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### Prevalence of Regular Physical Activity Among Adults — United States, 2001 and 2005

Regular physical activity is associated with decreased risk for obesity, heart disease, hypertension, diabetes, certain cancers, and premature mortality (1). CDC and the American College of Sports Medicine recommend that adults engage in at least 30 minutes of moderate physical activity on most days and preferably on all days (2). *Healthy People 2010* objectives include increasing the proportion of adults who engage regularly in moderate or vigorous activity to at least 50% (objective 22-2). In addition, reducing racial and ethnic health disparities, including disparities in physical activity, is an overarching national goal (3). To examine changes in the prevalence of regular, leisure-time, physical activity from 2001 to 2005, CDC analyzed data from the Behavioral Risk Factor Surveillance System (BRFSS). This report summarizes the results of that analysis, which indicated that, from 2001 to 2005, the prevalence of regular physical activity increased 8.6% among women overall (from 43.0% to 46.7%) and 3.5% among men (from 48.0% to 49.7%). In addition, the prevalence of regular physical activity increased 15.0% (from 31.4% to 36.1%) among non-Hispanic black women and 12.4% (from 40.3% to 45.3%) among non-Hispanic black men, slightly narrowing previous racial disparities when compared with increases of 7.8% (from 46.0% to 49.6%) for white women and 3.4% (from 50.6% to 52.3%) for white men, respectively. CDC, state and local public health agencies, and other public health partners should continue to implement evidence-based, culturally appropriate initiatives to further increase physical-activity levels among all adults, with special focus on eliminating racial/ethnic disparities.

BRFSS is a state-based, random-digit-dialed telephone survey of the noninstitutionalized, U.S. civilian population aged  $\geq 18$  years. Data for this report were reported by the 50 states, District of Columbia, Puerto Rico, and U.S.

Virgin Islands. CDC collected data for the 2001 BRFSS survey from 205,140 respondents (median response rate\*: 51.1%; median cooperation rate†: 52.7%) and the 2005 survey from 356,112 respondents (median response rate: 51.1%; median cooperation rate 75.1%) (4). Response rates were calculated using guidelines from the Council of American Survey and Research Organizations.

Beginning in 2001, BRFSS included biannual questions about participation in moderate and vigorous physical activities. To assess participation in moderate activities, respondents were asked if, when not working, they “do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes some increase in breathing or heart rate” in a usual week. Respondents who answered “yes” were asked how many days per week they engaged in moderate activities and the amount of time spent in activities on each of those days. To assess participation in vigorous activities, respondents were asked to report whether they “do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate” in a usual week, when not working. Respondents who answered “yes” were

\*The percentage of persons who completed interviews among all eligible persons, including those who were not successfully contacted.

†The cooperation rate is the proportion of all respondents interviewed of all eligible units in which a respondent was selected and actually contacted.

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asked how many days per week they engaged in vigorous activities and the amount of time spent in activities on each of those days. For this report, respondents considered to be engaging in regular physical activity were those who met the *Healthy People 2010* objective of at least 30 minutes a day of moderate-intensity activity on 5 or more days a week, or at least 20 minutes a day of vigorous-intensity activity on 3 or more days a week, or both. Data were age adjusted to the 2000 U.S. standard population and weighted to provide overall estimates; 95% confidence intervals and *p*-values were calculated. Statistically significant changes in prevalence from 2001 to 2005 were determined by *t*-test ( $p < 0.05$ ).

From 2001 to 2005, the prevalence of regular physical activity (Table) increased by 8.6% (from 43.0% to 46.7%) among women overall and by 3.5% (from 48.0% to 49.7%) among men. Among women, significant increases in regular activity were observed in all racial/ethnic, age, and education-level categories examined with the exception of women aged 18–24 years. Among men, significant increases in regular physical activity were observed among respondents aged 45–64 years, non-Hispanic whites, non-Hispanic blacks, high school graduates, and college graduates.

Among racial/ethnic groups, significant increases in the prevalence of regular physical activity from 2001 to 2005 were observed among non-Hispanic black women (15.0%, from 31.4% to 36.1%), non-Hispanic black men (12.4%, from 40.3% to 45.3%), Hispanic women (11.6%, from 36.3% to 40.5%), women of other races (13.1%, from 41.2% to 46.6%), non-Hispanic white women (7.8%, from 46.0% to 49.6%), and non-Hispanic white men (3.4%, from 50.6% to 52.3%) (Table).

Despite certain gains, racial/ethnic disparities in physical activity remained evident in the 2005 survey results. Among men, non-Hispanic whites had the highest prevalence of regular physical activity (52.3%), followed by men classified as of other race (45.7%), non-Hispanic blacks (45.3%), and Hispanics (41.9%). Among women, non-Hispanic whites had the highest prevalence of regular physical activity (49.6%), followed by women classified as of other race (46.6%), Hispanics (40.5%), and non-Hispanic blacks (36.1%) (Table).

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**Editorial Note:** From 2001 to 2005, the prevalence of engaging in regular physical activity increased among both U.S. men and women. In 2005, 49.7% of men and 46.7%

**TABLE. Estimated age-adjusted percentage of persons aged ≥18 years who reported meeting the *Healthy People 2010* objective for regular physical activity,\* by sex, age group, race/ethnicity, and education level — Behavioral Risk Factor Surveillance System, United States, 2001 and 2005**

Characteristic	Men			Women						
	2001 %	(95% CI) <sup>†</sup>	2005 %	(95% CI)	% change from 2001 to 2005	2001 %	(95% CI)	2005 %	(95% CI)	% change from 2001 to 2005
<b>Age group (yrs)</b>										
18–24	60.5	(58.5–62.5)	62.0	(59.9–64.0)	2.5	50.6	(48.8–52.3)	52.7	(51.0–54.4)	4.2
25–34	51.4	(50.0–52.9)	51.5	(50.1–52.9)	0.2	47.7	(46.6–48.8)	50.5	(49.4–51.6)	5.9 <sup>§</sup>
35–44	47.8	(46.5–49.1)	49.6	(48.4–50.8)	3.8	46.2	(45.0–47.3)	49.7	(48.8–50.6)	7.6 <sup>§</sup>
45–64	43.3	(42.3–44.4)	46.5	(45.6–47.3)	7.4 <sup>§</sup>	40.6	(39.8–41.5)	45.5	(44.8–46.2)	12.1 <sup>§</sup>
≥65	43.1	(41.6–44.6)	44.5	(43.4–45.6)	3.3	32.2	(31.2–33.2)	36.3	(35.5–37.1)	12.7 <sup>§</sup>
<b>Race/Ethnicity</b>										
White, non-Hispanic	50.6	(50.0–51.2)	52.3	(51.8–52.9)	3.4 <sup>§</sup>	46.0	(45.5–46.6)	49.6	(49.2–50.1)	7.8 <sup>§</sup>
Black, non-Hispanic	40.3	(38.3–42.4)	45.3	(43.3–47.3)	12.4 <sup>§</sup>	31.4	(30.0–32.9)	36.1	(34.8–37.5)	15.0 <sup>§</sup>
Hispanic	42.0	(39.4–44.6)	41.9	(39.8–44.0)	-0.2	36.3	(34.5–38.1)	40.5	(38.8–42.1)	11.6 <sup>§</sup>
Other race	43.1	(40.5–45.8)	45.7	(43.4–48.1)	6.0	41.2	(38.6–43.8)	46.6	(44.4–48.9)	13.1 <sup>§</sup>
<b>Education level</b>										
Less than high school graduate	35.8	(33.9–37.9)	37.2	(35.4–39.0)	3.9	34.2	(32.5–35.9)	37.1	(35.5–38.7)	8.5 <sup>§</sup>
High school graduate	46.0	(44.9–47.1)	47.9	(46.9–48.9)	4.1 <sup>§</sup>	40.3	(39.5–41.2)	43.2	(42.4–44.0)	7.2 <sup>§</sup>
Some college	50.3	(49.1–51.4)	50.3	(49.2–51.4)	0.0	44.3	(43.4–45.2)	47.9	(47.2–48.7)	8.1 <sup>§</sup>
College graduate	52.6	(51.5–53.7)	54.6	(53.6–55.6)	3.8 <sup>§</sup>	49.1	(48.1–50.1)	53.3	(52.5–54.1)	8.6 <sup>§</sup>
<b>Total</b>	<b>48.0</b>	<b>(47.3–48.6)</b>	<b>49.7</b>	<b>(49.2–50.3)</b>	<b>3.5<sup>§</sup></b>	<b>43.0</b>	<b>(42.5–43.5)</b>	<b>46.7</b>	<b>(46.2–47.1)</b>	<b>8.6<sup>§</sup></b>

\* At least 30 minutes a day of moderate-intensity activity on 5 or more days a week, or at least 20 minutes a day of vigorous-intensity activity on 3 or more days a week, or both.

<sup>†</sup> Confidence interval.

<sup>§</sup> Statistically significant change ( $p < 0.05$  by  $t$ -test).

of women reported engaging in regular physical activity, with the largest increases reported among non-Hispanic black women and men. However, among racial/ethnic groups in 2005, only non-Hispanic white men (52.3%) had reached the *Healthy People 2010* target of 50% of adults engaging in regular physical activity, although non-Hispanic white women (49.6%) had nearly reached that target.

The findings in this report are consistent with previous BRFSS physical-activity analyses (5), including a decrease in leisure-time physical inactivity from 2001 to 2004 among men and women in all racial/ethnic groups (6). These BRFSS findings and those from the previous BRFSS reports suggest that U.S. adults are becoming more physically active. However, data from the National Health Interview Survey indicate that regular leisure-time physical activity among U.S. adults decreased among men and did not change significantly among women from 2000 and 2005 (7). Differences in format, period of recall, and activities assessed might explain the differences in results from the two surveys.

In addition to the racial/ethnic disparities, disparities in education also were observed. In 2001 and 2005, increasing education level was associated with increased prevalence of regular physical activity in both men and women. In

2005, 54.6% of men and 53.3% of women who were college graduates engaged in regular physical activity, compared with 37.2% of men and 37.1% of women with less than a high school education. Why persons with higher levels of education reported more physical activity is not clear.

The findings in this report are subject to at least four limitations. First, BRFSS data are self-reported and subject to recall bias. Second, the survey questions were not designed to assess whether a combination of moderate and vigorous physical activity met the requirement for engaging in regular physical activity when the two activity types measured separately did not; therefore, prevalences might have been underestimated. Third, the “other race” category combined multiple racial and ethnic groups. Although this approach increased the power of analysis by creating a larger group, analysis could not be extended to any individual groups included in this category. Finally, persons without landline telephones are not eligible for participation in the BRFSS and might be younger or of lower socioeconomic status (8); their exclusion might affect estimates of regular physical activity.

In 2005, fewer than half the adult U.S. population engaged in recommended levels of physical activity. To increase physical-activity levels in the United States, CDC

encourages states to implement evidence-based intervention strategies such as those described in the *Guide to Community Preventive Services*.<sup>§</sup> Examples of recommended intervention strategies include communitywide campaigns, point-of-decision prompts, social support for physical activity, and enhanced access to places to be physically active combined with informational outreach. Certain communities have successfully implemented these strategies to increase physical-activity levels. For example, Marin County, California developed a multipronged approach to encourage children and parents to walk or bike to schools daily (9). As a result, participating schools reported an increase in trips made by walking (64%) and biking (114%).

Despite increases in prevalence of physical activity among minorities, racial/ethnic disparities persist. Many persons in racial/ethnic minority groups are at increased risk for heart disease, hypertension, and diabetes, all of which have been linked to low levels of physical activity (10). To help eliminate racial and ethnic disparities in health, CDC implemented REACH Across the United States (REACH US) as a national, multilevel program. REACH US communities have implemented culturally appropriate, community-based, physical-activity interventions, including free classes, walking clubs, and faith-based nutrition and activity programs. State and local public health agencies should consult the *Community Guide to Preventive Services* and successful REACH US communities for examples of culturally appropriate, evidence-based initiatives to further increase physical-activity levels among racial and ethnic minorities.

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## Norovirus Outbreak Associated with Ill Food-Service Workers — Michigan, January–February 2006

On January 30, 2006, the Barry-Eaton District Health Department (BEDHD) in Michigan was notified of gastrointestinal illness in several members of two dining parties after a meal at an Eaton County restaurant on January 28. An investigation was initiated by BEDHD to identify the source and agent of infection and to determine the scope of illness among patrons and employees of this national chain restaurant. Norovirus genogroup I (GI) was detected in stool specimens submitted by multiple patrons and employees. The investigation revealed that several food-service workers had been ill during January 19–February 3, 2006, and that a line cook had vomited in the restaurant on January 28, possibly increasing environmental contamination and transmission of virus. This report summarizes the findings of the outbreak investigation, which determined that at least 364 restaurant patrons had become ill. The findings underscore the need for 1) ongoing education of food-service workers regarding prevention of norovirus contamination and transmission; 2) enforcement of policies regarding ill and recently ill food-service workers; and 3) environmental decontamination with effective disinfectants to eliminate the presence of norovirus.

After learning of the outbreak on January 30, BEDHD launched an epidemiologic and environmental assessment. The restaurant was open for dinner on weekdays and lunch and dinner on weekends and served up to 800 persons daily with a staff of 32–50 employees. Initial investigation indicated that the index case was in an employee who worked as a server at the restaurant and became ill with symptoms of vomiting on or around January 19. Work records indicated that this employee did not work while ill. A second employee (a sibling to the server) became ill with abdominal cramps, diarrhea, and vomiting on January 21 and

<sup>§</sup> Available at <http://www.thecommunityguide.org/pa>.

worked on the first and second days of illness; this person's duties included bartending and administrative work. Seven patrons reported that they had eaten at the restaurant during January 21–27. On January 28, a line cook (line cook A) vomited at home (at approximately 6:00 a.m.) before reporting to work at 11:00 a.m., then vomited again into a waste bin beside the frontline workstation at approximately 2:00 p.m. while preparing antipasti platters, pizzas, and salads. After vomiting, line cook A remained on site (but off the cooking line) and left work at 4:15 p.m. This person also reported to work on January 29 from 11:00 a.m. to 4:30 p.m. while still experiencing loose stools.

BEDHD began case finding by obtaining names of patrons from credit card receipts, records of delivery and catering events, and records of dinner reservations; information on patrons without reservations or those who paid with cash was not available. Using Internet-based telephone directories, BEDHD contacted patrons who dined at or consumed food prepared by the restaurant during January 19–February 3. Many patrons contacted BEDHD as a result of the extensive media coverage. BEDHD staff members administered patron interviews by telephone; the interviews included questions about basic demographics, date and time of the restaurant meal, food history, and illness history. Restaurant employees were interviewed in person or by telephone and additionally asked about their work schedules for this period.

BEDHD conducted two studies: 1) a descriptive study to characterize ill persons and 2) an analytic study to determine whether certain foods were associated with illness. Because only a portion of restaurant patrons could be identified or contacted, a case-control methodology was used for the analytic study.

For the descriptive study, a case in a patron was defined as illness in a patron who had eaten food prepared at the restaurant during January 19–February 3 and who had become ill with vomiting or diarrhea within 10–50 hours (1) after eating the food. A case in an employee was defined as illness in an employee who was ill with vomiting or diarrhea during January 19–February 3, regardless of the incubation period. To determine whether any changes occurred in rates of illness among patrons based on the time the meal was eaten, attack rates were calculated in 3-hour intervals for January 28 and 29, by dividing the number of cases in patrons who dined during each time interval by the number of meals served for those periods.

For the analytic study, a case-patron was defined as a patron who had eaten food prepared at the restaurant during January 28–29 (the 2 days line cook A worked while symptomatic) and subsequently became ill with vomiting

or diarrhea 10–50 hours after eating; a control was a patron who had the same exposure but no gastrointestinal illness. Statistical software was used to perform the analysis. Chi-square and Fisher's exact tests were used in the case-control analysis.

Stool specimens, obtained from patrons and employees, were tested for norovirus RNA by reverse transcriptase–polymerase chain reaction (RT-PCR) and for bacterial pathogens at the Michigan Department of Community Health (MDCH). All positive RT-PCR specimens were genotyped by sequence analysis.

## Descriptive Study

A total of 625 persons were interviewed by BEDHD: 584 patrons (113 were well), 32 employees, and nine additional persons who became ill after contact with a patron or employee in whom a case was identified. A total of 364 patrons of the 584 interviewed met the descriptive study case definition; the median age was 40 years (range: 1–92 years), 58.5% were female, 88.2% reported diarrhea, 71.7% reported vomiting, and the median duration of illness was 42 hours (range: 2–172 hours) (Table). Patron onset of illness peaked during 12:00 a.m.–3:59 a.m. on January 30 (Figure 1). The median time from a meal at the restaurant until onset of symptoms was 32 hours. The number of cases was already decreasing on January 30, when BEDHD was notified and interventions were implemented.

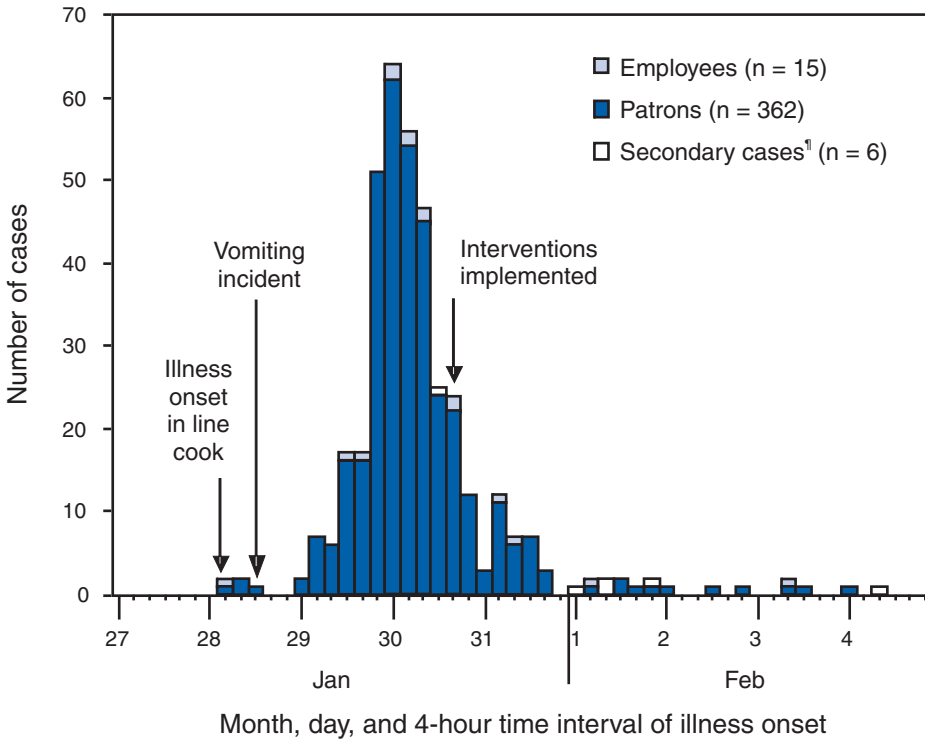
A total of 281 patrons in whom cases were identified had dined on January 28, resulting in an attack rate of 33.7%; on January 29, the attack rate was 13.5% (64 cases divided by 475 meals). Analysis of patron illness based on date and time that the meal was eaten demonstrated that norovirus transmission was occurring in the restaurant before the vomiting incident on January 28 (Figure 2). The attack rate was highest for patrons who ate during 5:00 p.m.–7:59 p.m. on January 28. Transmission continued through the next day.

**TABLE. Selected characteristics of patrons (n = 364) who became ill in a norovirus outbreak associated with a restaurant—Eaton County, Michigan, January 28–February 4, 2006**

Characteristic	Measure
Median age (yrs) (range)	40 (1–92)
No. female (%)	213 (58.5)
No. who reported diarrhea (%)	321 (88.2)
No. who reported bloody diarrhea (%)	7 (1.9)
No. who reported vomiting (%)	261 (71.7)
Median incubation period (hrs) (range)	32 (10–50)
Median duration of illness (hrs) (range)	42 (2–172)
No. who sought medical attention (%)*	30 (8.2)
No. who visited a hospital emergency department (%)	6 (1.6)

\* Includes persons who visited a hospital emergency department.

**FIGURE 1. Number of cases of norovirus illness among patrons and employees\* of a restaurant,† by 4-hour time interval§ of illness onset — Eaton County, Michigan, January 28–February 4, 2006**



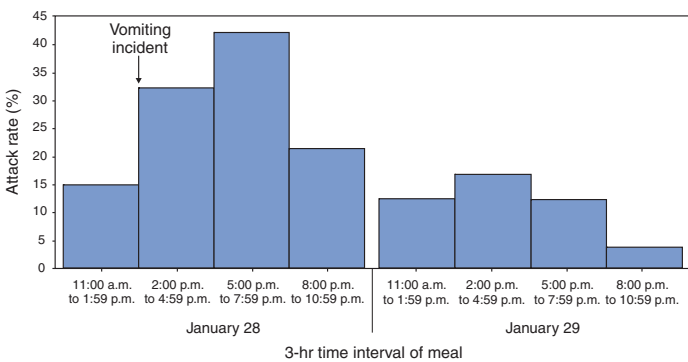
\* Cases among patrons defined as illness with vomiting or diarrhea, with an incubation period of 10–50 hours. Cases among employees defined as illness with vomiting or diarrhea during January 19–February 3, regardless of incubation period.

† The first two employees in whom cases were identified (onset dates January 19 and 21) and the first two patrons in whom cases were identified (onset dates January 23) are not included.

§ Time intervals: 1) 12:00 a.m. to 3:59 a.m.; 2) 4:00 a.m. to 7:59 a.m.; 3) 8:00 a.m. to 11:59 a.m.; 4) 12:00 p.m. to 3:59 p.m.; 5) 4:00 p.m. to 7:59 p.m.; and 6) 8:00 p.m. to 11:59 p.m.

¶ Cases in persons who had not eaten at the restaurant but became ill after contact with a patron or employee in whom a case was identified.

**FIGURE 2. Attack rate among patrons\* who ate at a restaurant implicated in a norovirus outbreak, by 3-hour time interval of eating a meal at the restaurant — Eaton County, Michigan, January 28 and January 29, 2006**



\* N = 345. Attack rate calculated by dividing the number of cases in patrons by number of meals served.

Of the 32 employees interviewed, cases were identified in 17 (53.1%). Seven (41.2%) of these 17 employees had worked while ill during January 21–30. Twelve employees (other than line cook A) worked on January 28 and subsequently became ill. Five (62.5%) of the eight line cooks who worked on January 28 became ill on or after January 28, compared with six (28.6%) of 21 servers.

**Analytic Study**

In the case-control study of patrons from the period January 28–29, a total of 45 were classified as case-patrons, and 91 were classified as controls. Two foods were found to have a statistically significant association with illness: the antipasti platter (odds ratio [OR] = 2.96; 95% confidence interval [CI] = 1.08–8.14) and garlic mashed potatoes (OR = 4.05; CI = 1.37–11.99). Eighteen patrons (10 who were ill and eight who were well) reported eating the antipasti platter. Sixteen patrons (10 ill and six well) reported eating the garlic mashed potatoes.

Nine persons who had not eaten or worked at the restaurant became ill after contact with either a case-patron or case-employee (i.e., household or work contacts). Eight of these nine persons had symptoms of vomiting or diarrhea with illness onset during January 30–February 7.

All 14 stool specimens tested by RT-PCR were positive for norovirus GI. The companion bacterial samples tested negative. Results from the sequence analysis, using the degenerative primer set to produce a 213-bp amplicon of region B of the norovirus genome, demonstrated 100% sequence homology with the genotype GI/4 Chiba.

**Environmental Assessment**

The BEDHD environmental assessment of the restaurant identified deficiencies with employee hand-washing practices, cleaning and sanitizing of food and nonfood contact surfaces, temperature monitoring and maintenance of potentially hazardous food, and maintenance of hand-sink stations for easy accessibility and proper use. Three

interventions were undertaken by the restaurant beginning January 30: 1) all food prepared during January 27–30 was discarded; 2) all ill employees were excluded from working for at least 72 hours after their symptoms had subsided; and 3) the facility was cleaned extensively. On February 3, BEDHD received reports of illness in three patrons who had dined at the restaurant on February 1, raising concern that residual contamination remained. Also on February 3, while reviewing the restaurant's clean-up procedures after the vomiting incident, BEDHD sanitarians discovered the restaurant had used a quaternary ammonium-based sanitizer that was ineffective against norovirus. BEDHD instructed the restaurant to disinfect according to MDCH and Michigan Department of Agriculture guidelines for environmental cleaning and disinfection of norovirus (2). The restaurant completed the disinfection with bleach solution before opening at 4:00 p.m. on February 3.

**Reported by:** *SR Bohm, MS, BM Brennan, MSPH, Michigan Dept of Community Health; R Schirmer, MD, G Cabose, Barry-Eaton District Health Dept, Charlotte, Michigan.*

**Editorial Note:** Norovirus can be transmitted person-to-person (via the fecal-oral route) and spread through contaminated airborne droplets, food, water, environmental surfaces, and fomites (3). In the outbreak described in this report, at least 364 restaurant patrons became ill with gastroenteritis after dining at a restaurant where employees had reported to work while ill. In a norovirus outbreak, a vomiting incident is a major risk factor for norovirus illness and can double the attack rate (4). In this outbreak, vomiting by a line cook at the work station might have contributed to transmission. Because of the open physical layout of the restaurant, no barrier impeded airborne spread of the virus from the kitchen to the main dining area. Attack rates increased after this incident, and among employees who worked on January 28, a higher percentage of line cooks became ill compared with servers. In addition, other environmental contamination probably contributed to transmission. Low-level transmission was occurring in the week before January 28; seven patrons who dined at the restaurant during January 21–27 met the case definition. During January 21–February 3, exposure to virus likely occurred by contact with contaminated surfaces and objects.

Foodborne transmission also might have contributed to the outbreak. The antipasti platter (a combination of calamari, bruschetta, and mozzarella cheese sticks with marinara sauce) was one of many dishes that line cook A prepared but the only item among those line cook A prepared that had a statistically significant association with

illness. The other food that was linked with illness was the garlic mashed potatoes. However, only a small proportion of patrons ate either of these items.

Feline calicivirus, a proxy virus used for norovirus research, can persist in the environment for 21–28 days and is resistant to inactivation by certain cleaning agents (e.g., quaternary ammonium-based sanitizers) (5). In this outbreak, the restaurant's use of cleaning cloths soaked with a quaternary ammonium-based cleaning product likely was ineffective in disinfecting the restaurant (6).\*

In 2006, MDCH received 144 reports of suspected or confirmed norovirus outbreaks throughout Michigan, compared with 34 in 2005 (MDCH, unpublished data, 2007). Norovirus genogroup II (GII) was identified in 97% of the 89 confirmed outbreaks in the state during 2006; GI was identified in the remaining 3% of the outbreaks. During 2000–2004, the predominant genogroup in calicivirus outbreaks in the United States was GII (79%), followed by GI (19%) and sapovirus (2%) (7). No other GI/4 outbreaks were detected in Michigan in 2006. In this outbreak, the detection of one norovirus genogroup (GI/4) in all stool specimens, including that of line cook A, suggests a single source of infection.

Approximately 50% of all norovirus outbreaks are linked to ill food-service workers (8). The Michigan Food Law of 2000,<sup>†</sup> which regulates Michigan food establishments, requires that food-establishment operators notify regulators when employees have infections with *Salmonella*, *Shigella*, *Escherichia coli* O157:H7 or hepatitis A. Food-service employees in Michigan also are obliged under the food law to inform their supervisors when they have symptoms of illness, such as diarrhea and vomiting. In October 2007, Michigan adopted several amendments to the Michigan Food Law of 2000, including the 2005 Food and Drug Administration Food Code.<sup>§</sup> The 2005 Food Code includes norovirus as one of several highly pathogenic organisms that can be easily spread by ill food handlers and provides disease-specific conditions for work exclusion, restriction, and reinstatement.

After the outbreak described in this report, BEDHD issued four recommendations (based on previously

\*The Environmental Protection Agency has approved the claims of effectiveness against norovirus of several antimicrobial disinfectants. Some of these products include quaternary ammonia-based disinfectants but are in combination with alcohols. These claims of effectiveness are based on in vitro studies that typically use a proxy virus (e.g., feline calicivirus); field effectiveness in the context of outbreaks has not been evaluated. A list of these products is available at [http://www.epa.gov/oppad001/list\\_g\\_norovirus.pdf](http://www.epa.gov/oppad001/list_g_norovirus.pdf).

<sup>†</sup> Available at [http://www.michigan.gov/mda/1,1607,7-125-1568\\_2387\\_2435---,00.html](http://www.michigan.gov/mda/1,1607,7-125-1568_2387_2435---,00.html).

<sup>§</sup> Available at <http://www.cfsan.fda.gov/~dms/fc05-toc.html>.

published guidelines [9]) for infection control and environmental decontamination after any vomiting incident in a food-service establishment. First, any exposed food or single-service articles (e.g., drinking straws, takeout containers, and paper napkins) should be discarded, and all surface areas within at least a 25-foot radius of the vomiting site should be disinfected with a bleach solution (2). Second, ill employees should be excluded from work for at least 72 hours after symptoms subside, and employees returning after a gastrointestinal illness should be restricted from handling kitchenware or ready-to-eat food for an additional 72 hours. Third, because thorough disinfection might be necessary, partial or complete closure of the food establishment should be considered after a vomiting incident. Finally, restrooms used during or after a vomiting incident should be closed immediately until they are disinfected properly with bleach solution.

#### Acknowledgments

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#### Notice to Readers

### National Influenza Vaccination Week — November 26–December 2, 2007

To help raise awareness regarding the importance of obtaining influenza vaccination throughout the entire influenza season, the U.S. Department of Health and Human Services, National Influenza Vaccine Summit, CDC, and other partners are conducting activities during the second annual National Influenza Vaccination Week (NIVW), November 26–December 2.

Influenza vaccination coverage in all groups recommended for vaccination remains suboptimal. Despite the timing of the peak of influenza disease, administration of vaccine decreases substantially after November. According to results from the National Health Interview Survey regarding the two most recent influenza seasons, approximately 84% of all influenza vaccinations were administered during September–November\* (Figure). Among persons aged  $\geq 65$  years, the percentage of September–November vaccinations was even higher, at 92% (CDC, unpublished data, 2007). Because many persons recommended for vaccination remain unvaccinated at the end of November, CDC is encouraging public-health partners and health-care providers to conduct vaccination clinics and other activities that promote influenza vaccination during NIVW and throughout the remainder of the influenza season.

Each year, on average, approximately 15–60 million persons in the United States are infected with influenza virus; an estimated 200,000 persons are hospitalized from influenza complications, and an estimated 36,000 persons die from those complications (1). Influenza vaccination is the best way to prevent influenza and potentially severe complications. CDC recommends that anyone who wants to reduce their risk for influenza infection should be vaccinated every influenza season. Annual vaccination is particularly important for the following groups (1).

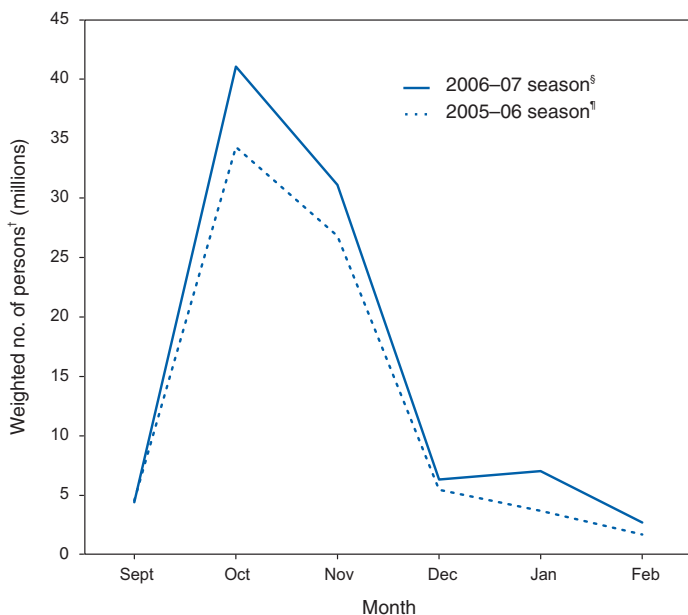
- persons at high risk for influenza-related complications and severe disease, including:
  - children aged 6–59 months,
  - pregnant women,

\* Respondents were asked two series of questions: “During the past 12 months, have you had a flu shot?” “A flu shot is usually given in the fall and protects against influenza for the flu season.” “During what month and year did you receive your most recent flu shot?” and “During the past 12 months, have you had a flu vaccine sprayed in your nose by a doctor or other health professional?” “A health professional may have let you spray it.” “This vaccine is usually given in the fall and protects against influenza for the flu season.” “During what month and year did you receive your most recent flu nasal spray?” Additional information is available at <http://www.cdc.gov/nchs/nhis.htm>.



- persons aged  $\geq 50$  years,
- persons of any age with certain chronic medical conditions; and
- persons who live with or care for persons at high risk, including:
  - household contacts and caregivers of persons in the above groups,
  - household contacts and caregivers of children aged  $< 6$  months (these children also are at high risk for influenza-related complications but are too young to receive influenza vaccination), and
  - health-care workers.

**FIGURE. Estimated number of persons reporting vaccination\* for influenza, by month — National Health Interview Survey, United States, 2005–06 and 2006–07 influenza seasons**



\* Respondents were asked two series of questions: “During the past 12 months, have you had a flu shot?” “A flu shot is usually given in the fall and protects against influenza for the flu season.” “During what month and year did you receive your most recent flu shot?” and “During the past 12 months, have you had a flu vaccine sprayed in your nose by a doctor or other health professional?” “A health professional may have let you spray it.” “This vaccine is usually given in the fall and protects against influenza for the flu season.” “During what month and year did you receive your most recent flu nasal spray?”

<sup>†</sup> Estimates are based on 1-month sampling weights.

<sup>§</sup> Persons aged  $\geq 6$  months for whom month of influenza vaccination was reported in interviews conducted in March 2007.

<sup>¶</sup> Persons aged  $\geq 6$  months for whom month of influenza vaccination was reported in interviews conducted in March 2006.

**SOURCE:** 2006 National Health Interview Survey final data and 2007 National Health Interview Survey preliminary data. Estimates for the 2006–07 influenza season might change as more data become available. Estimates are based on household interviews of the civilian noninstitutionalized population. Additional information available at <http://www.cdc.gov/nchs/nhis.htm>.

The time to receive influenza vaccination starts when vaccine becomes available in the local community and continues into January or later, when the influenza season typically peaks. Throughout NIVW, CDC will be highlighting the importance of influenza vaccination for persons at high risk, their close contacts, and all those who want to be protected from influenza. CDC, Families Fighting Flu, and other partners also have designated Tuesday, November 27, as Children’s Flu Vaccination Day to put a special focus on the importance of vaccinating children at high risk and their close contacts.

NIVW posters and other influenza educational materials are available to download for local printing and distribution at <http://www.cdc.gov/flu/professionals/flugallery>. Other influenza-related tools and information for health-care professionals and patients are available at <http://www.cdc.gov/flu>.

#### Reference

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#### Notice to Readers

### Expansion of Use of Live Attenuated Influenza Vaccine (FluMist®) to Children Aged 2–4 Years and Other FluMist Changes for the 2007–08 Influenza Season

On September 19, 2007, MedImmune Vaccines (Gaithersburg, Maryland) received approval from the Food and Drug Administration (FDA) to expand the use of FluMist®, a live, attenuated influenza vaccine (LAIV), to children aged 2–4 years (i.e., 24–49 months). FluMist is an intranasally administered influenza vaccine that was first licensed by the FDA in 2003 for healthy, nonpregnant persons aged 5–49 years (1). Expanding the age indications to include healthy children aged 2–4 years provides another influenza vaccination option for young children. In granting the new approval, FDA emphasized that FluMist is not approved for vaccination of children aged  $< 2$  years or adults aged  $> 49$  years, and that FluMist safety has not been established in persons with underlying medical conditions predisposing them to influenza-related complications (2). In addition, FluMist should not be administered to persons with asthma or children aged  $< 5$  years with recurrent wheezing (1,2).

## New Recommendation for FluMist

In a randomized trial published in 2007, FluMist and trivalent inactivated vaccine (TIV) were compared among children aged 6–59 months (3). Children with medically diagnosed or treated wheezing within 42 days before enrollment, or a history of severe asthma, were excluded from this study. FluMist had a 55% (95% confidence interval [CI] = 45%–63%) greater efficacy compared with TIV in preventing culture-confirmed influenza illness.

In the trial, among children aged 6–23 months, wheezing that required bronchodilator therapy or that was associated with significant respiratory symptoms occurred in 5.9% of FluMist recipients, compared with 3.8% of those who received TIV (risk ratio [RR] = 1.5, CI = 1.2–2.1). Wheezing was not greater among children aged 24–59 months who received FluMist (3). In a previous randomized placebo-controlled safety trial among children aged 12 months–17 years, an elevated risk for asthma events (RR = 4.06, CI = 1.29–17.86) was noted among 728 children aged 18–35 months who received FluMist; of the 16 children with asthma-related events, none required hospitalization, and elevated risks for asthma were not observed in other age groups (4).

During 2006–2007, the Advisory Committee on Immunization Practices (ACIP) influenza vaccine workgroup reviewed data on the use of FluMist among children aged 2–4 years. On the basis of these data, expert opinion of the workgroup members, and consultation with representatives from the American Academy of Pediatrics and immunization safety experts, the workgroup revised recommendations for use of LAIV to include children aged 2–4 years, and presented its recommendations to ACIP. On October 24, 2007, ACIP recommended that either LAIV or TIV can be used to vaccinate healthy non-pregnant persons aged 2–49 years. For the purposes of this recommendation, healthy persons were defined as persons who do not have an underlying medical condition that predisposes them to influenza complications (5). ACIP also approved use of FluMist for healthy persons aged 2–18 years under the federal Vaccines for Children (VFC) program.

Although FDA licensure of FluMist excluded children aged 2–4 years with a history of asthma or recurrent wheezing, the precise risk, if any, of wheezing caused by FluMist among these children is unknown because experience with FluMist among these young children is limited. Young children might not have a history of recurrent wheezing if their exposure to respiratory viruses has been limited because of their age. Certain children might have a history of wheezing with respiratory illnesses but have not had

asthma diagnosed. The ACIP influenza vaccine workgroup, with advice from consultants, developed the following screening recommendations to assist persons who administer influenza vaccines in providing the appropriate vaccine for children aged 2–4 years.

Clinicians and immunization programs should screen for possible reactive airways diseases when considering use of FluMist for children aged 2–4 years, and should avoid use of this vaccine in children with asthma or a recent wheezing episode. Health-care providers should consult the medical record, when available, to identify children aged 2–4 years with asthma or recurrent wheezing that might indicate asthma. In addition, to identify children who might be at greater risk for asthma and possibly at increased risk for wheezing after receiving LAIV, parents or caregivers of children aged 2–4 years should be asked: “In the past 12 months, has a health-care provider ever told you that your child had wheezing or asthma?” Children whose parents or caregivers answer “yes” to this question and children who have asthma or who had a wheezing episode noted in the medical record within the past 12 months, should not receive FluMist. TIV is available for use in children with asthma or possible reactive airways diseases.

## Other Changes in FluMist Use for 2007–08

Three other changes in the use of FluMist and its 2007–08 formulation should be noted; the amount of vaccine administered, the temperature at which FluMist is shipped and stored after delivery to the end-user, and the minimum interval between doses have changed compared with the 2006–07 influenza season formulation. First, FluMist is now supplied in a prefilled, single-use sprayer containing 0.2 mL of vaccine instead of the previous 0.5 mL dose. Persons administering FluMist should spray 0.1 mL (i.e., half of the total sprayer contents) into the first nostril while the recipient is in an upright position. An attached dose-divider clip should then be removed from the sprayer and the second half of the dose administered into the other nostril. Second, FluMist is now approved to be shipped to end users at 35°F–46°F (2°C–8°C) instead of being shipped and stored frozen. FluMist should be stored at 35°F–46°F (2°C–8°C) upon receipt, and can remain at that temperature until the expiration date is reached. (2) Third, the recommended interval from the first to the second dose in children requiring 2 doses has changed from a minimum of 6 weeks to a minimum of 4 weeks, the same interval recommended between doses for TIV (2).

Regardless of the vaccine used, ACIP, the American Academy of Pediatrics, and the American Academy of Family Physicians recommend that children aged <9 years who

have not previously been administered an influenza vaccine should receive 2 doses separated by 4 or more weeks in the initial year (6). Children aged <9 years who did not receive the recommended second dose of influenza vaccine in the initial year that they received influenza vaccine should receive 2 doses separated by 4 or more weeks before or during the next influenza season. This recommendation applies only to the influenza season that follows the first season that a child aged <9 years receives influenza vaccine (5,7). Children aged <9 years who are being vaccinated two or more seasons after receiving an influenza vaccine for the first time should receive a single annual dose, regardless of the number of doses administered previously (5,7). Additional information is available from the manufacturer's package insert (2) and MedImmune Vaccines, telephone 877-358-6478.

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#### Notice to Readers

### Availability of Additional Trivalent Inactivated Influenza Vaccine for Adults (Afluria®)

On September 28, 2007, CSL Biotherapies, Inc., (King of Prussia, Pennsylvania) received approval from the Food and Drug Administration for use of Afluria®, a trivalent inactivated influenza vaccine (TIV) administered intramuscularly in persons aged ≥18 years (1). Afluria can be used for any adult influenza vaccine indication (2).

The addition of Afluria brings to six (five TIVs and one live, attenuated influenza vaccine) the number of seasonal influenza vaccines licensed for the U.S. market. CDC

estimates that manufacturers of the six vaccines will supply a record 132 million doses of influenza vaccine for the 2007–08 influenza season.

Afluria is available in a 0.5 mL preservative-free, single-dose, prefilled syringe and in a 5 mL multidose vial containing 10 doses. Thimerosal, a mercury derivative, is added as a preservative to the multidose vial; each 0.5 mL dose contains 24.5 µg of mercury. Additional information is available from the manufacturer's package insert (3) and CSL Biotherapies, Inc., telephone 888-435-8633.

#### References

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#### Notice to Readers

### Satellite Broadcast: Surveillance of Vaccine-Preventable Diseases 2007

On December 13, 2007, CDC and the Public Health Training Network will present the satellite broadcast and webcast, Surveillance of Vaccine-Preventable Diseases 2007. The 3.5-hour broadcast will occur live from 9:00 a.m. to 12:30 p.m. EST. This program is designed to provide information on case investigation, outbreak control, and disease reporting for vaccine-preventable diseases, and will discuss methods of enhancing surveillance and completing case investigations. The program is specifically targeted to persons with surveillance responsibilities (e.g., those in state health departments). The broadcast will feature a live question-and-answer session in which participants nationwide can interact with course instructors via toll-free telephone lines. Continuing education credits will be provided. Additional information about the program is available at <http://www2a.cdc.gov/phtn/vpd-07>.

Information for site administrators about establishing and registering a viewing location is available at <http://www.cdc.gov/tceonline>. No registration is necessary to access the webcasts via an Internet connection. The link to the live webcast is available at <http://www2a.cdc.gov/phtn/webcast/vpd-07>. The webcast will be accessible through an Internet connection until January 14, 2008. The program will become available as a self-study DVD and Internet-based program in January 2008.

**TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending November 17, 2007 (46th Week)\***

Disease	Current week	Cum 2007	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2006	2005	2004	2003	2002	
Anthrax	—	—	—	1	—	—	—	2	
Botulism:									
foodborne	1	18	1	20	19	16	20	28	NC (1)
infant	1	73	2	97	85	87	76	69	TN (1)
other (wound & unspecified)	—	19	0	48	31	30	33	21	
Brucellosis	—	106	2	121	120	114	104	125	
Chancroid	—	27	1	33	17	30	54	67	
Cholera	—	6	0	9	8	5	2	2	
Cyclosporiasis§	—	88	1	136	543	171	75	156	
Diphtheria	—	—	—	—	—	—	1	1	
Domestic arboviral diseases§¶:									
California serogroup	—	28	1	67	80	112	108	164	
eastern equine	—	4	0	8	21	6	14	10	
Powassan	—	1	—	1	1	1	—	1	
St. Louis	—	5	0	10	13	12	41	28	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	4	443	9	646	786	537	362	511	NY (2), MN (2)
human monocytic	9	571	7	578	506	338	321	216	NY (1), MN (7), NC (1)
human (other & unspecified)	1	141	1	231	112	59	44	23	NY (1)
<i>Haemophilus influenzae</i> **,									
invasive disease (age <5 yrs):									
serotype b	—	16	0	29	9	19	32	34	
nonserotype b	—	123	2	175	135	135	117	144	
unknown serotype	1	180	3	179	217	177	227	153	GA (1)
Hansen disease§	1	46	2	66	87	105	95	96	IN (1)
Hantavirus pulmonary syndrome§	—	23	0	40	26	24	26	19	
Hemolytic uremic syndrome, postdiarrheal§	6	195	4	288	221	200	178	216	MI (1), ND (2), TN (1), CA (2)
Hepatitis C viral, acute	5	591	19	802	652	713	1,102	1,835	MI (2), TN (1), CA (2)
HIV infection, pediatric (age <13 yrs)††	—	—	5	52	380	436	504	420	
Influenza-associated pediatric mortality§§	—	75	0	43	45	—	N	N	
Listeriosis	7	599	15	875	896	753	696	665	ME (1), NY (1), MI (2), WA (2), CA (1)
Measles¶¶	—	28	1	55	66	37	56	44	
Meningococcal disease, invasive***:									
A, C, Y, & W-135	—	243	4	318	297	—	—	—	
serogroup B	2	116	2	193	156	—	—	—	OH (1), IN (1)
other serogroup	1	27	0	32	27	—	—	—	MI (1)
unknown serogroup	4	511	12	651	765	—	—	—	NY (1), FL (1), MS (1), CA (1)
Mumps	3	655	14	6,584	314	258	231	270	MI (1), NC (1), UT (1)
Novel influenza A virus infections	—	4	—	N	N	N	N	N	
Plague	—	6	0	17	8	3	1	2	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Poliovirus infection, nonparalytic§	—	—	—	N	N	N	N	N	
Psittacosis§	—	8	0	21	16	12	12	18	
Q fever§	2	152	1	169	136	70	71	61	TN (1), TX (1)
Rabies, human	—	—	0	3	2	7	2	3	
Rubella†††	—	11	—	11	11	10	7	18	
Rubella, congenital syndrome	—	—	—	1	1	—	1	1	
SARS-CoV§§§	—	—	—	—	—	—	8	N	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	2	87	1	125	129	132	161	118	CT (1), OH (1)
Syphilis, congenital (age <1 yr)	3	402	8	380	329	353	413	412	PA (1), NC (1), LA (1)
Tetanus	1	19	0	41	27	34	20	25	FL (1)
Toxic-shock syndrome (staphylococcal)§	—	69	2	101	90	95	133	109	
Trichinellosis	—	6	0	15	16	5	6	14	
Tularemia	2	109	2	95	154	134	129	90	NE (1), AR (1)
Typhoid fever	1	298	5	353	324	322	356	321	NY (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> §	—	19	0	6	2	—	N	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> §	—	—	—	1	3	1	N	N	
Vibriosis (noncholera <i>Vibrio</i> species infections)§	10	317	2	N	N	N	N	N	GA (2), FL (3), AL (1), AZ (1), WA (1), CA (2)
Yellow fever	—	—	—	—	—	—	—	1	

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

\* Incidence data for reporting year 2007 are provisional, whereas data for 2002, 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 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.

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

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

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

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. No cases occurring during the 2007–08 influenza season have been reported. A total of 73 cases were reported for the 2006–07 influenza season.

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

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

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

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





TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2007, and November 18, 2006 (46th Week)\*

Reporting area	Hepatitis (viral, acute), by type†										Legionellosis				
	A					B									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	15	52	201	2,437	3,114	28	77	405	3,472	3,920	34	43	106	2,069	2,457
<b>New England</b>	1	2	6	109	167	1	1	5	67	108	1	2	13	115	164
Connecticut	—	0	3	25	37	—	0	5	28	46	—	0	5	36	48
Maine§	—	0	1	3	8	—	0	2	12	22	1	0	1	7	9
Massachusetts	—	1	4	49	80	—	0	1	4	19	—	0	3	21	65
New Hampshire	—	0	3	12	22	—	0	1	5	9	—	0	2	8	13
Rhode Island§	1	0	2	12	12	—	0	3	13	9	—	0	6	34	21
Vermont§	—	0	1	8	8	1	0	1	5	3	—	0	2	9	8
<b>Mid. Atlantic</b>	1	8	19	373	355	1	8	21	394	474	12	11	36	646	892
New Jersey	—	2	6	93	100	—	1	8	79	153	—	1	11	76	111
New York (Upstate)	1	1	11	67	82	1	2	13	82	57	6	4	22	204	304
New York City	—	3	8	137	111	—	2	6	84	109	—	2	10	103	173
Pennsylvania	—	1	5	76	62	—	3	8	149	155	6	4	21	263	304
<b>E. N. Central</b>	3	6	13	261	324	2	9	23	379	446	8	8	27	469	551
Illinois	—	2	5	92	95	—	2	6	99	120	—	1	12	83	116
Indiana	—	0	7	29	24	—	0	21	47	52	2	1	7	49	46
Michigan	2	1	8	74	115	—	2	8	96	128	1	3	10	137	135
Ohio	1	1	4	59	49	2	2	7	117	113	5	3	17	190	210
Wisconsin	—	0	3	7	41	—	0	3	20	33	—	0	2	10	44
<b>W.N. Central</b>	—	2	18	150	122	2	2	15	118	131	2	1	9	89	77
Iowa	—	1	4	39	11	—	0	3	21	19	—	0	1	9	10
Kansas	—	0	1	6	26	—	0	2	9	10	—	0	1	3	8
Minnesota	—	0	17	62	17	—	0	13	18	18	2	0	6	25	24
Missouri	—	0	2	25	42	2	1	5	55	61	—	1	3	37	21
Nebraska§	—	0	2	12	17	—	0	1	10	18	—	0	2	11	9
North Dakota	—	0	3	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	—	0	1	6	9	—	0	1	5	5	—	0	1	4	5
<b>S. Atlantic</b>	6	10	21	453	503	10	18	56	855	1,087	5	7	25	346	420
Delaware	—	0	1	7	13	—	0	2	15	46	—	0	2	8	12
District of Columbia	—	0	5	14	7	—	0	2	1	7	—	0	2	1	29
Florida	3	3	7	140	193	4	7	14	306	372	—	2	10	137	141
Georgia	—	1	4	63	51	2	2	7	109	184	1	0	2	21	32
Maryland§	—	1	5	70	59	2	2	6	101	137	—	1	4	67	97
North Carolina	1	0	11	57	94	—	0	16	120	147	3	1	4	42	33
South Carolina§	1	0	4	16	23	—	1	5	53	84	—	0	2	17	6
Virginia§	1	1	5	78	57	2	3	8	111	62	1	1	4	41	57
West Virginia	—	0	2	8	6	—	0	23	39	48	—	0	4	12	13
<b>E. S. Central</b>	—	2	5	90	115	1	7	14	313	298	1	2	6	86	99
Alabama§	—	0	3	16	13	—	2	7	109	89	—	0	1	9	9
Kentucky	—	0	2	19	31	—	1	7	65	67	—	1	4	43	43
Mississippi	—	0	4	8	8	—	0	8	25	11	—	0	1	—	4
Tennessee§	—	1	5	47	63	1	3	8	114	131	1	1	4	34	43
<b>W. S. Central</b>	—	5	43	210	344	6	17	169	757	802	2	2	16	102	60
Arkansas§	—	0	2	10	45	—	1	7	59	70	—	0	3	8	4
Louisiana	—	1	3	26	29	—	1	4	63	50	—	0	1	3	10
Oklahoma	—	0	8	11	6	—	1	38	115	69	—	0	6	5	1
Texas§	—	3	39	163	264	6	12	135	520	613	2	2	13	86	45
<b>Mountain</b>	4	5	15	227	250	1	3	7	151	125	3	2	7	104	116
Arizona	2	3	11	162	153	—	1	4	49	U	1	0	5	39	35
Colorado	—	0	3	21	36	—	0	3	30	32	—	0	2	21	25
Idaho§	2	0	1	6	9	—	0	1	12	13	1	0	1	6	11
Montana§	—	0	2	9	11	—	0	3	—	2	—	0	1	3	6
Nevada§	—	0	2	9	11	—	1	3	29	34	—	0	2	7	10
New Mexico§	—	0	2	10	14	—	0	2	10	22	—	0	2	8	5
Utah	—	0	2	7	14	1	0	4	19	22	1	0	3	17	24
Wyoming§	—	0	1	3	2	—	0	1	2	—	—	0	1	3	—
<b>Pacific</b>	—	12	92	564	934	4	10	106	438	449	—	2	11	112	78
Alaska	—	0	1	4	1	—	0	1	7	8	—	0	1	—	1
California	—	10	40	489	884	2	7	31	327	359	—	1	11	84	77
Hawaii	—	0	1	—	12	—	0	1	—	7	—	0	0	—	—
Oregon§	—	1	2	27	37	—	1	4	55	75	—	0	1	9	—
Washington	—	0	52	44	—	2	1	74	49	—	—	0	3	19	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	1	10	45	61	—	1	9	44	60	—	0	2	3	1
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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

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

\* Incidence data for reporting year 2007 are provisional.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2007, and November 18, 2006 (46th Week)\*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	211	262	1,228	18,290	17,792	7	20	105	959	1,272	7	21	87	897	986
<b>New England</b>	41	40	300	3,324	4,196	—	1	5	49	49	—	1	3	38	47
Connecticut	28	11	214	1,601	1,635	—	0	3	1	10	—	0	1	6	10
Maine§	11	4	61	447	259	—	0	2	7	4	—	0	1	7	7
Massachusetts	—	2	27	211	1,421	—	0	3	29	24	—	0	2	19	22
New Hampshire	—	7	86	785	598	—	0	4	8	9	—	0	1	1	4
Rhode Island§	—	0	93	151	186	—	0	1	—	1	—	0	1	2	2
Vermont§	2	2	13	129	97	—	0	2	4	1	—	0	1	3	2
<b>Mid. Atlantic</b>	81	110	624	9,135	9,092	2	5	14	234	334	1	3	8	122	149
New Jersey	—	26	146	1,942	2,334	—	0	2	—	85	—	0	2	13	18
New York (Upstate)	66	52	426	3,035	3,385	2	1	5	59	41	1	1	3	35	32
New York City	—	1	22	169	291	—	3	7	139	163	—	0	4	26	57
Pennsylvania	15	40	306	3,989	3,082	—	1	4	36	45	—	1	5	48	42
<b>E. N. Central</b>	—	8	151	1,278	1,667	—	2	6	97	152	3	3	9	133	151
Illinois	—	0	12	112	109	—	1	6	41	79	—	1	3	42	39
Indiana	—	0	7	41	21	—	0	2	9	11	1	0	4	25	22
Michigan	—	0	5	53	53	—	0	2	16	18	1	0	3	25	26
Ohio	—	0	3	19	42	—	0	2	22	27	1	1	2	32	44
Wisconsin	—	6	138	1,053	1,442	—	0	2	9	17	—	0	3	9	20
<b>W. N. Central</b>	53	5	195	582	717	2	0	12	37	57	—	1	5	59	58
Iowa	—	1	11	109	95	—	0	1	3	2	—	0	3	14	17
Kansas	—	0	2	9	4	—	0	1	3	7	—	0	1	2	4
Minnesota	50	1	188	423	601	—	0	11	16	37	—	0	3	18	13
Missouri	2	0	6	31	5	1	0	1	6	6	—	0	3	15	14
Nebraska§	1	0	1	7	11	—	0	1	6	3	—	0	2	5	6
North Dakota	—	0	7	3	—	1	0	1	2	1	—	0	3	2	1
South Dakota	—	0	0	—	1	—	0	1	1	1	—	0	1	3	3
<b>S. Atlantic</b>	29	66	176	3,683	1,953	3	4	13	224	309	1	3	11	150	176
Delaware	4	12	34	648	451	—	0	1	4	5	—	0	1	1	4
District of Columbia	—	0	7	13	56	—	0	2	3	5	—	0	1	—	1
Florida	—	1	11	77	25	1	1	7	53	53	1	1	7	58	66
Georgia	—	0	1	3	8	—	0	5	31	82	—	0	5	24	15
Maryland§	13	30	112	2,040	1,096	—	1	5	54	73	—	0	2	20	14
North Carolina	1	0	8	43	29	—	0	4	20	28	—	0	6	18	30
South Carolina§	—	0	2	23	18	—	0	1	6	9	—	0	2	14	20
Virginia§	11	13	61	769	257	2	1	5	51	52	—	0	2	13	18
West Virginia	—	0	14	67	13	—	0	1	2	2	—	0	2	2	8
<b>E. S. Central</b>	—	1	5	50	34	—	0	3	31	23	1	1	4	44	40
Alabama§	—	0	3	12	10	—	0	1	5	9	—	0	2	8	5
Kentucky	—	0	2	5	7	—	0	1	8	3	—	0	2	10	11
Mississippi	—	0	1	1	3	—	0	1	2	6	1	0	4	10	5
Tennessee§	—	0	4	32	14	—	0	2	16	5	—	0	2	16	19
<b>W. S. Central</b>	2	1	6	64	23	—	1	29	76	93	—	2	15	89	87
Arkansas§	—	0	1	1	—	—	0	1	2	4	—	0	2	9	10
Louisiana	—	0	1	2	1	—	0	2	14	8	—	0	4	25	34
Oklahoma	—	0	0	—	—	—	0	3	5	7	—	0	4	16	11
Texas§	2	1	6	61	22	—	1	25	55	74	—	1	11	39	32
<b>Mountain</b>	—	1	4	38	28	—	1	6	58	71	—	1	4	57	65
Arizona	—	0	1	2	10	—	0	3	12	23	—	0	2	12	15
Colorado	—	0	1	2	—	—	0	2	23	19	—	0	2	21	20
Idaho§	—	0	2	8	6	—	0	2	3	1	—	0	1	3	3
Montana§	—	0	2	4	—	—	0	1	3	2	—	0	1	2	5
Nevada§	—	0	2	8	3	—	0	1	2	4	—	0	1	4	6
New Mexico§	—	0	1	4	3	—	0	1	4	5	—	0	1	2	6
Utah	—	0	2	7	5	—	0	3	11	17	—	0	2	11	6
Wyoming§	—	0	1	3	1	—	0	0	—	—	—	0	1	2	4
<b>Pacific</b>	5	2	16	136	82	—	3	45	153	184	1	4	48	205	213
Alaska	1	0	1	8	3	—	0	1	2	23	—	0	1	1	3
California	4	2	9	122	73	—	2	7	112	142	1	3	10	153	164
Hawaii	N	0	0	N	N	—	0	0	—	8	—	0	1	—	9
Oregon§	—	0	1	3	6	—	0	3	14	11	—	0	3	30	37
Washington	—	0	8	3	—	—	0	43	25	—	—	0	43	21	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	3	2	—	0	1	6	6
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.  
 U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.  
 \* Incidence data for reporting year 2007 are provisional.  
 † Data for meningococcal disease, invasive caused by serogroups A, C, Y, & W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.  
 § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).



TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2007, and November 18, 2006 (46th Week)\*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	66	172	1,479	7,643	12,596	37	101	177	4,894	5,079	21	32	211	1,818	1,962
<b>New England</b>	1	27	77	1,182	1,621	9	11	22	530	444	—	0	10	5	11
Connecticut	—	1	5	59	110	3	4	10	208	192	—	0	0	—	—
Maine†	—	1	13	73	132	1	2	5	79	113	—	0	1	1	N
Massachusetts	—	22	39	928	1,027	—	0	0	—	N	—	0	1	4	10
New Hampshire	—	1	6	52	202	2	1	4	51	45	—	0	0	—	1
Rhode Island†	1	0	31	23	49	—	0	4	37	30	—	0	9	—	—
Vermont†	—	0	9	47	101	3	3	13	155	64	—	0	0	—	—
<b>Mid. Atlantic</b>	10	23	155	1,017	1,667	8	22	56	1,217	491	—	1	6	60	84
New Jersey	—	3	11	139	273	N	0	0	N	N	—	0	2	9	38
New York (Upstate)	7	11	146	506	757	8	11	20	482	N	—	0	1	3	—
New York City	—	2	6	105	93	—	1	5	42	34	—	0	3	26	23
Pennsylvania	3	6	15	267	544	—	13	44	693	457	—	0	3	22	23
<b>E.N. Central</b>	5	28	79	1,229	2,011	2	4	48	380	157	—	1	4	42	63
Illinois	—	3	23	130	505	1	1	15	113	46	—	0	3	24	26
Indiana	—	0	45	52	204	—	0	1	12	11	—	0	2	4	6
Michigan	—	7	18	254	559	1	1	27	179	46	—	0	1	4	4
Ohio	5	13	54	594	541	—	1	11	76	54	—	0	2	10	26
Wisconsin	—	3	24	199	202	N	0	0	N	N	—	0	0	—	1
<b>W.N. Central</b>	5	13	151	594	1,142	—	5	13	244	290	—	5	32	374	192
Iowa	—	2	16	122	284	—	0	3	30	57	—	0	4	14	5
Kansas	—	3	12	122	277	—	2	7	101	71	—	0	1	1	1
Minnesota	—	0	119	157	161	—	0	5	32	38	—	0	1	1	3
Missouri	2	1	9	72	285	—	0	3	39	63	—	4	26	340	158
Nebraska†	3	1	12	59	90	—	0	0	—	—	—	0	2	14	25
North Dakota	—	0	18	8	25	—	0	6	21	24	—	0	0	—	—
South Dakota	—	1	7	54	20	—	0	2	21	37	—	0	1	4	—
<b>S. Atlantic</b>	13	16	163	836	1,005	15	40	76	1,897	2,110	20	12	112	882	1,094
Delaware	—	0	2	11	3	—	0	0	—	—	—	0	2	14	21
District of Columbia	—	0	1	2	6	—	0	0	—	—	—	0	1	1	1
Florida	4	4	18	198	192	—	0	29	110	176	—	0	4	21	14
Georgia	—	0	4	27	92	12	3	34	246	244	1	0	5	35	51
Maryland†	2	2	8	107	133	—	7	18	327	385	1	1	7	60	77
North Carolina	6	3	112	288	177	3	9	19	447	479	18	4	96	563	794
South Carolina†	—	2	9	66	172	—	0	11	46	160	—	1	7	60	38
Virginia†	1	2	11	108	187	—	13	31	646	568	—	2	11	123	95
West Virginia	—	0	19	29	43	—	0	11	75	98	—	0	3	5	3
<b>E.S. Central</b>	1	6	32	369	323	—	3	9	140	231	—	4	16	241	356
Alabama†	—	2	18	79	81	—	0	2	—	78	—	1	9	82	84
Kentucky	—	0	4	22	56	—	0	3	18	27	—	0	2	5	3
Mississippi	—	1	29	194	34	—	0	1	1	4	—	0	2	14	8
Tennessee†	1	1	7	74	152	—	3	7	121	122	—	2	10	140	261
<b>W.S. Central</b>	1	19	226	833	785	1	1	27	74	917	1	1	168	173	114
Arkansas†	1	1	17	133	86	1	0	5	29	31	1	0	53	91	51
Louisiana	—	0	1	14	24	—	0	1	—	6	—	0	1	2	5
Oklahoma	—	0	36	6	19	—	0	22	45	60	—	0	108	47	29
Texas†	—	16	174	680	656	—	0	20	—	820	—	0	7	33	29
<b>Mountain</b>	10	22	61	1,004	2,317	—	3	14	208	207	—	0	4	33	46
Arizona	—	4	13	182	478	—	2	12	144	134	—	0	1	7	11
Colorado	5	6	14	271	680	—	0	0	—	—	—	0	2	4	4
Idaho†	—	0	5	34	83	—	0	0	—	24	—	0	1	4	14
Montana†	—	0	7	38	113	—	0	3	18	15	—	0	1	1	2
Nevada†	—	0	5	12	66	—	0	1	2	5	—	0	0	—	—
New Mexico†	—	1	7	65	127	—	0	2	10	10	—	0	1	4	8
Utah	5	8	47	380	695	—	0	2	16	11	—	0	1	1	—
Wyoming†	—	0	4	22	75	—	0	4	18	8	—	0	2	12	7
<b>Pacific</b>	20	11	547	579	1,725	2	4	10	204	232	—	0	3	8	2
Alaska	—	0	8	50	89	—	0	6	39	16	N	0	0	N	N
California	—	3	167	157	1,453	2	3	8	154	191	—	0	3	6	—
Hawaii	—	0	1	—	85	N	0	0	N	N	N	0	0	N	N
Oregon†	—	2	14	112	98	—	0	3	11	25	—	0	1	2	2
Washington	20	2	377	260	—	—	0	0	—	—	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	1	—	63	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	3	—	0	5	37	75	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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

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

\* Incidence data for reporting year 2007 are provisional.

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



TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2007, and November 18, 2006 (46th Week)\*

Reporting area	Streptococcal disease, invasive, group A					<i>Streptococcus pneumoniae</i> , invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max		
<b>United States</b>	53	97	261	4,238	4,685	16	29	108	1,355	1,182
<b>New England</b>	3	5	28	349	316	—	2	11	109	109
Connecticut	2	0	23	114	83	—	0	6	15	31
Maine <sup>§</sup>	1	0	3	25	17	—	0	1	2	—
Massachusetts	—	3	12	155	160	—	2	6	72	64
New Hampshire	—	0	4	33	35	—	0	2	10	9
Rhode Island <sup>§</sup>	—	0	12	6	7	—	0	2	8	5
Vermont <sup>§</sup>	—	0	2	16	14	—	0	1	2	—
<b>Mid. Atlantic</b>	4	17	41	787	847	1	4	37	228	169
New Jersey	—	2	10	113	137	—	1	4	31	56
New York (Upstate)	—	5	27	258	270	1	2	15	92	85
New York City	—	4	13	182	151	—	1	35	105	28
Pennsylvania	4	5	11	234	289	N	0	0	N	N
<b>E.N. Central</b>	9	16	34	720	886	3	4	14	189	312
Illinois	—	4	13	199	268	—	1	6	39	87
Indiana	2	2	12	108	106	—	0	10	18	47
Michigan	3	4	10	178	187	3	1	4	65	70
Ohio	4	4	14	204	215	—	1	7	55	65
Wisconsin	—	0	6	31	110	—	0	2	12	43
<b>W.N. Central</b>	11	5	32	302	315	2	2	8	108	102
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	3	30	50	—	0	1	3	11
Minnesota	5	0	29	149	143	—	1	6	70	64
Missouri	3	2	6	72	71	—	0	2	20	14
Nebraska <sup>§</sup>	—	0	3	23	29	2	0	1	14	10
North Dakota	3	0	2	18	12	—	0	2	1	3
South Dakota	—	0	2	10	10	—	0	0	—	—
<b>S. Atlantic</b>	20	22	52	1,119	1,067	4	4	14	242	76
Delaware	—	0	1	10	10	—	0	0	—	—
District of Columbia	—	0	3	8	15	—	0	1	—	1
Florida	11	6	16	287	271	2	1	5	61	—
Georgia	4	5	13	226	230	—	0	5	44	—
Maryland <sup>§</sup>	3	4	10	192	195	2	1	5	57	63
North Carolina	—	1	22	150	148	—	0	0	—	—
South Carolina <sup>§</sup>	—	1	7	85	57	—	1	4	42	—
Virginia <sup>§</sup>	2	2	11	136	116	—	0	4	31	—
West Virginia	—	0	3	25	25	—	0	4	7	12
<b>E.S. Central</b>	—	4	13	189	187	1	2	6	82	17
Alabama <sup>§</sup>	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	35	41	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	3	17
Tennessee <sup>§</sup>	—	3	13	154	146	1	1	6	79	—
<b>W.S. Central</b>	2	6	90	271	351	1	4	43	197	193
Arkansas <sup>§</sup>	—	0	2	17	24	—	0	2	10	20
Louisiana	—	0	4	16	16	—	0	4	27	22
Oklahoma	—	1	23	64	94	—	1	13	48	51
Texas <sup>§</sup>	2	3	64	174	217	1	2	27	112	100
<b>Mountain</b>	4	10	22	472	598	4	4	12	174	180
Arizona	1	4	11	184	309	2	2	7	100	97
Colorado	2	3	8	132	109	2	1	4	43	51
Idaho <sup>§</sup>	—	0	2	16	8	—	0	1	2	3
Montana <sup>§</sup>	N	0	0	N	N	N	0	0	N	N
Nevada <sup>§</sup>	—	0	1	2	—	—	0	1	1	2
New Mexico <sup>§</sup>	—	1	4	51	112	—	0	4	21	27
Utah	1	2	7	82	56	—	0	2	7	—
Wyoming <sup>§</sup>	—	0	1	5	4	—	0	0	—	—
<b>Pacific</b>	—	1	9	29	118	—	0	2	26	24
Alaska	—	0	3	29	N	—	0	2	26	N
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	3	9	—	118	—	1	2	—	24
Oregon <sup>§</sup>	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U

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

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

\* Incidence data for reporting year 2007 are provisional.

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

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

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2007, and November 18, 2006 (46th Week)\***

Reporting area	<i>Streptococcus pneumoniae</i> , invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages				Age <5 years										
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	19	46	256	2,019	2,100	3	8	35	396	358	67	201	310	9,198	8,475
<b>New England</b>	—	2	12	89	114	—	0	3	11	4	5	5	14	234	174
Connecticut	—	1	5	50	87	—	0	2	4	—	2	0	10	30	38
Maine§	—	0	2	9	7	—	0	2	2	1	—	0	2	9	8
Massachusetts	—	0	0	—	—	—	0	0	—	—	3	3	8	141	106
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	3	26	11
Rhode Island§	—	0	4	15	9	—	0	1	3	—	—	0	5	26	9
Vermont§	—	0	2	15	11	—	0	1	2	3	—	0	1	2	2
<b>Mid. Atlantic</b>	2	2	9	110	136	—	0	5	23	21	9	27	45	1,326	1,016
New Jersey	—	0	0	—	—	—	0	0	—	—	—	4	8	180	153
New York (Upstate)	1	1	5	36	44	—	0	4	7	9	4	3	14	123	133
New York City	—	0	0	—	—	—	0	0	—	—	—	17	35	808	491
Pennsylvania	1	1	6	74	92	—	0	2	16	12	5	4	10	215	239
<b>E.N. Central</b>	6	10	40	492	445	1	2	8	95	75	13	15	27	699	790
Illinois	—	0	8	54	22	—	0	5	30	6	9	7	14	324	381
Indiana	—	3	31	124	125	—	0	5	23	21	—	1	6	50	82
Michigan	—	0	1	2	16	—	0	1	1	2	2	2	9	103	104
Ohio	6	5	38	312	282	1	1	5	41	46	2	4	9	172	161
Wisconsin	N	0	0	N	N	—	0	0	—	—	—	1	4	50	62
<b>W.N. Central</b>	—	2	124	120	89	—	0	15	10	13	3	7	14	309	257
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	15	18
Kansas	—	0	11	64	—	—	0	2	6	—	—	0	2	20	24
Minnesota	—	0	123	—	51	—	0	15	—	10	—	1	4	62	44
Missouri	—	1	5	47	36	—	0	0	—	3	3	4	11	203	151
Nebraska§	—	0	1	2	1	—	0	0	—	—	—	0	1	2	7
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota	—	0	3	7	1	—	0	1	4	—	—	0	3	7	12
<b>S. Atlantic</b>	11	20	59	885	998	1	4	15	189	173	10	50	180	2,183	1,917
Delaware	—	0	1	8	—	—	0	1	2	—	—	0	3	15	17
District of Columbia	—	0	1	5	24	—	0	0	—	2	—	3	12	157	105
Florida	9	11	29	510	528	1	2	8	108	110	—	17	44	823	656
Georgia	2	7	17	306	345	—	1	10	71	61	—	7	153	337	360
Maryland§	—	0	1	1	—	—	0	0	—	—	—	6	15	269	271
North Carolina	—	0	0	—	—	—	0	0	—	—	5	5	23	291	270
South Carolina§	—	0	0	—	—	—	0	0	—	—	—	2	11	86	60
Virginia§	N	0	0	N	N	—	0	0	—	—	5	4	16	200	169
West Virginia	—	1	17	55	101	—	0	1	8	—	—	0	1	5	9
<b>E.S. Central</b>	—	3	9	143	163	1	0	3	33	29	8	18	30	785	642
Alabama§	N	0	0	N	N	—	0	0	—	—	—	7	16	304	283
Kentucky	—	0	2	21	32	—	0	1	3	6	1	1	7	54	63
Mississippi	—	0	2	—	22	—	0	0	—	—	—	2	9	96	68
Tennessee§	—	2	8	122	109	1	0	3	30	23	7	7	15	331	228
<b>W.S. Central</b>	—	2	12	124	72	—	0	3	17	8	7	35	55	1,620	1,403
Arkansas§	—	0	1	3	10	—	0	0	—	2	6	2	10	114	74
Louisiana	—	1	4	53	62	—	0	2	7	6	1	9	23	417	287
Oklahoma	—	0	10	68	—	—	0	2	10	—	—	1	4	53	63
Texas§	—	0	0	—	—	—	0	0	—	—	—	21	39	1,036	979
<b>Mountain</b>	—	1	6	56	83	—	0	3	18	35	1	8	24	332	441
Arizona	—	0	0	—	—	—	0	0	—	—	—	3	22	149	171
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	35	61
Idaho§	N	0	0	N	N	—	0	0	—	—	—	0	1	1	3
Montana§	—	0	0	—	—	—	0	0	—	—	—	0	2	3	1
Nevada§	—	0	3	18	16	—	0	2	5	2	—	2	6	87	121
New Mexico§	—	0	0	—	—	—	0	0	—	—	—	1	7	38	67
Utah	—	0	6	24	35	—	0	3	11	23	1	0	2	16	17
Wyoming§	—	0	2	14	32	—	0	1	2	10	—	0	1	3	—
<b>Pacific</b>	—	0	0	—	—	—	0	0	—	—	11	39	59	1,710	1,835
Alaska	—	0	0	—	N	—	0	0	—	—	—	0	1	7	11
California	N	0	0	N	N	—	0	0	—	—	3	36	56	1,565	1,631
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	1	—	17
Oregon§	N	0	0	N	N	—	0	0	—	—	—	0	6	15	18
Washington	N	0	0	N	N	—	0	0	—	—	8	2	12	123	158
American Samoa	U	0	0	U	U	U	0	1	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	N	0	0	N	N	—	0	0	—	—	—	0	1	3	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	8	3	10	145	132
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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

**TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2007, and November 18, 2006 (46th Week)\***

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Neuroinvasive					Nonneuroinvasive§				
		Med	Max			Current week	Med	Max	Cum 2007	Cum 2006	Current week	Med	Max	Cum 2007	Cum 2006
<b>United States</b>	505	776	2,813	30,084	39,809	—	1	134	1,102	1,490	1	2	291	2,234	2,767
<b>New England</b>	15	15	124	629	3,768	—	0	2	7	9	—	0	2	5	3
Connecticut	—	0	76	2	1,441	—	0	2	4	7	—	0	1	1	2
Maine¶	—	0	7	—	214	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	1,141	—	0	2	3	2	—	0	2	3	1
New Hampshire	8	7	14	299	362	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
Vermont¶	7	5	66	328	610	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	2	91	195	3,349	4,476	—	0	3	18	26	—	0	1	6	12
New Jersey	N	0	0	N	N	—	0	1	1	2	—	0	0	—	3
New York (Upstate)	N	0	0	N	N	—	0	0	—	8	—	0	0	—	4
New York City	—	0	0	—	—	—	0	3	12	8	—	0	1	2	4
Pennsylvania	2	91	195	3,349	4,476	—	0	1	5	8	—	0	1	4	1
<b>E.N. Central</b>	121	209	568	8,476	12,973	—	0	18	104	244	—	0	11	59	174
Illinois	—	3	11	147	128	—	0	13	60	127	—	0	8	36	88
Indiana	N	0	0	N	N	—	0	4	13	27	—	0	2	10	53
Michigan	44	84	258	3,473	4,230	—	0	5	13	43	—	0	0	—	12
Ohio	77	83	449	4,018	7,698	—	0	4	13	36	—	0	3	8	11
Wisconsin	—	17	80	838	917	—	0	2	5	11	—	0	1	5	10
<b>W.N. Central</b>	21	31	136	1,440	1,613	—	0	40	240	224	—	0	116	708	484
Iowa	N	0	0	N	N	—	0	4	11	22	—	0	3	15	15
Kansas	—	8	52	491	296	—	0	3	13	17	—	0	7	26	13
Minnesota	—	0	0	—	—	—	0	9	45	31	—	0	12	54	34
Missouri	21	14	78	801	1,186	—	0	9	56	51	—	0	2	12	11
Nebraska¶	N	0	0	N	N	—	0	5	18	45	—	0	15	126	219
North Dakota	—	0	60	84	45	—	0	11	49	20	—	0	48	316	117
South Dakota	—	1	15	64	86	—	0	9	48	38	—	0	32	159	75
<b>S. Atlantic</b>	40	97	239	4,333	4,022	—	0	12	40	18	—	0	6	34	14
Delaware	—	1	4	38	63	—	0	1	1	—	—	0	0	—	—
District of Columbia	—	0	8	14	45	—	0	0	—	—	—	0	0	—	2
Florida	26	23	76	1,125	N	—	0	1	3	3	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	8	23	2	—	0	4	25	6
Maryland¶	N	0	0	N	N	—	0	2	6	10	—	0	2	4	1
North Carolina	—	0	0	—	—	—	0	1	3	1	—	0	1	2	—
South Carolina¶	4	22	72	949	1,044	—	0	2	2	1	—	0	1	2	—
Virginia¶	—	20	190	1,200	1,511	—	0	1	2	—	—	0	1	1	5
West Virginia	10	22	50	1,007	1,359	—	0	0	—	1	—	0	0	—	—
<b>E.S. Central</b>	27	9	571	527	28	—	0	11	66	118	—	0	14	92	99
Alabama¶	27	9	571	524	26	—	0	2	16	8	—	0	1	6	—
Kentucky	N	0	0	N	N	—	0	1	4	5	—	0	0	—	1
Mississippi	—	0	2	3	2	—	0	7	42	89	—	0	12	83	92
Tennessee¶	N	0	0	N	N	—	0	1	4	16	—	0	1	3	6
<b>W.S. Central</b>	194	156	1,640	8,914	10,393	—	0	28	207	371	—	0	13	90	234
Arkansas¶	8	11	105	605	867	—	0	5	13	24	—	0	2	7	5
Louisiana	—	1	11	99	194	—	0	5	25	90	—	0	3	11	87
Oklahoma	—	0	0	—	N	—	0	11	52	27	—	0	7	42	21
Texas¶	186	149	1,534	8,210	9,332	—	0	16	117	230	—	0	5	30	121
<b>Mountain</b>	85	53	131	2,381	2,536	—	0	36	261	392	—	1	139	998	1,485
Arizona	—	0	0	—	—	—	0	7	39	67	—	0	12	46	80
Colorado	41	21	62	971	1,341	—	0	17	96	66	—	0	65	459	279
Idaho¶	N	0	0	N	N	—	0	2	8	139	—	0	19	101	857
Montana¶	13	6	40	366	N	—	0	10	37	12	—	0	30	162	22
Nevada¶	—	0	1	1	10	—	0	1	1	34	—	0	3	10	90
New Mexico¶	4	5	37	325	349	—	0	8	38	3	—	0	6	22	5
Utah	27	12	73	684	775	—	0	8	27	56	—	0	7	33	102
Wyoming¶	—	0	9	34	61	—	0	4	15	15	—	0	33	165	50
<b>Pacific</b>	—	0	9	35	—	—	0	18	159	88	1	0	23	242	262
Alaska	—	0	9	35	N	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	N	—	0	17	152	81	1	0	21	223	197
Hawaii	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	3	7	7	—	0	4	19	62
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	3
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	4	30	168	243	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	10	30	467	541	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

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

TABLE III. Deaths in 122 U.S. cities,\* week ending November 17, 2007 (46th 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>	485	343	96	27	3	16	32	<b>S. Atlantic</b>	1,115	687	275	80	37	36	56		
Boston, MA	115	74	32	5	2	2	6	Atlanta, GA	89	56	24	7	1	1	1		
Bridgeport, CT	34	26	5	1	—	2	2	Baltimore, MD	128	80	29	9	8	2	9		
Cambridge, MA	14	11	3	—	—	—	1	Charlotte, NC	116	70	27	11	5	3	9		
Fall River, MA	24	22	1	1	—	—	4	Jacksonville, FL	216	122	63	17	4	10	12		
Hartford, CT	50	31	12	5	—	2	5	Miami, FL	65	42	13	4	4	2	2		
Lowell, MA	12	8	3	1	—	—	—	Norfolk, VA	55	32	14	5	2	2	3		
Lynn, MA	6	4	—	2	—	—	—	Richmond, VA	57	36	14	6	1	—	—		
New Bedford, MA	18	16	2	—	—	—	—	Savannah, GA	54	39	9	2	1	3	4		
New Haven, CT	24	17	2	2	—	3	4	St. Petersburg, FL	48	31	10	3	2	2	4		
Providence, RI	39	26	8	3	—	2	3	Tampa, FL	173	108	47	11	4	3	6		
Somerville, MA	6	4	1	1	—	—	—	Washington, D.C.	100	58	24	5	5	8	5		
Springfield, MA	57	38	10	4	1	4	5	Wilmington, DE	14	13	1	—	—	—	1		
Waterbury, CT	25	21	3	1	—	—	2	<b>E.S. Central</b>	823	530	201	57	21	14	60		
Worcester, MA	61	45	14	1	—	1	—	Birmingham, AL	98	59	29	8	2	—	3		
<b>Mid. Atlantic</b>	2,056	1,390	473	112	42	39	108	Chattanooga, TN	101	74	20	1	5	1	8		
Albany, NY	43	28	11	1	—	3	3	Knoxville, TN	90	52	25	9	3	1	6		
Allentown, PA	35	22	5	7	1	—	—	Lexington, KY	62	39	18	3	1	1	2		
Buffalo, NY	94	59	24	4	2	5	6	Memphis, TN	199	129	45	14	4	7	19		
Camden, NJ	15	8	5	—	1	1	—	Mobile, AL	77	47	19	8	1	2	6		
Elizabeth, NJ	16	11	4	1	—	—	3	Montgomery, AL	47	38	4	3	1	1	7		
Erie, PA	51	39	10	2	—	—	1	Nashville, TN	149	92	41	11	4	1	9		
Jersey City, NJ	15	9	3	3	—	—	1	<b>W.S. Central</b>	1,400	866	357	104	37	36	66		
New York City, NY	1,065	728	254	51	17	15	45	Austin, TX	96	61	21	9	2	3	8		
Newark, NJ	27	17	7	2	1	—	3	Baton Rouge, LA	67	32	16	10	9	—	—		
Paterson, NJ	23	13	8	1	—	1	4	Corpus Christi, TX	71	43	17	8	1	2	4		
Philadelphia, PA	307	182	74	28	13	10	15	Dallas, TX	185	111	49	17	4	4	8		
Pittsburgh, PA <sup>‡</sup>	32	22	6	4	—	—	2	El Paso, TX	34	22	7	2	3	—	—		
Reading, PA	26	22	2	1	—	1	1	Fort Worth, TX	134	84	42	2	—	6	6		
Rochester, NY	133	95	30	3	5	—	14	Houston, TX	387	232	102	26	12	15	20		
Schenectady, NY	26	23	3	—	—	—	—	Little Rock, AR	64	40	15	7	—	2	1		
Scranton, PA	24	22	2	—	—	—	4	New Orleans, LA <sup>†</sup>	U	U	U	U	U	U	U		
Syracuse, NY	69	48	18	1	—	2	5	San Antonio, TX	214	139	55	16	3	1	10		
Trenton, NJ	21	15	2	1	2	1	—	Shreveport, LA	55	36	11	5	2	1	5		
Utica, NY	15	13	1	1	—	—	—	Tulsa, OK	93	66	22	2	1	2	4		
Yonkers, NY	19	14	4	1	—	—	1	<b>Mountain</b>	971	634	232	53	34	18	58		
<b>E.N. Central</b>	2,035	1,377	444	120	39	54	115	Albuquerque, NM	100	65	27	4	2	2	4		
Akron, OH	38	31	5	1	—	1	—	Boise, ID	57	41	7	6	2	1	3		
Canton, OH	36	30	5	1	—	—	1	Colorado Springs, CO	73	52	17	2	1	1	2		
Chicago, IL	361	226	87	23	13	12	31	Denver, CO	72	42	24	5	—	1	9		
Cincinnati, OH	77	49	21	3	2	2	7	Las Vegas, NV	230	146	66	11	6	1	14		
Cleveland, OH	246	178	48	13	2	5	8	Ogden, UT	32	25	5	—	1	1	3		
Columbus, OH	194	133	38	16	2	5	8	Phoenix, AZ	148	85	38	9	11	5	9		
Dayton, OH	128	92	23	9	1	3	6	Pueblo, CO	28	16	7	4	1	—	1		
Detroit, MI	163	86	54	9	7	7	13	Salt Lake City, UT	100	68	20	5	7	—	11		
Evansville, IN	56	40	11	4	1	—	7	Tucson, AZ	131	94	21	7	3	6	2		
Fort Wayne, IN	69	47	15	3	1	3	4	<b>Pacific</b>	1,254	870	270	71	20	23	76		
Gary, IN	14	5	2	2	2	2	—	Berkeley, CA	14	10	4	—	—	—	—		
Grand Rapids, MI	39	27	7	3	2	—	4	Fresno, CA	67	44	14	6	2	1	3		
Indianapolis, IN	157	101	37	11	3	5	8	Glendale, CA	U	U	U	U	U	U	U		
Lansing, MI	39	34	5	—	—	—	1	Honolulu, HI	84	63	12	5	2	2	10		
Milwaukee, WI	104	66	28	8	—	2	2	Long Beach, CA	60	37	16	3	2	2	8		
Peoria, IL	69	49	10	4	2	4	6	Los Angeles, CA	U	U	U	U	U	U	U		
Rockford, IL	47	34	10	3	—	—	1	Pasadena, CA	17	10	5	1	—	1	3		
South Bend, IN	57	42	12	1	—	2	1	Portland, OR	121	79	28	10	1	3	6		
Toledo, OH	84	60	18	4	1	1	4	Sacramento, CA	198	130	50	12	4	2	10		
Youngstown, OH	57	47	8	2	—	—	3	San Diego, CA	176	128	32	8	3	5	8		
<b>W.N. Central</b>	512	347	106	21	18	20	34	San Francisco, CA	44	31	9	2	—	2	2		
Des Moines, IA	62	46	14	1	1	—	6	San Jose, CA	171	121	32	12	3	3	11		
Duluth, MN	35	26	6	2	—	1	2	Santa Cruz, CA	26	22	3	1	—	—	2		
Kansas City, KS	25	15	8	1	1	—	6	Seattle, WA	109	72	30	5	1	1	8		
Kansas City, MO	86	58	18	3	5	2	5	Spokane, WA	53	37	11	3	1	1	3		
Lincoln, NE	35	26	7	—	2	—	1	Tacoma, WA	114	86	24	3	1	—	2		
Minneapolis, MN	60	30	11	5	7	7	3	<b>Total</b>	10,651**	7,044	2,454	645	251	256	605		
Omaha, NE	58	42	10	3	—	3	2										
St. Louis, MO	36	20	11	2	—	3	3										
St. Paul, MN	40	31	8	—	—	1	1										
Wichita, KS	75	53	13	4	2	3	5										

U: Unavailable. —:No reported cases.

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

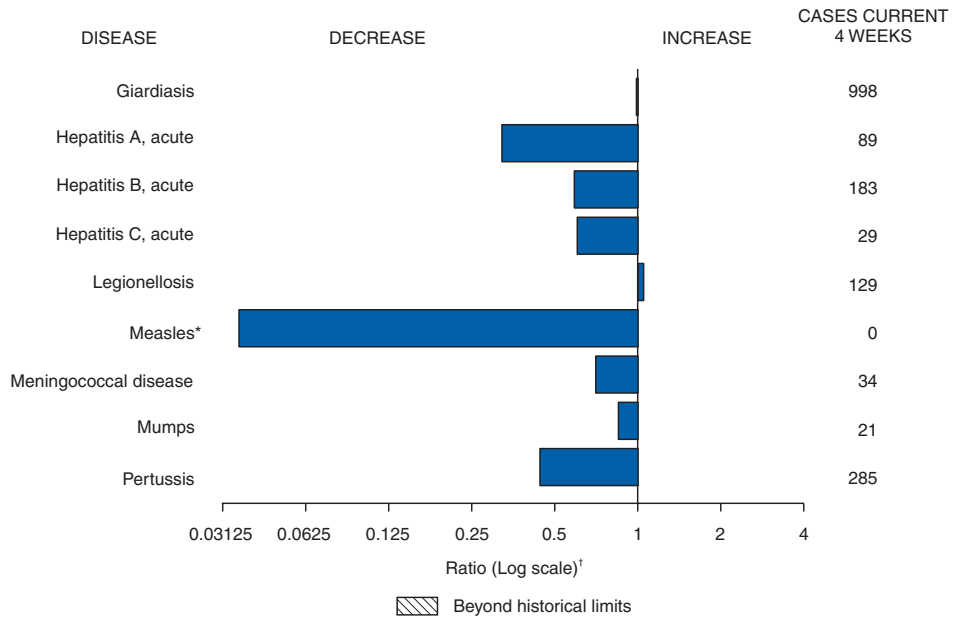
† Pneumonia and influenza.

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

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

\*\* Total includes unknown ages.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals November 17, 2007, with historical data**



\* No measles cases were reported for the current 4-week period yielding a ratio for week 46 of zero (0).  
 † Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

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