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Multistate Outbreak of Norovirus Gastroenteritis Among Attendees at a Family Reunion — Grant County, West Virginia, October 2006

On October 17, 2006, the West Virginia Department of Health and Human Resources (WVDHHR) was notified of an outbreak of acute gastroenteritis, characterized by vomiting and diarrhea, among attendees at a family reunion. The outbreak initially was reported by a group of attendees to their local health department in Garrett County, Maryland. The same day, the information was relayed to the Grant County Health Department in West Virginia and subsequently to WVDHHR. The reunion was held on October 14 at a private residence in Grant County, West Virginia, and the 53 identified attendees included residents from Florida, Maryland, New York, Pennsylvania, Virginia, and West Virginia. This report describes a collaborative, multijurisdictional epidemiologic investigation using a cohort study and laboratory analyses to determine the source of infection and appropriate control measures. The results indicated that a combination of person-to-person and foodborne transmission of two strains of norovirus, likely introduced by persons from two different states and subsequently at least two food items, was the probable cause of these illnesses, highlighting the challenge of investigating and controlling norovirus outbreaks. During periods of peak norovirus activity, public health officials should emphasize the importance of appropriate handwashing and the exclusion of ill persons from social gatherings.

Epidemiologic Investigation

In collaboration with state and local health departments, interviews were conducted with 11 reunion attendees to help generate hypotheses and develop a list of attendees and foods served. A questionnaire was then developed to conduct a cohort study involving all reunion attendees. Questions addressed illness onset, symptoms, attendance at prereunion gatherings, consumption of specific food items, contact with ill persons, and onset of symptoms among nonattendees. Questionnaires were administered by telephone and in person by state and local health department staff members from West Virginia and Maryland in coordination with health departments from the other attendee jurisdictions in Florida, New York, Pennsylvania, and Virginia.

An attendee case was defined as two or more episodes of nonbloody diarrhea (i.e., two or more loose stools in a 24-hour period) or vomiting within a single 24-hour period on or after October 7, 2006, in a person who attended the reunion. A nonattendee case was defined as acute illness characterized by vomiting or diarrhea with onset after 12 a.m. on October 18 in persons who did not attend the reunion but who had direct contact (i.e., within 3 feet) with attendees after the reunion.

The list of reunion attendees included 53 persons, of whom 48 (91%) were interviewed. Of those interviewed, 28 (58%) had illness that met the attendee case definition. In addition, four cases were identified among nonattendees, all of whom were household contacts of attendees. Symptoms reported by the 28 ill attendees included diarrhea (96%), vomiting (75%), abdominal cramps (71%), nausea (61%), headache (54%), chills (36%), body aches (32%), fever (not specified) (21%), and fatigue or malaise (18%). Nineteen (68%) of the 28 ill attendees were female, and six (21%) were aged ≤10 years. Six (21%) of the patients sought medical care. For the 25 patients who reported both date of illness onset and date of

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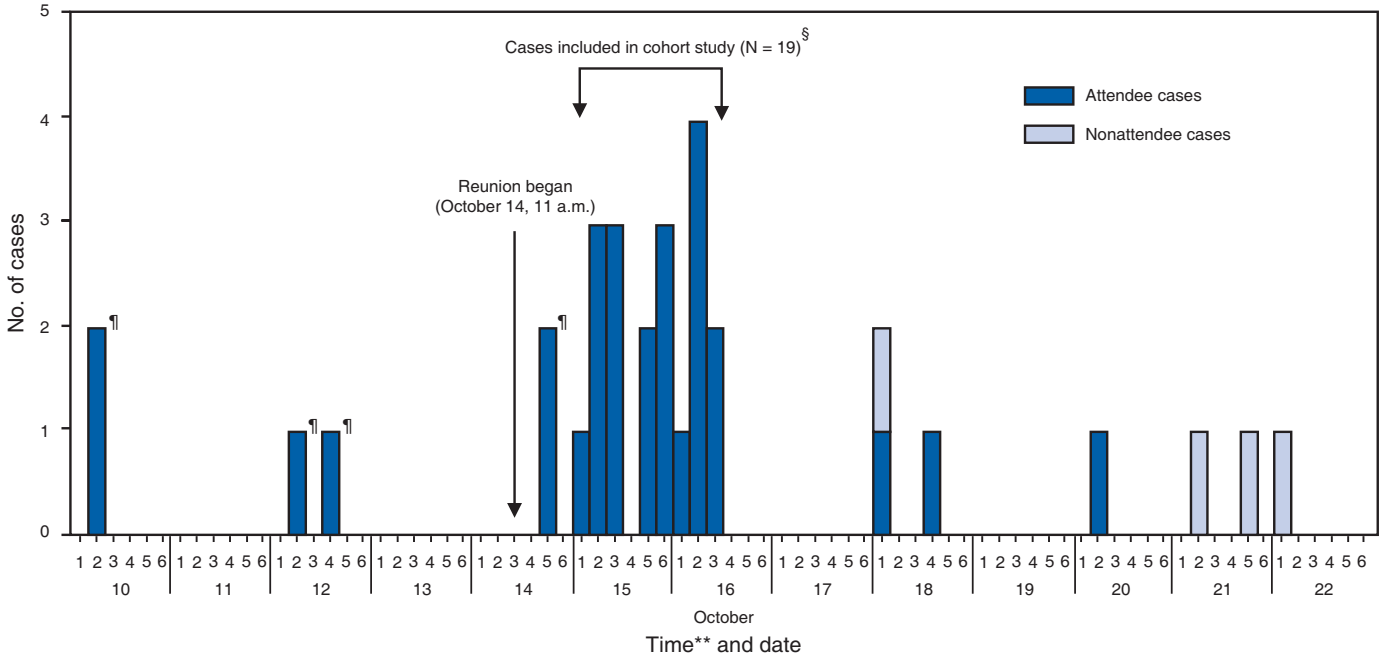
recovery, the median duration of illness was 54 hours (range: 6–135 hours). Twenty-one of the 28 attendee cases occurred during October 14–16 (Figure).

The 1-day reunion began at 11 a.m. on October 14. Persons with illness onset after 8 p.m. on October 14 through 12 a.m. on October 18 were included in the cohort study, as were persons who attended but did not become ill (Figure). Persons with illness onset either before the reunion or after 12 a.m. on October 18 were excluded. Incubation periods were calculated by subtracting the date and time of the first possible exposure from the date and time of illness onset. The first possible exposure was defined as either the time the person arrived at the reunion or the time the person arrived at a prereunion gathering where previously ill persons were present. Nine of the 48 interviewed attendees were excluded from the cohort study because they did not meet the defined illness-onset criteria. Three had illness onset >72 hours after the reunion. Six attendees had illness onset either before the reunion or within 6 hours after the reunion began and might have introduced the illness into the reunion; four of these six were immediate family members from New York who had traveled to the reunion together, including a child who was ill with vomiting and diarrhea during the reunion, and the other two were West Virginia residents who had no contact with each other or the family from New York immediately before the reunion.

Of the 39 attendees included in the cohort study, 19 met the case definition and illness-onset criteria, and 20 did not become ill. The median incubation period for the 19 cases was 36 hours (range: 20–61 hours). Of 31 food items served at the reunion (Table 1), two items were identified as significant risk factors for developing illness ($p<0.05$, by two-tailed Mantel-Haenszel chi-square test) and were eaten by the majority of ill persons: scalloped potatoes (relative risk [RR] = 2.8, 95% confidence interval [CI] = 1.1–6.9) and chicken (RR = 2.2, CI = 1.0–4.8). Both food items were eaten at the reunion by persons who were ill before the reunion, which might have provided an opportunity for these persons to contaminate the food at the event. The chicken was purchased at a store by the family from New York, whose four members had been ill before the reunion, which provided another opportunity for the food to be contaminated. The scalloped potatoes were brought by persons from West Virginia who were not ill before the reunion. Consumption of the chocolate cheese ball also was statistically associated with illness ($p = 0.04$), but the item was only eaten by seven persons. In addition, six of the seven attendees who ate the chocolate cheese ball also ate both the chicken and scalloped potatoes; all seven ate the chicken. Self-reported direct contact with ill persons at the reunion, including with the symptomatic child, also

FIGURE. Number of acute gastroenteritis cases among attendees* at a family reunion (N = 28) and among nonattendees† (N = 4), by time and date of illness onset — Grant County, West Virginia, October 10–22, 2006



* Two or more episodes of nonbloody diarrhea or vomiting within a 24-hour period in a person who attended the reunion.
† Acute illness characterized by vomiting or diarrhea with onset after 12 a.m. October 18, 2006, in a person who did not attend the reunion but who had direct contact (i.e., within 3 feet) with attendees after reunion.
§ Persons with illness onset after 8 p.m. on October 14 through 12 a.m. on October 18. Of the 39 persons included in the cohort study, 19 had illness that met the case definition and these illness-onset criteria; 20 did not become ill.
¶ Six attendees with illness onset either before the reunion or within 6 hours after the reunion began who likely introduced the illness into the reunion. Four immediate family members from New York traveled to the reunion together and had illness onset dates of October 10 (two persons), October 12 (a child who was ill with vomiting and diarrhea during the reunion), and October 14 (one person). Two West Virginia residents with no contact with each other or the family from New York before the reunion had illness onset dates of October 12 and October 14.
** Time spans: 1 = 12:01 a.m.–4:00 a.m.; 2 = 4:01 a.m.–8:00 a.m.; 3 = 8:01 a.m.–12:00 p.m.; 4 = 12:01 p.m.–4:00 p.m.; 5 = 4:01 p.m.–8:00 p.m.; and 6 = 8:01 p.m.–12:00 a.m.

was a significant risk factor for developing illness (RR = 2.3, CI = 1.0–5.1). Attendance at prereunion gatherings at either home A or home B was not associated with illness. Reunion attendees were provided information on appropriate hand hygiene and the potential for viral shedding and secondary transmission up to 2 weeks after symptoms resolved.

Laboratory Investigation

In coordination with state and local health departments, reunion attendees were encouraged to submit stool or vomitus samples to their respective local health departments. Stool specimens were submitted by 13 ill reunion attendees from Pennsylvania, Maryland, New York, and West Virginia, and the specimens were then submitted to the respective state laboratories for analysis.* No vomitus samples were analyzed. Norovirus reverse transcription–polymerase chain reaction (RT–PCR), genotype sequencing analyses, and enteric bacterial cultures were performed by the Maryland, New York, and Pennsylvania state laboratories. Initial genogroup assignment was made by differential probe binding. Results were compiled and compared to identify specific etiologic agents involved in the outbreak. No environmental samples were collected.

Of the 13 stool specimens submitted (six from Pennsylvania residents, three from Maryland, three from New York, one from West Virginia, and none from Florida or Virginia), 12 (92.3%) tested positive for norovirus genogroup II by RT–PCR (Table 2). Using genetic sequencing of the RT–PCR products from norovirus region B† and comparison with GenBank,§ the closest match for the strain detected was

* Three of the four New York family members who were ill before the reunion submitted stool samples; neither of the two persons from West Virginia who were ill submitted a stool sample. The specimen from one West Virginia resident was analyzed at the Maryland state laboratory because of assay availability.

† RT–PCR primers targeted region B of the viral genome, which includes the polymerase gene commonly used for genetic classification.
§ Genetic sequence database maintained by the National Institutes of Health (http://www.ncbi.nlm.nih.gov/Genbank/index.html).

TABLE 1. Gastroenteritis attack rate and relative risk for illness among attendees at a family reunion,* by type of food consumed and other risk factors — Grant County, West Virginia, October 2006

	Exposed			Not exposed					
Exposure	Ill (n = 19)	Not ill (n = 20)	Attack rate† (%)	Ill (n = 19)	Not ill (n = 20)	Attack rate (%)	Relative risk	(95% CI§)	p value¶
Food consumed									
Scalloped potatoes	14	6	(70.0)	4	12	(25.0)	2.80	(1.14–6.86)	0.01
Ham	17	14	(54.8)	2	6	(25.0)	2.19	(0.63–7.60)	0.24
Chicken	14	8	(63.6)	5	12	(29.4)	2.16	(0.97–4.81)	0.04
Chocolate cheese ball	6	1	(85.7)	12	18	(40.0)	2.14	(1.26–3.65)	0.04
Onion dip	5	2	(71.4)	13	17	(43.3)	1.65	(0.88–3.07)	0.23
Meatballs	10	7	(58.8)	8	13	(38.1)	1.54	(0.79–3.03)	0.21
Green beans	10	7	(58.8)	9	13	(40.9)	1.44	(0.76–2.73)	0.27
Cream cheese roll-ups	7	4	(63.6)	12	15	(44.4)	1.43	(0.77–2.65)	0.29
Cheese ball	4	2	(66.7)	14	16	(46.7)	1.43	(0.72–2.83)	0.66
Chip dip	7	5	(58.3)	11	14	(44.0)	1.33	(0.69–2.54)	0.42
Butterscotch cake	5	4	(55.6)	13	16	(44.8)	1.24	(0.61–2.52)	0.71
Cole slaw	6	5	(54.5)	13	15	(46.4)	1.17	(0.60–2.30)	0.65
Deviled eggs	10	9	(52.6)	9	10	(47.4)	1.11	(0.59–2.10)	0.75
Pasta salad	11	9	(55.0)	8	10	(44.4)	1.04	(0.57–1.89)	0.90
Broccoli salad	6	6	(50.0)	13	14	(48.1)	1.04	(0.52–2.07)	0.92
Chocolate cake	2	2	(50.0)	15	16	(48.4)	1.03	(0.36–2.94)	1.00
Pinch-me cake	2	2	(50.0)	16	17	(48.5)	1.03	(0.36–2.92)	1.00
Sugar cookies	3	3	(50.0)	16	16	(50.0)	1.00	(0.42–2.39)	1.00
Coffee	4	4	(50.0)	18	18	(50.0)	1.00	(0.46–2.19)	1.00
Soda	11	12	(47.8)	8	7	(53.3)	0.90	(0.47–1.70)	0.74
Spicy rice casserole	4	5	(44.4)	14	14	(50.0)	0.89	(0.39–2.02)	1.00
Parsley potatoes	5	6	(45.5)	12	10	(54.5)	0.83	(0.39–1.77)	0.63
Potato casserole	7	10	(41.2)	10	8	(55.6)	0.74	(0.37–1.50)	0.40
Raw vegetables	5	8	(38.5)	13	12	(52.0)	0.74	(0.34–1.62)	0.43
Pecan cake	3	5	(37.5)	16	14	(53.3)	0.70	(0.27–1.83)	0.69
Coffee creamer	1	2	(33.3)	16	17	(48.5)	0.69	(0.13–3.54)	1.00
Mandarin orange cake	2	4	(33.3)	17	15	(53.1)	0.63	(0.19–2.04)	0.66
Macaroni salad	4	10	(28.6)	14	10	(58.3)	0.53	(0.22–1.28)	0.11
Turkey	1	4	(20.0)	16	16	(50.0)	0.40	(0.07–2.39)	0.35
Baked beans	2	7	(22.2)	17	12	(58.6)	0.38	(0.11–1.34)	0.12
Fruit cocktail	0	1	(0.0)	18	18	(50.0)	0.00	—	1.00
Other risk factors									
Contact with ill person**	12	6	(66.7)	5	12	(29.4)	2.27	(1.01–5.07)	0.03
At home A prereunion gathering	6	2	(75.0)	11	12	(47.8)	1.57	(0.87–2.81)	0.24
At home B prereunion gathering	6	6	(50.0)	12	10	(54.5)	0.92	(0.46–1.81)	0.80

* N = 39. Excludes persons with prior illness (onset before 8 p.m. October 14, 2006) and secondary cases (onset after 12 a.m. October 18, 2006) (based on presumed exposure to norovirus at the reunion on October 14 and the incubation period for norovirus [12–72 hours]).
† Calculated by dividing the sum of ill and not ill attendees with given exposure by the number of ill with that exposure.
§ 95% confidence interval of the calculated relative risk.
¶ Based on two-tailed Mantel-Haenszel chi-square test or Fisher exact test if expected cell value was less than 5.
** Self-reported direct contact (i.e., within 3 feet) with ill persons at the reunion.

identified by each state laboratory. The same strain (Hu/GII-4/Chester/2006/UK) was identified in the two sequenced norovirus-positive specimens from Maryland, the two positive specimens from New York, and the one positive specimen from West Virginia. A second strain (Hu/NLV/Oxford/B6S6/2003/UK) was identified in all six positive specimens from Pennsylvania. No differences in exposures between persons infected with the two different strains could be identified. No other etiologies (e.g., bacterial) were identified.

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Editorial Note: Noroviruses are the most common cause of gastroenteritis in the United States, with an estimated 23 million cases occurring annually (*1–3*). The average incubation period for norovirus is 24–48 hours, and clinical disease is characterized by acute onset of vomiting, nonbloody diarrhea, or both, lasting 12–60 hours (*4*). In clinical studies, approximately two thirds of persons infected with norovirus experi-

TABLE 2. Results of norovirus laboratory testing of stool specimens from attendees at a family reunion — Grant County, West Virginia, October 2006

Patient	State of residence	Norovirus RT-PCR* result	Genogroup assignment†	Viral strain§
A	West Virginia	Positive	Genogroup II	Hu/GII-4/Chester/2006/UK
B	Maryland	Positive	Genogroup II	Hu/GII-4/Chester/2006/UK
C	Maryland	Positive	Genogroup II	Hu/GII-4/Chester/2006/UK
D	Maryland	Positive	Genogroup II	Not sequenced
E	New York	Positive	Genogroup II	Hu/GII-4/Chester/2006/UK
F	New York	Positive	Genogroup II	Hu/GII-4/Chester/2006/UK
G	New York	Negative	—	—
H	Pennsylvania	Positive	Genogroup II	Hu/NLV/Oxford/B6S6/2003/UK
I	Pennsylvania	Positive	Genogroup II	Hu/NLV/Oxford/B6S6/2003/UK
J	Pennsylvania	Positive	Genogroup II	Hu/NLV/Oxford/B6S6/2003/UK
K	Pennsylvania	Positive	Genogroup II	Hu/NLV/Oxford/B6S6/2003/UK
L	Pennsylvania	Positive	Genogroup II	Hu/NLV/Oxford/B6S6/2003/UK
M	Pennsylvania	Positive	Genogroup II	Hu/NLV/Oxford/B6S6/2003/UK

* Reverse transcription–polymerase chain reaction.
† Classification of noroviruses determined by differential PCR probe binding.
§ Based on genetic sequencing of the polymerase gene (region B) and comparison with GenBank, the genetic sequence database maintained by the National Institutes of Health.

enced symptoms of disease (*5*). The primary route of transmission for noroviruses is fecal-oral, including consumption of fecally contaminated food or water, direct person-to-person contact, and contaminated objects or environments (*4,5*). Airborne transmission via vomitus droplets also can occur (*4,5*). During outbreaks, primary cases often result from exposure to a fecally contaminated food item, object, or environment, whereas secondary cases result from person-to-person transmission (*6*). Noroviruses and norovirus infections have numerous characteristics that facilitate their spread during outbreaks, including the low dose required for infection; prolonged, asymptomatic shedding that can occur in infected persons; environmental stability of the virus; and lack of lasting immunity in persons who have been infected previously (*4*). Molecular epidemiologic techniques have identified substantial strain diversity, and epidemic strains of norovirus might be more virulent or more environmentally persistent than nonepidemic strains (*7*).

This outbreak highlights the challenges of investigating and controlling norovirus outbreaks, including multiple modes of transmission. The findings of this investigation, including the detection of two different norovirus strains in patients, suggest that illness was independently introduced into the reunion by several sources (i.e., persons from New York and from West Virginia). Food items might have been contaminated by persons who were ill when they attended the reunion. Infection likely was propagated through a combination of person-to person contact and foodborne transmission; transmission through contaminated fomites cannot be ruled out. Laboratory evidence confirmed that at least two different norovirus strains were circulating among attendees. The convergence of two virus strains in a single outbreak coincided with a period of high norovirus activity in the region. During October–December 2006, a total of 20 other outbreaks of acute gastroenteritis in West Virginia were reported to WVDHHR, representing a sevenfold increase in the number reported during the same period in 2005.

Prevention and control of norovirus outbreaks, especially during periods of increased norovirus circulation, should emphasize standard infection-control practices, including the exclusion of ill caregivers and food handlers from work settings and exercising adequate hand hygiene (*8*). Persons who have had gastroenteritis recently should pay attention to washing their hands after toileting and should not prepare food. Food items that might have been contaminated by persons with gastroenteritis should be discarded. As demonstrated by this outbreak, collaboration among multiple state and local health departments often is required for prompt public health investigations of norovirus outbreaks, which can be complicated by multiple sources, viral strains, and routes of this highly transmissible infection.

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References

1. Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. Emerg Infect Dis 1999;5:607–25.

2. Fankhauser RL, Monroe SS, Noel JS, et al. Epidemiologic and molecular trends of "Norwalk-like viruses" associated with outbreaks of gastroenteritis in the United States. J Infect Dis 2002;186:1–7.
3. Turcios RM, Widdowson MA, Sulka AC, Mead PS, Glass RI. Reevaluation of epidemiological criteria for identifying outbreaks of acute gastroenteritis due to norovirus: United States, 1998–2000. Clin Infect Dis 2006;42:964–9.
4. CDC. "Norwalk-like viruses": public health consequences and outbreak management. MMWR 2001;50(No. RR-9).
5. Goodgame R. Norovirus gastroenteritis. Curr Gastroenterol Rep 2006;8:401–8.
6. Becker KM, Moe CL, Southwick KL, MacCormack JN. Transmission of Norwalk virus during football game. N Engl J Med 2000;343:1223–7.
7. Blanton LH, Adams SM, Beard RS, et al. Molecular and epidemiologic trends of caliciviruses associated with outbreaks of acute gastroenteritis in the United States, 2000–2004. J Infect Dis 2006;193:413–21.
8. American Academy of Pediatrics. Caliciviruses. In: Pickering LK, Baker CJ, Long SS, McMillan JA, eds. Red book: 2006 Report of the Committee on Infectious Diseases. 27th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2006:239–40.

Hepatitis A Vaccination Coverage Among Children Aged 24–35 Months — United States, 2004–2005

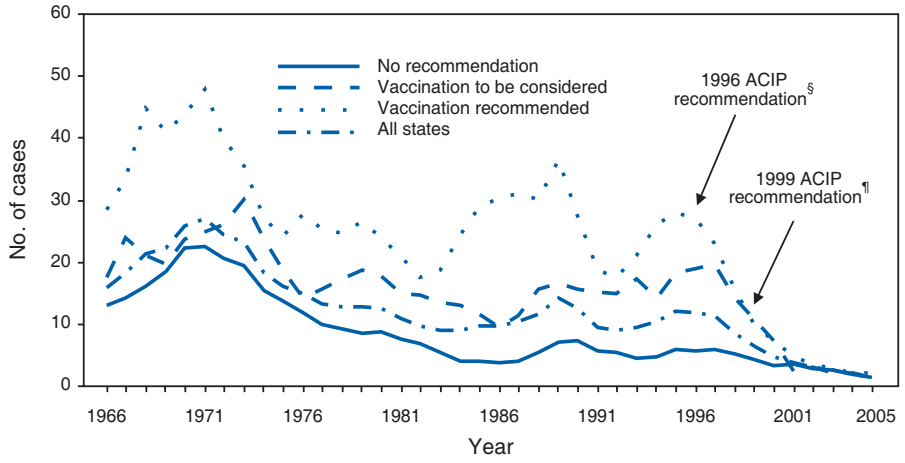
After the licensure of hepatitis A vaccine in 1995 for children aged ≥24 months, the Advisory Committee on Immunization Practices (ACIP) incrementally expanded the proportion of children for whom it recommended the vaccine. In 1996, ACIP recommended vaccinating children in communities that had high rates of hepatitis A virus (HAV) infection, including American Indian/Alaska Native (AI/AN) communities and selected Hispanic and religious communities (*1*). In 1999, ACIP extended the recommendation to include routine vaccination for all children living in states, counties, and communities with incidence rates twice the 1987–1997 national average of 10 cases per 100,000 population (i.e., ≥20 cases per 100,000 population); ACIP also recommended considering vaccination for children living in states, counties, and communities with incidence rates exceeding the 1987–1997 national average (i.e., >10 to <20 cases per 100,000 population) (*2*). National estimates of hepatitis A vaccination coverage were first made available through the 2003 National Immunization Survey (NIS), which indicated an overall national 1-dose coverage level of 16.0% (range: 6.4%–72.7%) among children aged 24–35 months (*3*). The estimates in this report update those findings by including 2 additional years of data (2004 and 2005). National 1-dose vaccination-coverage levels among children aged 24–35 months increased from 17.6% in 2004 to 21.3% in 2005. Coverage in states where vaccination was recommended (overall in 2005: 56.5%; range: 12.9%–71.0%) was below those for other recommended childhood vaccinations, such as varicella (87.5% in 2004) (*4*). Despite low hepatitis A vaccination-coverage levels compared with other recommended childhood vaccinations, incidence of acute HAV infections have declined to the lowest level ever recorded (*5*) (Figure 1). The 2005 licensure of the hepatitis A vaccine for use in younger children (aged ≥12 months) and the 2006 ACIP guideline for routine hepatitis A vaccination of all children aged ≥12 months (*6*) should result in improved vaccination coverage and further reductions in disease incidence.

NIS provides vaccination coverage estimates among noninstitutionalized children aged 19–35 months for the 50 states and selected cities and counties. To obtain vaccination data, NIS conducts a random-digit–dialed telephone survey of households and a mail survey of the children's vaccination providers. Data are weighted to adjust for households with multiple telephone lines, household nonresponse, and noninclusion of households without landline telephones (*7*). The household survey response rate was 67.4% in 2004 and 65.1% in 2005. Among children aged 19–35 months for whom household interviews were completed, health-care provider vaccination records were obtained for 21,998 children (71.0%) in 2004 and 17,563 children (63.6%) in 2005. Among the children with vaccination records, age criteria for this assessment (24–35 months) were met by 14,143 children in 2004 and 12,203 in 2005. Although hepatitis A vaccine is licensed as a 2-dose regimen, data are presented for 1-dose vaccination coverage, which has been determined to convey serologic protection in 96% of children aged ≤6 years (*8*).

A statistically significant increase was observed in estimated national 1-dose hepatitis A vaccination coverage, from 17.6% in 2004 to 21.3% in 2005 (Table). Coverage was greater in states where vaccination was recommended by ACIP, compared with states where vaccination was to be considered or where no specific recommendation was in effect. In the 11 states where vaccination was recommended, 1-dose coverage was 54.4% (range: 8.6%–74.4%) in 2004 and 56.5% (range: 12.9%–71.0%) in 2005. In the six states where vaccination was to be considered, 1-dose coverage was 26.8% (range: 1.4%–34.7%) in 2004 and 43.2% (range: 1.9%–57.5%) in 2005. In the District of Columbia and the 33 states where no specific recommendation for vaccination was in effect, coverage was 1.5% (range: 0%–10.3%) in 2004 and 2.9% (range: 0%–8.4%) in 2005.

From 2004 to 2005, vaccination coverage increased more in states where ACIP recommended that vaccination be considered (16.4%) than in states where ACIP recommended routine vaccination (2.1%) or where no specific recommendation was in effect (1.4%). The significant increase in states where vacci-

FIGURE 1. Incidence* of acute hepatitis A, by ACIP† state vaccination recommendation status and year — National Notifiable Diseases Surveillance System, United States, 1966–2005



* Per 100,000 population.
† Advisory Committee on Immunization Practices.
§ In 1996, ACIP recommended vaccinating children in communities that had high rates of hepatitis A virus infection, including American Indian/Alaska Native communities and selected Hispanic and religious communities.
¶ In 1999, ACIP extended the 1996 recommendation to include routine vaccination for all children living in states, counties, and communities with incidence rates twice the 1987–1997 national average of 10 cases per 100,000 population (i.e., ≥20 cases per 100,000 population); ACIP also recommended considering vaccination for children living in states, counties, and communities with incidence rates exceeding the 1987–1997 national average (i.e., >10 to <20 cases per 100,000 population).

nation was to be considered primarily resulted from increased coverage in Texas (from 34.7% in 2004 to 57.5% in 2005).

In states where vaccination was recommended or to be considered, non-Hispanic blacks, Hispanics, AI/ANs, and Asians/Pacific Islanders (A/PIs) had greater vaccination coverage rates than non-Hispanic whites (Figure 2). In 2005, coverage in states where vaccination was recommended ranged from 46.9% among non-Hispanic whites to 72.9% among A/PIs. In states where vaccination was to be considered, coverage in 2005 ranged from 33.3% among non-Hispanic whites to 54.7% among Hispanics. For all racial/ethnic groups, coverage increased from 2004 to 2005 in states where vaccination was to be considered.

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Editorial Note: The NIS findings from 2004 and 2005 are similar to those from 2003; states where routine hepatitis A vaccination was recommended had greater vaccination coverage compared with states where vaccination was to be considered or where no specific recommendation for vaccination was in effect. However, even in states where hepatitis A vaccination was recommended, coverage remained below levels observed for other vaccinations that were recommended during a comparable period. For example, 1-dose vaccination coverage of varicella vaccine, which has been routinely recommended for children aged 12–18 months since 1996, was 76.3% (95% confidence interval [CI] = 75.5%–77.1%) in 2001 and 80.6% (CI = 79.7%–81.5%) in 2002 for children aged 19–35 months. Coverage with 1 dose of measles, mumps, and rubella vaccine, which became available in 1971, was 93.0% (CI = 92.4%–93.6%) in 2004 (*4*).

Despite low levels of 1-dose hepatitis A vaccination coverage compared with other recommended vaccinations, the number of cases and rates of acute hepatitis A in the United States have declined substantially, especially among racial/ethnic groups disproportionately affected by hepatitis A. Before the 1995 introduction of hepatitis A vaccine for children aged ≥24 months, rates of acute hepatitis A were five times greater than the national average among AI/ANs and three times greater among Hispanics (*1*). In 2005, acute hepatitis A rates among AI/ANs were comparable to other populations but remained greater for Hispanics compared with non-Hispanics (*9*). This trend demonstrates progress toward eliminating racial/ethnic disparities previously observed in rates of acute hepatitis A.

The overall number of cases and rates of acute hepatitis A in the United States have declined to historic lows since the last peak in 1995. In 1995, a total of 31,582 cases were reported (12 per 100,000 population), compared with 4,488 cases (1.5 per 100,000) in 2005, which was the lowest annual number ever recorded (*5*). In 2005, similar rates of acute hepatitis A were reported by states where vaccination was recommended (2.1 per 100,000), states where vaccination was to be considered (1.5 per 100,000), and states where no specific recommendation for vaccination was in effect (1.3 per 100,000) (CDC, unpublished data, 2005). Even limited vaccination coverage might reduce disease incidence through herd effects because young children are thought to be a major reservoir of infection. In one communitywide outbreak, approximately 40% of adults with hepatitis A without an identifiable source lived with a child aged <6 years who had evidence of recent HAV infection (*10*). Declines also might be the result of cyclic increases and decreases in HAV infections (*9*).

TABLE. Estimated hepatitis A vaccination coverage (1 dose) among children aged 24–35 months, by state and selected city/county area, 1999 ACIP* vaccination recommendation† status, and year — National Immunization Survey, United States, 2004–2005

Vaccination recommendation status	2004§ %	2004§ (95% CI**)	2005¶ %	2005¶ (95% CI)
Vaccination recommended (overall)	**54.4**	**(50.9–57.8)**	**56.5**	**(52.9–60.1)**
Alaska	69.9	(61.4–77.2)	66.8	(57.2–75.2)
Arizona	64.2	(58.1–69.8)	66.1	(58.8–72.8)
Maricopa County	71.7	(64.0–78.3)	69.6	(59.3–78.2)
Rest of state	50.4	(40.7–60.0)	59.5	(49.4–68.9)
California	56.6	(50.9–62.2)	60.3	(54.1–66.2)
Alameda	—††	—††	60.0	(49.5–66.7)
Los Angeles County	65.4	(57.0–73.1)	68.2	(58.3–76.7)
San Bernardino County	—††	—††	58.1	(48.3–67.3)
San Diego County	58.8	(50.5–66.6)	—††	—††
Santa Clara County	46.0	(37.7–54.6)	—††	—††
Rest of state	53.1	(44.3–61.6)	56.9	(48.0–65.4)
Idaho	47.2	(39.0–55.5)	43.9	(35.9–52.4)
Nevada	58.7	(50.9–66.0)	55.9	(48.3–63.2)
Clark County	—††	—††	57.8	(48.2–66.8)
Rest of state	—††	—††	—§§	—§§
New Mexico	46.6	(38.4–54.9)	48.4	(38.7–58.3)
Oklahoma	74.4	(65.9–81.4)	59.6	(51.1–67.6)
Oregon	31.6	(24.0–40.3)	31.8	(24.0–40.7)
South Dakota	8.6	(4.1–17.2)	12.9	(8.0–20.1)
Utah	55.0	(46.9–63.0)	71.0	(60.4–79.8)
Washington	35.0	(29.5–41.0)	34.7	(28.5–41.5)
King County	56.3	(47.7–64.6)	54.3	(42.7–65.4)
Rest of state	26.5	(20.0–34.4)	26.8	(19.8–35.3)
Vaccination to be considered (overall)	**26.8**	**(23.5–30.4)**	**43.2**	**(39.2–47.2)**
Arkansas	1.4	(0.4–5.6)	1.9	(0.5–7.5)
Colorado	17.4	(11.5–25.5)	22.3	(16.9–28.8)
Denver	—††	—††	36.6	—††
Rest of state	—††	—††	11.2	(6.3–19.2)
Missouri	12.3	(6.5–22.2)	19.7	(14.6–26.1)
St. Louis County/ City of St. Louis	—††	—††	23.1	(16.2–31.7)
Rest of state	—††	—††	18.8	(12.7–26.8)
Montana	11.6	(7.1–18.5)	8.4	(4.8–14.5)
Texas	34.7	(29.9–39.9)	57.5	(51.8–63.0)
Bexar County	63.8	(54.7–72.1)	64.3	(54.3–73.2)
City of Houston	45.3	(37.0–53.9)	66.6	(58.1–74.2)
Dallas County	53.3	(44.9–61.5)	—§§	—§§
El Paso County	75.0	(67.3–81.4)	70.0	(61.5–77.4)
Rest of state	24.4	(18.1–32.0)	54.2	(46.0–62.3)
Wyoming	10.5	(6.5–16.6)	8.2	(4.5–14.6)
No vaccination recommendation (overall)	**1.5**	**(1.2–1.9)**	**2.9**	**(2.4–3.5)**
Alabama	0.2	(0.04–0.9)	0.3	(0.1–1.0)
Jefferson County	1.2	(0.3–5.4)	1.3	(0.3–5.3)
Rest of state	0	—¶¶	0.1	(0.02–0.9)
Connecticut	0	—¶¶	2.0	(0.5–7.9)
Delaware	0.3	(0.04–2.1)	0.7	(0.1–4.7)
District of Columbia	2.4	(1.2–4.8)	3.7	(2.0–6.9)
Florida	0.9	(0.4–1.8)	2.0	(0.6–6.7)
Duval County	1.1	(0.3–4.7)	0	—¶¶
Santa Clara County	46.0	(37.7–54.6)	—††	—††
Miami-Dade County	5.0	(2.3–10.4)	—††	—††
Rest of state	0	—¶¶	2.2	(0.6–7.1)
Georgia	2.4	(1.5–3.7)	8.0	(5.5–11.4)
Fulton and DeKalb counties	7.6	(4.6–12.3)	24.0	(16.2–33.9)
Rest of state	1.2	(0.6–2.6)	4.4	(2.2–8.4)
Hawaii	0.9	(0.2–4.2)	0	—¶¶

Vaccination recommendation status	2004 %	2004 (95% CI)	2005 %	2005 (95% CI)
No vaccination recommendation (overall) (*continued*)				
Illinois	4.4	(2.6–7.3)	8.4	(4.6–14.7)
City of Chicago	14.1	(8.5–22.5)	15.8	(10.5–23.2)
Rest of state	0.8	(0.1–5.4)	5.7	(1.9–16.1)
Indiana	0	—¶¶	5.7	(0.1–2.4)
Marion County	0	—¶¶	—††	—††
Rest of state	0	—¶¶	—††	—††
Iowa	0	—¶¶	0	—¶¶
Kansas	3.3	(1.2–9.1)	5.3	(2.6–10.6)
Kentucky	0	—¶¶	2.5	(0.7–8.2)
Louisiana	0	—¶¶	3.4	(2.0–5.7)
Orleans Parish	0	—¶¶	—††	—††
Rest of state	0	—¶¶	—††	—††
Maine	0	—¶¶	0.5	(0.1–3.8)
Maryland	1.8	(0.8–4.0)	3.0	(1.5–5.8)
City of Baltimore	2.3	(0.9–5.6)	14.4	(8.7–23.0)
Rest of state	1.7	(0.6–4.5)	1.4	(0.3–5.8)
Massachusetts	1.2	(0.3–5.1)	0.2	(0.03–1.4)
City of Boston	1.5	(0.5–4.9)	—††	—††
Rest of state	1.2	(0.2–6.0)	—††	—††
Michigan	0.1	(0.01–0.5)	0	—¶¶
City of Detroit	0.6	(0.1–4.4)	0	—¶¶
Rest of state	0	—¶¶	0	—¶¶
Minnesota	1.0	(0.2–4.6)	3.0	(0.9–9.8)
Mississippi	0.9	(0.2–3.7)	0.8	(0.1–5.5)
Nebraska	0.4	(0.1–2.8)	1.4	(0.3–6.0)
New Hampshire	0.3	(0.1–2.3)	0.6	(0.1–4.4)
New Jersey	0.5	(0.1–3.3)	4.0	(2.0–8.0)
City of Newark	0	—¶¶	0	—¶¶
Rest of state	0.5	(0.1–3.4)	4.2	(2.1–8.4)
New York	3.3	(1.7–6.3)	5.1	(2.8–9.2)
City of New York	5.4	(1.7–6.3)	7.3	(4.0–12.7)
Rest of state	1.4	(0.5–3.8)	3.1	(0.7–12.3)
North Carolina	0.7	(0.2–2.6)	0.5	(0.1–3.3)
North Dakota	10.3	(5.7–17.9)	4.5	(2.1–9.3)
Ohio	0.2	(0.1–0.6)	0.4	(0.1–0.9)
Cuyahoga County	0	—¶¶	2.2	(0.7–6.7)
Franklin County	1.8	(0.7–4.9)	0.8	(0.1–5.6)
Rest of state	0	—¶¶	0	—¶¶
Pennsylvania	0	—¶¶	0.5	(0.1–2.6)
Philadelphia County	0	—¶¶	0.6	(0.1–4.5)
Rest of state	0	—¶¶	0.5	(0.1–3.4)
Rhode Island	0	—¶¶	1.3	(0.4–4.0)
South Carolina	0	—¶¶	1.0	(0.3–3.2)
Tennessee	3.1	(2.0–4.8)	4.7	(3.0–7.1)
Davidson County	0	—¶¶	1.1	(0.3–4.4)
Shelby County	17.2	(11.3–25.4)	20.6	(13.5–30.1)
Rest of state	0	—¶¶	1.1	(0.3–4.6)
Vermont	0.3	(0.04–2.2)	0	—¶¶
Virginia	0.3	(0.04–2.0)	1.2	(0.4–3.1)
West Virginia	0.5	(0.1–3.2)	0.7	(0.1–4.8)
Wisconsin	8.7	(6.4–11.9)	6.2	(4.2–9.0)
Milwaukee County	36.3	(27.9–45.6)	—§§	—§§
Rest of state	1.4	(0.3–6.0)	0	—¶¶
United States (overall)	**17.6**	**(16.6–18.6)**	**21.3**	**(20.1–22.5)**

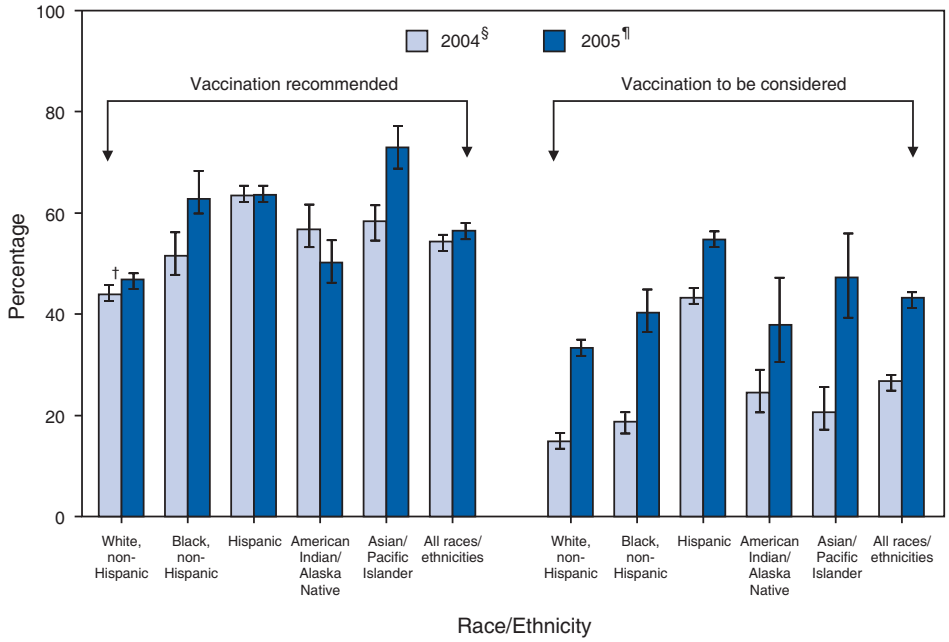
* Advisory Committee on Immunization Practices.
† In 1996, ACIP recommended vaccinating children in communities that had high rates of hepatitis A virus infection, including American Indian/Alaska Native communities and selected Hispanic and religious communities. In 1999, ACIP extended the recommendation to include routine vaccination for all children living in states, counties, and communities with incidence rates twice the 1987–1997 national average of 10 cases per 100,000 population (i.e., ≥20 cases per 100,000 population); ACIP also recommended considering vaccination for children living in states, counties, and communities with incidence rates exceeding the 1987–1997 national average (i.e., >10 to <20 cases per 100,000 population).
§ Among children born during July 2001–May 2003.
¶ Among children born during July 2002–July 2004.
** Confidence interval.
†† Selected city/county area was not sampled; estimates are not available.
§§ Estimate not reported because it is unstable; 95% CI is >20%.
¶¶ CIs were not computed for observed rates of zero; the true rates might be greater than zero.

The findings in this report are subject to at least four limitations. First, NIS is a telephone survey, and statistical adjustments might not fully compensate for nonresponse and households without telephones. Second, NIS relies on provider-verified vaccination histories; vaccination coverage might be underestimated if providers have incomplete records or if incomplete reporting of hepatitis A vaccination has occurred. Third, children who are older than the 24–35 months age group described in this report might have greater hepatitis A vaccination coverage because ACIP recommendations state that community disease patterns should determine which age groups to vaccinate (*2*). Finally, changes in vaccination coverage levels from 2004 to 2005 might be underestimated because the sampled birth cohorts overlap.

The data in this report do not explain differences in coverage levels among states; however, variations in state mandates for vaccination might provide one explanation for these differences. Statewide day care or school-entry mandates were in effect in six of the 11 states where vaccination was recommended. Intrastate regional mandates were in effect in one of six states where vaccination was to be considered and in one of 33 states where no specific recommendation for vaccination was in effect.*

In August 2005, hepatitis A vaccine was licensed by the Food and Drug Administration for use in younger children (aged ≥12 months). In 2006, ACIP recommended routine vaccination of all children aged ≥12 months regardless of risk category or geographic location (*6*). This recommendation should decrease hepatitis A incidence in states where vaccination was not recommended previously and should sustain reductions in places where hepatitis A vaccination has been recommended since 1999.

FIGURE 2. Estimated hepatitis A vaccination coverage (1 dose) among children aged 24–35 months in areas where routine vaccination was recommended and where vaccination was to be considered,* by race/ethnicity and year — National Immunization Survey, United States, 2004–2005



* In 1996, ACIP recommended vaccinating children in communities that had high rates of hepatitis A virus infection, including American Indian/Alaska Native communities and selected Hispanic and religious communities. In 1999, ACIP extended the recommendation to include routine vaccination for all children living in states, counties, and communities with incidence rates twice the 1987–1997 national average of 10 cases per 100,000 population (i.e., ≥20 cases per 100,000 population); ACIP also recommended considering vaccination for children living in states, counties, and communities with incidence rates exceeding the 1987–1997 national average (i.e., >10 to <20 cases per 100,000 population).
† 95% confidence interval.
§ Among children born during July 2001–May 2003.
¶ Among children born during July 2002–July 2004.

* Additional information available at http://www.immunize.org/laws/hepa.htm.

References

1. CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1996;45(No. RR-15).
2. CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-12).
3. CDC. Hepatitis A vaccination coverage among children aged 24–35 months—United States, 2003. MMWR 2005;54:141–4.
4. CDC. National, state, and urban area vaccination coverage among children aged 19–35 months—United States, 2005. MMWR 2006; 55:988–93.
5. CDC. Hepatitis surveillance. Report no. 61. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/ncidod/diseases/hepatitis/resource/pdfs/hep_surveillance_61.pdf.
6. CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-7).
7. Smith PJ, Hoaglin DC, Battaglia MP, Khare M, Barker LE, CDC. Statistical methodology of the National Immunization Survey, 1994–2002. Vital Health Stat 2 2005(138):1–55.
8. McMahon BJ, Williams J, Bulkow L, et al. Immunogenicity of an inactivated hepatitis A vaccine in Alaska Native children and Native and non-Native adults. J Infect Dis 1995;171:676–9.
9. Wasley A, Samandari T, Bell B. Incidence of hepatitis A in the United States in the era of vaccination. JAMA 2005;294:194–201.
10. Staes CJ, Schlenker TL, Risk I, et al. Sources of infection among persons with acute hepatitis A and no identified risk factors during a sustained community-wide outbreak. Pediatrics 2000;106:E54.

Progress Toward Interruption of Wild Poliovirus Transmission — Worldwide, January 2006–May 2007

Progress toward global polio eradication continued during 2006 and the first 5 months of 2007, although the number of countries where wild poliovirus (WPV) transmission has never been interrupted remained at four (Afghanistan, India, Nigeria, and Pakistan) (*1–4*). Continuing challenges included intense WPV circulation in northern India during 2006, low vaccination coverage with oral polio vaccine (OPV) during supplemental immunization activities (SIAs)* in Nigeria, and security problems preventing access to children during SIAs along the Afghanistan-Pakistan border. Programmatic strategies to address these challenges consisted of large-scale use of type 1 monovalent oral polio vaccine (mOPV1) (*5*), targeted programs (e.g., cross-border synchronization of polio campaigns) to reach more children through SIAs, and introduction of new laboratory procedures to confirm cases more rapidly. This report summarizes these strategies and overall progress toward global polio eradication.

Routine OPV Vaccination

Routine vaccination remains an integral component of the polio eradication initiative. Global routine vaccination coverage for infants with 3 doses of OPV was estimated at 78%† in 2005, the most recent year with fully reported data, and was similar to the 3-dose OPV coverage reported in 2004 (81%). Estimated routine coverage varied among World Health Organization (WHO) regions in 2005: 63% in the South-East Asian, 69% in the African, 84% in the Eastern Mediterranean, 87% in the Western Pacific, and >90% in the European and Americas regions. In the four polio-endemic countries, 3-dose OPV coverage was estimated at 77% in Pakistan, 76% in Afghanistan, 58% in India, and 39% in Nigeria; however, lower coverage has been reported in areas with ongoing polio transmission (e.g., northern Nigeria and the northern Indian states of Uttar Pradesh and Bihar).

SIAs in 2006

In 2006, 187 SIAs (86 national immunization days [NIDs], 84 subnational immunization days [SNIDs], and 17 mop-up rounds) with OPV were conducted in 36 countries, using a total of 2.12 billion OPV doses. Doses were delivered to 375 million children aged <5 years. Use of mOPV1 increased from 22% of all administered doses in 2005 to 46% in 2006, reflecting the programmatic shift in campaign strategy (*5*). A total of 58 (31%) of the 187 SIAs were conducted in the four polio-endemic countries: 17 each in India and Pakistan and 12 each in Afghanistan and Nigeria. Of the remaining 2006 SIAs, 81 (43%) were conducted in 13 countries where WPV cases were reintroduced through importation in 2006, and 48 (26%) were conducted in 19 countries with no WPV-confirmed cases in 2006 as a precaution against poliovirus importations.

To improve SIA quality, new approaches were used in the four polio-endemic countries in 2006. In mid-2006, Nigeria initiated a strategy of offering other vaccines (i.e., measles and diphtheria and tetanus toxoids and pertussis vaccine) and health interventions (i.e., bednets and deworming medication) in addition to OPV during SIAs, which were renamed "immunization-plus days" (*2*). The proportion of "zero-dose" children§ in northern states decreased from approximately 50% at the end of 2005 to an average of 20% by the end of 2006. In India, in response to an outbreak in 2006, the National Polio Program increased the number of large-scale SIAs in districts with the highest polio risk (western Uttar Pradesh and Bihar), using mainly mOPV1 and concentrating on improving coverage among children aged <2 years. To reach migrating families, Afghanistan implemented a new multipronged approach that included cross-border synchronization of polio campaigns with Pakistan.

Acute Flaccid Paralysis (AFP) Surveillance

The quality of AFP surveillance is monitored by three performance indicators: 1) the rate of AFP cases not caused by WPV (i.e., the nonpolio AFP rate; target for certification: more than one case per 100,000 persons aged <15 years); 2) the proportion of AFP cases with adequate stool specimens¶ (target for certification: >80%), and 3) the proportion of stool specimens processed in a WHO-accredited laboratory (target: 100%). In 2006, each WHO region maintained sensitivity of AFP surveillance to detect paralytic polio cases at certification-standard levels (Table). Globally, AFP case reporting increased 10%, from 62,434 cases in 2005 to 68,576 cases in 2006, mainly as a result of increased reporting from India, Nigeria, and Pakistan. In 2005, the global Advisory Committee on Polio Eradication (ACPE) endorsed a new

* 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.

† WHO/UNICEF estimates of OPV3 coverage from 2007 summary of WHO vaccine-preventable diseases monitoring system.

§ Children with nonpolio acute flaccid paralysis who had never been vaccinated with OPV, according to their vaccination histories.

¶ Two specimens are collected ≥24 hours apart, both within 14 days of paralysis onset, and shipped on ice or frozen ice packs to a WHO-accredited laboratory, arriving at the laboratory in good condition.

TABLE. Acute flaccid paralysis (AFP) surveillance data for 2006 and wild poliovirus (WPV)-confirmed cases of poliomyelitis for 2006, January–May 2006, and January–May 2007, by World Health Organization (WHO) region and country*

Region/Country	No. reported AFP cases 2006	Nonpolio AFP rate† 2006	% persons with AFP with adequate specimens 2006§	WPV-confirmed cases 2006	WPV-confirmed cases January–May 2006	WPV-confirmed cases January–May 2007
African	**12,477**	**4.0**	**89**	**1,189**	**377**	**105**
Angola	203	2.4	94	2	0	0
Cameroon	193	2.3	85	2	0	0
Chad	126	2.7	93	1	0	0
Democratic Republic of the Congo	1,622	4.8	86	13	1	12
Ethiopia	815	2.1	89	17	2	0
Kenya	281	1.9	93	2	0	0
Namibia	311	11.6	89	18	0	0
Niger	316	4.0	85	11	3	3
Nigeria¶	5,179	6.5	88	1,123	371	90
Eastern Mediterranean	**8,739**	**3.9**	**89**	**107**	**36**	**18**
Afghanistan¶	989	6.2	89	31	8	2
Pakistan¶	4,416	5.8	89	40	3	8
Somalia	185	4.0	83	35	24	8
Yemen	274	2.7	85	1	1	0
South-East Asian	**36,643**	**6.1**	**83**	**701**	**39**	**60**
Bangladesh	1,619	2.9	93	18	3	0
India¶	32,175	7.3	82	676	33	55
Indonesia	1,526	2.4	83	2	2	0
Myanmar	410	2.1	95	0	0	5
Nepal	363	3.5	86	5	1	0
American	**2,150**	**1.3**	**78**	**—**	**—**	**—**
European	**1,555**	**1.1**	**82**	**—**	**—**	**—**
Western Pacific	**7,012**	**1.5**	**87**	**—**	**—**	**—**
Worldwide	**68,576**	**3.7**	**85**	**1,997**	**452**	**183**

* Data reported to WHO as of May 30, 2007. Only countries with WPV in 2006 or 2007 are included. When averaging global, regional, or national surveillance indicators, suboptimal performance-quality indicators in smaller areas might be masked.
† Per 100,000 persons aged <15 years.
§ Two stool specimens collected at an interval of ≥24 hours within 14 days of paralysis onset and adequately shipped to the laboratory.
¶ Countries where polio is endemic.

minimum operational target nonpolio AFP rate of two cases per 100,000 persons aged <15 years for all polio-endemic countries and countries at high risk for WPV importation (*6*). All four polio-endemic countries and 12 of the 13 (i.e., all except Kenya) countries in which polio was reintroduced in 2006 reached this new operational nonpolio AFP target rate in 2006.

Global Polio Laboratory Network

In 2006, WHO fully accredited 97% of the 145 global poliovirus network laboratories, which together analyzed approximately 135,000 fecal samples. In late 2006, the laboratory network evaluated and began adoption of a new testing strategy that will reduce poliovirus confirmation time by 50%, from 42 days to 21 days. The new approach uses previously available technologies for poliovirus identification in a new testing sequence that generates results more rapidly.** The network has established a goal to increase to ≥75% (compared with 58% to date in 2007) the percentage of fecal samples tested from polio-endemic regions in laboratories with capacity for both virus isolation in cell culture and intratypic differentiation (i.e., identification of viruses as either wild or vaccine like) by mid-2008.

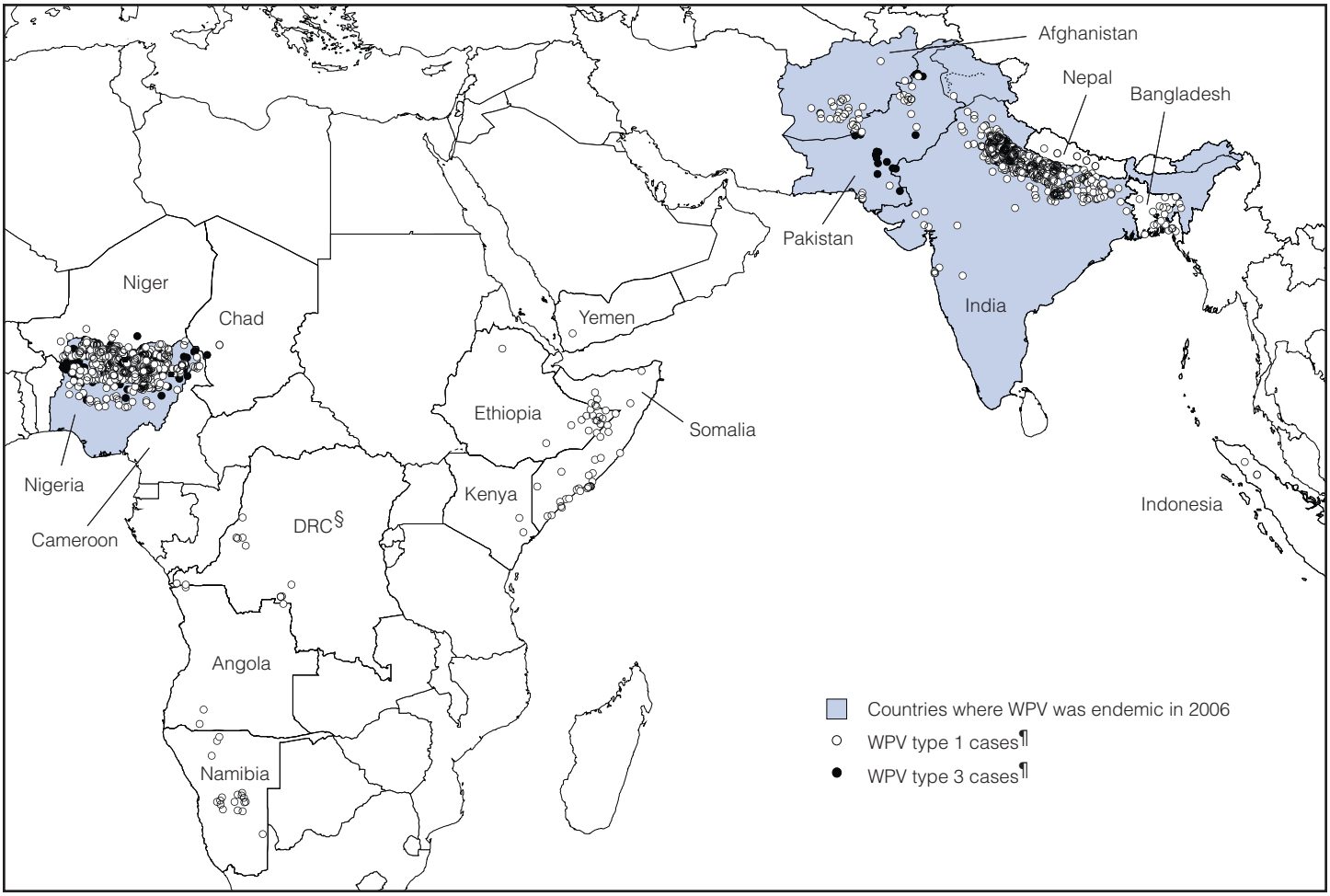
WPV Incidence

As of May 30, 2007, a total of 1,997 polio cases had been reported worldwide for 2006 (Table, Figure 1), essentially unchanged from the 1,979 cases reported in 2005. Although 53% of cases in 2005 were the result of polio importations and outbreaks in previously polio-free countries, 6% of cases in 2006 were in countries where polio was reintroduced through importation. As of May 30, 2007, a total of 183 WPV cases with onset of paralysis in 2007 had been reported, less than half the 452 cases reported during the same period in 2006 (Figure 2).

Nigeria. In 2006, Nigeria reported 1,123 WPV cases, compared with 830 cases in 2005. The incidence of new cases decreased in the second half of 2006, with one third of all 2006 cases reported after June 2006. The number of affected

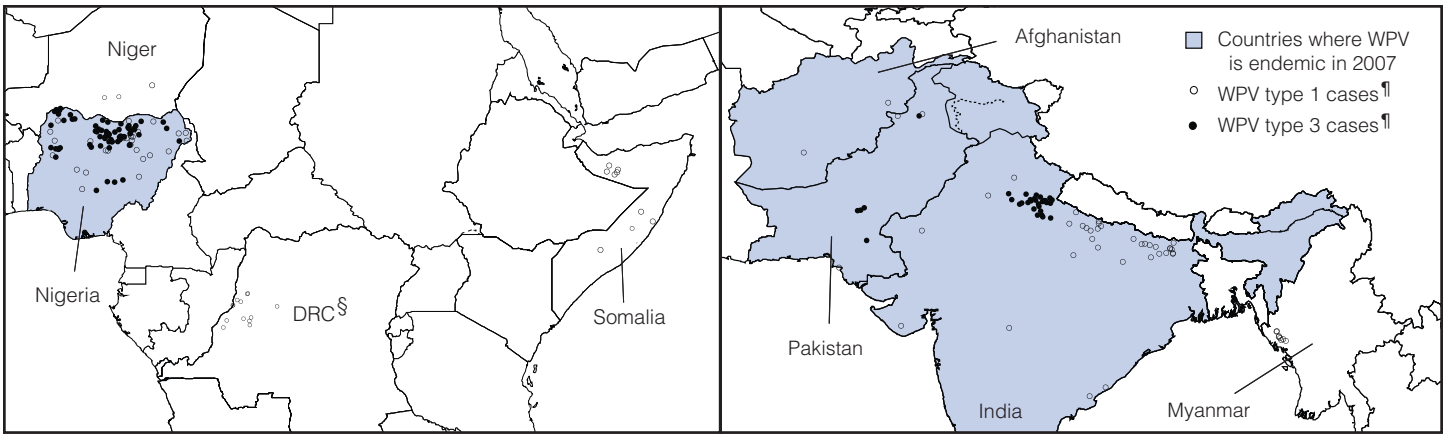
** Additional information available at http://www.who.int/immunization_monitoring/Supplement_polio_lab_manual.pdf.

FIGURE 1. Number of wild poliovirus (WPV) cases* — worldwide, 2006†



* Data reported for 2006 to the World Health Organization as of May 30, 2007 (N = 1,997).
† Excludes polioviruses detected by environmental surveillance and vaccine-derived polioviruses.
§ Democratic Republic of the Congo.
¶ By place of patient residence.

FIGURE 2. Number of wild poliovirus (WPV) cases* — worldwide, 2007†



* Data reported for 2007 to the World Health Organization as of May 30, 2007 (N = 183).
† Excludes polioviruses detected by environmental surveillance and vaccine-derived polioviruses.
§ Democratic Republic of the Congo.
¶ By place of patient residence.

states decreased from 21 (57% of the 37 states in Nigeria) in 2005 to 18 states (49%) in 2006. Approximately 60% of 2006 cases were reported from three states in northern Nigeria (Jigawa, Kano, and Katsina). As of May 30, 2007, a total of 90 cases with onset in 2007 had been reported from Nigeria, compared with 371 reported for the same period in 2006.

India. An outbreak originating in western Uttar Pradesh in 2006 resulted in the reintroduction of polio in areas of India that had been polio free and 10 times as many polio cases in 2006 as in 2005 (676 cases versus 66 cases). Of the 676 cases, 648 were poliovirus type 1 (WPV1) and 28 were type 3 (WPV3); 73% were in children aged <2 years. As of May 30, 2007, India had reported 55 polio cases with onset in 2007, of which 31 were WPV1 and 24 were WPV3. Western Uttar Pradesh had reported one WPV1 case in 2007. WPV1 continues to circulate in other parts of Uttar Pradesh and Bihar.

Pakistan and Afghanistan. Although 40 polio cases were reported in Pakistan in 2006 compared with 28 in 2005, approximately 80% of districts were polio-free in 2006. Transmission has remained confined to a few known virus reservoirs, largely along the Afghanistan-Pakistan border. By May 30, 2007, eight WPV cases (three WPV1 and five WPV3) with onset in 2007 had been reported in Pakistan.

Afghanistan reported 31 cases in 2006, compared with nine cases in 2005. Most of Afghanistan remains polio-free, except for continued transmission in the Southern Region, where a new WPV1 outbreak started in 2005 and peaked during mid-2006. Although the last outbreak-associated case was reported in September 2006, two WPV1 cases with onset in 2007 indicate ongoing low-level WPV1 transmission in the Southern Region.

Other countries. Ten of the 26 countries where polio has been reintroduced since 2003 reported polio cases in the second half of 2006 (*7*). As of May 30, 2007, WPV circulation continued in five countries where polio was reintroduced (Angola, Democratic Republic of the Congo, Ethiopia, Myanmar, and Somalia); four additional countries (Cameroon, Chad, Nepal, and Niger) bordering polio-endemic areas continued to experience sporadic importations.

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Editorial Note: The global incidence of polio was unchanged from 2005 to 2006. Although the number of polio cases from importations decreased, the number of cases in the four polio-endemic countries increased from 2005 to 2006 because of low SIA coverage in Nigeria, intense virus circulation in certain high-risk districts in northern India, and security-related access problems in Afghanistan-Pakistan border areas. However, programmatic strategies developed to address these challenges, including use of mOPV1 with its greater efficacy against WPV1 compared with trivalent OPV (*5*), have had an impact on polio transmission in the four polio-endemic countries, as suggested by the decrease in the number of WPV1 cases in early 2007.

In Nigeria, implementation of immunization-plus days reduced the proportion of zero-dose children by roughly 30%, indicating that more children are being reached and vaccinated for the first time. India responded to a WPV1 outbreak by increasing the number of large-scale SIAs in the highest-risk districts of western Uttar Pradesh and Bihar, using mainly mOPV1, and concentrating on improving the coverage among children aged <2 years. Polio program staff members in Afghanistan and Pakistan implemented synchronized cross-border polio campaigns, ensuring simultaneous and comprehensive coverage of children in transit through the border areas. Although these strategies have positively affected polio transmission in high-risk countries, ongoing program evaluation and adaptability to changing circumstances will be crucial for progress to continue during the remainder of 2007 and early 2008.

In February 2007, a meeting was held at WHO headquarters in Geneva, attended by envoys of the heads of state of the four polio-endemic countries and by major polio-eradication partners. Agreement was reached regarding the technical feasibility of polio eradication and the economic benefits of eradication compared with a polio-control program. The national technical advisory bodies of the polio-endemic countries subsequently convened in May and early June 2007 to review the latest epidemiologic and programmatic data and to further refine tactics to vaccinate all children with OPV during the second half of 2007. WPV1 transmission has been curtailed substantially in the polio-endemic countries. With global collaboration and sustained commitment, the world can achieve global polio eradication.

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—Nigeria, January 2005–July 2006. MMWR 2007;56:278–81.
3. CDC. Progress toward poliomyelitis eradication—India, January 2005–June 2006. MMWR 2006;55:772–6.
4. CDC. Progress toward poliomyelitis eradication—Pakistan and Afghanistan, January 2006–February 2007. MMWR 2007;56:340–3.
5. Grassly NC, Wenger J, Durrani S, et al. Protective efficacy of a monovalent oral type 1 poliovirus vaccine: a case-control study. Lancet 2007; 369:1356–62.
6. World Health Organization. Advisory committee on polio eradication—standing recommendations for responding to circulating polioviruses in polio-free areas. Wkly Epidemiol Rec 2005;80:330–1.
7. CDC. Resurgence of wild poliovirus type 1 transmission and consequences of importation—21 countries, 2002–2005. MMWR 2006;55: 145–50.

Notice to Readers

Malaria Rapid Diagnostic Test

On June 13, 2007, the Food and Drug Administration approved BinaxNOW® Malaria (Inverness Medical Professional Diagnostics, Scarborough, Maine), the first malaria rapid diagnostic test (RDT) authorized for use in the United States. Malaria RDTs, which detect circulating malaria-specific antigens, already are available in other countries and often are used in settings where malaria microscopy is not available. In the United States, use of the RDT can decrease the amount of time required to determine whether a patient is infected with malaria.

BinaxNOW® Malaria is approved for use by hospital and commercial laboratories, not by individual clinicians or by patients themselves; however, the manufacturer is planning to seek a Clinical Laboratory Improvement Amendments waiver for point-of-care use by clinicians. The RDT detects two different malaria antigens: HRP2, which is specific to *Plasmodium falciparum,* and a malaria aldolase found in all four human species of malaria parasites. Although the test can identify *P. falciparum*, it cannot distinguish between *Plasmodium vivax*, *Plasmodium ovale,* or *Plasmodium malariae* or detect mixed infections. The manufacturer recommends that the laboratory maintain a supply of blood containing *P. falciparum* for use as a positive control (*1*).

Use of a malaria RDT does not eliminate the need to examine thick and thin blood smears for the presence of malaria parasites. The RDT might not be able to detect infections with lower concentrations of malaria parasites, and data are insufficient to determine the ability of this test to detect the two less common species of malaria parasite, *P. ovale* and *P. malariae*. Therefore, all negative RDT results should be followed by microscopy to confirm the results and accurately identify the species.

Although malaria treatment should be initiated after receipt of positive RDT results, these results also should be followed by microscopy. In cases of nonfalciparum malaria, microscopy is needed to determine the species of malaria parasite. In addition, because the result of the RDT is qualitative and not quantitative, it cannot be used to determine initial parasite density or the parasitologic response to therapy. Therefore, serial microscopy is needed to quantify the proportion of red blood cells that are infected, an important prognostic indicator that can be used to monitor response to therapy.

High-quality malaria microscopy is not always immediately available in every clinical setting. Although thick and thin blood smears should be examined immediately, in some healthcare settings, blood smears are either saved until a qualified person is available to perform malaria microscopy or sent to commercial or reference laboratories. These practices have resulted in delays in diagnosis and initiation of appropriate management. Clinicians should be aware that certain hospitals and laboratories might offer RDT, which can aid the rapid diagnosis of malaria and result in prompt therapeutic intervention.

Reference

1. BinaxNOW® Malaria [package insert]. Scarborough, Maine: Inverness Medical Professional Diagnostics; 2007.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 7, 2007 (27th 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	—	—	0	1	—	—	—	2	
Botulism:									
foodborne	—	3	1	20	19	16	20	28	
infant	—	41	2	97	85	87	76	69	
other (wound & unspecified)	1	12	0	48	31	30	33	21	CA (1)
Brucellosis	1	56	2	121	120	114	104	125	CA (1)
Chancroid	—	12	1	33	17	30	54	67	
Cholera	—	—	0	9	8	5	2	2	
Cyclosporiasis§	1	40	10	136	543	171	75	156	NY (1)
Diphtheria	—	—	0	—	—	—	1	1	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	4	67	80	112	108	164	
eastern equine	—	—	0	8	21	6	14	10	
Powassan	—	—	0	1	1	1	—	1	
St. Louis	—	—	0	10	13	12	41	28	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	3	64	21	646	786	537	362	511	NY (1), MO (1), TN (1)
human monocytic	8	114	12	577	506	338	321	216	MO (3), WV (1), NC (3), TN (1)
human (other & unspecified)	4	44	6	231	112	59	44	23	NY (1), MO (1), TN (1), AR (1)
Haemophilus influenzae,**									
invasive disease (age <5 yrs):									
serotype b	—	6	0	27	9	19	32	34	
nonserotype b	—	49	2	143	135	135	117	144	
unknown serotype	5	141	3	212	217	177	227	153	CT (1), NE (1), FL (1), TN (1), AL (1)
Hansen disease§	—	24	2	66	87	105	95	96	
Hantavirus pulmonary syndrome§	—	10	1	39	26	24	26	19	
Hemolytic uremic syndrome, postdiarrheal§	1	66	5	288	221	200	178	216	NY (1)
Hepatitis C viral, acute	4	336	19	813	652	713	1,102	1,835	VA (1), NC (1), TX (1), OR (1)
HIV infection, pediatric (age <13 yrs)††	—	—	5	52	380	436	504	420	
Influenza-associated pediatric mortality§,§§	—	66	1	41	45	—	N	N	
Listeriosis	10	257	18	875	896	753	696	665	NY (1), PA (2), MI (1), NC (3), TN (1), WA (1), CA (1)
Measles¶¶	1	20	2	56	66	37	56	44	IN (1)
Meningococcal disease, invasive***:									
A, C, Y, & W-135	—	146	3	311	297	—	—	—	
serogroup B	3	67	3	190	156	—	—	—	OK (3)
other serogroup	—	11	0	31	27	—	—	—	
unknown serogroup	11	358	10	649	765	—	—	—	NY (2), PA (1), NC (1), FL (5), AZ (1), OR (1)
Mumps	3	464	16	6,584	314	258	231	270	FL (1), CO (1), WA (1)
Novel influenza A virus infections	—	—	—	N	N	N	N	N	
Plague	—	4	0	17	8	3	1	2	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Poliovirus infection, nonparalytic§	—	—	—	N	N	N	N	N	
Psittacosis§	—	2	0	21	16	12	12	18	
Q fever§	2	93	3	169	136	70	71	61	NY (1), CO (1)
Rabies, human	—	—	0	3	2	7	2	3	
Rubella†††	—	10	0	10	11	10	7	18	
Rubella, congenital syndrome	—	—	—	1	1	—	1	1	
SARS-CoV§,§§§	—	—	—	—	—	—	8	N	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	2	62	2	125	129	132	161	118	MI (1), NC (1)
Syphilis, congenital (age <1 yr)	—	142	8	380	329	353	413	412	
Tetanus	—	6	1	41	27	34	20	25	
Toxic-shock syndrome (staphylococcal)§	1	40	2	101	90	95	133	109	NC (1)
Trichinellosis	—	4	0	15	16	5	6	14	
Tularemia	3	35	5	95	154	134	129	90	MO (1), NE (1), TN (1)
Typhoid fever	—	134	7	353	324	322	356	321	
Vancomycin-intermediate *Staphylococcus aureus*§	—	5	—	6	2	—	N	N	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	1	3	1	N	N	
Vibriosis (noncholera *Vibrio* species infections)§	4	92	2	N	N	N	N	N	NY (1), MD (1), FL (1), AZ (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 nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.

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

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

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. A total of 66 cases were reported for the 2006–07 flu season.

¶¶ The one measles case reported for the current week was 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 July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	10,312	20,497	25,327	511,107	514,816	113	153	658	4,273	4,374	29	71	319	1,393	1,469
New England	519	673	1,357	17,487	16,188	—	0	1	1	—	—	4	27	82	113
Connecticut	206	210	829	5,074	4,663	N	0	0	N	N	—	0	12	12	38
Maine§	—	49	74	1,257	1,099	—	0	0	—	—	—	1	6	14	13
Massachusetts	251	310	600	8,144	7,114	—	0	0	—	—	—	1	19	26	39
New Hampshire	17	39	71	1,013	944	—	0	1	1	—	—	1	4	13	14
Rhode Island§	19	63	108	1,567	1,735	—	0	0	—	—	—	0	5	5	3
Vermont§	26	20	45	432	633	N	0	0	N	N	—	1	4	12	6
Mid. Atlantic	1,378	2,671	4,284	73,529	62,550	—	0	0	—	—	5	10	37	175	230
New Jersey	—	420	541	10,490	9,793	N	0	0	N	N	—	0	5	—	12
New York (Upstate)	389	509	2,758	12,794	11,811	N	0	0	N	N	5	3	14	61	50
New York City	488	827	1,514	23,142	21,026	N	0	0	N	N	—	2	10	28	69
Pennsylvania	501	832	1,795	27,103	19,920	N	0	0	N	N	—	4	18	86	99
E.N. Central	1,137	3,180	6,292	86,853	87,685	—	1	3	15	23	4	15	110	306	338
Illinois	533	1,014	1,323	24,975	27,789	—	0	0	—	—	—	2	22	28	45
Indiana	216	382	644	10,610	10,571	—	0	0	—	—	—	1	18	29	27
Michigan	255	742	1,225	18,611	16,778	—	0	3	11	19	2	2	10	69	53
Ohio	64	644	3,654	23,064	21,557	—	0	2	4	4	2	5	33	89	102
Wisconsin	69	371	528	9,593	10,990	N	0	0	N	N	—	5	53	91	111
W.N. Central	550	1,201	1,448	29,810	31,203	—	0	54	3	—	2	11	77	208	225
Iowa	95	162	243	4,334	4,232	N	0	0	N	N	—	2	28	37	25
Kansas	130	149	294	4,190	4,079	N	0	0	N	N	—	1	8	32	28
Minnesota	—	243	314	5,118	6,554	—	0	54	—	—	—	2	25	48	79
Missouri	284	453	628	11,767	11,538	—	0	1	3	—	1	2	21	34	41
Nebraska§	—	105	184	2,504	2,578	N	0	0	N	N	1	1	16	9	17
North Dakota	6	31	69	624	904	N	0	0	N	N	—	0	11	1	5
South Dakota	35	49	84	1,273	1,318	N	0	0	N	N	—	1	7	47	30
S. Atlantic	2,734	3,905	6,760	95,928	98,052	—	0	1	1	2	14	18	70	350	322
Delaware	65	69	115	1,744	1,834	N	0	0	N	N	—	0	3	2	1
District of Columbia	—	83	167	2,790	1,568	—	0	0	—	—	—	0	2	3	8
Florida	1,001	1,051	1,651	27,161	24,642	N	0	0	N	N	7	9	32	165	128
Georgia	—	691	3,822	11,632	17,548	N	0	0	N	N	2	3	17	69	102
Maryland§	226	412	697	10,136	10,363	—	0	1	1	2	1	0	2	15	10
North Carolina	944	596	1,233	15,568	18,103	—	0	0	—	—	4	1	11	43	36
South Carolina§	—	436	2,105	12,515	10,328	N	0	0	N	N	—	1	14	26	18
Virginia§	481	495	685	12,944	12,172	N	0	0	N	N	—	1	5	23	17
West Virginia	17	54	85	1,438	1,494	N	0	0	N	N	—	0	3	4	2
E.S. Central	786	1,412	2,044	34,109	39,085	—	0	0	—	—	2	3	15	63	53
Alabama§	40	348	539	4,654	12,263	N	0	0	N	N	—	0	12	22	20
Kentucky	148	130	691	4,015	4,953	N	0	0	N	N	—	1	3	19	15
Mississippi	174	391	959	10,982	9,265	N	0	0	N	N	—	0	8	8	7
Tennessee§	424	531	695	14,458	12,604	N	0	0	N	N	2	1	5	14	11
W.S. Central	1,322	2,208	3,028	57,122	57,796	—	0	1	—	—	—	5	45	70	84
Arkansas§	127	168	337	4,224	3,868	N	0	0	N	N	—	0	3	4	8
Louisiana	289	323	610	8,326	8,975	—	0	1	—	—	—	1	9	17	16
Oklahoma	—	258	471	6,187	6,048	N	0	0	N	N	—	0	9	16	18
Texas§	906	1,463	1,911	38,385	38,905	N	0	0	N	N	—	2	36	33	42
Mountain	370	1,326	2,026	28,344	33,895	100	98	293	2,742	3,103	2	5	40	103	67
Arizona	54	477	993	9,016	10,287	98	97	293	2,670	3,018	—	0	6	18	11
Colorado	71	293	416	5,085	8,243	N	0	0	N	N	2	1	7	27	18
Idaho§	—	31	253	1,263	1,738	N	0	0	N	N	—	0	5	7	5
Montana§	18	52	144	1,352	1,217	N	0	0	N	N	—	1	26	11	8
Nevada§	216	169	397	4,432	3,970	2	1	5	29	36	—	0	3	5	4
New Mexico§	—	165	396	4,334	5,237	—	0	2	11	11	—	1	6	25	12
Utah	—	99	200	2,236	2,450	—	1	4	32	36	—	0	3	3	6
Wyoming§	11	26	45	626	753	—	0	0	—	2	—	0	11	7	3
Pacific	1,516	3,375	4,362	87,925	88,362	13	57	311	1,511	1,246	—	1	5	36	37
Alaska	73	87	157	2,231	2,219	N	0	0	N	N	—	0	1	1	2
California	1,017	2,666	3,627	68,927	68,896	13	57	311	1,511	1,246	—	0	0	—	—
Hawaii	—	106	129	2,655	2,969	N	0	0	N	N	—	0	1	—	1
Oregon§	155	166	394	4,815	4,861	N	0	0	N	N	—	1	5	35	34
Washington	271	342	621	9,297	9,417	N	0	0	N	N	—	0	0	—	—
American Samoa	U	0	32	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	16	18	—	477	—	0	0	—	—	—	0	0	—	—
Puerto Rico	171	122	233	3,781	2,498	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	U	3	8	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 July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	190	293	1,513	6,587	7,678	3,040	6,943	8,941	164,511	176,776	32	47	184	1,238	1,226
New England	1	23	67	481	554	77	111	259	2,833	2,793	5	3	19	95	83
Connecticut	—	5	25	129	120	33	43	204	1,044	1,104	5	0	6	29	23
Maine§	1	4	14	68	43	—	2	8	57	66	—	0	4	7	7
Massachusetts	—	9	26	194	265	33	49	96	1,399	1,226	—	2	5	48	38
New Hampshire	—	0	3	5	13	2	3	8	84	114	—	0	2	6	6
Rhode Island§	—	0	17	28	42	5	9	19	221	251	—	0	10	4	2
Vermont§	—	3	12	57	71	4	1	5	28	32	—	0	1	1	7
Mid. Atlantic	31	57	127	1,126	1,576	268	713	1,537	19,263	16,468	2	10	27	249	253
New Jersey	—	5	17	36	244	—	119	172	3,141	2,644	—	1	5	22	43
New York (Upstate)	25	24	108	445	522	64	115	1,035	2,970	3,065	1	3	15	71	75
New York City	—	16	32	363	480	73	186	376	4,922	5,124	—	2	6	51	48
Pennsylvania	6	14	34	282	330	131	251	613	8,230	5,635	1	3	10	105	87
E.N. Central	16	46	100	937	1,217	455	1,276	2,608	34,396	35,431	2	7	15	143	213
Illinois	—	11	30	186	306	220	363	500	9,020	10,160	—	2	6	29	66
Indiana	N	0	0	N	N	67	157	293	4,360	4,592	—	1	10	31	37
Michigan	3	14	38	294	326	110	280	880	7,567	6,818	—	0	5	14	19
Ohio	13	15	32	337	348	32	317	1,569	10,117	10,271	2	2	5	61	48
Wisconsin	—	9	27	120	237	26	131	181	3,332	3,590	—	0	4	8	43
W.N. Central	5	20	553	404	861	186	386	514	9,661	9,628	2	3	24	70	64
Iowa	—	5	16	94	121	16	39	62	933	904	—	0	1	1	—
Kansas	1	3	11	65	84	38	42	86	1,161	1,132	—	0	2	7	13
Minnesota	—	0	514	12	343	—	66	87	1,362	1,594	—	1	17	26	28
Missouri	2	8	28	162	225	125	203	268	5,359	5,113	—	1	5	25	18
Nebraska§	1	2	9	41	44	—	28	57	679	638	2	0	2	10	4
North Dakota	1	0	16	6	8	—	2	7	35	59	—	0	2	1	1
South Dakota	—	1	6	24	36	7	6	15	132	188	—	0	0	—	—
S. Atlantic	58	54	106	1,222	1,149	649	1,658	3,209	37,265	43,033	7	12	34	322	310
Delaware	—	1	3	17	18	25	27	44	702	755	—	0	3	5	1
District of Columbia	—	1	7	34	36	—	41	63	1,129	901	—	0	2	3	2
Florida	28	24	44	578	459	441	474	717	11,549	12,087	3	3	8	94	96
Georgia	24	10	27	231	260	—	329	2,068	4,851	8,181	1	2	7	66	71
Maryland§	1	5	12	114	101	59	131	228	3,165	3,637	1	2	5	50	39
North Carolina	—	0	0	—	—	—	317	676	7,044	9,095	1	1	9	39	29
South Carolina§	—	1	8	38	57	—	181	1,026	5,276	4,689	—	1	4	31	23
Virginia§	3	9	28	195	206	120	124	236	3,141	3,298	—	1	6	20	38
West Virginia	2	0	21	15	12	4	18	44	408	390	1	0	6	14	11
E.S. Central	4	9	34	206	188	337	550	879	12,757	15,628	6	2	9	76	65
Alabama§	1	4	22	109	85	32	152	271	2,120	5,646	1	0	3	17	14
Kentucky	N	0	0	N	N	58	52	268	1,508	1,701	—	0	1	2	4
Mississippi	N	0	0	N	N	79	156	434	4,051	3,471	—	0	1	5	6
Tennessee§	3	5	12	97	103	168	195	240	5,078	4,810	5	1	6	52	41
W.S. Central	6	7	55	149	130	604	944	1,490	23,631	25,031	5	2	34	62	52
Arkansas§	2	3	13	61	37	77	79	142	2,024	2,148	—	0	2	5	5
Louisiana	—	1	6	29	44	188	211	366	5,080	5,314	—	0	3	4	11
Oklahoma	4	2	42	59	49	—	88	236	2,355	2,227	5	1	29	50	33
Texas§	N	0	0	N	N	339	561	938	14,172	15,342	—	0	3	3	3
Mountain	24	30	67	645	705	144	252	454	5,459	7,459	3	4	11	151	130
Arizona	5	3	11	88	71	19	106	220	1,937	2,492	1	2	6	63	50
Colorado	11	9	26	197	227	53	64	93	1,204	1,889	2	1	4	32	35
Idaho§	1	3	12	58	77	—	1	20	84	99	—	0	1	4	3
Montana§	—	2	10	39	33	—	2	20	47	91	—	0	0	—	—
Nevada§	2	2	8	59	65	68	47	135	1,090	1,439	—	0	2	6	9
New Mexico§	—	2	6	50	30	—	29	64	726	928	—	0	4	21	19
Utah	5	6	27	135	192	—	16	28	330	450	—	0	3	23	12
Wyoming§	—	1	4	19	10	4	2	5	41	71	—	0	1	2	2
Pacific	45	57	558	1,417	1,298	320	750	935	19,246	21,305	—	2	16	70	56
Alaska	—	1	17	31	23	8	10	27	228	287	—	0	2	5	5
California	28	43	93	980	1,056	254	627	804	16,305	17,548	—	0	10	19	19
Hawaii	—	1	4	38	28	—	14	26	324	517	—	0	2	6	10
Oregon§	9	8	14	194	191	24	25	46	547	741	—	1	6	40	22
Washington	8	0	449	174	—	34	70	142	1,842	2,212	—	0	5	—	—
American Samoa	U	0	0	U	U	U	0	4	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	1	6	—	49	—	0	1	—	3
Puerto Rico	—	6	19	114	78	6	6	16	172	155	—	0	2	2	1
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 July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	Hepatitis (viral, acute), by type† A: Current week	A: Previous 52 weeks Med	A: Previous 52 weeks Max	A: Cum 2007	A: Cum 2006	B: Current week	B: Previous 52 weeks Med	B: Previous 52 weeks Max	B: Cum 2007	B: Cum 2006	Legionellosis: Current week	Legionellosis: Previous 52 weeks Med	Legionellosis: Previous 52 weeks Max	Legionellosis: Cum 2007	Legionellosis: Cum 2006
United States	22	55	201	1,282	1,836	30	78	405	1,885	2,195	24	42	113	763	909
New England	—	2	6	37	105	—	2	5	33	62	3	2	13	34	55
Connecticut	—	0	3	8	19	—	0	5	18	27	3	0	9	8	12
Maine§	—	0	2	1	5	—	0	2	2	11	—	0	2	1	3
Massachusetts	—	1	4	14	52	—	0	2	2	12	—	1	8	13	33
New Hampshire	—	0	2	7	18	—	0	1	5	7	—	0	2	—	4
Rhode Island§	—	0	2	5	5	—	0	4	5	4	—	0	6	10	1
Vermont§	—	0	1	2	6	—	0	1	1	1	—	0	2	2	2
Mid. Atlantic	—	7	20	180	197	—	10	21	223	271	5	12	55	206	278
New Jersey	—	2	5	42	62	—	2	7	47	87	—	1	10	21	48
New York (Upstate)	—	1	11	35	41	—	1	13	43	31	2	5	30	71	86
New York City	—	2	10	60	59	—	2	6	45	64	—	2	24	28	50
Pennsylvania	—	1	5	43	35	—	3	8	88	89	3	5	19	86	94
E.N. Central	1	6	17	117	160	—	9	23	212	261	2	9	31	143	188
Illinois	—	2	7	38	37	—	2	6	47	82	—	0	13	1	38
Indiana	—	0	7	5	15	—	0	21	20	22	—	1	6	10	12
Michigan	—	2	8	32	51	—	2	8	57	74	—	3	10	53	43
Ohio	1	1	4	35	39	—	3	10	77	63	2	3	19	72	73
Wisconsin	—	0	4	7	18	—	0	3	11	20	—	0	3	7	22
W.N. Central	2	2	17	80	73	1	2	15	63	70	—	1	16	29	23
Iowa	—	0	4	15	7	—	0	3	10	12	—	0	3	3	3
Kansas	—	0	1	2	21	—	0	1	5	8	—	0	3	1	1
Minnesota	—	0	17	42	6	—	0	13	9	6	—	0	11	5	—
Missouri	2	0	2	12	23	—	1	5	31	37	—	0	2	15	10
Nebraska§	—	0	2	5	9	1	0	3	6	6	—	0	1	3	5
North Dakota	—	0	3	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	—	0	1	4	7	—	0	1	2	1	—	0	1	2	4
S. Atlantic	10	10	27	246	237	15	20	56	503	610	6	8	25	168	185
Delaware	—	0	1	3	9	—	0	3	7	26	—	0	2	5	4
District of Columbia	—	0	5	14	2	—	0	2	1	4	—	0	5	1	6
Florida	3	3	13	72	87	7	7	14	182	213	3	2	9	70	74
Georgia	1	1	4	37	23	—	3	10	54	103	—	1	3	14	11
Maryland§	—	1	6	37	31	1	2	7	49	81	1	1	8	30	42
North Carolina	5	0	11	25	45	5	0	16	75	89	1	0	4	22	19
South Carolina§	—	0	3	5	11	—	2	5	37	40	1	0	2	8	3
Virginia§	1	1	5	50	25	—	2	8	69	21	—	1	4	15	22
West Virginia	—	0	1	3	4	2	0	23	29	33	—	0	4	3	4
E.S. Central	2	2	7	48	64	4	6	20	151	188	2	2	7	43	44
Alabama§	—	0	2	7	6	1	2	10	55	52	—	0	1	5	7
Kentucky	—	0	2	9	24	—	1	6	21	40	2	1	6	20	12
Mississippi	—	0	4	6	4	—	0	8	11	25	—	0	2	—	1
Tennessee§	2	1	5	26	30	3	3	8	64	71	—	1	3	18	24
W.S. Central	—	5	43	81	177	5	18	169	349	401	—	1	16	39	36
Arkansas§	—	0	2	5	34	—	1	7	12	35	—	0	2	3	1
Louisiana	—	1	4	13	10	—	1	4	21	32	—	0	2	1	6
Oklahoma	—	0	3	3	4	—	1	24	17	13	—	0	6	1	1
Texas§	—	4	39	60	129	5	15	135	299	321	—	1	13	34	28
Mountain	2	5	17	153	156	1	3	9	107	69	4	2	8	45	51
Arizona	2	4	14	122	87	—	0	5	44	—	1	0	4	14	17
Colorado	—	0	3	14	26	—	0	2	16	21	1	0	2	7	7
Idaho§	—	0	1	2	7	1	0	2	7	7	—	0	3	4	6
Montana§	—	0	3	4	5	—	0	3	—	—	—	0	1	1	3
Nevada§	—	0	2	6	8	—	1	5	23	19	2	0	2	5	4
New Mexico§	—	0	2	2	11	—	0	2	5	9	—	0	2	3	2
Utah	—	0	1	2	11	—	0	4	12	13	—	0	2	8	12
Wyoming§	—	0	1	1	1	—	0	1	—	—	—	0	1	3	—
Pacific	5	13	92	340	667	4	10	106	244	263	2	2	11	56	49
Alaska	—	0	1	2	1	—	0	3	4	2	—	0	1	—	—
California	3	11	40	303	636	3	7	31	186	214	1	1	11	43	49
Hawaii	—	0	1	3	8	—	0	1	—	5	—	0	1	1	—
Oregon§	—	1	3	16	22	—	1	5	32	42	—	0	1	3	—
Washington	2	0	52	16	—	1	0	74	22	—	1	0	2	9	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	1	10	28	26	1	1	9	31	29	—	0	2	3	1
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional.
† Data for acute hepatitis C, viral are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	225	226	1,150	4,632	6,928	5	22	105	445	639	14	19	87	582	691
New England	39	36	339	588	1,529	—	1	5	19	38	—	1	3	28	23
Connecticut	24	12	184	352	447	—	0	3	1	10	—	0	1	5	8
Maine§	10	2	38	47	39	—	0	1	3	3	—	0	3	5	2
Massachusetts	—	1	145	7	757	—	0	3	14	17	—	0	2	14	10
New Hampshire	2	6	70	141	267	—	0	1	1	7	—	0	1	—	1
Rhode Island§	—	0	93	1	1	—	0	1	—	—	—	0	1	1	—
Vermont§	3	1	15	40	18	—	0	0	—	1	—	0	1	3	2
Mid. Atlantic	147	112	560	2,437	3,443	1	6	18	105	149	3	2	8	73	113
New Jersey	—	25	153	456	1,299	—	0	7	—	44	—	0	2	1	12
New York (Upstate)	108	50	426	754	879	—	1	7	27	17	2	1	2	23	24
New York City	—	1	23	8	94	—	3	9	65	72	—	0	4	20	42
Pennsylvania	39	44	223	1,219	1,171	1	1	4	13	16	1	1	5	29	35
E.N. Central	3	5	156	74	983	—	2	10	48	72	—	3	9	76	103
Illinois	—	0	16	6	51	—	1	6	18	33	—	0	3	21	29
Indiana	—	0	3	10	7	—	0	2	4	6	—	0	4	14	14
Michigan	1	1	5	14	10	—	0	2	7	10	—	0	3	14	17
Ohio	2	0	5	6	21	—	0	2	12	17	—	1	3	21	28
Wisconsin	—	3	146	38	894	—	0	3	7	6	—	0	3	6	15
W.N. Central	4	4	195	109	154	1	0	12	20	23	—	1	5	37	39
Iowa	—	1	8	27	60	—	0	1	2	1	—	0	3	9	9
Kansas	—	0	2	6	3	—	0	2	1	1	—	0	1	1	1
Minnesota	—	1	188	63	83	—	0	12	11	14	—	0	3	10	10
Missouri	4	0	3	10	1	—	0	1	2	3	—	0	3	10	11
Nebraska§	—	0	2	3	6	1	0	1	3	2	—	0	1	2	6
North Dakota	—	0	7	—	—	—	0	1	—	1	—	0	3	2	1
South Dakota	—	0	0	—	1	—	0	1	1	1	—	0	1	3	1
S. Atlantic	28	47	134	1,299	775	1	5	14	105	169	6	3	11	93	117
Delaware	1	9	25	302	255	—	0	1	3	5	—	0	1	1	4
District of Columbia	—	0	7	13	9	—	0	2	3	2	—	0	1	—	—
Florida	2	1	3	21	8	—	1	4	22	22	5	1	7	34	48
Georgia	—	0	1	1	4	—	0	5	11	55	—	0	3	9	10
Maryland§	19	24	108	675	424	—	1	4	28	39	—	0	2	16	7
North Carolina	1	0	6	20	15	1	0	4	13	13	1	0	6	12	20
South Carolina§	—	0	2	8	5	—	0	2	4	5	—	0	2	9	12
Virginia§	1	9	36	249	52	—	1	4	20	27	—	0	2	12	13
West Virginia	4	0	14	10	3	—	0	1	1	1	—	0	2	—	3
E.S. Central	1	1	4	25	7	1	0	3	19	12	—	1	4	31	27
Alabama§	—	0	3	7	2	1	0	2	4	6	—	0	2	6	4
Kentucky	—	0	2	—	—	—	0	1	4	1	—	0	2	6	7
Mississippi	—	0	1	—	—	—	0	1	1	3	—	0	4	7	3
Tennessee§	1	0	3	18	5	—	0	2	10	2	—	0	2	12	13
W.S. Central	—	1	5	30	6	—	2	29	36	41	3	2	15	57	66
Arkansas§	—	0	0	—	—	—	0	2	—	1	—	0	2	7	6
Louisiana	—	0	1	2	—	—	0	2	12	3	—	0	4	15	28
Oklahoma	—	0	0	—	—	—	0	3	3	3	3	0	4	14	8
Texas§	—	1	5	28	6	—	1	25	21	34	—	0	11	21	24
Mountain	—	1	3	11	6	—	1	6	27	32	1	1	5	45	42
Arizona	—	0	1	—	4	—	0	3	5	11	1	0	3	13	11
Colorado	—	0	0	—	—	—	0	2	9	10	—	0	2	14	14
Idaho§	—	0	2	4	—	—	0	1	—	—	—	0	1	3	1
Montana§	—	0	1	1	—	—	0	1	2	1	—	0	1	1	3
Nevada§	—	0	2	5	—	—	0	1	1	1	—	0	1	3	4
New Mexico§	—	0	1	—	2	—	0	1	1	2	—	0	1	2	2
Utah	—	0	1	1	—	—	0	3	9	7	—	0	2	7	5
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	2	2	2
Pacific	3	2	16	59	25	1	3	45	66	103	1	4	48	142	161
Alaska	—	0	1	2	—	—	0	4	2	14	—	0	1	1	2
California	3	2	8	56	24	—	2	6	44	78	—	3	10	102	128
Hawaii	N	0	0	N	N	—	0	1	2	4	—	0	1	2	4
Oregon§	—	0	1	1	1	—	0	3	12	7	1	0	3	23	27
Washington	—	0	8	—	—	1	0	43	6	—	—	0	43	14	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	—	—	0	1	5	4
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 July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	70	219	1,479	3,930	6,830	35	96	171	2,211	2,581	53	28	211	619	773
New England	—	32	77	587	796	5	12	22	291	191	—	0	10	—	7
Connecticut	—	2	10	18	33	4	5	14	118	79	—	0	0	—	—
Maine†	—	2	15	37	24	—	2	8	39	46	N	0	0	N	N
Massachusetts	—	22	46	476	510	—	0	0	—	—	—	0	1	—	6
New Hampshire	—	2	9	32	128	—	1	4	20	16	—	0	0	—	1
Rhode Island†	—	0	31	4	22	—	0	3	18	14	—	0	9	—	—
Vermont†	—	1	9	20	79	1	2	13	96	36	—	0	0	—	—
Mid. Atlantic	15	32	155	583	839	1	13	44	420	226	—	1	6	26	32
New Jersey	—	3	16	62	156	—	0	0	—	—	—	0	4	1	19
New York (Upstate)	13	18	146	317	313	—	—	—	—	—	—	0	1	1	—
New York City	—	2	6	51	47	1	1	5	28	8	—	0	3	11	6
Pennsylvania	2	8	20	153	323	—	12	44	392	218	—	0	3	13	7
E.N. Central	16	41	80	796	995	8	2	18	84	48	—	0	9	8	30
Illinois	—	7	23	78	255	1	0	7	26	10	—	0	4	1	16
Indiana	5	2	45	30	110	—	0	2	6	3	—	0	1	2	3
Michigan	1	9	39	127	202	2	0	5	21	23	—	0	1	2	—
Ohio	10	15	54	412	306	5	0	12	31	12	—	0	4	3	10
Wisconsin	—	4	24	149	122	—	0	0	—	—	—	0	0	—	1
W.N. Central	10	15	151	259	690	4	6	17	137	146	10	3	13	91	80
Iowa	—	4	16	73	179	—	0	7	16	23	—	0	1	3	2
Kansas	4	3	14	83	140	2	2	8	77	41	—	0	1	—	—
Minnesota	—	0	119	—	102	—	0	4	10	22	—	0	2	1	1
Missouri	5	3	10	42	184	2	1	6	14	21	10	3	12	81	67
Nebraska†	1	1	4	18	66	—	0	0	—	—	—	0	5	4	10
North Dakota	—	0	18	4	4	—	0	6	11	13	—	0	0	—	—
South Dakota	—	0	6	39	15	—	0	2	9	26	—	0	1	2	—
S. Atlantic	11	19	163	480	559	11	40	65	982	1,191	34	14	67	331	468
Delaware	—	0	2	5	3	—	0	0	—	—	—	0	2	7	11
District of Columbia	—	0	2	2	3	—	0	0	—	—	—	0	1	1	—
Florida	1	4	18	119	109	—	0	24	67	176	1	0	4	10	8
Georgia	—	1	7	13	51	—	4	9	81	129	1	0	5	9	21
Maryland†	—	2	8	63	84	—	6	17	145	211	—	1	7	24	33
North Carolina	10	2	112	180	101	11	11	21	262	222	31	6	61	213	357
South Carolina†	—	3	11	42	79	—	3	11	46	75	—	1	6	23	13
Virginia†	—	2	17	47	109	—	12	31	343	325	—	2	12	42	24
West Virginia	—	0	19	9	20	—	1	8	38	53	1	0	2	2	1
E.S. Central	3	5	24	101	157	—	3	11	62	133	2	7	27	110	112
Alabama†	1	1	18	31	33	—	0	8	—	46	—	1	9	27	27
Kentucky	—	0	5	2	30	—	0	4	10	7	—	0	1	2	—
Mississippi	—	0	10	14	23	—	0	0	—	4	—	0	1	2	2
Tennessee†	2	3	9	54	71	—	2	8	52	76	2	4	22	79	83
W.S. Central	—	19	226	296	371	—	10	35	59	464	7	1	168	36	28
Arkansas†	—	2	17	63	38	—	0	5	14	19	6	0	53	7	18
Louisiana	—	0	2	6	17	—	0	1	—	2	—	0	1	—	—
Oklahoma	—	0	36	2	10	—	0	22	45	37	—	0	108	21	5
Texas†	—	14	174	225	306	—	4	34	—	406	1	0	7	8	5
Mountain	8	28	61	577	1,613	4	3	28	70	81	—	0	4	15	14
Arizona	—	6	17	143	345	3	2	10	50	62	—	0	2	—	4
Colorado	3	6	18	144	522	—	0	0	—	—	—	0	1	1	1
Idaho†	—	1	6	22	43	—	0	24	—	—	—	0	3	2	1
Montana†	—	1	8	30	69	—	0	2	4	7	—	0	2	1	2
Nevada†	—	0	9	3	44	—	0	2	1	1	—	0	0	—	—
New Mexico†	—	2	8	25	54	—	0	2	4	6	—	0	1	3	3
Utah	5	8	47	196	494	1	0	1	6	3	—	0	0	—	—
Wyoming†	—	1	8	14	42	—	0	2	5	2	—	0	2	8	3
Pacific	7	20	547	251	810	2	4	13	106	101	—	0	1	2	2
Alaska	—	1	8	19	36	—	0	6	34	14	N	0	0	N	N
California	—	15	225	99	633	2	3	12	71	85	—	0	0	—	—
Hawaii	—	0	5	10	65	N	0	0	N	N	N	0	0	N	N
Oregon†	—	1	11	58	76	—	0	4	1	2	—	0	1	2	2
Washington	7	0	377	65	—	—	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	—	1	7	—	18	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	—	—	5	1	4	26	55	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 7, 2007, and July 8, 2006 (27th 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	448	800	2,338	16,595	17,168	66	70	336	1,349	1,312	247	302	1,287	6,634	5,396
New England	—	34	186	908	1,205	1	3	24	86	135	—	4	16	97	162
Connecticut	—	0	172	172	503	—	0	19	19	75	—	0	13	13	67
Maine§	—	2	14	53	42	—	1	8	17	6	—	0	5	12	2
Massachusetts	—	23	60	542	513	—	1	6	37	41	—	3	11	63	81
New Hampshire	—	3	15	55	88	—	0	3	5	8	—	0	2	3	4
Rhode Island§	—	2	20	51	41	—	0	2	2	2	—	0	3	4	5
Vermont§	—	2	6	35	18	1	0	4	6	3	—	0	2	2	3
Mid. Atlantic	54	93	189	2,105	2,094	4	7	63	134	168	20	11	47	246	490
New Jersey	—	12	50	148	457	—	1	20	11	45	—	2	12	22	212
New York (Upstate)	33	28	112	607	433	3	3	15	59	63	4	3	42	55	105
New York City	5	23	45	548	548	—	0	4	13	20	—	5	12	112	130
Pennsylvania	16	35	66	802	656	1	3	47	51	40	16	1	6	57	43
E.N. Central	40	98	203	2,335	2,482	11	9	63	175	200	68	30	75	736	541
Illinois	—	30	65	669	749	—	1	8	18	33	—	13	53	220	184
Indiana	8	16	55	288	271	5	1	8	22	25	2	2	17	32	73
Michigan	2	18	35	373	472	2	1	6	32	35	—	1	5	19	92
Ohio	30	25	56	592	551	4	3	18	58	58	66	4	68	369	87
Wisconsin	—	17	49	413	439	—	2	41	45	49	—	4	14	96	105
W.N. Central	30	49	104	1,196	1,116	6	11	45	215	229	23	41	156	1,012	700
Iowa	—	9	26	185	192	—	2	38	40	52	—	2	14	38	37
Kansas	7	7	20	194	164	4	0	4	26	10	—	1	10	16	57
Minnesota	—	13	44	290	286	—	4	26	76	57	—	5	24	122	44
Missouri	16	15	35	326	307	1	2	13	36	72	23	15	72	800	413
Nebraska§	5	3	11	101	93	1	1	11	23	21	—	1	14	11	40
North Dakota	—	0	23	17	7	—	0	12	1	2	—	0	127	4	4
South Dakota	2	3	11	83	67	—	0	5	13	15	—	4	24	21	105
S. Atlantic	154	217	401	4,191	4,005	14	14	32	274	198	67	81	167	2,368	1,291
Delaware	1	2	10	52	52	—	0	3	9	1	—	0	1	4	3
District of Columbia	—	1	4	16	30	—	0	1	1	—	—	0	5	4	6
Florida	75	97	176	1,782	1,724	5	2	8	77	39	45	45	76	1,370	581
Georgia	13	29	73	663	618	—	2	7	29	37	19	28	89	824	473
Maryland§	16	14	31	321	271	1	3	10	43	32	1	2	10	45	41
North Carolina	37	29	130	597	574	8	2	11	45	35	2	1	14	35	92
South Carolina§	3	18	47	328	349	—	0	3	7	4	—	1	4	37	66
Virginia§	5	20	58	368	343	—	3	11	60	50	—	2	9	48	29
West Virginia	4	1	31	64	44	—	0	5	3	—	—	0	2	1	—
E.S. Central	33	53	140	1,087	1,019	10	4	21	72	99	28	17	89	653	335
Alabama§	5	13	78	308	303	3	0	4	16	12	6	6	67	250	91
Kentucky	13	9	23	217	189	3	1	12	19	21	21	2	32	155	151
Mississippi	—	11	101	207	240	—	0	3	2	2	—	2	76	154	36
Tennessee§	15	18	32	355	287	4	2	9	35	64	1	4	14	94	57
W.S. Central	11	79	595	1,303	1,812	2	4	73	74	80	15	40	655	646	774
Arkansas§	3	14	45	228	363	—	1	7	16	10	—	2	10	50	40
Louisiana	—	15	48	191	374	—	0	2	—	11	—	6	25	145	70
Oklahoma	8	9	103	185	169	—	0	17	12	6	3	2	63	51	51
Texas§	—	44	470	699	906	2	2	68	46	53	12	25	580	400	613
Mountain	30	48	90	1,130	1,265	8	8	34	168	167	10	21	84	366	425
Arizona	10	17	44	399	359	5	2	9	57	36	2	10	37	190	230
Colorado	13	10	21	266	358	1	1	7	22	38	7	3	15	53	66
Idaho§	2	3	8	56	81	2	2	10	34	34	—	0	3	5	6
Montana§	—	2	6	45	70	—	0	0	—	—	—	1	12	13	4
Nevada§	1	4	20	93	106	—	0	5	11	15	—	1	20	15	47
New Mexico§	—	5	15	101	112	—	1	5	19	13	—	2	15	51	44
Utah	4	4	13	130	146	—	1	14	25	25	1	1	4	14	25
Wyoming§	—	1	4	40	33	—	0	3	—	6	—	0	19	25	3
Pacific	96	109	890	2,340	2,170	10	4	164	151	36	16	32	256	510	678
Alaska	—	1	5	41	38	N	0	0	N	N	—	0	2	6	5
California	66	90	260	1,768	1,819	4	0	15	92	N	9	25	84	404	579
Hawaii	—	5	16	109	109	1	0	3	8	6	—	1	3	15	22
Oregon§	3	7	17	155	203	—	1	9	19	30	—	1	6	35	72
Washington	27	0	625	267	1	5	0	162	32	—	7	0	170	50	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
Puerto Rico	6	14	66	293	219	—	0	0	—	—	1	0	6	15	15
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 *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 July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	Streptococcal disease, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max		
United States	62	92	261	3,029	3,353	12	30	108	877	767
New England	16	6	29	261	216	—	2	11	67	67
Connecticut	14	0	23	84	58	—	0	6	—	23
Maine§	—	0	3	18	10	—	0	1	1	—
Massachusetts	—	3	12	121	112	—	2	6	50	38
New Hampshire	2	0	5	24	23	—	0	2	7	6
Rhode Island§	—	0	12	—	4	—	0	3	7	—
Vermont§	—	0	2	14	9	—	0	1	2	—
Mid. Atlantic	6	15	41	573	639	2	4	20	101	113
New Jersey	—	2	9	80	114	—	1	4	15	42
New York (Upstate)	5	5	27	187	202	2	2	15	63	61
New York City	—	3	12	132	115	—	1	3	23	10
Pennsylvania	1	6	11	174	208	N	0	0	N	N
E.N. Central	2	16	32	525	667	4	6	14	144	205
Illinois	—	5	13	135	200	—	1	6	32	57
Indiana	—	2	12	70	78	1	0	10	14	25
Michigan	1	3	10	130	137	—	1	4	50	51
Ohio	1	4	14	164	174	3	1	7	40	43
Wisconsin	—	1	6	26	78	—	0	2	8	29
W.N. Central	—	5	32	212	223	—	2	8	67	56
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	3	25	40	—	0	1	2	9
Minnesota	—	0	29	107	107	—	1	6	46	31
Missouri	—	2	6	50	40	—	0	2	13	10
Nebraska§	—	0	3	15	20	—	0	2	5	4
North Dakota	—	0	2	9	8	—	0	2	1	2
South Dakota	—	0	2	6	8	—	0	0	—	—
S. Atlantic	22	22	51	727	717	4	3	14	176	49
Delaware	—	0	2	5	7	—	0	0	—	—
District of Columbia	—	0	3	8	9	—	0	1	—	—
Florida	7	6	16	178	149	1	0	5	39	—
Georgia	2	5	11	134	160	—	0	5	44	—
Maryland§	5	4	9	134	140	1	1	6	42	40
North Carolina	4	0	22	99	105	—	0	0	—	—
South Carolina§	3	1	7	67	46	1	0	3	20	—
Virginia§	1	2	11	84	81	—	0	3	26	—
West Virginia	—	0	3	18	20	1	0	4	5	9
E.S. Central	8	4	9	123	140	—	1	6	50	12
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	29	33	—	0	0	—	—
Mississippi	N	0	0	N	N	—	0	2	2	12
Tennessee§	8	3	6	94	107	—	0	6	48	—
W.S. Central	—	6	90	180	247	2	4	43	130	123
Arkansas§	—	0	2	15	18	—	0	2	7	16
Louisiana	—	0	1	6	11	—	0	4	25	16
Oklahoma	—	2	23	45	66	2	1	13	33	23
Texas§	—	3	64	114	152	—	1	27	65	68
Mountain	8	10	23	354	448	—	4	12	121	129
Arizona	2	5	11	144	229	—	2	7	68	73
Colorado	4	2	9	102	77	—	1	4	33	32
Idaho§	2	0	1	8	7	—	0	1	2	1
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	2	—	—	0	1	1	2
New Mexico§	—	1	5	34	87	—	0	4	17	21
Utah	—	1	7	59	45	—	0	0	—	—
Wyoming§	—	0	1	5	3	—	0	0	—	—
Pacific	—	3	9	74	56	—	1	4	21	13
Alaska	—	0	3	18	N	—	0	2	19	—
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	9	56	56	—	0	2	2	13
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U

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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, 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 July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	32	46	254	1,398	1,506	3	8	35	245	236	88	196	310	4,898	4,639
New England	—	1	12	31	87	—	0	3	5	2	3	4	13	111	106
Connecticut	—	0	5	—	67	—	0	0	—	—	2	0	10	15	22
Maine§	—	0	2	7	5	—	0	2	1	1	—	0	1	2	7
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	2	8	69	62
New Hampshire	—	0	0	—	—	—	0	0	—	—	1	0	2	12	6
Rhode Island§	—	0	4	13	6	—	0	1	2	—	—	0	5	12	7
Vermont§	—	0	2	11	9	—	0	1	2	1	—	0	1	1	2
Mid. Atlantic	—	3	9	84	92	—	0	5	21	12	19	26	44	815	584
New Jersey	—	0	0	—	—	—	0	0	—	—	—	3	8	84	86
New York (Upstate)	—	1	5	28	30	—	0	4	7	6	4	3	14	70	78
New York City	—	0	0	—	—	—	0	0	—	—	11	16	35	528	282
Pennsylvania	—	2	6	56	62	—	0	2	14	6	4	5	12	133	138
E.N. Central	13	9	40	360	343	1	1	7	45	52	3	15	27	375	467
Illinois	—	0	3	10	18	—	0	1	2	5	—	7	13	166	246
Indiana	—	2	31	92	87	—	0	5	10	14	—	1	5	23	40
Michigan	—	0	1	2	15	—	0	1	1	2	1	2	8	58	54
Ohio	13	5	38	256	223	1	1	5	32	31	1	3	9	96	99
Wisconsin	N	0	0	N	N	—	0	0	—	—	1	1	4	32	28
W.N. Central	—	1	124	93	26	—	0	15	6	1	4	6	14	163	141
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	5	8
Kansas	—	0	10	48	—	—	0	2	2	—	1	0	3	9	12
Minnesota	—	0	123	—	—	—	0	15	—	—	—	1	5	40	28
Missouri	—	1	5	37	26	—	0	1	—	1	3	3	12	104	90
Nebraska§	—	0	1	2	—	—	0	0	—	—	—	0	2	1	2
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota	—	0	3	6	—	—	0	1	4	—	—	0	3	4	—
S. Atlantic	14	21	59	623	717	—	4	15	127	112	17	44	180	1,112	1,006
Delaware	—	0	1	5	—	—	0	1	1	—	—	0	3	6	13
District of Columbia	—	0	2	5	17	—	0	0	—	2	—	2	12	93	55
Florida	11	12	29	360	371	—	2	8	72	72	11	15	25	396	367
Georgia	3	7	17	210	249	—	1	10	46	38	—	7	153	138	134
Maryland§	—	0	1	1	—	—	0	0	—	—	4	5	15	148	167
North Carolina	—	0	0	—	—	—	0	0	—	—	2	5	23	177	159
South Carolina§	—	0	0	—	—	—	0	0	—	—	—	1	10	47	38
Virginia§	N	0	0	N	N	—	0	0	—	—	—	4	17	103	71
West Virginia	—	1	17	42	80	—	0	1	8	—	—	0	2	4	2
E.S. Central	4	2	9	92	114	1	0	3	18	22	12	15	29	400	313
Alabama§	N	0	0	N	N	—	0	0	—	—	5	6	17	144	128
Kentucky	—	0	2	17	26	—	0	1	2	5	—	1	7	36	34
Mississippi	—	0	0	—	—	—	0	0	—	—	—	2	9	56	32
Tennessee§	4	2	8	75	88	1	0	3	16	17	7	6	14	164	119
W.S. Central	—	1	9	76	62	—	0	2	11	6	26	32	55	854	721
Arkansas§	—	0	1	1	9	—	0	0	—	2	—	1	7	54	36
Louisiana	—	1	3	31	53	—	0	1	3	4	6	7	29	188	116
Oklahoma	—	0	8	44	—	—	0	2	8	—	—	1	5	38	36
Texas§	—	0	0	—	—	—	0	0	—	—	20	21	35	574	533
Mountain	1	1	5	39	65	1	0	3	12	29	2	7	27	138	249
Arizona	—	0	0	—	—	—	0	0	—	—	—	2	16	48	96
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	15	43
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	1	2
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	1	1	1
Nevada§	1	0	3	16	15	—	0	2	5	1	2	2	12	42	67
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	1	7	26	33
Utah	—	0	5	13	26	1	0	3	6	20	—	0	2	4	7
Wyoming§	—	0	2	10	24	—	0	1	1	8	—	0	1	1	—
Pacific	—	0	0	—	—	—	0	0	—	—	2	38	57	930	1,052
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	2	5	5
California	N	0	0	N	N	—	0	0	—	—	2	36	54	855	925
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	1	5	13
Oregon§	N	0	0	N	N	—	0	0	—	—	—	0	6	8	9
Washington	N	0	0	N	N	—	0	0	—	—	—	2	11	57	100
American Samoa	U	0	0	U	U	U	0	1	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	1	3	11	76	77
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending July 7, 2007, and July 8, 2006 (27th Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	151	788	2,813	23,243	29,998	—	0	178	3	76	—	1	417	3	87
New England	3	21	124	413	3,014	—	0	3	—	—	—	0	2	—	1
Connecticut	—	3	76	1	1,054	—	0	3	—	—	—	0	1	—	1
Maine¶	—	0	7	—	167	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	18	—	1,089	—	0	1	—	—	—	0	1	—	—
New Hampshire	—	7	17	169	228	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Vermont¶	3	9	66	243	476	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	20	106	195	2,836	3,096	—	0	11	—	1	—	0	4	—	1
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	20	106	195	2,836	3,096	—	0	2	—	1	—	0	1	—	1
E.N. Central	25	227	568	6,712	10,075	—	0	42	—	3	—	0	33	—	3
Illinois	—	2	11	87	82	—	0	24	—	2	—	0	22	—	—
Indiana	—	0	0	—	—	—	0	5	—	1	—	0	12	—	1
Michigan	2	93	258	2,719	2,986	—	0	10	—	—	—	0	4	—	1
Ohio	23	107	449	3,231	6,271	—	0	11	—	—	—	0	3	—	—
Wisconsin	—	17	72	675	736	—	0	2	—	—	—	0	2	—	1
W.N. Central	5	32	136	1,183	1,213	—	0	37	—	13	—	0	78	2	20
Iowa	N	0	0	N	N	—	0	3	—	1	—	0	4	1	2
Kansas	—	9	52	424	232	—	0	3	—	3	—	0	3	—	1
Minnesota	—	0	0	—	—	—	0	7	—	2	—	0	7	—	3
Missouri	4	17	78	615	924	—	0	14	—	3	—	0	2	—	—
Nebraska¶	N	0	0	N	N	—	0	9	—	2	—	0	38	—	8
North Dakota	—	0	60	84	25	—	0	5	—	—	—	0	28	—	3
South Dakota	1	2	15	60	32	—	0	7	—	2	—	0	22	1	3
S. Atlantic	43	95	239	3,056	2,859	—	0	2	—	1	—	0	7	—	—
Delaware	—	1	6	20	44	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	8	14	21	—	0	0	—	—	—	0	1	—	—
Florida	30	16	86	775	N	—	0	1	—	1	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
North Carolina	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Carolina¶	11	18	72	667	779	—	0	1	—	—	—	0	0	—	—
Virginia¶	—	27	190	880	1,024	—	0	0	—	—	—	0	2	—	—
West Virginia	2	25	50	700	991	—	0	1	—	—	—	0	0	—	—
E.S. Central	4	2	571	313	25	—	0	15	3	9	—	0	17	1	4
Alabama¶	4	1	571	311	25	—	0	2	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Mississippi	—	0	2	2	—	—	0	10	3	9	—	0	16	1	4
Tennessee¶	N	0	0	N	N	—	0	5	—	—	—	0	2	—	—
W.S. Central	43	190	1,640	6,974	7,909	—	0	59	—	37	—	0	27	—	16
Arkansas¶	—	10	105	273	543	—	0	5	—	—	—	0	2	—	1
Louisiana	—	1	11	68	175	—	0	13	—	4	—	0	10	—	5
Oklahoma	—	0	0	—	—	—	0	6	—	1	—	0	4	—	1
Texas¶	43	168	1,534	6,633	7,191	—	0	39	—	32	—	0	16	—	9
Mountain	8	56	133	1,732	1,807	—	0	63	—	8	—	0	245	—	29
Arizona	—	0	0	—	—	—	0	10	—	—	—	0	14	—	1
Colorado	7	22	62	638	940	—	0	11	—	2	—	0	51	—	6
Idaho¶	N	0	0	N	N	—	0	32	—	6	—	0	174	—	17
Montana¶	—	4	40	271	N	—	0	3	—	—	—	0	8	—	—
Nevada¶	—	0	1	1	9	—	0	9	—	—	—	0	17	—	4
New Mexico¶	1	5	39	272	297	—	0	1	—	—	—	0	1	—	—
Utah	—	15	73	532	530	—	0	8	—	—	—	0	17	—	—
Wyoming¶	—	0	11	18	31	—	0	7	—	—	—	0	10	—	1
Pacific	—	0	9	24	—	—	0	15	—	4	—	0	51	—	13
Alaska	—	0	9	24	N	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	N	—	0	15	—	4	—	0	37	—	10
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	—	—	0	14	—	3
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	—	3	14	—	149	—	0	0	—	—	—	0	0	—	—
Puerto Rico	3	12	27	361	324	—	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 July 7, 2007 (27th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
New England	535	391	99	30	6	9	43
Boston, MA	163	108	32	10	6	7	10
Bridgeport, CT	38	26	9	3	—	—	4
Cambridge, MA	12	10	2	—	—	—	1
Fall River, MA	18	16	2	—	—	—	3
Hartford, CT	46	36	10	—	—	—	7
Lowell, MA	28	22	4	2	—	—	1
Lynn, MA	9	6	3	—	—	—	1
New Bedford, MA	23	18	2	3	—	—	1
New Haven, CT	27	23	3	1	—	—	2
Providence, RI	33	22	6	4	—	1	—
Somerville, MA	1	—	1	—	—	—	—
Springfield, MA	41	28	10	3	—	—	8
Waterbury, CT	29	22	6	1	—	—	2
Worcester, MA	67	54	9	3	—	1	3
Mid. Atlantic	1,676	1,094	372	145	29	35	79
Albany, NY	41	26	10	2	1	2	3
Allentown, PA	18	12	5	—	1	—	1
Buffalo, NY	106	70	19	9	2	6	7
Camden, NJ	32	11	14	5	—	2	2
Elizabeth, NJ	12	8	2	2	—	—	—
Erie, PA	52	36	10	4	2	—	3
Jersey City, NJ	15	9	3	3	—	—	—
New York City, NY	899	587	207	80	15	9	32
Newark, NJ	31	18	8	3	1	1	2
Paterson, NJ	10	3	4	2	1	—	—
Philadelphia, PA	139	85	26	15	3	10	5
Pittsburgh, PA§	27	15	8	3	1	—	2
Reading, PA	23	19	2	1	1	—	4
Rochester, NY	137	99	24	11	—	3	12
Schenectady, NY	21	14	7	—	—	—	1
Scranton, PA	23	16	5	2	—	—	2
Syracuse, NY	36	29	5	—	—	2	—
Trenton, NJ	20	14	5	—	1	—	—
Utica, NY	17	12	5	—	—	—	2
Yonkers, NY	17	11	3	3	—	—	1
E.N. Central	1,608	1,045	374	115	39	35	103
Akron, OH	37	24	9	1	2	1	1
Canton, OH	37	30	4	2	—	1	3
Chicago, IL	391	233	97	42	11	8	30
Cincinnati, OH	88	52	23	5	2	6	13
Cleveland, OH	171	113	45	12	—	1	7
Columbus, OH	136	96	22	9	3	6	6
Dayton, OH	86	52	28	4	2	—	1
Detroit, MI	62	28	14	16	4	—	8
Evansville, IN	39	28	8	2	1	—	2
Fort Wayne, IN	42	31	6	3	2	—	1
Gary, IN	9	3	4	1	1	—	—
Grand Rapids, MI	39	27	7	1	2	2	7
Indianapolis, IN	148	95	42	4	4	3	9
Lansing, MI	39	27	9	3	—	—	2
Milwaukee, WI	71	47	14	5	2	3	4
Peoria, IL	46	31	10	1	1	3	2
Rockford, IL	41	32	7	1	—	1	—
South Bend, IN	26	22	4	—	—	—	2
Toledo, OH	66	46	17	1	2	—	5
Youngstown, OH	34	28	4	2	—	—	—
W.N. Central	406	259	94	32	11	9	20
Des Moines, IA	U	U	U	U	U	U	U
Duluth, MN	19	14	3	2	—	—	2
Kansas City, KS	14	8	5	—	1	—	—
Kansas City, MO	72	48	17	2	2	2	3
Lincoln, NE	33	25	5	2	1	—	3
Minneapolis, MN	34	24	7	1	—	2	1
Omaha, NE	63	44	11	5	1	2	4
St. Louis, MO	71	36	21	6	5	3	2
St. Paul, MN	41	23	12	6	—	—	2
Wichita, KS	59	37	13	8	1	—	3
S. Atlantic	989	593	237	91	46	22	43
Atlanta, GA	126	78	24	9	11	4	1
Baltimore, MD	132	73	38	13	6	2	12
Charlotte, NC	95	48	33	10	2	2	5
Jacksonville, FL	141	83	39	11	6	2	5
Miami, FL	100	57	25	11	6	1	7
Norfolk, VA	38	25	6	2	3	2	1
Richmond, VA	53	27	13	9	3	1	1
Savannah, GA	44	31	10	2	1	—	2
St. Petersburg, FL	37	26	4	4	2	1	2
Tampa, FL	145	95	31	15	2	2	6
Washington, D.C.	63	39	11	5	4	4	—
Wilmington, DE	15	11	3	—	—	1	1
E.S. Central	667	425	156	48	20	18	49
Birmingham, AL	122	66	34	11	5	6	7
Chattanooga, TN	80	56	18	3	2	1	3
Knoxville, TN	80	54	22	2	1	1	9
Lexington, KY	34	25	7	2	—	—	1
Memphis, TN	145	91	34	10	7	3	15
Mobile, AL	51	28	18	2	2	1	3
Montgomery, AL	31	22	6	1	—	2	2
Nashville, TN	124	83	17	17	3	4	9
W.S. Central	1,151	731	267	86	41	26	64
Austin, TX	75	47	17	8	2	1	4
Baton Rouge, LA	31	12	10	2	5	2	2
Corpus Christi, TX	62	44	9	7	—	2	3
Dallas, TX	160	79	42	24	9	6	11
El Paso, TX	91	61	18	5	4	3	3
Fort Worth, TX	77	57	20	—	—	—	2
Houston, TX	265	156	72	23	8	6	18
Little Rock, AR	61	40	12	3	6	—	1
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	177	127	33	12	3	2	11
Shreveport, LA	49	35	11	—	2	1	3
Tulsa, OK	103	73	23	2	2	3	6
Mountain	761	470	171	67	27	26	41
Albuquerque, NM	92	54	27	5	5	1	4
Boise, ID	26	20	5	1	—	—	3
Colorado Springs, CO	48	30	9	5	2	2	2
Denver, CO	65	43	13	5	2	2	5
Las Vegas, NV	230	149	55	20	4	2	12
Ogden, UT	21	11	5	3	1	1	1
Phoenix, AZ	143	73	29	18	6	17	8
Pueblo, CO	37	26	8	2	1	—	3
Salt Lake City, UT	99	64	20	8	6	1	3
Tucson, AZ	U	U	U	U	U	U	U
Pacific	833	569	175	47	24	18	54
Berkeley, CA	13	8	2	2	—	1	—
Fresno, CA	U	U	U	U	U	U	U
Glendale, CA	U	U	U	U	U	U	U
Honolulu, HI	60	49	9	2	—	—	4
Long Beach, CA	56	37	10	4	4	1	4
Los Angeles, CA	U	U	U	U	U	U	U
Pasadena, CA	20	16	2	1	—	1	1
Portland, OR	95	54	25	5	7	4	8
Sacramento, CA	151	100	36	6	8	1	8
San Diego, CA	89	66	13	8	—	2	9
San Francisco, CA	U	U	U	U	U	U	U
San Jose, CA	114	77	25	3	2	7	7
Santa Cruz, CA	13	8	2	2	1	—	2
Seattle, WA	97	57	32	7	1	—	3
Spokane, WA	42	35	5	2	—	—	4
Tacoma, WA	83	62	14	5	1	1	4
Total	8,626**	5,577	1,945	661	243	198	496

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.

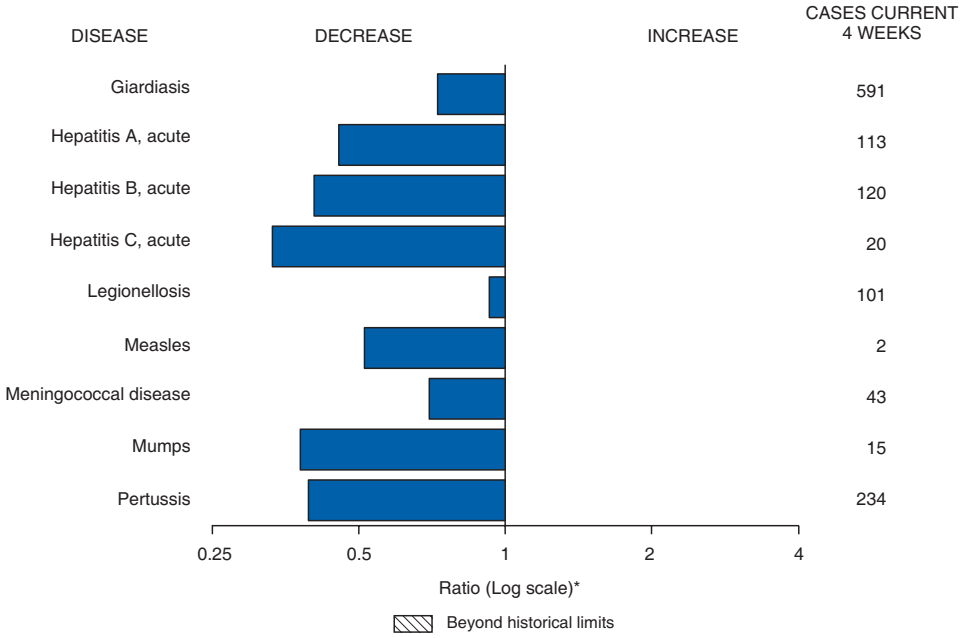
** Total includes unknown ages.

TABLE IV. Provisional cases of selected notifiable diseases,* United States, quarter ending June 30, 2007 (26th Week)

Reporting area	Tuberculosis				
	Current quarter	Previous 4 quarters Min	Previous 4 quarters Max	Cum 2007	Cum 2006
United States	**2,114**	**1,871**	**3,921**	**3,985**	**6,060**
New England	**48**	**26**	**81**	**74**	**131**
Connecticut	30	17	30	47	41
Maine	3	3	6	9	7
Massachusetts	—	0	44	—	60
New Hampshire	3	1	8	4	7
Rhode Island	11	2	11	13	13
Vermont	1	0	5	1	3
Mid. Atlantic	**386**	**386**	**598**	**898**	**964**
New Jersey	74	74	139	166	233
New York (Upstate)	49	49	124	118	113
New York City	217	217	269	486	477
Pennsylvania	46	46	98	128	141
E.N. Central	**234**	**234**	**380**	**503**	**523**
Illinois	121	121	177	250	232
Indiana	7	0	33	7	66
Michigan	38	38	93	100	73
Ohio	52	52	64	116	122
Wisconsin	16	14	21	30	30
W.N. Central	**103**	**103**	**149**	**209**	**227**
Iowa	7	2	14	9	16
Kansas	22	15	22	37	53
Minnesota	46	46	60	95	99
Missouri	26	25	36	55	45
Nebraska	—	0	9	9	9
North Dakota	—	0	9	—	—
South Dakota	2	2	5	4	5
S. Atlantic	**501**	**357**	**815**	**858**	**1,308**
Delaware	4	2	16	6	12
District of Columbia	11	1	16	12	36
Florida	217	127	315	344	467
Georgia	112	29	117	141	298
Maryland	38	34	45	75	89
North Carolina	62	62	144	144	156
South Carolina	16	12	63	28	109
Virginia	37	37	138	98	130
West Virginia	4	4	6	10	11
E.S. Central	**109**	**109**	**207**	**245**	**296**
Alabama	37	29	51	66	96
Kentucky	18	18	31	49	33
Mississippi	22	22	36	46	50
Tennessee	32	32	95	84	117
W.S. Central	**176**	**75**	**459**	**251**	**937**
Arkansas	23	21	36	56	45
Louisiana	—	0	0	—	—
Oklahoma	29	28	42	71	83
Texas	124	0	395	124	809
Mountain	**84**	**84**	**226**	**180**	**280**
Arizona	23	23	138	97	118
Colorado	17	4	32	21	64
Idaho	—	0	0	—	—
Montana	—	0	12	—	—
Nevada	16	0	33	16	48
New Mexico	14	5	14	24	31
Utah	14	8	14	22	17
Wyoming	—	0	1	—	2
Pacific	**473**	**294**	**1,062**	**767**	**1,394**
Alaska	9	9	24	23	31
California	367	183	925	550	1,149
Hawaii	32	22	32	58	61
Oregon	—	0	26	—	39
Washington	65	65	84	136	114
American Samoa	**U**	**0**	**3**	**U**	**U**
C.N.M.I.	—	—	—	—	U
Guam	—	0	15	—	28
Puerto Rico	6	6	48	23	47
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 July 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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