had laboratory confirmation of nonviral etiologies. The majority of outbreaks that did not have a laboratory-confirmed etiology were clinically and epidemiologically consistent with norovirus infection (1).

Boston, Massachusetts

During December 1, 2006–April 1, 2007, 18 outbreaks characterized by acute onset of vomiting and diarrhea were reported from colleges, day care centers, and health-care facilities in Boston, Massachusetts, affecting 1,327 persons, compared with two such outbreaks during the same period in 2005. Eight of the 2006–2007 outbreaks were attributed to norovirus by RT-PCR testing of stool specimens.

The Boston Public Health Commission (BPHC), which coordinates syndromic surveillance in all 10 Boston hospital EDs, examined data from the city's EDs to determine whether an AGE increase had occurred. These EDs submit demographic and chief complaint data to BPHC every 24 hours. Chief complaints are grouped into syndromes and analyzed for unusual activity. These data indicated citywide increases in the number of ED visits for a gastrointestinal syndrome defined as nausea, vomiting, or diarrhea among all age groups during December 5, 2006–March 24, 2007. During this 16-week period, ED visits attributable to this gastrointestinal syndrome averaged 96 per day (7.4% of all visits), compared with 74 visits per day (5.8% of all visits) during the same period in the previous year ($p < 0.001$, by Pearson's chi-square test) (Figure).

United States

CDC solicited information from the health departments of all 50 states and the District of Columbia on the number of 1) AGE outbreaks reported during October–December 2005 and October–December 2006, 2) AGE outbreaks in long-term-care facilities, and 3) norovirus outbreaks confirmed by PCR. Forty states responded, and CDC reviewed data from 24 states that reported at least five outbreaks in both 2005 and 2006 (Table). These 24 states reported a total of 1,316 AGE outbreaks with onset during October–December 2006; a median of 50% occurred in long-term-care facilities, and a median of 26% had laboratory confirmation of norovirus by RT-PCR. Of these 24 states, 22 (92%) reported an increase in the number of outbreaks compared with the same period in 2005 (range of increase: 18%–800%). State officials reported that the majority of the outbreaks with no laboratory confirmation of norovirus had epidemiologic and clinical evidence suggestive of norovirus infection (1).

FIGURE. Percentage of emergency department visits for nausea, vomiting, or diarrhea, by surveillance week and month — Boston, Massachusetts, July 2004–April 2007

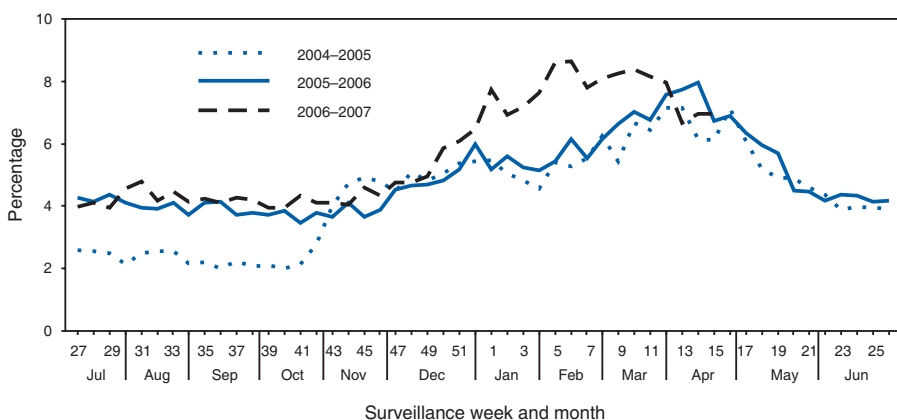


TABLE. Number and percentage of reported acute gastroenteritis outbreaks, by state, number in long-term-care facilities, and number with norovirus confirmed — multiple states, 2005 and 2006

State*	No. of outbreaks during October–December 2005†	No. of outbreaks during October–December 2006†	% change from 2005 to 2006	Outbreaks in long-term-care facilities October–December 2006†		Outbreaks with norovirus confirmed§ October–December 2006†	
				No.	(%)	No.	(%)
California	47	256	445	126	(49)	69	(27)
Colorado	18	69	283	63	(91)	15	(22)
Connecticut	17	45	165	38	(84)	4	(9)
Georgia	17	20	18	11	(55)	7	(35)
Idaho	5	18	260	4	(22)	5	(28)
Indiana	12	49	308	38	(78)	17	(35)
Iowa	8	24	200	10	(42)	6	(25)
Kansas	5	21	320	2	(10)	2	(10)
Kentucky	12	22	83	17	(77)	3	(14)
Maryland	24	55	129	20	(36)	13	(24)
Massachusetts	13	33	154	20	(61)	3	(9)
Michigan	8	72	800	49	(68)	37	(51)
Minnesota	20	98	390	48	(49)	47	(48)
Missouri	11	17	55	8	(47)	4	(24)
Nebraska	5	12	140	5	(42)	3	(25)
New Jersey	9	24	167	16	(67)	4	(17)
New York	40	236	490	184	(78)	11	(5)
North Carolina	22	18	-18	9	(50)	9	(50)
Ohio	22	69	213	16	(23)	34	(49)
Oregon	23	46	100	26	(57)	21	(46)
Pennsylvania	7	38	443	12	(32)	25	(66)
Tennessee	6	14	133	2	(14)	8	(57)
Utah	6	5	-17	0	(0)	1	(20)
Virginia	15	55	267	38	(69)	34	(62)
Total	372	1,316	254	762	(58)	382	(29)

* Only states that reported at least five outbreaks during October–December 2005 and October–December 2006 were included.

† Date of outbreak onset.

§ Confirmed by reverse transcription–polymerase chain reaction.

CDC Laboratory Surveillance

During 2006, the National Calicivirus Laboratory at CDC tested 761 stool specimens from 126 AGE outbreaks in the United States for norovirus by RT-PCR (2). Outbreak settings included cruise ships (n = 37), long-term-care facilities and assisted-living facilities (n = 37), restaurants and catered events (n = 13), hospitals and health-care centers (n = seven), colleges and schools (n = three), parties (n = three), and other settings (n = 26). Norovirus was confirmed in 114 (90%) of these outbreaks, and 87 (76%) of these were associated with two new GII.4 norovirus variants (Minerva and Laurens) by partial capsid gene-region sequencing (3). The Minerva strain was detected in 15 (60%) of 25 outbreaks during October–December 2006 on cruise ships and in eight states; during January–June 2007, the same strain caused 66 (54%) of 122 outbreaks on cruise ships and in 19 states. The Laurens strain was detected in 10 (40%) of the 25 outbreaks during October–December 2006 and 33 (27%) of the 122 outbreaks during January–June 2007. The partial capsid sequences of the Minerva and Laurens strains are identical to the GII.4 strains (GII.4-2006a and GII.4-2006b) reported in 2006 in Europe (4).

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Editorial Note: This report highlights widespread increased frequency of norovirus-like illness outbreaks and ED visits during October–December 2006 and January–June 2007. This increase was associated with the emergence of two new cocirculating strains of norovirus GII.4. A previous increase in norovirus outbreaks in the United States also was associated with the emergence of new strains (7). Whether the increase in outbreaks is a result of increased pathogenicity or transmissibility of new strains, lower immunity in the population, or other factors is unclear. During late 2006

and early 2007, increases in AGE outbreaks consistent with norovirus (1) were reported by many state health departments. A high proportion of specimens tested were positive for norovirus, which suggests that the increase in AGE outbreaks was associated with norovirus infection. The magnitude and consistency of increases in multiple states suggest an actual increase rather than increased reporting resulting from increased awareness of and testing for norovirus.

A large proportion of AGE outbreaks in 2006 occurred among residents of long-term-care facilities, a population that has higher attack rates from AGE than noninstitutionalized populations (6). Illness compatible with norovirus infection was the primary cause of death recorded for a resident of a long-term-care facility in North Carolina; in addition, two deaths in Wisconsin and 16 deaths in New York were associated with AGE outbreaks in health-care facilities. Norovirus infection as a confirmed cause of death has not been reported previously in the United States. Additional investigation of deaths associated with AGE outbreaks in health-care settings is needed to better understand the role of norovirus.

Noroviruses are the most common cause of sporadic cases and outbreaks of AGE (8). Transmission occurs via foodborne and person-to-person routes as well as through contact with contaminated environmental surfaces. The low infectious dose of norovirus (<10 viral particles) required for transmission, in addition to the virus's environmental persistence and prolonged shedding after recovery, coupled with the shared toilet facilities, close living quarters, and immobile or incontinent residents in long-term-care facilities predispose these facilities to prolonged outbreaks with high attack rates (9). Control of norovirus outbreaks depends on consistent enforcement of measures such as strict hand hygiene and use of effective environmental disinfectants (Box) (10).

The findings in this report are subject to at least two limitations. First, no national surveillance system exists for AGE or norovirus outbreaks that are transmitted from person to person; reporting methods and completeness of reporting vary substantially by state. Thus, this report likely underestimates the number of norovirus outbreaks and cannot accurately quantify the increase in frequency from 2005 to 2006. Second, laboratory testing for norovirus is limited to the state public health laboratories, and norovirus testing is not routinely performed on all specimens from all AGE outbreaks; the low number of outbreaks with norovirus confirmation likely reflects this. During October–December 2006, only 29% of all reported AGE outbreaks in 24 states had laboratory confirmation of norovirus. States such as Wisconsin that routinely test specimens from outbreaks determined that a high proportion were attributable to norovirus.

BOX. Recommended measures for the prevention and control of norovirus infection

1. Practice good hand hygiene.
 - Wash hands frequently with soap and water.
 - Alcohol-based sanitizing hand gels ($\geq 62\%$ ethanol content) may be used to complement hand washing with soap and water.
2. Disinfect contaminated surfaces with either of the following methods:
 - Use a chlorine bleach solution with a concentration of 1,000–5,000 ppm (1:50–1:10 dilution of household bleach [5.25%]) for hard, nonporous surfaces.
 - Use disinfectants registered as effective against norovirus by the Environmental Protection Agency (EPA)* in accordance with the manufacturers' instructions.
3. Do not return to work or school until 24–72 hours after symptoms resolve and practice good hand hygiene after returning.
4. Additional measures for outbreaks in health-care and long-term-care facilities include the following:
 - Use contact precautions for preventing gastroenteritis.
 - Avoid sharing staff members between units or facilities with affected patients and units or facilities that are not affected.
 - Group symptomatic patients and provide separate toilet facilities for ill and well persons.
 - Instruct visitors on appropriate hand hygiene and monitor compliance with contact isolation precautions.
 - Close affected units to new admissions and transfers.

* List of EPA-approved products available at http://www.epa.gov/oppad001/list_g_norovirus.pdf. Evidence for efficacy against norovirus is usually based on studies using feline calicivirus (FCV) as a substitute for norovirus. FCV and norovirus have different physiochemical properties, and whether inactivation of FCV reflects efficacy against norovirus is unclear.

In June 2006, the Council for State and Territorial Epidemiologists passed a resolution stating that all AGE outbreaks should be reportable nationally, regardless of mode of transmission (i.e., foodborne or person to person). This will be implemented in 2008 through the National Outbreak Reporting System. In addition to better surveillance, specific protocols are needed to investigate the role of norovirus in diarrheal deaths, particularly among older adults. Development and application of new, easy-to-use norovirus assays for routine clinical practice could better define the prevalence of norovirus among persons with AGE who seek health-care services. CaliciNet, a centralized database at CDC, is used to collect and compare norovirus sequences to identify emergent strains, track more virulent

strains in real time, and determine the role of contaminated foods in their emergence; this database soon will be widely accessible to state and local health departments.

References

1. Turcios RM, Widdowson M-A, Sulka AC, et al. Reevaluation of epidemiological criteria for identifying outbreaks of acute gastroenteritis due to norovirus: United States, 1998–2000. *Clin Infect Dis* 2006; 42:964–9.
2. Trujillo AA, McCaustland KA, Zheng DP, et al. Use of TaqMan real-time reverse transcription-PCR for rapid detection, quantification, and typing of norovirus. *J Clin Microbiol* 2006;44:1405–12.
3. Vinjé J, Hamidjaja RA, Sobsey MD. Development and application of a capsid VP1 (region D) based reverse transcription PCR assay for genotyping of genogroup I and II noroviruses. *J Virol Methods* 2004;116:109–17.
4. Kroneman A, Vennema H, Harris J, et al. Increase in norovirus activity reported in Europe. *Euro Surveill* 2006;11:E061214.1.
5. Widdowson M-A, Cramer EH, Hadley L, et al. Outbreaks of acute gastroenteritis on cruise ships and on land: identification of a predominant circulating strain of norovirus—United States, 2002. *J Infect Dis* 2004;190:27–36.
6. Lopman BA, Reacher MH, Vipond IB, Sarangi J, Brown DW. Clinical manifestations of norovirus gastroenteritis in health care settings. *Clin Infect Dis* 2004;39:318–24.
7. CDC. Norovirus activity—United States, 2002. *MMWR* 2003;52:42–5.
8. Mead PS, Slutsker L, Dietz V. Food-related illness and death in the United States. *Emerg Infect Dis* 1999;5:607–25.
9. CDC. Norwalk-like viruses: public health consequences and outbreak management. *MMWR* 2001;50(No. RR-9):1–17.
10. CDC. Norovirus in healthcare facilities fact sheet. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/ncidod/dhqp/id_norovirusFS.html#.

Director's Perspective

Director's Perspective — Jeffrey P. Koplan, M.D., M.P.H., 1998–2002

CDC: Known and Trusted

CDC approached the new millennium with strong programs, strong partners, and a strong reputation. Emblematic of scientific integrity, evidence-based information, and public trust, the quality of CDC's "brand" rivaled any in corporate America and was unique among federal agencies. CDC built on this brand recognition to advance its public health mission into the 21st century. Introduction of a new design element (Figure 1) showcased the agency as a valuable federal asset.

In commemoration of CDC's 60th Anniversary, MMWR is departing from its usual report format. This is the sixth in a series of occasional commentaries by directors of CDC. The directors were invited to give their personal perspectives on the key public health achievements and challenges that occurred during their tenures.

FIGURE 1. The CDC design element, featured here at the entrance to the CDC Roybal campus, was developed during Dr. Koplan's tenure as CDC director



Photo/CDC

Beyond the importance of name recognition was the real substance of what CDC and public health represented to the nation and to the world. Taking a cue from the "top 10" lists proliferating at the end of the century, a series in the *Morbidity and Mortality Weekly Report (MMWR)* distilled reflections about 10 major public health accomplishments into a case for the value of public health (1). Each of the 10 breakthroughs highlighted an achievement that had a profound effect on the length and quality of the lives of Americans. The series celebrated achievements in immunizations, motor-vehicle safety, safer workplaces, control of infectious diseases, reduced deaths from coronary artery disease and stroke, safer and healthier foods, healthier mothers and infants, family planning, fluoridation of drinking water, and recognition of tobacco use as a health hazard. This inventory of landmark accomplishments provided rich material to demonstrate the value of public health and remains an inspiration for future achievements.

The 50th anniversary of the Epidemic Intelligence Service (EIS), a year-long celebration starting in February 2001, provided another opportunity to reflect on past successes (2). For the agency's premier cadre of epidemiologists, known worldwide for their *esprit de corps* and service on the front lines (Figure 2), the recognition illuminated a half-century of work in responding to thousands of public health threats around the globe, from polio to toxic shock, asthma to Ebola. The EIS began during the Cold War as a response to the threat of biological warfare and manmade epidemics. In its 50th year, the EIS came full circle when called on to respond to the terrorist attacks in the fall of 2001.

To launch the agency into the 21st century, CDC identified three areas for priority attention. These priority areas were

FIGURE 2. Dr. Koplan (center), of the Epidemic Intelligence Service class of 1972, participates in smallpox-related field care in Bangladesh during the 1970s



Photo/CDC

1) improving the science base to drive public health programs; 2) renovating and investing in the public health infrastructure; and 3) expanding CDC's role in global health.

Maintaining the Basics of Public Health

CDC's accomplishments have always stemmed from broad-based programs grounded in the underpinnings of public health: epidemiology, surveillance, laboratory science, education and communication, policy intervention, and preparedness (3). These programs not only save lives but also improve the quality of life.

Since CDC's early years, the agency has counted immunization among its most vital programs, recognizing it as a core public health activity and perhaps the best example of primary prevention. With measles elimination as the main driver, the National Immunization Program achieved major advances in coverage and health impact and provided lessons for the future.

At the beginning of the 21st century, childhood immunization levels in the United States were at or near record highs, and most vaccine-preventable diseases were at record lows (4). Racial and ethnic disparities in vaccination coverage had also been markedly reduced. As the culmination of a 34-year effort, measles was declared no longer endemic in the nation, and the Western Hemisphere was close to interrupting measles transmission (5) and moving toward elimination of rubella.

Other achievements were less obvious but no less important. As chronicled in *MMWR*, CDC continued to respond routinely to outbreaks and to address risk factors for adverse health outcomes. One of these success stories was the decrease in neural tube defects resulting from the requirement,

as of 1998, that manufacturers add folic acid to enriched flour and non-whole-grain products (6).

Along with the familiar outbreaks of infectious diseases, CDC also tackled a parade of unusual epidemics and new and unforeseen threats. Increased travel and migration, international trade and global transport of foods and other products, economic disruptions, and microbial adaptation accelerated and expanded the movement of disease. A new paramyxovirus, Nipah virus, was identified in 1999 as the cause of an outbreak of severe encephalitis in persons with close contact with pigs in Malaysia and Singapore (7). An outbreak in Saudi Arabia and Yemen in 2000 marked the first appearance of Rift Valley fever outside Africa (8). The summer of 1999 brought West Nile virus to New York City, the first time that this mosquito-borne virus was reported in the Western Hemisphere (9).

CDC renewed its commitment to infectious disease control in the face of these and other threats, including a virulent strain of avian influenza, a human variant of bovine spongiform encephalopathy, and new drug-resistant forms of *Staphylococcus aureus*, plus the heightened awareness of bioterrorism. Noteworthy new programs included FoodNet, an active surveillance network for foodborne disease; PulseNet, a molecular subtyping network that received Innovations in American Government awards in 1999 and 2002; and multifaceted programs to reduce antimicrobial resistance by decreasing unnecessary prescribing of and demand for antibiotics.

Meeting New Public Health Challenges

By 1998, CDC had long since extended its public health mandate to noninfectious conditions. The formation of the National Center for Chronic Disease Prevention and Health Promotion a decade before was a formal acknowledgement of the growing importance of noncommunicable conditions, behaviors, and changing environments as major contributors to death and disability. New programs targeted multiple levels (individual, institutional, community, state, national, and international) to address chronic diseases and their risk factors.

Obesity. CDC was a vanguard in recognizing the nation's growing obesity epidemic, creating solutions based on scientific data and disseminating and popularizing these solutions for maximum impact. Although today the consequences of unhealthy dietary choices, sedentary lifestyles, and "supersized" food portions are familiar, in the late 1990s their potential for harm was underestimated. CDC research published in 1999 documented for the first time the nation's rapidly increasing obesity rates and impending epidemic in all U.S. states, regions, and demographic groups (10).

One novel prevention approach was a campaign to tackle the societal and health problems of inactivity and obesity among U.S. children. In 2001, Congress appropriated \$125 million for CDC to develop a national media campaign to change children's health behaviors. CDC's response to this broad mandate was to address the sedentary lifestyle of "tweens" (i.e., children aged 9–13 years) through VERB, an innovative and expansive campaign based on behavioral science theory and contemporary principles of marketing, which produced measurable positive results (11).

Tobacco. Despite considerable achievements in reducing smoking prevalence, tobacco use was still responsible for one of every five U.S. deaths at the end of the 20th century. In 1999, CDC's Office on Smoking and Health created the National Tobacco Control Program to encourage coordinated efforts to reduce tobacco-related diseases and deaths. The National Youth Tobacco Survey measured the tobacco-related beliefs, attitudes, and behavior of youth and was the first to gather data from both high-school and middle-school students. Findings were used to design strategies for youth-focused anti-tobacco campaigns.

Violence. After nearly a decade of work, CDC's injury- and violence-prevention programs also were expanding their reach and impact. With the national homicide rate for youth aged <19 years averaging nine deaths per day, CDC issued *Best Practices of Youth Violence Prevention: A Sourcebook for Community Action* (12), the first publication of its kind to draw on real-world experiences to prevent violence among children and adolescents. CDC also supported a series of unique academic centers of excellence in youth violence prevention at U.S. colleges and universities.

Disparities. As these programs started to reap benefits, rates of decline in adverse health outcomes among certain racial and ethnic groups lagged behind overall declines. Work done by David Satcher as previous CDC director and then as Surgeon General contributed to a new initiative, Racial and Ethnic Approaches to Community Health (REACH). Through the REACH cooperative agreement, CDC began funding frontline coalitions to design, implement, and evaluate community-driven strategies to reduce disparities in cardiovascular disease, diabetes, infant mortality, breast and cervical cancer, immunizations, and HIV/AIDS.

Since its inception, REACH has produced measurable and significant reductions in health risks and improved management of chronic diseases in some of the nation's most disadvantaged and historically intractable communities. Examples include increases in the proportion of African Americans and Hispanics screened for cholesterol and the percentage of Vietnamese women receiving Pap tests (13).

New Infrastructure for a New Millennium

A central goal during this period was strengthening the public health system. New buildings and facilities for CDC's Clifton Road campus provided the most obvious expression of this goal but formed only one piece of the bigger picture. The focus also extended to state and local public health agencies, the public health workforce, and preparedness for bioterrorism and other unforeseen threats.

Master plan for CDC facilities. The start of a new millennium provided an unprecedented opportunity to move CDC into the 21st century with a \$1 billion master plan for consolidation and expansion of facilities. Many CDC staff were working in crowded facilities, some antedating CDC's founding in the 1940s, and in dilapidated spaces converted from animal rooms and closets. Antiquated facilities were impeding efforts to recruit and retain staff and were inadequate to support and sustain the ambitious programs needed to move public health into a new era.

Thanks to the efforts of Dr. Satcher and others, the groundwork for a major expansion and rejuvenation of CDC's Clifton Road facilities had been laid: a master plan had been developed and land procured. The existing facilities plan was accelerated, and whereas much of the previous development of CDC facilities had been piece by piece, a new vision was developed of a true campus and the co-location of formerly disparate groups into cohesive units. The effort focused on development of two primary campuses in Atlanta: Clifton Road and Chamblee. Key national business leaders from the Atlanta community provided crucial support in making the facilities plan a reality. On December 18, 2000, CDC celebrated the opening of its new state-of-the-art research facility, the Edward R. Roybal Laboratory Building, marking the first phase of a decade-long process to give CDC's first-rate employees the first-rate tools they need to protect health and safety.

Workforce capacity development. Beyond building infrastructure through construction projects was the importance of building the capacity of the public health workforce. New challenges in public health generated need for training, strategies, and technologies. The Public Health Prevention Specialist Program, begun in 1997, recruited talented professionals who filled frontline field assignments with state and local agencies. The Leadership Management Institute trained annual cohorts of middle- and senior-level leaders from CDC.

CDC also invested in building public health infrastructure at the state and local levels. The Public Health Practice Program Office played an essential role in supporting state and local health departments and securing their stature as CDC's primary constituents.

Bioterrorism preparedness. As early as 1998, CDC had begun planning to enhance capacity to respond to bioterrorism, and in 1999 awarded funding to states and major cities to improve their public health response to bioterrorist events. Concomitantly, CDC created the Laboratory Response Network to provide the highest level of laboratory expertise and support during responses to naturally occurring as well as intentionally caused outbreaks. Well before any bioterrorism event, CDC also accelerated production of a new smallpox vaccine to protect the population in the event of a smallpox release.

Additional enhancements in bioterrorism preparedness included the Health Alert Network, which links local, state, and federal health agencies and provides an electronic platform for emergency alerts and real-time discussion; the Epidemic Information Exchange (Epi-X), a secure communications tool for sharing health surveillance information; and the National Pharmaceutical Stockpile (now the Strategic National Stockpile), which ensures the rapid delivery of drugs and materiel to the site of a public health emergency. The funding invested in enhancing medical expertise, laboratories, and communication networks to respond to bioterrorism and other emergency situations also reinvigorated the public health infrastructure to deal with everyday community health problems. An *MMWR* report released in April 2001 outlined steps needed at state and local public health agencies to protect the nation from bioterrorism (14).

A nation challenged. These intense preparedness efforts were tested in the fall of 2001, with two events that in quick succession indelibly changed Americans' beliefs in the invulnerability of their national borders and turned the threat of bioterrorism into a reality. When two commercial aircraft were intentionally crashed into the World Trade Center towers, destroying them and the surrounding areas of lower Manhattan on September 11, 2001, the New York City Department of Health immediately activated its emergency response protocol and began to assess the public health and medical impact of the attack (15).

In response to the events in Manhattan and the related attack on the Pentagon, the Federal Response Plan also was activated. Within hours, the first CDC staff members were en route to New York City, and CDC had delivered a shipment of medical supplies, marking the first emergency mobilization of the National Pharmaceutical Stockpile. The deployment of 34 EIS officers to New York City on September 14 was at that time the largest-ever single deployment to one location.

Within weeks, another defining moment entered the nation's consciousness. On October 4, 2001, CDC and state and local public health authorities reported a case of inhalational anthrax in Florida (16). This was the first recognized case of

anthrax in the United States in a quarter century and the first in U.S. history to result from an intentional act. The ensuing epidemiologic and criminal investigations revealed a series of 22 cases in multiple locations across the Eastern seaboard resulting from intentional delivery of *Bacillus anthracis* spores through mailed letters or packages. Anthrax-laced letters ultimately were implicated in the deaths of five persons. An additional 17 persons were infected, and nearly 30,000 more received prophylactic antibiotics as a consequence of possible exposure to *B. anthracis* spores.

The agency mobilized its resources with characteristic speed, expertise, and resilience. In the largest response in CDC's history, more than 500 epidemiologic, laboratory, industrial hygiene, communications, and other staff were detailed from their regular jobs, laboratories were reassigned to anthrax investigations, field teams were established in the outbreak sites, and researchers worked 24-hour days on the investigation.

The events created formidable challenges in management, coordination, and communication at CDC and brought unprecedented public scrutiny as the agency coped with the evolving outbreak itself and fast-track preparations for its new role in the war on bioterrorism. Public health agencies became part of the government-wide effort to combat bioterrorism, in partnership with agencies responsible for security and law enforcement, emergency response, intelligence, and the military. Preparation for a potential bioterrorism attack spotlighted the importance of identifying unusual health events early and responding rapidly in a highly coordinated fashion to prevent large-scale devastation.

The events also provided vivid examples of the importance of a stronger public health infrastructure. For example, news stories recounting how county and state public health officials investigated the first and subsequent cases of anthrax documented the value of strong local public health capacity (17). The rapid recognition of anthrax by a laboratorian in the Florida Department of Health, who recently had been instructed in anthrax diagnosis at CDC, demonstrated the importance of training and workforce development. In response to this unprecedented attention and recognition, CDC funding to state and local health departments for terrorism preparedness was increased to a historic \$1 billion in fiscal year 2002.

The Shared Agenda of Global Health

On the eve of the new millennium, CDC's global linkages were evident. The spread of infectious diseases from developing to developed countries, the opposite movement of unhealthy habits like smoking and reliance on motor vehicles, and concerns about health security were creating

a common public health agenda worldwide, and CDC was committed to expanding its activities in support of global health (18). This involved forging stronger ties with the World Health Organization (WHO), recognizing that its successes and CDC's were integrally aligned, and enhancing existing ties with the World Bank to address the development challenges of the 21st century.

With the worldwide eradication of polio seemingly within reach, CDC created the STOP (Stop Transmission of Polio) program in 1998, in collaboration with WHO and other partners. Modeled on the teams recruited from CDC to interrupt transmission of smallpox in the final phase of eradication, the program mobilized short-term CDC teams to provide field support for local polio eradication efforts.

CDC's Global AIDS Program (GAP) began in 2000 and now works in 25 countries with a budget of more than \$700 million. GAP leverages CDC's efforts to prevent HIV infection, improve care, and build capacity to address the growing global HIV/AIDS pandemic. The program provides financial and technical assistance through partnerships with communities, governments, and national and international entities working in resource-constrained countries.

CDC also pioneered programs to extend global public health efforts beyond infectious disease control. In collaboration with WHO's Tobacco Free Initiative, CDC was involved in global surveillance to monitor tobacco use, and the two agencies provided technical assistance to nations administering the Global Youth Tobacco Survey to track smoking prevalence, exposure, and attitudes.

Conclusion

At the turn of the 21st century, several truisms about public health held CDC in good stead. First was the primacy of state and local health departments and the vital base of infrastructure, not just CDC buildings, but adequate resources throughout the system, a well-trained and well-equipped workforce, and capable state and local partners. Another principle was the importance of looking ahead to anticipate new threats and ensure the capacity to address them, as CDC did with the threat of bioterrorism, the early recognition of the obesity epidemic, and the recognition of the global implications of tobacco use. Above all, CDC was able to maintain and strengthen its "branding" as an institution of high scientific integrity, a provider of effective and timely public health interventions, and a reliable and understanding partner for domestic health agencies and global organizations.

Jeffrey P. Koplan, M.D., M.P.H., came to CDC as an Epidemic Intelligence Service officer in 1972. He served as director of CDC's National Center for Chronic Disease Prevention and Health Promotion during 1988–1994. From 1995 to 1998, he was president of the Prudential Center for Health Care Research, then returned to serve CDC as director of the agency from 1998 to 2002. He is currently Vice President of Academic Health Affairs at Emory University's Woodruff Health Science Center and director of Emory's Global Health Institute.

References

1. CDC. Ten great public health achievements—United States, 1900–1999. *MMWR* 1999;48:241–3.
2. CDC. 50 years of the Epidemic Intelligence Service. *MMWR* 2001;50:285.
3. Koplan JP. Public health: which road will it take? *Managed Care* 2005;14(Suppl):5–7.
4. CDC. National, state, and urban area vaccination coverage levels among children aged 19–35 months—United States, 1999. *MMWR* 2000;49:585–9.
5. Orenstein WA. The role of measles elimination in development of a national immunization program. *Pediatr Infect Dis J* 2006;25:1093–101.
6. CDC. Spina bifida and anencephaly before and after folic acid mandate—United States, 1995–1996 and 1999–2000. *MMWR* 2004;53:362–5.
7. Chua KB, Bellini WJ, Rota PA, et al. Nipah virus: a recently emergent deadly paramyxovirus. *Science* 2000;288:1432–5.
8. CDC. Outbreak of Rift Valley fever—Saudi Arabia, August–October 2000. *MMWR* 2000;49:905–8.
9. CDC. Outbreak of West Nile-like viral encephalitis—New York, 1999. *MMWR* 1999;48:845–9.
10. Mokdad AH, Serdula MK, Dietz WH, Bowman BA, Marks JS, Koplan JS. The spread of the obesity epidemic in the United States, 1991–1998. *JAMA* 1999;282:1519–22.
11. Huhman ME, Potter LD, Duke JC, Judkins DR, Heitzler CD, Wong FL. Evaluation of a national physical activity intervention for children: VERB campaign, 2002–2004. *Am J Prev Med* 2007;32:38–43.
12. CDC. Best practices of youth violence prevention: a sourcebook for community action. Available at http://www.cdc.gov/ncipc/dvp/best_practices.htm.
13. CDC. Racial and ethnic approaches to community health (REACH) U.S. Finding solutions to health disparities. At a glance 2007. Available at <http://0-www.cdc.gov.mill1.sjlibrary.org/nccdp/ncdphp/publications/aag/reach.htm>.
14. CDC. Biological and chemical terrorism: strategic plan for preparedness and response. *MMWR* 2001;49(No. RR-4).
15. CDC. New York City Department of Health response to terrorist attack, September 11, 2001. *MMWR* 2001;50:821–2.
16. CDC. Ongoing investigation of anthrax—Florida, October 2001. *MMWR* 2001;50:877.
17. Baker EL Jr, Koplan JP. Strengthening the nation's public health infrastructure: historic challenge, unprecedented opportunity. *Health Aff (Millwood)* 2002;21:15–27.
18. Koplan J. The small world of global health. *Mt Sinai J Med* 2002;69:291–8.

Notice to Readers

Final 2006 Reports of Nationally Notifiable Infectious Diseases

The tables listed on pages 853–863 summarize finalized data from the National Notifiable Diseases Surveillance System (NNDSS) for 2006, as of June 30, 2007. These data will be published in greater detail in the *Summary of Notifiable Diseases, United States, 2006 (1)*. Because no cases of diphtheria, neuroinvasive or non-neuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus syndrome, smallpox, or yellow fever, and no varicella deaths were reported in the United States during 2006, these diseases do not appear in these early release tables.

Policies for reporting NNDSS data to CDC can vary by disease or reporting jurisdiction depending on case status classification (i.e., confirmed, probable, or suspected) and other factors.* Publication criteria used for the 2006 finalized tables

*CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this release of the Final 2006 Reports of Nationally Notifiable Infectious Diseases.

are listed in the “Print Criteria” column of the revised January 2007 NNDSS event code list, available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.

The NNDSS website is updated annually to include the latest national surveillance case definitions approved by the Council of State and Territorial Epidemiologists for enumerating data on nationally notifiable infectious diseases.

Population estimates for states are from the National Center for Health Statistics. Estimates of the July 1, 2000–July 1, 2005, United States resident population are from the Vintage 2005 postcensal series by year, county, age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau and available at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>. Population estimates for territories are 2005 estimates from the U.S. Census Bureau (2).

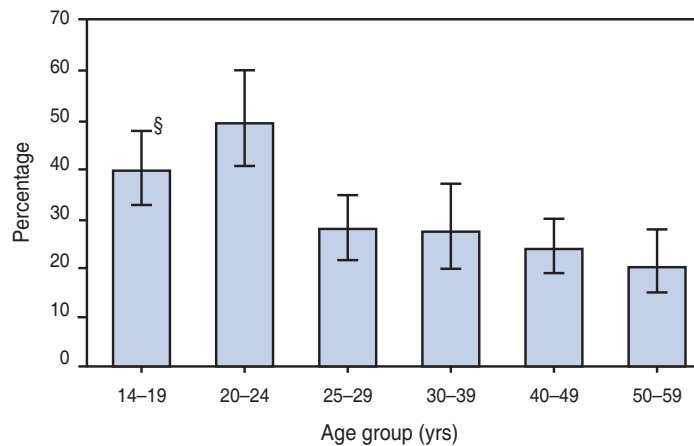
References

1. CDC. Summary of notifiable diseases, United States, 2006. *MMWR* for 2006;55(53) (in press).
2. US Census Bureau. International data base. Washington, DC: US Census Bureau. Available at <http://www.census.gov/ipc/www/idb/summaries.html>.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Prevalence of HPV* Infection† Among Sexually Active Females Aged 14–59 Years, by Age Group — National Health and Nutrition Examination Survey, United States, 2003–2004



* Human papillomavirus.

† Determined by DNA extraction from self-collected cervicovaginal swabs.

§ 95% confidence interval.

Among sexually active females (i.e., 57% of females aged 14–19 years and 97% of those aged 20–59 years), the prevalence of HPV infection was highest for those in the youngest age groups (i.e., approximately 40% in those aged 14–19 years and 50% in those aged 20–24 years). Prevalence declined substantially after age 24 years.

SOURCES: National Health and Nutrition Examination Survey, 2003–2004. Available at http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/nhanes03_04.htm.

Dunne EF, Unger ER, Sternberg M, et al. Prevalence of HPV infection among females in the United States. *JAMA* 2007;297:813–9.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Total resident population (in thousands)	Anthrax	Botulism			Brucellosis
			Foodborne	Infant	Other†	
United States	296,410	1	20	97	48	121
New England	14,239	—	—	1	—	3
Connecticut	3,510	—	—	—	—	—
Maine	1,321	—	—	—	—	—
Massachusetts	6,399	—	—	1	—	2
New Hampshire	1,310	—	—	—	—	—
Rhode Island	1,076	—	—	—	—	1
Vermont	623	—	—	—	—	—
Mid. Atlantic	40,402	1	—	16	3	2
New Jersey	8,718	—	—	7	—	1
New York (Upstate)	11,111	—	—	1	—	—
New York City	8,143	1	—	—	3	—
Pennsylvania	12,430	—	—	8	—	1
E.N. Central	46,156	—	1	2	—	14
Illinois	12,763	—	1	—	—	8
Indiana	6,272	—	—	—	—	1
Michigan	10,121	—	—	—	—	3
Ohio	11,464	—	—	2	—	2
Wisconsin	5,536	—	—	—	—	—
W.N. Central	19,816	—	—	1	—	12
Iowa	2,966	—	—	1	—	2
Kansas	2,745	—	—	—	—	3
Minnesota	5,133	—	—	—	—	3
Missouri	5,800	—	—	—	—	1
Nebraska	1,759	—	—	—	—	3
North Dakota	637	—	—	—	—	—
South Dakota	776	—	—	—	—	—
S. Atlantic	56,180	—	5	6	1	19
Delaware	844	—	—	—	—	1
District of Columbia	551	—	—	—	—	—
Florida	17,790	—	1	—	—	5
Georgia	9,073	—	3	—	—	5
Maryland	5,600	—	—	5	1	3
North Carolina	8,683	—	1	—	—	2
South Carolina	4,255	—	—	—	—	3
Virginia	7,567	—	—	—	—	—
West Virginia	1,817	—	—	1	—	—
E.S. Central	17,615	—	—	1	—	3
Alabama	4,558	—	—	—	—	1
Kentucky	4,173	—	—	—	—	1
Mississippi	2,921	—	—	—	—	—
Tennessee	5,963	—	—	1	—	1
W.S. Central	33,711	—	—	5	1	20
Arkansas	2,779	—	—	—	—	—
Louisiana	4,524	—	—	—	—	—
Oklahoma	3,548	—	—	—	—	2
Texas	22,860	—	—	5	1	18
Mountain	20,291	—	2	12	—	12
Arizona	5,939	—	—	5	—	4
Colorado	4,665	—	—	1	—	4
Idaho	1,429	—	—	—	—	—
Montana	936	—	—	1	—	—
Nevada	2,415	—	2	1	—	3
New Mexico	1,928	—	—	1	—	—
Utah	2,470	—	—	3	—	—
Wyoming	509	—	—	—	—	1
Pacific	48,000	—	12	53	43	36
Alaska	664	—	6	—	—	—
California	36,132	—	6	44	42	34
Hawaii	1,275	—	—	—	—	2
Oregon	3,641	—	—	—	—	—
Washington	6,288	—	—	9	1	—
American Samoa	58	—	—	—	—	—
C.N.M.I.	80	—	—	—	—	—
Guam	169	—	—	—	—	—
Puerto Rico	3,912	—	—	—	N	—
U.S. Virgin Islands	109	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), smallpox, and yellow fever, or varicella deaths were reported in 2006. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this release of the Final 2006 Reports of Nationally Notifiable Infectious Diseases.

† Includes cases reported as wound and unspecified botulism.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Chancroid [§]	Chlamydia [¶]	Cholera	Coccidioidomycosis	Cryptosporidiosis	Cyclosporiasis
United States	33	1,030,911	9	8,917	6,071	137
New England	—	34,976	—	—	379	14
Connecticut	—	10,946	—	N	38	11
Maine	—	2,306	—	—	52	—
Massachusetts	—	15,394	—	—	175	2
New Hampshire	N	1,997	—	—	47	—
Rhode Island	—	3,142	—	—	14	1
Vermont	N	1,191	—	N	53	—
Mid. Atlantic	5	128,401	2	—	667	40
New Jersey	—	20,194	1	N	42	8
New York (Upstate)	1	27,488	—	N	184	2
New York City	4	41,232	1	N	155	23
Pennsylvania	—	39,487	—	N	286	7
E.N. Central	1	170,494	1	46	1,350	4
Illinois	—	53,586	1	—	204	1
Indiana	—	19,859	—	—	113	1
Michigan	1	36,753	—	40	144	—
Ohio	—	40,106	—	6	357	—
Wisconsin	—	20,190	—	N	532	2
W.N. Central	—	62,017	—	56	892	4
Iowa	N	8,390	—	N	176	—
Kansas	—	7,829	—	N	82	—
Minnesota	—	12,935	—	54	242	4
Missouri	—	22,982	—	2	188	—
Nebraska	N	5,428	—	N	98	N
North Dakota	N	1,820	—	N	20	N
South Dakota	—	2,633	—	N	86	—
S. Atlantic	21	199,732	—	6	1,222	65
Delaware	—	3,615	—	1	15	1
District of Columbia	—	3,368	—	—	17	4
Florida	1	48,955	—	N	577	31
Georgia	—	38,972	—	N	275	19
Maryland	—	21,859	—	5	20	2
North Carolina	5	33,615	—	—	101	3
South Carolina	14	22,351	—	N	131	5
Virginia	1	24,087	—	N	71	—
West Virginia	—	2,910	—	N	15	—
E.S. Central	—	76,177	—	—	188	4
Alabama	—	22,915	—	N	72	N
Kentucky	—	8,940	—	N	44	N
Mississippi	—	19,002	—	N	24	N
Tennessee	—	25,320	—	N	48	4
W.S. Central	6	114,679	4	1	438	2
Arkansas	—	8,259	—	N	29	—
Louisiana	1	17,885	4	1	86	—
Oklahoma	N	12,992	—	N	50	1
Texas	5	75,543	—	N	273	1
Mountain	—	71,139	—	5,677	416	1
Arizona	—	24,090	—	5,535	29	—
Colorado	—	16,313	—	N	77	—
Idaho	—	3,345	—	N	38	N
Montana	—	2,650	—	N	141	N
Nevada	—	8,398	—	62	14	—
New Mexico	—	9,829	—	22	45	1
Utah	—	5,092	—	56	21	—
Wyoming	—	1,422	—	2	51	—
Pacific	—	173,296	2	3,131	519	3
Alaska	N	4,525	—	N	4	—
California	—	135,827	2	3,131	340	N
Hawaii	N	5,548	—	N	4	N
Oregon	—	9,577	—	N	76	2
Washington	—	17,819	—	N	95	1
American Samoa	N	—	—	N	N	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	832	—	—	—	—
Puerto Rico	N	5,102	—	N	N	N
U.S. Virgin Islands	—	203	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

[§] Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP), as of June 22, 2007.

[¶] Totals reported to the Division of STD Prevention, NCHHSTP, as of June 22, 2007. Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Domestic arboviral diseases**									
	California serogroup		Eastern equine		Powassan		St. Louis		West Nile	
	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	64	3	8	—	1	—	7	3	1,495	2,774
New England	—	—	5	—	—	—	1	—	9	3
Connecticut	—	—	—	—	—	—	—	—	7	2
Maine	—	—	—	—	—	—	—	—	—	—
Massachusetts	—	—	5	—	—	—	—	—	2	1
New Hampshire	—	—	—	—	—	—	1	—	—	—
Rhode Island	—	—	—	—	—	—	—	—	—	—
Vermont	—	—	—	—	—	—	—	—	—	—
Mid. Atlantic	—	—	—	—	—	—	—	—	26	12
New Jersey	—	—	—	—	—	—	—	—	2	3
New York (Upstate)	—	—	—	—	—	—	—	—	8	4
New York City	—	—	—	—	—	—	—	—	8	4
Pennsylvania	—	—	—	—	—	—	—	—	8	1
E.N. Central	18	1	—	—	1	—	1	—	244	175
Illinois	—	—	—	—	—	—	—	—	127	88
Indiana	3	—	—	—	—	—	—	—	27	53
Michigan	2	—	—	—	—	—	—	—	43	12
Ohio	11	—	—	—	—	—	1	—	36	12
Wisconsin	2	1	—	—	1	—	—	—	11	10
W.N. Central	2	—	—	—	—	—	1	—	224	484
Iowa	1	—	—	—	—	—	—	—	22	15
Kansas	—	—	—	—	—	—	—	—	17	13
Minnesota	1	—	—	—	—	—	—	—	31	34
Missouri	—	—	—	—	—	—	1	—	51	11
Nebraska	—	—	—	—	—	—	—	—	45	219
North Dakota	—	—	—	—	—	—	—	—	20	117
South Dakota	—	—	—	—	—	—	—	—	38	75
S. Atlantic	35	1	2	—	—	—	—	—	18	14
Delaware	—	—	—	—	—	—	—	—	—	—
District of Columbia	—	—	—	—	—	—	—	—	—	2
Florida	1	—	—	—	—	—	—	—	3	—
Georgia	—	1	1	—	—	—	—	—	2	6
Maryland	—	—	—	—	—	—	—	—	10	1
North Carolina	17	—	1	—	—	—	—	—	1	—
South Carolina	1	—	—	—	—	—	—	—	1	—
Virginia	—	—	—	—	—	—	—	—	—	5
West Virginia	16	—	—	—	—	—	—	—	1	—
E.S. Central	7	—	—	—	—	—	1	—	118	101
Alabama	—	—	—	—	—	—	—	—	8	—
Kentucky	—	—	—	—	—	—	1	—	5	1
Mississippi	—	—	—	—	—	—	—	—	89	94
Tennessee	7	—	—	—	—	—	—	—	16	6
W.S. Central	2	1	1	—	—	—	2	1	375	236
Arkansas	—	—	—	—	—	—	—	—	24	5
Louisiana	2	1	1	—	—	—	2	—	91	89
Oklahoma	—	—	—	—	—	—	—	—	27	21
Texas	—	—	—	—	—	—	—	1	233	121
Mountain	—	—	—	—	—	—	1	2	393	1,487
Arizona	—	—	—	—	—	—	1	1	68	82
Colorado	—	—	—	—	—	—	—	—	66	279
Idaho	—	—	—	—	—	—	—	1	139	857
Montana	—	—	—	—	—	—	—	—	12	22
Nevada	—	—	—	—	—	—	—	—	34	90
New Mexico	—	—	—	—	—	—	—	—	3	5
Utah	—	—	—	—	—	—	—	—	56	102
Wyoming	—	—	—	—	—	—	—	—	15	50
Pacific	—	—	—	—	—	—	—	—	88	262
Alaska	—	—	—	—	—	—	—	—	—	—
California	—	—	—	—	—	—	—	—	81	197
Hawaii	—	—	—	—	—	—	—	—	—	—
Oregon	—	—	—	—	—	—	—	—	7	62
Washington	—	—	—	—	—	—	—	—	—	3
American Samoa	—	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	—	—	—	—	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

** Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2007.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Ehrlichiosis			Giardiasis	Gonorrhea ^{††}
	Human granulocytic	Human monocytic	Human (other & unspecified)		
United States	646	578	231	18,953	358,366
New England	90	13	10	1,456	5,936
Connecticut	37	—	—	307	2,610
Maine	10	4	—	192	137
Massachusetts	30	6	1	621	2,429
New Hampshire	—	1	1	26	180
Rhode Island	13	2	8	117	508
Vermont	—	—	—	193	72
Mid. Atlantic	285	208	1	3,611	34,417
New Jersey	49	67	N	476	5,492
New York (Upstate)	206	125	1	1,375	7,160
New York City	29	16	—	936	10,299
Pennsylvania	1	—	—	824	11,466
E.N. Central	56	37	123	2,806	70,712
Illinois	6	23	3	695	20,186
Indiana	—	4	—	N	8,732
Michigan	1	2	—	715	15,677
Ohio	1	5	—	809	19,190
Wisconsin	48	3	120	587	6,927
W.N. Central	182	92	25	2,307	19,636
Iowa	N	N	N	303	1,966
Kansas	—	—	—	198	2,210
Minnesota	177	19	—	1,001	3,303
Missouri	2	73	24	548	10,204
Nebraska	3	—	1	122	1,433
North Dakota	—	—	—	38	153
South Dakota	—	—	—	97	367
S. Atlantic	18	118	54	2,858	89,406
Delaware	7	14	—	43	1,485
District of Columbia	—	—	—	69	1,887
Florida	1	5	—	1,165	23,976
Georgia	2	14	—	642	19,669
Maryland	5	25	45	256	7,328
North Carolina	1	54	3	—	17,312
South Carolina	—	4	2	112	10,320
Virginia	2	2	4	514	6,476
West Virginia	—	—	—	57	953
E.S. Central	3	35	5	465	31,147
Alabama	2	2	—	224	10,665
Kentucky	—	4	—	N	3,277
Mississippi	—	—	—	N	7,511
Tennessee	1	29	5	241	9,694
W.S. Central	10	75	11	401	50,589
Arkansas	2	32	6	148	4,306
Louisiana	—	1	1	87	10,883
Oklahoma	8	39	—	166	4,951
Texas	—	3	4	N	30,449
Mountain	1	—	1	1,709	15,576
Arizona	—	—	—	163	5,949
Colorado	—	—	—	554	3,695
Idaho	N	N	N	190	206
Montana	N	N	N	103	194
Nevada	1	—	—	110	2,791
New Mexico	—	—	—	80	1,733
Utah	—	—	—	471	888
Wyoming	—	—	1	38	120
Pacific	1	—	1	3,340	40,947
Alaska	N	N	N	113	630
California	—	—	1	2,303	33,740
Hawaii	N	N	N	58	885
Oregon	1	—	—	417	1,461
Washington	N	N	N	449	4,231
American Samoa	N	N	N	N	—
C.N.M.I.	—	—	—	—	—
Guam	N	N	N	5	98
Puerto Rico	N	N	N	276	302
U.S. Virgin Islands	—	—	—	—	34

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

†† Totals reported to the Division of STD Prevention, NCHHSTP, as of June 22, 2007.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	<i>Haemophilus influenzae</i> , invasive disease				Hansen disease (leprosy)	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal
	All ages, serotypes	Age <5 years					
		Serotype b	Nonserotype b	Unknown serotype			
United States	2,436	29	175	179	66	40	288
New England	195	—	15	4	2	—	16
Connecticut	48	—	3	—	—	N	5
Maine	21	—	2	1	N	—	6
Massachusetts	85	—	7	1	1	—	4
New Hampshire	16	—	—	1	1	—	—
Rhode Island	16	—	2	—	—	—	—
Vermont	9	—	1	1	N	—	1
Mid. Atlantic	499	6	15	44	4	—	21
New Jersey	90	—	—	14	1	—	7
New York (Upstate)	158	1	3	8	N	—	8
New York City	90	—	—	14	3	—	6
Pennsylvania	161	5	12	8	—	—	N
E.N. Central	395	—	19	39	4	—	42
Illinois	120	—	—	20	3	—	8
Indiana	81	—	8	—	—	—	—
Michigan	32	—	5	1	—	—	5
Ohio	93	—	6	7	—	—	15
Wisconsin	69	—	—	11	1	—	14
W.N. Central	180	3	14	5	2	4	48
Iowa	2	1	—	—	1	—	9
Kansas	20	—	—	3	—	—	1
Minnesota	98	2	14	—	—	—	19
Missouri	39	—	—	1	1	—	8
Nebraska	10	—	—	—	—	—	9
North Dakota	11	—	—	1	N	2	1
South Dakota	—	—	—	—	—	2	1
S. Atlantic	579	6	35	25	8	—	27
Delaware	1	—	—	—	—	—	—
District of Columbia	9	—	—	2	—	—	—
Florida	167	3	11	5	7	—	5
Georgia	122	2	—	18	N	—	8
Maryland	83	—	10	—	—	—	N
North Carolina	61	—	5	—	—	—	8
South Carolina	40	1	4	—	—	—	2
Virginia	69	—	3	—	1	—	2
West Virginia	27	—	2	—	N	—	2
E.S. Central	117	—	6	17	—	—	25
Alabama	23	—	1	4	—	N	2
Kentucky	5	—	—	1	—	—	N
Mississippi	13	—	—	3	—	—	—
Tennessee	76	—	5	9	—	—	23
W.S. Central	122	5	10	11	11	2	18
Arkansas	10	—	—	4	2	—	—
Louisiana	23	—	—	6	—	—	—
Oklahoma	78	—	10	1	—	—	2
Texas	11	5	—	—	9	2	16
Mountain	217	4	42	12	4	28	32
Arizona	88	3	19	7	—	9	1
Colorado	51	—	8	—	N	6	8
Idaho	7	—	5	1	1	2	4
Montana	—	—	—	—	—	—	—
Nevada	14	—	2	—	1	2	3
New Mexico	33	1	4	1	1	8	4
Utah	19	—	4	2	1	—	12
Wyoming	5	—	—	1	—	1	—
Pacific	132	5	19	22	31	6	59
Alaska	12	—	—	6	1	N	N
California	40	4	18	4	19	3	47
Hawaii	21	—	—	2	11	—	—
Oregon	54	—	—	7	N	—	11
Washington	5	1	1	3	N	3	1
American Samoa	—	—	—	—	—	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	1	—	—	—	3	N	—
Puerto Rico	3	—	—	1	2	N	N
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable.

U: Unavailable.

—: No reported cases.

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

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Hepatitis, viral, acute			Influenza-associated pediatric mortality ^{§§}	Legionellosis	Listeriosis	Lyme disease	Malaria
	A	B	C					
United States	3,579	4,713	766	43	2,834	884	19,931	1,474
New England	182	120	40	3	190	62	4,588	61
Connecticut	44	49	14	1	59	19	1,788	13
Maine	8	26	2	—	11	6	338	4
Massachusetts	84	19	—	—	69	22	1,432	29
New Hampshire	22	11	N	—	15	7	617	10
Rhode Island	16	11	1	1	28	6	308	4
Vermont	8	4	23	1	8	2	105	1
Mid. Atlantic	400	538	179	8	984	213	10,134	362
New Jersey	111	164	90	1	120	42	2,432	90
New York (Upstate)	102	82	44	—	345	60	4,155	50
New York City	120	120	—	5	185	36	305	173
Pennsylvania	67	172	45	2	334	75	3,242	49
E.N. Central	362	509	128	2	612	130	1,700	165
Illinois	109	132	13	—	128	31	110	83
Indiana	33	80	3	—	54	21	26	13
Michigan	125	141	104	1	151	18	55	21
Ohio	53	123	7	1	231	44	43	29
Wisconsin	42	33	1	N	48	16	1,466	19
W.N. Central	145	152	38	2	85	36	1,039	73
Iowa	13	21	—	—	12	6	97	2
Kansas	27	11	—	2	10	4	4	8
Minnesota	31	32	11	—	26	7	914	50
Missouri	44	62	27	—	22	12	5	6
Nebraska	18	20	—	—	9	4	11	4
North Dakota	3	1	—	—	1	1	7	2
South Dakota	9	5	—	—	5	2	1	1
S. Atlantic	550	1,237	99	4	497	167	2,270	338
Delaware	13	47	3	—	12	2	482	5
District of Columbia	10	9	2	—	33	2	62	5
Florida	213	420	18	—	167	47	34	61
Georgia	56	205	8	1	38	20	8	88
Maryland	60	148	16	N	109	28	1,248	79
North Carolina	104	159	19	1	42	25	31	32
South Carolina	24	97	—	—	8	9	20	10
Virginia	64	78	9	2	68	20	357	55
West Virginia	6	74	24	—	20	14	28	3
E.S. Central	125	332	80	1	112	25	36	25
Alabama	13	95	11	N	10	7	11	9
Kentucky	33	69	36	1	48	3	7	4
Mississippi	9	13	4	—	5	2	3	6
Tennessee	70	155	29	—	49	13	15	6
W.S. Central	427	1,079	85	1	94	56	30	129
Arkansas	48	87	1	—	4	4	—	4
Louisiana	38	63	9	—	11	6	1	9
Oklahoma	11	96	19	1	10	5	—	10
Texas	330	833	56	N	69	41	29	106
Mountain	286	147	52	8	125	37	31	77
Arizona	179	U	—	2	38	7	10	23
Colorado	44	34	28	2	27	12	—	24
Idaho	9	15	3	N	11	—	7	1
Montana	11	5	—	—	7	1	1	2
Nevada	11	42	7	—	11	9	4	4
New Mexico	16	24	4	3	5	6	3	5
Utah	14	26	10	—	26	2	5	18
Wyoming	2	1	—	1	—	—	1	—
Pacific	1,102	599	65	14	135	158	103	244
Alaska	2	8	—	N	1	N	3	23
California	992	427	25	14	96	124	85	157
Hawaii	12	8	6	—	—	4	N	8
Oregon	44	82	11	N	18	12	7	13
Washington	52	74	23	N	20	18	8	43
American Samoa	—	—	—	—	N	N	N	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	1	4	—	N	—	N	—	3
Puerto Rico	76	83	—	N	1	—	N	2
U.S. Virgin Islands	—	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of June 29, 2007.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Measles		Meningococcal disease				
	Indigenous	Imported ^{†††}	All serogroups	Serogroup A, C, Y, & W-135	Serogroup B	Other serogroup	Serogroup unknown
United States	24	31	1,194	318	193	32	651
New England	17	3	52	26	17	3	6
Connecticut	—	—	10	9	1	—	—
Maine	—	—	9	1	6	2	—
Massachusetts	17	2	24	14	7	1	2
New Hampshire	—	1	4	—	—	—	4
Rhode Island	—	—	2	2	—	—	—
Vermont	—	—	3	—	3	—	—
Mid. Atlantic	6	7	174	48	18	1	107
New Jersey	—	1	24	—	—	—	24
New York (Upstate)	4	3	40	26	10	—	4
New York City	—	3	58	—	—	—	58
Pennsylvania	2	—	52	22	8	1	21
E.N. Central	—	2	173	41	31	3	98
Illinois	—	—	46	—	—	—	46
Indiana	—	1	24	7	12	—	5
Michigan	—	1	30	14	2	3	11
Ohio	—	—	48	20	17	—	11
Wisconsin	—	—	25	—	—	—	25
W.N. Central	—	3	70	35	19	1	15
Iowa	—	—	20	14	4	—	2
Kansas	—	1	5	2	1	—	2
Minnesota	—	1	16	10	5	—	1
Missouri	—	1	15	6	7	—	2
Nebraska	—	—	6	—	1	1	4
North Dakota	—	—	4	—	—	—	4
South Dakota	—	—	4	3	1	—	—
S. Atlantic	1	5	215	89	52	7	67
Delaware	—	—	6	—	—	—	6
District of Columbia	—	—	2	—	—	—	2
Florida	—	4	79	40	10	3	26
Georgia	—	—	19	8	9	1	1
Maryland	1	1	16	11	4	—	1
North Carolina	—	—	34	12	8	2	12
South Carolina	—	—	26	5	11	—	10
Virginia	—	—	22	5	8	—	9
West Virginia	—	—	11	8	2	1	—
E.S. Central	—	—	50	1	6	2	41
Alabama	—	—	7	—	1	—	6
Kentucky	—	—	11	—	—	—	11
Mississippi	—	—	7	—	—	—	7
Tennessee	—	—	25	1	5	2	17
W.S. Central	—	—	107	27	21	10	49
Arkansas	—	—	11	1	2	—	8
Louisiana	—	—	36	13	4	—	19
Oklahoma	—	—	15	2	4	8	1
Texas	—	—	45	11	11	2	21
Mountain	—	1	71	38	10	5	18
Arizona	—	—	16	4	4	1	7
Colorado	—	1	22	16	1	3	2
Idaho	—	—	4	1	—	—	3
Montana	—	—	6	3	1	—	2
Nevada	—	—	7	4	3	—	—
New Mexico	—	—	6	6	—	—	—
Utah	—	—	6	4	1	1	—
Wyoming	—	—	4	—	—	—	4
Pacific	—	10	282	13	19	—	250
Alaska	—	—	4	—	—	—	4
California	—	6	184	—	—	—	184
Hawaii	—	—	10	—	—	—	10
Oregon	—	2	41	—	—	—	41
Washington	—	2	43	13	19	—	11
American Samoa	—	—	2	—	—	—	2
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	1	—	—	—	1
Puerto Rico	—	—	7	—	—	—	7
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

^{†††} Imported cases include only those directly related to importation from other countries.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Mumps	Pertussis	Plague	Psittacosis	Q Fever	Rabies		Rocky Mountain spotted fever
						Animal	Human	
United States	6,584	15,632	17	21	169	5,534	3	2,288
New England	21	1,975	—	1	5	488	—	23
Connecticut	—	126	—	N	1	208	—	—
Maine	—	174	—	—	4	127	—	N
Massachusetts	12	1,238	—	—	—	N	—	12
New Hampshire	5	226	—	1	N	50	—	1
Rhode Island	4	101	—	—	—	30	—	10
Vermont	—	110	—	—	N	73	—	—
Mid. Atlantic	199	2,083	—	7	7	549	—	90
New Jersey	12	301	—	2	1	N	—	41
New York (Upstate)	51	1,083	—	3	1	N	—	—
New York City	19	112	—	—	3	44	—	23
Pennsylvania	117	587	—	2	2	505	—	26
E.N. Central	1,779	2,365	—	—	31	164	1	65
Illinois	798	588	—	—	17	46	—	26
Indiana	10	280	—	—	1	11	1	6
Michigan	84	632	—	—	3	49	—	6
Ohio	45	644	—	—	6	58	—	26
Wisconsin	842	221	—	—	4	N	—	1
W.N. Central	3,960	1,453	—	1	22	318	—	199
Iowa	1,964	345	—	—	N	57	—	5
Kansas	968	310	—	—	1	83	—	1
Minnesota	180	320	—	—	2	42	—	5
Missouri	170	308	—	—	11	66	—	163
Nebraska	368	101	—	1	6	—	—	25
North Dakota	14	43	—	—	—	32	—	—
South Dakota	296	26	—	—	2	38	—	—
S. Atlantic	264	1,311	—	2	21	2,314	—	1,203
Delaware	—	3	—	—	—	—	—	22
District of Columbia	1	6	—	—	—	—	—	1
Florida	15	228	—	1	8	176	—	21
Georgia	6	102	—	—	1	267	—	53
Maryland	48	152	—	1	4	414	—	93
North Carolina	43	334	—	—	4	521	—	852
South Carolina	10	199	—	—	—	181	—	43
Virginia	117	221	—	—	4	637	—	114
West Virginia	24	66	—	—	—	118	—	4
E.S. Central	61	374	—	2	13	247	—	371
Alabama	47	106	N	—	—	84	—	94
Kentucky	1	59	—	—	4	28	—	3
Mississippi	2	37	—	—	—	4	—	9
Tennessee	11	172	—	2	9	131	—	265
W.S. Central	79	1,154	1	—	15	997	1	288
Arkansas	8	112	—	—	2	32	—	104
Louisiana	3	24	—	—	—	7	—	5
Oklahoma	10	64	—	—	—	69	—	139
Texas	58	954	1	N	13	889	1	40
Mountain	120	2,501	14	1	33	213	—	47
Arizona	40	508	—	—	4	140	—	11
Colorado	51	710	4	1	14	—	—	5
Idaho	7	88	—	—	1	24	—	14
Montana	—	115	—	—	—	15	—	2
Nevada	5	71	1	—	7	5	—	—
New Mexico	3	147	8	—	4	10	—	8
Utah	5	779	1	—	—	11	—	—
Wyoming	9	83	—	—	3	8	—	7
Pacific	101	2,416	2	7	22	244	1	2
Alaska	3	91	—	1	N	18	—	N
California	31	1,749	2	3	22	201	1	—
Hawaii	6	87	—	—	—	N	—	N
Oregon	19	112	—	3	—	25	—	2
Washington	42	377	—	—	—	—	—	N
American Samoa	—	—	—	N	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	1	64	—	N	N	—	—	N
Puerto Rico	16	3	—	N	—	78	—	N
U.S. Virgin Islands	—	—	—	—	—	—	—	—

N: Not notifiable.

U: Unavailable.

—: No reported cases.

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

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Rubella	Rubella, congenital syndrome	Salmonellosis	Shiga toxin- producing <i>E. Coli</i> STEC***	Shigellosis	Streptococcal disease, invasive, group A	Streptococcal toxic-shock syndrome
United States	11	1	45,808	4,432	15,503	5,407	125
New England	3	—	2,303	287	280	360	22
Connecticut	1	—	503	75	67	98	20
Maine	—	—	161	50	10	19	N
Massachusetts	2	—	1,214	105	168	174	—
New Hampshire	—	—	225	29	11	35	—
Rhode Island	—	—	119	9	18	20	—
Vermont	—	—	81	19	6	14	2
Mid. Atlantic	2	—	5,521	610	922	963	8
New Jersey	—	—	1,120	163	291	149	—
New York (Upstate)	—	—	1,423	193	269	322	4
New York City	2	—	1,277	43	274	167	—
Pennsylvania	—	—	1,701	211	88	325	4
E.N. Central	1	—	5,695	693	1,485	1,000	52
Illinois	—	—	1,603	104	720	307	19
Indiana	—	—	898	95	178	127	12
Michigan	1	—	998	94	152	205	2
Ohio	—	—	1,290	196	196	238	19
Wisconsin	—	—	906	204	239	123	N
W.N. Central	3	—	2,725	722	1,944	372	6
Iowa	—	—	476	163	137	—	—
Kansas	1	—	368	25	138	53	—
Minnesota	—	—	724	220	259	171	4
Missouri	2	—	766	167	658	90	1
Nebraska	—	—	201	79	128	33	1
North Dakota	—	—	55	18	235	15	—
South Dakota	—	—	135	50	389	10	—
S. Atlantic	1	—	11,805	668	3,576	1,218	21
Delaware	—	—	150	16	11	10	2
District of Columbia	—	—	65	4	22	18	—
Florida	1	—	4,928	102	1,646	312	N
Georgia	—	—	1,835	84	1,379	272	—
Maryland	—	—	780	131	139	212	N
North Carolina	—	—	1,696	129	174	164	10
South Carolina	—	—	1,091	17	80	69	—
Virginia	—	—	1,089	168	120	132	—
West Virginia	—	—	171	17	5	29	9
E.S. Central	—	—	2,987	297	895	209	1
Alabama	—	—	910	32	348	N	N
Kentucky	—	—	463	101	237	44	1
Mississippi	—	—	787	11	133	N	N
Tennessee	—	—	827	153	177	165	—
W.S. Central	—	—	5,712	324	2,654	472	—
Arkansas	—	—	918	52	133	27	—
Louisiana	—	—	1,129	18	261	18	—
Oklahoma	—	—	605	44	195	125	N
Texas	—	—	3,060	210	2,065	302	—
Mountain	—	—	2,725	543	1,531	681	13
Arizona	—	—	958	105	729	351	—
Colorado	—	—	625	109	238	122	1
Idaho	—	—	179	106	15	12	—
Montana	—	—	132	—	69	N	N
Nevada	—	—	245	35	143	—	5
New Mexico	—	—	261	46	177	123	—
Utah	—	—	278	122	72	68	7
Wyoming	—	—	47	20	88	5	—
Pacific	1	1	6,335	288	2,216	132	2
Alaska	—	N	82	N	7	N	N
California	1	1	4,939	N	1,873	N	N
Hawaii	—	—	265	19	45	132	2
Oregon	—	—	422	107	121	N	N
Washington	—	—	627	162	170	N	N
American Samoa	—	—	2	N	6	—	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	38	N	18	—	N
Puerto Rico	—	N	774	—	43	—	N
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

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

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	<i>Streptococcus pneumoniae</i> , invasive disease drug-resistant all ages	<i>Streptococcus pneumoniae</i> , invasive disease nondrug-resistant age <5 yrs	All stages ^{§§§}	Syphilis ^{†††}		Tetanus	Toxic-shock syndrome
				Congenital (age <1 yr)	Primary & secondary		
United States	3,308	1,861	36,935	349	9,756	41	101
New England	156	147	710	—	227	—	4
Connecticut	106	43	197	—	64	—	N
Maine	12	—	22	—	9	—	N
Massachusetts	—	84	378	—	124	—	1
New Hampshire	—	12	35	—	13	—	2
Rhode Island	20	8	71	—	14	—	—
Vermont	18	—	7	—	3	—	1
Mid. Atlantic	189	227	6,261	30	1,173	4	16
New Jersey	—	73	799	15	173	1	4
New York (Upstate)	72	117	858	8	158	—	2
New York City	—	37	3,719	7	578	—	—
Pennsylvania	117	N	885	—	264	3	10
E.N. Central	651	380	2,768	28	894	9	18
Illinois	33	106	1,473	15	431	1	2
Indiana	198	68	250	—	93	2	1
Michigan	18	75	384	13	118	3	8
Ohio	402	82	491	—	184	3	7
Wisconsin	N	49	170	—	68	—	—
W.N. Central	320	121	840	5	282	3	20
Iowa	—	—	68	—	19	—	—
Kansas	72	14	87	1	27	—	2
Minnesota	199	74	189	1	47	1	9
Missouri	44	16	430	3	168	1	5
Nebraska	1	12	34	—	7	—	4
North Dakota	—	5	3	—	1	1	—
South Dakota	4	—	29	—	13	—	—
S. Atlantic	1,429	382	8,393	61	2,312	5	15
Delaware	—	2	74	—	20	—	—
District of Columbia	27	2	314	1	116	—	—
Florida	774	72	2,945	21	719	2	N
Georgia	504	141	1,933	9	581	—	7
Maryland	3	72	1,038	19	300	1	N
North Carolina	—	—	961	6	309	1	8
South Carolina	—	25	397	2	66	1	N
Virginia	N	50	701	3	190	—	—
West Virginia	121	18	30	—	11	—	—
E.S. Central	222	103	2,654	16	727	1	10
Alabama	N	N	931	9	319	—	2
Kentucky	38	N	188	1	73	—	4
Mississippi	31	19	520	—	86	—	N
Tennessee	153	84	1,015	6	249	1	4
W.S. Central	198	260	6,837	101	1,553	6	3
Arkansas	12	24	243	7	77	1	3
Louisiana	77	24	1,387	13	342	3	—
Oklahoma	109	69	251	2	70	1	N
Texas	—	143	4,956	79	1,064	1	N
Mountain	143	214	1,816	42	513	2	11
Arizona	—	120	926	16	203	1	2
Colorado	—	55	182	2	69	—	8
Idaho	N	3	12	—	3	—	—
Montana	—	N	2	—	1	—	N
Nevada	23	3	388	15	137	—	1
New Mexico	—	33	237	7	79	—	—
Utah	75	—	68	2	21	1	—
Wyoming	45	—	1	—	—	—	—
Pacific	—	27	6,656	66	2,075	11	4
Alaska	N	N	25	—	11	—	N
California	N	N	6,043	66	1,835	11	4
Hawaii	—	27	66	—	18	—	N
Oregon	N	N	99	—	29	—	N
Washington	N	N	423	—	182	—	N
American Samoa	—	N	—	—	—	—	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	N	13	—	3	—	—
Puerto Rico	N	N	1,066	13	150	1	N
U.S. Virgin Islands	—	—	5	—	1	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

††† Totals reported to the Division of STD Prevention, NCHHSTP, as of June 22, 2007.

§§§ Includes the following categories: primary, secondary, latent (including neurosyphilis, early latent, late latent, late with clinical manifestations other than neurosyphilis, and unknown latent), and congenital syphilis.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Trichinellosis	Tuberculosis ^{†††}	Tularemia	Typhoid fever	Vancomycin-intermediate <i>Staphylococcus aureus</i>	Vancomycin-resistant <i>Staphylococcus aureus</i>	Varicella (morbidity)
United States	15	13,779	95	353	6	1	48,445
New England	—	415	11	14	1	—	4,316
Connecticut	—	89	—	4	1	—	1,727
Maine	—	16	—	1	—	—	238
Massachusetts	—	259	11	7	—	—	1,142
New Hampshire	—	17	—	—	N	—	419
Rhode Island	—	26	—	2	N	N	—
Vermont	—	8	—	—	—	—	790
Mid. Atlantic	3	2,120	2	100	1	—	5,202
New Jersey	2	508	—	15	—	—	N
New York (Upstate)	1	317	1	11	1	—	N
New York City	—	954	—	65	—	—	—
Pennsylvania	—	341	1	9	—	—	5,202
E.N. Central	1	1,229	1	39	1	1	15,321
Illinois	—	569	1	18	—	—	150
Indiana	—	125	—	—	N	—	N
Michigan	—	221	—	7	1	1	5,200
Ohio	—	239	—	11	—	—	8,860
Wisconsin	1	75	—	3	N	N	1,111
W.N. Central	3	491	36	11	1	—	2,001
Iowa	—	40	1	—	—	—	N
Kansas	—	82	7	2	N	N	372
Minnesota	3	217	—	5	—	—	—
Missouri	—	104	14	2	1	—	1,408
Nebraska	—	25	7	1	—	—	N
North Dakota	—	9	2	—	—	—	103
South Dakota	—	14	5	1	—	—	118
S. Atlantic	2	2,846	2	52	2	—	4,832
Delaware	—	29	—	—	—	—	66
District of Columbia	—	72	—	1	N	N	51
Florida	1	1,038	—	16	—	—	N
Georgia	N	504	—	5	1	—	N
Maryland	1	253	—	7	N	N	N
North Carolina	—	374	1	3	1	—	—
South Carolina	—	222	—	—	—	—	1,259
Virginia	—	332	—	20	N	—	1,959
West Virginia	—	22	1	—	—	—	1,497
E.S. Central	—	674	—	6	—	—	601
Alabama	—	196	—	1	N	N	599
Kentucky	N	84	—	2	N	N	N
Mississippi	—	115	—	2	—	—	2
Tennessee	—	279	—	1	—	—	N
W.S. Central	—	2,038	10	18	—	—	13,183
Arkansas	N	102	6	1	N	N	1,214
Louisiana	—	207	1	—	—	—	201
Oklahoma	—	144	3	—	N	N	N
Texas	—	1,585	—	17	—	—	11,768
Mountain	—	659	23	18	—	—	2,989
Arizona	—	315	1	7	—	—	—
Colorado	N	124	3	7	N	—	1,504
Idaho	—	20	1	—	N	N	N
Montana	—	13	4	—	N	N	N
Nevada	—	101	1	1	—	—	10
New Mexico	—	48	7	1	N	N	370
Utah	—	34	3	2	—	—	1,035
Wyoming	—	4	3	—	—	—	70
Pacific	6	3,307	10	95	—	—	—
Alaska	—	70	—	—	N	N	N
California	5	2,779	5	76	N	N	N
Hawaii	—	115	—	8	—	—	N
Oregon	—	81	4	4	N	N	N
Washington	1	262	1	7	N	N	N
American Samoa	N	—	—	1	N	N	N
C.N.M.I.	—	35	—	—	—	—	—
Guam	—	53	—	—	N	—	292
Puerto Rico	N	112	—	—	N	—	615
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

^{†††} Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of May 25, 2007.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 18, 2007 (33rd Week)*

Disease	Current week	Cum 2007	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2006	2005	2004	2003	2002	
Anthrax	—	—	—	1	—	—	—	2	
Botulism:									
foodborne	4	8	0	20	19	16	20	28	IN (3), CA (1)
infant	—	53	2	97	85	87	76	69	
other (wound & unspecified)	—	13	1	48	31	30	33	21	
Brucellosis	3	77	2	121	120	114	104	125	MN (2), CA (1)
Chancroid	—	19	0	33	17	30	54	67	
Cholera	—	1	0	9	8	5	2	2	
Cyclosporiasis§	1	64	4	136	543	171	75	156	FL (1)
Diphtheria	—	—	—	—	—	—	1	1	
Domestic arboviral diseases§§:									
California serogroup	—	6	7	67	80	112	108	164	
eastern equine	—	1	1	8	21	6	14	10	
Powassan	—	—	0	1	1	1	—	1	
St. Louis	—	2	2	10	13	12	41	28	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	4	194	17	646	786	537	362	511	NY (3), MD (1)
human monocytic	15	254	14	578	506	338	321	216	NC (2), KY (2), AR (7), OK (4)
human (other & unspecified)	3	76	3	231	112	59	44	23	AR (2), TX (1)
<i>Haemophilus influenzae</i> **,									
invasive disease (age <5 yrs):									
serotype b	—	8	0	29	9	19	32	34	
nonserotype b	1	57	2	175	135	135	117	144	FL (1)
unknown serotype	1	165	3	179	217	177	227	153	AK (1)
Hansen disease§	—	31	1	66	87	105	95	96	
Hantavirus pulmonary syndrome§	1	18	0	40	26	24	26	19	TX (1)
Hemolytic uremic syndrome, postdiarrheal§	2	109	7	288	221	200	178	216	MN (1), CO (1)
Hepatitis C viral, acute	8	396	22	802	652	713	1,102	1,835	NY (2), MO (1), OK (1), WA (2), CA (2)
HIV infection, pediatric (age <13 yrs)††	—	—	3	52	380	436	504	420	
Influenza-associated pediatric mortality§§§	—	71	0	43	45	—	N	N	
Listeriosis	11	364	21	875	896	753	696	665	NY (2), IN (1), MN (1), MD (1), NC (1), CA (4), HI (1)
Measles¶¶	—	21	1	55	66	37	56	44	
Meningococcal disease, invasive***:									
A, C, Y, & W-135	1	174	3	318	297	—	—	—	WV (1)
serogroup B	1	86	2	193	156	—	—	—	FL (1)
other serogroup	—	14	0	32	27	—	—	—	
unknown serogroup	8	414	8	651	765	—	—	—	NYC (1), TN (1), TX (1), NV (1), WA (1), CA (3)
Mumps	6	538	11	6,584	314	258	231	270	PA (1), CO (1), WA (4)
Novel influenza A virus infections	—	—	—	N	N	N	N	N	
Plague	—	4	0	17	8	3	1	2	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Poliovirus infection, nonparalytic§	—	—	—	N	N	N	N	N	
Psittacosis§	—	4	0	21	16	12	12	18	
Q fever§	1	107	2	169	136	70	71	61	PA (1)
Rabies, human	—	—	0	3	2	7	2	3	
Rubella†††	—	9	0	11	11	10	7	18	
Rubella, congenital syndrome	—	—	—	1	1	—	1	1	
SARS-CoV§§§	—	—	—	—	—	—	8	N	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	2	72	1	125	129	132	161	118	CT (2)
Syphilis, congenital (age <1 yr)	3	228	7	380	329	353	413	412	TX (2), CA (1)
Tetanus	2	9	1	41	27	34	20	25	MN (1), FL (1)
Toxic-shock syndrome (staphylococcal)§	—	49	2	101	90	95	133	109	
Trichinellosis	—	5	0	15	16	5	6	14	
Tularemia	2	71	4	95	154	134	129	90	MN (1), AR (1)
Typhoid fever	2	167	9	353	324	322	356	321	MD (1), CA (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> §	—	6	—	6	2	—	N	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> §	—	—	—	1	3	1	N	N	
Vibriosis (noncholera <i>Vibrio</i> species infections)§	8	160	8	N	N	N	N	N	NY (2), FL (4), CA (2)
Yellow fever	—	—	—	—	—	—	—	1	

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

* Incidence data for reporting years 2006 and 2007 are provisional, whereas data for 2002, 2003, 2004, and 2005 are finalized.

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

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

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

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

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

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. A total of 68 cases were reported for the 2006–07 flu season.

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

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

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

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	12,454	20,617	25,327	637,925	637,240	62	124	658	4,015	5,451	226	75	319	2,594	2,443
New England	939	699	1,357	21,907	20,032	—	0	1	2	—	5	4	27	131	192
Connecticut	337	217	829	6,647	5,754	N	0	0	N	N	—	0	18	18	38
Maine§	39	50	74	1,610	1,396	—	0	0	—	—	5	1	6	28	20
Massachusetts	411	310	600	9,846	8,923	—	0	0	—	—	—	1	19	36	83
New Hampshire	43	40	70	1,312	1,174	—	0	1	2	—	—	1	4	27	22
Rhode Island§	79	64	108	1,982	2,036	—	0	0	—	—	—	0	5	6	3
Vermont§	30	18	45	510	749	N	0	0	N	N	—	1	4	16	26
Mid. Atlantic	1,039	2,671	4,284	87,888	78,097	—	0	0	—	—	30	10	48	371	338
New Jersey	191	403	541	12,391	12,516	N	0	0	N	N	—	0	5	9	24
New York (Upstate)	409	505	2,758	16,038	14,768	N	0	0	N	N	14	3	14	97	75
New York City	—	857	1,687	27,810	25,847	N	0	0	N	N	—	1	10	38	82
Pennsylvania	439	797	1,798	31,649	24,966	N	0	0	N	N	16	4	44	227	157
E.N. Central	1,164	3,153	6,305	103,304	106,583	—	0	3	17	31	2	16	110	459	656
Illinois	488	1,013	1,345	30,330	34,150	—	0	0	—	—	—	2	22	38	114
Indiana	373	388	644	12,984	12,844	—	0	0	—	—	1	1	18	43	36
Michigan	—	741	1,225	21,813	20,827	—	0	3	12	27	—	3	10	89	79
Ohio	83	628	3,653	26,201	25,715	—	0	2	5	4	—	5	29	137	177
Wisconsin	220	372	528	11,976	13,047	N	0	0	N	N	1	5	53	152	250
W.N. Central	602	1,201	1,448	37,081	38,812	—	0	54	3	—	54	11	77	463	367
Iowa	145	163	254	5,456	5,224	N	0	0	N	N	17	2	34	163	70
Kansas	126	149	294	5,126	5,163	N	0	0	N	N	5	1	8	46	42
Minnesota	—	237	314	6,542	8,094	—	0	54	—	—	16	3	25	89	97
Missouri	267	453	628	14,360	14,313	—	0	1	3	—	4	1	21	43	74
Nebraska§	—	105	183	3,122	3,256	N	0	0	N	N	6	1	16	46	38
North Dakota	—	30	69	883	1,101	N	0	0	N	N	5	0	11	8	6
South Dakota	64	49	84	1,592	1,661	N	0	0	N	N	1	2	7	68	40
S. Atlantic	3,336	3,966	6,760	124,889	122,218	—	0	1	2	2	27	21	70	501	475
Delaware	47	67	140	2,232	2,249	—	0	0	—	—	1	0	3	6	7
District of Columbia	139	96	167	3,646	1,892	—	0	0	—	—	—	0	2	3	10
Florida	1,236	1,064	1,770	35,571	30,802	N	0	0	N	N	24	10	32	256	191
Georgia	—	673	3,822	14,353	22,297	N	0	0	N	N	—	4	17	88	133
Maryland§	415	400	697	12,629	13,212	—	0	1	2	2	1	0	2	19	12
North Carolina	200	624	1,234	18,241	21,435	—	0	0	—	—	1	1	11	51	53
South Carolina§	777	458	3,030	20,923	13,619	N	0	0	N	N	—	1	14	39	41
Virginia§	485	490	685	15,453	14,861	N	0	0	N	N	—	1	5	34	24
West Virginia	37	55	84	1,841	1,851	N	0	0	N	N	—	0	3	5	4
E.S. Central	1,232	1,390	2,044	42,250	48,841	—	0	0	—	—	14	3	17	141	81
Alabama§	25	347	539	7,299	14,962	N	0	0	N	N	4	0	12	32	28
Kentucky	188	116	691	4,695	5,968	N	0	0	N	N	5	1	13	66	25
Mississippi	506	346	959	12,832	12,088	N	0	0	N	N	—	0	8	14	9
Tennessee§	513	512	695	17,424	15,823	N	0	0	N	N	5	1	5	29	19
W.S. Central	2,157	2,294	3,028	75,230	71,434	—	0	1	1	—	8	5	45	145	142
Arkansas§	289	164	337	5,279	4,890	N	0	0	N	N	—	0	3	6	13
Louisiana	278	358	855	12,422	11,418	—	0	1	1	—	—	1	9	31	41
Oklahoma	415	275	467	8,328	7,033	N	0	0	N	N	8	1	13	52	22
Texas§	1,175	1,482	1,911	49,201	48,093	N	0	0	N	N	—	3	36	56	66
Mountain	686	1,353	2,026	38,306	41,940	47	78	293	2,333	3,826	84	5	47	322	141
Arizona	45	488	993	13,526	13,138	47	74	293	2,240	3,728	—	0	6	23	16
Colorado	339	257	416	6,075	10,198	N	0	0	N	N	10	1	7	54	31
Idaho§	—	56	253	2,242	1,920	N	0	0	N	N	2	0	5	18	9
Montana§	—	51	82	1,488	1,605	N	0	0	N	N	—	1	26	23	44
Nevada§	155	185	397	5,935	4,752	—	1	5	38	42	—	0	3	6	6
New Mexico§	—	163	396	4,943	6,320	—	0	2	15	14	—	1	6	38	16
Utah	140	102	209	3,336	3,067	—	1	4	38	40	72	0	38	143	7
Wyoming§	7	25	45	761	940	—	0	1	2	2	—	0	11	17	12
Pacific	1,299	3,373	4,362	107,070	109,283	15	45	311	1,657	1,592	2	1	5	61	51
Alaska	68	87	157	2,800	2,773	N	0	0	N	N	—	0	2	3	3
California	1,144	2,683	3,627	85,387	85,552	15	45	311	1,657	1,592	—	0	0	—	—
Hawaii	—	102	129	3,216	3,683	N	0	0	N	N	—	0	1	—	3
Oregon§	—	166	394	5,592	5,984	N	0	0	N	N	2	1	5	58	45
Washington	87	333	621	10,075	11,291	N	0	0	N	N	—	0	0	—	—
American Samoa	U	0	32	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	12	72	127	574	—	0	0	—	—	—	0	0	—	—
Puerto Rico	547	114	300	4,930	3,001	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	U	3	7	U	U	U	0	0	U	U	U	0	0	U	U

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

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

* Incidence data for reporting years 2006 and 2007 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 August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	Hepatitis (viral, acute), by type [†]										Legionellosis				
	A					B									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	36	55	201	1,626	2,188	33	76	406	2,369	2,710	30	41	109	1,128	1,422
New England	1	2	6	61	125	—	2	5	42	72	2	2	13	65	93
Connecticut	—	0	3	9	26	—	0	5	21	30	2	0	9	19	19
Maine [§]	—	0	1	2	7	—	0	2	2	15	—	0	2	2	6
Massachusetts	—	1	4	28	62	—	0	2	4	15	—	0	5	14	48
New Hampshire	—	0	3	10	18	—	0	1	5	7	—	0	2	3	8
Rhode Island [§]	—	0	2	8	6	—	0	4	9	4	—	0	6	22	9
Vermont [§]	1	0	1	4	6	—	0	1	1	1	—	0	2	5	3
Mid. Atlantic	4	7	20	231	231	—	8	21	274	341	7	12	55	337	470
New Jersey	—	2	5	51	72	—	2	7	53	108	—	1	10	29	62
New York (Upstate)	1	1	11	44	50	—	1	13	52	45	3	5	30	111	158
New York City	1	2	10	82	69	—	2	6	56	79	—	2	24	47	77
Pennsylvania	2	1	5	54	40	—	3	8	113	109	4	5	19	150	173
E.N. Central	—	6	17	161	196	2	9	23	257	318	3	9	31	220	318
Illinois	—	2	7	60	52	—	2	6	64	92	—	1	13	30	61
Indiana	—	0	7	7	15	2	0	21	29	34	3	0	6	20	26
Michigan	—	2	8	44	64	—	2	8	68	91	—	3	10	76	70
Ohio	—	1	4	43	39	—	2	10	84	76	—	3	14	86	132
Wisconsin	—	0	4	7	26	—	0	3	12	25	—	0	3	8	29
W.N. Central	3	2	18	103	90	3	2	15	77	94	2	1	16	46	52
Iowa	—	0	4	25	8	—	0	3	14	14	—	0	2	6	10
Kansas	—	0	1	2	22	—	0	1	5	8	—	0	3	2	4
Minnesota	3	0	17	49	9	1	0	13	14	12	—	0	11	14	11
Missouri	—	0	2	15	30	2	0	5	33	50	1	0	2	17	16
Nebraska [§]	—	0	2	7	12	—	0	3	8	7	1	0	1	4	7
North Dakota	—	0	3	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	—	0	1	5	9	—	0	1	3	3	—	0	1	3	4
S. Atlantic	10	10	27	314	323	6	21	56	609	756	9	7	25	209	254
Delaware	—	0	1	3	11	—	0	3	10	32	—	0	2	5	7
District of Columbia	—	0	5	14	4	—	0	2	1	5	—	0	4	1	14
Florida	6	3	11	92	122	5	7	14	227	265	4	2	9	85	97
Georgia	—	1	4	42	40	—	3	10	70	127	—	1	2	14	16
Maryland [§]	2	1	6	53	34	1	2	7	62	102	2	1	8	41	53
North Carolina	2	0	11	37	60	—	0	16	79	94	2	1	4	29	22
South Carolina [§]	—	0	4	12	14	—	1	5	41	56	—	0	2	9	3
Virginia [§]	—	1	5	56	34	—	2	8	88	35	—	1	4	21	35
West Virginia	—	0	1	5	4	—	0	23	31	40	1	0	4	4	7
E.S. Central	—	2	7	60	84	2	6	17	203	206	3	2	7	63	57
Alabama [§]	—	0	2	10	9	2	2	10	71	64	—	0	1	7	8
Kentucky	—	0	2	11	28	—	1	7	39	45	2	1	6	31	17
Mississippi	—	0	4	6	5	—	0	8	14	8	—	0	1	—	3
Tennessee [§]	—	1	5	33	42	—	3	8	79	89	1	1	4	25	29
W.S. Central	3	6	43	125	221	12	18	170	482	511	2	1	16	59	50
Arkansas [§]	—	0	2	8	38	—	1	7	37	43	—	0	3	4	3
Louisiana	—	1	4	18	12	—	1	4	46	41	—	0	1	2	10
Oklahoma	—	0	3	3	4	1	1	25	21	20	—	0	6	4	1
Texas [§]	3	4	39	96	167	11	14	135	378	407	2	1	13	49	36
Mountain	2	5	15	144	174	2	3	9	115	95	1	2	8	55	70
Arizona	—	3	11	98	96	—	0	3	40	—	1	0	4	15	24
Colorado	1	1	3	20	29	1	0	2	20	27	—	0	2	11	14
Idaho [§]	—	0	1	2	8	—	0	2	8	10	—	0	3	4	6
Montana [§]	—	0	3	6	6	—	0	3	—	—	—	0	1	3	3
Nevada [§]	1	0	2	8	9	1	1	5	27	25	—	0	2	6	4
New Mexico [§]	—	0	2	5	12	—	0	2	7	15	—	0	2	5	3
Utah	—	0	1	3	12	—	0	4	13	18	—	0	2	8	16
Wyoming [§]	—	0	1	2	2	—	0	1	—	—	—	0	1	3	—
Pacific	13	13	92	427	744	6	10	106	310	317	1	2	11	74	58
Alaska	—	0	1	2	1	—	0	3	4	3	—	0	1	—	—
California	9	10	40	373	706	4	7	31	230	259	—	1	11	56	58
Hawaii	—	0	1	3	9	—	0	1	1	5	—	0	1	1	—
Oregon [§]	—	1	2	20	28	1	1	5	43	50	—	0	1	5	—
Washington	4	0	52	29	—	1	0	74	32	—	1	0	2	12	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	1	10	38	35	—	1	9	41	38	—	0	2	3	1
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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

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

* Incidence data for reporting years 2006 and 2007 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 August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	372	232	981	9,825	12,737	17	22	105	623	879	10	19	87	688	783
New England	163	39	272	1,837	3,058	1	1	5	29	39	—	1	3	32	33
Connecticut	116	12	214	1,146	1,225	—	0	3	1	10	—	0	1	6	9
Maine§	41	3	38	148	57	1	0	1	5	3	—	0	3	5	3
Massachusetts	—	1	52	21	1,212	—	0	3	16	18	—	0	2	17	16
New Hampshire	5	6	55	445	502	—	0	4	6	7	—	0	1	—	3
Rhode Island§	—	0	93	3	1	—	0	1	—	—	—	0	1	1	—
Vermont§	1	1	16	74	61	—	0	1	1	1	—	0	1	3	2
Mid. Atlantic	175	132	473	5,214	6,421	3	5	18	143	215	1	2	8	96	127
New Jersey	3	27	60	888	1,915	—	0	5	—	66	—	0	2	10	14
New York (Upstate)	110	50	426	1,755	2,052	2	1	7	37	19	—	1	3	25	29
New York City	—	1	12	40	210	—	3	8	87	103	1	0	4	25	48
Pennsylvania	62	44	241	2,531	2,244	1	1	4	19	27	—	1	5	36	36
E.N. Central	—	6	41	162	1,451	—	2	10	62	98	—	3	9	91	113
Illinois	—	0	6	33	95	—	1	6	25	48	—	0	3	25	30
Indiana	—	0	4	21	16	—	0	2	5	8	—	0	4	17	15
Michigan	—	1	6	29	36	—	0	2	9	15	—	0	3	17	21
Ohio	—	0	4	9	33	—	0	2	15	19	—	1	3	24	31
Wisconsin	—	3	31	70	1,271	—	0	3	8	8	—	0	3	8	16
W.N. Central	—	5	195	274	326	—	0	12	22	29	—	1	5	40	45
Iowa	—	1	10	66	83	—	0	1	2	1	—	0	3	10	11
Kansas	—	0	2	10	3	—	0	1	2	5	—	0	1	1	2
Minnesota	—	1	188	177	230	—	0	12	11	14	—	0	3	12	10
Missouri	—	0	4	14	2	—	0	1	2	5	—	0	3	10	13
Nebraska§	—	0	2	5	7	—	0	1	4	2	—	0	1	2	6
North Dakota	—	0	7	2	—	—	0	1	—	1	—	0	3	2	1
South Dakota	—	0	0	—	1	—	0	1	1	1	—	0	1	3	2
S. Atlantic	25	48	147	2,149	1,382	5	5	13	149	230	2	3	11	108	135
Delaware	6	9	33	464	347	—	0	1	3	5	—	0	1	1	4
District of Columbia	—	0	7	13	27	—	0	2	3	3	—	0	1	—	1
Florida	3	1	4	35	13	5	1	7	36	35	1	1	7	41	52
Georgia	—	0	1	1	7	—	0	5	19	69	—	0	3	10	10
Maryland§	15	26	108	1,130	810	—	1	5	36	53	—	0	2	18	9
North Carolina	1	0	6	31	19	—	0	4	16	17	—	0	6	14	23
South Carolina§	—	0	2	14	10	—	0	1	5	8	—	0	2	10	16
Virginia§	—	10	59	422	144	—	1	3	29	38	—	0	2	12	15
West Virginia	—	0	14	39	5	—	0	1	2	2	1	0	2	2	5
E.S. Central	2	1	5	36	20	1	0	3	23	20	1	1	4	35	29
Alabama§	—	0	3	9	6	—	0	2	4	8	—	0	2	6	4
Kentucky	—	0	2	3	3	1	0	1	5	3	—	0	2	7	7
Mississippi	—	0	0	—	3	—	0	1	1	4	—	0	4	9	3
Tennessee§	2	0	4	24	8	—	0	2	13	5	1	0	2	13	15
W.S. Central	1	1	5	39	13	—	2	29	59	58	1	2	15	75	75
Arkansas§	—	0	0	—	—	—	0	2	—	2	—	0	2	8	8
Louisiana	—	0	1	2	—	—	0	2	13	4	—	0	4	24	29
Oklahoma	—	0	0	—	—	—	0	3	5	6	—	0	4	14	8
Texas§	1	1	5	37	13	—	1	25	41	46	1	0	11	29	30
Mountain	1	1	3	24	13	1	1	6	34	48	1	1	4	44	49
Arizona	—	0	1	—	5	—	0	3	5	17	—	0	2	8	13
Colorado	—	0	1	1	—	1	0	2	12	12	—	0	2	16	15
Idaho§	—	0	2	7	1	—	0	2	2	—	—	0	1	3	2
Montana§	—	0	1	1	—	—	0	1	3	1	—	0	1	1	3
Nevada§	1	0	2	7	1	—	0	1	2	2	1	0	1	4	4
New Mexico§	—	0	1	3	3	—	0	1	1	5	—	0	1	2	2
Utah	—	0	2	3	2	—	0	3	9	11	—	0	2	8	6
Wyoming§	—	0	1	2	1	—	0	0	—	—	—	0	1	2	4
Pacific	5	2	16	90	53	6	3	45	102	142	4	4	48	167	177
Alaska	1	0	1	4	2	—	0	1	2	21	—	0	1	1	3
California	4	2	10	85	47	6	2	7	70	105	3	3	10	121	139
Hawaii	N	0	0	N	N	—	0	1	2	8	—	0	1	4	5
Oregon§	—	0	1	1	4	—	0	3	12	8	—	0	3	24	30
Washington	—	0	8	—	—	—	0	43	16	—	1	0	43	17	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	2	—	—	0	1	6	5
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—

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

U: Unavailable. —: Not reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	123	179	1,479	5,185	8,772	58	93	171	2,817	3,389	58	32	211	1,000	1,252
New England	—	32	77	752	992	9	12	22	366	252	—	0	10	—	9
Connecticut	—	2	6	33	64	4	5	11	145	110	—	0	0	—	—
Maine†	—	2	15	40	49	1	2	8	51	62	—	0	0	—	—
Massachusetts	—	22	46	613	629	—	0	0	—	—	—	0	1	—	8
New Hampshire	—	2	9	36	143	1	1	4	32	25	—	0	0	—	1
Rhode Island†	—	0	31	4	25	—	0	3	25	17	—	0	9	—	—
Vermont†	—	1	9	26	82	3	2	13	113	38	—	0	0	—	—
Mid. Atlantic	19	28	155	740	1,092	—	13	44	424	312	—	1	6	35	62
New Jersey	—	2	16	77	195	—	0	0	—	—	—	0	3	3	31
New York (Upstate)	19	16	146	393	453	—	—	—	—	—	—	0	1	3	—
New York City	—	2	6	76	63	—	1	5	32	14	—	0	3	15	17
Pennsylvania	—	7	20	194	381	—	12	44	392	298	—	0	3	14	14
E.N. Central	2	35	80	938	1,279	8	2	21	158	104	—	1	9	25	48
Illinois	—	4	23	88	319	7	1	8	58	27	—	0	3	16	23
Indiana	2	1	45	41	138	1	0	1	8	8	—	0	1	3	4
Michigan	—	8	39	159	287	—	1	11	55	36	—	0	1	3	2
Ohio	—	14	54	451	384	—	0	9	37	33	—	0	4	3	18
Wisconsin	—	5	24	199	151	—	0	0	—	—	—	0	0	—	1
W.N. Central	34	14	151	405	829	6	5	17	179	205	3	3	12	120	127
Iowa	—	4	16	101	208	—	0	7	21	39	—	0	1	7	4
Kansas	2	3	14	96	165	1	2	8	88	53	—	0	1	2	—
Minnesota	31	0	119	90	132	1	0	5	18	31	—	0	2	1	1
Missouri	—	2	10	45	210	3	0	6	26	38	3	2	12	99	104
Nebraska†	1	1	4	29	75	—	0	0	—	—	—	0	2	8	18
North Dakota	—	0	18	4	20	1	0	6	13	14	—	0	0	—	—
South Dakota	—	0	6	40	19	—	0	2	13	30	—	0	1	3	—
S. Atlantic	22	19	163	603	701	24	40	63	1,277	1,512	24	13	67	533	696
Delaware	—	0	2	7	3	—	0	0	—	—	—	0	2	7	17
District of Columbia	—	0	2	2	3	—	0	0	—	—	—	0	1	1	1
Florida	6	4	18	155	135	—	0	28	80	176	—	0	4	12	8
Georgia	—	1	5	21	62	—	4	23	141	174	—	0	5	14	32
Maryland†	—	2	8	70	97	—	6	12	182	279	—	1	7	39	52
North Carolina	13	2	112	213	131	9	9	19	320	321	22	6	61	357	499
South Carolina†	—	2	9	52	114	—	2	11	46	103	2	1	7	39	24
Virginia†	3	2	17	71	133	11	13	31	462	392	—	2	12	62	60
West Virginia	—	0	19	12	23	4	1	8	46	67	—	0	1	2	3
E.S. Central	—	5	24	150	212	—	4	11	99	161	1	5	27	156	212
Alabama†	—	1	18	42	40	—	0	8	—	51	1	1	9	43	55
Kentucky	—	0	3	5	47	—	0	3	14	14	—	0	2	4	1
Mississippi	—	0	10	40	21	—	0	0	—	4	—	0	1	2	3
Tennessee†	—	2	7	63	104	—	2	7	85	92	—	3	22	107	153
W.S. Central	7	20	226	576	500	—	2	35	68	592	28	1	168	105	68
Arkansas†	3	2	17	112	55	—	0	5	23	24	14	0	53	41	34
Louisiana	—	0	2	13	19	—	0	1	—	3	—	0	1	2	1
Oklahoma	—	0	36	4	18	—	0	22	45	48	11	0	108	45	21
Texas†	4	17	174	447	408	—	0	34	—	517	3	0	7	17	12
Mountain	19	24	61	696	1,838	6	3	28	112	114	2	0	4	22	28
Arizona	—	6	13	148	377	4	2	10	77	87	1	0	2	2	7
Colorado	10	6	17	193	580	—	0	0	—	—	—	0	1	1	4
Idaho†	3	1	6	31	56	—	0	24	—	—	1	0	3	4	4
Montana†	—	1	7	31	86	—	0	2	9	10	—	0	1	1	2
Nevada†	3	0	5	9	56	—	0	2	2	2	—	0	0	—	—
New Mexico†	—	2	8	40	64	—	0	2	8	7	—	0	1	4	5
Utah	3	8	47	229	562	2	0	1	8	6	—	0	0	—	—
Wyoming†	—	1	5	15	57	—	0	2	8	2	—	0	2	10	6
Pacific	20	13	547	325	1,329	5	4	13	134	137	—	0	1	4	2
Alaska	4	1	8	37	51	1	0	6	35	14	N	0	0	N	N
California	—	6	167	99	1,114	4	3	12	93	111	—	0	1	2	—
Hawaii	—	0	2	14	79	N	0	0	N	N	N	0	0	N	N
Oregon†	—	1	11	59	85	—	0	3	6	12	—	0	1	2	2
Washington	16	1	377	116	—	—	0	0	—	—	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	7	—	43	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	—	1	1	1	5	35	58	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.
 U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Incidence data for reporting years 2006 and 2007 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 August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]					Shigellosis				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	473	850	2,338	23,201	24,593	84	77	336	2,198	2,120	159	331	1,287	8,871	7,311
New England	6	38	262	1,310	1,523	1	3	39	146	202	—	4	24	135	195
Connecticut	—	0	247	247	503	—	0	34	34	75	—	0	21	21	67
Maine [§]	5	3	14	75	77	1	0	4	21	22	—	0	5	13	3
Massachusetts	—	23	60	775	736	—	1	10	74	71	—	3	11	91	113
New Hampshire	1	3	15	104	125	—	0	3	8	19	—	0	2	4	4
Rhode Island [§]	—	2	20	58	46	—	0	2	3	2	—	0	3	4	5
Vermont [§]	—	2	6	51	36	—	0	3	6	13	—	0	2	2	3
Mid. Atlantic	62	96	186	2,955	3,156	15	8	63	220	276	19	11	47	390	616
New Jersey	—	12	41	219	689	—	1	20	11	85	—	1	5	33	246
New York (Upstate)	34	29	112	844	687	12	3	15	103	90	9	3	42	83	153
New York City	6	24	42	767	778	—	0	4	22	31	—	5	12	145	163
Pennsylvania	22	33	65	1,125	1,002	3	3	47	84	70	10	2	21	129	54
E.N. Central	17	104	180	3,237	3,455	3	9	63	266	323	10	32	83	1,130	788
Illinois	—	30	105	992	1,026	—	1	8	29	62	—	11	53	279	339
Indiana	15	15	55	445	460	3	1	8	41	42	10	2	17	59	85
Michigan	—	18	35	502	633	—	1	6	44	54	—	1	4	33	113
Ohio	—	25	67	811	758	—	3	18	77	85	—	6	68	619	102
Wisconsin	2	16	49	487	578	—	2	41	75	80	—	4	13	140	149
W.N. Central	38	49	102	1,573	1,558	16	12	45	379	378	11	44	156	1,236	993
Iowa	—	9	26	281	270	—	2	38	81	86	—	2	14	48	62
Kansas	7	7	20	245	215	1	0	4	32	18	1	1	10	19	77
Minnesota	7	13	44	405	390	7	4	26	138	97	4	5	24	155	73
Missouri	17	14	31	389	451	6	2	9	63	115	5	18	72	897	473
Nebraska [§]	4	4	11	133	123	2	1	11	45	35	—	1	14	14	78
North Dakota	3	0	23	22	17	—	0	12	1	2	1	0	127	5	30
South Dakota	—	2	11	98	92	—	0	5	19	25	—	4	30	98	200
S. Atlantic	163	216	401	5,911	6,080	11	15	37	399	323	39	85	174	2,930	1,681
Delaware	2	3	10	89	84	—	0	3	10	6	—	0	1	7	6
District of Columbia	—	0	4	16	36	—	0	1	1	1	—	0	5	4	8
Florida	112	85	176	2,406	2,543	5	2	8	97	53	35	46	76	1,586	776
Georgia	—	31	73	965	984	—	2	6	48	51	—	34	92	1,074	602
Maryland [§]	16	15	32	496	424	3	2	10	62	55	3	2	9	64	74
North Carolina	18	29	130	788	814	2	2	24	81	56	—	1	14	49	101
South Carolina [§]	10	17	51	514	568	—	0	2	10	8	1	1	6	68	71
Virginia [§]	—	20	58	528	570	—	3	11	80	89	—	2	9	71	41
West Virginia	5	1	31	109	57	1	0	5	10	4	—	0	6	7	2
E.S. Central	38	56	136	1,562	1,567	7	4	25	159	173	23	21	89	909	399
Alabama [§]	18	14	78	452	463	3	0	18	50	15	6	8	67	355	117
Kentucky	10	9	23	323	266	1	1	8	48	49	14	3	32	227	156
Mississippi	—	11	101	293	407	—	0	3	2	6	—	3	76	206	48
Tennessee [§]	10	18	34	494	431	3	2	8	59	103	3	3	14	121	78
W.S. Central	29	86	595	2,090	2,636	1	4	73	110	111	5	39	655	936	1,056
Arkansas [§]	6	15	45	367	472	—	1	7	19	20	1	2	10	65	56
Louisiana	—	17	48	376	585	—	0	2	3	12	—	8	25	279	101
Oklahoma	23	8	103	273	260	—	0	17	14	10	4	2	63	70	69
Texas [§]	—	44	470	1,074	1,319	1	2	68	74	69	—	22	580	522	830
Mountain	35	45	90	1,343	1,618	25	8	34	292	275	15	18	84	481	646
Arizona	12	13	44	380	474	1	2	9	69	49	9	9	37	257	342
Colorado	13	10	21	337	431	9	1	7	52	70	2	3	15	68	107
Idaho [§]	4	3	8	82	111	7	2	16	82	48	—	0	2	8	12
Montana [§]	—	2	6	53	88	—	0	0	—	—	—	0	13	14	6
Nevada [§]	1	4	10	123	134	—	0	5	16	18	3	1	20	25	62
New Mexico [§]	—	5	15	142	166	—	1	4	23	27	—	2	15	64	78
Utah	5	4	14	179	179	8	1	14	50	53	—	1	4	16	35
Wyoming [§]	—	1	4	47	35	—	0	3	—	10	1	1	19	29	4
Pacific	85	111	890	3,220	3,000	5	5	164	227	59	37	29	256	724	937
Alaska	4	1	5	54	50	N	0	0	N	N	—	0	2	7	6
California	62	94	260	2,415	2,547	2	1	15	125	N	33	24	84	584	816
Hawaii	1	5	16	161	142	—	0	3	15	11	1	0	3	17	27
Oregon [§]	2	7	17	200	259	1	1	9	37	48	—	1	6	46	88
Washington	16	5	625	390	2	2	0	162	50	—	3	1	170	70	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
Puerto Rico	3	14	66	378	304	—	0	0	—	—	—	0	4	17	29
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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

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

* Incidence data for reporting years 2006 and 2007 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 August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	Streptococcal disease, invasive, group A					<i>Streptococcus pneumoniae</i> , invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max		
United States	31	93	261	3,455	3,805	7	30	110	1,040	865
New England	—	6	27	285	251	—	3	11	76	72
Connecticut	—	0	23	91	68	—	0	6	—	23
Maine§	—	0	3	21	15	—	0	1	1	—
Massachusetts	—	3	12	131	127	—	2	6	58	42
New Hampshire	—	0	4	27	28	—	0	2	7	6
Rhode Island§	—	0	12	—	4	—	0	3	8	1
Vermont§	—	0	2	15	9	—	0	1	2	—
Mid. Atlantic	1	16	41	659	710	—	5	27	170	125
New Jersey	—	2	9	89	121	—	1	4	21	46
New York (Upstate)	—	5	27	222	229	—	2	15	75	65
New York City	—	3	12	154	129	—	1	25	74	14
Pennsylvania	1	5	11	194	231	N	0	0	N	N
E.N. Central	3	16	32	599	748	1	5	14	160	233
Illinois	—	4	13	149	228	—	1	6	38	61
Indiana	3	2	17	99	88	1	0	10	15	42
Michigan	—	3	10	151	157	—	1	4	55	54
Ohio	—	3	14	174	191	—	1	7	44	46
Wisconsin	—	1	6	26	84	—	0	2	8	30
W.N. Central	1	5	32	233	248	1	2	8	73	68
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	3	28	45	—	0	1	1	11
Minnesota	—	0	29	116	116	—	1	6	51	38
Missouri	—	2	6	53	49	—	0	2	13	11
Nebraska§	—	0	3	18	22	1	0	2	7	5
North Dakota	1	0	2	11	8	—	0	2	1	3
South Dakota	—	0	2	7	8	—	0	0	—	—
S. Atlantic	13	21	52	861	836	1	3	14	191	56
Delaware	—	0	2	7	7	—	0	0	—	—
District of Columbia	—	0	3	8	9	—	0	1	—	—
Florida	6	6	16	207	195	—	0	5	41	—
Georgia	—	5	12	160	174	—	0	5	44	—
Maryland§	1	4	10	156	157	—	1	6	46	46
North Carolina	6	0	22	126	126	—	0	0	—	—
South Carolina§	—	1	7	74	53	—	0	3	25	—
Virginia§	—	2	11	103	95	—	0	4	28	—
West Virginia	—	0	3	20	20	1	0	4	7	10
E.S. Central	3	4	13	158	155	2	1	6	62	15
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	32	36	—	0	0	—	—
Mississippi	N	0	0	N	N	—	0	2	3	15
Tennessee§	3	3	13	126	119	2	0	6	59	—
W.S. Central	5	6	90	224	283	1	4	45	150	143
Arkansas§	—	0	2	17	21	—	0	2	7	17
Louisiana	—	0	4	16	13	—	0	4	24	17
Oklahoma	—	1	23	53	72	1	1	15	37	29
Texas§	5	3	64	138	177	—	1	27	82	80
Mountain	3	9	20	344	502	1	4	12	134	138
Arizona	—	4	11	105	261	1	2	7	77	78
Colorado	—	3	9	115	87	—	1	4	32	35
Idaho§	1	0	2	10	7	—	0	1	2	1
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	2	—	—	0	1	1	2
New Mexico§	—	1	5	36	95	—	0	4	18	22
Utah	2	2	7	71	49	—	0	2	4	—
Wyoming§	—	0	1	5	3	—	0	0	—	—
Pacific	2	3	9	92	72	—	1	4	24	15
Alaska	2	0	3	25	N	—	0	2	22	—
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	9	67	72	—	0	2	2	15
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U

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

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

* Incidence data for reporting years 2006 and 2007 are provisional.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	<i>Streptococcus pneumoniae</i> , invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	9	47	256	1,547	1,674	3	8	35	277	256	136	198	310	6,230	5,886
New England	—	1	12	34	93	—	0	3	6	2	5	4	13	150	138
Connecticut	—	0	5	—	70	—	0	0	—	—	1	0	10	22	28
Maine§	—	0	2	9	6	—	0	2	1	1	—	0	1	3	7
Massachusetts	—	0	0	—	—	—	0	0	—	—	2	2	8	89	85
New Hampshire	—	0	0	—	—	—	0	0	—	—	1	0	3	21	9
Rhode Island§	—	0	4	14	8	—	0	1	3	—	1	0	5	14	7
Vermont§	—	0	2	11	9	—	0	1	2	1	—	0	1	1	2
Mid. Atlantic	2	2	9	91	104	—	0	5	22	14	14	27	45	984	716
New Jersey	—	0	0	—	—	—	0	0	—	—	2	4	8	114	110
New York (Upstate)	2	1	5	32	33	—	0	4	8	7	6	3	14	88	92
New York City	—	0	0	—	—	—	0	0	—	—	—	16	35	611	339
Pennsylvania	—	1	6	59	71	—	0	2	14	7	6	5	10	171	175
E.N. Central	1	9	40	381	367	—	1	7	49	56	3	15	27	493	565
Illinois	—	0	4	13	19	—	0	1	2	5	—	7	15	231	285
Indiana	1	2	31	99	96	—	0	5	13	15	—	1	6	34	51
Michigan	—	0	1	2	15	—	0	1	1	2	—	2	8	74	70
Ohio	—	5	38	267	237	—	1	5	33	34	2	3	9	113	119
Wisconsin	N	0	0	N	N	—	0	0	—	—	1	1	4	41	40
W.N. Central	1	2	124	108	30	—	0	15	7	1	8	6	14	214	184
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	10	13
Kansas	1	0	10	60	—	—	0	2	3	—	2	0	3	14	15
Minnesota	—	0	123	—	—	—	0	15	—	—	—	1	5	50	34
Missouri	—	1	5	40	29	—	0	1	—	1	6	3	12	135	112
Nebraska§	—	0	1	2	—	—	0	0	—	—	—	0	2	2	3
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota	—	0	3	6	1	—	0	1	4	—	—	0	2	3	6
S. Atlantic	4	21	59	698	806	2	4	15	141	123	47	46	180	1,435	1,303
Delaware	—	0	1	5	—	—	0	1	2	—	1	0	3	8	16
District of Columbia	—	0	2	5	19	—	0	0	—	—	2	2	12	111	74
Florida	4	11	29	409	427	2	2	8	82	79	17	15	25	508	472
Georgia	—	7	17	231	270	—	1	10	49	42	—	7	153	200	210
Maryland§	—	0	1	1	—	—	0	0	—	—	10	6	15	195	195
North Carolina	—	0	0	—	—	—	0	0	—	—	6	5	23	212	189
South Carolina§	—	0	0	—	—	—	0	0	—	—	2	1	10	62	45
Virginia§	N	0	0	N	N	—	0	0	—	—	9	4	17	134	98
West Virginia	—	1	17	47	90	—	0	1	8	—	—	0	2	5	4
E.S. Central	1	3	9	106	139	1	0	3	22	24	12	16	29	517	421
Alabama§	N	0	0	N	N	—	0	0	—	—	3	6	15	199	183
Kentucky	—	0	2	17	26	—	0	1	2	6	—	1	7	38	42
Mississippi	—	0	2	—	18	—	0	0	—	—	4	2	9	65	41
Tennessee§	1	2	8	89	95	1	0	3	20	18	5	6	14	215	155
W.S. Central	—	1	10	90	63	—	0	3	15	6	41	32	55	1,067	929
Arkansas§	—	0	1	1	9	—	0	0	—	—	—	1	8	70	45
Louisiana	—	1	3	45	54	—	0	2	6	4	11	7	29	257	152
Oklahoma	—	0	8	44	—	—	0	2	9	—	—	1	4	35	41
Texas§	—	0	0	—	—	—	0	0	—	—	30	21	38	705	691
Mountain	—	1	5	39	72	—	0	3	14	30	6	7	20	210	327
Arizona	—	0	0	—	—	—	0	0	—	—	—	3	12	83	129
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	22	50
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	1	2
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	1	1	1
Nevada§	—	0	3	16	15	—	0	2	5	1	6	2	12	67	91
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	1	7	31	44
Utah	—	0	5	13	29	—	0	3	8	21	—	0	2	4	10
Wyoming§	—	0	2	10	28	—	0	1	1	8	—	0	1	1	—
Pacific	—	0	0	—	—	—	0	1	1	—	—	38	57	1,160	1,303
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	4	6
California	N	0	0	N	N	—	0	0	—	—	—	36	54	1,065	1,145
Hawaii	—	0	0	—	—	—	0	1	1	—	—	0	1	5	14
Oregon§	N	0	0	N	N	—	0	0	—	—	—	0	6	11	13
Washington	N	0	0	N	N	—	0	0	—	—	—	2	11	75	125
American Samoa	U	0	0	U	U	U	0	1	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	N	0	0	N	N	—	0	0	—	—	—	0	1	3	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	3	3	11	95	89
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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

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

* Incidence data for reporting years 2006 and 2007 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 August 18, 2007, and August 19, 2006 (33rd Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Neuroinvasive					Nonneuroinvasive§				
		Med	Max			Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
							Med	Max				Med	Max		
United States	116	795	2,813	24,780	31,416	2	1	178	179	848	6	2	383	397	1,649
New England	1	18	124	478	3,147	—	0	3	2	2	—	0	2	—	1
Connecticut	—	0	76	1	1,105	—	0	3	2	2	—	0	1	—	1
Maine¶	—	0	7	—	170	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	2	—	1,140	—	0	1	—	—	—	0	1	—	—
New Hampshire	1	8	17	212	241	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Vermont¶	—	9	66	265	491	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	36	110	195	3,078	3,334	—	0	11	1	11	—	0	2	—	7
New Jersey	N	0	0	N	N	—	0	2	—	2	—	0	1	—	1
New York (Upstate)	N	0	0	N	N	—	0	5	—	2	—	0	1	—	2
New York City	—	0	0	—	—	—	0	4	—	3	—	0	1	—	3
Pennsylvania	36	110	195	3,078	3,334	—	0	2	1	4	—	0	0	—	1
E.N. Central	1	229	568	7,053	10,354	—	0	42	9	81	—	0	33	3	69
Illinois	1	2	11	98	94	—	0	24	8	52	—	0	22	3	45
Indiana	—	0	0	—	—	—	0	5	—	9	—	0	12	—	12
Michigan	—	97	258	2,861	3,075	—	0	10	—	7	—	0	4	—	3
Ohio	—	107	449	3,309	6,434	—	0	11	1	7	—	0	3	—	3
Wisconsin	—	19	80	785	751	—	0	2	—	6	—	0	2	—	6
W.N. Central	5	32	136	1,214	1,250	1	0	37	52	137	—	0	75	146	320
Iowa	N	0	0	N	N	—	0	3	1	11	—	0	4	2	11
Kansas	—	9	52	430	237	—	0	2	3	13	—	0	2	3	9
Minnesota	—	0	0	—	—	—	0	7	11	18	—	0	6	13	24
Missouri	5	16	78	640	945	—	0	14	2	27	—	0	2	3	4
Nebraska¶	N	0	0	N	N	—	0	9	2	31	—	0	38	25	117
North Dakota	—	0	60	84	34	—	0	4	8	13	—	0	24	44	98
South Dakota	—	2	15	60	34	1	0	8	25	24	—	0	12	56	57
S. Atlantic	10	96	239	3,244	3,063	—	0	2	6	9	—	0	7	4	1
Delaware	—	1	6	24	45	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	8	14	24	—	0	0	—	—	—	0	1	—	1
Florida	7	16	81	813	N	—	0	1	3	3	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	2	2	—	0	4	4	—
Maryland¶	N	0	0	N	N	—	0	2	—	3	—	0	1	—	—
North Carolina	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Carolina¶	—	18	72	695	805	—	0	1	—	—	—	0	0	—	—
Virginia¶	2	26	190	961	1,158	—	0	1	1	—	—	0	2	—	—
West Virginia	1	23	50	737	1,031	—	0	0	—	1	—	0	0	—	—
E.S. Central	3	3	571	337	27	—	0	15	12	67	—	0	17	10	49
Alabama¶	3	3	571	335	26	—	0	2	5	5	—	0	1	2	—
Kentucky	N	0	0	N	N	—	0	2	1	—	—	0	1	—	—
Mississippi	—	0	2	2	1	—	0	10	6	54	—	0	16	8	47
Tennessee¶	N	0	0	N	N	—	0	5	—	8	—	0	2	—	2
W.S. Central	46	181	1,640	7,501	8,369	—	0	36	17	259	—	0	26	9	121
Arkansas¶	18	13	105	530	608	—	0	5	3	18	—	0	1	—	5
Louisiana	—	2	11	91	181	—	0	12	1	53	—	0	10	1	44
Oklahoma	—	0	0	—	—	—	0	3	4	17	—	0	4	4	7
Texas¶	28	163	1,534	6,880	7,580	—	0	17	9	171	—	0	16	4	65
Mountain	14	56	131	1,850	1,872	—	0	53	37	233	1	1	211	148	907
Arizona	—	0	0	—	—	—	0	10	10	6	—	0	14	6	6
Colorado	8	22	62	707	985	—	0	11	10	33	—	0	51	62	154
Idaho¶	N	0	0	N	N	—	0	25	1	116	1	0	114	23	583
Montana¶	—	5	40	285	N	—	0	2	1	7	—	0	8	5	16
Nevada¶	—	0	1	1	9	—	0	5	1	30	—	0	17	2	67
New Mexico¶	1	6	37	291	301	—	0	3	6	1	—	0	2	5	2
Utah	5	15	73	548	544	—	0	8	2	34	—	0	17	2	57
Wyoming¶	—	0	11	18	33	—	0	7	6	6	—	0	16	43	22
Pacific	—	0	9	25	—	1	0	13	43	49	5	0	32	77	174
Alaska	—	0	9	25	N	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	N	1	0	13	43	46	5	0	22	77	129
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	3	—	0	10	—	43
Washington	N	0	0	N	N	—	0	0	—	—	—	0	1	—	2
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	6	30	130	159	—	0	0	—	—	—	0	0	—	—
Puerto Rico	1	13	31	460	381	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.
 U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 † Incidence data for reporting years 2006 and 2007 are provisional.
 ¶ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
 § Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.
 ¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending August 18, 2007 (33rd Week)

Reporting Area	All causes, by age (years)							Reporting Area	All causes, by age (years)						
	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total		All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total
New England	506	346	109	28	7	16	40	S. Atlantic	1,048	611	273	94	35	35	43
Boston, MA	148	92	35	13	3	5	15	Atlanta, GA	U	U	U	U	U	U	U
Bridgeport, CT	30	24	4	—	—	2	2	Baltimore, MD	153	82	45	15	6	5	10
Cambridge, MA	12	7	3	2	—	—	2	Charlotte, NC	114	71	26	8	2	7	5
Fall River, MA	16	11	3	2	—	—	1	Jacksonville, FL	146	85	43	13	2	3	8
Hartford, CT	38	29	6	1	2	—	1	Miami, FL	139	83	30	12	7	7	6
Lowell, MA	12	9	1	2	—	—	—	Norfolk, VA	57	32	18	6	1	—	1
Lynn, MA	7	3	3	1	—	—	—	Richmond, VA	53	27	16	6	2	2	3
New Bedford, MA	22	17	4	1	—	—	2	Savannah, GA	54	35	12	5	1	1	2
New Haven, CT	51	37	12	—	1	1	9	St. Petersburg, FL	38	26	8	1	1	2	1
Providence, RI	60	46	11	1	—	2	3	Tampa, FL	170	110	38	14	4	4	6
Somerville, MA	3	3	—	—	—	—	—	Washington, D.C.	107	46	34	14	9	4	—
Springfield, MA	37	20	8	3	—	6	1	Wilmington, DE	17	14	3	—	—	—	1
Waterbury, CT	23	12	10	—	1	—	1	E.S. Central	767	489	188	55	20	15	58
Worcester, MA	47	36	9	2	—	—	3	Birmingham, AL	146	87	37	11	4	7	10
Mid. Atlantic	1,959	1,371	365	128	55	39	89	Chattanooga, TN	61	42	15	2	1	1	3
Albany, NY	66	43	14	6	1	2	4	Knoxville, TN	84	56	21	6	1	—	11
Allentown, PA	28	23	3	—	2	—	1	Lexington, KY	62	48	7	5	1	1	3
Buffalo, NY	91	55	23	9	3	1	9	Memphis, TN	138	82	40	11	3	2	9
Camden, NJ	44	28	7	3	1	5	1	Mobile, AL	71	50	12	7	1	1	7
Elizabeth, NJ	18	8	9	1	—	—	1	Montgomery, AL	55	35	19	1	—	—	3
Erie, PA	47	39	5	1	1	1	4	Nashville, TN	150	89	37	12	9	3	12
Jersey City, NJ	13	6	5	2	—	—	2	W.S. Central	1,392	866	324	114	46	42	71
New York City, NY	945	656	204	51	21	13	25	Austin, TX	83	59	17	7	—	—	6
Newark, NJ	37	18	7	8	4	—	1	Baton Rouge, LA	64	41	14	3	2	4	—
Paterson, NJ	20	9	4	—	1	6	1	Corpus Christi, TX	59	45	6	3	2	3	2
Philadelphia, PA	295	231	20	22	13	8	14	Dallas, TX	195	105	39	26	10	15	10
Pittsburgh, PA [§]	22	15	2	3	2	—	1	El Paso, TX	71	53	13	3	2	—	3
Reading, PA	32	24	6	2	—	—	4	Fort Worth, TX	131	94	23	8	3	3	13
Rochester, NY	107	81	18	6	—	2	6	Houston, TX	378	202	123	33	13	7	16
Schenectady, NY	20	11	5	4	—	—	—	Little Rock, AR	54	31	14	6	1	2	—
Scranton, PA	31	26	5	—	—	—	—	New Orleans, LA [¶]	U	U	U	U	U	U	U
Syracuse, NY	95	62	19	8	5	1	14	San Antonio, TX	178	115	36	16	8	3	11
Trenton, NJ	23	15	7	1	—	—	—	Shreveport, LA	46	40	5	—	1	—	1
Utica, NY	10	6	2	1	1	—	—	Tulsa, OK	133	81	34	9	4	5	9
Yonkers, NY	15	15	—	—	—	—	1	Mountain	815	495	193	63	27	35	38
E.N. Central	1,913	1,237	465	126	45	37	103	Albuquerque, NM	90	54	25	7	2	2	2
Akron, OH	65	44	17	2	—	2	2	Boise, ID	43	32	5	5	1	—	2
Canton, OH	38	28	9	—	—	1	5	Colorado Springs, CO	43	33	8	2	—	—	1
Chicago, IL	299	174	78	29	11	7	22	Denver, CO	82	54	19	5	—	4	8
Cincinnati, OH	102	64	25	7	4	2	8	Las Vegas, NV	263	151	73	21	6	11	12
Cleveland, OH	198	136	47	10	1	4	9	Ogden, UT	30	21	3	3	3	—	2
Columbus, OH	187	117	53	9	6	2	10	Phoenix, AZ	153	80	37	12	9	14	5
Dayton, OH	108	77	19	9	1	2	4	Pueblo, CO	36	25	8	1	1	1	2
Detroit, MI	159	80	53	17	4	5	8	Salt Lake City, UT	U	U	U	U	U	U	U
Evansville, IN	40	33	6	—	—	1	1	Tucson, AZ	75	45	15	7	5	3	4
Fort Wayne, IN	64	46	14	4	—	—	—	Pacific	1,192	806	263	70	30	23	74
Gary, IN	11	6	2	1	2	—	—	Berkeley, CA	12	7	5	—	—	—	1
Grand Rapids, MI	32	25	7	—	—	—	2	Fresno, CA	142	103	27	7	5	—	10
Indianapolis, IN	186	108	48	16	8	6	12	Glendale, CA	U	U	U	U	U	U	U
Lansing, MI	54	37	11	1	1	1	3	Honolulu, HI	64	51	5	5	—	3	5
Milwaukee, WI	102	77	15	9	—	1	11	Long Beach, CA	56	32	17	4	2	1	2
Peoria, IL	52	34	12	3	2	1	—	Los Angeles, CA	U	U	U	U	U	U	U
Rockford, IL	54	40	12	1	1	—	—	Pasadena, CA	17	16	1	—	—	—	2
South Bend, IN	49	27	16	3	2	1	1	Portland, OR	124	90	24	4	4	2	9
Toledo, OH	75	55	15	3	1	1	3	Sacramento, CA	185	118	47	8	5	7	17
Youngstown, OH	38	29	6	2	1	—	2	San Diego, CA	133	88	30	9	5	1	5
W.N. Central	637	404	142	41	23	26	41	San Francisco, CA	U	U	U	U	U	U	U
Des Moines, IA	78	55	15	8	—	—	8	San Jose, CA	153	102	36	8	3	4	13
Duluth, MN	36	28	8	—	—	—	2	Santa Cruz, CA	33	14	6	8	5	—	—
Kansas City, KS	22	15	4	1	—	2	1	Seattle, WA	114	70	28	11	1	4	1
Kansas City, MO	97	64	20	6	3	4	4	Spokane, WA	63	46	12	4	—	1	4
Lincoln, NE	27	20	6	1	—	—	4	Tacoma, WA	96	69	25	2	—	—	5
Minneapolis, MN	83	38	16	9	5	15	2	Total	10,229**	6,625	2,322	719	288	268	557
Omaha, NE	89	61	21	3	2	2	8								
St. Louis, MO	88	42	27	9	8	1	8								
St. Paul, MN	40	27	7	2	3	1	1								
Wichita, KS	77	54	18	2	2	1	3								

U: Unavailable. —: No reported cases.

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

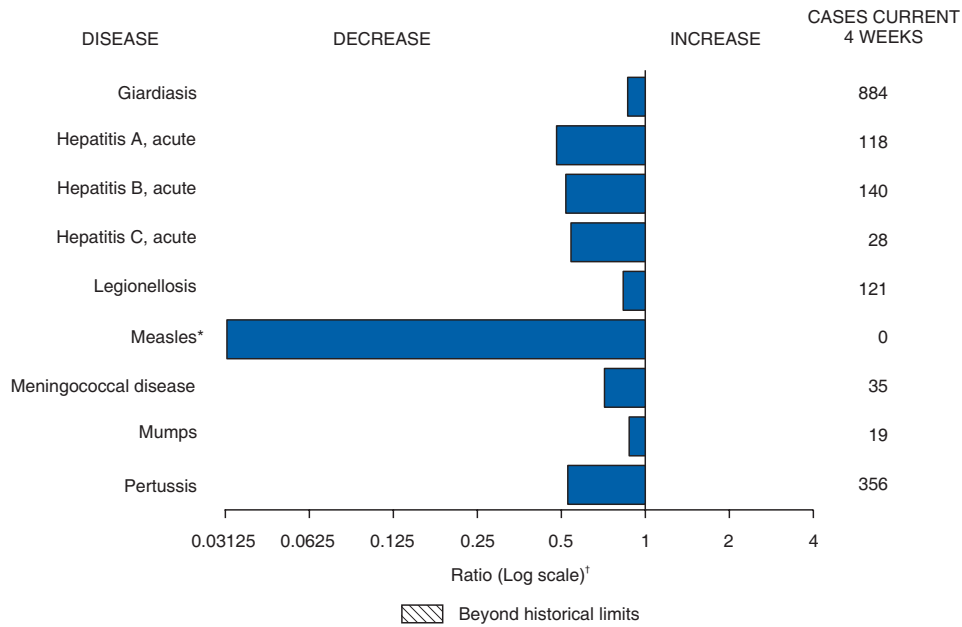
† Pneumonia and influenza.

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

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

** Total includes unknown ages.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 18, 2007, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 33 of zero (0).

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

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