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Severe Methicillin-Resistant *Staphylococcus aureus* Community-Acquired Pneumonia Associated with Influenza — Louisiana and Georgia, December 2006–January 2007

Staphylococcus aureus infection has been reported infrequently as a cause of community-acquired pneumonia (CAP) and typically has been associated with influenza virus infection or influenza-like illness (ILI).* During the 2003–04 influenza season, methicillin-resistant *S. aureus* (MRSA) gained attention as a cause of 15 cases of influenza-associated CAP† (*1*). No formal surveillance has been conducted, and few additional cases of MRSA CAP were reported to CDC during the 2004–05 and 2005–06 influenza seasons. However, in January 2007, CDC received reports of 10 cases of severe MRSA CAP, including six deaths, among previously healthy children and adults in Louisiana and Georgia during December 2006–January 2007. These were the first reported cases of severe MRSA CAP during the 2006–07 influenza season in the two states, and 10 was a higher number than expected for the 2-month period. A case of severe MRSA CAP was defined as pneumonia requiring hospitalization or resulting in the death of a patient from whom a specimen (i.e., sterile site or sputum sample) yielded MRSA when collected <48 hours after hospitalization or arrival at an emergency department (ED). Association with influenza was determined by either a positive result on a laboratory test or a diagnosis of ILI. This report describes three of the MRSA CAP cases as examples and summarizes all 10 of the reported cases. These cases underscore the need for health-care providers to be vigilant, especially during the influenza season, for severe cases of CAP that might be caused by MRSA.

* Defined as a temperature of ≥100.0°F (≥37.8°C), oral or equivalent, with cough and/or sore throat, in the absence of a known cause other than influenza.

† Defined as pneumonia occurring during the 2003–04 influenza season in a person with either laboratory-confirmed influenza virus infection, clinician-determined ILI (e.g., fever plus sore throat or cough), or both, from whom a specimen (i.e., blood, sputum, or pleural fluid) that was collected within 48 hours after hospitalization yielded *S. aureus*.

Case Reports

Louisiana case 1. A previously healthy boy aged 10 years (Table) became ill with fever, cough, sore throat, and bilateral earache on December 6, 2006, and was treated with acetaminophen at home. The next day, his symptoms worsened and he was taken to a local ED in respiratory distress with a fever of 104°F (40°C). A chest radiograph was performed and revealed mutlilobar pneumonia. The patient was transferred to another hospital and admitted to the pediatric intensive care unit (PICU), where he required endotracheal intubation and mechanical ventilation. He was treated initially on December 7 with intravenous (IV) ceftriaxone; vancomycin was started the next day. On December 8, a rapid immunochromatographic assay for the qualitative detection of influenza A or B was performed on nasopharyngeal secretions and was positive for influenza A. A sputum culture obtained the same day grew MRSA; blood cultures were negative. The patient had leukopenia and worsening hypotension

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and hypoxia. He died on December 9, approximately 42 hours after admission to the PICU. The cause of death was reported as bilateral pneumonia. The patient had no documented history of MRSA; no documentation of influenza vaccination was present in either his medical record or the statewide immunization database, Louisiana Immunization Network for Kids Statewide (LINKS).

Louisiana case 2. An adolescent boy aged 14 years (Table) had ILI symptoms on December 26, 2006, and was taken to a local ED, where he was treated with clarithromycin and penicillin for atypical pneumonia and pharyngitis. A rapid test for group A streptococcus was negative. The following day, the patient was taken to his primary-care provider with worsening symptoms and was prescribed oseltamivir for suspected influenza. On December 28, the youth returned to the ED in respiratory distress and was noted to have bloody, frothy sputum; a fever of 104°F (40°C); and hypoxia. In the ED, the patient was intubated, placed on mechanical ventilation, and administered IV ceftriaxone and vancomycin. A chest radiograph revealed diffuse bilateral infiltrates, and a computed tomography scan of his chest revealed extensive bilateral lung consolidation and small anterior mediastinal and posterior pneumothoraces. A rapid immunochromatographic assay performed on nasopharyngeal secretions was positive for influenza A, and a blood culture grew MRSA. The patient died on December 28, approximately 6 hours after arrival in the ED; cause of death was recorded as pneumonia, sepsis, and disseminated intravascular coagulation. At autopsy, the lungs displayed necrotizing pneumonia. Immunohistochemical assay in the lung revealed evidence of *S. aureus* (positive antigens using monoclonal and polyclonal anti-*S. aureus* antibodies) in the areas of pneumonia; however, the tissues did not indicate evidence of influenza A or B by immunohistochemistry. MRSA was recovered from a tonsillar swab and lung specimen. Influenza vaccination had not been documented in the patient's medical record or in LINKS. His medical history was unremarkable except for a culture-confirmed axillary MRSA abscess that was diagnosed on October 9, 2006, and treated with trimethoprim-sulfamethoxazole for 7 days.

Georgia case 1. A previously healthy girl aged 8 years (Table) was taken to her primary-care provider on December 17, 2006, after 3 days of fever (maximum: 103.0°F [39.4°C]), cough, and posttussive emesis. She was treated in the provider's office with azithromycin, dexamethasone, and aerosolized albuterol. Her condition worsened, and she was transported to a local ED, where she received IV ceftriaxone and nebulized albuterol. A chest radiograph revealed a right lower lobe pneumonia. She was transported to a referral hospital, where she was noted to be hypotensive and hypoxemic. She was intubated on arrival and placed on extracorporeal membrane

TABLE. Demographic and clinical characteristics of patients with severe methicillin-resistant *Staphylococcus aureus* (MRSA) community-acquired pneumonia associated with influenza or influenza-like illness* — Louisiana and Georgia, December 2006–January 2007

State and case no.	Age	Sex	Comor-bidities	Previous MRSA skin disease (self or contact)	Sites of positive MRSA cultures	Respiratory symptom onset to collection of MRSA sample (days)	Initial radiologic findings	Laboratory influenza test	Influenza vaccination documented by medical record or immunization registry	Empiric antimicrobials before *S. aureus* culture	Outcome (cause of death)	Respiratory symptom onset to death (days)
Louisiana												
1	10 yrs	M	None	Unknown	Sputum	2	Multiple lobar infiltrate	Rapid test positive	No	Ceftriaxone	Died (bilateral pneumonia)	3
2	14 yrs	M	None	Yes (self)	Blood, sputum, tonsillar swab	2	Multiple lobar infiltrate	Rapid test positive	No	Ceftriaxone	Died (sepsis, pneumonia, DIC†)	2
3	43 yrs	M	Hepatitis C, hypertension	Yes (self)	Blood, sputum	3	Multiple lobar infiltrate	Test not performed	No	Vancomycin, gentamicin	Survived	Not applicable
4	26 yrs	M	None	Yes (self)	Sputum	5	Multiple lobar infiltrate	Rapid test negative§	No	Trimethoprim-sulfamethoxazole	Survived	Not applicable
5	21 yrs	M	None	Yes (contact)	Blood, sputum	6	Multiple lobar infiltrate	Rapid test positive	No	Ceftriaxone	Survived	Not applicable
6	4 mos	F	None	No	Pleural rind	3	Single lobar infiltrate, pleural effusion	Test not performed	No	Ceftriaxone	Survived	Not applicable
Georgia												
1	8 yrs	F	None	None known in last year	Sputum	3	Single lobar infiltrate	Viral culture positive	No	Azithromycin, ceftriaxone, vancomycin	Died (hypoxia, pneumonia, respiratory distress, MRSA sepsis)	25
2	48 yrs	F	Current smoker	None known in last year	Sputum, blood, nares	3	Multiple lobar infiltrate	Rapid test negative§	No	Ceftriaxone, azithromycin, levofloxacin, pipericillin/ tazobactam	Died (MRSA sepsis)	4
3	27 yrs	F	Current smoker	None known	Sputum, blood	2	Single lobar infiltrate	Rapid test positive	No	Ceftriaxone, azithromycin	Died (necrotizing pneumonia)	19
4	11 yrs	F	None	None known	Blood	2	Multiple lobar infiltrate	Rapid test positive	No	Ceftriaxone, vancomycin	Died (MRSA pneumonia)	2

* Defined as a temperature of ≥100.0°F (≥37.8°C), oral or equivalent, with cough and/or sore throat, in the absence of a known cause other than influenza.
† Disseminated intravascular coagulation.
§ Patient had influenza-like illness, and influenza test was conducted outside the 4-day reliability window from respiratory symptom onset to test.

oxygenation. During intubation, she had cardiac arrest and was resuscitated. Also on December 17, viral and sputum cultures were collected that tested positive for influenza A and MRSA, respectively; blood cultures were negative for MRSA. After a long hospital course complicated by renal and hepatic failure and a subpulmonic abscess, the patient died on January 7, 2007, a total of 25 days after onset of symptoms. Cause of death was listed as hypoxia, pneumonia, respiratory distress, and MRSA sepsis. Influenza vaccination was not documented in the medical record or in the Georgia Registry of Immunization Transactions and Services.

Summary of 10 Cases

Ten cases of severe MRSA CAP were reported during December 2006–January 2007 from Louisiana and Georgia (Table). Median age of the 10 patients was 17.5 years (range: 4 months to 48 years), and eight were aged <30 years. Five of the patients were female. One patient had a history of chronic

hepatitis C and hypertension, and two were current smokers; none of the other patients had any relevant medical history. Four patients had documentation of either recent MRSA skin and soft tissue infection (SSTI) or living with someone with a history of MRSA SSTI. In all 10 cases, clinicians diagnosed ILI either preceding or concurrent with CAP. Six patients had laboratory-confirmed influenza. Influenza vaccination status for the 2006–07 influenza season was available for six of the patients; none had documentation of vaccination. Radiologic information on the initial evaluation was available for all patients; three had unilobar infiltrates, and seven had multilobar infiltrates. In three patients, MRSA was isolated only from sputum. Respiratory symptoms for the 10 patients began a median of 3 days (range: 2–6 days) before collection of specimens that grew MRSA. Of the six (60%) patients who died, the median period from respiratory symptom onset to death was 3.5 days (range: 2–25 days).

Laboratory Findings

Among the 10 cases, MRSA isolates from five of the six Louisiana cases were available for microbiologic characterization by CDC. All isolates were resistant to beta-lactams and erythromycin, two had inducible resistance to clindamycin, and two were not susceptible to levofloxacin. All isolates were positive for Panton-Valentine leukocidin (PVL) toxin genes by polymerase chain reaction and carried the staphylococcal cassette chromosome *mec* (SCC*mec*) type IVa resistance gene cassette. Pulsed-field gel electrophoresis analysis revealed that the five isolates had indistinguishable patterns and were designated USA 300-0114.

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Editorial Note: As demonstrated by the cases in this report, secondary *S. aureus* pneumonia is a potentially catastrophic complication of influenza. *S. aureus* respiratory coinfections often develop into severe, necrotizing pneumonia with a relatively high case-fatality rate (33% during the influenza epidemic of 1968–1969) and rapid clinical progression (e.g., death within 24 hours after admission) (*2*). *S. aureus* pneumonia has been complicated further by the emergence of MRSA as a cause of infection among persons in the community without traditionally recognized MRSA risk factors (*3*). During the 2003–04 influenza season, 15 cases of influenza-associated CAP caused by MRSA and four deaths (fatality rate: 26.7%) were reported to CDC, generally in persons with no medical problems (*1,4*).

Reports of pediatric mortality associated with bacterial coinfections with influenza virus infection have been uncommon. During the 2003–04 influenza season, 153 influenza-associated pediatric deaths were reported through state health departments to CDC; 102 of these had bacterial cultures obtained, and 11 were positive for *S. aureus*, primarily CAP infections (*5*). Pediatric influenza deaths were made nationally notifiable in 2004. During October 1, 2004–January 19, 2007, a total of 99 pediatric deaths associated with influenza were reported to CDC. Of these, 13 were tested for concomitant invasive bacterial infections, and only four had invasive *S. aureus* coinfection; two of those four deaths are reported here.

Particularly notable in the 10 cases described in this report is the short period between any respiratory symptom onset and either death or recovery of MRSA from the patient. Respiratory symptoms began a median of 3 days before recovery of MRSA, and four (67%) of six patients who died did so within 4 days of respiratory symptom onset. These short durations suggest that, in these cases, the influenza virus and MRSA infections likely occurred concomitantly rather than in the more classically described biphasic clinical course of CAP symptoms after influenza illness (*6*).

In the United States, the majority of community-associated MRSA infections have been SSTIs caused by a single pulsed-field type, termed USA300. USA300 isolates typically are resistant only to beta-lactam and macrolide antimicrobial agents and contain genes for the PVL toxin, which lyses white blood cells; these genes typically are not present in strains of health-care–associated MRSA (*7*). A recent study with an acute pneumonia animal model determined that PVL was associated with the development of necrotizing pneumonia (*8*).

In general, diagnostic testing for CAP is encouraged if the results might affect clinical decisions (e.g., antimicrobial management). In 30% of the cases in this report, MRSA was recovered only from sputum. The recently released Infectious Disease Society of America/American Thoracic Society CAP guidelines for adults recommend sputum cultures along with blood cultures and other diagnostic tests for certain patients (e.g., those with severe disease). Other indications for sputum culture include pleural effusion, cavitary infiltrates, and

failure of outpatient therapy; all of these indications were observed among the MRSA patients described in this report. The guidelines also note that sputum Gram stain is useful for quickly identifying pathogens such as *S. aureus* that are not the most common causes of CAP and might not be covered by routine empiric therapy (*9*). Beginning optimal therapy quickly can reduce mortality (*9*).

Four patients in this report had a documented history of MRSA skin infection in themselves or in a close contact before contracting pneumonia. The presence of preceding staphylococcal skin disease among persons with staphylococcal pneumonia has been described previously during an influenza pandemic (*10*). The index of suspicion for MRSA CAP, therefore, should be increased in patients with a history of MRSA infection or close contact with an MRSA-infected person or in communities where MRSA infections have been identified. If MRSA CAP is suspected, clinicians should add vancomycin or linezolid to the empiric regimen (*9*).

These cases serve to remind health-care providers that CAP can be caused by MRSA. Although uncommon, MRSA CAP has few obvious characteristics that differentiate it from other bacterial infections or from influenza virus infection alone; MRSA CAP often affects young, otherwise healthy persons and can be rapidly fatal. MRSA should be suspected in persons with severe pneumonia, especially during the influenza season, in those with cavitary infiltrates, and in those with a history of MRSA infection. Fatal cases of MRSA CAP or cases requiring hospitalization or ICU admission should be reported through state health departments to CDC's Division of Healthcare Quality Promotion by telephone (800-893-0485) or e-mail (search@cdc.gov).

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References

1. Hageman JC, Uyeki TM, Francis JS, et al. Severe community-acquired pneumonia due to *Staphylococcus aureus*, 2003–04 influenza season. Emerg Infect Dis 2006;12:894–9.
2. Schwarzmann SW, Adler JL, Sullivan RJ, Marine WM. Bacterial pneumonia during the Hong Kong influenza epidemic of 1968–1969. Arch Intern Med 1971;127:1037–41.
3. Fridkin SK, Hageman JC, Morrison M, et al. Methicillin-resistant *Staphylococcus aureus* disease in three communities. N Engl J Med 2005;352:1436–44.
4. Francis JS, Doherty MC, Lopatin U, et al. Severe community-onset pneumonia in healthy adults caused by methicillin-resistant *Staphylococcus aureus* carrying the Panton-Valentine leukocidin genes. Clin Infect Dis 2005;40:100–7.
5. Bhat N, Wright JG, Broder KR, et al. Influenza-associated deaths among children in the United States, 2003–2004. N Engl J Med 2005;353:2559–67.
6. Treanor JJ. Influenza virus. In: Mandell GL, Bennett JE, Dolin R, eds. The principles and practice of infectious diseases, 6th ed. Philadelphia, PA: Elsevier Inc. 2005:2060–85.
7. Tenover FC, McDougal LK, Goering RV, et al. Characterization of a strain of community-associated methicillin-resistant *Staphylococcus aureus* widely disseminated in the United States. J Clin Microbiol 2006;44:108–18.
8. Labandeira-Rey M, Couzon F, Boisset S, et al. *Staphylococcus aureus* Panton-Valentine leukocidin causes necrotizing pneumonia. Science 2007;315:1130–3.
9. Mandell LA, Wunderink RG, Anzueto A, et al. Infectious Diseases Society of America/American Thoracic Society consensus guidelines on the management of community-acquired pneumonia in adults. Clin Infect Dis 2007;44(Suppl 2):S27–72.
10. Goslings WR, Mulder J, Djajadiningrat J, Masurel J. Staphylococcal pneumonia in influenza in relation to antecedent staphylococcal skin infection. Lancet 1959;2:428–30.

Nail-Gun Injuries Treated in Emergency Departments — United States, 2001–2005

Speed, ease of use, and ready availability have made pneumatic nail guns a common tool used in work settings such as residential construction and wood-product fabrication. In addition, the tools are now readily available to consumers, extending to the public what had been primarily a potential work-related hazard. To characterize nail-gun injuries in work and nonwork settings, patients with nail-gun injuries treated in U.S. hospital emergency departments (EDs) were studied by using the U.S. Consumer Product Safety Commission's (CPSC's) National Electronic Injury Surveillance System (NEISS) and the NEISS occupational injury supplement (NEISS-Work) maintained by CDC's National Institute for Occupational Safety and Health (NIOSH). This report describes the results of that analysis, which indicated that during the 5-year period 2001–2005, an average of approximately 37,000 patients with injuries* related to nail-gun use were treated annually in EDs, with 40% of injuries (14,800) occurring among consumers.† In addition, data on ED-treated injuries indicated that, in 2005, nail-gun injuries among consumers were approximately three times higher than in 1991

* For this report, all cases are referred to as injuries; however, ED-treated illnesses and disorders are included in the national estimates. Among the NEISS-Work cases, 90%–95% of the cases are injuries. Although NEISS programs collect information on injuries and illnesses (e.g., infection of a nail-gun wound or repetitive motion disorder), they are not categorized separately in the available data.

† All references to consumers and consumer-product injuries are nonwork related.

(4,200). Additional measures are needed to prevent nail-gun injuries among both workers and consumers.

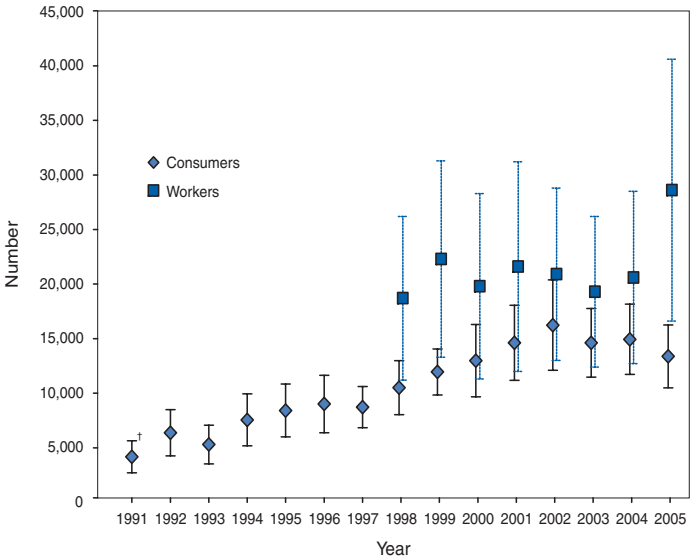
Nail-gun injury estimates for consumers were obtained from CPSC's online NEISS data (*1*); NEISS data are derived from a national stratified probability sample of 101 U.S. hospital EDs (*2*). Estimates for work-related nail-gun injuries were taken from NEISS-Work, an adjunct occupational injury and illness surveillance program with a 67-hospital sample (*3*).[§] An injury was identified as work related if the ED chart indicated that the injury occurred while working for pay or other compensation, while volunteering for an organized group, or during agricultural production-related activities.

Consumer nail-gun injuries were defined as ED-treated injuries that involved "nail guns or stud drivers" (CPSC product code 0882), excluding heavy-duty staplers (CPSC product code 0834) (*1*). The CPSC online NEISS data system produced the national estimates with variances (used to calculate 95% confidence intervals [CIs]) (*1*); individual consumer case records were not reviewed. Cases were weighted on the basis of the size (i.e., annual number of ED visits) of the hospital in which treatment was received. The number of injuries was the sum of the case weights, and variances were calculated using the classic formula for the variance of a total from a stratified sample.

Work-related nail-gun injuries were identified from NIOSH NEISS-Work data as those involving pneumatic nail guns and excluding heavy-duty staplers, rivet drivers, and electric or powder-actuated tools. Nail-gun injuries were identified based on CPSC product code 0882, the Occupational Injury and Illness Classification System injury and illness source/secondary source code 7291 (nail guns — powered) (*4*), and key words (e.g., nail gun, nailer, shot, or gun) from case narratives. Injuries included being shot by a nail from a gun, being struck by the nail gun or the hose from a compressor, and reporting either a musculoskeletal injury or an eye injury associated with use of the nail gun. Work-related injury estimates and variances were calculated by the same methods used by CPSC for consumer-product–related injuries (*1*). Consumer-product–related injuries and work-related nail-gun injuries were mutually exclusive.

During 2001–2005, annual consumer nail-gun injuries ranged from 13,400 to 16,200, with an annual average of 14,800 ED-treated injuries (Figure). During the same period, work-related nail-gun injuries ranged from 19,300 to 28,600, with an annual average of 22,200. A steady increase in injuries among consumers occurred during the 1990s. Similar data for workers were not available before 1998.

FIGURE. Number of consumer* (1991–2005) and worker (1998–2005) nail-gun injuries treated in hospital emergency departments — United States



* Consumer injuries are non-work related.
† 95% confidence interval.

In 2005, approximately 12,800 (96%) of 13,400 consumers injured by nails guns and 28,000 (98%) of 28,600 workers injured by nail guns were men. Injured workers had a median age of 27 years, and consumers had a median age of 35 years. For both consumers and workers, the diagnosis associated with 87% of the nail-gun injuries was either wound with a foreign body (i.e., open wound with retained nail or other object) or puncture wound (i.e., open wound, excluding those with retained foreign body) (Table). Certain puncture wounds resulted from a nail going through construction material into a person; in others, a nail was shot completely through a body part, or a person removed the nail before seeking treatment. Approximately 4% of nail-gun injuries among workers resulted in fractured bones.[¶] Injuries to upper extremities, primarily hands and fingers, accounted for 75% of all consumer nail-gun injuries and 66% of all worker nail-gun injuries. Lower extremities also were injured frequently, accounting for 17% of consumer injuries and 24% of worker injuries. Examples of other nail-gun injuries among either workers or consumers included eye injuries from foreign

[§] The NEISS-Work sample for occupational injuries uses 67 of the 101 NEISS hospitals used by CPSC for consumer-product–related injuries. The 67-hospital sample is distributed proportionately across the strata similar to the larger CPSC sample and statistically weighted to appropriately account for the smaller sample size. Because of hospital closures and other nonparticipation and nonresponse factors, the number of reporting hospitals can vary monthly and yearly.

[¶] Number of fractures did not meet minimum NEISS reporting requirements because the national estimate was too small, the coefficient of variation exceeded 33%, or both. Percentages are provided for information purposes only and might be unstable.

TABLE. Number and percentage of nail-gun injuries treated in hospital emergency departments, by nature of injury and body part — United States, 2005

Characteristic	Consumers No.*	Consumers (95% CI)†	Consumers (%)	Workers No.	Workers (95% CI)	Workers (%)§
Total	**13,400**	**(10,400–16,400)**	**(100)**	**28,600**	**(16,600–40,600)**	**(100)**
Nature of injury						
Foreign body¶	4,400	(3,100–5,700)	(33)	9,600	(5,000–14,100)	(34)
Puncture wound**	7,200	(5,400–9,000)	(54)	15,100	(8,300–21,900)	(53)
Other injuries	1,800	(900–2,700)	(13)	3,900	(1,900–5,900)	(14)
Body part						
Upper extremity††	10,000	(7,600–12,500)	(75)	18,800	(10,500–27,100)	(66)
Hands/Fingers	8,900	(6,800–11,000)	(66)	16,600	(8,900–24,300)	(58)
Lower extremity§§	2,300	(1,500–3,000)	(17)	6,900	(4,000–9,900)	(24)
Other body parts	—¶¶	—	—	2,800	(1,300–4,400)	(10)

* Numbers of injuries for consumers were rounded to the nearest 100 injuries and might not match values published by the Consumer Product Safety Commission.
† Confidence interval.
§ Percentage might not add to 100 because of rounding.
¶ Open wound with retained nail or other object.
** Open wound, excluding those with retained foreign body.
†† Upper extremity includes lower and upper arm, elbow, hand, fingers, and wrist (excludes shoulder).
§§ Lower extremity includes ankle, foot, knee, lower and upper leg, and toes.
¶¶ Does not meet minimum National Electronic Injury Surveillance System (NEISS) reporting requirements.

bodies and corneal abrasions; dental injuries; musculoskeletal injuries such as sprains, strains, tendonitis, nerve damage from tool use, and finger dislocation from reaching and lifting a tool; lacerations; electrical burns; and noise-induced hearing difficulty.** Among 1,500 workers hospitalized for nail-gun injuries in 2005 (CI = 700–2,200), approximately 60% had foreign-body injuries and 35% had puncture wounds,†† whereas overall, more persons had puncture wounds than foreign-body injuries (Table). Wounds requiring hospitalization included embedded nails in the trunk, head, joints, or bones; fractures from nail penetration; and infected puncture wounds. Most persons with nail-gun injuries were not hospitalized; 12,600 (94%) consumers and 26,900 (94%) workers were treated and released from EDs in 2005.

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Editorial Note: Since 1991, annual consumer nail-gun injuries have increased approximately 200%. This increase likely corresponds to an increase in availability during the 1990s of inexpensive pneumatic nail guns and air compressors (used to power the nail guns) in home hardware stores; however, no sales data are available for confirmation. The number of worker nail-gun injuries has remained stable since 1998 (when data comparable to those for consumers became available), with the exception of 2005. In 2005, the estimated number of nail-gun injuries among workers increased 39% from 2004. This increase was distributed uniformly throughout the year, and the reason for the increase is unclear. Although the increase is not statistically significant ($p>0.05$) compared with estimates for the preceding years, the change indicates a need for close monitoring.

Nail guns in the consumer and commercial markets differ, but similar models are available in both markets. The current national standard for pneumatic fastener driving tools (American National Standards Institute [ANSI] SNT-101-2002) applies to products in both markets (*5*). According to the ANSI standard, actuation (firing) mechanisms on nail guns have two critical components to prevent unintentional firing: a manual trigger and a contact element in the nose of the gun. The most common type of firing mechanism is the dual-action contact-trip trigger, which requires that the manual trigger and nose contact element both be depressed for a nail to be discharged. When users depress the manual trigger, they can rapidly fire a nail (i.e., "bounce nail") each time the nail-gun nose contacts the work material, speeding up production. Trigger locks and other user modifications that keep the trigger constantly depressed or that disable the nose contact switch have been used to make rapid nailing easier, but this counteracts the safety features of the dual-action contact-trip mechanism.

Another type of firing mechanism, the alternative sequential-trip trigger, requires the nose contact to be depressed before the manual trigger, rather than simultaneously with the trigger, to discharge a nail, making unintentional discharge of nails less likely. Injury surveillance in the residential construction industry has indicated that approximately 65%–69% of injuries from contact-trip tools likely could be prevented through use of a sequential-trip trigger (*6–8*). The International Staple, Nail, and Tool Association adopted a voluntary ANSI standard recommending that manufacturers install sequential-trip triggers on certain types of nail guns before distribution, beginning in May 2003 (*5*); however,

** National estimates did not meet minimum NEISS reporting requirements because the national estimate was too small, the coefficient of variation exceeded 33%, or both.
†† Number of persons hospitalized as a result of foreign-body or puncture wounds did not meet minimum NEISS reporting requirements because the national estimate was too small, the coefficient of variation exceeded 33%, or both. Percentages are provided for information purposes only and might be unstable.

under the standard, contact-trip triggers can continue to be sold with nail guns or as an option.

The findings in this report are subject to at least four limitations. First, the total number of injuries from nail guns is underrepresented by NEISS because the system only counts injuries treated in EDs; however, EDs are likely to treat a high proportion of nail-gun puncture wounds and embedded nails. In addition, only the most severe injury at the time of treatment is recorded for an individual person; a single incident might have resulted in multiple injuries or more severe sequelae. Second, the identification of cases and their specific characteristics is limited by the availability of appropriate information in the ED records and subsequent reporting by the hospital records abstractors. Thus, misclassification might have occurred in describing the person who was injured (consumer versus worker), the type of fastener tool, and the injury diagnosis (foreign-body versus puncture wound). Third, the small hospital sample size resulted in large standard errors (10%–20%) that might have obscured significant differences among years. CIs for work-related injury estimates are larger than for consumer injuries because of the smaller hospital sample used for data collection. Finally, NEISS ED surveillance does not provide information about the population at risk, the amount of exposure (e.g., hours of tool use), or tool characteristics (e.g., type of nail gun or trigger mechanism). Although consumers had fewer injuries than workers during 2001–2005, if consumers had substantially fewer hours of exposure (i.e., tool use) than workers, consumer nail-gun injury rates might have been higher than those of workers.

NEISS consumer injury estimates and NEISS-Work occupational injury estimates provide a national perspective on the injuries received from nail guns and indicate how injuries from tools used in work and nonwork settings can overlap (*9*). Although training regarding safe work practices might reduce nail-gun injuries, use of sequential-trip triggers is likely to be more effective (*6–8*), particularly among consumers, who do not usually receive training in tool use. The voluntary ANSI standard only addresses availability of the sequential-trip triggers and does not address the continued use of contact-trip triggers. The ANSI standard revision is likely to decrease injuries over time as older tools with contact-trip triggers are no longer being sold or used, but perceived lack of future availability might result in the contact-trip trigger tools being retained in work settings. In addition, consumers might be unaware of the need to replace older contact-trip triggers with sequential-trip triggers. Therefore, distribution of new nail guns with sequential-trip triggers and availability in home hardware centers of kits to convert contact-trip triggers to sequential-trip triggers might help reduce the use of the more hazardous tools. Moreover, additional training material on nail-gun safety to supplement product information included with the tools should be provided at the point of sale or rental to further influence safe nail-gun use among consumers and workers.

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References

1. US Consumer Product Safety Commission. National Electronic Injury Surveillance System online. Washington, DC: US Consumer Product Safety Commission; 2007. Available at http://www.cpsc.gov/library/neiss.html.
2. US Consumer Product Safety Commission. NEISS. The National Electronic Injury Surveillance System: a tool for researchers. Washington, DC: Division of Hazard and Injury Data Systems, US Consumer Product Safety Commission; 2000. Available at http://www.cpsc.gov/neiss/2000d015.pdf.
3. CDC. Nonfatal occupational injuries and illnesses among workers treated in hospital emergency departments—United States, 2003. MMWR 2006;55:449–52.
4. US Bureau of Labor Statistics. Occupational injury and illness classification system manual. Washington, DC: US Department of Labor; 1992. Available at http://www.bls.gov/iif/oshoiics.htm.
5. American National Standards Institute; International Staple, Nail, and Tool Association. American national standard for power tools—portable, compressed-air–actuated, fastener driving tools—safety requirements for, ANSI SNT-101-2002 (Revision of ANSI SNT-101-1993). LaGrange, IL: International Staple, Nail, and Tool Association; 2002. Available at http://www.isanta.org/snt101__new.pdf.
6. Dement JM, Lipscomb H, Li L, Epling C, Desai T. Nail gun injuries among construction workers. Appl Occup Environ Hyg 2003;18:374–83.
7. Lipscomb HJ, Dement JM, Nolan J, Patterson D, Li L. Nail gun injuries in residential carpentry: lessons from active injury surveillance. Inj Prev 2003;9:20–4.
8. Lipscomb HJ, Dement JM, Nolan J, Patterson D. Nail gun injuries in apprentice carpenters: risk factors and control measures. Am J Ind Med 2006;49:505–13.
9. Smith GS, Sorock GS, Wellman HM, Courtney TK, Pransky GS. Blurring the distinctions between on and off the job injuries: similarities and differences in circumstances. Inj Prev 2006;12:236–41.

Update to CDC's *Sexually Transmitted Diseases Treatment Guidelines, 2006*: Fluoroquinolones No Longer Recommended for Treatment of Gonococcal Infections

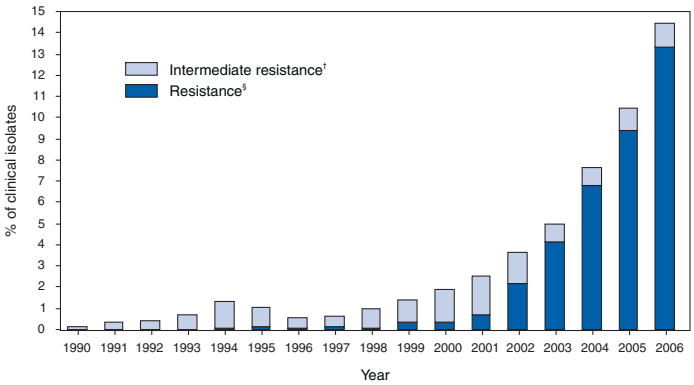
In the United States, gonorrhea is the second most commonly reported notifiable disease, with 339,593 cases documented in 2005 (*1*). Since 1993, fluoroquinolones (i.e.,

ciprofloxacin, ofloxacin, or levofloxacin) have been used frequently in the treatment of gonorrhea because of their high efficacy, ready availability, and convenience as a single-dose, oral therapy. However, prevalence of fluoroquinolone resistance in *Neisseria gonorrhoeae* has been increasing and is becoming widespread in the United States, necessitating changes in treatment regimens. Beginning in 2000, fluoroquinolones were no longer recommended for gonorrhea treatment in persons who acquired their infections in Asia or the Pacific Islands (including Hawaii); in 2002, this recommendation was extended to California (*2*). In 2004, CDC recommended that fluoroquinolones not be used in the United States to treat gonorrhea in men who have sex with men (MSM) (*3*). This report, based on data from the Gonococcal Isolate Surveillance Project (GISP), summarizes data on fluoroquinolone-resistant *N. gonorrhoeae* (QRNG) in heterosexual males and in MSM throughout the United States. This report also updates CDC's *Sexually Transmitted Diseases Treatment Guidelines, 2006* (*4*) regarding the treatment of infections caused by *N. gonorrhoeae*. On the basis of the most recent evidence, CDC no longer recommends the use of fluoroquinolones for the treatment of gonococcal infections and associated conditions such as pelvic inflammatory disease (PID). Consequently, only one class of drugs, the cephalosporins, is still recommended and available for the treatment of gonorrhea.

GISP is a CDC-sponsored sentinel surveillance system that has been monitoring antimicrobial susceptibilities of *N. gonorrhoeae* in the United States since 1986. Annually, GISP collects approximately 6,000 urethral gonococcal isolates from males attending 26 to 30 sexually transmitted disease (STD) clinics throughout the country and provides national data to guide treatment. QRNG isolates demonstrate ciprofloxacin minimum inhibitory concentrations (MICs) of ≥1.0 μg/mL; isolates with intermediate resistance to fluoroquinolones demonstrate ciprofloxacin MICs of 0.125–0.500 μg/mL.

GISP began susceptibility testing for ciprofloxacin in 1990. Overall, QRNG prevalence remained <1% during 1990–2001 but increased to 2.2% in 2002, to 4.1% in 2003, and to 6.8% in 2004. In 2005, of 6,199 isolates collected by GISP, 9.4% were resistant to ciprofloxacin, and during January–June 2006, 13.3% of 3,005 isolates collected were resistant (Figure) (*5*). Excluding isolates from Hawaii and California (areas that discontinued fluoroquinolone treatment in 2000 and 2002, respectively), 6.1% and 8.6% of isolates were QRNG in 2005 and 2006, respectively. Intermediate resistance to ciprofloxacin has remained stable, ranging from 0.4% to 1.1% from 1990 to 2006 (*5*).

FIGURE. Percentage of *Neisseria gonorrhoeae* isolates with intermediate resistance or resistance to ciprofloxacin, by year — Gonococcal Isolate Surveillance Project, United States, 1990–2006*



* Data for 2006 are preliminary (January–June only).
† Demonstrating ciprofloxacin minimum inhibitory concentrations (MICs) of 0.125–0.500 μg/mL.
§ Demonstrating ciprofloxacin MICs of ≥1.0 μg/mL.

In addition, since 2001, GISP has observed QRNG increases among isolates from MSM, and more recently, from heterosexual males. In 2001, QRNG prevalence was 1.6% and 0.6% among MSM and heterosexual males, respectively. The QRNG prevalence among isolates from MSM increased to 7.2% in 2002, to 15% in 2003, to 23.8% in 2004, and to 29% in 2005 (*5*). Among heterosexual males, the prevalence increased more slowly, from 0.9% in 2002 to 1.5% in 2003, to 2.9% in 2004, and to 3.8% in 2005 (*5*). Preliminary data from January–June 2006 indicate that QRNG prevalence increased to 38.3% among MSM and 6.7% among heterosexual males. For isolates from sites outside of California and Hawaii, QRNG prevalence was 24.3% in MSM and 2.7% in heterosexual males in 2005; in the first 6 months of 2006, it was 30.7% and 5.1%, respectively.

Available data from GISP for 2005 and preliminary data from 2006 have demonstrated that QRNG has continued to increase among heterosexual males and is present in all regions of the country (Table) (*5*). Several cities outside California and Hawaii have seen substantial increases in QRNG prevalence among heterosexual males from 2004 to 2006; for example, in Philadelphia, QRNG prevalence increased from 1.2% in 2004 to 9.9% in 2005 and to 26.6% in 2006, and in Miami, prevalence increased from 2.1% in 2004 to 4.5% in 2005 and to 15.3% in 2006.

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TABLE. Prevalence of ciprofloxacin-resistant* *Neisseria gonorrhoeae* among heterosexual males with gonococcal urethritis, by U.S. Census region — Gonococcal Isolate Surveillance Project (GISP), United States, 2004–2006†

Region	2004 %	2005 %	2006 %
West			
Albuquerque	—	—	5.5
Denver	4.0	3.1	1.8
Honolulu	11.3	19.4	25.0
Las Vegas	0.8	2.7	4.2
Long Beach	12.7	16.0	22.2
Los Angeles	9.5	4.0	10.0
Orange County	20.5	26.2	25.0
Phoenix	2.7	4.5	1.0
Portland	8.9	11.5	10.7
San Diego	13.9	15.6	25.0
San Francisco	10.3	8.2	22.5
Seattle	4.6	4.7	19.2
Tripler§ (Honolulu)	16.7¶	—¶	—¶
Midwest			
Chicago	—	1.4	1.6
Cincinnati	—	—	—
Cleveland	—	1.1	1.4
Detroit	—	0.3	—
Minneapolis	2.9	0.5	1.1
Northeast			
Philadelphia	1.2	9.9	26.6
South			
Atlanta	1.0	2.9	5.7
Baltimore	0.7	1.8	2.9
Birmingham	—	1.1	1.8
Dallas	1.5	0.4	4.6
Greensboro	—	0.7	1.7
Miami	2.1	4.5	15.3
New Orleans	1.7	7.1**	—**
Oklahoma City	1.1	1.8	3.5

* Demonstrating ciprofloxacin minimum inhibitory concentrations of ≥1.0 μg/mL.
† Data for 2006 are preliminary (January–June only).
§ Tripler Army Medical Center.
¶ Fewer than 10 isolates were collected.
** Because of Hurricane Katrina, isolates were collected during January–May 2005 only. GISP was restarted in October 2006.

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Editorial Note: GISP is the only national, sentinel surveillance system that monitors emerging resistance in *N. gonorrhoeae* in the United States; with the decreasing use of culture to diagnose gonorrhea, GISP has become an increasingly important source of information on *N. gonorrhoeae* that are resistant to antimicrobials. Findings from GISP, which is conducted in publicly funded clinics and includes only male urethral isolates, might not be representative of the entire U.S. population infected with gonorrhea.

During January–June 2006, QRNG was identified in 25 out of 26 GISP sites, and increases in the prevalence of QRNG were observed among isolates from heterosexual males and MSM in most regions of the country. As a result, CDC no longer recommends fluoroquinolones for treatment of gonorrhea in the United States; similarly, CDC no longer recommends fluoroquinolones for treatment of other conditions that might be caused by *N. gonorrhoeae*, such as PID.

CDC has recommended single-dose fluoroquinolone regimens for the treatment of gonococcal infections since 1993. Although QRNG was identified as a problem in Asia in 1991 and was first identified in Hawaii in the same year, only sporadic occurrences were noted in the continental United States during the 1990s. However, since 1999, increasing resistance of *N. gonorrhoeae* to the fluoroquinolones has been observed, first in Hawaii, then in California and other Western states, then among MSM, and now in other populations and regions. CDC has changed treatment recommendations when QRNG prevalence has reached >5% in defined groups and locations, with consideration given to other factors such as the prevalence of gonorrhea, the availability of antimicrobial susceptibility data, and the costs of diagnostic and treatment options (*4,6*). This >5% threshold has been used by CDC and the World Health Organization so that all recommended treatments for gonorrhea can be expected to cure ≥95% of infections.

Because fluoroquinolones are no longer recommended, the options for treating gonococcal infections in the United States are limited (*4*) (Box). For the treatment of uncomplicated urogenital and anorectal gonorrhea, CDC now recommends a single intramuscular dose of ceftriaxone 125 mg or a single oral dose of cefixime 400 mg. However, 400-mg tablets of cefixime are not available; cefixime is only available in a suspension formulation. Some evidence suggests that a single oral dose of cefpodoxime 400 mg or cefuroxime axetil 1 g might be additional oral alternatives for the treatment of urogenital and anorectal gonorrhea (*4*).

Alternative parenteral single-dose regimens for urogenital and anorectal gonorrhea include ceftizoxime 500 mg, cefoxitin 2 g with probenecid 1 g orally, or cefotaxime 500 mg. However, these cephalosporin regimens do not offer any advantage over ceftriaxone. For persons with penicillin or cephalosporin allergies, a single intramuscular dose of spectinomycin 2 g is a recommended alternative. However spectinomycin is not available in the United States. Updated information from CDC regarding the availability of cefixime and spectinomycin will be available at http://www.cdc.gov/std/gonorrhea/arg.

BOX. Updated recommended treatment regimens for gonococcal infections and associated conditions — United States, April 2007

Uncomplicated Gonococcal Infections of the Cervix, Urethra, and Rectum*

Recommended Regimens

Ceftriaxone 125 mg in a single intramuscular (IM) dose

OR

Cefixime† 400 mg in a single oral dose

PLUS

TREATMENT FOR CHLAMYDIA IF CHLAMYDIAL INFECTION IS NOT RULED OUT

Alternative Regimens

Spectinomycin† 2 g in a single IM dose

OR

Cephalosporin single-dose regimens§

Uncomplicated Gonococcal Infections of the Pharynx*

Recommended Regimens

Ceftriaxone 125 mg in a single IM dose

PLUS

TREATMENT FOR CHLAMYDIA IF CHLAMYDIAL INFECTION IS NOT RULED OUT

Disseminated Gonococcal Infection

Updated treatment regimens available at http://www.cdc.gov/std/treatment.

Pelvic Inflammatory Disease

Updated treatment regimens available at http://www.cdc.gov/std/treatment.

Epididymitis

Updated treatment regimens available at http://www.cdc.gov/std/treatment.

* For all adult and adolescent patients, regardless of travel history or sexual behavior. Information regarding management of these infections in patients with documented severe allergic reactions to penicillins or cephalosporins is available at http://www.cdc.gov/std/treatment.

† Not available in the United States.

§ Other single-dose cephalosporin regimens that are considered alternative treatment regimens against uncomplicated urogenital and anorectal gonococcal infections include ceftizoxime 500 mg IM; or cefoxitin 2 g IM, administered with probenecid 1 g orally; or cefotaxime 500 mg IM. Some evidence indicates that cefpodoxime 400 mg and cefuroxime axetil 1 g might be oral alternatives.

For pharyngeal gonorrhea, CDC now recommends a single intramuscular dose of ceftriaxone 125 mg (Box); pharyngeal gonococcal infections often are asymptomatic and more difficult to eradicate than urogenital and anorectal infections (*4*). Spectinomycin, cefixime, cefpodoxime, and cefuroxime axetil do not appear adequate for treating pharyngeal gonococcal infections.

A single oral dose of azithromycin 2 g is effective against uncomplicated gonococcal infections, but CDC does not recommend widespread use of azithromycin because of concerns regarding rapid emergence of resistance, as evidenced by the increase in azithromycin MICs documented since 1999 in the United States and internationally (*4,5,7–9*). However, azithromycin might be an option for treatment of uncomplicated gonococcal infections from any site (i.e., urogenital, anorectal, and pharyngeal) in persons with documented severe allergic reactions to penicillins or cephalosporins.

Persons in whom gonococcal infection is diagnosed should be treated for possible coinfection with *Chlamydia trachomatis* with a single dose of azithromycin 1 g by mouth or with doxycycline 100 mg twice a day, by mouth for 7 days, if chlamydial infection has not been ruled out (*4*).

Test of cure is not recommended routinely for patients with uncomplicated gonorrhea who have been treated with recommended or alternative regimens. Persons with persistent symptoms of gonococcal infection or whose symptoms recur shortly after treatment with a recommended or alternative regimen should be reevaluated by culture for *N. gonorrhoeae*; positive isolates should undergo antimicrobial-susceptibility testing. Clinicians and laboratories should report treatment failures or resistant gonococcal isolates to CDC at 404-639-8373 through state and local public health authorities.

With fluoroquinolones no longer recommended for the treatment of gonococcal infections, only one class of drug, cephalosporins, is still recommended and available. Therefore, state and local health departments must remain vigilant for the emergence of cephalosporin resistance.

With use of nonculture tests to diagnose *N. gonorrhoeae* increasing and with local data on antimicrobial susceptibility less available, CDC strongly recommends that all state and local health department laboratories maintain or develop the capacity to perform culture (*10*). CDC also encourages all state and local health department laboratories to maintain the capacity to perform antimicrobial-susceptibility testing or form partnerships with experienced laboratories that can perform such testing. At a minimum, antimicrobial-susceptibility testing should be performed for ceftriaxone, spectinomycin, azithromycin, and any other regimens that are used locally for gonorrhea treatment.

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References

1. CDC. Sexually transmitted disease surveillance 2005. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/nchstp/dstd/stats_trends/stats_and_trends.htm.
2. CDC. Increases in fluoroquinolone-resistant *Neisseria gonorrhoeae*—Hawaii and California, 2001. MMWR 2002;51:1041–4.
3. CDC. Increases in fluoroquinolone-resistant *Neisseria gonorrhoeae* among men who have sex with men—United States, 2003, and revised recommendations for gonorrhea treatment, 2004. MMWR 2004;53:335–8.
4. CDC. Sexually transmitted diseases treatment guidelines, 2006. MMWR 2006;55(No. RR-11).
5. CDC. Sexually transmitted disease surveillance 2005 supplement: Gonococcal Isolate Surveillance Project (GISP) annual report, 2005. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/std/GISP2005/default.htm.
6. Newman L, Moran JS, Workowski KA. Update on the management of gonorrhea in adults in the United States. Clin Infect Dis 2007;44:S84–S101.
7. CDC. Fluoroquinolone-resistance in *Neisseria gonorrhoeae*, Hawaii, 1999, and decreased susceptibility to azithromycin in *N. gonorrhoeae*, Missouri, 1999. MMWR 2000;49:833–7.
8. Gonococcal Resistance to Antimicrobials Surveillance Programme GRASP) Steering Group. GRASP year 2005 report. London, England: Health Protection Agency; 2006. Available at http://www.hpa.org.uk/infections/topics_az/hiv_and_sti/sti-gonorrhoea/publications/grasp_2005_annual_report.pdf.
9. CDC. Sexually transmitted disease surveillance 2004 supplement: Gonococcal Isolate Surveillance Project (GISP) annual report, 2004. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/std/GISP2004/default.htm.
10. Dicker LW, Mosure DJ, Steece R, Stone KM. Testing for sexually transmitted diseases in U.S. public health laboratories in 2004. Sex Transm Dis 2007;34:41–6.

Preliminary FoodNet Data on the Incidence of Infection with Pathogens Transmitted Commonly Through Food — 10 States, 2006

Foodborne illnesses are a substantial health burden in the United States (*1*). The Foodborne Diseases Active Surveillance Network (FoodNet) of CDC's Emerging Infections Program collects data from 10 U.S. states* regarding diseases caused by enteric pathogens transmitted commonly through food. FoodNet quantifies and monitors the incidence of these infections by conducting active, population-based surveillance for laboratory-confirmed illnesses (*1*). This report describes preliminary surveillance data for 2006 and compares them with baseline data from the period 1996–1998. Incidence of infections caused by *Campylobacter*, *Listeria*, *Shigella*, and *Yersinia* has declined since the baseline period. Incidence of infections caused by Shiga toxin-producing *Escherichia coli* O157 (STEC O157) and *Salmonella*, however, did not decrease significantly, and *Vibrio* infections have increased, indicating that further measures are needed to prevent foodborne illness and achieve national health objectives.

In 1996, FoodNet began active, population-based surveillance for laboratory-confirmed cases of infection caused by *Campylobacter*, *Listeria*, *Salmonella*, STEC O157, *Shigella*, *Vibrio*, and *Yersinia*. FoodNet personnel ascertain cases through contact with all clinical laboratories serving their surveillance areas. FoodNet added surveillance for cases of *Cryptosporidium* and *Cyclospora* infection in 1997 and STEC non-O157 infection in 2000. In 2004, FoodNet began collecting data on which laboratory-confirmed infections were associated with outbreaks.

Hemolytic uremic syndrome (HUS) surveillance, which began in 2000, is conducted in nine states through a network of pediatric nephrologists and infection-control practitioners and is validated with a review of hospital discharge data. Because of the length of time required for review of hospital records, this report contains preliminary HUS data for 2005.

During 1996–2006, the FoodNet surveillance population increased from 14.2 million persons (5% of the U.S. population) in five states to 44.9 million persons (15% of the U.S. population) in 10 states. Preliminary incidence for 2006 was calculated by dividing the number of laboratory-confirmed infections by 2005 population estimates. Final incidence for 2006 will be reported when 2006 population estimates are available from the U.S. Census Bureau. In previous reports, the final incidence has been similar to the preliminary incidence.

Surveillance

In 2006, a total of 17,252 laboratory-confirmed cases of infections in FoodNet surveillance areas were identified:

* Connecticut, Georgia, Maryland, Minnesota, New Mexico, Oregon, Tennessee, and selected counties in California, Colorado, and New York.

Salmonella (6,655 cases), *Campylobacter* (5,712), *Shigella* (2,736), *Cryptosporidium* (859), STEC O157 (590), STEC non-O157 (209), *Yersinia* (158), *Vibrio* (154), *Listeria* (138), and *Cyclospora* (41). The overall incidence per 100,000 population was 14.81 for *Salmonella*, 12.71 for *Campylobacter*, 6.09 for *Shigella*, 1.91 for *Cryptosporidium*, 1.31 for STEC O157, 0.46 for STEC non-O157, 0.35 for *Yersinia*, 0.34 for *Vibrio*, 0.31 for *Listeria*, and 0.09 for *Cyclospora*. Substantial variation occurred among surveillance sites (Table). In 2005, FoodNet identified 71 cases of HUS in children aged <18 years (rate: 0.68 per 100,000 children); 47 (66%) cases occurred in children aged <5 years (rate: 1.63).

Of the 5,957 (90%) *Salmonella* isolates serotyped, seven serotypes accounted for 64% of infections: Typhimurium, 1,157 (19%); Enteritidis, 1,109 (19%); Newport, 531 (9%); Javiana, 292 (5%); Montevideo, 250 (4%); Heidelberg, 239 (4%); and a monophasic serotype identified as *Salmonella* I 4,[5],12:i:-, 239 (4%). Among 147 (95%) *Vibrio* isolates for which the species was identified, 94 (64%) were *V. parahaemolyticus*, and 18 (12%) were *V. vulnificus*. FoodNet also collected data on 209 STEC non-O157 isolates that were tested for O antigen determination; 188 (90%) had an identifiable O antigen, including O26 (53 isolates [28%]), O103 (46 [24%]), and O111 (29 [15%]); for 21 (10%) isolates, no reaction occurred with the typing antisera used by CDC, or O antigen information was not available.

Comparison with Baseline Period

A main-effects, log-linear Poisson regression model (negative binomial) was used to estimate statistically significant changes in incidence. This model accounts for the increase in the number of FoodNet sites and surveillance population and for variations in incidence among sites (*1*). For laboratory-confirmed infections, the average annual incidence for 1996–1998 (1997–1998 for *Cryptosporidium*) was used as the baseline. For HUS surveillance, 2000–2001 was used as the baseline. Estimated changes in incidence (relative rate) between the baseline period and 2006 and 95% confidence intervals (CIs) were calculated. Partly because of concerns that changes in clinical laboratory practices affected incidence, a baseline has not been set for non-O157 STEC (*2*) or *Salmonella* I 4,[5],12:i:-.

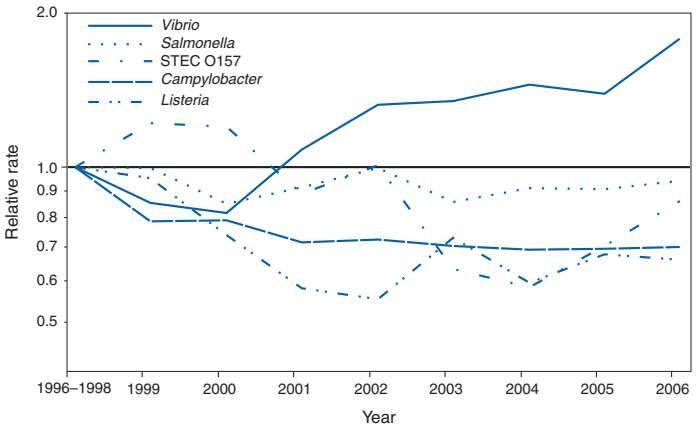
The estimated annual incidence of several infections changed significantly from baseline to 2006 (Figure 1). The estimated incidence of infection with *Yersinia* decreased 50% (CI = 37%–60%), *Shigella* decreased 35% (CI = 8%–54%), *Listeria* decreased 34% (CI = 17%–47%), *Campylobacter* decreased 30% (CI = 24%–35%), and *Vibrio* increased 78% (CI = 34%–138%). The estimated incidence of *Cryptosporidium*, *Salmonella*, and STEC O157 did not change significantly compared with the baseline. Although *Salmonella* incidence did not decrease significantly overall, the incidence of *S.* Typhimurium decreased significantly (41% [CI = 34%–48%]). In contrast,

TABLE. Incidence* of bacterial and parasitic infection in 2006 and hemolytic uremic syndrome (HUS) in 2005, by site and pathogen/condition, compared with national health objectives† — Foodborne Diseases Active Surveillance Network,§ United States

Pathogen/ Condition	California	Colorado	Connecticut	Georgia	Maryland	Minnesota	New Mexico	New York	Oregon	Tennessee	Overall 2006	National health objective
Bacteria												
Campylobacter	26.82	18.52	15.16	6.27	7.61	17.51	18.77	12.07	17.14	7.40	12.71	12.30
Listeria	0.25	0.19	0.54	0.22	0.50	0.14	0.26	0.51	0.30	0.22	0.31	0.25
Salmonella	15.19	13.84	14.41	20.04	13.86	14.05	13.33	11.44	11.01	14.04	14.81	6.80
Shigella	7.55	6.96	1.91	15.01	2.18	4.99	8.71	1.11	2.58	3.30	6.09	NA¶
STEC** O157	1.31	1.35	1.20	0.45	0.70	2.86	1.04	1.23	2.28	1.48	1.31	1.00
STEC non-O157	0.22	0.62	0.94	0.20	0.61	0.86	1.19	0.42	0.25	0.12	0.46	NA
Vibrio	1.15	0.12	0.54	0.28	0.59	0.08	0.10	0.28	0.27	0.15	0.34	NA
Yersinia	0.31	0.23	0.48	0.35	0.18	0.39	0.26	0.32	0.41	0.49	0.35	NA
Parasites												
Cryptosporidium	1.50	1.43	1.08	2.98	0.32	4.66	1.76	1.23	2.06	0.79	1.91	NA
Cyclospora	0	0	0.26	0.21	0.04	0.08	0.05	0	0.05	0.07	0.09	NA
HUS††	3.26	2.02	0.95	0.72	0.52	2.08	—	2.96	2.66	1.80	1.63	0.90

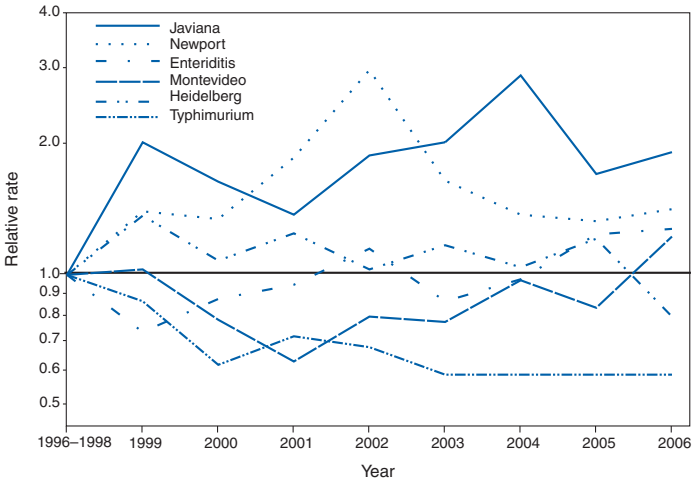
* Per 100,000 population.
† *Healthy People 2010* objectives for incidence of *Campylobacter, Salmonella*, and Shiga toxin-producing *Escherichia coli* O157 infections for year 2010 and for incidence of *Listeria* infections for year 2005.
§ Surveillance populations (in millions): California (3.21), Colorado (2.59), Connecticut (3.51), Georgia (9.07), Maryland (5.60), Minnesota (5.13), New Mexico (1.93), New York (4.31), Oregon (3.64), Tennessee (5.96), and overall (44.95).
¶ Not applicable because no national health objective exists regarding infection with this pathogen.
** Shiga toxin-producing *Escherichia coli*.
†† Incidence rate for HUS in children aged <5 years; rate calculation is based on surveillance population aged <5 years in the nine sites that conducted hospital discharge data review.

FIGURE 1. Relative rates compared with 1996–1998 baseline period of laboratory-diagnosed cases of infection with *Campylobacter*, STEC* O157, *Listeria*, *Salmonella*, and *Vibrio*, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2006



* Shiga toxin-producing *Escherichia coli.*

FIGURE 2. Relative rates compared with 1996–1998 baseline period of laboratory-diagnosed cases of infection with the six most commonly isolated *Salmonella* serotypes, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2006



significant increases in incidence compared with baseline occurred for *S.* Enteritidis (28%, CI = 4%–57%), *S.* Newport (42%, CI = 7%–87%), and *S.* Javiana (92%, CI = 22%–202%). The estimated incidence of *S.* Heidelberg and *S.* Montevideo did not change significantly compared with baseline (Figure 2). The estimated incidence of HUS in children aged <5 years also did not change significantly.†

Outbreak-Associated Cases of Infection

Outbreak-associated cases of infection accounted for at least 88 (15%) of 590 STEC O157 cases in 2006, compared with 36 (9.0%) of 402 cases in 2004 and 107 (23%) of 473 cases in 2005. Three large, high-profile multistate outbreaks of STEC O157 infections associated with produce affected FoodNet sites in 2006. Of the 88 outbreak-associated STEC O157 cases ascertained in FoodNet in 2006, one outbreak associated with bagged fresh spinach (*3*) accounted for 32 (36%), and two outbreaks associated with lettuce in two fast-food chains accounted for 14 (16%).

Outbreak-associated cases accounted for at least 404 (6.1%) of 6,655 *Salmonella* cases ascertained in FoodNet in 2006, compared with 352 (5.4%) of 6,498 cases in 2004 and 296 (4.6%) of 6,505 cases in 2005. A multistate outbreak of *S.* Typhimurium infections associated with tomatoes accounted for 58 (14%) outbreak-associated *Salmonella* cases ascertained in FoodNet in 2006, and an outbreak of *S.* Newport infections associated with tomatoes accounted for 37 (9.2%).

† Additional information, including data on age-specific trends and trends of HUS, is available at http://www.cdc.gov/foodnet.

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Editorial Note: In 2006, compared with the 1996–1998 baseline period, significant declines occurred in the estimated incidence of *Campylobacter*, *Listeria*, *Shigella*, and *Yersinia* infections. However, most of these declines occurred before 2006. Most of the decline in *Campylobacter* incidence occurred by 2001. In 2006, the incidence of *Listeria* infections remained higher than at its lowest point in 2002.

After substantial declines in 2003 and 2004, the incidence of STEC O157 infections increased in 2005 (*4*) and again in 2006. The earlier decline in incidence was temporally associated with measures by the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) and the beef-processing industry to reduce the contamination of ground beef. These measures were accompanied by a decline in the frequency of isolation of STEC O157 from ground beef in 2003 and 2004 (*5*). In 2005 and 2006, however, the frequency

of isolation of STEC O157 in ground beef remained at the same level as 2004.[§] Reasons for the increases in human STEC O157 infections in 2005 and 2006 are not known. However, STEC O157 outbreaks caused by contaminated spinach and lettuce in 2006 highlight the need to more effectively prevent contamination of produce that is consumed raw. In a measure to reduce the risk for illness attributed to fresh produce, the Food and Drug Administration recently published draft guidance advising processors on how to minimize microbial food-safety hazards common to the processing of most fresh-cut fruits and vegetables (*6*).

Of the six most common *Salmonella* serotypes in 2006, only Typhimurium has declined since the baseline, and its incidence since 2003 has been stable. Transmission of *Salmonella* to humans can occur via many vehicles, including produce, eggs, poultry and other meat, and direct contact with animals and their environments. The two outbreaks of salmonellosis associated with tomatoes in 2006 underscore the need to more effectively prevent contamination of produce that is consumed raw. Poultry is an important source of human *Salmonella* infections. USDA-FSIS reported an increase in the frequency of isolation of *Salmonella*, particularly *S.* Enteriditis, in chicken-broiler carcasses during 2000–2005 (*7,8*). The predominant *S.* Enteriditis phage type strains isolated from chickens matched those associated with eating chicken in a FoodNet case-control study (*7,9*), indicating that chicken is an important source of human *S.* Enteriditis infections. In early 2006, USDA-FSIS launched an initiative to reduce *Salmonella* in poultry and other meat (*10*). For the period 2001–2006, a USDA-FSIS testing program identified 2006 as the year with the lowest percentage of chickens that tested positive for *Salmonella* (*8*).

The incidence of *Vibrio* infections has increased to the highest level since FoodNet began conducting surveillance. These infections are most often associated with the consumption of raw seafood, particularly oysters. Additional measures to reduce contamination of seafood more effectively are warranted. Consumers, especially persons who are immunocompromised, should be informed they are at increased risk for *Vibrio* infections when they consume raw seafood.

Much remains to be done to reach the national health objectives for foodborne illnesses.[¶] Enhanced measures are needed to control pathogens in animals and plants; to reduce or prevent contamination during growing, harvesting, and processing; and to educate consumers more effectively about risks and prevention measures. Such measures can be better focused when the source of human infections (i.e., animal reservoir species and transmission route) is known. In particular, further research is needed to understand how contamination of fresh produce occurs so that new measures to reduce such contamination can be developed and implemented.

Consumers can reduce their risk for foodborne illness by following safe food-handling recommendations and by avoiding consumption of unpasteurized milk, raw or undercooked oysters, raw or undercooked eggs, raw or undercooked ground beef, and undercooked poultry. The risk for foodborne illness also can be decreased by choosing in-shell pasteurized eggs, irradiated ground meat, and high-pressure–treated oysters. Additional information on food safety for consumers is available at http://www.foodsafety.gov.

References

1. Scallan E. Activities, achievements, and lessons learned during the first 10 years of the Foodborne Diseases Active Surveillance Network: 1996-2005. Clin Infect Dis 2007;44:718–25.
2. CDC. Laboratory-confirmed non-O157 Shiga toxin-producing *Escherichia coli*—Connecticut, 2000–2005. MMWR 2007;56:29–31.
3. CDC. Ongoing multistate outbreak of *Escherichia coli* serotype O157:H7 infections associated with consumption of fresh spinach—United States, September 2006. MMWR 2006;55:1045–6.
4. CDC. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food—10 states, United States, 2005. MMWR 2006;55:392–5.
5. Naugle AL, Holt KG, Levine P, Eckel R. Sustained decrease in the rate of *Escherichia coli* O157:H7-positive raw ground beef samples tested by the Food Safety and Inspection Service. J Food Prot 2006;69:480–1.
6. US Food and Drug Administration. Draft final guidance for industry: guide to minimize food safety hazards for fresh-cut fruits and vegetables. Fed Regist 2007;72:11364–8. Available at http://www.cfsan.fda.gov/~dms/prodgui3.html.
7. Altekruse SF, Bauer N, Chanlongbutra A, et al. *Salmonella* Enteritidis in broiler chickens, United States, 2000–2005. Emerg Infect Dis 2006;12:1848–52.
8. US Department of Agriculture, Food Safety and Inspection Service. Progress report on *Salmonella* testing of raw meat and poultry products, 1998–2006. Washington, DC: US Department of Agriculture; 2007. Available at http://www.fsis.usda.gov/science/progress_report_salmonella_testing/index.asp.
9. Marcus R, Varma JK, Medus C, et al. Re-assessment of risk factors for sporadic *Salmonella* serotype Enteritidis infections: a case-control study in five FoodNet sites, 2002–2003. Epidemiol Infect 2007;135:84–92.
10. US Department of Agriculture, Food Safety and Inspection Service. *Salmonella* verification sample result reporting: agency policy and use in public health protection. Fed Regist 2006;71:9772–7. Available at http://www.fsis.usda.gov/oppde/rdad/frpubs/04-026n.pdf.

[§] Additional information is available at http://www.fsis.usda.gov/science/ground_beef_e.coli_testing_results/index.asp.

[¶] Additional information is available at http://www.health.gov/healthypeople.

Progress Toward Poliomyelitis Eradication — Pakistan and Afghanistan, January 2006–February 2007

Of the four countries where wild poliovirus (WPV) transmission has never been interrupted, two are in the World Health Organization's (WHO) Eastern Mediterranean Region: Pakistan and Afghanistan (*1*).* During January 2006–February 2007, the number of reported WPV cases in both countries increased. In addition, an increase was observed in the number of affected districts; however, genetic diversity of the virus decreased, and regions of transmission remained limited. This report updates a previous report (*2*) and describes polio cases and eradication activities in Pakistan and Afghanistan during January 2006–February 2007. Critical to the success of polio eradication will be high vaccination coverage among children in areas of frequent conflict along the border between these two countries.

Immunization Activities

Routine coverage of infants with 3 doses of oral polio vaccine (OPV) remained low in 2006, at 69% and 64% in Afghanistan and Pakistan, respectively.† Reported 3-dose OPV coverage, however, varied substantially among provinces within each country, ranging from 20% to 80% in Afghanistan, and from 42% to 90% in Pakistan. Coverage was higher in areas with good health infrastructure and management, easy access, and higher levels of literacy.

In 2006, Pakistan conducted 12 supplemental immunization activities (SIAs),§ consisting of six national immunization days (NIDs), two sub-NIDs (SNIDs), three large-scale SIAs in response to reported WPV cases, and one cross-border SIA in collaboration with Afghanistan. SNIDs in Pakistan were conducted primarily in districts at high risk for poliovirus circulation, including semiautonomous tribal areas of North-West Frontier Province; districts of Balochistan Province, bordering Afghanistan; and Sindh Province (including Karachi city). During 2006, Afghanistan conducted five NIDs and five SNIDs, with most SNIDs covering the southern, southwestern, and eastern regions along the border with Pakistan. During the first 2 months of 2007, Pakistan conducted two SIAs (one NID and one SNID), and Afghanistan conducted two SNIDs.

SIAs in both countries continued to be effective, with vaccination rates estimated at >95% among children aged <5 years. However, evidence from post-SIA assessments, field observations, and reported vaccination histories of acute flaccid paralysis (AFP) cases indicates that vaccination coverage remains suboptimal, particularly in the known high-risk, security-compromised, and remote areas along the border between the two countries. In Pakistan, these areas include parts of the Federally Administered Tribal Areas, North-West Frontier Province, and Balochistan Province. In Afghanistan, the most serious security situation persists in the Southern Region (Kandahar, Helmand, Oruzgan, and Zabul provinces), but security also is compromised in large parts of the South Eastern Region and in parts of the Eastern Region. Because of the extensive cross-border movement and migration between Pakistan and Afghanistan, especially in the region stretching from central Pakistan through Balochistan into southern Afghanistan, SIAs in the two countries generally were synchronized to ensure simultaneous, comprehensive coverage of border areas and of children in transit.

In 2006, monovalent type 1 OPV (mOPV1),¶ which is most effective against the outbreak serotype, WPV type 1 (WPV1) (*3*), was used in most high-transmission risk areas during four of the 12 SIAs conducted in Pakistan, and five of the 10 SIAs in Afghanistan. However, in Pakistan, since the November 2006 SIA, only trivalent OPV (tOPV) has been used in SIAs because of the persistent transmission of both WPV1 and WPV type 3 (WPV3). In 2007, the extent of mOPV1 use in SIAs in both countries will depend on the types of poliovirus circulation.

Acute Flaccid Paralysis (AFP) Surveillance

The Global Polio Eradication Initiative relies on an acute flaccid paralysis (AFP) surveillance system to identify cases of poliomyelitis. Through this system, AFP cases in all children aged <15 years and suspected polio in persons of any age are reported and investigated as possible poliomyelitis. AFP surveillance quality is monitored according to World Health

* The other two countries are India and Nigeria.

† Sources of coverage data are unpublished reports from the Ministry of Health on routine immunization coverage (Afghanistan) and an independent coverage evaluation conducted in May 2006 (Pakistan).

§ Mass campaigns conducted during a brief period (days to weeks) in which 1 dose of OPV is administered to all children aged <5 years, regardless of vaccination history. The geographic extent of campaigns (national versus subnational) is determined by analysis of surveillance data. OPV can be administered at fixed sites, by mobile teams during house-to-house visits, by mobile teams at transit points (e.g., train stations or markets), or through a combination of strategies, depending on local circumstances.

¶ mOPV1 contains polio vaccine against WPV1 only and does not provide protection against other WPV types. mOPV1 provides greater immunity to a specific WPV type than does the same number of doses of trivalent OPV.

Organization (WHO) operational targets.** The national nonpolio AFP rate (number of nonpolio AFP cases per 100,000 population aged <15 years) was 5.8 in Pakistan and 6.2 in Afghanistan, above the target rate of two cases; adequate stool specimens†† were collected from 89% (range: 82%–95% among provinces) and 91% (range: 64%–100% among provinces) of AFP cases in Pakistan and Afghanistan, respectively, above the target of 80% (Table).

The polio laboratory at the National Institutes of Health in Islamabad, Pakistan, which serves as a Regional Reference Laboratory in the global polio laboratory network, continues to provide laboratory support for AFP surveillance in both countries. The National Institutes of Health laboratory performs the initial virus isolation, intratypic differentiation, and genomic sequencing. Since July 2006, the laboratory has implemented a fast-processing algorithm, which shortens the interval between receiving the specimen and reporting the results to approximately 14 days (an approximate 50% reduction).

** Current WHO operational targets for countries at high risk for polio transmission are a nonpolio AFP rate of at least two cases per 100,000 population aged <15 years at each subnational level and adequate stool specimen collection for >80% of AFP cases (i.e., two specimens collected >24 hours apart, both within 14 days of paralysis onset, and shipped on ice or frozen ice packs to a WHO-accredited laboratory and arriving at the laboratory in good condition).

†† Two stool specimens collected 24 hours apart within 2 weeks of paralysis onset that arrive at the lab in good condition.

WPV Incidence

In Pakistan, the number of confirmed polio cases increased from 28 cases reported from 17 districts in 2005 to 40 cases reported from 20 districts in 2006. Of the 40 polio cases, 20 were caused by WPV1 and 20 by WPV3. The majority of WPV1 cases were reported from Sindh Province or from security-compromised areas in North-West Frontier Province (Figure). Approximately 73% of polio patients were aged <2 years, 13% had never received any OPV doses, and 18% had received 1 to 3 OPV doses. Additionally, 18% of patients were of Afghani origin, a group that accounts for approximately 2% of the total Pakistan population. The resurgence of WPV3 in Pakistan was reported in late 2006 in northern Sindh and North-West Frontier Province, caused by a virus strain that had circulated in southern Afghanistan in 2005 and early 2006 and was reintroduced into Pakistan through Balochistan Province. The virus spread most rapidly in Sindh, and by February 2007, a total of 10 WPV3 cases had been reported from eight districts. As of February 28, six cases (two WPV1 and four WPV3) had been confirmed.

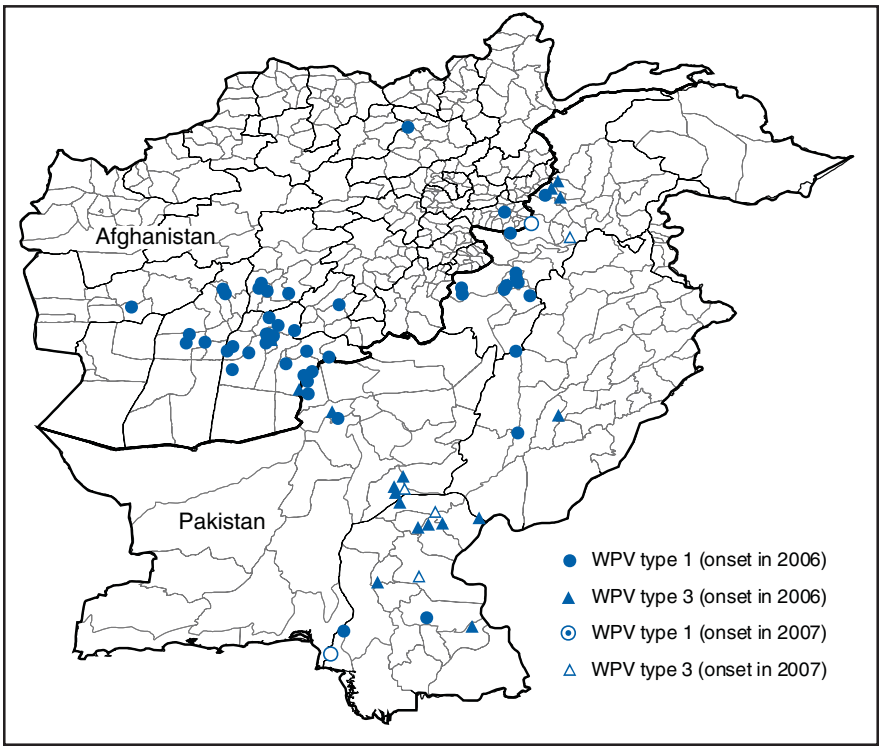
In Afghanistan, 31 WPV cases were reported in 2006 (29 WPV1 and two WPV3), up from nine total cases in 2005 (*2*). After nearly 2 years without a report of WPV1 in the Southern Region, an importation of WPV1 from Pakistan in late 2005 resulted in an outbreak that peaked in June–July 2006 and ended in early September 2006. Apart from this regional outbreak, Afghanistan reported only two WPV1 cases (one

TABLE. Acute flaccid paralysis (AFP) surveillance indicators and reported wild poliovirus (WPV) cases, by quarter and type — Pakistan and Afghanistan, January 2006–February 2007

Country/ Province or region	AFP reporting (2006)			Reported WPV cases (2006)							Reported WPV cases, by type, (January 1–February 28, 2007)	
	No. AFP cases	Nonpolio AFP rate*	% persons with AFP with adequate specimens†	Quarter 1	2	3	4	Total cases by WPV type: WPV1	WPV3	Total cases	WPV1	WPV3
Pakistan	**4,410**	**5.8**	**89**	**2**	**10**	**13**	**15**	**20**	**20**	**40**	**2**	**4**
NWFP§	965	8.2	86	1	3	7	5	11	5	16	1	1
Balochistan	226	6.3	83	1	5	2	2	4	6	10	—	1
Punjab	1,934	4.8	92	—	1	1	—	1	1	2	—	—
Sindh	1,207	7.0	87	—	1	3	8	4	8	12	1	2
Other areas¶	78	3.1	87	—	—	—	—	—	—	—	—	—
Afghanistan	**989**	**6.2**	**91**	**6**	**16**	**7**	**2**	**29**	**2**	**31**	**—**	**—**
Southern	154	4.5	81	6	15	6	1	26	2	28	—	—
South Eastern	67	4.2	97	—	—	—	—	—	—	—	—	—
Eastern	107	7.4	88	—	—	1	—	1	—	1	—	—
Western	151	5.8	92	—	1	—	—	1	—	1	—	—
Central	197	6.6	93	—	—	—	—	—	—	—	—	—
North Eastern	118	6.4	91	—	—	—	1	1	—	1	—	—
Northern	168	7.6	96	—	—	—	—	—	—	—	—	—
Badakhshan	27	5.9	93	—	—	—	—	—	—	—	—	—

* Per 100,000 children aged <15 years.
† Two stool specimens that are collected at an interval of at least 24 hours within 14 days of paralysis onset and properly shipped to the laboratory.
§ North-West Frontier Province.
¶ Includes Azad, Jammu, Kashmir (AJK), the Federally Administered Northern Areas, and Islamabad.

FIGURE. Wild poliovirus (WPV) cases,* by district — Afghanistan and Pakistan, January 2006–February 2007†



* Excludes viruses detected from environmental surveillance and vaccine-derived polioviruses.
† Data reported to the World Health Organization as of February 28, 2007.

from Nangarhar Province, Eastern Region, and one from Baghlan Province, North Eastern Region). Neither of these cases led to extended virus transmission, and genetic data suggest that both cases were imported recently from the Southern Region outbreak area or from Pakistan. Both 2006 WPV3 cases were reported from the Southern Region. Twenty (65%) of 31 cases reported in 2006 were among children aged <2 years; six (19%) of those children had never received OPV, and 10 (32%) had received 1 to 3 doses of OPV. In 2007, no polio cases had been reported from Afghanistan as of February 28. However, the security-compromised, hard-to-access area around Kandahar, Southern Region (adjacent to the Quetta area of Balochistan, Pakistan) remains the area at greatest risk for undetected poliovirus transmission. In previous outbreaks, circulating virus has been reported in Kandahar with subsequent spread to other provinces in western and central Afghanistan.

Genetic sequencing revealed that five clusters of genetic lineages of WPV1 and two clusters of WPV3 circulated in Pakistan and Afghanistan in 2006, a decrease in the number of lineages from seven WPV1 and three WPV3 in 2005. The genetic data also suggested strong links between viruses reported in Pakistan and Afghanistan.

Reported by: *WHO Eastern Mediterranean Regional Office Egypt, Cairo; WHO Pakistan, Islamabad; WHO Afghanistan, Kabul; Immunization, Vaccines, and Biologicals Dept, WHO, Geneva, Switzerland. Global Immunization Div, National Center for Immunization and Respiratory Diseases, CDC.*

Editorial Note: Although the number of confirmed polio cases increased during 2006 in both Pakistan and Afghanistan, some progress was made toward the eradication goal in both countries. WPV transmission in Pakistan in 2006 was confined to previously known areas of transmission: south and central North-West Frontier Province; the Quetta area of Balochistan, bordering the Southern Region of Afghanistan; and Karachi in Sindh. After the use of mOPV1 during several SIAs since 2005 (*3*), WPV1 transmission in Pakistan was lower in 2006 than in any previous year since poliovirus type has been measured, with only one WPV1 case each reported from Punjab Province and from northern Sindh. In Afghanistan, the WPV1 outbreak in the southern area of the country ended, with no further reports of WPV1 from the area since early September 2006. Although WPV1 was imported into two other regions of Afghanistan, the virus did not spread. In addition, the genetic diversity of both types of WPV circulating in Afghanistan and Pakistan continued to decrease, and AFP surveillance remained sensitive in both countries.

Vaccinating children in areas of conflict remains one of the greatest challenges in both countries and will require continued engagement of civil administration and local communities, including support from tribal and religious leaders. Additional focus has been placed on the identification of and access to mobile populations in areas of high poliovirus transmission. Cross-border coordination of polio activities, including two joint SNIDs, indicates government commitment to the program in both countries. The two respective ministers of health conducted a meeting on polio and jointly inaugurated the cross-border mop-up vaccination campaign in December 2006. The number of permanent vaccination posts at the border also was increased from two to 15.

Interruption of WPV transmission in Pakistan and Afghanistan is a regional and global priority. Success will require overcoming one of the greatest challenges to polio eradication:

accessing and vaccinating children along the large, remote, and increasingly security-compromised border between the two countries. This area is now recognized as the principal remaining virus reservoir in the region and a primary source of poliovirus spread into other areas, facilitated by frequent border crossings. Achieving a high rate of vaccination coverage in this border area will require continued support from the international polio partnership,[§§] commitment to high-quality SIAs from political and health leaders at all levels, and close coordination of polio eradication activities between the two countries.

References

1. CDC. Progress toward interruption of wild poliovirus transmission—worldwide, January 2005–March 2006. MMWR 2006;55:458–62.
2. CDC. Progress toward poliomyelitis eradication—Pakistan and Afghanistan, January 2005–May 2006. MMWR 2006;55:679–82.
3. Caceres VM, Sutter RW. Sabin monovalent oral polio vaccines: review of past experiences and their potential use after polio eradication. Clin Infect Dis 2001;33:531–41.

[§§] Polio eradication efforts in Afghanistan and Pakistan are supported by the Bill and Melinda Gates Foundation; the governments of Japan, the Netherlands, and the United Kingdom; the International Committee of the Red Cross; the International Federation of Red Cross and Red Crescent Societies; Rotary International; UNICEF; the United States Agency for International Development; WHO; and CDC.

Notice to Readers

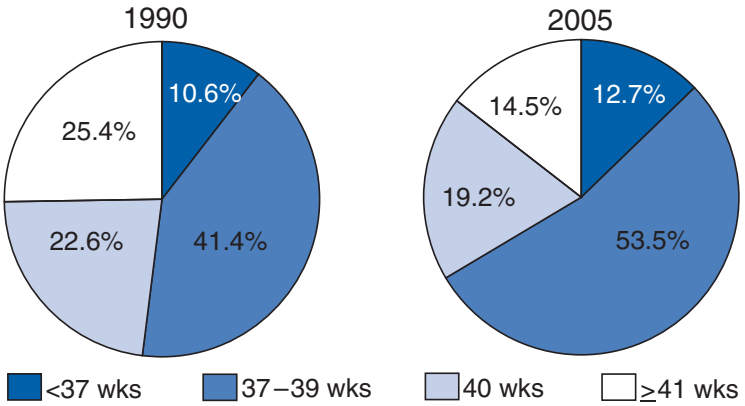
Availability of Provisional AIDS and HIV/AIDS Data in Table IV and Pediatric HIV Surveillance Data in Table I

CDC is upgrading the national human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) surveillance data management system. During this transition, CDC will not update AIDS or HIV/AIDS surveillance data in the quarterly *MMWR* Table IV. In addition, CDC will not provide monthly updates of HIV infection data for persons aged <13 years in Table I. A footnote that explains this situation will be included with Tables I and IV during the period when no updates are available.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Distribution of Births, by Gestational Age — United States, 1990 and 2005



The distribution of births by gestational age changed between 1990 and 2005. The percentage of preterm births (<37 completed weeks of gestation) increased 20%, from 10.6% to 12.7%; the percentage of births at 37–39 weeks of gestation also increased, from 41.4% to 53.5%, a 29% increase. In contrast, the percentage of infants born at 40 weeks and especially 41 weeks of gestation declined (15% and 43%, respectively).

SOURCE: National Vital Statistics System. Births: preliminary data for 2005. Available at http://www.cdc.gov/nchs/products/pubs/pubd/hestats/prelimbirths05/prelimbirths05.htm.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 7, 2007 (14th Week)*

Disease	Current week	Cum 2007	5-year weekly average†	Total cases reported for previous years 2006	2005	2004	2003	2002	States reporting cases during current week (No.)
Anthrax	—	—	—	1	—	—	—	2	
Botulism:									
foodborne	—	—	0	19	19	16	20	28	
infant	—	13	1	95	85	87	76	69	
other (wound & unspecified)	—	2	1	45	31	30	33	21	
Brucellosis	—	25	2	119	120	114	104	125	
Chancroid	—	1	1	34	17	30	54	67	
Cholera	—	—	0	7	8	5	2	2	
Cyclosporiasis§	2	14	2	135	543	171	75	156	FL (2)
Diphtheria	—	—	—	—	—	—	1	1	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	0	63	80	112	108	164	
eastern equine	—	—	—	7	21	6	14	10	
Powassan	—	—	—	1	1	1	—	1	
St. Louis	—	—	0	9	13	12	41	28	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	—	13	2	575	786	537	362	511	
human monocytic	1	29	1	500	506	338	321	216	CA (1)
human (other & unspecified)	—	10	0	230	112	59	44	23	
Haemophilus influenzae,**									
invasive disease (age <5 yrs):									
serotype b	1	3	0	9	9	19	32	34	MN (1)
nonserotype b	1	12	3	103	135	135	117	144	NC (1)
unknown serotype	3	82	5	248	217	177	227	153	FL (1), TN (1), UT (1)
Hansen disease§	—	9	2	73	87	105	95	96	
Hantavirus pulmonary syndrome§	—	2	0	38	26	24	26	19	
Hemolytic uremic syndrome, postdiarrheal§	4	25	2	272	221	200	178	216	NY (1), MO (2), TX (1)
Hepatitis C viral, acute	7	164	21	841	652	713	1,102	1,835	NY (1), MN (2), FL (1), OK (1), WA (1), OR (1)
HIV infection, pediatric (age <13 yrs)††	—	—	5	52	380	436	504	420	
Influenza-associated pediatric mortality§,§§	1	41	1	41	45	—	N	N	AK (1)
Listeriosis	11	121	10	816	896	753	696	665	NY (2), PA (1), GA (1), FL (2), TN (2), TX (1), CA (2)
Measles¶¶	3	5	1	52	66	37	56	44	NC (3)
Meningococcal disease, invasive***:									
A, C, Y, & W-135	2	54	6	233	297	—	—	—	WA (2)
serogroup B	3	24	3	145	156	—	—	—	OK (1), WA (2)
other serogroup	—	6	1	25	27	—	—	—	
unknown serogroup	12	187	20	716	765	—	—	—	OH (1), MN (1), FL (2), TN (1), AZ (1), WA (1), CA (5)
Mumps	4	222	88	6,541	314	258	231	270	OH (1), WA (2), CA (1)
Novel influenza A virus infections	—	—	—	N	N	N	N	N	
Plague	—	—	—	17	8	3	1	2	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Poliovirus infection, nonparalytic§	—	—	—	N	N	N	N	N	
Psittacosis§	—	3	0	20	16	12	12	18	
Q fever§	1	34	2	178	136	70	71	61	MD (1)
Rabies, human	—	—	0	3	2	7	2	3	
Rubella†††	—	9	0	8	11	10	7	18	
Rubella, congenital syndrome	—	—	0	1	1	—	1	1	
SARS-CoV§,§§§	—	—	0	—	—	—	8	N	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	17	5	101	129	132	161	118	
Syphilis, congenital (age <1 yr)	—	37	7	334	329	353	413	412	
Tetanus	—	3	0	33	27	34	20	25	
Toxic-shock syndrome (staphylococcal)§	2	19	2	96	90	95	133	109	VA (1), CO (1)
Trichinellosis	—	1	0	14	16	5	6	14	
Tularemia	—	2	0	89	154	134	129	90	
Typhoid fever	2	57	5	317	324	322	356	321	CA (2)
Vancomycin-intermediate *Staphylococcus aureus*§	—	2	0	4	2	—	N	N	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	0	1	3	1	N	N	
Vibriosis (non-cholera *Vibrio* species infections)§	4	26	—	N	N	N	N	N	FL (3), CA (1)
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 non-neuroinvasive. 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 42 cases were reported for the 2006–07 flu season.

¶¶ The three measles cases reported for the current week were indigenous.

*** 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 April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	10,216	19,779	23,540	237,694	267,578	116	150	478	2,128	2,362	14	68	301	583	712
New England	372	674	1,364	8,502	7,928	—	0	0	—	—	1	3	22	27	73
Connecticut	207	201	833	2,006	1,625	N	0	0	N	N	—	0	7	7	38
Maine§	55	47	73	707	557	—	0	0	—	—	1	0	6	8	8
Massachusetts	—	304	604	4,117	4,025	—	0	0	—	—	—	0	14	—	20
New Hampshire	20	38	69	503	470	—	0	0	—	—	—	0	5	6	5
Rhode Island§	69	63	108	925	908	—	0	0	—	—	—	0	5	—	—
Vermont§	21	20	45	244	343	N	0	0	N	N	—	1	5	6	2
Mid. Atlantic	2,257	2,459	4,163	31,724	32,776	—	0	0	—	—	3	11	33	71	115
New Jersey	—	384	543	3,842	5,118	N	0	0	N	N	—	0	3	—	8
New York (Upstate)	572	505	2,745	6,164	5,490	N	0	0	N	N	3	3	13	23	22
New York City	1,202	753	1,325	11,224	11,436	N	0	0	N	N	—	2	12	13	30
Pennsylvania	483	770	1,006	10,494	10,732	N	0	0	N	N	—	4	18	35	55
E.N. Central	1,064	3,201	4,471	38,636	46,061	—	1	3	10	9	2	15	110	121	159
Illinois	575	1,019	1,333	12,153	14,982	—	0	0	—	—	—	2	22	3	22
Indiana	—	374	632	5,077	5,685	—	0	0	—	—	—	1	18	10	9
Michigan	309	757	1,225	9,454	7,513	—	1	3	8	6	—	2	9	29	30
Ohio	27	625	2,269	7,294	11,878	—	0	2	2	3	2	5	33	48	57
Wisconsin	153	374	528	4,658	6,003	N	0	0	N	N	—	4	53	31	41
W.N. Central	93	1,186	1,445	13,820	16,962	1	0	54	3	—	4	12	77	91	96
Iowa	—	155	225	2,064	2,373	N	0	0	N	N	—	2	28	15	7
Kansas	—	147	270	1,861	2,267	N	0	0	N	N	—	1	8	13	14
Minnesota	—	245	314	2,396	3,585	—	0	54	—	—	2	3	25	23	40
Missouri	—	447	628	5,220	6,133	1	0	1	3	—	2	2	21	19	23
Nebraska§	—	99	180	1,260	1,395	N	0	0	N	N	—	1	16	6	4
North Dakota	33	30	64	351	530	N	0	0	N	N	—	0	1	1	—
South Dakota	60	50	84	668	679	N	0	0	N	N	—	1	7	14	8
S. Atlantic	2,399	3,706	6,115	39,069	51,227	—	0	1	1	2	3	17	68	177	168
Delaware	41	68	111	965	1,008	N	0	0	N	N	—	0	3	2	—
District of Columbia	92	65	161	1,331	755	—	0	0	—	—	—	0	2	3	5
Florida	—	960	1,187	3,300	12,561	N	0	0	N	N	2	8	32	89	65
Georgia	—	708	3,022	6,520	8,682	N	0	0	N	N	1	5	12	49	45
Maryland§	509	342	951	5,167	4,685	—	0	1	1	2	—	0	2	5	8
North Carolina	645	624	1,772	8,301	10,310	—	0	0	—	—	—	0	11	8	25
South Carolina§	609	384	2,105	6,415	5,853	N	0	0	N	N	—	1	14	11	5
Virginia§	503	461	685	6,518	6,636	N	0	0	N	N	—	1	5	9	13
West Virginia	—	57	96	552	737	N	0	0	N	N	—	0	3	1	2
E.S. Central	630	1,470	2,093	20,505	20,691	—	0	0	—	—	1	3	14	28	20
Alabama§	70	421	577	4,915	6,977	N	0	0	N	N	—	0	11	12	8
Kentucky	68	131	691	1,541	2,557	N	0	0	N	N	—	1	3	9	6
Mississippi	—	401	958	6,033	4,330	N	0	0	N	N	—	0	3	3	1
Tennessee§	492	528	709	8,016	6,827	N	0	0	N	N	1	1	5	4	5
W.S. Central	1,370	2,203	3,026	28,717	29,498	—	0	1	—	—	—	5	45	22	35
Arkansas§	184	157	337	2,223	2,206	N	0	0	N	N	—	0	2	2	4
Louisiana	60	303	610	3,662	4,588	—	0	1	—	—	—	1	9	5	—
Oklahoma	129	263	473	3,699	2,714	N	0	0	N	N	—	1	4	10	9
Texas§	997	1,451	1,908	19,133	19,990	N	0	0	N	N	—	2	36	5	22
Mountain	278	1,270	2,018	12,167	17,034	80	102	201	1,455	1,802	—	3	39	30	26
Arizona	72	431	993	2,854	5,041	80	102	199	1,432	1,756	—	0	3	7	3
Colorado	—	317	416	1,781	4,172	N	0	0	N	N	—	1	7	11	5
Idaho§	23	54	253	1,004	915	N	0	0	N	N	—	0	5	1	3
Montana§	3	51	144	662	598	N	0	0	N	N	—	0	26	2	5
Nevada§	174	107	397	2,234	1,811	—	1	3	7	21	—	0	1	—	3
New Mexico§	—	183	321	2,159	2,762	—	0	3	5	4	—	0	5	6	2
Utah	—	97	201	1,132	1,341	—	1	4	11	19	—	0	3	1	5
Wyoming§	6	28	54	341	394	—	0	0	—	2	—	0	11	2	—
Pacific	1,753	3,377	4,075	44,554	45,401	35	53	299	659	549	—	1	5	16	20
Alaska	79	85	157	1,090	1,113	N	0	0	N	N	—	0	1	—	—
California	1,183	2,670	3,198	34,807	35,053	35	53	299	659	549	—	0	0	—	—
Hawaii	—	107	133	1,289	1,603	N	0	0	N	N	—	0	1	—	—
Oregon§	153	161	394	2,591	2,621	N	0	0	N	N	—	1	4	16	20
Washington	338	352	548	4,777	5,011	N	0	0	N	N	—	0	0	—	—
American Samoa	U	0	46	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	111	236	1,994	1,238	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	U	4	9	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 April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	155	309	530	3,172	3,914	3,052	6,792	8,674	76,649	91,545	43	43	137	612	636
New England	4	18	44	118	264	64	111	259	1,343	1,312	—	2	12	23	31
Connecticut	—	5	25	48	45	55	42	203	433	419	—	0	7	15	8
Maine§	2	4	14	39	18	1	2	8	20	38	—	0	4	5	5
Massachusetts	—	0	18	—	137	—	48	96	697	651	—	0	7	—	15
New Hampshire	—	0	9	1	8	2	3	9	40	61	—	0	2	3	—
Rhode Island§	—	0	17	—	12	6	10	19	139	128	—	0	3	—	1
Vermont§	2	3	12	30	44	—	1	5	14	15	—	0	2	—	2
Mid. Atlantic	27	64	120	586	811	505	633	1,521	8,428	8,897	10	10	25	138	141
New Jersey	—	7	16	36	125	—	103	158	1,229	1,468	—	1	4	8	22
New York (Upstate)	17	25	101	219	227	124	122	1,035	1,596	1,508	8	3	14	38	30
New York City	3	17	33	182	263	199	175	376	2,502	2,808	—	2	6	35	33
Pennsylvania	7	14	35	149	196	182	224	336	3,101	3,113	2	3	10	57	56
E.N. Central	13	39	96	420	683	391	1,283	2,227	15,497	18,459	1	5	14	55	92
Illinois	—	8	27	29	157	157	363	488	4,231	5,640	—	1	5	3	27
Indiana	N	0	0	N	N	—	154	289	2,062	2,491	—	1	10	7	14
Michigan	2	13	38	151	194	178	306	880	4,279	2,870	—	0	5	8	13
Ohio	11	15	32	188	204	8	310	1,165	3,244	5,449	1	2	6	37	24
Wisconsin	—	9	24	52	128	48	133	181	1,681	2,009	—	0	3	—	14
W.N. Central	7	23	117	222	340	11	384	518	4,444	5,132	2	3	22	35	28
Iowa	—	5	16	46	60	—	37	63	475	490	—	0	1	—	—
Kansas	—	3	11	29	41	—	43	90	564	641	—	0	2	4	3
Minnesota	—	0	87	7	77	—	65	87	668	840	2	1	17	12	10
Missouri	5	9	28	109	114	—	195	269	2,354	2,701	—	0	5	15	12
Nebraska§	1	2	9	20	22	—	24	48	290	338	—	0	2	3	3
North Dakota	1	0	4	1	5	2	2	6	16	31	—	0	2	1	—
South Dakota	—	1	6	10	21	9	6	15	77	91	—	0	0	—	—
S. Atlantic	36	52	97	631	571	870	1,599	2,696	15,301	22,275	16	11	28	176	162
Delaware	—	1	4	7	7	18	28	44	379	401	1	0	3	5	—
District of Columbia	—	1	7	15	16	41	35	63	586	498	—	0	2	2	—
Florida	23	23	44	288	240	—	446	549	1,564	5,777	7	3	9	56	47
Georgia	4	12	26	154	118	—	349	1,539	2,706	3,933	4	2	6	50	41
Maryland§	2	4	11	49	49	134	119	230	1,642	1,798	2	2	5	30	21
North Carolina	—	0	0	—	—	270	314	608	4,080	5,216	2	0	8	15	15
South Carolina§	1	2	8	15	22	278	166	1,026	2,590	2,675	—	1	3	12	13
Virginia§	6	9	28	96	114	129	119	238	1,595	1,785	—	1	7	1	16
West Virginia	—	0	21	7	5	—	19	44	159	192	—	0	6	5	9
E.S. Central	1	8	34	91	100	198	584	878	7,314	8,211	2	2	9	33	46
Alabama§	1	4	22	46	49	8	193	271	2,017	3,195	—	0	3	7	10
Kentucky	N	0	0	N	N	20	50	268	499	895	—	0	1	1	4
Mississippi	N	0	0	N	N	—	154	434	2,106	1,625	—	0	1	—	3
Tennessee§	—	4	12	45	51	170	194	240	2,692	2,496	2	1	6	25	29
W.S. Central	5	7	21	74	38	556	960	1,483	11,929	12,353	5	1	26	35	23
Arkansas§	3	3	13	35	18	111	80	142	1,072	1,231	—	0	2	2	2
Louisiana	—	1	6	12	—	83	184	366	2,302	2,668	—	0	3	3	1
Oklahoma	2	2	11	27	20	40	107	238	1,566	926	5	1	24	28	19
Texas§	N	0	0	N	N	322	587	931	6,989	7,528	—	0	2	2	1
Mountain	10	29	69	313	357	62	269	455	2,360	3,680	4	4	14	86	84
Arizona	1	3	11	49	40	19	106	220	626	1,217	2	2	9	42	34
Colorado	5	10	26	116	119	—	71	93	524	973	1	1	4	20	23
Idaho§	1	3	12	25	38	4	2	20	64	58	—	0	1	3	2
Montana§	—	2	11	16	18	—	3	20	26	32	—	0	0	—	—
Nevada§	—	1	9	19	29	39	31	135	534	627	—	0	2	3	6
New Mexico§	—	1	6	18	17	—	30	65	395	473	—	0	2	8	10
Utah	3	7	25	62	91	—	16	28	173	250	1	0	3	10	9
Wyoming§	—	1	4	8	5	—	2	5	18	50	—	0	1	—	—
Pacific	52	60	147	717	750	395	787	971	10,033	11,226	3	2	8	31	29
Alaska	2	1	17	16	8	11	11	27	118	148	—	0	2	4	3
California	30	43	71	512	570	324	649	833	8,524	9,284	—	0	6	—	9
Hawaii	—	1	4	15	17	—	15	30	146	286	—	0	1	1	4
Oregon§	7	8	14	101	102	8	26	46	285	372	3	1	6	26	12
Washington	13	8	68	73	53	52	76	131	960	1,136	—	0	2	—	1
American Samoa	U	0	0	U	U	U	0	2	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	5	19	42	22	—	6	16	97	94	—	0	2	—	—
U.S. Virgin Islands	U	0	0	U	U	U	0	3	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 *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Hepatitis (viral, acute), by type† A					Hepatitis (viral, acute), by type† B					Legionellosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	42	58	116	610	1,035	37	80	287	861	1,075	9	49	109	336	341
New England	—	2	20	6	72	—	2	4	16	40	—	1	12	3	16
Connecticut	—	1	3	4	9	—	0	4	8	18	—	0	9	2	3
Maine§	—	0	2	—	3	—	0	2	1	4	—	0	2	—	2
Massachusetts	—	0	4	—	42	—	0	1	—	12	—	0	4	—	9
New Hampshire	—	0	16	2	13	—	0	1	2	4	—	0	0	—	1
Rhode Island§	—	0	2	—	1	—	0	4	4	1	—	0	6	—	—
Vermont§	—	0	2	—	4	—	0	1	1	1	—	0	2	1	1
Mid. Atlantic	2	7	19	72	88	5	8	19	93	136	2	15	53	89	100
New Jersey	—	1	4	8	30	—	2	5	17	43	—	2	11	11	14
New York (Upstate)	2	2	12	19	14	3	1	14	18	16	2	5	30	29	32
New York City	—	2	11	31	29	—	2	6	14	30	—	2	20	11	17
Pennsylvania	—	1	4	14	15	2	3	7	44	47	—	5	19	38	37
E.N. Central	—	6	13	67	85	7	8	19	101	126	—	10	30	68	66
Illinois	—	1	4	17	19	—	2	5	12	45	—	1	11	—	11
Indiana	—	0	7	5	5	—	0	17	5	7	—	1	5	4	3
Michigan	—	2	8	25	32	—	2	8	35	43	—	3	10	26	14
Ohio	—	1	4	20	21	7	2	10	44	29	—	4	19	37	27
Wisconsin	—	0	4	—	8	—	0	3	5	2	—	0	3	1	11
W.N. Central	17	2	8	32	35	2	3	13	38	41	—	1	15	11	9
Iowa	—	0	1	5	3	—	0	3	7	6	—	0	3	1	1
Kansas	—	0	1	—	15	—	0	2	3	4	—	0	2	—	—
Minnesota	17	0	7	18	1	2	0	12	4	1	—	0	11	2	—
Missouri	—	1	3	5	8	—	1	4	19	27	—	0	2	6	5
Nebraska§	—	0	2	2	3	—	0	3	3	2	—	0	2	1	2
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	3	2	5	—	0	1	2	1	—	0	1	1	1
S. Atlantic	12	8	27	113	156	12	23	55	257	300	3	10	25	92	85
Delaware	—	0	2	—	4	—	0	4	3	12	—	0	2	1	1
District of Columbia	—	0	5	9	1	—	0	2	1	4	—	0	5	—	3
Florida	4	3	13	46	57	5	7	16	86	112	3	3	10	41	38
Georgia	3	1	5	15	9	2	3	8	36	36	—	1	5	11	2
Maryland§	3	1	7	13	23	2	2	7	22	49	—	2	8	20	20
North Carolina	—	0	11	6	38	1	1	16	49	49	—	0	5	9	11
South Carolina§	—	0	3	3	7	—	2	5	21	18	—	0	2	4	2
Virginia§	2	1	4	21	16	2	2	5	32	9	—	1	5	3	7
West Virginia	—	0	3	—	1	—	0	23	7	11	—	0	4	3	1
E.S. Central	—	2	7	22	32	1	6	20	62	90	—	2	9	14	12
Alabama§	—	0	2	2	2	—	1	10	19	26	—	0	2	1	3
Kentucky	—	0	4	4	14	—	1	5	1	21	—	1	6	7	3
Mississippi	—	0	5	5	1	—	0	7	7	10	—	0	2	—	—
Tennessee§	—	1	5	11	15	1	3	7	35	33	—	1	7	6	6
W.S. Central	—	6	20	36	95	—	18	128	105	156	—	1	12	12	6
Arkansas§	—	0	5	3	24	—	1	4	7	16	—	0	1	1	1
Louisiana	—	0	4	4	2	—	1	5	15	5	—	0	2	1	—
Oklahoma	—	0	3	—	3	—	1	14	9	1	—	0	6	—	1
Texas§	—	5	15	29	66	—	14	108	74	134	—	1	12	10	4
Mountain	3	5	16	82	99	2	3	9	31	52	1	2	8	25	16
Arizona	3	3	13	71	59	—	0	2	—	19	1	1	4	8	3
Colorado	—	1	3	6	15	—	0	4	7	10	—	0	2	5	4
Idaho§	—	0	2	1	4	—	0	2	3	4	—	0	3	1	2
Montana§	—	0	3	—	1	—	0	0	—	—	—	0	1	—	—
Nevada§	—	0	2	3	5	—	1	5	10	11	—	0	2	2	3
New Mexico§	—	0	2	1	6	—	0	2	3	5	—	0	2	2	—
Utah	—	0	2	—	8	2	0	5	8	3	—	0	6	5	4
Wyoming§	—	0	1	—	1	—	0	1	—	—	—	0	1	2	—
Pacific	8	15	52	180	373	8	12	38	158	134	3	1	11	22	31
Alaska	—	0	1	1	1	—	0	3	2	1	—	0	1	—	—
California	8	13	48	164	347	8	8	26	121	100	1	1	11	17	31
Hawaii	—	0	2	2	6	—	0	1	—	2	—	0	0	—	—
Oregon§	—	1	3	8	11	—	2	5	26	23	—	0	0	—	—
Washington	—	1	4	5	8	—	1	12	9	8	2	0	2	5	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	1	10	13	12	—	1	9	11	4	—	0	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 April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	53	250	1,019	1,419	1,569	6	25	50	165	295	17	19	40	271	403
New England	2	20	260	81	99	—	0	6	2	9	—	1	3	6	14
Connecticut	—	9	227	20	41	—	0	3	—	1	—	0	2	2	3
Maine§	—	2	39	31	17	—	0	1	2	1	—	0	3	1	2
Massachusetts	—	0	3	—	19	—	0	3	—	5	—	0	2	—	7
New Hampshire	1	3	95	24	17	—	0	3	—	1	—	0	2	—	2
Rhode Island§	—	0	93	—	1	—	0	1	—	—	—	0	1	1	—
Vermont§	1	1	15	6	4	—	0	0	—	1	—	0	1	2	—
Mid. Atlantic	19	153	571	690	1,101	1	5	18	39	79	—	2	11	27	58
New Jersey	—	26	187	102	262	—	1	7	—	22	—	0	2	—	6
New York (Upstate)	16	54	392	196	464	1	1	7	10	6	—	1	4	7	8
New York City	—	2	24	5	16	—	3	9	23	41	—	1	4	5	22
Pennsylvania	3	45	237	387	359	—	1	4	6	10	—	0	4	15	22
E.N. Central	—	12	158	18	75	2	3	10	25	38	1	2	7	29	55
Illinois	—	0	1	1	—	—	1	6	6	12	—	0	2	3	15
Indiana	—	0	3	—	2	—	0	2	1	5	—	0	4	7	8
Michigan	—	1	5	6	3	—	0	2	6	5	—	0	3	8	9
Ohio	—	0	5	2	9	2	0	2	7	11	1	1	4	11	15
Wisconsin	—	11	154	9	61	—	0	3	5	5	—	0	2	—	8
W.N. Central	1	5	169	20	34	—	1	13	12	5	1	1	5	26	18
Iowa	—	1	8	3	4	—	0	1	2	1	—	0	3	6	4
Kansas	—	0	2	1	—	—	0	2	—	—	—	0	1	1	—
Minnesota	—	2	167	15	29	—	0	12	7	2	1	0	3	7	2
Missouri	1	0	2	1	—	—	0	1	1	1	—	0	3	9	8
Nebraska§	—	0	2	—	1	—	0	1	2	—	—	0	1	1	4
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	1	1	—
South Dakota	—	0	1	—	—	—	0	0	—	1	—	0	1	1	—
S. Atlantic	26	42	134	551	227	3	5	15	44	82	2	3	10	39	70
Delaware	4	7	28	97	76	—	0	1	1	2	—	0	1	—	2
District of Columbia	—	0	7	2	5	—	0	2	1	—	—	0	1	—	—
Florida	3	1	5	11	6	2	1	4	12	9	2	1	7	13	26
Georgia	—	0	1	—	1	—	1	6	4	23	—	0	3	6	6
Maryland§	15	20	104	362	129	1	1	4	13	22	—	0	2	10	6
North Carolina	1	0	4	6	8	—	0	4	4	9	—	0	6	4	13
South Carolina§	—	0	2	3	1	—	0	2	—	3	—	0	2	4	6
Virginia§	3	6	36	70	1	—	1	4	9	13	—	0	2	2	10
West Virginia	—	0	14	—	—	—	0	1	—	1	—	0	2	—	1
E.S. Central	—	0	4	6	1	—	0	3	7	7	1	1	3	13	15
Alabama§	—	0	3	1	1	—	0	2	1	3	—	0	2	3	3
Kentucky	—	0	2	—	—	—	0	1	1	1	—	0	1	—	3
Mississippi	—	0	1	—	—	—	0	1	1	1	—	0	3	3	3
Tennessee§	—	0	2	5	—	—	0	2	4	2	1	0	2	7	6
W.S. Central	—	1	6	6	2	—	1	7	3	9	1	1	9	32	25
Arkansas§	—	0	0	—	—	—	0	2	—	—	—	0	2	5	4
Louisiana	—	0	1	—	—	—	0	1	1	1	—	0	4	8	4
Oklahoma	—	0	0	—	—	—	0	2	1	1	1	0	3	7	5
Texas§	—	1	6	6	2	—	1	6	1	7	—	0	9	12	12
Mountain	—	0	4	2	3	—	1	6	10	17	1	1	5	27	32
Arizona	—	0	2	—	3	—	0	3	4	2	1	0	2	6	12
Colorado	—	0	1	—	—	—	0	2	4	6	—	0	2	8	10
Idaho§	—	0	2	—	—	—	0	1	—	—	—	0	1	2	1
Montana§	—	0	1	1	—	—	0	1	1	1	—	0	1	1	—
Nevada§	—	0	1	1	—	—	0	1	—	—	—	0	1	3	3
New Mexico§	—	0	1	—	—	—	0	1	—	1	—	0	1	1	1
Utah	—	0	1	—	—	—	0	2	1	7	—	0	2	6	3
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	2	—	2
Pacific	5	3	17	45	27	—	4	14	23	49	10	4	9	72	116
Alaska	—	0	1	2	—	—	0	4	2	4	—	0	1	1	2
California	5	2	14	38	27	—	2	6	17	38	5	3	8	48	75
Hawaii	N	0	0	N	N	—	0	2	—	—	—	0	2	2	4
Oregon§	—	0	2	5	—	—	0	3	3	4	—	0	3	9	18
Washington	—	0	3	—	—	—	0	11	1	3	5	0	5	12	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	—	—	0	1	3	2
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. —: 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 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 April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	53	246	898	1,666	3,784	74	105	173	840	1,326	7	29	118	107	283
New England	—	18	53	62	402	7	12	26	108	141	—	0	8	—	—
Connecticut	—	2	9	15	21	—	4	14	38	32	—	0	0	—	—
Maine†	—	2	15	25	22	—	2	8	22	20	N	0	0	N	N
Massachusetts	—	0	22	—	309	—	0	17	—	64	—	0	1	—	—
New Hampshire	—	2	27	7	6	—	1	5	8	5	—	0	1	—	—
Rhode Island†	—	0	30	—	11	1	0	3	9	4	—	0	8	—	—
Vermont†	—	1	14	15	33	6	2	5	31	16	—	0	0	—	—
Mid. Atlantic	8	34	156	324	482	1	16	57	115	193	—	2	6	10	11
New Jersey	—	3	11	9	105	—	0	0	—	—	—	0	2	—	2
New York (Upstate)	4	20	150	220	144	—	0	0	—	—	—	0	2	—	—
New York City	—	0	8	—	23	1	1	5	18	1	—	0	3	3	2
Pennsylvania	4	9	22	95	210	—	16	56	97	192	—	1	4	7	7
E.N. Central	7	39	79	387	599	—	2	18	5	4	—	1	6	1	3
Illinois	—	9	23	49	146	—	0	7	—	1	—	0	4	—	1
Indiana	—	3	37	3	50	—	0	2	—	—	—	0	1	—	—
Michigan	1	10	39	94	123	—	1	5	4	2	—	0	1	1	—
Ohio	6	12	56	223	196	—	0	9	1	1	—	0	4	—	2
Wisconsin	—	3	9	18	84	—	0	0	—	—	—	0	1	—	—
W.N. Central	2	18	96	119	420	1	6	20	35	50	2	3	14	16	4
Iowa	—	4	16	34	121	—	1	7	4	7	—	0	1	—	—
Kansas	—	4	13	47	109	—	2	5	20	19	—	0	1	—	—
Minnesota	—	0	80	—	—	—	0	6	3	4	—	0	2	—	—
Missouri	2	4	10	20	123	—	1	6	2	4	2	2	12	16	4
Nebraska†	—	1	4	4	57	—	0	0	—	—	—	0	5	—	—
North Dakota	—	0	9	1	4	1	0	7	6	2	—	0	0	—	—
South Dakota	—	0	4	13	6	—	0	4	—	14	—	0	0	—	—
S. Atlantic	19	17	164	247	276	52	37	62	471	637	4	10	68	62	249
Delaware	—	0	1	1	1	—	0	0	—	—	—	0	3	3	3
District of Columbia	—	0	2	2	3	—	0	0	—	—	—	0	1	—	—
Florida	5	4	20	86	68	—	0	10	33	176	—	0	5	3	6
Georgia	—	0	3	—	7	—	4	16	36	60	—	1	5	2	3
Maryland†	1	2	6	37	56	—	6	12	62	103	—	1	7	8	13
North Carolina	10	0	111	69	52	19	9	22	121	84	4	4	61	36	219
South Carolina†	3	3	11	24	43	2	3	11	33	33	—	1	5	4	3
Virginia†	—	2	19	25	42	31	11	27	163	159	—	2	13	6	2
West Virginia	—	0	19	3	4	—	2	8	23	22	—	0	2	—	—
E.S. Central	2	6	24	57	72	—	4	13	27	48	1	5	27	17	12
Alabama†	—	1	17	17	18	—	1	8	—	16	—	1	9	5	4
Kentucky	—	0	5	—	12	—	0	4	6	4	—	0	1	—	—
Mississippi	—	0	6	6	9	—	0	2	—	2	—	0	1	—	—
Tennessee†	2	3	11	34	33	—	2	7	21	26	1	4	22	12	8
W.S. Central	—	17	147	86	159	2	2	34	17	184	—	1	28	—	4
Arkansas†	—	1	13	2	10	1	0	5	7	4	—	0	10	—	3
Louisiana	—	0	2	5	3	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	9	—	2	1	0	9	10	11	—	0	18	—	—
Texas†	—	14	134	79	144	—	0	29	—	169	—	0	6	—	1
Mountain	10	38	87	320	945	3	3	28	16	30	—	0	5	1	—
Arizona	4	6	28	61	189	3	2	10	15	29	—	0	2	—	—
Colorado	—	8	26	96	360	—	0	0	—	—	—	0	1	—	—
Idaho†	1	1	7	11	25	—	0	24	—	—	—	0	3	1	—
Montana†	—	1	8	10	32	—	0	2	—	—	—	0	2	—	—
Nevada†	—	0	9	3	15	—	0	1	—	—	—	0	1	—	—
New Mexico†	—	2	8	12	25	—	0	2	—	1	—	0	2	—	—
Utah	5	12	39	116	284	—	0	1	1	—	—	0	2	—	—
Wyoming†	—	1	8	11	15	—	0	2	—	—	—	0	1	—	—
Pacific	5	33	229	64	429	8	4	12	46	39	—	0	1	—	—
Alaska	—	1	8	8	27	2	0	6	22	7	N	0	0	N	N
California	—	22	226	—	242	6	3	11	24	32	—	0	1	—	—
Hawaii	—	1	7	6	38	N	0	0	N	N	N	0	0	N	N
Oregon†	—	1	6	18	48	—	0	4	—	—	—	0	1	—	—
Washington	5	4	46	32	74	—	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	—	—	—	—	—	—	—	—	—	—	N	—	—	N	N
Puerto Rico	—	0	1	—	—	—	1	6	15	28	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting 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 April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	338	821	1,336	6,536	7,344	20	75	178	398	517	155	258	521	2,455	2,489
New England	5	18	82	142	778	1	2	16	17	104	5	2	14	18	120
Connecticut	—	0	68	68	503	—	0	5	5	84	—	0	8	8	67
Maine§	2	2	14	26	17	1	0	8	8	2	4	0	5	8	—
Massachusetts	—	0	53	—	222	—	0	9	—	13	—	0	11	—	45
New Hampshire	1	3	25	17	22	—	0	3	3	2	—	0	2	1	4
Rhode Island§	2	1	15	21	10	—	0	2	—	1	1	0	3	1	3
Vermont§	—	1	6	10	4	—	0	4	1	2	—	0	2	—	1
Mid. Atlantic	36	90	191	884	849	5	8	62	49	48	4	14	47	107	230
New Jersey	—	16	49	49	164	—	1	16	1	13	—	3	35	6	73
New York (Upstate)	22	27	93	276	165	2	3	14	21	13	4	3	43	28	67
New York City	—	24	50	226	233	—	0	4	4	7	—	5	14	57	63
Pennsylvania	14	30	67	333	287	3	3	47	23	15	—	1	6	16	27
E.N. Central	30	103	198	680	1,030	—	9	59	48	86	7	23	68	131	252
Illinois	—	27	61	56	295	—	1	7	2	13	—	10	50	17	89
Indiana	—	15	55	110	110	—	1	8	1	10	—	2	17	14	32
Michigan	3	18	35	143	182	—	1	6	10	19	—	2	5	9	59
Ohio	27	22	56	236	265	—	3	18	30	21	7	3	14	63	46
Wisconsin	—	16	27	135	178	—	2	39	5	23	—	3	10	28	26
W.N. Central	29	48	109	517	444	5	11	45	52	67	38	41	77	508	217
Iowa	—	8	26	75	77	—	2	38	6	12	—	2	14	16	8
Kansas	—	7	16	75	67	—	0	4	4	1	—	2	11	8	21
Minnesota	24	11	60	121	96	5	3	26	23	27	7	4	24	73	20
Missouri	5	15	35	171	130	—	2	13	12	21	30	12	69	390	122
Nebraska§	—	3	9	30	45	—	1	11	7	5	1	1	14	5	25
North Dakota	—	0	5	8	4	—	0	0	—	—	—	0	18	4	2
South Dakota	—	3	11	37	25	—	0	5	—	1	—	6	24	12	19
S. Atlantic	112	224	395	2,136	1,721	7	11	32	114	83	64	70	143	947	594
Delaware	—	2	10	17	18	—	0	3	4	1	—	0	2	3	—
District of Columbia	—	1	4	8	19	—	0	1	—	—	—	0	5	3	3
Florida	82	95	176	910	757	3	2	9	32	13	41	33	76	584	243
Georgia	12	34	66	386	225	1	1	7	15	14	18	24	54	294	206
Maryland§	8	13	33	146	118	2	2	9	22	15	2	1	10	18	33
North Carolina	—	29	130	335	333	1	2	11	17	19	1	1	14	16	62
South Carolina§	4	19	55	146	88	—	0	3	1	2	1	0	10	12	35
Virginia§	6	20	58	167	145	—	3	11	22	19	1	2	9	17	12
West Virginia	—	1	31	21	18	—	0	5	1	—	—	0	2	—	—
E.S. Central	11	53	138	385	368	—	4	21	20	37	8	12	75	168	163
Alabama§	3	9	70	102	131	—	0	5	3	3	5	4	66	64	34
Kentucky	4	9	23	90	77	—	1	12	7	10	—	2	15	21	82
Mississippi	—	12	42	36	60	—	0	0	—	—	—	1	25	25	24
Tennessee§	4	17	32	157	100	—	2	9	10	24	3	3	14	58	23
W.S. Central	16	84	186	254	591	—	3	52	15	21	15	37	187	176	284
Arkansas§	10	14	45	77	218	—	0	7	4	2	4	2	10	21	20
Louisiana	—	17	42	73	49	—	0	1	—	—	—	3	24	40	8
Oklahoma	6	8	40	68	48	—	0	17	4	1	1	2	9	13	20
Texas§	—	46	107	36	276	—	2	48	7	18	10	30	174	102	236
Mountain	22	52	88	502	519	2	7	36	47	47	4	26	87	168	193
Arizona	10	19	45	192	173	1	2	13	17	13	3	11	35	82	99
Colorado	8	12	30	130	132	—	1	8	9	12	1	3	15	27	25
Idaho§	2	3	9	27	32	1	2	8	4	5	—	0	3	3	5
Montana§	—	2	10	18	26	—	0	0	—	—	—	0	13	4	1
Nevada§	—	4	20	36	38	—	0	5	4	9	—	1	20	11	23
New Mexico§	—	5	15	44	45	—	1	5	8	4	—	2	15	25	28
Utah	2	4	15	41	58	—	1	14	5	3	—	1	6	5	11
Wyoming§	—	1	4	14	15	—	0	3	—	1	—	0	19	11	1
Pacific	77	116	306	1,036	1,044	—	5	24	36	24	10	32	94	232	436
Alaska	1	1	5	20	27	N	0	0	N	N	—	0	2	5	3
California	60	89	218	806	803	—	0	5	21	N	7	28	81	192	330
Hawaii	—	4	16	51	51	—	0	3	2	3	—	1	3	7	10
Oregon§	2	7	17	59	90	—	1	9	5	15	—	1	6	10	56
Washington	14	11	83	100	73	—	2	22	8	6	3	2	13	18	37
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	—	—	—	—	—	N	—	—	N	N	—	—	—	—	—
Puerto Rico	3	14	65	93	59	—	0	0	—	—	—	0	6	5	2
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 April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Streptococcal disease, invasive, group A					*Streptococcus pneumoniae*, invasive disease† Age <5 years				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	85	88	212	1,363	1,845	15	24	88	403	402
New England	—	2	15	19	69	—	1	4	9	21
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine§	—	0	2	5	8	—	0	2	—	—
Massachusetts	—	0	5	—	46	—	0	4	—	17
New Hampshire	—	0	9	4	10	—	0	4	5	4
Rhode Island§	—	0	6	—	3	—	0	3	3	—
Vermont§	—	0	2	10	2	—	0	1	1	—
Mid. Atlantic	15	17	39	263	365	1	3	17	34	69
New Jersey	—	2	8	23	69	—	0	4	—	20
New York (Upstate)	9	5	26	93	106	1	2	14	34	44
New York City	—	3	8	52	66	—	0	2	—	5
Pennsylvania	6	6	11	95	124	N	0	0	N	N
E.N. Central	16	14	31	221	418	2	6	14	64	119
Illinois	—	4	11	33	135	—	1	6	9	32
Indiana	—	2	12	32	44	—	0	10	6	17
Michigan	2	3	10	63	93	—	1	5	25	28
Ohio	14	4	14	93	98	2	1	7	23	23
Wisconsin	—	1	6	—	48	—	0	2	1	19
W.N. Central	3	5	32	114	126	—	2	10	35	28
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	3	15	30	—	0	3	3	7
Minnesota	—	0	29	48	52	—	1	6	19	10
Missouri	1	2	5	36	24	—	0	2	10	6
Nebraska§	—	0	2	4	13	—	0	2	2	4
North Dakota	2	0	2	8	4	—	0	1	1	1
South Dakota	—	0	2	3	3	—	0	0	—	—
S. Atlantic	31	20	45	350	394	4	2	11	85	22
Delaware	—	0	2	—	3	—	0	0	—	—
District of Columbia	—	0	2	4	4	—	0	1	—	—
Florida	9	5	16	78	88	1	0	5	19	—
Georgia	7	5	11	87	91	1	0	5	30	—
Maryland§	4	3	10	58	83	2	1	5	25	17
North Carolina	5	0	26	45	55	—	0	0	—	—
South Carolina§	3	1	5	23	25	—	0	2	8	—
Virginia§	3	2	10	49	37	—	0	1	2	—
West Virginia	—	0	6	6	8	—	0	3	1	5
E.S. Central	3	4	11	60	81	—	0	6	23	5
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	0	4	14	24	—	0	0	—	—
Mississippi	N	0	0	N	N	—	0	2	2	5
Tennessee§	3	3	7	46	57	—	0	6	21	—
W.S. Central	5	6	61	89	134	5	4	39	70	60
Arkansas§	1	0	5	10	6	1	0	2	7	9
Louisiana	—	0	2	3	1	—	0	4	12	2
Oklahoma	1	2	5	35	45	2	1	12	20	13
Texas§	3	3	56	41	82	2	1	24	31	36
Mountain	12	11	42	214	230	3	4	11	72	76
Arizona	2	5	34	82	129	1	2	7	42	49
Colorado	6	3	9	63	42	2	1	4	19	18
Idaho§	—	0	1	5	3	—	0	1	—	1
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	1	1	—	0	0	—	—
New Mexico§	—	1	4	17	29	—	0	4	11	8
Utah	4	1	7	44	24	—	0	0	—	—
Wyoming§	—	0	1	2	2	—	0	0	—	—
Pacific	—	3	9	33	28	—	0	4	11	2
Alaska	—	0	2	7	N	—	0	2	9	—
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	9	26	28	—	0	2	2	2
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	—	—	—	—	—	N	—	—	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 (NNDSS event code 11717).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	48	43	115	800	896	7	7	16	117	121	91	181	260	2,024	2,337
New England	1	0	7	18	10	—	0	1	—	2	1	4	13	42	58
Connecticut	—	0	0	—	—	—	0	0	—	—	1	0	10	6	12
Maine§	—	0	2	3	2	—	0	0	—	1	—	0	1	—	3
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	2	7	28	32
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	2	4	5
Rhode Island§	1	0	4	7	3	—	0	1	—	—	—	0	3	3	4
Vermont§	—	0	2	8	5	—	0	1	—	1	—	0	1	1	2
Mid. Atlantic	1	3	8	49	44	—	0	5	11	6	23	24	44	419	281
New Jersey	—	0	0	—	—	—	0	0	—	—	—	3	8	48	45
New York (Upstate)	1	1	5	18	13	—	0	4	6	1	1	3	14	31	35
New York City	—	0	0	—	—	—	0	0	—	—	21	13	35	283	135
Pennsylvania	—	2	6	31	31	—	0	2	5	5	1	4	12	57	66
E.N. Central	11	10	40	203	202	—	1	7	23	36	4	14	32	142	245
Illinois	—	0	2	3	8	—	0	1	1	3	2	6	13	27	139
Indiana	—	2	30	34	43	—	0	5	3	9	—	1	5	11	22
Michigan	—	0	3	—	8	—	0	1	—	1	1	2	10	33	21
Ohio	11	5	38	166	143	—	1	5	19	23	—	4	9	57	50
Wisconsin	N	0	0	N	N	—	0	0	—	—	1	1	4	14	13
W.N. Central	—	1	51	30	16	—	0	10	4	1	—	5	14	47	61
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	1	5
Kansas	—	0	1	3	—	—	0	0	—	—	—	0	3	5	8
Minnesota	—	0	50	—	—	—	0	10	—	—	—	1	5	20	15
Missouri	—	1	5	25	16	—	0	2	3	1	—	3	9	21	31
Nebraska§	—	0	1	1	—	—	0	0	—	—	—	0	2	—	2
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	3	1	—	—	0	1	1	—	—	0	3	—	—
S. Atlantic	33	21	54	391	500	7	3	8	60	45	20	42	136	380	517
Delaware	—	0	1	1	—	—	0	1	1	—	—	0	3	2	8
District of Columbia	—	0	3	4	15	—	0	0	—	2	1	2	11	44	34
Florida	26	12	29	223	223	7	2	8	54	42	—	14	23	68	193
Georgia	6	7	17	147	223	—	0	1	—	1	—	6	105	13	43
Maryland§	—	0	0	—	—	—	0	0	—	—	4	5	14	74	89
North Carolina	—	0	0	—	—	—	0	0	—	—	7	5	23	98	88
South Carolina§	—	0	0	—	—	—	0	0	—	—	4	1	5	23	20
Virginia§	N	0	0	N	N	—	0	0	—	—	4	4	17	57	41
West Virginia	1	1	17	16	39	—	0	1	5	—	—	0	2	1	1
E.S. Central	1	2	7	49	77	—	0	3	9	13	7	14	29	191	148
Alabama§	N	0	0	N	N	—	0	0	—	—	3	5	17	64	76
Kentucky	—	0	2	10	19	—	0	1	1	3	1	1	9	24	11
Mississippi	—	0	0	—	—	—	0	0	—	—	—	1	8	30	17
Tennessee§	1	2	7	39	58	—	0	3	8	10	3	6	12	73	44
W.S. Central	1	1	5	43	8	—	0	2	4	3	25	29	58	388	367
Arkansas§	—	0	3	1	4	—	0	0	—	2	1	1	7	29	25
Louisiana	—	0	2	13	4	—	0	1	1	1	10	5	30	77	46
Oklahoma	1	0	5	29	—	—	0	2	3	—	2	1	5	25	21
Texas§	—	0	0	—	—	—	0	0	—	—	12	21	31	257	275
Mountain	—	1	7	17	39	—	0	5	6	15	—	8	27	58	120
Arizona	—	0	0	—	—	—	0	0	—	—	—	2	16	11	52
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	3	22
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	1	1
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
Nevada§	—	0	3	11	8	—	0	2	3	—	—	1	12	19	28
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	1	5	19	15
Utah	—	0	7	4	18	—	0	4	2	10	—	0	2	3	2
Wyoming§	—	0	3	2	13	—	0	2	1	5	—	0	1	1	—
Pacific	—	0	0	—	—	—	0	0	—	—	11	37	52	357	540
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	2	3	5
California	N	0	0	N	N	—	0	0	—	—	—	34	45	316	462
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	1	1	8
Oregon§	N	0	0	N	N	—	0	0	—	—	—	0	6	4	5
Washington	N	0	0	N	N	—	0	0	—	—	11	2	11	33	60
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	N	—	—	N	N	—	—	—	—	—	—	—	—	—	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	—	2	11	27	38
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting 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 April 7, 2007, and April 8, 2006 (14th Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Non-neuroinvasive§				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2007	Cum 2006
United States	557	826	1,435	11,931	14,941	—	1	178	—	3	—	1	399	—	1
New England	10	21	72	154	522	—	0	3	—	—	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	3	—	—	—	0	1	—	—
Maine¶	—	2	17	—	101	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	92	—	0	1	—	—	—	0	1	—	—
New Hampshire	2	5	47	59	120	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Vermont¶	8	11	66	95	209	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	60	103	193	1,597	1,848	—	0	11	—	—	—	0	4	—	—
New Jersey	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	4	—	—	—	0	2	—	—
Pennsylvania	60	103	193	1,597	1,848	—	0	2	—	—	—	0	1	—	—
E.N. Central	125	234	587	3,618	5,843	—	0	43	—	—	—	0	33	—	—
Illinois	1	1	9	50	29	—	0	23	—	—	—	0	23	—	—
Indiana	—	0	0	—	—	—	0	7	—	—	—	0	12	—	—
Michigan	41	94	258	1,445	1,710	—	0	11	—	—	—	0	2	—	—
Ohio	83	128	449	1,895	3,623	—	0	11	—	—	—	0	3	—	—
Wisconsin	—	12	64	228	481	—	0	2	—	—	—	0	2	—	—
W.N. Central	14	30	131	640	758	—	0	36	—	—	—	0	79	—	—
Iowa	N	0	0	N	N	—	0	3	—	—	—	0	4	—	—
Kansas	—	7	52	276	132	—	0	3	—	—	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	6	—	—	—	0	7	—	—
Missouri	14	16	82	255	593	—	0	14	—	—	—	0	2	—	—
Nebraska¶	N	0	0	N	N	—	0	9	—	—	—	0	38	—	—
North Dakota	—	0	60	84	13	—	0	5	—	—	—	0	28	—	—
South Dakota	—	1	15	25	20	—	0	7	—	—	—	0	22	—	—
S. Atlantic	53	96	176	1,494	1,569	—	0	2	—	—	—	0	7	—	—
Delaware	—	1	6	8	34	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	5	—	11	—	0	0	—	—	—	0	1	—	—
Florida	21	0	42	389	N	—	0	1	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
North Carolina	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Carolina¶	19	22	72	452	389	—	0	1	—	—	—	0	0	—	—
Virginia¶	2	28	142	220	516	—	0	0	—	—	—	0	2	—	—
West Virginia	11	25	56	425	619	—	0	1	—	—	—	0	0	—	—
E.S. Central	2	5	43	102	—	—	0	15	—	3	—	0	16	—	—
Alabama¶	2	5	43	100	—	—	0	2	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Mississippi	—	0	2	2	—	—	0	10	—	3	—	0	16	—	—
Tennessee¶	N	0	0	N	N	—	0	4	—	—	—	0	2	—	—
W.S. Central	266	200	966	3,351	3,237	—	0	58	—	—	—	0	26	—	1
Arkansas¶	5	11	92	169	225	—	0	4	—	—	—	0	2	—	—
Louisiana	—	2	11	39	16	—	0	13	—	—	—	0	9	—	1
Oklahoma	—	0	0	—	—	—	0	6	—	—	—	0	4	—	—
Texas¶	261	172	873	3,143	2,996	—	0	38	—	—	—	0	16	—	—
Mountain	26	57	102	955	1,164	—	0	61	—	—	—	1	228	—	—
Arizona	—	0	0	—	—	—	0	9	—	—	—	0	15	—	—
Colorado	13	23	51	370	621	—	0	10	—	—	—	0	51	—	—
Idaho¶	N	0	0	N	N	—	0	30	—	—	—	0	157	—	—
Montana¶	2	0	26	109	N	—	0	3	—	—	—	0	8	—	—
Nevada¶	—	0	3	—	1	—	0	9	—	—	—	0	16	—	—
New Mexico¶	3	4	18	105	218	—	0	1	—	—	—	0	1	—	—
Utah	8	19	65	367	314	—	0	8	—	—	—	0	17	—	—
Wyoming¶	—	0	11	4	10	—	0	7	—	—	—	0	10	—	—
Pacific	1	0	9	20	—	—	0	15	—	—	—	0	51	—	—
Alaska	1	0	9	20	N	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	N	—	0	15	—	—	—	0	37	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	—	—	0	14	—	—
Washington	N	0	0	N	N	—	0	0	—	—	—	0	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	1	12	30	144	145	—	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 April 7, 2007 (14th Week)

Reporting Area	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1	Total
New England	502	375	81	18	10	17	52
Boston, MA	117	95	5	5	5	6	8
Bridgeport, CT	36	28	7	—	1	—	5
Cambridge, MA	14	12	2	—	—	—	—
Fall River, MA	24	18	4	2	—	—	3
Hartford, CT	36	23	8	3	1	1	6
Lowell, MA	40	28	11	1	—	—	8
Lynn, MA	9	7	1	1	—	—	—
New Bedford, MA	22	12	7	2	—	1	—
New Haven, CT	23	15	3	—	2	3	6
Providence, RI	50	39	9	1	1	—	6
Somerville, MA	3	2	1	—	—	—	—
Springfield, MA	44	32	7	1	—	4	4
Waterbury, CT	20	18	2	—	—	—	2
Worcester, MA	64	46	14	2	—	2	4
Mid. Atlantic	2,389	1,689	494	120	44	39	116
Albany, NY	43	29	9	3	1	1	2
Allentown, PA	25	21	1	2	—	1	—
Buffalo, NY	80	60	15	3	1	1	3
Camden, NJ	18	7	6	2	1	2	—
Elizabeth, NJ	8	5	3	—	—	—	2
Erie, PA	53	36	12	4	1	—	3
Jersey City, NJ	11	8	1	1	—	1	—
New York City, NY	1,022	733	199	54	17	16	43
Newark, NJ	52	32	11	1	3	5	4
Paterson, NJ	16	12	4	—	—	—	—
Philadelphia, PA	630	416	152	40	13	9	27
Pittsburgh, PA§	39	25	12	—	1	1	5
Reading, PA	33	26	6	—	1	—	2
Rochester, NY	152	122	23	3	2	2	7
Schenectady, NY	21	16	4	—	1	—	—
Scranton, PA	29	18	8	2	1	—	1
Syracuse, NY	108	82	22	4	—	—	15
Trenton, NJ	21	15	4	1	1	—	2
Utica, NY	12	11	1	—	—	—	—
Yonkers, NY	16	15	1	—	—	—	—
E.N. Central	1,871	1,191	462	123	45	50	151
Akron, OH	49	28	18	1	1	1	1
Canton, OH	36	30	6	—	—	—	6
Chicago, IL	303	186	74	33	8	2	29
Cincinnati, OH	95	51	28	8	6	2	15
Cleveland, OH	199	143	40	8	5	3	13
Columbus, OH	179	111	51	9	3	5	17
Dayton, OH	106	73	23	7	2	1	8
Detroit, MI	151	73	51	11	4	12	7
Evansville, IN	38	31	4	1	1	1	7
Fort Wayne, IN	81	55	17	4	4	1	4
Gary, IN	6	3	1	—	1	1	1
Grand Rapids, MI	52	35	9	5	—	3	9
Indianapolis, IN	179	99	53	17	5	5	11
Lansing, MI	48	35	10	3	—	—	1
Milwaukee, WI	75	44	19	7	2	3	4
Peoria, IL	38	23	12	1	—	2	4
Rockford, IL	46	31	11	2	1	1	1
South Bend, IN	43	29	13	—	1	—	1
Toledo, OH	92	67	14	5	1	5	11
Youngstown, OH	55	44	8	1	—	2	1
W.N. Central	598	387	141	42	12	13	52
Des Moines, IA	74	56	13	2	1	2	15
Duluth, MN	21	15	5	1	—	—	3
Kansas City, KS	32	19	12	—	1	—	6
Kansas City, MO	78	43	16	11	3	3	1
Lincoln, NE	47	31	9	5	1	1	4
Minneapolis, MN	48	35	8	3	1	1	5
Omaha, NE	101	67	20	8	1	5	7
St. Louis, MO	83	39	34	7	2	—	3
St. Paul, MN	48	36	10	1	1	—	5
Wichita, KS	66	46	14	4	1	1	3
S. Atlantic	1,015	621	262	82	29	20	56
Atlanta, GA	U	U	U	U	U	U	U
Baltimore, MD	128	66	40	13	6	3	11
Charlotte, NC	49	27	14	7	—	1	5
Jacksonville, FL	162	94	45	16	4	2	8
Miami, FL	124	74	31	11	6	2	9
Norfolk, VA	50	34	10	4	2	—	—
Richmond, VA	41	26	12	1	1	1	3
Savannah, GA	75	47	19	2	5	2	5
St. Petersburg, FL	58	43	6	4	2	3	5
Tampa, FL	212	146	48	14	2	2	9
Washington, D.C.	103	55	34	9	1	4	1
Wilmington, DE	13	9	3	1	—	—	—
E.S. Central	846	546	201	57	24	18	64
Birmingham, AL	179	109	47	13	5	5	16
Chattanooga, TN	54	41	7	2	2	2	3
Knoxville, TN	114	72	28	11	3	—	9
Lexington, KY	42	27	10	4	—	1	3
Memphis, TN	107	71	26	6	3	1	9
Mobile, AL	151	102	37	8	2	2	9
Montgomery, AL	65	41	13	5	3	3	6
Nashville, TN	134	83	33	8	6	4	9
W.S. Central	1,431	868	355	122	46	40	89
Austin, TX	89	59	22	2	3	3	6
Baton Rouge, LA	43	24	11	6	2	—	3
Corpus Christi, TX	49	33	14	2	—	—	3
Dallas, TX	229	121	62	25	9	12	14
El Paso, TX	138	90	29	11	4	4	13
Fort Worth, TX	115	76	32	5	—	2	9
Houston, TX	321	181	89	31	8	12	15
Little Rock, AR	85	46	23	8	5	3	4
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	229	144	47	23	11	4	13
Shreveport, LA	31	25	4	2	—	—	5
Tulsa, OK	102	69	22	7	4	—	4
Mountain	1,093	740	221	79	23	30	82
Albuquerque, NM	197	147	41	4	2	3	14
Boise, ID	42	31	5	3	—	3	5
Colorado Springs, CO	50	33	12	2	1	2	2
Denver, CO	86	53	17	8	2	6	10
Las Vegas, NV	247	162	48	23	9	5	14
Ogden, UT	28	21	3	3	1	—	2
Phoenix, AZ	203	126	50	16	5	6	15
Pueblo, CO	38	25	8	5	—	—	3
Salt Lake City, UT	111	74	17	14	1	5	12
Tucson, AZ	91	68	20	1	2	—	5
Pacific	1,417	980	306	73	35	23	109
Berkeley, CA	20	11	6	1	1	1	1
Fresno, CA	U	U	U	U	U	U	U
Glendale, CA	U	U	U	U	U	U	U
Honolulu, HI	80	59	12	3	3	3	9
Long Beach, CA	63	40	17	4	2	—	7
Los Angeles, CA	U	U	U	U	U	U	U
Pasadena, CA	31	20	9	—	—	2	4
Portland, OR	120	76	32	4	2	6	11
Sacramento, CA	191	123	50	11	7	—	14
San Diego, CA	184	128	41	8	4	3	11
San Francisco, CA	129	89	30	6	1	3	16
San Jose, CA	245	177	43	18	5	2	16
Santa Cruz, CA	31	25	1	3	2	—	1
Seattle, WA	106	66	27	6	6	1	10
Spokane, WA	86	68	14	2	—	2	4
Tacoma, WA	131	98	24	7	2	—	5
Total	11,162**	7,397	2,523	716	268	250	771

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.

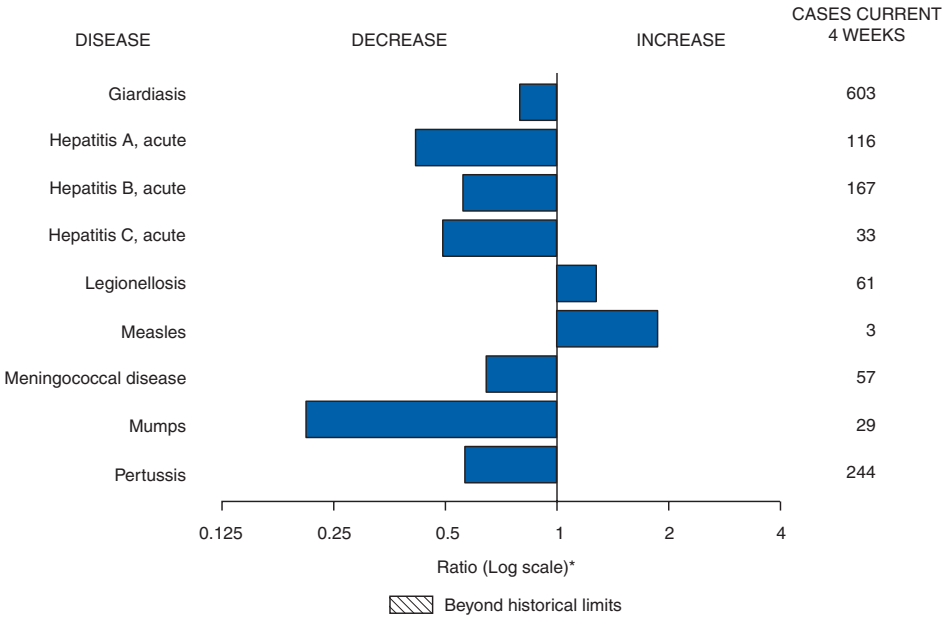
** Total includes unknown ages.

TABLE IV. Provisional cases of selected notifiable diseases,* United States, quarter ending March 31, 2007 (13th Week)

Reporting area	Tuberculosis				
	Current quarter	Previous 4 quarters Min	Previous 4 quarters Max	Cum 2007	Cum 2006
United States	1,595	1,595	3,294	1,595	2,666
New England	35	35	94	35	62
Connecticut	22	22	26	22	19
Maine	3	2	5	3	3
Massachusetts	—	0	58	—	31
New Hampshire	3	2	8	3	2
Rhode Island	5	5	9	5	4
Vermont	2	0	5	2	3
Mid. Atlantic	377	377	617	377	463
New Jersey	65	65	139	65	96
New York (Upstate)	44	44	108	44	50
New York City	222	222	275	222	233
Pennsylvania	46	46	98	46	84
E.N. Central	234	234	327	234	219
Illinois	121	120	158	121	91
Indiana	7	7	38	7	28
Michigan	38	38	93	38	30
Ohio	53	53	68	53	54
Wisconsin	15	14	21	15	16
W.N. Central	97	97	148	97	96
Iowa	5	5	14	5	9
Kansas	18	18	29	18	30
Minnesota	46	46	65	46	34
Missouri	26	25	31	26	15
Nebraska	—	0	11	—	3
North Dakota	—	0	9	—	—
South Dakota	2	0	5	2	5
S. Atlantic	323	323	793	323	600
Delaware	—	0	16	—	3
District of Columbia	10	10	18	10	18
Florida	141	141	313	141	221
Georgia	32	32	140	32	160
Maryland	26	26	48	26	79
North Carolina	62	62	144	62	57
South Carolina	12	7	45	12	8
Virginia	37	37	137	37	49
West Virginia	3	3	6	3	5
E.S. Central	78	78	207	78	149
Alabama	30	30	51	30	52
Kentucky	9	9	26	9	12
Mississippi	23	23	36	23	27
Tennessee	16	16	95	16	58
W.S. Central	54	54	459	54	480
Arkansas	23	21	37	23	19
Louisiana	—	0	0	—	—
Oklahoma	31	27	31	31	55
Texas	—	0	403	—	406
Mountain	58	58	176	58	72
Arizona	23	23	138	23	25
Colorado	12	12	34	12	30
Idaho	—	0	0	—	—
Montana	—	0	0	—	—
Nevada	—	0	0	—	—
New Mexico	9	0	13	9	10
Utah	14	8	14	14	6
Wyoming	—	0	1	—	1
Pacific	339	339	767	339	525
Alaska	8	8	24	8	19
California	234	234	641	234	433
Hawaii	32	22	43	32	18
Oregon	—	0	0	—	10
Washington	65	65	84	65	45
American Samoa	U	0	0	U	U
C.N.M.I.	—	—	—	—	U
Guam	—	—	—	—	—
Puerto Rico	—	0	48	—	17
U.S. Virgin Islands	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable.
Cum: Cumulative year-to-date counts. Min: Minimum. Max: Maximum.
* AIDS and HIV/AIDS data are not updated for this quarter because of upgrading of the national HIV/AIDS surveillance data management system.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 7, 2007, with historical data



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

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