



# MMWR<sup>TM</sup>

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### Subpopulation Estimates from the HIV Incidence Surveillance System — United States, 2006

CDC has created an HIV incidence surveillance system in selected areas of the United States as a component of its national human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) reporting system (1). The purpose of the new system is to estimate the number of new HIV infections occurring each year in the United States. Initial results published recently for 2006 (2) showed that 73% of new infections were in males, 45% were in blacks, and 53% were in men who have sex with men (MSM). To provide additional subpopulation estimates by age group, race/ethnicity, and HIV transmission category, CDC conducted a more detailed analysis of data from the new surveillance system. The results indicated that, in 2006, of new HIV infections among males, 72% were in MSM. Among MSM with new infections, 46% were white, 35% were black, and 19% were Hispanic. Among MSM aged 13–29 years, the number of new HIV infections in blacks (5,220) was 1.6 times the number in whites (3,330) and 2.3 times the number in Hispanics (2,300). Among females, the predominant HIV transmission category was high-risk heterosexual contact, which accounted for 80% of new infections. The HIV incidence rate for black females was 14.7 times the rate for white females, and the rate for Hispanic females was 3.8 times the rate for white females. MSM (of all races), blacks, and Hispanics were represented disproportionately in 2006 among those with new HIV infections. The new incidence data will help guide local, state, and national intervention measures tailored to those populations at greatest risk for HIV infection.

The ability to distinguish recent from long-standing HIV infection using a serologic testing algorithm for recent HIV seroconversion (STARHS) (3,4) enabled development of the new national HIV incidence surveillance system and integration with the established national HIV/AIDS reporting system (1). HIV surveillance data, testing and treatment history,

and STARHS results are now used to estimate HIV incidence using a stratified extrapolation approach. Detailed descriptions of this method have been published previously (2,5). For this report, the extrapolations were based on a total of 33,802 HIV diagnoses (with or without AIDS, adjusted to 39,400 for reporting delays) in 2006 among adults and adolescents aged  $\geq 13$  years, reported to CDC from 22 states\* through June 2007. Based on risk factors, cases were classified in the following hierarchy of transmission categories: 1) male-to-male sexual contact, 2) injection-drug use, 3) both male-to-male sexual contact and injection-drug use, 4) high-risk heterosexual contact (i.e., with a person of the opposite sex known to have HIV or an HIV risk factor [e.g., male-to-male sexual contact or injection-drug use]), and 5) all other risk factors combined. Data for the fifth category are not reported because the number of cases was too small to permit analysis by race/ethnicity.

Incidence was calculated for the 22 states included in the analysis and extrapolated to the 50 states and the District of Columbia by applying the ratio of HIV incidence to AIDS in the 22 states to those states without incidence data. Percentages and rates were based on extrapolated data. Rates were calculated based on official postcensal estimates for 2006 (6).

\*The 22 states were those with confidential, name-based HIV surveillance and HIV incidence surveillance with adequate data to calculate incidence estimates: Alabama, Arizona, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Louisiana, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Washington.

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Data were adjusted for reporting delays and redistribution of risk factors among persons initially reported without sufficient information to classify them into a transmission category (7). Persons diagnosed with AIDS within 6 months of HIV diagnosis were classified as having long-term infections. Missing testing and treatment history and STARHS results were imputed using a 20-fold multiple imputation procedure (5,8). Stratified data were analyzed for three racial/ethnic populations: white (i.e., non-Hispanic white), black (non-Hispanic black), and Hispanic. An estimated 2.6% of new infections in 2006 occurred among American Indian/Alaska Natives and Asian/Pacific Islanders; however, these populations were not included in the analyses because the small numbers precluded further stratification. The 22 states accounted for approximately 73% of AIDS cases in the United States (excluding territories) diagnosed in 2006.

Of the estimated 54,230 new infections among whites, blacks, and Hispanics in 2006, 46% of the infections occurred among blacks, 36% occurred among whites, and 18% occurred among Hispanics. Among males, 40% of new infections occurred in blacks, 41% occurred in whites, and 19% occurred in Hispanics. Among females, 61% of infections were in blacks, 23% were in whites, and 16% were in Hispanics. Among both males and females, the highest rates of new infections occurred among blacks (115.7 and 55.7 per 100,000 population, respectively) (Table). Among black males, the incidence rate was 5.9 times the rate among white males; the rate among black males aged 13–29 years was 7.1 times the rate among white males in the same age group. Among black females, the incidence rate was 14.7 times the rate among white females. Among Hispanic males and females, incidence rates were 2.2 and 3.8 times the rates among white males and females, respectively. High-risk heterosexual contact was the predominant transmission category (80%) among females but accounted for 13% of new infections among males (20% among blacks, 13% among Hispanics, and 6% among whites).

The male-to-male sexual contact transmission category represented 72% of new infections among males, including 81% of new infections among whites, 63% among blacks, and 72% among Hispanics. Among MSM, whites had 46% of new infections, and blacks and Hispanics had 35% and 19%, respectively. Among MSM aged 13–29 years, blacks had an estimated 5,220 (48%) infections, compared with 3,300 (31%) for whites and 2,300 (21%) for Hispanics. MSM aged 13–29 years had 38% of new infections among all MSM and 25% of new infections among white MSM, 52% among black MSM, and 43% among Hispanic MSM. Among white MSM, by age group, the largest number of new infections (5,600 [34%]) was among those aged 30–39 years (Figure).

**TABLE. Estimated number,\* percentage, and rate† of persons with new human immunodeficiency virus (HIV) infections, by race/ethnicity and selected characteristics — United States, 2006**

Characteristic	White, non-Hispanic					Black, non-Hispanic				
	No.	(95% CI)§	%	Rate	(95% CI)	No.	(95% CI)	%	Rate	(95% CI)
<b>Male</b>										
<b>Age group (yrs)</b>										
13–29	4,050	(3,310–4,790)	25	18.1	(14.8–21.4)	6,760	(5,970–7,550)	42	128.3	(113.3–143.3)
30–39	5,600	(4,620–6,590)	34	44.0	(36.3–51.8)	4,170	(3,490–4,840)	26	170.2	(142.5–197.6)
40–49	4,640	(3,840–5,440)	29	29.5	(24.4–34.6)	3,680	(2,990–4,380)	23	143.1	(116.3–170.3)
≥50	1,980	(1,450–2,520)	12	6.1	(4.5–7.8)	1,510	(1,110–1,920)	9	41.5	(30.5–52.8)
<b>HIV transmission category</b>										
Male-to-male sexual contact	13,230	(11,710–14,750)	81			10,130	(9,030–11,230)	63		
Injection drug use (IDU)	1,010	(640–1,380)	6			2,010	(1,540–2,480)	12		
Male-to-male sexual contact/IDU	1,050	(670–1,420)	6			690	(400–970)	4		
High-risk heterosexual contact¶	990	(660–1,330)	6			3,290	(2,670–3,920)	20		
<b>Male subtotal**</b>	<b>16,280</b>	<b>(14,440–18,110)</b>	<b>83</b>	<b>19.6</b>	<b>(17.4–21.8)</b>	<b>16,120</b>	<b>(14,530–17,710)</b>	<b>65</b>	<b>115.7</b>	<b>(104.3–127.2)</b>
<b>Female</b>										
<b>Age group (yrs)</b>										
13–29	1,050	(730–1,370)	32	4.9	(3.4–6.4)	2,810	(2,350–3,270)	32	53.6	(44.8–62.3)
30–39	1,060	(720–1,400)	32	8.4	(5.7–11.1)	2,670	(2,200–3,140)	30	97.8	(80.6–115.0)
40–49	840	(560–1,110)	25	5.3	(3.5–7.0)	2,360	(1,940–2,790)	27	80.2	(65.9–94.8)
≥50	360	(170–550)	11	1.0	(0.5–1.5)	960	(650–1,270)	11	19.6	(13.3–25.9)
<b>HIV transmission category</b>										
IDU	990	(680–1,300)	30			1,470	(1,090–1,850)	17		
High-risk heterosexual contact¶	2,310	(1,790–2,830)	70			7,340	(6,540–8,140)	83		
<b>Female subtotal**</b>	<b>3,300</b>	<b>(2,680–3,920)</b>	<b>17</b>	<b>3.8</b>	<b>(3.1–4.5)</b>	<b>8,810</b>	<b>(7,950–9,660)</b>	<b>35</b>	<b>55.7</b>	<b>(50.3–61.1)</b>
<b>Total††</b>	<b>19,580</b>	<b>(16,390–22,760)</b>	<b>100</b>	<b>11.5</b>	<b>(9.6–13.3)</b>	<b>24,920</b>	<b>(21,110–28,730)</b>	<b>100</b>	<b>83.8</b>	<b>(71.0–96.6)</b>
Characteristic	Hispanic§§					Total¶¶				
	No.	(95% CI)	%	Rate	(95% CI)	No.	(95% CI)	%	Rate	(95% CI)
<b>Male</b>										
<b>Age group (yrs)</b>										
13–29	3,010	(2,300–3,720)	41	42.8	(32.7–53.0)	<b>13,820</b>	<b>(12,540–15,100)</b>	<b>35</b>	<b>39.9</b>	<b>(36.2–43.6)</b>
30–39	2,520	(1,950–3,090)	34	62.7	(48.5–76.9)	<b>12,290</b>	<b>(10,890–13,690)</b>	<b>31</b>	<b>64.1</b>	<b>(56.8–71.4)</b>
40–49	1,410	(1,000–1,830)	19	47.8	(33.9–62.0)	<b>9,730</b>	<b>(8,610–10,850)</b>	<b>24</b>	<b>45.8</b>	<b>(40.5–51.1)</b>
≥50	480	(220–730)	6	14.9	(6.8–22.7)	<b>3,980</b>	<b>(3,220–4,730)</b>	<b>10</b>	<b>10.2</b>	<b>(8.2–12.1)</b>
<b>HIV transmission category</b>										
Male-to-male sexual contact	5,360	(4,460–6,270)	72			<b>28,720</b>	<b>(26,580–30,860)</b>	<b>72</b>		
IDU	730	(410–1,050)	10			<b>3,750</b>	<b>(3,020–4,480)</b>	<b>9</b>		
Male-to-male sexual contact/IDU	360	(150–570)	5			<b>2,100</b>	<b>(1,520–2,680)</b>	<b>5</b>		
High-risk heterosexual contact¶	970	(600–1,340)	13			<b>5,250</b>	<b>(4,370–6,130)</b>	<b>13</b>		
<b>Male subtotal**</b>	<b>7,420</b>	<b>(6,210–8,630)</b>	<b>76</b>	<b>43.1</b>	<b>(36.1–50.1)</b>	<b>39,820</b>	<b>(33,770–45,860)</b>	<b>73</b>	<b>34.9</b>	<b>(29.6–40.2)</b>
<b>Female</b>										
<b>Age group (yrs)</b>										
13–29	820	(540–1,110)	36	13.5	(8.9–18.3)	<b>4,680</b>	<b>(4,020–5,350)</b>	<b>32</b>	<b>14.3</b>	<b>(12.3–16.3)</b>
30–39	720	(420–1,020)	31	20.9	(12.2–29.6)	<b>4,450</b>	<b>(3,790–5,110)</b>	<b>31</b>	<b>23.7</b>	<b>(20.2–27.3)</b>
40–49	440	(250–620)	19	16.1	(9.1–22.7)	<b>3,640</b>	<b>(3,080–4,190)</b>	<b>25</b>	<b>16.9</b>	<b>(14.3–19.5)</b>
≥50	320	(130–510)	14	8.7	(3.5–13.8)	<b>1,640</b>	<b>(1,190–2,100)</b>	<b>11</b>	<b>3.5</b>	<b>(2.6–4.5)</b>
<b>HIV transmission category</b>										
IDU	400	(210–590)	17			<b>2,860</b>	<b>(2,290–3,420)</b>	<b>20</b>		
High-risk heterosexual contact¶	1,910	(1,460–2,350)	83			<b>11,550</b>	<b>(10,450–12,650)</b>	<b>80</b>		
<b>Female subtotal**</b>	<b>2,300</b>	<b>(1,800–2,810)</b>	<b>24</b>	<b>14.4</b>	<b>(11.3–17.6)</b>	<b>14,410</b>	<b>(12,170–16,650)</b>	<b>27</b>	<b>12.1</b>	<b>(10.2–14.0)</b>
<b>Total††</b>	<b>9,730</b>	<b>(7,890–11,570)</b>	<b>100</b>	<b>29.4</b>	<b>(23.8–34.9)</b>	<b>54,230</b>	<b>(46,350–62,100)</b>	<b>100</b>	<b>23.2</b>	<b>(19.9–26.6)</b>

\* Incidence estimates are adjusted for reporting delays and reclassification of cases reported without information regarding an HIV transmission category but are not adjusted for underreporting. Estimates are rounded to the nearest 10.

† Per 100,000 population. Rates for transmission category subgroups were not calculated because population denominators were unavailable. Rates for racial/ethnic populations do not include an adjustment for redistribution of persons of unknown race or ethnicity into known race or ethnicity categories.

§ Confidence interval.

¶ Heterosexual contact with a person known to have HIV infection, or to have a risk factor for HIV infection.

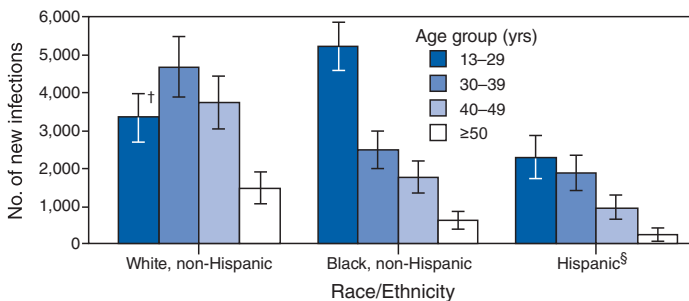
\*\* Does not include hemophilia, blood transfusion, and perinatal transmission.

†† Because column and row totals were calculated independently of the values for the subpopulations and all values are rounded, the values in each column or row might not sum to the respective column or row total.

§§ Might be of any race.

¶¶ Includes only non-Hispanic whites, non-Hispanic blacks, and Hispanics.

**FIGURE. Estimated number\* of persons with new human immunodeficiency virus (HIV) infections among men who have sex with men, by race/ethnicity and age group — United States, 2006**



\* Incidence estimates are adjusted for reporting delays and reclassification of cases reported without information regarding an HIV transmission category but are not adjusted for underreporting.

† 95% confidence interval.

§ Might be of any race.

**Reported by:** J Prejean, PhD, R Song, PhD, Q An, MS, HI Hall, PhD, Div of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC.

**Editorial Note:** The new CDC HIV incidence surveillance system provides the first U.S. estimates of HIV incidence based on a biologic marker of recent infection. Recently published estimates of HIV incidence provided overall incidence estimates for the nation (2), but stratification was limited. The additional analyses presented in this report show the distribution of new HIV infections among certain racial/ethnic populations, transmission categories, and age groups.

The distribution of new HIV infections in 2006 demonstrates that, more than 25 years after the first report of AIDS, the disease continues to affect the MSM population more than any other in the United States. Although MSM represented the most new infections in the white, black, and Hispanic populations, the age distribution of persons with new infections suggests important differences by race and ethnicity. Among black and Hispanic MSM, most new infections were in persons aged 13–29, whereas, among white MSM, most new infections were in persons aged 30–39 years.

The recently published incidence estimates confirmed that new infections of HIV occurred disproportionately among blacks and Hispanics (2). The results in this report indicate further that the disparity between racial/ethnic minorities and whites is greatest among females. Data on new HIV diagnoses, especially among females and young MSM, also have suggested these racial/ethnic differences (9,10); however, using new diagnoses as a proxy for incidence is complicated by numerous factors, including 1) difficulty in ascertaining the relationship between testing rates and HIV diagnoses and 2) diagnoses that occur years after the initial infection.

The findings in this report are subject to at least three limitations. First, although the 22 states account for 73% of all AIDS diagnoses in the United States (excluding territories), they might not be nationally representative. Data from some areas with high AIDS morbidity but without confidential, name-based HIV reporting in 2006 were not included (e.g., California and the District of Columbia). Second, classification of cases with no risk factor data was based on historical patterns of reassignment to transmission category groups; these cases were assumed to constitute a representative sample of all cases initially reported without a risk factor. Finally, the stratified extrapolation approach is based on a number of assumptions that require more discussion than could be included in this report; however, these assumptions have been discussed fully in previous reports (2,5).

In areas not covered by the new CDC HIV incidence surveillance system and in areas without enough HIV incidence surveillance data to accommodate subpopulation analyses, data on HIV diagnoses continue to provide the best data regarding the distribution of HIV infection despite the potential limitations of using HIV diagnosis data as a proxy measurement for HIV incidence. However, comprehensive surveillance systems are essential for HIV incidence estimation. All states are now implementing confidential, name-based HIV surveillance, and national data on HIV diagnoses and incidence likely will continue to improve. CDC will use the HIV incidence data in conjunction with data from the national HIV/AIDS reporting system and other recently implemented surveillance systems (e.g., the Variant, Atypical and Resistant HIV Surveillance System and the National HIV Behavioral Surveillance System) to provide greater understanding of the scope of HIV infection and to refine and evaluate national prevention programs. CDC supports state and local health departments and community-based organizations to promote effective HIV prevention interventions that target those persons at greatest risk for HIV infection.

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## Communitywide Cryptosporidiosis Outbreak — Utah, 2007

Cryptosporidiosis is a nationally notifiable gastrointestinal illness caused by chlorine-resistant protozoa of the genus *Cryptosporidium* (1). Fecal-oral transmission of *Cryptosporidium* occurs via ingestion of contaminated recreational water, drinking water, or food, or via contact with infected persons or animals (e.g., cattle). Incidence peaks in late summer and coincides with the summer swimming season (2,3). The number of nonoutbreak cryptosporidiosis cases reported nationally increased from 3,411 cases in 2004 (2) to nearly 8,300 in 2007 (CDC, unpublished data, 2008). This substantial

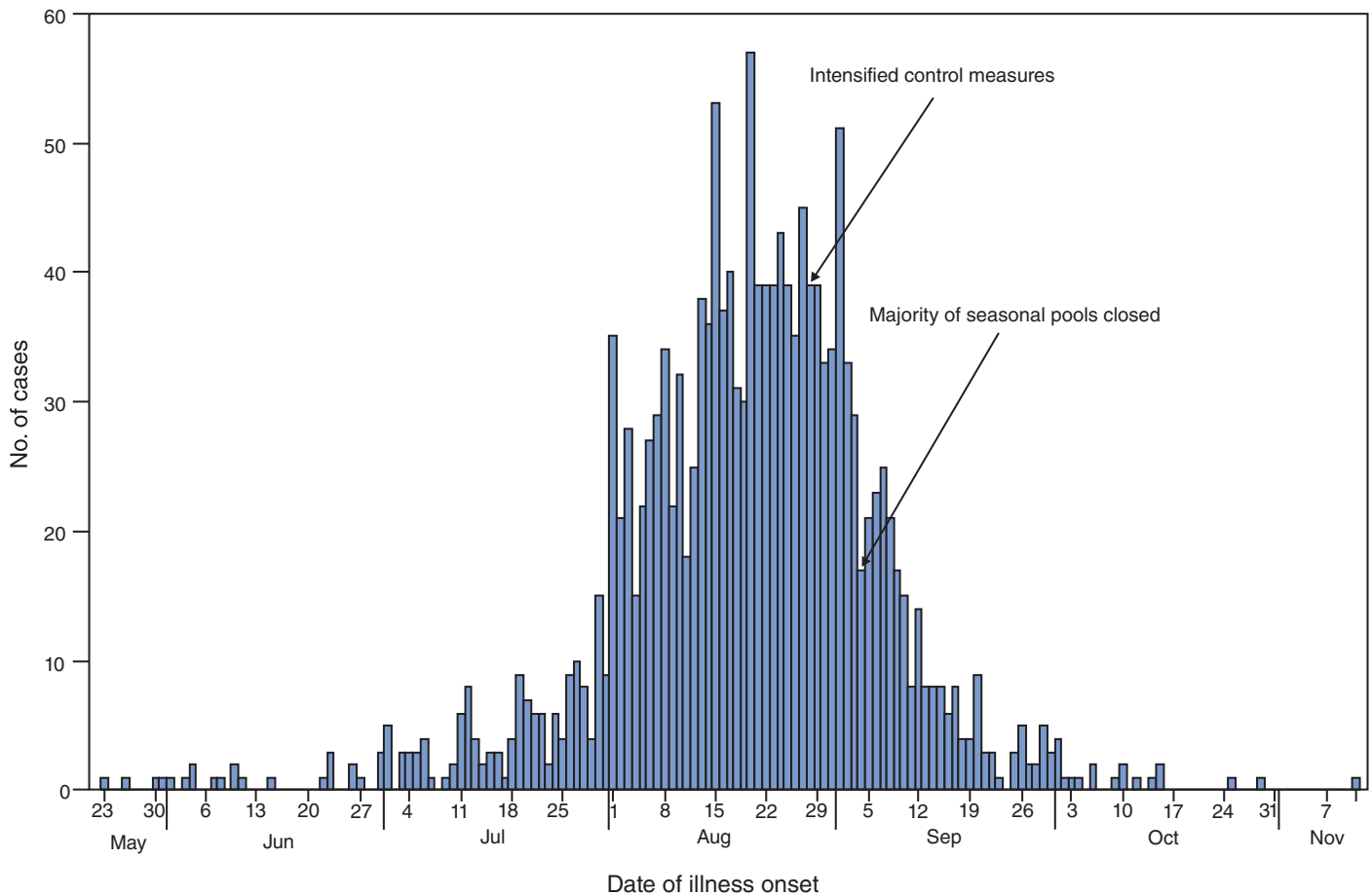
increase (143%) mirrors the increase in the number of nationally reported cryptosporidiosis outbreaks associated with treated recreational water\* venues (e.g., pools, water parks, and interactive fountains): seven reported treated recreational water-associated outbreaks in 2004 (4), 19 in 2006 (5), and, as of September 5, 2008, provisional reports of 26 in 2007 (CDC, unpublished data, 2008). This report describes a communitywide cryptosporidiosis outbreak in Utah that likely was associated initially with treated recreational water venues and subsequently with person-to-person transmission. *Cryptosporidium*'s ability to cause communitywide outbreaks, which is attributable to factors such as its chlorine resistance, underscores the need for more rapid implementation of control measures once an increase in case reporting is noted rather than waiting for an outbreak investigation to implicate a specific source of transmission. Such a response should include 1) pre-outbreak planning and preparation, 2) pre-outbreak adoption of a disease action threshold (e.g., a twofold to threefold increase in cases over baseline), and 3) rapid mobilization of community partners to implement control measures once the threshold is exceeded.

The Utah Department of Health (UDOH) received 1,902 case reports of laboratory-confirmed cryptosporidiosis during June–December 2007, compared with an annual median of 16 reports of laboratory-confirmed cases (range: six to 20) during 2002–2006. All 1,902 cases met the outbreak-related case definition. A case was defined as a laboratory-confirmed infection† in a Utah resident with an illness (e.g., diarrhea) onset or report date during May 23–December 19, 2007. The median age of patients was 9 years (range: <1–101 years), and 32% (617) were aged <5 years; 51% (953 of 1,878) of patients were female. Patients were residents of all 12 local health districts in Utah. Follow-up interviews provided additional data on 1,650 cases. Eight percent (97 of 1,144) of patients were hospitalized. Illness onset dates (ranging from May 23 through November 11, 2007) were reported for 1,601 (84%) patients (Figure 1). The total incidence rate during the outbreak period was 124.5 cases per 100,000 person-years overall and 411.8 cases per 100,000 person-years among children aged <5 years. The outbreak peaked (at 564.4 cases per 100,000 person-years) during the week beginning August 19.

\* Water that has undergone a disinfection or treatment process (e.g., chlorination and filtration) for the purpose of making it safe for recreation. Typically, this refers to any recreational water in an enclosed, manufactured structure.

† In Utah, laboratory-confirmed cryptosporidiosis is defined as the detection of a member of the genus *Cryptosporidium* by one of the following methods: 1) organisms in stool, intestinal fluid, or tissue samples or biopsy specimens; 2) antigens in stool or intestinal fluid; or 3) nucleic acid by polymerase chain reaction in stool, intestinal fluid, tissue samples, or biopsy specimens.

FIGURE 1. Number of laboratory-confirmed cases of cryptosporidiosis among patients with known date of illness onset,\* by date of illness onset — Utah, May 23–November 11, 2007



\* n = 1,601.

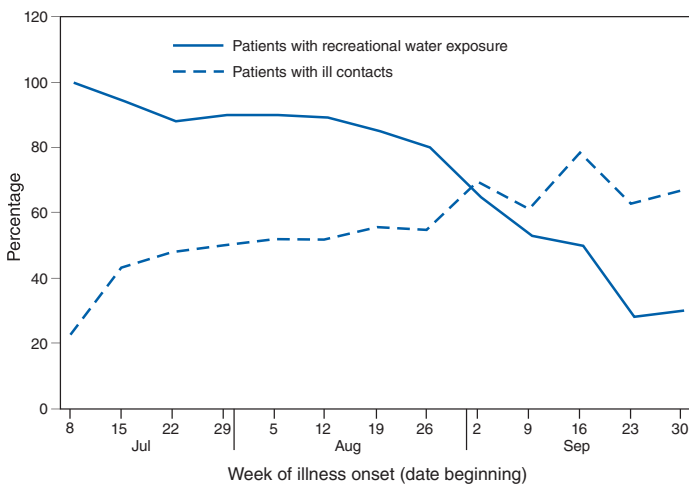
Of 1,506 patients for whom data were available, 1,209 (80%) reported exposure to a total of approximately 450 recreational water venues within 14 days before illness onset. Most of these patients (1,093 [90%] of 1,209) reported exposure to treated recreational water venues; approximately one third of patients (401 [33%] of 1,209) reported exposures to multiple recreational water venues. Of 1,371 patients for whom data were available, 592 (43%) reported both recreational water exposure and contact with persons ill with diarrhea, 503 (37%) reported only recreational water exposure, and 170 (12%) reported only contact with persons ill with diarrhea. The percentage of patients who reported only contact with persons ill with diarrhea increased from 5% (seven of 136) in July to 8% (71 of 884) in August and 27% (85 of 311) in September. Conversely, the percentage of patients who reported exposure to recreational water decreased (Figure 2). Child care exposure was reported by 7% (95 of 1,456) of patients, of whom 100% (95) also reported exposure to recreational water and

56% (48 of 86) reported ill contacts. The outbreak spanned a geographic area with multiple drinking water sources, so contaminated drinking water was deemed to be an unlikely mode of transmission. Swimming while ill with diarrhea was reported by 20% (136 of 686) of patients.<sup>§</sup>

Initial control measures began in late July, after UDOH received the first eight case reports; these measures included 1) local press releases instructing the public not to swim while ill with diarrhea, 2) communication with health-care providers to request increased *Cryptosporidium* testing, and 3) hyperchlorination (i.e., raising the free chlorine for a prolonged period to levels that are not safe for swimming but will inactivate *Cryptosporidium*) of treated recreational water venues in which patients had swum during their incubation periods or while ill. Statewide press releases were issued on August 10

<sup>§</sup> Swimming while ill with diarrhea was defined as any recreational water exposure within 18 days after illness onset because the median duration of illness for this outbreak was 18 days.

**FIGURE 2. Percentage of patients with laboratory-confirmed cryptosporidiosis who reported contact with persons ill with diarrhea\* or recreational water exposure,<sup>†§</sup> by week of illness onset — Utah, July 8–October 6, 2007**



\* Cases (n = 1,483) for which data were available.

<sup>†</sup> Cases (n = 1,400) for which data were available.

<sup>§</sup> Answers were not mutually exclusive; patients could report both exposures.

and August 17. Real-time evaluation of the effectiveness of control measures, especially those implemented before August 28, was made difficult by the lag time (a median of 21 days) between exposure and reporting of cases to UDOH. Incidence rates continued to increase through late August, which suggested that these control efforts were inadequate. Intensified control measures were implemented in 10 of the 12 health districts on August 28; these included 1) banning children aged <5 years and anyone needing diapers from swimming in public treated recreational water venues, 2) requiring all public treated recreational water venues to hyperchlorinate weekly and to post educational signs about healthy swimming behaviors and cryptosporidiosis, and 3) asking child care programs to suspend all water-play activities and enforce diarrhea-exclusion policies. Challenges to implementation and enforcement of the ban included 1) difficulty in notifying all operators in a timely manner because of a lack of contact information for pool operators in some health districts, 2) lack of cooperation from some patrons, and 3) initial resistance from some operators who feared a lack of cooperation from patrons, decreased attendance, and lost revenue. The cryptosporidiosis incidence rate decreased after implementation of intensified control measures (to 313.1 cases per 100,000 person-years during the week of September 3–8) and further decreased after many outdoor pools closed on September 4, the day after Labor Day (to 153.9 cases per 100,000 person-years during the week of September 9–15).

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**Editorial Note:** This large communitywide outbreak occurred in the context of a nationwide increase in the number of cryptosporidiosis nonoutbreak case reports and outbreaks. Contributing factors to this increase might include 1) an actual increase in incidence, 2) improved surveillance, 3) changes in diagnostic testing (e.g., an increase in *Cryptosporidium* testing related to the recent licensing of nitazoxanide, the first-ever drug approved for treating cryptosporidiosis), 4) increased awareness of contaminated recreational water spreading *Cryptosporidium*, or 5) a combination of these factors.

Approximately 80% of patients in this outbreak had exposure to recreational water within 14 days before illness. Although an analytic epidemiologic study was not conducted to identify risk factors associated with the outbreak, four findings suggest initial association with treated recreational water: 1) the high number of patients reporting only exposure to treated recreational water, 2) the lack of child care-only exposures, 3) the wide geographic range of disease precluding an association with drinking water consumption, and 4) the low number of patients with July or August illness onset dates who reported contact with ill persons. As the Utah outbreak evolved, beginning in mid- to late-August, an increasing percentage of patients reported no recreational water exposure but did report contact with persons ill with diarrhea. This suggests that increased secondary transmission occurred later in this outbreak.

Preventing transmission of this chlorine-resistant parasite in pools, water parks, and interactive fountains requires control measures that will limit contamination of the water and decrease swimmers' ingestion of contaminated water. Efforts to educate the public about healthy swimming behaviors (e.g., not swimming while ill with diarrhea and not swallowing the water) are a cornerstone to cryptosporidiosis prevention and control. Environmental control measures include hyperchlorination of treated recreational water venues where patients had swum during their incubation periods or while ill.

Given that the outbreak disproportionately affected children aged <5 years and likely was associated with treated recreational water use, UDOH banned young children from entering public treated recreational water venues, the first known ban in the United States. However, neither the sustainability nor the effectiveness of this intensified control measure can be determined. The ban was implemented at the end of the summer swimming season, so other factors might have contributed to decreased incidence (e.g., closing outdoor

pools after Labor Day). The multiple challenges to implementation and enforcement also raise questions about the sustainability of such a ban.

The findings in this report are subject to at least two limitations. First, limiting the outbreak investigation to laboratory-confirmed cases precluded estimating the actual magnitude of this outbreak.<sup>4</sup> Second, whether this outbreak resulted from one or multiple chains of transmission is unclear. The lack of

<sup>4</sup>UDOH is currently conducting a population survey to help estimate the magnitude of the outbreak.

appropriate stool specimens precluded the use of molecular epidemiologic methods that might have helped answer this question (i.e., stool specimens were preserved in formalin, prohibiting the use of molecular techniques).

For many outbreaks of infectious diseases, specific control measures (e.g., closing a restaurant, recalling a food item, or implementing clinical control measures) must wait until a specific source of the outbreak can be determined (6). However, for communitywide outbreaks of *Cryptosporidium*, rapidly implementing control measures (Box) once a preset disease

#### BOX. Preventing communitywide cryptosporidiosis outbreaks — Recommendations for health departments

##### Before increased transmission of *Cryptosporidium* is detected

- Establish strong working relationships with community partners, such as operators of treated recreational water venues (e.g., pools, water parks, and interactive fountains) and child care programs. For example, maintain updated e-mail, fax, and telephone lists for community partners.
- Set disease action threshold (e.g., a twofold to threefold increase over baseline for the previous 5 years) at which community partners will be notified and mobilized to implement additional control measures.
- Develop health communications about cryptosporidiosis control and outbreak response.
- Educate community partners about how they can prevent *Cryptosporidium* transmission and about the control measures they will need to implement if the preset disease action threshold is exceeded.
- Collaborate with community partners to educate the public about healthy swimming and good hand-washing behaviors.

##### If the preset disease action threshold is exceeded or an outbreak is detected, public health officials should rapidly mobilize community partners to implement additional control measures

- Control measures for operators of treated recreational water venues:
  - Reinforce efforts to educate the public about healthy swimming behaviors (e.g., not swimming while ill with diarrhea and not swallowing the water).
  - Post diarrhea-exclusion messages where patrons can easily see and read them before entering the facility and the water.
  - Restrict staff members who are ill with diarrhea from entering the water. Consider reassigning them to duties that do not require them to enter

the water (e.g., administrative duties) until their symptoms resolve.

- Hyperchlorinate the water (when not being used) at levels that inactivate *Cryptosporidium* if the health department notifies the facility of the need to hyperchlorinate.
  - Consider regular hyperchlorination (e.g., weekly) to help prevent the spread of *Cryptosporidium*.
  - Discuss other possible prevention measures with local or state health department (e.g., suspending high-risk group events, such as visits from child care groups).
  - Control measures for operators of child care programs:
    - Educate parents and staff about cryptosporidiosis and how they can help stop *Cryptosporidium* transmission.
    - Reinforce the facility's diarrhea-exclusion policy. For example, reassign staff ill with diarrhea to jobs that minimize the risk for transmission (e.g., administrative work instead of food preparation).
    - Reinforce good hand-washing practices among attendees and staff. Assist young children with hand washing as needed. (Note: Alcohol-based hand gels and sanitizers are ineffective against *Cryptosporidium*.)
    - Follow good diaper-changing practices. For example, with each diaper change, use new disposable paper over diaper-changing surfaces and new gloves.
    - Suspend all water-play and swimming activities (e.g., visits to public pools).
    - Disinfect surfaces, particularly diaper-changing areas and toys, with hydrogen peroxide. (Note: Bleach solutions are ineffective against *Cryptosporidium*.)
- Additional information on cryptosporidiosis is available at <http://www.cdc.gov/crypto>. Information about healthy swimming is available at <http://www.cdc.gov/healthyswimming>.

SOURCE: CDC. Cryptosporidiosis outbreak response and evaluation. Available at [http://www.cdc.gov/crypto/pdfs/core\\_guidelines.pdf](http://www.cdc.gov/crypto/pdfs/core_guidelines.pdf).



action threshold is exceeded (before a specific source of transmission is identified) could help prevent continued transmission and expansion into a wider outbreak. Such a rapid response requires 1) predevelopment of a strong communication network with community partners (e.g., pool operators and child care program operators), 2) predevelopment of health communication tools, 3) presetting a disease action threshold for initiating a response, and 4) mobilizing community partners to implement control measures when the threshold is exceeded. Such a rapid public health response model is similar to those for decreasing transmission of *Shigella* (7), another enteric pathogen that causes communitywide outbreaks. Both *Shigella* and *Cryptosporidium* transmission can be largely controlled by environmental and behavioral interventions, which can be rapidly and easily implemented and are likely to be acceptable. Establishing a lower threshold for public health response (i.e., exceeding a preset case-reporting threshold instead of identifying the source of initial exposure) might reduce the likelihood of communitywide transmission of cryptosporidiosis.

#### Acknowledgments

The findings in this report are based, in part, on contributions by UDOH staff members; epidemiologists, nurses, sanitarians, and other personnel of local health departments in Utah; and S Roy, Div of Parasitic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

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## Cross-Contamination of Clinical Specimens with *Bacillus anthracis* During a Laboratory Proficiency Test — Idaho, 2006

On July 18, 2006, the Utah Department of Health notified epidemiologists at the Idaho Department of Health and Welfare that *Bacillus anthracis*, the causative agent for anthrax, had been isolated from a patient. On the same day, the Idaho epidemiologists were notified by the Idaho Bureau of Laboratories of a specimen from a second patient received for anthrax testing. The two reports resulted briefly in alerts to the Federal Bureau of Investigation (FBI) and precautionary treatment of one of the patients for anthrax. Subsequent investigation revealed that, during July 2006, the Idaho Bureau of Laboratories had been conducting a sentinel laboratory proficiency testing exercise among Idaho's hospital laboratories. The exercise included specimens with the Sterne strain of *B. anthracis*, a nonvirulent strain. Subsequent laboratory testing of the two patient isolates detected the Sterne strain of *B. anthracis*; neither patient had signs or symptoms consistent with *B. anthracis* infection. Further investigation revealed that the Idaho hospital laboratories that tested the two specimens had been conducting the laboratory proficiency testing exercise simultaneously, but the Idaho epidemiologists were not aware of the exercise. The two specimens had become cross-contaminated with *B. anthracis* in the laboratories. The findings in this report underscore the need to follow proper laboratory practices to minimize cross-contamination. In addition, to guard against false reports of anthrax, public health epidemiologists who monitor reportable diseases should be notified of upcoming proficiency testing of high-priority bioterrorism agents.

### Case Reports

**Case 1.** On the afternoon of July 18, the Utah Department of Health notified epidemiologists at the Idaho Department of Health and Welfare that *B. anthracis* had been isolated from a wound culture from an Idaho patient. The specimen had been forwarded by an Idaho hospital laboratory to a commercial reference laboratory in Utah, where initial morphologic testing results prompted transfer of the isolate for additional analysis to the Utah Public Health Laboratories, in accordance

with Laboratory Response Network (LRN) sentinel laboratory protocols.\*

Following LRN protocols, Utah Public Health Laboratories demonstrated that the isolate 1) was a gram-positive, spore-forming bacillus; 2) formed tenacious, nonhemolytic colonies on blood agar; 3) was nonmotile; and 4) was positive for lysis by gamma phage and positive for *B. anthracis* cell wall by direct fluorescent antibody (DFA). However, DFA for *B. anthracis* capsule was negative, an indication of nonvirulence. Polymerase chain reaction (PCR) results were inconclusive for wild-type *B. anthracis* DNA and were more consistent with a plasmid-cured strain (two of three signatures present), such as the Sterne strain, a nonvirulent strain used for animal vaccinations. Per existing laboratory protocols for biologic threat agent isolates from sentinel laboratories, the FBI was notified of the result. On July 19, Utah Public Health Laboratories consulted with CDC's Bioterrorism Rapid Response and Advanced Technology laboratory, which asked to receive the isolate for additional analysis.

On July 18, the day of the initial identification of *B. anthracis*, the local Idaho public health district initiated a public health investigation, which revealed the specimen was taken from a dog-bite wound on the face of a male health-care worker aged 36 years in southern Idaho. The patient and health-care provider were notified of the anthrax test result by investigators the same day.

The patient had been prescribed amoxicillin/clavulanate potassium to treat the dog-bite wound, which was unremarkable and healing. The patient reported no risk factors for cutaneous anthrax infection. Although *B. anthracis* can be carried by dogs (1), nothing indicated that the dog, a household pet living in an urban area, had been exposed to anthrax. The health-care provider noted no clinical indications of cutaneous anthrax or any other infection in the patient during initial examination. On July 24, the isolate was confirmed by CDC as a Sterne strain of *B. anthracis* by multiple-locus variable-number tandem repeat analysis.

**Case 2.** In the late afternoon of July 18, the same day case 1 was reported, the Idaho Bureau of Laboratories notified epidemiologists at the Department of Public Health and Welfare of a specimen received for anthrax rule-out testing using LRN protocols from an Idaho hospital laboratory in a geographic

area different from the area where the hospital laboratory in case 1 was located. Because two possible anthrax cases had been reported on the same day, the possibility of a bioterrorist act was considered briefly; however, the PCR results of case 1 suggesting a Sterne strain made this possibility seem less likely.

Investigation by the local Idaho public health district revealed the specimen was from a male sculptor aged 45 years living in northern Idaho. The specimen was taken from an incision made during removal of wire implanted in the patient's hand in March 2006 to repair a table-saw wound (the incision had become inflamed). Although anthrax spores can survive for years in soil and the patient had contact with clay while sculpting, no clinical indications of cutaneous anthrax were detected. The patient's surgeon was notified of the positive anthrax test result by the local Idaho public health district and referred the patient to an infectious-disease specialist, who initiated treatment for anthrax as a precaution. The Idaho Department of Health and Welfare informed the FBI of the circumstances of this second possible case.

The isolate was recovered at the Idaho hospital laboratory after incubation of the specimen by broth enrichment. Incubation of the original specimen on solid media had yielded a coagulase-negative *Staphylococcus* species. The isolate received by the Idaho Bureau of Laboratories on July 18 was phenotypically consistent with *B. anthracis*. DFA and PCR results were identical to those reported for the isolate in case 1. On July 19, the Idaho Bureau of Laboratories conferred with CDC, and a decision was made that forwarding the isolate to CDC was not necessary.

## Follow-Up Investigation

On July 12, the Idaho Bureau of Laboratories had sent proficiency test samples containing the Sterne strain to the two Idaho source hospital laboratories and other Idaho sentinel laboratories. On July 19, the Idaho Bureau of Laboratories conducted telephone interviews with laboratorians at the two Idaho hospital laboratories. For case 1, the laboratory manager used laboratory information system data to construct a partial timeline that indicated the patient specimen arrived and was set up for culture on the final day of work on the proficiency testing sample. No additional details were available. For case 2, the hospital laboratorian who worked on the patient specimen and proficiency sample indicated that both were set up for culture in the same biosafety cabinet within minutes of each other.

The precise mechanism of cross-contamination could not be ascertained for either case. The lyophilized proficiency sample might have become aerosolized during processing, or materials used in setting up the patient specimen might have

\*Established in 1999, LRN is a network of local, national, and international reference and sentinel laboratories equipped to respond rapidly to acts of terrorism (biologic or chemical), emerging infectious diseases, and other public health emergencies. Sentinel laboratories (e.g., private clinical or hospital-based laboratories with the capacity and training to recognize potential agents of bioterrorism and rule them out), using American Society of Microbiology protocols, perform presumptive identification of possible biologic terrorism agents and submit isolates to reference laboratories for confirmatory testing. Additional information is available at <http://www.bt.cdc.gov/lrn>.

become contaminated, possibly through incomplete sterilization, within the biosafety cabinet. In both cases 1) the hospital laboratories received proficiency samples containing the Sterne strain; 2) the Sterne strain was isolated from the patient specimens only after broth enrichment of wound specimens, a practice generally not considered appropriate for nonsterile sites such as wounds; and 3) both patient specimens and proficiency samples were in the same laboratory area at the same time, including, in case 2, in the same biosafety cabinet.

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**Editorial Note:** This report is the first to describe cross-contamination of clinical specimens with *B. anthracis* during laboratory proficiency sample testing. The Idaho Bureau of Laboratories regularly conducts proficiency testing surveys with participating sentinel laboratories. Proficiency testing is intended to improve the ability of a sentinel laboratory to either rule out the presence of potential category A agents<sup>†</sup> or refer the isolates to the state laboratory for confirmation. The Idaho sentinel laboratory proficiency testing exercise described in this report included the Sterne strain of *B. anthracis*, which is used widely as a live veterinary vaccine and by research laboratories to produce crude toxins (3,4). The Sterne strain lacks a 60 megadalton plasmid, pX02, which mediates the formation of a capsule, rendering the strain relatively avirulent, although cases of vaccine-related illness have been reported in cattle (5). The negative capsule DFA was an indicator that the strain was not virulent and was crucial to ruling out the more virulent form of *B. anthracis* in the two Idaho cases.

Cross-contamination of specimens and cultures is not a rare event in clinical laboratories (6–8). However, because of heightened awareness of the potential significance of gram-positive, spore-forming bacilli in recent years, clinical laboratories are less likely to ignore such isolates. This report underscores the need to use good laboratory practices to minimize cross-contamination of specimens during set up and analysis, not only when dealing with proficiency samples, but during daily operation with patient specimens. Recommended practices include opening one sample at a time, carefully handling samples to avoid splashing or aerosolization, changing gloves between samples, immediately cleaning up spills, disinfecting the work area often, and properly using biosafety cabinets. To

reduce the likelihood of cross-contamination, laboratory workers should avoid practices such as inappropriate use of mixing devices (i.e., vortexers, blenders, and homogenizers) or fixing slides or sterilizing inoculating loops containing infectious material over an open flame (9).

Many public health laboratories designated as LRN reference laboratories have developed programs to evaluate the readiness of sentinel laboratories in their jurisdictions to rule out bioterrorism agents, including the practice of sending proficiency samples. Recently, the College of American Pathologists enhanced its Laboratory Preparedness Survey to include select agent-exempt strains of category A and B agents, including the Sterne strain of *B. anthracis*. Reference laboratories, whether or not they are LRN members, and epidemiologists should be aware that these strains are being distributed.

Public health epidemiologists who monitor reportable diseases in the jurisdictions where laboratory proficiency testing of high-priority bioterrorism agents will take place should be notified when testing is scheduled so they can be alert for potential cross-contamination. However, vigilance for biologic threats must always be maintained; public health responders should never assume that laboratory reports of positive test results are linked to proficiency testing events.

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<sup>†</sup>Category A agents are easily disseminated or transmitted agents that can result in high mortality rates, have potential for major public health impact, can cause social disruption, and require special preparedness actions. Diseases caused by category A agents include anthrax, botulism, plague, smallpox, tularemia, and viral hemorrhagic fevers (2).

**TABLE 1. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending September 6, 2008 (36th week)\***

Disease	Current week	Cum 2008	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2007	2006	2005	2004	2003	
Anthrax	—	—	0	1	1	—	—	—	
Botulism:									
foodborne	—	7	1	32	20	19	16	20	
infant	—	59	2	85	97	85	87	76	
other (wound & unspecified)	—	12	1	27	48	31	30	33	
Brucellosis	1	51	2	131	121	120	114	104	CA (1)
Chancroid	1	30	0	23	33	17	30	54	NY (1)
Cholera	—	1	0	7	9	8	6	2	
Cyclosporiasis§	1	104	2	93	137	543	160	75	FL (1)
Diphtheria	—	—	—	—	—	—	—	1	
Domestic arboviral diseases§,¶:									
California serogroup	—	21	6	55	67	80	112	108	
eastern equine	—	1	1	4	8	21	6	14	
Powassan	—	—	0	7	1	1	1	—	
St. Louis	—	5	1	9	10	13	12	41	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
<i>Ehrlichia chaffeensis</i>	7	477	14	828	578	506	338	321	OH (2), MD (1), NC (2), FL (1), TN (1)
<i>Ehrlichia ewingii</i>	—	6	—	—	—	—	—	—	
<i>Anaplasma phagocytophilum</i>	—	181	15	834	646	786	537	362	
undetermined	—	47	4	337	231	112	59	44	
<i>Haemophilus influenzae</i> ,††									
invasive disease (age <5 yrs):									
serotype b	—	16	0	22	29	9	19	32	
nonserotype b	—	115	2	199	175	135	135	117	
unknown serotype	—	139	2	180	179	217	177	227	
Hansen disease§	1	50	2	101	66	87	105	95	CA (1)
Hantavirus pulmonary syndrome§	—	9	0	32	40	26	24	26	
Hemolytic uremic syndrome, postdiarrheal§	5	112	8	292	288	221	200	178	NC (1), UT (3), CA (1)
Hepatitis C viral, acute	6	554	15	849	766	652	720	1,102	MI (2), NC (3), FL (1)
HIV infection, pediatric (age <13 years)§§	—	—	2	—	—	380	436	504	
Influenza-associated pediatric mortality§,¶¶	—	88	0	77	43	45	—	N	
Listeriosis	4	394	22	808	884	896	753	696	NY (2), PA (1), WI (1)
Measles***	—	127	1	43	55	66	37	56	
Meningococcal disease, invasive†††:									
A, C, Y, & W-135	—	202	4	325	318	297	—	—	
serogroup B	—	115	2	167	193	156	—	—	
other serogroup	—	25	0	35	32	27	—	—	
unknown serogroup	5	444	9	550	651	765	—	—	FL (1), TX (1), CA (3)
Mumps	1	281	12	800	6,584	314	258	231	CA (1)
Novel influenza A virus infections	—	—	0	1	N	N	N	N	
Plague	—	1	0	7	17	8	3	1	
Poliomyelitis, paralytic	—	—	—	—	—	1	—	—	
Polio virus infection, nonparalytic§	—	—	—	—	N	N	N	N	
Psittacosis§	—	7	0	12	21	16	12	12	
Qfever§,§§ total:	2	75	3	171	169	136	70	71	
acute	2	68	—	—	—	—	—	—	OH (1), CA (1)
chronic	—	7	—	—	—	—	—	—	
Rabies, human	—	—	0	1	3	2	7	2	
Rubella¶¶¶	2	11	0	12	11	11	10	7	FL (2)
Rubella, congenital syndrome	—	1	—	—	1	1	—	1	
SARS-CoV§,****	—	—	—	—	—	—	—	8	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	1	101	1	132	125	129	132	161	NC (1)
Syphilis, congenital (age <1 yr)	—	133	8	430	349	329	353	413	
Tetanus	1	8	1	28	41	27	34	20	NH (1)
Toxic-shock syndrome (staphylococcal)§	—	47	2	92	101	90	95	133	
Trichinellosis	—	5	0	5	15	16	5	6	
Tularemia	—	72	3	137	95	154	134	129	
Typhoid fever	4	254	12	434	353	324	322	356	MD (1), CA (3)
Vancomycin-intermediate <i>Staphylococcus aureus</i> §	—	6	28	37	6	2	—	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> §	—	—	—	2	1	3	1	N	
Vibriosis (noncholera <i>Vibrio</i> species infections)§	11	247	8	447	N	N	N	N	MD (1), FL (3), TN (1), AL (2), OK (1), CA (3)
Yellow fever	—	—	—	—	—	—	—	—	

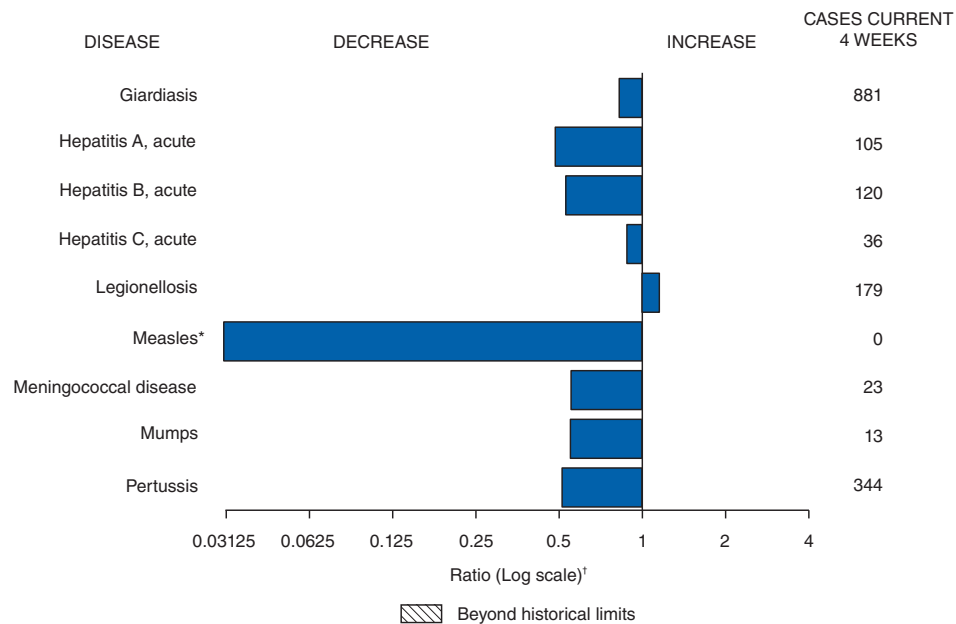
See Table 1 footnotes on next page.



**TABLE 1. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending September 6, 2008 (36th week)\***

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.  
 \* Incidence data for reporting years 2007 and 2008 are provisional, whereas data for 2003, 2004, 2005, and 2006 are finalized.  
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at <http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf>.  
 § Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 and 2008 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.  
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.  
 \*\* The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).  
 †† Data for *H. influenzae* (all ages, all serotypes) are available in Table II.  
 §§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.  
 ¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Eighty-six cases occurring during the 2007–08 influenza season have been reported.  
 \*\*\* No measles cases were reported for the current week.  
 ††† Data for meningococcal disease (all serogroups) are available in Table II.  
 §§§ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.  
 ¶¶¶ The two rubella cases reported for the current week were unknown.  
 \*\*\*\* Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals September 6, 2008, with historical data**



\* No measles cases were reported for the current 4-week period yielding a ratio for week 36 of zero.  
 † Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	11,188	21,178	28,892	736,310	748,718	108	125	341	4,477	5,176	149	103	983	3,829	6,331
<b>New England</b>	639	676	1,516	24,899	24,131	—	0	1	1	2	3	5	26	234	221
Connecticut	255	205	1,093	7,416	7,191	N	0	0	N	N	—	0	24	24	42
Maine§	—	49	73	1,591	1,750	N	0	0	N	N	—	1	5	25	33
Massachusetts	332	330	660	12,289	10,893	N	0	0	N	N	—	2	11	91	75
New Hampshire	2	38	73	1,316	1,425	—	0	1	1	2	—	1	4	45	39
Rhode Island§	35	54	98	1,845	2,172	—	0	0	—	—	—	0	3	5	6
Vermont§	15	16	44	442	700	N	0	0	N	N	3	1	4	44	26
<b>Mid. Atlantic</b>	1,861	2,806	5,032	101,751	96,880	—	0	0	—	—	17	13	88	462	911
New Jersey	217	406	518	14,140	14,779	N	0	0	N	N	—	0	6	10	40
New York (Upstate)	396	564	2,177	18,655	17,679	N	0	0	N	N	13	5	20	174	130
New York City	881	1,012	3,099	39,986	34,727	N	0	0	N	N	—	2	8	60	63
Pennsylvania	367	807	1,047	28,970	29,695	N	0	0	N	N	4	6	61	218	678
<b>E.N. Central</b>	896	3,504	4,466	116,997	122,794	—	1	3	34	25	71	23	134	1,098	1,095
Illinois	—	1,038	1,711	31,064	35,609	N	0	0	N	N	—	2	13	55	125
Indiana	219	379	656	13,826	14,465	N	0	0	N	N	3	3	41	128	52
Michigan	513	790	1,226	30,674	25,885	—	0	3	25	18	2	5	9	159	130
Ohio	92	881	1,261	29,882	33,350	—	0	1	9	7	60	6	60	392	297
Wisconsin	72	357	615	11,551	13,485	N	0	0	N	N	6	9	59	364	491
<b>W.N. Central</b>	232	1,231	1,700	43,345	43,192	—	0	77	1	6	10	18	111	602	923
Iowa	—	159	240	5,614	5,962	N	0	0	N	N	4	5	61	184	396
Kansas	150	166	529	6,355	5,536	N	0	0	N	N	—	1	15	43	72
Minnesota	—	260	373	8,678	9,234	—	0	77	—	—	—	5	34	134	109
Missouri	—	470	567	16,214	15,943	—	0	1	1	6	—	3	13	104	100
Nebraska§	—	93	253	3,292	3,613	N	0	0	N	N	3	2	24	76	103
North Dakota	26	34	65	1,221	1,159	N	0	0	N	N	—	0	51	3	15
South Dakota	56	54	87	1,971	1,745	N	0	0	N	N	3	1	9	58	128
<b>S. Atlantic</b>	3,091	3,788	7,609	127,057	147,129	—	0	1	2	3	28	18	65	543	718
Delaware	40	66	150	2,524	2,390	—	0	1	1	—	—	0	2	10	12
District of Columbia	151	129	217	4,864	4,084	—	0	1	—	1	—	0	2	5	1
Florida	891	1,317	1,553	47,279	38,541	N	0	0	N	N	16	8	35	270	352
Georgia	3	482	1,338	9,653	29,368	N	0	0	N	N	2	4	14	134	159
Maryland§	526	458	667	15,671	14,867	—	0	1	1	2	1	0	4	12	23
North Carolina	—	150	4,783	5,901	19,619	N	0	0	N	N	9	0	18	25	55
South Carolina§	994	431	3,052	17,948	18,835	N	0	0	N	N	—	1	15	28	54
Virginia§	484	534	1,062	21,158	17,248	N	0	0	N	N	—	1	5	46	52
West Virginia	2	58	96	2,059	2,177	N	0	0	N	N	—	0	5	13	10
<b>E.S. Central</b>	1,186	1,549	2,394	55,811	56,843	—	0	0	—	—	2	4	64	100	309
Alabama§	—	473	589	15,409	17,531	N	0	0	N	N	2	2	14	44	61
Kentucky	274	232	370	8,098	5,439	N	0	0	N	N	—	1	40	22	130
Mississippi	376	369	1,048	13,562	15,085	N	0	0	N	N	—	0	11	11	58
Tennessee§	536	525	789	18,742	18,788	N	0	0	N	N	—	1	18	23	60
<b>W.S. Central</b>	1,447	2,713	4,426	99,728	84,262	—	0	1	2	2	8	6	37	177	223
Arkansas§	240	270	455	9,871	6,356	N	0	0	N	N	—	1	8	31	25
Louisiana	—	382	774	14,027	13,659	—	0	1	2	2	—	1	6	34	43
Oklahoma	77	207	392	7,004	9,221	N	0	0	N	N	8	1	12	63	67
Texas§	1,130	1,879	3,923	68,826	55,026	N	0	0	N	N	—	2	28	49	88
<b>Mountain</b>	576	1,339	1,811	41,488	50,670	89	89	170	3,046	3,270	8	10	567	344	1,608
Arizona	150	462	650	14,887	17,071	89	85	168	2,980	3,168	3	1	9	61	32
Colorado	—	229	488	5,748	12,056	N	0	0	N	N	—	2	25	73	114
Idaho§	—	60	314	2,579	2,442	N	0	0	N	N	2	1	71	41	119
Montana§	30	53	363	2,049	1,856	N	0	0	N	N	—	1	6	35	47
Nevada§	152	182	416	6,360	6,636	—	1	7	41	44	—	0	6	11	14
New Mexico§	108	145	561	4,804	6,133	—	0	3	19	19	1	2	13	92	83
Utah	113	119	209	4,074	3,640	—	0	7	4	36	2	1	484	22	1,161
Wyoming§	23	26	58	987	836	—	0	1	2	3	—	0	4	9	38
<b>Pacific</b>	1,260	3,634	4,676	125,234	122,817	19	32	217	1,391	1,868	2	9	37	269	323
Alaska	—	93	129	3,078	3,386	N	0	0	N	N	—	0	1	3	3
California	1,052	2,861	4,115	98,287	95,718	19	32	217	1,391	1,868	1	5	19	159	176
Hawaii	—	109	151	3,707	3,907	N	0	0	N	N	—	0	1	1	5
Oregon§	—	171	402	5,716	6,669	N	0	0	N	N	—	1	11	43	88
Washington	208	386	634	14,446	13,137	N	0	0	N	N	1	2	16	63	51
American Samoa	—	0	22	73	73	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	7	26	107	594	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	121	612	4,910	5,194	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	20	42	678	124	—	0	0	—	—	—	0	0	—	—

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

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

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

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	Giardiasis					Gonorrhea					<i>Haemophilus influenzae</i> , invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	227	303	1,158	10,694	11,520	2,991	6,026	8,913	204,226	241,766	6	47	173	1,774	1,736
<b>New England</b>	6	26	58	910	941	121	103	227	3,585	3,801	—	3	12	117	128
Connecticut	1	6	18	215	233	75	50	199	1,688	1,453	—	0	9	29	29
Maine§	3	3	11	112	123	—	2	6	60	91	—	0	3	9	8
Massachusetts	—	11	22	343	413	44	41	127	1,518	1,815	—	2	5	57	67
New Hampshire	—	2	6	87	22	—	2	6	73	109	—	0	2	9	15
Rhode Island§	—	1	15	57	36	1	6	13	223	287	—	0	1	5	7
Vermont§	2	3	9	96	114	1	1	5	23	46	—	0	3	8	2
<b>Mid. Atlantic</b>	44	56	131	1,869	2,001	362	630	1,028	22,701	25,007	1	10	31	355	334
New Jersey	—	6	15	132	268	60	112	170	3,723	4,161	—	1	7	53	51
New York (Upstate)	24	23	111	723	713	80	126	545	4,167	4,286	—	3	22	104	93
New York City	3	15	29	514	560	143	175	518	7,087	7,498	—	1	6	61	71
Pennsylvania	17	15	29	500	460	79	230	394	7,724	9,062	1	4	9	137	119
<b>E.N. Central</b>	40	48	106	1,690	1,880	450	1,283	1,626	41,088	50,119	—	8	28	266	274
Illinois	—	11	32	349	598	—	344	589	10,235	13,330	—	2	7	75	87
Indiana	N	0	0	N	N	70	152	296	5,571	6,145	—	1	20	56	43
Michigan	5	11	21	363	416	336	301	657	11,435	10,683	—	0	3	14	22
Ohio	31	16	30	584	523	29	319	531	10,723	15,320	—	2	6	99	78
Wisconsin	4	11	54	394	343	15	111	214	3,124	4,641	—	1	4	22	44
<b>W.N. Central</b>	19	29	621	1,231	801	54	326	426	11,068	13,684	3	3	24	132	97
Iowa	—	6	24	196	180	—	29	53	954	1,368	—	0	1	2	1
Kansas	2	3	11	88	104	41	41	130	1,557	1,602	—	0	3	9	11
Minnesota	16	0	575	403	6	—	61	92	1,985	2,363	3	0	21	41	35
Missouri	—	9	22	316	337	—	157	210	5,358	7,074	—	1	6	51	33
Nebraska§	1	4	10	136	94	—	26	47	915	1,022	—	0	3	21	14
North Dakota	—	0	36	14	11	2	2	7	73	78	—	0	2	8	3
South Dakota	—	1	10	78	69	11	5	15	226	177	—	0	0	—	—
<b>S. Atlantic</b>	26	55	102	1,643	1,950	950	1,281	3,072	43,179	56,345	1	11	29	417	440
Delaware	—	1	6	26	26	8	21	44	770	928	—	0	2	6	5
District of Columbia	—	1	5	34	48	38	48	104	1,798	1,650	—	0	1	7	3
Florida	20	22	47	795	835	314	470	549	15,965	15,897	1	3	10	132	117
Georgia	4	12	25	399	424	1	210	561	3,624	11,981	—	2	10	108	86
Maryland§	2	1	18	58	168	130	118	188	4,184	4,474	—	1	3	11	66
North Carolina	N	0	0	N	N	—	89	1,949	2,638	9,532	—	1	9	54	44
South Carolina§	—	3	7	76	70	324	182	833	6,542	7,136	—	1	7	39	38
Virginia§	—	8	39	226	351	134	155	486	7,159	4,095	—	1	6	43	62
West Virginia	—	0	8	29	28	1	15	34	499	652	—	0	3	17	19
<b>E.S. Central</b>	7	9	23	293	356	361	564	945	20,173	22,122	—	2	8	92	100
Alabama§	2	5	11	165	171	—	187	287	6,087	7,581	—	0	2	15	23
Kentucky	N	0	0	N	N	74	90	161	3,172	2,103	—	0	1	2	6
Mississippi	N	0	0	N	N	131	131	401	4,956	5,680	—	0	2	11	7
Tennessee§	5	4	16	128	185	156	166	296	5,958	6,758	—	2	6	64	64
<b>W.S. Central</b>	15	7	41	261	268	408	1,005	1,355	34,204	35,078	—	2	29	84	75
Arkansas§	6	3	11	95	96	75	86	167	3,219	2,847	—	0	3	7	8
Louisiana	—	2	9	77	85	—	178	317	6,091	7,949	—	0	2	7	4
Oklahoma	9	3	35	89	87	15	83	134	2,676	3,546	—	1	21	64	56
Texas§	N	0	0	N	N	318	643	1,102	22,218	20,736	—	0	3	6	7
<b>Mountain</b>	18	31	68	922	1,079	90	222	337	7,055	9,548	—	5	14	215	184
Arizona	1	3	11	85	128	17	72	115	2,140	3,532	—	2	11	92	70
Colorado	—	11	26	341	343	—	56	86	1,853	2,379	—	1	4	41	45
Idaho§	5	3	19	127	122	—	4	18	112	177	—	0	4	12	4
Montana§	—	2	9	60	63	—	1	48	69	51	—	0	1	2	1
Nevada§	1	2	6	70	98	39	43	130	1,535	1,625	—	0	1	12	9
New Mexico§	—	2	5	53	84	20	27	104	896	1,185	—	1	4	25	29
Utah	11	5	32	169	211	10	12	36	366	548	—	1	6	29	22
Wyoming§	—	0	3	17	30	4	2	9	84	51	—	0	1	2	4
<b>Pacific</b>	52	55	185	1,875	2,244	195	643	809	21,173	26,062	1	2	7	96	104
Alaska	—	2	5	58	48	—	10	24	342	375	—	0	4	13	9
California	26	35	91	1,233	1,539	165	528	683	17,488	21,850	—	0	3	25	39
Hawaii	—	1	5	29	58	—	12	22	406	453	—	0	2	14	8
Oregon§	14	9	19	302	295	—	23	63	725	782	1	1	4	41	46
Washington	12	8	87	253	304	30	63	97	2,212	2,602	—	0	3	3	2
American Samoa	—	0	0	—	—	—	0	1	3	3	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	2	—	1	12	45	100	—	0	1	—	—
Puerto Rico	—	2	31	72	243	—	5	24	196	230	—	0	0	—	2
U.S. Virgin Islands	—	0	0	—	—	—	4	12	128	32	N	0	0	N	N

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

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

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

† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	Hepatitis (viral, acute), by type†										Legionellosis				
	A				B				Legionellosis						
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	27	49	171	1,705	1,987	21	72	259	2,288	2,951	42	53	125	1,733	1,667
<b>New England</b>	—	2	7	81	88	—	1	7	45	82	1	3	13	87	101
Connecticut	—	0	3	18	12	—	0	7	15	28	1	0	5	27	27
Maine§	—	0	1	5	2	—	0	2	10	5	—	0	2	5	3
Massachusetts	—	1	5	38	47	—	0	3	9	33	—	0	3	13	28
New Hampshire	—	0	2	8	10	—	0	2	5	4	—	0	4	21	6
Rhode Island§	—	0	2	10	9	—	0	2	4	11	—	0	5	16	30
Vermont§	—	0	1	2	8	—	0	1	2	1	—	0	1	5	7
<b>Mid. Atlantic</b>	5	6	16	194	318	2	10	18	309	372	26	15	50	571	526
New Jersey	—	1	6	38	91	—	3	7	96	107	—	1	8	46	77
New York (Upstate)	3	1	6	44	49	1	1	7	46	54	18	5	19	200	125
New York City	—	2	7	66	114	—	2	6	61	83	—	2	10	55	117
Pennsylvania	2	1	6	46	64	1	3	7	106	128	8	6	31	270	207
<b>E.N. Central</b>	1	6	16	211	241	1	7	18	240	319	3	11	36	392	391
Illinois	—	2	10	64	91	—	1	6	53	102	—	1	5	23	89
Indiana	—	0	4	14	14	1	0	8	24	29	—	1	7	34	36
Michigan	1	2	7	83	61	—	2	5	80	80	1	3	16	108	106
Ohio	—	1	4	29	50	—	2	7	77	91	2	5	18	198	138
Wisconsin	—	0	3	21	25	—	0	1	6	17	—	0	7	29	22
<b>W.N. Central</b>	1	5	29	203	122	—	2	9	70	85	—	2	8	76	77
Iowa	—	1	7	90	35	—	0	2	10	17	—	0	2	8	9
Kansas	1	0	3	11	5	—	0	3	6	7	—	0	1	1	8
Minnesota	—	0	23	26	49	—	0	5	7	15	—	0	4	9	15
Missouri	—	0	3	35	17	—	1	4	41	30	—	1	5	40	33
Nebraska§	—	1	5	39	11	—	0	1	5	10	—	0	4	16	8
North Dakota	—	0	2	—	—	—	0	1	1	—	—	0	2	—	—
South Dakota	—	0	1	2	5	—	0	1	—	6	—	0	1	2	4
<b>S. Atlantic</b>	6	8	15	240	337	10	15	60	533	723	7	8	28	260	268
Delaware	—	0	1	6	4	—	0	3	7	14	—	0	2	7	7
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	1	9	10
Florida	4	3	8	106	101	6	6	12	224	242	3	3	10	99	97
Georgia	1	1	4	31	53	2	2	8	89	107	—	0	3	18	25
Maryland§	—	0	3	11	57	1	0	6	13	80	2	1	10	58	48
North Carolina	1	0	9	48	37	—	0	17	52	95	2	0	7	16	31
South Carolina§	—	0	2	7	14	—	1	6	42	47	—	0	2	9	12
Virginia§	—	1	5	27	64	1	2	16	75	101	—	1	6	33	33
West Virginia	—	0	2	4	7	—	0	30	31	37	—	0	3	11	5
<b>E.S. Central</b>	1	1	9	57	78	1	7	13	239	258	—	2	10	85	67
Alabama§	—	0	4	8	16	—	2	5	67	90	—	0	2	12	7
Kentucky	—	0	3	20	15	—	2	5	62	48	—	1	4	41	35
Mississippi	—	0	2	4	7	—	0	3	25	24	—	0	1	1	—
Tennessee§	1	1	6	25	40	1	3	8	85	96	—	1	5	31	25
<b>W.S. Central</b>	—	5	55	173	154	4	15	131	463	610	—	1	23	53	85
Arkansas§	—	0	1	5	9	—	1	4	31	57	—	0	2	9	8
Louisiana	—	0	2	9	24	—	2	4	54	75	—	0	1	6	4
Oklahoma	—	0	7	7	3	2	3	37	77	34	—	0	3	3	5
Texas§	—	5	53	152	118	2	9	107	301	444	—	1	18	35	68
<b>Mountain</b>	2	4	10	140	173	2	3	11	136	152	1	2	5	51	73
Arizona	2	2	9	70	118	—	1	4	44	66	—	0	5	14	22
Colorado	—	0	3	27	21	—	0	3	20	24	—	0	1	4	18
Idaho§	—	0	3	17	3	—	0	2	6	10	—	0	1	3	5
Montana§	—	0	1	1	8	—	0	1	—	—	—	0	1	3	3
Nevada§	—	0	2	5	9	—	1	3	30	33	—	0	2	8	8
New Mexico§	—	0	3	15	7	—	0	2	8	10	—	0	1	4	8
Utah	—	0	2	2	5	2	0	5	25	5	1	0	3	15	6
Wyoming§	—	0	1	3	2	—	0	1	3	4	—	0	0	—	3
<b>Pacific</b>	11	11	51	406	476	1	8	30	253	350	4	4	18	158	79
Alaska	—	0	1	2	3	—	0	2	9	4	—	0	1	1	—
California	11	9	42	333	414	1	5	19	172	260	4	3	14	125	60
Hawaii	—	0	2	11	5	—	0	2	4	10	—	0	1	4	1
Oregon§	—	0	3	22	20	—	1	3	33	41	—	0	2	12	6
Washington	—	1	7	38	34	—	1	9	35	35	—	0	3	16	12
American Samoa	—	0	0	—	—	—	0	0	—	14	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	—	2	—	0	0	—	—
Puerto Rico	1	0	4	15	52	—	1	5	30	53	—	0	1	1	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

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

† Data for acute hepatitis C, viral are available in Table I.

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



TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	Lyme Disease					Malaria					Meningococcal disease, invasive† All serotypes				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	222	368	1,375	15,292	19,900	11	22	136	621	852	5	19	53	786	779
<b>New England</b>	—	57	216	2,362	6,380	—	1	35	32	40	—	1	3	21	35
Connecticut	—	0	45	—	2,655	—	0	27	11	1	—	0	1	1	6
Maine§	—	4	67	296	227	—	0	1	—	6	—	0	1	4	5
Massachusetts	—	16	114	1,039	2,599	—	0	2	14	23	—	0	3	15	17
New Hampshire	—	9	98	820	762	—	0	1	3	8	—	0	1	1	3
Rhode Island§	—	0	77	—	33	—	0	8	—	—	—	0	1	—	1
Vermont§	—	2	35	207	104	—	0	1	4	2	—	0	1	—	3
<b>Mid. Atlantic</b>	188	170	934	9,833	8,002	1	5	18	142	251	—	2	6	92	95
New Jersey	—	37	158	1,838	2,471	—	0	4	—	53	—	0	2	10	13
New York (Upstate)	144	56	453	3,256	2,099	1	1	8	22	41	—	0	3	25	26
New York City	—	1	13	19	314	—	3	9	94	130	—	0	2	20	19
Pennsylvania	44	56	477	4,720	3,118	—	1	4	26	27	—	1	5	37	37
<b>E.N. Central</b>	5	10	42	447	1,831	—	2	7	87	99	—	3	10	132	120
Illinois	—	0	5	31	135	—	1	6	36	47	—	1	4	38	48
Indiana	1	0	9	26	41	—	0	2	5	8	—	0	4	22	18
Michigan	—	0	10	61	44	—	0	2	12	12	—	0	3	23	20
Ohio	2	0	4	26	23	—	0	3	22	18	—	1	4	32	27
Wisconsin	2	7	32	303	1,588	—	0	3	12	14	—	0	4	17	7
<b>W.N. Central</b>	1	3	740	562	307	1	1	9	39	27	—	2	8	71	45
Iowa	—	1	4	34	104	—	0	1	2	3	—	0	3	14	10
Kansas	—	0	1	1	8	—	0	1	3	2	—	0	1	2	3
Minnesota	1	0	731	498	178	—	0	8	19	11	—	0	7	19	12
Missouri	—	0	3	17	9	—	0	4	7	5	—	0	3	23	13
Nebraska§	—	0	2	8	5	1	0	2	8	5	—	0	2	10	2
North Dakota	—	0	9	1	3	—	0	2	—	—	—	0	1	1	2
South Dakota	—	0	1	3	—	—	0	0	—	1	—	0	1	2	3
<b>S. Atlantic</b>	25	54	172	1,793	3,203	7	4	13	146	183	1	3	9	110	125
Delaware	2	12	37	570	552	—	0	1	1	4	—	0	1	1	1
District of Columbia	—	2	8	108	93	—	0	1	1	2	—	0	0	—	—
Florida	6	1	8	56	14	2	1	4	37	41	1	1	3	41	47
Georgia	3	0	2	17	8	2	1	3	36	33	—	0	3	14	16
Maryland§	9	20	136	504	1,838	1	0	4	12	44	—	0	3	5	19
North Carolina	5	0	8	19	31	1	0	7	22	17	—	0	4	11	14
South Carolina§	—	0	4	16	18	1	0	2	9	5	—	0	3	19	12
Virginia§	—	12	68	469	592	—	1	7	28	36	—	0	2	16	14
West Virginia	—	0	9	34	57	—	0	0	—	1	—	0	1	3	2
<b>E.S. Central</b>	—	0	5	30	40	—	0	3	13	27	—	1	6	38	40
Alabama§	—	0	3	9	10	—	0	1	3	4	—	0	2	5	7
Kentucky	—	0	1	2	4	—	0	1	4	7	—	0	2	7	9
Mississippi	—	0	1	1	—	—	0	1	1	2	—	0	2	9	10
Tennessee§	—	0	3	18	26	—	0	2	5	14	—	0	3	17	14
<b>W.S. Central</b>	—	2	11	58	49	—	1	64	41	65	1	2	13	85	80
Arkansas§	—	0	1	2	—	—	0	1	—	—	—	0	2	7	9
Louisiana	—	0	1	1	2	—	0	1	2	14	—	0	3	19	23
Oklahoma	—	0	1	—	—	—	0	4	2	5	—	0	5	12	14
Texas§	—	1	10	55	47	—	1	60	37	46	1	1	7	47	34
<b>Mountain</b>	—	0	4	32	33	—	1	5	18	45	—	1	4	41	52
Arizona	—	0	1	3	2	—	0	1	8	10	—	0	2	6	11
Colorado	—	0	1	4	—	—	0	2	3	16	—	0	1	9	19
Idaho§	—	0	2	7	7	—	0	1	—	2	—	0	2	3	4
Montana§	—	0	2	4	2	—	0	0	—	3	—	0	1	4	1
Nevada§	—	0	2	8	10	—	0	3	4	2	—	0	2	6	4
New Mexico§	—	0	2	4	5	—	0	1	1	3	—	0	1	7	2
Utah	—	0	1	—	4	—	0	1	2	9	—	0	2	4	9
Wyoming§	—	0	1	2	3	—	0	0	—	—	—	0	1	2	2
<b>Pacific</b>	3	4	9	175	55	2	3	10	103	115	3	4	17	196	187
Alaska	—	0	2	5	5	—	0	2	4	2	—	0	2	3	1
California	2	3	8	129	45	2	2	8	75	79	3	3	17	140	137
Hawaii	N	0	0	N	N	—	0	1	2	2	—	0	2	4	7
Oregon§	1	0	5	34	4	—	0	2	4	12	—	1	3	26	25
Washington	—	0	7	7	1	—	0	3	18	20	—	0	5	23	17
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	1	1	1	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	3	—	0	1	2	6
U.S. Virgin Islands	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—

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

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

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

† Data for meningococcal disease, invasive caused by serogroups A, C, Y, &amp; 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 September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	72	151	849	5,193	6,717	91	84	153	2,905	4,339	32	29	195	1,384	1,420
<b>New England</b>	2	18	49	496	1,050	9	7	20	252	391	—	0	1	2	7
Connecticut	—	0	4	—	65	8	3	17	138	168	—	0	0	—	—
Maine†	1	1	5	23	58	—	1	5	33	61	N	0	0	N	N
Massachusetts	—	15	33	420	834	N	0	0	N	N	—	0	1	1	7
New Hampshire	1	0	4	26	58	—	1	3	28	38	—	0	1	1	—
Rhode Island†	—	0	25	19	8	N	0	0	N	N	—	0	0	—	—
Vermont†	—	0	6	8	27	1	2	6	53	124	—	0	0	—	—
<b>Mid. Atlantic</b>	19	20	43	608	871	15	20	32	762	725	—	1	5	51	61
New Jersey	—	0	9	4	154	—	0	0	—	—	—	0	2	2	23
New York (Upstate)	14	6	24	284	420	14	9	20	358	371	—	0	3	15	6
New York City	—	2	7	46	89	1	0	2	13	32	—	0	2	16	21
Pennsylvania	5	9	23	274	208	—	10	23	391	322	—	0	2	18	11
<b>E.N. Central</b>	9	20	190	868	1,170	6	5	33	175	327	1	1	8	72	45
Illinois	—	3	9	107	127	—	1	18	73	93	—	0	7	47	29
Indiana	5	0	12	40	47	2	0	1	6	9	1	0	2	7	5
Michigan	1	4	16	144	205	1	1	25	57	172	—	0	1	3	3
Ohio	3	6	176	517	516	3	1	5	39	53	—	0	4	15	7
Wisconsin	—	2	9	60	275	N	0	0	N	N	—	0	0	—	1
<b>W.N. Central</b>	5	12	142	443	461	—	4	12	115	202	3	4	32	323	287
Iowa	—	1	5	37	120	—	0	3	15	23	—	0	2	3	13
Kansas	1	1	5	27	79	—	0	7	—	92	—	0	1	—	11
Minnesota	2	1	131	155	104	—	0	7	35	20	—	0	4	—	1
Missouri	—	3	18	149	62	—	0	9	41	33	—	3	32	300	246
Nebraska†	2	1	12	59	35	—	0	0	—	—	3	0	4	17	11
North Dakota	—	0	5	1	7	—	0	8	17	18	—	0	0	—	—
South Dakota	—	0	3	15	54	—	0	2	7	16	—	0	1	3	5
<b>S. Atlantic</b>	18	13	50	516	662	54	34	94	1,265	1,574	27	9	109	496	642
Delaware	—	0	2	9	10	—	0	0	—	—	—	0	3	21	13
District of Columbia	—	0	1	3	8	—	0	0	—	—	—	0	2	7	2
Florida	16	3	20	190	164	—	0	77	91	128	—	0	4	13	8
Georgia	—	1	4	41	30	42	6	16	270	204	2	0	8	43	53
Maryland†	2	1	6	31	82	—	0	13	77	301	2	1	6	36	46
North Carolina	—	0	38	79	213	11	9	16	336	350	23	0	96	246	390
South Carolina†	—	2	22	76	57	—	0	0	—	46	—	0	4	26	49
Virginia†	—	2	8	83	85	—	12	27	424	499	—	1	12	101	76
West Virginia	—	0	12	4	13	1	1	11	67	46	—	0	3	3	5
<b>E.S. Central</b>	2	6	14	193	352	1	2	7	83	119	1	4	22	200	212
Alabama†	1	1	6	29	68	—	0	0	—	—	1	1	8	57	67
Kentucky	1	1	8	55	20	1	0	4	33	16	—	0	1	1	5
Mississippi	—	2	9	64	196	—	0	1	2	2	—	0	3	4	13
Tennessee†	—	1	4	45	68	—	1	6	48	101	—	2	18	138	127
<b>W.S. Central</b>	5	20	198	805	771	1	3	40	76	765	—	2	153	215	135
Arkansas†	—	1	11	47	142	—	1	6	43	24	—	0	14	44	59
Louisiana	—	0	5	41	16	—	0	2	—	6	—	0	1	3	4
Oklahoma	2	0	26	32	4	1	0	32	32	45	—	0	132	142	45
Texas†	3	18	179	685	609	—	0	34	1	690	—	1	8	26	27
<b>Mountain</b>	—	18	37	567	775	—	1	4	48	64	—	0	3	21	28
Arizona	—	3	10	137	169	N	0	0	N	N	—	0	2	8	6
Colorado	—	4	13	108	218	—	0	0	—	—	—	0	2	1	1
Idaho†	—	0	4	20	37	—	0	2	—	8	—	0	1	1	4
Montana†	—	1	11	71	35	—	0	2	7	14	—	0	1	3	1
Nevada†	—	0	7	23	33	—	0	2	5	9	—	0	1	1	—
New Mexico†	—	0	5	28	57	—	0	3	22	9	—	0	1	2	4
Utah	—	6	27	171	206	—	0	2	3	10	—	0	0	—	—
Wyoming†	—	0	2	9	20	—	0	2	11	14	—	0	2	5	12
<b>Pacific</b>	12	22	303	697	605	5	3	12	129	172	—	0	1	4	3
Alaska	—	1	29	101	40	—	0	4	12	37	N	0	0	N	N
California	—	8	129	257	331	5	3	12	111	128	—	0	1	1	1
Hawaii	1	0	2	8	18	—	0	0	—	—	N	0	0	N	N
Oregon†	1	3	14	119	72	—	0	1	6	7	—	0	1	3	2
Washington	10	5	169	212	144	—	0	0	—	—	N	0	0	N	N
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	1	1	5	47	38	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

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

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

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	610	814	2,110	27,853	29,850	34	86	248	3,140	3,134	214	412	1,227	12,721	11,301
<b>New England</b>	—	24	364	1,401	1,791	1	4	29	158	230	—	3	25	135	200
Connecticut	—	0	334	334	431	—	0	26	26	71	—	0	24	24	44
Maine§	—	2	14	102	87	—	0	4	11	25	—	0	6	18	13
Massachusetts	—	16	52	741	1,025	—	2	11	80	100	—	2	6	78	128
New Hampshire	—	3	8	96	127	—	0	5	21	20	—	0	1	3	5
Rhode Island§	—	1	13	66	64	—	0	3	7	6	—	0	9	9	7
Vermont§	—	1	7	62	57	1	0	3	13	8	—	0	1	3	3
<b>Mid. Atlantic</b>	49	98	212	3,323	4,160	2	8	192	489	348	15	32	88	1,544	528
New Jersey	—	15	39	443	917	—	1	5	21	84	1	7	36	484	117
New York (Upstate)	34	25	73	898	975	2	3	188	342	128	14	7	35	450	94
New York City	1	23	48	820	928	—	0	5	36	36	—	9	35	495	178
Pennsylvania	14	32	83	1,162	1,340	—	2	9	90	100	—	2	65	115	139
<b>E.N. Central</b>	39	88	165	3,071	4,282	2	11	39	474	452	70	74	147	2,604	1,828
Illinois	—	22	62	685	1,517	—	1	11	50	85	—	20	37	537	395
Indiana	7	8	53	406	462	—	1	13	46	52	7	11	83	500	76
Michigan	—	17	36	619	672	—	2	16	105	70	1	2	7	72	52
Ohio	32	25	65	911	933	1	2	17	125	103	59	21	77	999	826
Wisconsin	—	15	35	450	698	1	4	17	148	142	3	14	51	496	479
<b>W.N. Central</b>	19	48	115	1,758	1,887	3	13	54	535	503	2	20	39	615	1,407
Iowa	—	9	15	282	338	—	2	16	131	124	—	3	11	102	64
Kansas	13	7	18	221	277	—	0	4	27	38	2	0	4	23	20
Minnesota	—	13	70	509	457	—	2	21	122	148	—	4	25	213	165
Missouri	—	14	29	452	502	—	3	12	109	89	—	6	33	163	1,024
Nebraska§	6	5	13	165	168	3	2	28	113	65	—	0	2	4	18
North Dakota	—	0	35	28	23	—	0	20	2	7	—	0	15	34	3
South Dakota	—	2	11	101	122	—	1	5	31	32	—	1	9	76	113
<b>S. Atlantic</b>	232	263	442	7,034	7,289	11	13	47	528	458	34	68	149	2,127	3,196
Delaware	—	3	9	103	113	—	0	1	9	12	—	0	2	8	7
District of Columbia	—	1	4	40	41	—	0	1	8	—	—	0	3	12	15
Florida	105	102	181	3,106	2,773	2	2	18	120	93	6	19	75	621	1,729
Georgia	39	38	86	1,308	1,182	1	1	7	63	66	13	26	50	788	1,094
Maryland§	15	11	32	410	609	1	1	9	63	56	—	1	5	42	79
North Carolina	58	18	228	753	960	6	1	14	65	93	13	1	27	112	59
South Carolina§	15	19	49	619	685	—	0	4	29	8	1	9	32	422	83
Virginia§	—	21	49	588	799	1	3	22	150	117	1	3	13	111	123
West Virginia	—	4	25	107	127	—	0	3	21	13	—	0	61	11	7
<b>E.S. Central</b>	25	63	144	2,049	2,116	6	6	21	192	196	6	44	178	1,323	1,229
Alabama§	12	16	50	582	594	1	1	17	48	55	1	10	43	310	428
Kentucky	4	9	21	299	375	2	1	12	59	63	—	6	35	207	271
Mississippi	—	17	57	654	584	—	0	2	5	5	—	10	112	263	400
Tennessee§	9	16	34	514	563	3	2	12	80	73	5	14	32	543	130
<b>W.S. Central</b>	69	104	894	3,540	2,746	—	4	25	139	177	45	65	748	2,755	1,341
Arkansas§	38	13	50	525	431	—	1	4	31	28	20	6	27	404	64
Louisiana	—	18	44	571	573	—	0	1	2	8	—	11	24	427	365
Oklahoma	31	16	72	512	314	—	0	14	22	15	10	3	32	95	84
Texas§	—	60	794	1,932	1,428	—	3	11	84	126	15	48	702	1,829	828
<b>Mountain</b>	21	59	111	2,143	1,802	4	10	21	335	420	10	17	43	610	608
Arizona	17	20	42	692	620	1	1	8	53	79	9	9	33	317	342
Colorado	—	11	43	503	404	—	2	8	95	117	—	2	7	72	81
Idaho§	3	3	14	120	92	2	2	11	76	91	1	0	1	9	9
Montana§	—	2	10	73	69	—	0	3	23	—	—	0	1	4	18
Nevada§	—	4	14	151	184	—	0	4	17	22	—	3	13	135	33
New Mexico§	—	6	31	384	195	—	1	6	33	33	—	1	6	50	78
Utah	1	5	17	194	184	1	1	6	34	64	—	1	5	20	18
Wyoming§	—	1	5	26	54	—	0	2	4	14	—	0	2	3	29
<b>Pacific</b>	156	108	399	3,534	3,777	5	9	35	290	350	32	30	72	1,008	964
Alaska	—	1	4	40	66	—	0	1	6	3	—	0	0	—	8
California	109	76	286	2,552	2,845	3	5	22	142	183	27	27	60	870	760
Hawaii	2	6	15	185	190	—	0	5	11	25	—	1	3	30	64
Oregon§	6	6	19	302	239	—	1	8	46	56	—	1	6	48	55
Washington	39	12	103	455	437	2	2	14	85	83	5	2	20	60	77
American Samoa	—	0	1	2	—	—	0	0	—	—	—	0	1	1	4
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	10	12	—	0	0	—	—	—	0	3	14	11
Puerto Rico	3	10	44	292	601	—	0	1	2	1	—	0	4	16	21
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

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

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	Streptococcal diseases, invasive, group A					Streptococcal pneumoniae, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
		Med	Max				Med	Max		
<b>United States</b>	40	93	259	3,904	3,980	10	37	166	1,109	1,215
<b>New England</b>	4	6	31	290	304	—	1	14	50	94
Connecticut	4	0	26	90	90	—	0	11	—	12
Maine§	—	0	3	20	21	—	0	1	1	1
Massachusetts	—	3	8	138	152	—	1	5	39	63
New Hampshire	—	0	2	19	23	—	0	1	7	8
Rhode Island§	—	0	8	12	3	—	0	1	2	8
Vermont§	—	0	2	11	15	—	0	1	1	2
<b>Mid. Atlantic</b>	6	18	43	804	750	1	4	19	138	212
New Jersey	—	3	11	132	136	—	1	6	28	43
New York (Upstate)	4	6	17	268	230	1	2	14	69	75
New York City	—	3	10	140	182	—	1	12	41	94
Pennsylvania	2	6	16	264	202	N	0	0	N	N
<b>E.N. Central</b>	5	19	63	838	784	3	6	23	230	215
Illinois	—	5	16	204	242	—	1	6	46	53
Indiana	2	2	11	107	91	2	0	14	29	13
Michigan	1	3	10	131	161	—	1	5	52	57
Ohio	1	5	14	216	185	1	1	5	41	46
Wisconsin	1	2	42	180	105	—	1	9	62	46
<b>W.N. Central</b>	—	5	39	301	260	2	2	16	96	62
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	5	29	27	1	0	3	13	—
Minnesota	—	0	35	144	124	1	0	13	39	35
Missouri	—	2	10	69	69	—	1	2	27	17
Nebraska§	—	0	3	31	20	—	0	3	7	9
North Dakota	—	0	5	10	13	—	0	2	4	1
South Dakota	—	0	2	18	7	—	0	1	6	—
<b>S. Atlantic</b>	14	18	34	693	949	—	6	13	164	216
Delaware	—	0	2	6	9	—	0	0	—	—
District of Columbia	—	0	4	20	16	—	0	1	1	2
Florida	4	5	11	194	226	—	1	4	44	43
Georgia	7	3	14	170	184	—	1	5	48	50
Maryland§	1	1	6	20	161	—	0	4	5	48
North Carolina	2	2	10	106	130	N	0	0	N	N
South Carolina§	—	1	5	48	85	—	1	4	36	32
Virginia§	—	3	12	103	118	—	0	6	25	34
West Virginia	—	0	3	26	20	—	0	1	5	7
<b>E.S. Central</b>	—	4	9	129	165	—	2	11	69	70
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	29	32	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	3	16	5
Tennessee§	—	3	7	100	133	—	2	9	53	65
<b>W.S. Central</b>	7	8	85	344	238	3	5	66	180	168
Arkansas§	—	0	2	4	17	—	0	2	4	9
Louisiana	—	0	2	11	14	—	0	2	7	30
Oklahoma	4	2	19	88	54	—	1	7	49	36
Texas§	3	6	65	241	153	3	3	58	120	93
<b>Mountain</b>	3	10	22	396	428	—	5	12	169	165
Arizona	2	3	9	145	161	—	2	8	85	82
Colorado	—	2	8	112	109	—	1	4	46	33
Idaho§	—	0	2	11	12	—	0	1	3	2
Montana§	N	0	0	N	N	—	0	1	4	1
Nevada§	—	0	2	8	2	N	0	0	N	N
New Mexico§	—	2	7	73	72	—	0	3	15	27
Utah	1	1	5	41	67	—	0	3	15	20
Wyoming§	—	0	2	6	5	—	0	1	1	—
<b>Pacific</b>	1	3	10	109	102	1	0	2	13	13
Alaska	—	0	4	27	20	N	0	0	N	N
California	—	0	0	—	—	N	0	0	N	N
Hawaii	1	2	10	82	82	1	0	2	13	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	—	0	12	30	4	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	3	—	13	—	0	0	—	—
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N

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

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

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

† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (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 September 6, 2008, and September 8, 2007 (36th Week)\*

Reporting area	<i>Streptococcus pneumoniae</i> , invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years									
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	18	58	307	2,052	2,142	2	9	43	297	355	134	234	351	7,942	7,394
<b>New England</b>	—	1	49	36	99	—	0	8	6	12	2	6	14	211	176
Connecticut	—	0	44	—	55	—	0	7	—	4	—	0	6	21	24
Maine§	—	0	2	15	10	—	0	1	2	1	—	0	2	8	5
Massachusetts	—	0	0	—	2	—	0	0	—	2	2	4	11	155	101
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	2	11	22
Rhode Island§	—	0	3	9	18	—	0	1	2	3	—	0	5	13	22
Vermont§	—	0	2	12	14	—	0	1	2	2	—	0	5	3	2
<b>Mid. Atlantic</b>	1	3	13	183	124	—	0	2	17	22	35	32	50	1,187	1,074
New Jersey	—	0	0	—	—	—	0	0	—	—	1	4	10	146	140
New York (Upstate)	—	1	6	49	43	—	0	2	6	8	—	3	13	95	99
New York City	—	0	5	54	—	—	0	0	—	—	31	17	37	754	652
Pennsylvania	1	2	9	80	81	—	0	2	11	14	3	5	12	192	183
<b>E.N. Central</b>	5	14	64	543	550	—	2	14	76	81	8	17	32	638	602
Illinois	—	2	17	71	120	—	0	6	14	27	—	6	19	174	320
Indiana	2	3	39	162	117	—	0	11	18	17	2	2	9	96	34
Michigan	—	0	3	13	2	—	0	1	2	1	2	2	17	137	74
Ohio	3	8	17	297	311	—	1	4	42	36	4	5	13	198	129
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	4	33	45
<b>W.N. Central</b>	—	3	115	125	145	—	0	9	8	27	1	7	15	258	238
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	12	12
Kansas	—	1	5	55	70	—	0	1	3	6	1	0	5	24	14
Minnesota	—	0	114	—	18	—	0	9	—	17	—	1	5	63	47
Missouri	—	1	8	66	44	—	0	1	2	—	—	5	10	151	154
Nebraska§	—	0	0	—	2	—	0	0	—	—	—	0	2	8	4
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	4	11	—	0	1	3	4	—	0	1	—	7
<b>S. Atlantic</b>	9	22	53	871	945	1	4	10	137	169	52	48	215	1,696	1,638
Delaware	—	0	1	3	8	—	0	0	—	2	—	0	4	10	9
District of Columbia	—	0	3	13	15	—	0	0	—	1	1	2	11	84	125
Florida	7	13	30	514	525	1	2	6	92	92	12	20	34	651	538
Georgia	2	8	22	267	341	—	1	5	38	66	—	10	175	299	301
Maryland§	—	0	0	—	1	—	0	0	—	—	5	6	14	222	214
North Carolina	N	0	0	N	N	N	0	0	N	N	18	5	18	188	233
South Carolina§	—	0	0	—	—	—	0	0	—	—	—	1	5	57	67
Virginia§	N	0	0	N	N	N	0	0	N	N	16	5	17	184	145
West Virginia	—	1	9	74	55	—	0	2	7	8	—	0	1	1	6
<b>E.S. Central</b>	3	6	15	206	172	1	1	4	35	25	11	20	31	733	597
Alabama§	N	0	0	N	N	N	0	0	N	N	—	7	16	292	260
Kentucky	2	1	6	58	19	—	0	2	9	2	2	1	7	60	38
Mississippi	—	0	5	1	36	—	0	0	—	—	—	3	15	106	80
Tennessee§	1	4	13	147	117	1	0	3	26	23	9	8	14	275	219
<b>W.S. Central</b>	—	2	7	61	62	—	0	2	12	7	16	42	61	1,467	1,215
Arkansas§	—	0	2	12	3	—	0	1	3	2	2	2	19	111	75
Louisiana	—	1	7	49	59	—	0	2	9	5	—	11	22	356	329
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	5	51	45
Texas§	—	0	0	—	—	—	0	0	—	—	14	26	48	949	766
<b>Mountain</b>	—	1	7	25	42	—	0	2	4	9	—	10	29	312	317
Arizona	—	0	0	—	—	—	0	0	—	—	—	5	21	145	164
Colorado	—	0	0	—	—	—	0	0	—	—	—	2	7	73	34
Idaho§	N	0	0	N	N	N	0	0	N	N	—	0	1	2	1
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	3	—	1
Nevada§	N	0	0	N	N	N	0	0	N	N	—	2	6	58	73
New Mexico§	—	0	1	1	—	—	0	0	—	—	—	1	4	32	30
Utah	—	1	7	22	28	—	0	2	4	8	—	0	2	—	11
Wyoming§	—	0	1	2	14	—	0	1	—	1	—	0	1	2	3
<b>Pacific</b>	—	0	1	2	3	—	0	1	2	3	9	42	62	1,440	1,537
Alaska	N	0	0	N	N	N	0	0	N	N	—	0	1	1	6
California	N	0	0	N	N	N	0	0	N	N	6	38	59	1,290	1,413
Hawaii	—	0	1	2	3	—	0	1	2	3	—	0	2	12	5
Oregon§	N	0	0	N	N	N	0	0	N	N	—	0	2	9	14
Washington	N	0	0	N	N	N	0	0	N	N	3	4	9	128	99
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	4
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	2	10	102	104
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

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

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

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

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 6, 2008, and September 8, 2007 (36th Week)\***

Reporting area	West Nile virus disease†														
	Varicella (chickenpox)					Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007	Current week	Previous 52 weeks		Cum 2008	Cum 2007
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	121	657	1,660	18,901	27,854	—	1	122	218	919	1	3	179	292	2,027
<b>New England</b>	3	14	68	373	1,764	—	0	2	—	2	—	0	1	1	5
Connecticut	—	0	38	—	1,018	—	0	1	—	1	—	0	1	1	2
Maine¶	—	0	26	—	226	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	1	—	—	0	2	—	1	—	0	1	—	2
New Hampshire	1	6	18	181	246	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
Vermont¶	2	6	17	191	274	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	37	56	117	1,609	3,470	—	0	3	5	12	—	0	3	3	6
New Jersey	N	0	0	N	N	—	0	0	—	1	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	0	—	3	—	0	0	—	1
New York City	N	0	0	N	N	—	0	3	4	5	—	0	3	2	2
Pennsylvania	37	56	117	1,609	3,470	—	0	1	1	3	—	0	1	1	3
<b>E.N. Central</b>	17	164	378	4,458	7,803	—	0	19	8	65	—	0	12	7	37
Illinois	—	13	124	668	701	—	0	14	—	32	—	0	8	4	19
Indiana	—	0	222	—	—	—	0	4	1	9	—	0	2	—	7
Michigan	3	63	154	1,916	2,930	—	0	4	2	14	—	0	1	—	—
Ohio	14	55	128	1,615	3,370	—	0	4	5	7	—	0	3	—	6
Wisconsin	—	7	34	259	802	—	0	2	—	3	—	0	2	3	5
<b>W.N. Central</b>	3	23	145	774	1,152	—	0	15	25	214	—	0	44	74	659
Iowa	N	0	0	N	N	—	0	2	3	10	—	0	2	3	13
Kansas	3	6	36	257	420	—	0	1	2	11	—	0	3	10	24
Minnesota	—	0	0	—	—	—	0	3	3	38	—	0	6	13	51
Missouri	—	11	47	449	665	—	0	8	3	45	—	0	3	3	9
Nebraska¶	N	0	0	N	N	—	0	4	1	19	—	0	11	1	117
North Dakota	—	0	140	48	—	—	0	2	2	46	—	0	19	21	296
South Dakota	—	0	5	20	67	—	0	5	11	45	—	0	6	23	149
<b>S. Atlantic</b>	29	94	167	3,191	3,678	—	0	4	2	32	1	0	5	1	25
Delaware	—	1	6	38	36	—	0	0	—	1	—	0	0	—	—
District of Columbia	—	0	3	18	24	—	0	0	—	—	—	0	0	—	—
Florida	14	28	87	1,196	866	—	0	0	—	3	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	3	—	17	—	0	5	—	14
Maryland¶	N	0	0	N	N	—	0	1	1	3	1	0	0	1	4
North Carolina	N	0	0	N	N	—	0	1	—	3	—	0	1	—	3
South Carolina¶	5	16	66	575	726	—	0	1	—	2	—	0	0	—	2
Virginia¶	—	21	81	847	1,219	—	0	0	—	3	—	0	0	—	2
West Virginia	10	15	66	517	807	—	0	1	1	—	—	0	0	—	—
<b>E.S. Central</b>	9	18	101	863	362	—	0	6	29	56	—	1	10	58	64
Alabama¶	9	18	101	853	360	—	0	2	4	13	—	0	2	4	3
Kentucky	N	0	0	N	N	—	0	1	—	2	—	0	0	—	—
Mississippi	—	0	2	10	2	—	0	5	21	38	—	0	9	50	58
Tennessee¶	N	0	0	N	N	—	0	1	4	3	—	0	2	4	3
<b>W.S. Central</b>	21	182	886	6,211	7,654	—	0	28	23	178	—	0	12	19	97
Arkansas¶	—	10	39	431	580	—	0	2	7	11	—	0	1	—	5
Louisiana	—	1	10	56	98	—	0	4	1	16	—	0	3	5	3
Oklahoma	N	0	0	N	N	—	0	6	2	43	—	0	5	4	35
Texas¶	21	166	852	5,724	6,976	—	0	19	13	108	—	0	6	10	54
<b>Mountain</b>	2	40	105	1,365	1,919	—	0	33	21	234	—	0	81	75	930
Arizona	—	0	0	—	—	—	0	8	8	28	—	0	10	—	20
Colorado	—	17	43	607	759	—	0	10	5	87	—	0	43	32	440
Idaho¶	N	0	0	N	N	—	0	3	2	8	—	0	7	20	108
Montana¶	—	5	27	220	297	—	0	2	—	33	—	0	20	4	147
Nevada¶	N	0	0	N	N	—	0	1	4	1	—	0	3	8	9
New Mexico¶	—	4	22	149	302	—	0	5	2	34	—	0	2	1	19
Utah	2	9	55	379	537	—	0	6	—	20	—	0	5	7	34
Wyoming¶	—	0	9	10	24	—	0	1	—	23	—	0	5	3	153
<b>Pacific</b>	—	1	7	57	52	—	0	31	105	126	—	0	20	54	204
Alaska	—	1	5	45	27	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	31	105	120	—	0	18	50	186
Hawaii	—	0	6	12	25	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	1	—	6	—	0	2	4	18
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	2	17	55	201	—	0	0	—	—	—	0	0	—	—
Puerto Rico	2	9	20	322	543	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

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

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

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

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

TABLE III. Deaths in 122 U.S. cities,\* week ending September 6, 2008 (36th week)

Reporting area	All causes, by age (years)						P&I†	Total	Reporting area	All causes, by age (years)						P&I†	Total
	All Ages	≥65	45-64	25-44	1-24	<1				All Ages	≥65	45-64	25-44	1-24	<1		
<b>New England</b>	456	330	90	22	7	7	34	<b>S. Atlantic</b>	1,067	643	284	80	30	29	50		
Boston, MA	124	86	24	7	1	6	8	Atlanta, GA	93	51	26	8	4	4	1		
Bridgeport, CT	24	19	4	1	—	—	2	Baltimore, MD	155	85	46	16	6	2	13		
Cambridge, MA	16	15	—	1	—	—	2	Charlotte, NC	90	53	26	5	3	3	2		
Fall River, MA	23	21	2	—	—	—	1	Jacksonville, FL	175	113	36	16	3	6	4		
Hartford, CT	41	22	15	2	2	—	1	Miami, FL	129	79	38	7	5	—	16		
Lowell, MA	15	11	2	2	—	—	—	Norfolk, VA	23	12	7	1	1	2	—		
Lynn, MA	7	5	1	1	—	—	1	Richmond, VA	66	40	18	5	1	2	3		
New Bedford, MA	20	16	3	1	—	—	1	Savannah, GA	55	34	14	3	2	2	4		
New Haven, CT	U	U	U	U	U	U	U	St. Petersburg, FL	55	31	15	2	4	3	3		
Providence, RI	58	40	15	1	2	—	4	Tampa, FL	119	75	31	8	1	4	—		
Somerville, MA	4	2	2	—	—	—	—	Washington, D.C.	98	66	23	8	—	1	2		
Springfield, MA	40	31	6	2	—	1	8	Wilmington, DE	9	4	4	1	—	—	2		
Waterbury, CT	26	20	1	3	2	—	3	<b>E.S. Central</b>	727	463	191	44	12	17	48		
Worcester, MA	58	42	15	1	—	—	3	Birmingham, AL	131	89	27	9	2	4	12		
<b>Mid. Atlantic</b>	1,776	1,186	400	118	32	39	82	Chattanooga, TN	104	71	24	2	3	4	3		
Albany, NY	49	35	12	—	1	1	1	Knoxville, TN	79	53	25	—	—	1	4		
Allentown, PA	20	19	—	—	1	—	2	Lexington, KY	57	35	14	4	—	4	—		
Buffalo, NY	64	39	18	1	3	3	2	Memphis, TN	130	79	38	10	2	1	15		
Camden, NJ	24	10	4	6	—	4	1	Mobile, AL	74	46	22	4	1	1	2		
Elizabeth, NJ	15	12	3	—	—	—	1	Montgomery, AL	38	25	6	6	1	—	4		
Erie, PA	40	30	8	1	1	—	1	Nashville, TN	114	65	35	9	3	2	8		
Jersey City, NJ	18	10	4	2	1	1	2	<b>W.S. Central</b>	1,088	675	291	71	23	28	60		
New York City, NY	848	588	183	59	10	8	32	Austin, TX	57	33	14	8	1	1	5		
Newark, NJ	52	21	16	9	2	3	7	Baton Rouge, LA	0	0	0	0	0	0	0		
Paterson, NJ	13	5	5	1	1	1	—	Corpus Christi, TX	48	32	13	2	1	—	3		
Philadelphia, PA	322	185	92	24	7	14	10	Dallas, TX	143	74	46	13	3	7	9		
Pittsburgh, PA§	30	17	10	3	—	—	2	El Paso, TX	73	47	16	7	3	—	5		
Reading, PA	29	22	6	—	—	1	1	Fort Worth, TX	104	56	34	4	3	7	5		
Rochester, NY	139	103	24	6	4	2	12	Houston, TX	278	183	73	12	5	5	14		
Schenectady, NY	20	16	3	1	—	—	1	Little Rock, AR	59	37	16	2	1	3	2		
Scranton, PA	25	22	2	1	—	—	2	New Orleans, LA¶	U	U	U	U	U	U	U		
Syracuse, NY	24	20	2	1	1	—	2	San Antonio, TX	199	125	48	18	4	4	7		
Trenton, NJ	17	12	3	1	—	1	—	Shreveport, LA	58	41	14	2	1	—	5		
Utica, NY	16	13	1	2	—	—	3	Tulsa, OK	69	47	17	3	1	1	5		
Yonkers, NY	11	7	4	—	—	—	—	<b>Mountain</b>	847	529	210	65	28	15	49		
<b>E.N. Central</b>	1,622	1,036	392	117	41	34	100	Albuquerque, NM	94	54	32	5	3	—	6		
Akron, OH	54	35	13	5	—	1	—	Boise, ID	22	17	5	—	—	—	2		
Canton, OH	34	24	7	1	—	2	—	Colorado Springs, CO	47	33	8	2	3	1	—		
Chicago, IL	298	152	99	32	10	3	15	Denver, CO	56	34	15	5	2	—	1		
Cincinnati, OH	64	38	13	4	2	7	10	Las Vegas, NV	247	150	63	20	9	5	15		
Cleveland, OH	178	122	44	10	1	1	10	Ogden, UT	29	21	6	1	—	1	3		
Columbus, OH	175	125	26	12	7	5	17	Phoenix, AZ	101	54	25	15	2	5	6		
Dayton, OH	105	79	17	3	5	1	7	Pueblo, CO	24	19	3	2	—	—	1		
Detroit, MI	126	72	42	7	5	—	5	Salt Lake City, UT	97	65	19	9	4	—	5		
Evansville, IN	29	23	5	—	—	1	3	Tucson, AZ	130	82	34	6	5	3	10		
Fort Wayne, IN	49	33	13	2	—	1	4	<b>Pacific</b>	1,368	893	316	93	41	24	113		
Gary, IN	13	7	4	2	—	—	—	Berkeley, CA	12	9	3	—	—	—	1		
Grand Rapids, MI	32	23	5	1	1	2	5	Fresno, CA	128	84	36	3	3	2	11		
Indianapolis, IN	147	88	40	14	2	3	10	Glendale, CA	31	23	6	2	—	—	2		
Lansing, MI	27	17	7	2	1	—	4	Honolulu, HI	48	26	9	10	—	3	7		
Milwaukee, WI	60	38	15	4	1	2	2	Long Beach, CA	57	32	16	6	2	1	7		
Peoria, IL	36	22	7	4	1	2	5	Los Angeles, CA	216	126	58	17	11	4	27		
Rockford, IL	44	24	9	6	3	2	1	Pasadena, CA	15	9	4	—	1	1	1		
South Bend, IN	51	38	8	4	1	—	1	Portland, OR	83	43	33	3	3	1	4		
Toledo, OH	49	37	9	3	—	—	—	Sacramento, CA	165	104	44	12	4	1	10		
Youngstown, OH	51	39	9	1	1	1	1	San Diego, CA	115	82	19	7	4	2	6		
<b>W.N. Central</b>	441	279	105	26	19	12	25	San Francisco, CA	104	75	18	4	2	5	9		
Des Moines, IA	35	20	11	3	1	—	2	San Jose, CA	134	102	19	9	3	1	12		
Duluth, MN	25	20	5	—	—	—	3	Santa Cruz, CA	23	15	5	3	—	—	1		
Kansas City, KS	20	8	11	—	1	—	2	Seattle, WA	88	58	16	7	6	1	5		
Kansas City, MO	109	65	25	10	4	5	3	Spokane, WA	58	42	11	3	—	2	7		
Lincoln, NE	23	21	2	—	—	—	—	Tacoma, WA	91	63	19	7	2	—	3		
Minneapolis, MN	38	18	8	4	5	3	2	<b>Total**</b>	<b>9,392</b>	<b>6,034</b>	<b>2,279</b>	<b>636</b>	<b>233</b>	<b>205</b>	<b>561</b>		
Omaha, NE	63	43	13	2	3	2	6										
St. Louis, MO	49	32	10	2	3	2	3										
St. Paul, MN	41	29	10	2	—	—	2										
Wichita, KS	38	23	10	3	2	—	2										

U: Unavailable. —:No reported cases.

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

† Pneumonia and influenza.

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

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

\*\* Total includes unknown ages.

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