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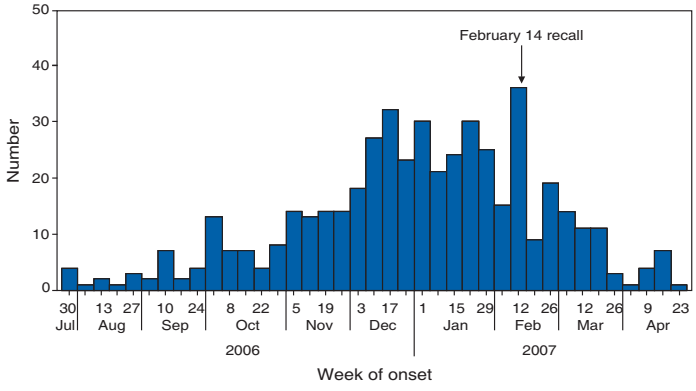
# Multistate Outbreak of *Salmonella* Serotype Tennessee Infections Associated with Peanut Butter — United States, 2006–2007

In November 2006, public health officials at CDC and state health departments detected a substantial increase in the reported incidence of isolates of *Salmonella* serotype Tennessee. In a multistate case-control study conducted during February 5–13, 2007, illness was strongly associated with consumption of either of two brands (Peter Pan or Great Value) of peanut butter produced at the same plant. Based on these findings, the plant ceased production and recalled both products on February 14, 2007. The outbreak strain of *Salmonella* Tennessee subsequently was isolated from several opened and unopened jars of Peter Pan and Great Value peanut butter and from two environmental samples obtained from the plant. New case reports decreased substantially after the product recall (Figure 1). As of May 22, 2007, a total of 628 persons infected with an outbreak strain of *Salmonella* serotype Tennessee had been reported from 47 states since August 1, 2006 (Figure 2). Local and state public health officials in multiple states, with assistance from CDC and the Food and Drug Administration (FDA), are continuing to investigate this outbreak caused by peanut butter, a new food source for salmonellosis in the United States. All remaining jars of Peter Pan or Great Value peanut butter with a product code beginning with 2111 should be discarded.

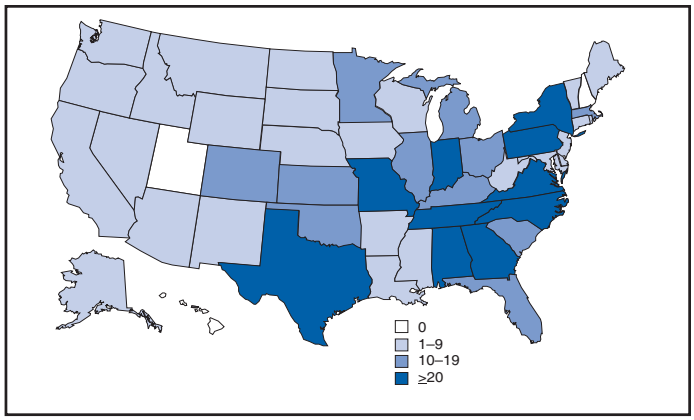
Public health officials in PulseNet (the molecular subtyping network for foodborne disease surveillance) and OutbreakNet

**FIGURE 1. Number of confirmed cases (n = 481)* of *Salmonella* Tennessee infection associated with consumption of peanut butter, by week of symptom onset — United States, August 1, 2006–April 23, 2007**




*Cases with outbreak-associated pulsed-field gel electrophoresis pattern and for which date of symptom onset was available.

**FIGURE 2. Number of confirmed cases (N = 628)* of *Salmonella* Tennessee infection associated with consumption of peanut butter, by state — United States, August 1, 2006–May 22, 2007**




*Cases with outbreak-associated pulsed-field gel electrophoresis pattern.

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(the network of public health epidemiologists who investigate foodborne illnesses nationwide) have been investigating this outbreak and attempting to identify the mechanism of initial contamination. The investigation began in November 2006, when public health officials in PulseNet noted a substantial increase in the number of isolates of the outbreak strain of *Salmonella* serotype Tennessee; throughout 2005 and most of 2006, these isolates were reported to PulseNet at a rate of one to five per month, whereas in October 2006, 30 isolates were reported. Pulsed-field gel electrophoresis (PFGE) patterns of *Salmonella* Tennessee strains isolated from patients were uploaded from state health department databases to CDC databases. Three closely related patterns* were determined to be associated with this outbreak.

A case was defined as infection with *Salmonella* Tennessee with a PFGE pattern matching one of the three outbreak patterns in a person residing in the United States with symptom onset on or after August 1, 2006 (or, if onset date unknown, *Salmonella* Tennessee isolated on or after August 1, 2006). The median age of patients was 52 years (range: 2 months–95 years); 73% were female. Symptoms of infection included diarrhea (72%), abdominal cramps (65%), fever (43%), and dysuria (45%). Symptom onset dates were known for 481 of 628 patients and ranged from August 1, 2006 to April 23, 2007 (Figure 1). Twenty percent of patients were hospitalized; no deaths were attributed to *Salmonella* infection. Sixty-one percent of isolates were from stool specimens, 35% from urine specimens, and 4% from other specimens.

The initial investigation indicated that cases were not clustered geographically, and patient interviews conducted during November–December 2006 by state and local officials from OutbreakNet did not reveal a common food exposure. Officials in multiple states then interviewed 26 patients in January 2007 using a standard food-consumption survey instrument of approximately 200 items. Interviews indicated that 48% of the patients had eaten turkey (excluding delicatessen-sliced turkey) and 85% had eaten peanut butter during the week before illness onset, higher proportions than would be expected from food-consumption surveys of the U.S. population (*1*).

In February 2007, a case-control study with 65 patients and 124 controls was conducted to identify the food item associated with illness; the majority of interviews were completed by state and local health departments and were coordinated by CDC. For the study, a case was defined as infection with the outbreak strain of *Salmonella* Tennessee in a person aged ≥18 years with a history of diarrhea. Controls were well adults

* CDC PulseNet patterns JNXX01.0010, JNXX01.0011, and JNXX01.0026.

from the patient's community who were matched by geographic location. Controls were identified using a reverse online telephone directory that when given an address provided telephone numbers for residences in the same extended neighborhood as the patients. The median ages for the patients and controls were 53 and 58 years, respectively. Patients were more likely than controls to have eaten peanut butter (81% versus 65%, matched odds ratio [mOR] = 1.9, 95% confidence interval [CI] = 0.8–5.2), to have eaten peanut butter more than once a week (66% versus 40%, mOR = 3.5, CI = 1.4–9.9), and to have eaten either Peter Pan or Great Value peanut butter (67% versus 13%, mOR = 10.9, CI = 3.8–43.0). Neither the consumption of other peanut butter brands nor consumption of turkey products was associated with illness.

Epidemiologic data suggesting Peter Pan brands of peanut butter as the possible source of the outbreak were provided to FDA officials on February 13, 2007. The following day, FDA issued a health alert to consumers indicating that they should not eat Peter Pan or Great Value peanut butter with a product code beginning with 2111, both of which were manufactured in a single facility in Georgia operated by ConAgra Foods. ConAgra Foods voluntarily recalled the products, destroyed existing products in their possession, and temporarily halted production pending further investigation.

New case reports decreased substantially after the February 14 recall (Figure 1). Investigation of the cases is ongoing to determine whether persons are still eating peanut butter from contaminated lots.

Subsequent laboratory testing of leftover peanut butter from patients was performed at state public health laboratories and CDC. *Salmonella* Tennessee with a PFGE pattern matching one of the outbreak strains was isolated from 21 opened and unopened peanut butter jars with production dates ranging from July 2006 to December 2006. These jars were collected from patients in 13 states (Arkansas, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Minnesota, New York, Oklahoma, Pennsylvania, South Carolina, and Tennessee); two of the PFGE strains were isolated from these peanut butter samples. FDA isolated *Salmonella* Tennessee from 13 unopened jars of Peter Pan and Great Value peanut butter with production dates ranging from August 2006 to January 2007 and from two plant environmental samples. Peanut butter from the Georgia plant was exported to 70 countries. No confirmed cases linked to this outbreak have been reported from other countries, although several possibly related cases have been investigated.

The source of the peanut butter contamination is unknown. FDA is investigating the plant operations, including heating temperatures, to determine the mechanism.

**Reported by:** Salmonella *Tennessee Outbreak Investigation Team. Local and state health departments. Div of Foodborne, Bacterial, and Mycotic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases, CDC.*

**Editorial Note:** Approximately 2,500 *Salmonella* serotypes can cause salmonellosis, an illness characterized by diarrhea, fever, and abdominal cramps, typically 12–72 hours after infection (*2*). *Salmonella* Tennessee infections are rare, and the source of most of these infections is unknown. An average of 52 *Salmonella* Tennessee cases were reported to the National *Salmonella* Surveillance System[†] each year during 1995–2004, representing 0.1% of all reported *Salmonella* strains (*3*). Only one other outbreak of *Salmonella* Tennessee infection with an identified food source, contaminated powdered milk, has been reported to CDC (*4*). In addition to causing gastrointestinal symptoms, certain serotypes, including *Salmonella* Tennessee, are more likely than other serotypes to infect the urinary tract. The percentage of patient *Salmonella* Tennessee isolates from urine specimens increased from 15% during 1995–2004 to 27% during 2005–2006. Because urinary tract infections are more common among females, the high proportion of isolates from urine in this outbreak might explain the high percentage of identified cases among females (*3,5*).

This is the first reported outbreak of a foodborne illness caused by peanut butter consumption in the United States. Outside the United States, one outbreak implicating peanut butter, caused by *Salmonella* serotype Mbandaka, was reported from Australia in 1996 (*6*). In addition, an outbreak of *Salmonella* serotype Agona infection in four countries was associated with consumption of a peanut-butter–coated snack produced in Israel (*7,8*).

Peanuts can become contaminated with salmonellae during growth, harvest, or storage, and the organisms are able to survive high temperatures in a high-fat, low-water–activity environment (*9*). Peanut butter provides such an environment, and although it typically undergoes heat treatment to temperatures >158°F (>70°C), such heating might not always eliminate salmonellae (*10*). In addition, after heat treatment, peanut butter that is being processed might be contaminated by salmonellae that are introduced into the production environment on raw peanuts or another source (e.g., animals in the production plant, salmonellae brought into the plant on containers or humans from the outside environment, or other ingredients used to make peanut butter).

[†] The National *Salmonella* Surveillance System collects information on serotypes of *Salmonella* isolates reported through the Public Health Laboratory Information System, an electronic reporting system. Additional information is available at http://www.cdc.gov/ncidod/dbmd/phlisdata/salmonella.htm.

This outbreak demonstrates the potential for widespread illness from a broadly distributed contaminated product, one that has not been previously implicated in a foodborne illness outbreak in the United States. In addition, the outbreak demonstrates that processed food can become contaminated even when the production process includes a heat-treatment step, underscoring the need for effective preventive controls in food-processing plants to prevent contamination.

Certain consumers might still be eating peanut butter from contaminated lots. All remaining jars of Peter Pan and Great Value peanut butter with a product code beginning with 2111 should be discarded.

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## Sunburn Prevalence Among Adults — United States, 1999, 2003, and 2004

Episodic acute overexposure to ultraviolet (UV) radiation (i.e., sunburn) is an important risk factor for two types of skin cancer: basal cell carcinoma and melanoma. Melanoma is the most lethal type of skin cancer. In 2003, a total of 45,625 new cases of melanoma were diagnosed in the United States, and 7,818 persons died from the disease (*1*). A meta-analysis of 57 studies indicated that the relative risk for melanoma among persons with sunburn history compared with those without sunburn history was 2.03 (95% confidence interval [CI] = 1.73–2.37) (*2*). Monitoring sunburn prevalence with population-based surveys allows an estimate of compliance with sun-protection behaviors, assessments of risk for developing skin cancer, and measurement of the success of prevention programs (*3*). To evaluate trends in sunburn prevalence among U.S. adults, CDC analyzed cross-sectional data from the 1999, 2003, and 2004 Behavioral Risk Factor Surveillance System (BRFSS) surveys. This report describes the results of that analysis, which indicated that sunburn prevalence among all adults increased from 31.8% in 1999 to 33.7% in 2004. Further research is needed to determine which interventions will best improve sun-protection behaviors among the public.

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized, U.S. civilian population aged ≥18 years. Questions are administered in English and Spanish, as necessary. Two questions related to self-reported sunburn experiences were used in the core section (i.e., the survey questions administered in all states) of the 1999, 2003, and 2004 questionnaires. The first question was presented as follows: "The next question is about sunburns, including any time that even a small part of your skin was red for more than 12 hours. Have you had a sunburn within the past 12 months?" Persons who responded "yes" were then asked, "Including times when even a small part of your skin was red for more than 12 hours, how many sunburns have you had within the past 12 months?" Excluded from the analysis were respondents who had missing answers, refused to answer, or answered "don't know" on the questionnaire. In 1999, a total of 156,095 persons responded, of whom 2,778 (1.8%) were excluded; in 2003, a total of 256,457 persons responded, of whom 3,478 (1.4%) were excluded; and in 2004, a total of 296,027 persons responded, of whom 906 (0.3%) were excluded. The median state response rate, based on Council of American Survey and Research Organizations guidelines, was 55.2% in 1999, 53.2% in 2003, and 52.7% in 2004. Information on each respondent's age, race/ethnicity, and sex and other demographic data also were collected in BRFSS.

Weighted prevalence of sunburn by race/ethnicity, sex, and state was calculated for each year and for all survey years combined. Data were weighted to the sex, racial/ethnic, and age distribution of the adult population of each state using intercensal estimates. To allow comparison among survey years, stratified BRFSS data were age adjusted to the 2000 U.S. standard population using six age groups: 18–24 years, 25–34 years, 35–44 years, 45–54 years, 55–64 years, and ≥65 years. Differences in prevalence were considered statistically significant if CIs did not overlap.

Estimated sunburn prevalence among all adults ranged from 31.8% in 1999 to 33.7% in 2004 (Table 1). Men had a higher prevalence of sunburn than women in all three survey years (35.8% versus 28.0% in 1999, 37.0% versus 30.2% in 2003, and 37.0% versus 30.3% in 2004). Sunburn prevalence increased from 1999 to 2004 among non-Hispanic white women (from 35.3% to 39.6%) and non-Hispanic white men (from 44.1% to 46.9%) (Table 1). Sunburn also was reported among racial/ethnic groups traditionally considered at lower risk for sunburn or skin cancer, such as Hispanic blacks (12.4% among men and 9.5% among women in 2004), Asians/Pacific Islanders (16.2% among men and 16.1% among women in 2004), and American Indians/Alaska Natives (30.4% among men and 21.5% among women in 2004). Non-Hispanic blacks had low prevalence of sunburn (5.8% among men and women in 2004) (Table 1).

Among adults who reported sunburn during the preceding year, 20.7% reported four or more sunburns (all survey years combined). Non-Hispanics whites and American Indians/Alaska Natives had the highest proportion of respondents with four or more sunburns during the preceding year (21.2% and 19.6%, respectively) (Table 2).

In 2004, a total of 20 states* reported a statistically significant increase in sunburn prevalence among whites, compared with 1999; four states (Indiana, Iowa, Kentucky, and Louisiana) reported a significant decrease in sunburn prevalence. The lowest reported sunburn prevalence among whites during any of the three survey years was 25.7% (Arizona, 1999), and the highest was 51.3% (Utah, 2003) (Table 3 and Figure).

**Reported by:** *M Saraiya, MD, Div of Cancer Prevention and Control; L Balluz, ScD, XJ Wen, MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion; DA Joseph, MD, EIS Officer, CDC.*

**Editorial Note:** For all three survey years, approximately one third of the U.S. adult population had at least one sunburn during the preceding year. Of those who had at least one sunburn during the preceding year, two thirds had more than one sunburn. These findings are consistent with previous similar analyses and suggest that a substantial segment of the adult population is not consistently practicing sun-protection behaviors *(3)*. CDC recommends the following sun-protection behaviors: wearing a wide-brimmed hat, covering up while in the sun, seeking shade, wearing wrap-around sunglasses, avoiding the sun during the hours of 10 a.m. to 4 p.m., and using sunscreen with a sun protection factor [SPF] of 15 or higher.†

Sunburn prevalence in racial/ethnic minority groups has not been well characterized previously. Skin-cancer prevention messages traditionally have been targeted toward white audiences because whites are at least 10 times more likely to

* Alaska, Arizona, Connecticut, Florida, Idaho, Kansas, Maine, Massachusetts, Minnesota, Montana, Nebraska, New Jersey, New York, North Dakota, Oklahoma, Pennsylvania, South Carolina, Tennessee, Vermont, and Washington.

† Additional information available at http://www.cdc.gov/cancer/skin/basic_info/howto.htm.

**TABLE 1. Estimated percentage of respondents aged ≥18 years who reported having had at least one sunburn during the preceding year, by sex and race/ethnicity — Behavioral Risk Factor Surveillance System, United States, 1999, 2003, and 2004***

| Characteristic | 1999 % | 1999 (95% CI†) | 2003 % | 2003 (95% CI) | 2004 % | 2004 (95% CI) |
|---|---|---|---|---|---|---|
| **Men** | | | | | | |
| White, non-Hispanic | 44.1 | (43.5–44.8) | 46.5§ | (45.9–47.1) | 46.9§ | (46.4–47.5) |
| White, Hispanic | 21.6 | (19.4–23.8) | 24.8 | (22.0–27.7) | 20.1 | (18.8–23.3) |
| Black, non-Hispanic | 5.3 | (4.3–6.4) | 4.6 | (3.7–5.6) | 5.8 | (4.7–7.0) |
| Black, Hispanic | 14.3 | (10.1–19.8) | 12.3 | (8.4–17.8) | 12.4 | (8.4–17.5) |
| Asian/Pacific Islander | 18.0 | (14.5–22.1) | 18.6 | (15.5–22.1) | 16.2 | (13.6–19.2) |
| American Indian/Alaska Native | 27.4 | (23.0–32.4) | 25.9 | (22.1–30.0) | 30.4 | (26.3–34.8) |
| **Total** | **35.8** | **(35.2–36.3)** | **37.0§** | **(36.5–37.6)** | **37.0§** | **(36.4–37.6)** |
| **Women** | | | | | | |
| White, non-Hispanic | 35.3 | (34.8–35.8) | 38.7§ | (38.3–39.2) | 39.6§ | (39.1–40.0) |
| White, Hispanic | 17.2 | (15.6–19.0) | 19.7 | (17.9–21.6) | 17.2 | (15.8–18.8) |
| Black, non-Hispanic | 5.1 | (4.5–5.9) | 5.7 | (5.1–6.4) | 5.8 | (5.2–6.5) |
| Black, Hispanic | 8.3 | (5.7–12.0) | 13.5 | (8.7–20.3) | 9.5 | (6.7–13.2) |
| Asian/Pacific Islander | 11.0 | (8.9–13.6) | 14.4 | (12.3–16.8) | 16.1 | (12.9–19.9) |
| American Indian/Alaska Native | 23.5 | (19.7–27.8) | 23.3 | (19.9–27.0) | 21.5 | (18.6–24.7) |
| **Total** | **28.0** | **(27.5–28.4)** | **30.3§** | **(29.9–30.7)** | **30.3§** | **(29.9–30.7)** |
| **Total** | **31.8** | **(31.4–32.2)** | **33.6§** | **(33.2–33.9)** | **33.7§** | **(33.4–34.1)** |

* Age adjusted to the 2000 U.S. standard population.
† Confidence interval.
§ Statistically significant difference compared with 1999. Differences were considered statistically significant if CIs did not overlap.

**TABLE 2. Estimated percentage of respondents aged ≥18 years who reported having had at least one sunburn during the preceding year, by number of sunburns and race/ethnicity — Behavioral Risk Factor Surveillance System, United States, 1999, 2003, and 2004 (all survey years combined)***

| | No. of sunburns | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | ≥4 | |
| Race/Ethnicity† | % | (95% CI§) | % | (95% CI) | % | (95% CI) | % | (95% CI) |
| White, non-Hispanic | 35.6 | (35.2–36.2) | 28.3 | (27.9–28.7) | 14.9 | (14.6–15.2) | 21.2 | (20.8–21.5) |
| White, Hispanic | 45.6 | (42.2–49.1) | 23.4 | (20.8–26.1) | 11.9 | (10.3–13.7) | 19.1 | (17.0–21.5) |
| Black, non-Hispanic | 50.4 | (46.4–54.4) | 25.5 | (21.5–28.0) | 11.8 | (9.7–14.3) | 12.3 | (10.3–14.6) |
| Asian/Pacific Islander | 53.3 | (48.1–58.5) | 22.1 | (18.6–25.9) | 9.1 | (7.2–11.4) | 15.5 | (12.0–19.8) |
| American Indian/Alaska Native | 44.2 | (39.8–48.6) | 22.5 | (19.2–26.1) | 13.8 | (10.9–17.4) | 19.6 | (16.7–22.9) |
| **Total** | **36.9** | **(36.5–37.4)** | **27.8** | **(27.4–28.1)** | **14.6** | **(14.3–14.8)** | **20.7** | **(20.4–21.1)** |

* Age adjusted to the 2000 U.S. standard population.
† Hispanic blacks excluded from analysis because of small sample size.
§ Confidence interval.

develop melanoma than racial/ethnic minorities, although racial/ethnic minority populations are more likely to have more advanced disease diagnosed and to have lower 5-year survival rates (*4,5*). However, the findings in this report indicate that substantial portions of the Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native populations acquired sunburns. Racial/ethnic groups with darker skin (higher melanin content) have a lower incidence of skin cancer, which is attributed, in part, to the inherent sun protection provided by melanin (*5*). However, race/ethnicity is a poor proxy for skin cancer risk because persons in racial/ethnic minority groups might have individual risk factors for skin cancer (e.g., lighter skin color; skin that burns, freckles, or reddens easily in the sun; or personal or family history of skin cancer) and might not benefit from the protective effects of melanin. In a study of adolescents aged 11–18 years, 21.7% of black respondents who reported having had a sunburn reported severe sunburn with blisters or peeling after 1 hour of exposure to sun during the summer (*6*).

The results of this analysis also indicated that men had a higher prevalence of sunburn than women in most of the racial/ethnic groups surveyed. This finding might be attributed to different sun-protection behaviors or different sun-exposure conditions between men and women, (e.g., differences in leisure or work activities). In addition, women might be more concerned about the cosmetic effect of long-term sun exposure (e.g., wrinkling of the skin and the appearance of age spots) and thus might be more likely to avoid sun exposure, use makeup with sunscreen, or practice sun-protection behaviors (*7*). In 2003, white men had a higher melanoma incidence and mortality than white women (22.7 versus 15.1 and 4.4 versus 2.0 per 100,000 population, respectively) (*1*).

None of the states with sunburn prevalence among whites greater than 45% were traditional "sunbelt" states. Persons living in the northern states might use fewer precautions during the first sunny days after winter or might travel to other locations where they acquire sunburns (*3*). Previous analyses have demonstrated that states with lower UV radiation (i.e., those in higher latitudes) have had more rapid increases in melanoma incidence than states with higher UV radiation (*8*).

The findings in this report are subject to at least six limitations. First, the BRFSS survey is a telephone survey, and results obtained might not be generalizable to U.S adults without landline telephones. Second, responses are self-reported and therefore subject to recall bias. Third, the BRFSS survey does not contain questions regarding skin type or sun-protection behaviors, so this information cannot be correlated to sunburns. Fourth, this analysis was a cross-sectional study, and individual sunburn patterns could not be followed over time. Fifth, the source of UV exposure (sun or artificial source) was not provided. Finally, the U.S. states in which respondents actually acquired their sunburns were unknown.

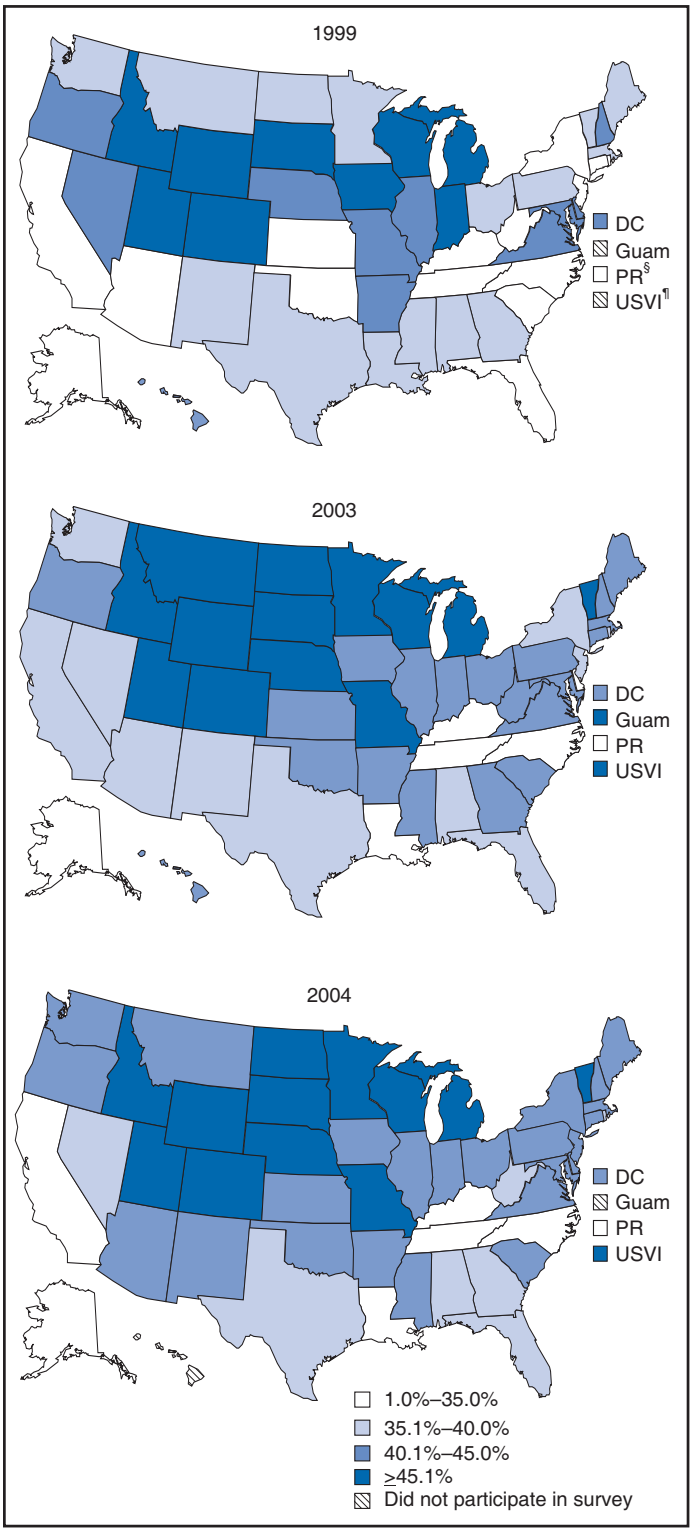
Sunburn prevalence among U.S. adults increased from 1999 to 2004. Several reasons might account for these increases. For example, the public might be receiving conflicting or confusing messages about what constitutes the best sun-protection behaviors. A review of 20 Internet sites about skin cancer prevention revealed inconsistent advice regarding a safe amount of sun exposure, times of day to avoid the sun, how many sunburns increase the risk for skin cancer, and the best types of clothing to use for sun protection (*9*). That review noted that only three recommendations were common to all 20 Internet sites: wearing broad-brimmed hats, wearing sunglasses, and using sunscreen with an SPF of 15 or higher (*9*). In addition, certain segments of the public might view the purported benefits of sun exposure (e.g., tanned skin or elevated mood) as outweighing the risk for skin cancer or might not be concerned about the risks of overexposure to the sun (*9*).

**TABLE 3. Estimated percentage of white* respondents aged ≥18 years who reported having had at least one sunburn during the preceding year, by state/area — Behavioral Risk Factor Surveillance System, United States, 1999, 2003, and 2004†**

| State/Area | 1999 | | 2003 | | 2004 | |
|---|---|---|---|---|---|---|
| | % | (95% CI§) | % | (95% CI) | % | (95% CI) |
| Alabama | 39.6 | (37.0–42.1) | 39.7 | (37.5–41.9) | 39.6 | (37.4–41.8) |
| Alaska | 27.8 | (24.7–30.9) | 32.6 | (29.6–35.5) | 34.1¶ | (31.1–37.0) |
| Arizona | 25.7 | (22.1–29.2) | 39.5¶ | (36.5–42.5) | 42.1¶ | (40.0–45.2) |
| Arkansas | 42.0 | (40.0–44.0) | 41.8 | (40.0–43.6) | 42.9 | (41.1–44.8) |
| California | 34.1 | (32.5–35.8) | 36.8 | (35.0–38.6) | 34.8 | (33.0–36.6) |
| Colorado | 45.8 | (43.4–48.1) | 46.6 | (44.9–48.4) | 45.1 | (43.3–46.8) |
| Connecticut | 33.3 | (30.1–35.6) | 40.7¶ | (39.1–42.3) | 43.1¶ | (41.4–44.7) |
| Delaware | 43.6 | (40.8–46.5) | 33.5¶ | (31.3–35.7) | 41.4 | (39.1–43.6) |
| District of Columbia | 42.8 | (37.5–48.1) | 41.3 | (38.1–44.5) | 40.1 | (37.4–42.8) |
| Florida | 33.4 | (31.7–35.1) | 36.8 | (34.4–39.2) | 37.7¶ | (35.7–39.6) |
| Georgia | 36.3 | (33.8–38.8) | 40.7¶ | (38.9–42.5) | 39.2 | (37.1–41.3) |
| Hawaii | 44.8 | (39.8–49.8) | 42.3 | (39.6–44.9) | —** | —** |
| Idaho | 45.4 | (43.8–46.9) | 49.3¶ | (47.7–50.9) | 48.5¶ | (47.0–50.1) |
| Illinois | 44.0 | (40.1–47.1) | 40.8 | (38.5–43.1) | 41.7 | (39.8–43.7) |
| Indiana | 48.1 | (44.8–51.4) | 44.9 | (43.4–46.4) | 43.3¶ | (41.8–44.6) |
| Iowa | 49.0 | (47.1–50.8) | 43.5¶ | (41.5–45.1) | 43.6¶ | (42.0–45.2) |
| Kansas | 34.2 | (32.5–35.9) | 41.3¶ | (39.6–43.0) | 41.4¶ | (40.2–42.6) |
| Kentucky | 30.7 | (29.2–32.2) | 28.0 | (26.3–29.7) | 27.0¶ | (25.2–28.8) |
| Louisiana | 35.2 | (32.3–38.1) | 31.0 | (29.2–32.7) | 30.5¶ | (29.1–31.9) |
| Maine | 37.0 | (34.3–39.5) | 42.8¶ | (40.6–44.9) | 42.6¶ | (40.6–44.5) |
| Maryland | 41.4 | (39.2–43.6) | 41.4 | (39.4–43.4) | 43.9 | (41.8–46.0) |
| Massachusetts | 35.2 | (33.4–36.9) | 41.0¶ | (39.5–42.6) | 42.6¶ | (41.1–44.2) |
| Michigan | 47.6 | (45.5–49.8) | 47.9 | (45.9–49.8) | 45.6 | (43.9–47.3) |
| Minnesota | 40.0 | (38.6–41.4) | 49.2¶ | (47.5–50.9) | 48.7¶ | (46.9–50.4) |
| Mississippi | 39.9 | (37.4–42.4) | 42.4 | (40.4–44.3) | 40.5 | (38.6–42.4) |
| Missouri | 42.9 | (40.8–45.0) | 45.9 | (43.7–48.1) | 45.2 | (43.2–47.2) |
| Montana | 38.8 | (36.3–41.2) | 47.6¶ | (45.4–48.1) | 44.1¶ | (42.2–45.9) |
| Nebraska | 43.1 | (41.1–45.1) | 46.3 | (44.7–47.8) | 46.9¶ | (45.5–48.3) |
| Nevada | 40.9 | (37.8–44.1) | 39.2 | (36.6–41.2) | 38.3 | (35.4–41.4) |
| New Hampshire | 41.7 | (38.8–44.6) | 42.8 | (41.2–44.4) | 43.8 | (42.2–45.5) |
| New Jersey | 32.8 | (30.5–35.1) | 39.0¶ | (37.8–40.3) | 40.2¶ | (38.9–41.5) |
| New Mexico | 38.6 | (36.6–40.7) | 38.8 | (37.0–40.6) | 41.3 | (39.6–43.0) |
| New York | 30.3 | (28.1–32.5) | 39.7¶ | (38.0–41.4) | 40.2¶ | (38.5–42.0) |
| North Carolina | 30.9 | (28.5–33.4) | 28.1 | (26.4–29.8) | 28.1 | (27.0–29.3) |
| North Dakota | 38.3 | (36.0–40.6) | 45.6¶ | (43.6–47.6) | 46.4¶ | (44.5–48.3) |
| Ohio | 39.1 | (36.1–42.1) | 42.4 | (40.3–44.5) | 43.4 | (41.0–45.9) |
| Oklahoma | 30.2 | (28.2–32.3) | 41.9¶ | (40.4–43.3) | 41.5¶ | (40.0–43.0) |
| Oregon | 41.3 | (38.7–43.8) | 42.1 | (40.3–43.9) | 43.6 | (41.9–45.2) |
| Pennsylvania | 36.5 | (34.8–38.4) | 43.8¶ | (41.9–45.7) | 42.7¶ | (41.1–44.2) |
| Rhode Island | 35.0 | (33.4–36.8) | 38.5 | (36.6–40.5) | 38.7 | (36.7–40.7) |
| South Carolina | 32.7 | (30.7–34.7) | 42.8¶ | (41.2–44.4) | 41.6¶ | (40.1–43.2) |
| South Dakota | 45.9 | (44.2–47.5) | 47.2 | (45.7–48.8) | 46.1 | (44.6–47.7) |
| Tennessee | 26.6 | (24.7–28.5) | 30.7 | (28.4–33.0) | 32.6¶ | (30.4–34.7) |
| Texas | 36.6 | (34.8–38.3) | 38.1 | (36.6–39.7) | 37.7 | (36.0–39.3) |
| Utah | 46.1 | (43.9–48.3) | 51.3¶ | (49.3–53.1) | 49.9 | (48.3–51.5) |
| Vermont | 39.1 | (37.3–40.9) | 45.7¶ | (44.0–47.4) | 47.1¶ | (45.8–48.5) |
| Virginia | 40.5 | (37.8–43.2) | 41.5 | (39.5–43.4) | 42.9 | (40.8–44.9) |
| Washington | 39.6 | (37.6–41.6) | 38.3 | (37.3–39.2) | 43.6¶ | (42.7–44.6) |
| West Virginia | 34.8 | (32.8–36.8) | 41.5¶ | (39.5–43.4) | 38.0 | (36.1–40.0) |
| Wisconsin | 51.4 | (49.1–53.7) | 49.3 | (47.5–51.2) | 48.6 | (46.9–50.4) |
| Wyoming | 48.4 | (46.4–50.5) | 49.5 | (47.8–51.2) | 48.3 | (46.6–50.0) |
| Guam | —** | —** | 50.6 | (41.3–59.8) | —** | —** |
| Puerto Rico | 12.8 | (11.2–14.7) | 11.8 | (10.0–13.6) | 14.2 | (12.4–16.0) |
| U.S. Virgin Islands | —** | —** | 46.5 | (38.1–54.8) | 50.1 | (45.0–55.3) |
| **United States** | **37.0** | **(36.5–37.4)** | **40.0¶** | **(39.6–40.4)** | **39.9¶** | **(39.5–40.3)** |

* Includes Hispanic whites.
† Age adjusted to the 2000 U.S. standard population.
§ Confidence interval.
¶ Statistically significant difference compared with 1999. Differences were considered statistically significant if CIs did not overlap.
** Did not participate in survey.

**FIGURE. Estimated percentage of white* respondents aged ≥18 years who reported having had at least one sunburn during the preceding year, by state/area — Behavioral Risk Factor Surveillance System, 1999, 2003, and 2004†**




* Includes Hispanic whites.
† Age adjusted to the 2000 U.S. standard population.
§ Puerto Rico.
¶ U.S. Virgin Islands.

Further research is needed to determine which public health interventions will improve sun-protection behaviors. The *Guide to Community Preventive Services* review of interventions to prevent skin cancer found sufficient evidence to warrant recommending educational and policy interventions for children in primary schools and for adults in recreational and tourism settings. However, evidence to warrant recommending other interventions, such as mass media campaigns and interventions in secondary schools, was insufficient (*10*). Future research on interventions to improve sun-protection behaviors should assess 1) the incorporation of messages that emphasize that sun-protection behaviors are readily implemented, and 2) the standardization of messages to eliminate confusing or conflicting advice. Public health messages specific to various racial/ethnic groups, certain subgroups (e.g., persons with lighter skin and men), and other populations at high risk (e.g., those with a personal or family history of skin cancer) need to be developed to emphasize that these populations also are susceptible to the harmful effects of the sun. Greater knowledge of interventions that will increase the proportion of persons who practice sun-protection behaviors is important for reducing sunburn prevalence and ultimately reducing skin cancer incidence and mortality. Continued surveillance of sunburn prevalence is necessary for evaluating the effectiveness of both current and new interventions.

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# Characteristics and Health of Caregivers and Care Recipients — North Carolina, 2005

Approximately 53.4 million caregivers in the United States provide an estimated $257–$389 billion worth of unpaid care annually to persons of all ages with disabilities and chronic illness (*1*,*2*). The health of caregivers and their ability to continue their contributions have emerged as public health concerns (*3*). A 2004 study indicated that those persons who provided the most intense caregiving reported substantially poorer health than noncaregivers or those with modest caregiving responsibilities (*2*). A *Healthy People 2010* objective calls for public health surveillance and health promotion programs for persons with disabilities and caregivers in every state and the District of Columbia (objective 6-13) (*4*). Although limited caregiver surveys have provided data at the national level, data have not been available at the state level to characterize the health of caregivers or health effects of caregiving. Such information could be useful to states for planning and policy decisions and the development and implementation of interventions to promote caregivers' health. To analyze the characteristics and health of caregivers and care recipients and to assess the effects of caregiving, data were analyzed from a caregiver module that was piloted in North Carolina in the 2005 Behavioral Risk Factor Surveillance System (BRFSS) survey. This report summarizes the results of that analysis, which determined that caregivers provided an average of 20.1 hours of care per week, and 72.2% of caregivers lived in the same household as (24.9%) or within 20 minutes of (47.3%) the care recipient. Caregivers were more likely to be women (59.5%) than men and averaged more days when their mental health was not good when compared with noncaregivers (4.3 days versus 3.0 days, of the preceding 30 days). Public health initiatives should be designed to promote the health and well-being of both care recipients and caregivers.

BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized, U.S. civilian population aged ≥18 years. Questions related to caregiving were administered as part of the national BRFSS core survey (i.e., the survey questions administered in all states) in 2000 (*5*) but were not repeated. To improve caregiver surveillance, CDC provided funds to the University of Florida in 2004 to develop a caregiver module to collect data on the characteristics and health of caregivers. Module development was based on previous research (*2*) and influenced by key national stakeholders convened by AARP (formerly known as the American Association of Retired Persons) in February 2005. North Carolina was selected as the site for piloting the module because of the state's large BRFSS sample size and administrative capacity.

The following caregiver screening question was administered in the North Carolina 2005 BRFSS survey: "People may provide regular care or assistance to someone who has a long-term illness or disability. During the past month, did you provide any such care or assistance to a family member or friend?" Persons who responded "yes" to the question were classified as caregivers and completed the caregiver module by responding to questions about themselves and their primary care recipient. If the caregiver had more than one care recipient, the caregiver was asked to answer module questions in reference to the recipient who required the most care. Questions in the caregiver module related to the age and sex of the care recipient; relationship of the care recipient to the caregiver (e.g., parent, spouse, or child); care recipient's major diagnosis (e.g., heart disease, cancer, stroke, or diabetes); care recipient's functional limitations (e.g., moving around or self-care) as defined by the *International Classification of Functioning, Disability, and Health* (*6*); duration of caregiving; hours per week of caregiving; difficulties for the caregiver that were created by caregiving (e.g., stress, lack of time, and health problems); and travel time to reach the care recipient. Comparisons were tested using *t* tests for differences in means of continuous variables and chi-square or chi-square for trend tests among categorical variables.

Among the 5,859 survey respondents interviewed during May–August 2005, a total of 895 (weighted prevalence: 15.5%; 95% confidence interval [CI] = 14.2%–16.9%) indicated they were caregivers. A greater percentage of caregivers (59.5%) were women than men (40.5%) (Table 1). A greater percentage of caregivers (21.2%) than noncaregivers (15.8%) were non-Hispanic blacks, but a smaller percentage of caregivers (2.3%) than noncaregivers (10.3%) were Hispanic (Table 1). On average, caregivers reported more days (4.3 days out of 30 days) that their mental health was not good than noncaregivers (3.0 days), although the number of days that physical health was reported not good was similar for caregivers (3.2 days) and noncaregivers (3.5 days).

Most care recipients (67.2%) were female and older than the general population; 64.3% of care recipients were aged ≥65 years, and 82.8% were cared for by a relative (Table 2). The major diagnoses of care recipients specified by caregivers were heart disease (12.8%), cancer (11.7%), stroke (9.1%), diabetes (9.0%), dementia (8.8%), arthritis/rheumatism (5.1%), lung disease/emphysema (3.0%), cerebral palsy (2.6%), and hypertension (2.4%). When asked to identify the functional limitations of their care recipients that required the most help, caregivers named moving around (41.7%); self-care (e.g., eating, dressing, bathing, and toileting) (41.0%); learning, memory, and confusion (17.0%); and anxiety or depression (16.4%) (Table 2). On average, caregivers had pro-

**TABLE 1. Characteristics of caregivers compared with noncaregivers* — Behavioral Risk Factor Surveillance System, North Carolina, 2005**

| Characteristic | Caregiver (n = 895) % | Caregiver (n = 895) (95% CI†) | Noncaregiver (n = 4,964) % | Noncaregiver (n = 4,964) (95% CI) |
|---|---|---|---|---|
| **Age group (yrs)** | | | | |
| 18–34 | 26.9 | (21.8–32.8) | 32.1 | (29.7–33.9) |
| 35–44 | 19.3 | (16.2–22.9) | 21.0 | (19.6–22.6) |
| 45–54 | 21.4 | (18.2–24.9) | 17.0 | (15.7–18.4) |
| 55–64 | 17.4 | (14.7–20.6) | 13.1 | (12.4–14.5) |
| ≥65 | 15.0 | (12.5–17.8) | 16.7 | (15.6–17.9) |
| **Race/Ethnicity** | | | | |
| White, non-Hispanic | 71.5 | (66.1–76.3) | 69.6 | (68.4–72.2) |
| Black, non-Hispanic§ | 21.2 | (16.6–26.6) | 15.8 | (13.8–16.4) |
| Other, non-Hispanic | 5.0 | (3.1–8.0) | 4.2 | ( 3.5–5.0) |
| Hispanic§ | 2.3 | (1.4–3.9) | 10.3 | (8.9–12.2) |
| **Sex** | | | | |
| Men | 40.5 | (35.6–45.7) | 48.8 | (45.8–50.7) |
| Women§ | 59.5 | (54.3–64.4) | 51.1 | (49.3–53.2) |
| **Marital status** | | | | |
| Married/Coupled | 64.8 | (59.6–69.7) | 63.9 | (62.4–66.2) |
| Divorced/Separated | 11.2 | (9.2–13.6) | 11.7 | (10.6–12.6) |
| Widowed | 5.1 | (3.8–6.9) | 7.1 | (6.4–7.8) |
| Never married | 18.8 | (14.0–24.8) | 17.3 | (15.3–19.0) |
| **Education¶** | | | | |
| No formal/Eighth grade or less | 2.9 | (1.6–5.2) | 7.4 | (6.2–8.7) |
| Some high school | 9.9 | (6.2–15.5) | 10.4 | (9.1–11.6) |
| High school graduate | 28.3 | (24.4–32.6) | 29.3 | (27.4–31.0) |
| Beyond high school | 58.8 | (53.8–63.7) | 52.9 | (51.2–55.1) |
| **Annual income** | | | | |
| <$25,000 | 30.3 | (26.0–35.0) | 34.0 | (31.8–36.0) |
| $25,000–$34,999 | 17.4 | (14.0–21.4) | 14.0 | (12.6–15.5) |
| $35,000–$49,999 | 16.3 | (11.8–22.1) | 15.0 | (13.8–16.5) |
| $50,000–$74,999 | 15.9 | (13.0–19.4) | 16.1 | (14.8–17.7) |
| ≥$75,000 | 20.1 | (16.7–24.0) | 21.0 | (19.2–22.5) |

* Percentages are weighted according to state population estimates; groupings do not all add to 100.0% because of rounding.
† Confidence interval.
§ Significant difference between caregivers and noncaregivers by chi-square test; p<0.05.
¶ Significant difference between caregivers and noncaregivers across categories of education (rather than between education levels); p<0.05.

vided care for 42.5 months, with 26.4% providing care for >5 years (Table 3). Although caregivers averaged 20.1 hours per week of care, 13.6% provided ≥40 hours per week. When asked to name the one or two greatest difficulties they experienced from caregiving, 29.9% of caregivers cited stress, 27.9% cited not enough time for themselves or their families, and 12.0% indicated that caregiving had created a financial burden (Table 3). In addition, 3.5% of caregivers said caregiving created or aggravated health problems. In response to a separate question, 3.7% (CI = 2.5%–5.4%) reported sustaining an injury while caregiving. Nearly half (47.3%) of caregivers lived within 20 minutes of the care recipient; 24.9% resided in the same household (Table 3).

**TABLE 2. Characteristics of care recipients* — Behavioral Risk Factor Surveillance System, North Carolina, 2005**

| Characteristic | Care recipients (n = 895) % | Care recipients (n = 895) (95% CI†) |
|---|---|---|
| **Age group (yrs)** | | |
| 0–5 | 1.6 | (0.7–3.8) |
| 6–17 | 5.5 | (3.6–8.3) |
| 18–29 | 3.1 | (1.8–5.3) |
| 30–49 | 10.5 | (7.9–13.9) |
| 50–64 | 15.1 | (12.4–18.2) |
| 65–74 | 19.2 | (15.9–22.9) |
| 75–84 | 25.5 | (22.0–29.3) |
| ≥85 | 19.6 | (15.2–24.8) |
| **Sex** | | |
| Male | 32.8 | (28.7–37.3) |
| Female | 67.2 | (62.7–71.3) |
| **Relationship to caregiver** | | |
| Relative other than spouse | 72.0 | (66.9–76.6) |
| Nonrelative | 16.0 | (11.8–21.4) |
| Spouse | 10.8 | (8.6–13.5) |
| Paid caregiver | 1.2 | (0.6–2.4) |
| **Major diagnosis** | | |
| Heart disease | 12.8 | (10.3–15.8) |
| Cancer | 11.7 | (9.3–14.6) |
| Stroke | 9.1 | (6.8–12.0) |
| Diabetes | 9.0 | (6.5–12.4) |
| Dementia | 8.8 | (6.5–11.7) |
| Arthritis/Rheumatism | 5.1 | (3.6–7.3) |
| Lung disease/Emphysema | 3.0 | (1.8–4.9) |
| Cerebral palsy | 2.6 | (1.2–5.3) |
| Hypertension | 2.4 | (1.3–4.5) |
| Other disease or condition | 35.5 | (31.4–39.9) |

* Percentages are weighted according to state population estimates; groupings do not all add to 100.0% because of rounding.
† Confidence interval.

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**Editorial Note:** These findings from the piloting of the BRFSS caregiver module reveal that an estimated 15.5% of adults in North Carolina were caregivers in 2005, compared with an estimated 21% of adults nationally, according to a study published in 2004 (*2*). In North Carolina, caregivers were more likely to be women than men, and one fourth of caregivers had been providing care for >5 years. Care recipients were most likely to be aged ≥65 years, and more than half had a major diagnosis of a chronic disabling condition, such as heart disease, cancer, stroke, diabetes, and dementia.

Recent data on the prevalence of disability indicated that variations occur from state to state (from 11% to 26% of the population) and persons with disabilities are likely to report overall poorer health (*9*). The extent to which the prevalence of caregiving mirrors these variations in disability is unknown and represents an area for future research.

**TABLE 3. Characteristics of caregivers* — Behavioral Risk Factor Surveillance System, North Carolina, 2005**

| Characteristic | Caregiver (n = 895) % | (95% CI†) |
|---|---|---|
| **Duration of caregiving** | | |
| ≤3 mos | 22.1 | (18.5–26.3) |
| 4–12 mos | 22.0 | (18.6–25.8) |
| 13–24 mos | 17.6 | (13.0–23.5) |
| 25 mos–5 yrs | 11.8 | (9.4–14.8) |
| >5 yrs | 26.4 | (22.7–30.4) |
| **Amount of caregiving (hrs per week)** | | |
| ≤8 | 52.1 | (47.1–57.2) |
| 9–19 | 18.1 | (14.8–22.0) |
| 20–39 | 16.1 | (13.0–19.8) |
| ≥40 | 13.6 | (10.9–16.9) |
| **Greatest difficulties resulting from caregiving§** | | |
| Creates stress | 29.9 | (26.1–34.0) |
| Not enough time for self or family | 27.9 | (22.4–34.7) |
| Financial burden | 12.0 | (9.7–14.9) |
| Interferes with work | 6.9 | (4.9–9.7) |
| Affects family relationships | 5.6 | (4.1–7.6) |
| Causes or aggravates health problems | 3.5 | (2.4–5.0) |
| Creates other difficulties | 4.0 | (2.5–6.2) |
| **Functional limitations for which caregiver provides the most help¶** | | |
| Moving around | 41.7 | (37.2–46.3) |
| Self-care (e.g., eating, dressing, bathing, and toileting) | 41.0 | (36.2–45.9) |
| Learning, remembering, and confusion | 17.0 | (14.0–20.4) |
| Feeling anxious or depressed | 16.4 | (13.6–19.6) |
| Communicating with others | 8.7 | (6.8–11.1) |
| Seeing or hearing | 7.0 | (5.2–9.4) |
| Getting along with others | 6.1 | (4.4–8.5) |
| **Travel time to care recipient** | | |
| Same house | 24.9 | (21.2–29.0) |
| <20 min | 47.3 | (42.5–52.1) |
| 20–59 min | 18.4 | (13.9–23.9) |
| 1–2 hrs | 2.9 | (1.9–4.3) |
| >2 hrs | 6.6 | (4.9–8.9) |

* Percentages are weighted according to state population estimates; groupings do not all add to 100.0% because of rounding.
† Confidence interval.
§ Respondents were asked to name one or two.
¶ Respondents were asked to name the top one or two activity limitations of the care recipient as defined by the World Health Organization's *International Classification of Functioning, Disability, and Health*. Available at http://www.who.int/classifications/icf/en (*6*).

The intensity and duration of caregiving has the potential to affect overall health among caregivers (*7,8*). Programs should be developed to address both the physical and mental health needs of caregivers and to relieve some of the difficulties they report (e.g., not enough time for self or family and financial burdens). Because 29.9% of caregivers indicate that stress, which can precipitate long-term physical or mental health problems, is one of the greatest difficulties resulting from caregiving, policies and preventive support should remove or mediate stressors. Also, given that 3.7% of caregivers report injuries, training and materials should be considered to prevent these injuries. In addition, because BRFSS data are collected only from adults aged ≥18 years, they do not reflect younger caregivers; alternative forms of national and state assessment should be developed to analyze the health needs and caregiving patterns for populations aged <18 years.

The caregiver module should be implemented in additional states to create national and state profiles of caregiving and caregiver health effects. By adopting the caregiver module, state officials, including policy makers and program planners in services for aging populations, children and youths, and persons with disabilities, will be able to develop and monitor data-driven state plans to support caregivers and care recipients.

The findings in this report are subject to at least five limitations. First, BRFSS is a telephone-based survey and excludes households without landline telephones or with cellular telephones only. Second, data are self-reported and subject to recall bias; therefore, prevalence estimates might be underestimated or overestimated. Third, no question specifically asked whether caregivers were paid or unpaid; the 1.2% of caregivers recorded as paid represents only those who provided that information without being asked, and therefore likely underestimate the proportion of caregivers who were paid. Further research might determine whether differences exist in the characteristics of paid and unpaid caregivers and the implications of these differences. Fourth, assessment of the greatest difficulties resulting from caregiving was asked only of caregivers, and no comparison can be made between caregivers and noncaregivers with regard to these difficulties (e.g., stress and not enough time for self or family). Finally, information on the relationship between the caregiver and the care recipient was limited (i.e., spouse, relative other than spouse, nonrelative, and paid). Future surveys will more fully describe this relationship (e.g., parent, sibling, or child).

The data presented in this report are the first CDC-sponsored state-level data to assess the characteristics and health of caregivers and care recipients and their caregiving situations. CDC plans to support further testing to develop an optional BRFSS caregiver module for adoption by more states in 2009. Participation by all states would enable CDC to report caregiver health status, using population-based data, for the first time nationally and by state. Additionally, states would have the surveillance results needed to create benchmarks, document and prioritize caregiver needs among their residents, and plan interventions to address those needs.

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## *Acanthamoeba* Keratitis — Multiple States, 2005–2007

*On May 26, 2007, this report was posted as an* MMWR Dispatch *on the* MMWR *website* (http://www.cdc.gov/mmwr).

In May 2006, the Illinois Department of Public Health (IDPH) informed CDC about a possible increase in *Acanthamoeba* keratitis (AK) at an ophthalmology center in Illinois during the preceding 3 years. The University of Illinois at Chicago (UIC) was investigating this possible increase. In October 2006, IDPH updated CDC about the ongoing UIC investigation. At that time, CDC informally contacted multiple ophthalmology centers in the United States to assess whether the potential increase in cases extended beyond Illinois. Responses from the ophthalmology centers were inconclusive. In January 2007, CDC initiated a retrospective survey of 22 ophthalmology centers nationwide to assess whether cases were increasing throughout the United States. In March 2007, data received from 13 centers demonstrated an increase in culture-confirmed cases of AK with wide geographic distribution. The increase in cases had begun in 2004 and continued to the present. On March 16, 2007, CDC initiated a multistate investigation to look for risk factors associated with this increase in AK cases. This report summarizes recent preliminary results of that investigation, which, indicated an association with AK in soft contact lens wearers who used Advanced Medical Optics (Santa Ana, California) Complete® MoisturePlus™ (AMOCMP) multipurpose cleaning solution. CDC and the Food and Drug Administration (FDA) are taking steps to notify the public and the medical and public health communities of this preliminary association. The manufacturer has undertaken a voluntary recall of the product.

AK, a rare but potentially blinding infection of the cornea, is caused by a ubiquitous, free-living ameba (*Acanthamoeba*) that is found commonly in the environment, including water (e.g., tap and recreational water), soil, sewage systems, cooling towers, and heating/ventilation/air conditioning (HVAC) systems. AK primarily affects otherwise healthy persons who wear contact lenses; an estimated 85% of U.S. cases occur in contact lens wearers (including wearers who follow recommended contact lens-care practices) (*1*). Persons who improperly store, handle, or disinfect their lenses (e.g., by using tap water or homemade solutions for cleaning); swim, use hot tubs, or shower while wearing lenses; come in contact with contaminated water; have minor damage to their corneas; or have previous corneal trauma are at increased risk for infection (*2*). Based on an analysis of cases reported to CDC during 1985–1987, the incidence of AK in the United States has been estimated at one to two cases per million contact lens users (*3,4*). An estimated 30 million persons in the United States wear soft contact lenses (*5*).

Initial case finding for this investigation was facilitated through postings on the *Epidemic Information Exchange* (*Epi-X*), on ophthalmology/optometry/infection control listservs and websites, and through queries of clinical microbiology laboratories. As of May 24, 2007, a total of 138 patients with onset of symptoms on or after January 1, 2005, and positive *Acanthamoeba* cultures from corneal specimens had been reported to CDC by public health authorities and ophthalmologists from 35 states and Puerto Rico. Standardized telephone interviews of patients, ophthalmologists, and primary eye-care providers are being conducted by state and local health officials and CDC. Laboratory testing of clinical specimens, contact lenses, bottles of solution, and contact lens cases received from AK patients, including typing of *Acanthamoeba* spp. isolates, is ongoing. An initial analysis was conducted using data from the first 46 completed patient interviews.

Among the 46 culture-confirmed patients who were interviewed, the median age was 40 years (range: 15–77 years); six (13%) were aged <18 years. Twenty-seven (59%) were female. Of the 37 of these patients for whom clinical data were available, medical therapy was unsuccessful for nine (24%), and they were required or expected to undergo corneal transplantation. Of the 46 patients, 39 (85%) wore soft contact lenses, three (7%) wore rigid lenses, and four (9%) reported no con-

tact lens use. Among the 42 contact lens users, 16 (38%) reported swimming while wearing contact lenses and 35 (83%) reported showering while wearing contact lenses during the month before symptom onset.

Among the 39 soft contact lens users, 36 reported using one or more specific types of contact lens solution, 21 of these (58%) reported any use of AMOCMP in the month before symptom onset, 20 (56%) reported using AMOCMP as their primary solution, and 14 (39%) reported using AMOCMP as their exclusive solution. Exposure data from the 36 patients who wore soft contact lenses and used any type of contact lens solution were compared with exposure data from controls who were interviewed as part of the 2006 CDC *Fusarium* keratitis outbreak investigation (*6*). These controls, who were selected as geographically matched controls for the *Fusarium* keratitis cases, represented a sample of adult soft contact lens wearers from different U.S. states who were asked about product use and behaviors during March 2006 (*6*).

The 14 AK soft contact lens–wearing case-patients with symptom onset dates before April 1, 2006 (the period most comparable to *Fusarium* controls), who reported use of a single solution were compared with 115 controls from the *Fusarium* investigation who reported using a single solution. The results indicated that four (29%) of the 14 AK case-patients had used AMOCMP, compared with six (5%) of the 115 *Fusarium* controls (odds ratio: 7.3 [95% confidence interval (CI) = 1.7–30.1]). In a separate comparison, 36 soft contact lens–wearing AK case-patients with symptom onset dates before May 24, 2007, who reported use of one or more solutions were compared with 124 *Fusarium* controls who reported using one or more solutions. The results indicated that 21 (58%) of the 36 AK case-patients had used AMOCMP, compared with eight (6%) of the 124 *Fusarium* controls (odds ratio: 20.3; [CI = 7.6–53.9]). AMOCMP lot numbers were available for 10 patients who reported using the solution; no single lot number was repeated, suggesting that AMOCMP was not intrinsically contaminated. Analysis of the reported use of other brands of contact lens solution did not reveal any statistically significant associations.

The AK investigation by CDC, state and local health departments, FDA, and other partners, is continuing, and interviews of the remaining patients with culture-confirmed AK, their treating ophthalmologists, and their primary eye-care providers are ongoing. Although the results of initial analyses are preliminary, they suggest that use of AMOCMP increases the risk for AK. Additional studies will provide a more definitive assessment of the risk associated with use of AMOCMP. However, based on the preliminary findings, persons who wear soft contact lenses and who use AMOCMP should 1) stop using the product immediately and discard all remaining solution, including partially used or unopened bottles; 2) choose an alternative contact lens solution; 3) discard current lens storage container; 4) discard their current pair of soft lenses; 5) see a health-care provider if they experience any signs of eye infection, including eye pain or redness, blurred vision, sensitivity to light, sensation of something in the eye, or excessive tearing.

Contact lens users with questions regarding which solutions are best for them should consult their eye-care provider. Patients should also consult their eye-care provider if they have any of the following symptoms: eye pain or redness, blurred vision, sensitivity to light, sensation of something in the eye, and/or excessive tearing. AK symptoms, which can last several weeks to months, vary among patients. Early in the infection, symptoms can be similar to the symptoms of other more common eye infections; however, AK can result in vision loss or blindness if untreated.

All contact lens wearers should follow established guidelines to help reduce the risk for eye infections, including AK (Box). Primary-care clinicians evaluating contact lens users with symptoms of eye pain or redness, tearing, decreased visual acuity, discharge, sensitivity to light, or foreign body sensation should consider the diagnosis of AK and refer

**BOX. Guidelines for contact lens users to help reduce their risk for eye infections**

- Visit your eye-care provider for regular eye examinations.
- Wear and replace contact lenses according to the schedule prescribed by your eye-care provider.
- Remove contact lenses before any activity involving contact with water, including showering, using a hot tub, or swimming.
- Wash hands with soap and water and dry before handling contact lenses.
- Clean contact lenses according to the manufacturer's guidelines and instructions from your eye-care provider.
  - — Use fresh cleaning or disinfecting solution each time lenses are cleaned and stored. Never reuse or top off old solution.
  - — Never use saline solution and rewetting drops to disinfect lenses. Neither solution is an effective or approved disinfectant.
- Store reusable lenses in the proper storage case.
  - — Rinse storage cases with sterile contact lens solution (never use tap water) and leave open to dry after each use.
  - — Replace storage cases at least once every 3 months.

patients to an ophthalmologist, if appropriate. Diagnosis of AK requires a high degree of suspicion, especially in a contact lens wearer with a recent diagnosis of another form of keratitis, such as herpes simplex virus keratitis, who is not responding to therapy. Diagnosis of AK is based on clinical presentation and isolation of organisms from corneal culture or detection of trophozoites and/or cysts on histopathology. However, a negative culture does not necessarily rule out *Acanthamoeba* infection. Confocal microscopy and polymerase chain reaction assays to detect *Acanthamoeba* can also assist with diagnosis. Early diagnosis can greatly improve treatment efficacy.

Clinicians should consider obtaining clinical specimens (e.g., corneal scrapings) for culture before initiating treatment. Clinicians or microbiology laboratories should report cases of AK to state and local health departments or directly to CDC at telephone, 770-488-7775. *Acanthamoeba* isolates should be submitted to state laboratories according to instructions provided by local and state public health laboratories. Public inquiries should be made via telephone 800-CDC-INFO. Further information regarding *Acanthamoeba* infections is available at http://www.cdc.gov/ncidod/dpd/parasites/acanthamoeba/index.htm

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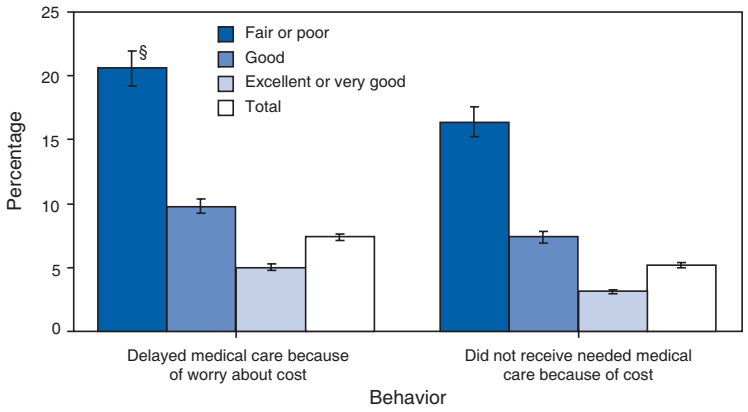
# QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

## Estimated Percentage* of Persons Who Delayed or Did Not Receive Medical Care During the Preceding Year Because of Cost, by Respondent-Assessed Health Status† — National Health Interview Survey, United States, 2005




* Estimates are age adjusted using the 2000 projected U.S. population as the standard population and using five age groups: 0–11 years, 12–17 years, 18–44 years, 45–64 years, and ≥65 years. Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. population.

† Based on responses to the following questions: "During the past 12 months, has [person] delayed seeking medical care because of worry about the cost?" and "During the past 12 months was there any time when [person] needed medical care but did not get it because [person] could not afford it?" Both questions exclude dental care. Respondents were asked to answer regarding themselves and other family members living in the same household. Health status data were obtained by asking respondents to assess their own health and that of family members living in the same household as excellent, very good, good, fair, or poor.

§ 95% confidence interval.

In 2005, approximately 7% of persons (21.7 million) delayed medical care during the preceding year because of worry about the cost, and another 5% (15.2 million) did not receive needed medical care because they could not afford it. Persons whose health was assessed as fair or poor were four to five times as likely as persons whose health was assessed as excellent or very good to delay or not receive needed medical care because of cost.

**SOURCE:** Adams PF, Dey, AN, Vickerie JL. Summary health statistics for the U.S. population: National Health Inteview Survey, 2005. Vital Health Stat 2007;10(233). Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_233.pdf.

**TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending May 26, 2007 (21st Week)***

| Disease | Current week | Cum 2007 | 5-year weekly average† | Total cases reported for previous years 2006 | 2005 | 2004 | 2003 | 2002 | States reporting cases during current week (No.) |
|---|---|---|---|---|---|---|---|---|---|
| Anthrax | — | — | — | 1 | — | — | — | 2 | |
| Botulism: | | | | | | | | | |
| foodborne | — | 2 | 0 | 20 | 19 | 16 | 20 | 28 | |
| infant | 1 | 28 | 2 | 98 | 85 | 87 | 76 | 69 | PA (1) |
| other (wound & unspecified) | 2 | 7 | 0 | 47 | 31 | 30 | 33 | 21 | WA (1), CA (1) |
| Brucellosis | 1 | 47 | 2 | 118 | 120 | 114 | 104 | 125 | CA (1) |
| Chancroid | — | 10 | 1 | 33 | 17 | 30 | 54 | 67 | |
| Cholera | — | — | 0 | 8 | 8 | 5 | 2 | 2 | |
| Cyclosporiasis§ | 1 | 24 | 17 | 136 | 543 | 171 | 75 | 156 | MI (1) |
| Diphtheria | — | — | — | — | — | — | 1 | 1 | |
| Domestic arboviral diseases§,¶: | | | | | | | | | |
| California serogroup | — | — | 0 | 63 | 80 | 112 | 108 | 164 | |
| eastern equine | — | — | 0 | 7 | 21 | 6 | 14 | 10 | |
| Powassan | — | — | — | 1 | 1 | 1 | — | 1 | |
| St. Louis | — | — | 0 | 9 | 13 | 12 | 41 | 28 | |
| western equine | — | — | — | — | — | — | — | — | |
| Ehrlichiosis§: | | | | | | | | | |
| human granulocytic | 4 | 25 | 9 | 689 | 786 | 537 | 362 | 511 | MN (4) |
| human monocytic | 2 | 53 | 5 | 556 | 506 | 338 | 321 | 216 | NC (2) |
| human (other & unspecified) | — | 19 | 2 | 238 | 112 | 59 | 44 | 23 | |
| *Haemophilus influenzae*,** | | | | | | | | | |
| invasive disease (age <5 yrs): | | | | | | | | | |
| serotype b | — | 5 | 1 | 24 | 9 | 19 | 32 | 34 | |
| nonserotype b | — | 33 | 2 | 140 | 135 | 135 | 117 | 144 | |
| unknown serotype | 5 | 106 | 4 | 218 | 217 | 177 | 227 | 153 | GA (2), CO (1), UT (1), AK (1) |
| Hansen disease§ | — | 19 | 2 | 67 | 87 | 105 | 95 | 96 | |
| Hantavirus pulmonary syndrome§ | — | 6 | 1 | 37 | 26 | 24 | 26 | 19 | |
| Hemolytic uremic syndrome, postdiarrheal§ | 1 | 37 | 4 | 284 | 221 | 200 | 178 | 216 | CA (1) |
| Hepatitis C viral, acute | 4 | 248 | 20 | 806 | 652 | 713 | 1,102 | 1,835 | MN (1), UT (1), WA (1), CA (1) |
| HIV infection, pediatric (age <13 yrs)†† | — | — | 4 | 52 | 380 | 436 | 504 | 420 | |
| Influenza-associated pediatric mortality§,§§ | 1 | 61 | 0 | 41 | 45 | — | N | N | MN (1) |
| Listeriosis | 4 | 187 | 11 | 858 | 896 | 753 | 696 | 665 | OH (1), KS (1), NC (1), CA (1) |
| Measles¶¶ | 1 | 13 | 2 | 73 | 66 | 37 | 56 | 44 | FL (1) |
| Meningococcal disease, invasive***: | | | | | | | | | |
| A, C, Y, & W-135 | 3 | 107 | 5 | 272 | 297 | — | — | — | CT (1), OK (1), CO (1) |
| serogroup B | — | 41 | 3 | 170 | 156 | — | — | — | |
| other serogroup | — | 9 | 0 | 28 | 27 | — | — | — | |
| unknown serogroup | 13 | 299 | 15 | 682 | 765 | — | — | — | PA (1), OH (1), MN (1), UT (1), OR (1), CA (8) |
| Mumps | 7 | 384 | 59 | 6,585 | 314 | 258 | 231 | 270 | OH (1), MN (1), KS (1), NC (1), GA (1), FL (1), OK (1) |
| Novel influenza A virus infections | — | — | — | N | N | N | N | N | |
| Plague | — | — | 0 | 17 | 8 | 3 | 1 | 2 | |
| Poliomyelitis, paralytic | — | — | — | — | 1 | — | — | — | |
| Poliovirus infection, nonparalytic§ | — | — | — | N | N | N | N | N | |
| Psittacosis§ | — | 3 | 0 | 19 | 16 | 12 | 12 | 18 | |
| Q fever§ | 1 | 66 | 3 | 176 | 136 | 70 | 71 | 61 | MO (1) |
| Rabies, human | — | — | — | 3 | 2 | 7 | 2 | 3 | |
| Rubella††† | — | 8 | 0 | 12 | 11 | 10 | 7 | 18 | |
| Rubella, congenital syndrome | — | — | — | 1 | 1 | — | 1 | 1 | |
| SARS-CoV§,§§§ | — | — | 0 | — | — | — | 8 | N | |
| Smallpox§ | — | — | — | — | — | — | — | — | |
| Streptococcal toxic-shock syndrome§ | 2 | 34 | 3 | 125 | 129 | 132 | 161 | 118 | OH (1), KY (1) |
| Syphilis, congenital (age <1 yr) | 3 | 74 | 8 | 379 | 329 | 353 | 413 | 412 | NC (2), WA (1) |
| Tetanus | 1 | 4 | 1 | 38 | 27 | 34 | 20 | 25 | MO (1) |
| Toxic-shock syndrome (staphylococcal)§ | — | 30 | 2 | 98 | 90 | 95 | 133 | 109 | |
| Trichinellosis | — | 1 | 0 | 13 | 16 | 5 | 6 | 14 | |
| Tularemia | 2 | 6 | 3 | 98 | 154 | 134 | 129 | 90 | MO (1), OK (1) |
| Typhoid fever | 1 | 101 | 5 | 333 | 324 | 322 | 356 | 321 | CA (1) |
| Vancomycin-intermediate *Staphylococcus aureus*§ | — | 3 | — | 6 | 2 | — | N | N | |
| Vancomycin-resistant *Staphylococcus aureus*§ | — | — | 0 | 1 | 3 | 1 | N | N | |
| Vibriosis (non-cholera *Vibrio* species infections)§ | 2 | 65 | 0 | N | N | N | N | N | FL (1), CA (1) |
| Yellow fever | — | — | — | — | — | — | — | 1 | |

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

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

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

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

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

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

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

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. A total of 62 cases were reported for the 2006–07 flu season.

¶¶ The one measles case reported for the current week was indigenous.

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

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

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

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Chlamydia† | | | | | Coccidioidomycosis | | | | | Cryptosporidiosis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 |
| | | Med | Max | | | | Med | Max | | | | Med | Max | | |
| **United States** | 8,574 | 19,843 | 25,557 | 368,532 | 405,901 | 108 | 153 | 658 | 3,228 | 3,520 | 32 | 71 | 321 | 966 | 1,068 |
| **New England** | 523 | 665 | 1,357 | 13,254 | 12,525 | — | 0 | 0 | — | — | — | 5 | 38 | 61 | 98 |
| Connecticut | — | 204 | 829 | 3,286 | 3,084 | N | 0 | 0 | N | N | — | 0 | 11 | 11 | 38 |
| Maine§ | — | 47 | 73 | 970 | 862 | — | 0 | 0 | — | — | — | 0 | 6 | 9 | 13 |
| Massachusetts | 387 | 302 | 600 | 6,514 | 5,997 | — | 0 | 0 | — | — | — | 2 | 29 | 18 | 38 |
| New Hampshire | 33 | 38 | 69 | 756 | 733 | — | 0 | 0 | — | — | — | 1 | 5 | 10 | 6 |
| Rhode Island§ | 72 | 64 | 108 | 1,378 | 1,341 | — | 0 | 0 | — | — | — | 0 | 5 | 5 | 1 |
| Vermont§ | 31 | 20 | 45 | 350 | 508 | N | 0 | 0 | N | N | — | 1 | 4 | 8 | 2 |
| **Mid. Atlantic** | 483 | 2,571 | 4,271 | 54,213 | 49,713 | — | 0 | 0 | — | — | 1 | 10 | 33 | 118 | 175 |
| New Jersey | — | 377 | 541 | 5,132 | 7,708 | N | 0 | 0 | N | N | — | 0 | 1 | — | 9 |
| New York (Upstate) | — | 509 | 2,745 | 9,903 | 9,141 | N | 0 | 0 | N | N | — | 3 | 13 | 43 | 36 |
| New York City | — | 753 | 1,523 | 16,763 | 16,982 | N | 0 | 0 | N | N | — | 2 | 10 | 22 | 53 |
| Pennsylvania | 483 | 832 | 1,776 | 22,415 | 15,882 | N | 0 | 0 | N | N | 1 | 3 | 18 | 53 | 77 |
| **E.N. Central** | 1,435 | 3,190 | 6,223 | 67,350 | 69,328 | 2 | 1 | 3 | 13 | 16 | 6 | 15 | 110 | 219 | 238 |
| Illinois | 655 | 982 | 1,290 | 18,565 | 22,281 | — | 0 | 0 | — | — | — | 2 | 22 | 19 | 31 |
| Indiana | — | 385 | 644 | 8,059 | 8,329 | — | 0 | 0 | — | — | — | 1 | 18 | 16 | 19 |
| Michigan | 603 | 749 | 1,225 | 14,983 | 12,629 | 1 | 1 | 3 | 10 | 12 | 1 | 3 | 10 | 54 | 37 |
| Ohio | 75 | 643 | 3,647 | 18,435 | 17,297 | 1 | 0 | 2 | 3 | 4 | 5 | 5 | 33 | 74 | 79 |
| Wisconsin | 102 | 372 | 528 | 7,308 | 8,792 | N | 0 | 0 | N | N | — | 4 | 53 | 56 | 72 |
| **W.N. Central** | 57 | 1,188 | 1,445 | 18,686 | 24,870 | — | 0 | 54 | 3 | — | 6 | 11 | 77 | 146 | 159 |
| Iowa | — | 160 | 238 | 3,106 | 3,428 | N | 0 | 0 | N | N | — | 2 | 28 | 25 | 15 |
| Kansas | — | 148 | 316 | 3,178 | 3,342 | N | 0 | 0 | N | N | 2 | 1 | 8 | 23 | 21 |
| Minnesota | — | 243 | 314 | 3,744 | 5,272 | — | 0 | 54 | — | — | 4 | 2 | 25 | 38 | 60 |
| Missouri | — | 434 | 628 | 5,220 | 8,997 | — | 0 | 1 | 3 | — | — | 2 | 21 | 29 | 33 |
| Nebraska§ | — | 104 | 185 | 1,991 | 2,010 | N | 0 | 0 | N | N | — | 1 | 16 | 6 | 12 |
| North Dakota | — | 28 | 64 | 446 | 757 | N | 0 | 0 | N | N | — | 0 | 1 | 1 | 1 |
| South Dakota | 57 | 49 | 84 | 1,001 | 1,064 | N | 0 | 0 | N | N | — | 1 | 7 | 24 | 17 |
| **S. Atlantic** | 1,399 | 3,566 | 7,072 | 56,080 | 77,421 | — | 0 | 1 | 1 | 2 | 13 | 18 | 71 | 246 | 241 |
| Delaware | 24 | 69 | 111 | 1,354 | 1,442 | N | 0 | 0 | N | N | — | 0 | 3 | 2 | — |
| District of Columbia | 97 | 79 | 161 | 2,219 | 1,221 | — | 0 | 0 | — | — | — | 0 | 2 | 3 | 7 |
| Florida | — | 921 | 1,187 | 3,300 | 19,068 | N | 0 | 0 | N | N | 12 | 8 | 32 | 127 | 98 |
| Georgia | — | 675 | 3,822 | 7,608 | 13,694 | N | 0 | 0 | N | N | — | 4 | 18 | 45 | 70 |
| Maryland§ | — | 392 | 669 | 6,594 | 8,201 | — | 0 | 1 | 1 | 2 | — | 0 | 2 | 11 | 6 |
| North Carolina | 479 | 634 | 1,207 | 12,643 | 14,575 | — | 0 | 0 | — | — | 1 | 1 | 11 | 25 | 29 |
| South Carolina§ | 353 | 425 | 2,105 | 11,106 | 8,620 | N | 0 | 0 | N | N | — | 1 | 14 | 14 | 12 |
| Virginia§ | 432 | 495 | 685 | 10,187 | 9,393 | N | 0 | 0 | N | N | — | 1 | 5 | 16 | 17 |
| West Virginia | 14 | 55 | 85 | 1,069 | 1,207 | N | 0 | 0 | N | N | — | 0 | 3 | 3 | 2 |
| **E.S. Central** | 765 | 1,409 | 2,044 | 25,713 | 30,823 | — | 0 | 0 | — | — | — | 3 | 14 | 47 | 40 |
| Alabama§ | 70 | 368 | 539 | 2,079 | 9,833 | N | 0 | 0 | N | N | — | 0 | 11 | 17 | 14 |
| Kentucky | 174 | 130 | 691 | 3,118 | 3,810 | N | 0 | 0 | N | N | — | 1 | 3 | 15 | 10 |
| Mississippi | — | 422 | 959 | 8,916 | 6,998 | N | 0 | 0 | N | N | — | 0 | 8 | 8 | 5 |
| Tennessee§ | 521 | 531 | 700 | 11,600 | 10,182 | N | 0 | 0 | N | N | — | 1 | 5 | 7 | 11 |
| **W.S. Central** | 1,627 | 2,158 | 3,028 | 43,866 | 45,844 | — | 0 | 1 | — | — | 3 | 5 | 45 | 36 | 46 |
| Arkansas§ | 171 | 161 | 337 | 3,324 | 3,230 | N | 0 | 0 | N | N | — | 0 | 3 | 2 | 6 |
| Louisiana | — | 315 | 610 | 5,225 | 6,888 | — | 0 | 1 | — | — | — | 1 | 9 | 14 | — |
| Oklahoma | 260 | 257 | 472 | 5,190 | 4,749 | N | 0 | 0 | N | N | 3 | 0 | 9 | 15 | 12 |
| Texas§ | 1,196 | 1,457 | 1,911 | 30,127 | 30,977 | N | 0 | 0 | N | N | — | 2 | 36 | 5 | 28 |
| **Mountain** | 198 | 1,334 | 2,025 | 20,832 | 26,307 | 48 | 100 | 293 | 2,173 | 2,496 | 3 | 4 | 40 | 66 | 41 |
| Arizona | 8 | 463 | 993 | 6,497 | 7,989 | 48 | 99 | 293 | 2,125 | 2,426 | — | 0 | 5 | 13 | 4 |
| Colorado | 112 | 306 | 416 | 3,730 | 6,408 | N | 0 | 0 | N | N | 1 | 1 | 7 | 21 | 9 |
| Idaho§ | — | 44 | 253 | 1,263 | 1,329 | N | 0 | 0 | N | N | — | 0 | 5 | 4 | 4 |
| Montana§ | — | 52 | 144 | 945 | 901 | N | 0 | 0 | N | N | — | 0 | 26 | 4 | 6 |
| Nevada§ | 67 | 167 | 397 | 3,439 | 3,027 | — | 1 | 3 | 17 | 31 | 1 | 0 | 3 | 4 | 3 |
| New Mexico§ | — | 166 | 324 | 2,591 | 4,048 | — | 0 | 3 | 7 | 8 | — | 1 | 6 | 11 | 9 |
| Utah | — | 97 | 200 | 1,886 | 2,010 | — | 1 | 4 | 24 | 29 | 1 | 0 | 3 | 2 | 6 |
| Wyoming§ | 11 | 27 | 45 | 481 | 595 | — | 0 | 0 | — | 2 | — | 0 | 11 | 7 | — |
| **Pacific** | 2,087 | 3,362 | 4,362 | 68,538 | 69,070 | 58 | 53 | 311 | 1,038 | 1,006 | — | 1 | 5 | 27 | 30 |
| Alaska | 72 | 88 | 157 | 1,730 | 1,672 | N | 0 | 0 | N | N | — | 0 | 1 | — | 1 |
| California | 1,565 | 2,656 | 3,627 | 53,759 | 53,745 | 58 | 53 | 311 | 1,038 | 1,006 | — | 0 | 0 | — | — |
| Hawaii | — | 105 | 130 | 1,994 | 2,337 | N | 0 | 0 | N | N | — | 0 | 1 | — | — |
| Oregon§ | 133 | 161 | 394 | 3,818 | 3,915 | N | 0 | 0 | N | N | — | 1 | 5 | 27 | 29 |
| Washington | 317 | 344 | 621 | 7,237 | 7,401 | N | 0 | 0 | N | N | — | 0 | 0 | — | — |
| American Samoa | U | 0 | 21 | 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 | — | — | — | — | 44 | — | — | — | — | — | — | — | — | — | — |
| Puerto Rico | 229 | 122 | 234 | 3,041 | 1,999 | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| U.S. Virgin Islands | U | 3 | 10 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Giardiasis | | | | | Gonorrhea | | | | | *Haemophilus influenzae*, invasive All ages, all serotypes† | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 |
| | | Med | Max | | | | Med | Max | | | | Med | Max | | |
| **United States** | 122 | 310 | 1,477 | 5,088 | 6,068 | 2,958 | 6,865 | 8,969 | 116,556 | 137,450 | 22 | 47 | 174 | 948 | 972 |
| **New England** | — | 26 | 67 | 359 | 563 | 73 | 109 | 259 | 2,098 | 2,147 | — | 3 | 18 | 67 | 82 |
| Connecticut | — | 5 | 25 | 86 | 94 | — | 43 | 204 | 689 | 779 | — | 0 | 6 | 20 | 17 |
| Maine§ | — | 4 | 14 | 50 | 33 | — | 2 | 8 | 41 | 50 | — | 0 | 4 | 6 | 7 |
| Massachusetts | — | 12 | 39 | 157 | 343 | 61 | 46 | 96 | 1,090 | 1,002 | — | 2 | 8 | 36 | 49 |
| New Hampshire | — | 0 | 9 | 4 | 2 | 4 | 2 | 8 | 62 | 95 | — | 0 | 3 | 4 | 2 |
| Rhode Island§ | — | 0 | 17 | 22 | 35 | 6 | 10 | 19 | 196 | 198 | — | 0 | 10 | 1 | 2 |
| Vermont§ | — | 3 | 12 | 40 | 56 | 2 | 1 | 5 | 20 | 23 | — | 0 | 1 | — | 5 |
| **Mid. Atlantic** | 10 | 63 | 120 | 876 | 1,193 | 144 | 683 | 1,537 | 14,256 | 12,996 | 2 | 10 | 26 | 200 | 200 |
| New Jersey | — | 7 | 17 | 36 | 180 | — | 104 | 155 | 1,483 | 2,138 | — | 1 | 5 | 17 | 37 |
| New York (Upstate) | — | 25 | 101 | 332 | 375 | — | 119 | 1,035 | 2,299 | 2,401 | — | 3 | 14 | 57 | 53 |
| New York City | 2 | 16 | 32 | 282 | 380 | — | 177 | 376 | 3,624 | 4,005 | — | 2 | 6 | 41 | 38 |
| Pennsylvania | 8 | 14 | 34 | 226 | 258 | 144 | 249 | 608 | 6,850 | 4,452 | 2 | 3 | 10 | 85 | 72 |
| **E.N. Central** | 20 | 44 | 100 | 709 | 976 | 542 | 1,297 | 2,581 | 26,709 | 27,637 | 4 | 7 | 15 | 101 | 170 |
| Illinois | — | 11 | 30 | 103 | 234 | 243 | 352 | 485 | 6,609 | 8,144 | — | 1 | 6 | 11 | 54 |
| Indiana | N | 0 | 0 | N | N | — | 157 | 292 | 3,265 | 3,576 | 3 | 1 | 10 | 20 | 32 |
| Michigan | 4 | 14 | 38 | 241 | 267 | 225 | 300 | 880 | 6,145 | 5,042 | — | 0 | 5 | 12 | 18 |
| Ohio | 16 | 15 | 32 | 272 | 291 | 26 | 328 | 1,563 | 8,115 | 8,006 | 1 | 2 | 6 | 51 | 34 |
| Wisconsin | — | 9 | 27 | 93 | 184 | 48 | 131 | 181 | 2,575 | 2,869 | — | 1 | 4 | 7 | 32 |
| **W.N. Central** | 6 | 22 | 539 | 333 | 667 | 2 | 385 | 516 | 5,601 | 7,465 | 1 | 3 | 23 | 61 | 49 |
| Iowa | 1 | 5 | 16 | 70 | 88 | — | 40 | 63 | 695 | 708 | — | 0 | 1 | 1 | — |
| Kansas | 1 | 3 | 11 | 45 | 62 | — | 43 | 89 | 903 | 922 | 1 | 0 | 2 | 6 | 9 |
| Minnesota | — | 0 | 514 | 12 | 279 | — | 66 | 87 | 1,006 | 1,216 | — | 1 | 17 | 22 | 23 |
| Missouri | 4 | 9 | 28 | 149 | 164 | — | 195 | 269 | 2,354 | 3,958 | — | 1 | 5 | 25 | 13 |
| Nebraska§ | — | 2 | 9 | 32 | 36 | — | 27 | 57 | 512 | 486 | — | 0 | 2 | 6 | 3 |
| North Dakota | — | 0 | 4 | 5 | 6 | — | 2 | 6 | 24 | 43 | — | 0 | 2 | 1 | 1 |
| South Dakota | — | 1 | 6 | 20 | 32 | 2 | 6 | 15 | 107 | 132 | — | 0 | 0 | — | — |
| **S. Atlantic** | 25 | 54 | 103 | 934 | 872 | 852 | 1,598 | 3,282 | 22,190 | 33,005 | 4 | 11 | 34 | 250 | 240 |
| Delaware | — | 1 | 4 | 11 | 10 | 10 | 27 | 44 | 543 | 591 | — | 0 | 3 | 5 | 1 |
| District of Columbia | — | 1 | 7 | 28 | 23 | 26 | 37 | 63 | 898 | 729 | — | 0 | 2 | 2 | 1 |
| Florida | 13 | 24 | 44 | 457 | 355 | — | 425 | 549 | 1,564 | 8,894 | — | 3 | 8 | 76 | 78 |
| Georgia | 12 | 12 | 28 | 176 | 213 | — | 339 | 2,068 | 3,159 | 6,264 | 3 | 2 | 7 | 52 | 57 |
| Maryland§ | — | 4 | 12 | 85 | 55 | — | 130 | 189 | 2,155 | 2,864 | — | 2 | 5 | 43 | 30 |
| North Carolina | — | 0 | 0 | — | — | 349 | 328 | 676 | 6,427 | 6,930 | 1 | 0 | 9 | 33 | 15 |
| South Carolina§ | — | 1 | 8 | 25 | 42 | 310 | 176 | 1,026 | 4,681 | 3,936 | — | 1 | 4 | 24 | 20 |
| Virginia§ | — | 9 | 28 | 140 | 164 | 147 | 125 | 238 | 2,472 | 2,471 | — | 1 | 7 | 7 | 28 |
| West Virginia | — | 0 | 21 | 12 | 10 | 10 | 18 | 44 | 291 | 326 | — | 0 | 6 | 8 | 10 |
| **E.S. Central** | — | 9 | 34 | 163 | 142 | 299 | 551 | 879 | 9,277 | 12,159 | — | 2 | 9 | 47 | 56 |
| Alabama§ | — | 3 | 22 | 82 | 73 | 36 | 170 | 271 | 996 | 4,490 | — | 0 | 3 | 10 | 12 |
| Kentucky | N | 0 | 0 | N | N | 61 | 50 | 268 | 1,107 | 1,317 | — | 0 | 1 | 2 | 4 |
| Mississippi | N | 0 | 0 | N | N | — | 158 | 434 | 3,206 | 2,615 | — | 0 | 1 | — | 5 |
| Tennessee§ | — | 5 | 12 | 81 | 69 | 202 | 194 | 240 | 3,968 | 3,737 | — | 1 | 6 | 35 | 35 |
| **W.S. Central** | 5 | 7 | 53 | 113 | 59 | 551 | 941 | 1,490 | 17,584 | 19,564 | 5 | 2 | 30 | 49 | 32 |
| Arkansas§ | 3 | 3 | 13 | 50 | 29 | 65 | 80 | 142 | 1,582 | 1,793 | — | 0 | 2 | 3 | 2 |
| Louisiana | — | 1 | 6 | 22 | 1 | — | 193 | 366 | 3,169 | 4,093 | — | 0 | 3 | 4 | 1 |
| Oklahoma | 2 | 2 | 40 | 41 | 29 | 84 | 94 | 236 | 2,026 | 1,722 | 5 | 1 | 27 | 39 | 27 |
| Texas§ | N | 0 | 0 | N | N | 402 | 560 | 938 | 10,807 | 11,956 | — | 0 | 2 | 3 | 2 |
| **Mountain** | 29 | 30 | 67 | 501 | 552 | 58 | 281 | 456 | 3,886 | 5,729 | 5 | 4 | 11 | 127 | 102 |
| Arizona | 3 | 3 | 11 | 68 | 55 | 3 | 104 | 220 | 1,338 | 1,989 | — | 2 | 6 | 56 | 38 |
| Colorado | 10 | 9 | 26 | 171 | 182 | 40 | 67 | 93 | 875 | 1,456 | 3 | 1 | 4 | 27 | 30 |
| Idaho§ | — | 3 | 12 | 39 | 60 | — | 2 | 20 | 84 | 82 | — | 0 | 1 | 4 | 3 |
| Montana§ | — | 2 | 11 | 30 | 26 | — | 3 | 20 | 38 | 58 | — | 0 | 0 | — | — |
| Nevada§ | 7 | 2 | 9 | 43 | 40 | 14 | 48 | 135 | 808 | 1,050 | — | 0 | 2 | 6 | 6 |
| New Mexico§ | — | 1 | 6 | 32 | 23 | — | 30 | 64 | 443 | 669 | — | 0 | 4 | 14 | 15 |
| Utah | 9 | 6 | 27 | 106 | 159 | — | 16 | 28 | 276 | 367 | 2 | 0 | 3 | 19 | 10 |
| Wyoming§ | — | 1 | 4 | 12 | 7 | 1 | 2 | 5 | 24 | 58 | — | 0 | 1 | 1 | — |
| **Pacific** | 27 | 57 | 558 | 1,100 | 1,044 | 437 | 765 | 935 | 14,955 | 16,748 | 1 | 2 | 16 | 46 | 41 |
| Alaska | — | 1 | 17 | 20 | 17 | 5 | 10 | 27 | 167 | 220 | 1 | 0 | 2 | 5 | 4 |
| California | 17 | 43 | 93 | 770 | 855 | 331 | 638 | 804 | 12,640 | 13,838 | — | 0 | 10 | — | 10 |
| Hawaii | — | 1 | 4 | 25 | 21 | — | 14 | 26 | 249 | 422 | — | 0 | 2 | 2 | 8 |
| Oregon§ | 4 | 9 | 14 | 150 | 151 | 21 | 26 | 46 | 440 | 568 | — | 1 | 6 | 39 | 19 |
| Washington | 6 | 0 | 449 | 135 | — | 80 | 72 | 142 | 1,459 | 1,700 | — | 0 | 5 | — | — |
| American Samoa | U | 0 | 0 | U | U | U | 0 | 4 | U | U | U | 0 | 0 | U | U |
| C.N.M.I. | U | — | — | U | U | U | — | — | U | U | U | — | — | U | U |
| Guam | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Puerto Rico | — | 6 | 19 | 69 | 52 | 5 | 6 | 16 | 140 | 130 | — | 0 | 2 | 1 | 1 |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 3 | U | U | U | 0 | 0 | U | U |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional.
† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Hepatitis (viral, acute), by type† A: Current week | A: Previous 52 weeks Med | A: Previous 52 weeks Max | A: Cum 2007 | A: Cum 2006 | B: Current week | B: Previous 52 weeks Med | B: Previous 52 weeks Max | B: Cum 2007 | B: Cum 2006 | Legionellosis: Current week | Legionellosis: Previous 52 weeks Med | Legionellosis: Previous 52 weeks Max | Legionellosis: Cum 2007 | Legionellosis: Cum 2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **United States** | 17 | 56 | 175 | 957 | 1,512 | 16 | 79 | 390 | 1,458 | 1,623 | 10 | 53 | 114 | 507 | 532 |
| **New England** | 2 | 2 | 21 | 24 | 107 | — | 2 | 5 | 28 | 53 | 1 | 3 | 16 | 23 | 27 |
| Connecticut | 2 | 0 | 3 | 7 | 13 | — | 0 | 5 | 14 | 23 | 1 | 0 | 9 | 4 | 5 |
| Maine§ | — | 0 | 2 | — | 5 | — | 0 | 2 | 1 | 10 | — | 0 | 2 | — | 3 |
| Massachusetts | — | 1 | 4 | 8 | 79 | — | 0 | 1 | 2 | 15 | — | 1 | 11 | 13 | 16 |
| New Hampshire | — | 0 | 15 | 5 | 2 | — | 0 | 2 | 5 | — | — | 0 | 2 | — | 2 |
| Rhode Island§ | — | 0 | 2 | 3 | 2 | — | 0 | 4 | 5 | 4 | — | 0 | 6 | 5 | — |
| Vermont§ | — | 0 | 2 | 1 | 6 | — | 0 | 1 | 1 | 1 | — | 0 | 2 | 1 | 1 |
| **Mid. Atlantic** | 2 | 7 | 18 | 123 | 139 | — | 9 | 19 | 173 | 204 | — | 15 | 57 | 126 | 146 |
| New Jersey | — | 1 | 4 | 21 | 40 | — | 2 | 6 | 30 | 63 | — | 2 | 11 | 12 | 20 |
| New York (Upstate) | — | 2 | 12 | 31 | 31 | — | 1 | 14 | 36 | 26 | — | 5 | 30 | 40 | 49 |
| New York City | — | 2 | 10 | 46 | 44 | — | 2 | 6 | 37 | 46 | — | 3 | 24 | 19 | 20 |
| Pennsylvania | 2 | 1 | 4 | 25 | 24 | — | 3 | 7 | 70 | 69 | — | 5 | 19 | 55 | 57 |
| **E.N. Central** | 2 | 6 | 17 | 89 | 125 | 1 | 9 | 23 | 171 | 188 | 1 | 11 | 31 | 99 | 108 |
| Illinois | — | 1 | 7 | 18 | 29 | — | 2 | 5 | 39 | 65 | — | 1 | 13 | 1 | 23 |
| Indiana | — | 0 | 7 | 5 | 10 | — | 0 | 21 | 14 | 14 | — | 1 | 6 | 6 | 3 |
| Michigan | 1 | 2 | 8 | 32 | 40 | 1 | 2 | 8 | 47 | 60 | — | 3 | 10 | 39 | 21 |
| Ohio | 1 | 1 | 4 | 27 | 33 | — | 3 | 10 | 65 | 44 | 1 | 4 | 19 | 49 | 47 |
| Wisconsin | — | 0 | 4 | 7 | 13 | — | 0 | 3 | 6 | 5 | — | 0 | 3 | 4 | 14 |
| **W.N. Central** | — | 2 | 17 | 62 | 57 | — | 2 | 14 | 54 | 55 | 2 | 1 | 16 | 16 | 18 |
| Iowa | — | 0 | 3 | 11 | 4 | — | 0 | 3 | 9 | 8 | — | 0 | 3 | 2 | 2 |
| Kansas | — | 0 | 1 | 2 | 19 | — | 0 | 2 | 4 | 6 | — | 0 | 3 | — | 1 |
| Minnesota | — | 0 | 17 | 33 | 3 | — | 0 | 13 | 4 | 6 | 2 | 0 | 11 | 4 | — |
| Missouri | — | 1 | 2 | 10 | 18 | — | 1 | 5 | 32 | 31 | — | 0 | 2 | 8 | 9 |
| Nebraska§ | — | 0 | 2 | 4 | 8 | — | 0 | 3 | 3 | 3 | — | 0 | 2 | 1 | 4 |
| North Dakota | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| South Dakota | — | 0 | 2 | 2 | 5 | — | 0 | 1 | 2 | 1 | — | 0 | 1 | 1 | 2 |
| **S. Atlantic** | 2 | 9 | 28 | 172 | 204 | 8 | 21 | 55 | 386 | 484 | 2 | 8 | 24 | 122 | 124 |
| Delaware | — | 0 | 1 | 1 | 8 | — | 0 | 3 | 6 | 21 | — | 0 | 2 | 1 | 2 |
| District of Columbia | — | 0 | 5 | 14 | 2 | — | 0 | 2 | 1 | 4 | — | 0 | 5 | 1 | 4 |
| Florida | — | 3 | 13 | 57 | 72 | 7 | 7 | 14 | 141 | 172 | 2 | 2 | 9 | 57 | 61 |
| Georgia | 2 | 1 | 4 | 27 | 20 | 1 | 3 | 10 | 43 | 75 | — | 1 | 3 | 10 | 5 |
| Maryland§ | — | 1 | 7 | 26 | 29 | — | 2 | 7 | 35 | 76 | — | 2 | 8 | 24 | 20 |
| North Carolina | — | 0 | 11 | 7 | 40 | — | 1 | 16 | 56 | 68 | — | 0 | 5 | 13 | 14 |
| South Carolina§ | — | 0 | 3 | 4 | 10 | — | 2 | 5 | 29 | 28 | — | 0 | 2 | 5 | 3 |
| Virginia§ | — | 1 | 5 | 34 | 22 | — | 2 | 5 | 55 | 15 | — | 1 | 4 | 8 | 14 |
| West Virginia | — | 0 | 3 | 2 | 1 | — | 0 | 23 | 20 | 25 | — | 0 | 4 | 3 | 1 |
| **E.S. Central** | — | 2 | 7 | 31 | 52 | 1 | 6 | 20 | 102 | 139 | 1 | 2 | 9 | 29 | 23 |
| Alabama§ | — | 0 | 2 | 7 | 3 | — | 2 | 10 | 40 | 36 | — | 0 | 2 | 3 | 5 |
| Kentucky | — | 0 | 2 | 5 | 23 | 1 | 1 | 3 | 6 | 34 | 1 | 1 | 6 | 13 | 6 |
| Mississippi | — | 0 | 4 | 4 | 4 | — | 0 | 8 | 8 | 17 | — | 0 | 2 | — | 1 |
| Tennessee§ | — | 1 | 5 | 15 | 22 | — | 3 | 7 | 48 | 52 | — | 1 | 7 | 13 | 11 |
| **W.S. Central** | — | 6 | 19 | 63 | 130 | 1 | 19 | 159 | 257 | 250 | — | 1 | 15 | 26 | 11 |
| Arkansas§ | — | 0 | 2 | 4 | 31 | — | 1 | 7 | 7 | 27 | — | 0 | 1 | 1 | 1 |
| Louisiana | — | 0 | 4 | 8 | 3 | — | 1 | 5 | 17 | 11 | — | 0 | 2 | 1 | — |
| Oklahoma | — | 0 | 3 | 3 | 3 | 1 | 1 | 41 | 14 | 1 | — | 0 | 6 | — | 1 |
| Texas§ | — | 5 | 15 | 48 | 93 | — | 15 | 108 | 219 | 211 | — | 1 | 12 | 24 | 9 |
| **Mountain** | 5 | 5 | 17 | 127 | 128 | 2 | 3 | 9 | 89 | 58 | — | 2 | 8 | 31 | 37 |
| Arizona | 3 | 3 | 14 | 104 | 70 | — | 0 | 5 | 38 | 4 | — | 0 | 4 | 10 | 13 |
| Colorado | 2 | 1 | 3 | 11 | 21 | — | 1 | 2 | 15 | 15 | — | 0 | 2 | 6 | 5 |
| Idaho§ | — | 0 | 1 | 2 | 6 | — | 0 | 2 | 4 | 6 | — | 0 | 3 | 1 | 4 |
| Montana§ | — | 0 | 3 | 1 | 4 | — | 0 | 0 | — | — | — | 0 | 1 | 1 | 1 |
| Nevada§ | — | 0 | 2 | 6 | 7 | 2 | 1 | 5 | 19 | 16 | — | 0 | 2 | 3 | 4 |
| New Mexico§ | — | 0 | 2 | 1 | 9 | — | 0 | 2 | 4 | 8 | — | 0 | 2 | 2 | 1 |
| Utah | — | 0 | 1 | 2 | 10 | — | 0 | 4 | 9 | 9 | — | 0 | 2 | 6 | 9 |
| Wyoming§ | — | 0 | 1 | — | 1 | — | 0 | 1 | — | — | — | 0 | 1 | 2 | — |
| **Pacific** | 4 | 14 | 92 | 266 | 570 | 3 | 10 | 105 | 198 | 192 | 3 | 1 | 11 | 35 | 38 |
| Alaska | — | 0 | 1 | 2 | 1 | 1 | 0 | 3 | 4 | 1 | — | 0 | 1 | — | — |
| California | 4 | 13 | 40 | 241 | 543 | 1 | 8 | 31 | 146 | 157 | 2 | 1 | 11 | 27 | 38 |
| Hawaii | — | 0 | 2 | 2 | 6 | — | 0 | 1 | — | 4 | — | 0 | 0 | — | — |
| Oregon§ | — | 1 | 3 | 11 | 20 | — | 2 | 5 | 29 | 30 | — | 0 | 1 | 1 | — |
| Washington | — | 0 | 52 | 10 | — | 1 | 0 | 74 | 19 | — | 1 | 0 | 2 | 7 | — |
| American Samoa | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |
| C.N.M.I. | U | — | — | U | U | U | — | — | U | U | U | — | — | U | U |
| Guam | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Puerto Rico | — | 1 | 10 | 25 | 20 | — | 1 | 9 | 20 | 19 | — | 0 | 2 | 2 | 1 |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |

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

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Lyme disease | | | | | Malaria | | | | | Meningococcal disease, invasive† All serogroups | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 |
| | | Med | Max | | | | Med | Max | | | | Med | Max | | |
| **United States** | 36 | 255 | 1,116 | 2,221 | 2,729 | 8 | 23 | 78 | 295 | 461 | 16 | 19 | 79 | 456 | 551 |
| **New England** | 14 | 37 | 350 | 139 | 334 | — | 1 | 7 | 12 | 25 | 1 | 1 | 3 | 20 | 22 |
| Connecticut | 14 | 9 | 227 | 62 | 73 | — | 0 | 3 | — | 1 | 1 | 0 | 2 | 4 | 6 |
| Maine§ | — | 1 | 38 | 18 | 34 | — | 0 | 1 | 3 | 2 | — | 0 | 3 | 3 | 2 |
| Massachusetts | — | 1 | 112 | 2 | 201 | — | 0 | 4 | 8 | 20 | — | 0 | 3 | 10 | 13 |
| New Hampshire | — | 6 | 97 | 46 | 16 | — | 0 | 3 | 1 | 1 | — | 0 | 2 | — | — |
| Rhode Island§ | — | 0 | 93 | — | 1 | — | 0 | 1 | — | — | — | 0 | 1 | 1 | — |
| Vermont§ | — | 1 | 15 | 11 | 9 | — | 0 | 0 | — | 1 | — | 0 | 1 | 2 | 1 |
| **Mid. Atlantic** | 13 | 142 | 552 | 1,106 | 1,631 | 1 | 5 | 18 | 65 | 112 | 1 | 2 | 8 | 54 | 90 |
| New Jersey | — | 26 | 190 | 102 | 462 | — | 0 | 7 | — | 33 | — | 0 | 2 | 1 | 9 |
| New York (Upstate) | — | 52 | 392 | 348 | 669 | — | 1 | 7 | 16 | 9 | — | 1 | 2 | 14 | 18 |
| New York City | — | 3 | 23 | 6 | 22 | — | 3 | 9 | 40 | 58 | — | 1 | 4 | 16 | 33 |
| Pennsylvania | 13 | 39 | 223 | 650 | 478 | 1 | 1 | 4 | 9 | 12 | 1 | 0 | 5 | 23 | 30 |
| **E.N. Central** | — | 6 | 162 | 25 | 254 | 2 | 3 | 10 | 36 | 54 | 1 | 3 | 8 | 61 | 85 |
| Illinois | — | 1 | 16 | 4 | 12 | — | 1 | 6 | 10 | 20 | — | 0 | 3 | 13 | 25 |
| Indiana | — | 0 | 3 | 1 | 2 | — | 0 | 2 | 1 | 6 | — | 0 | 4 | 14 | 10 |
| Michigan | — | 1 | 5 | 7 | 3 | — | 0 | 2 | 7 | 8 | — | 0 | 3 | 13 | 14 |
| Ohio | — | 0 | 5 | 3 | 15 | 2 | 0 | 2 | 11 | 14 | 1 | 1 | 3 | 15 | 24 |
| Wisconsin | — | 5 | 154 | 10 | 222 | — | 0 | 3 | 7 | 6 | — | 0 | 2 | 6 | 12 |
| **W.N. Central** | 7 | 5 | 188 | 63 | 75 | — | 1 | 12 | 19 | 20 | 1 | 1 | 5 | 30 | 33 |
| Iowa | — | 1 | 8 | 8 | 25 | — | 0 | 1 | 2 | 1 | — | 0 | 3 | 7 | 9 |
| Kansas | 1 | 0 | 3 | 7 | 1 | — | 0 | 2 | 1 | — | — | 0 | 1 | 1 | 1 |
| Minnesota | 6 | 2 | 188 | 41 | 46 | — | 0 | 12 | 11 | 14 | 1 | 0 | 3 | 9 | 7 |
| Missouri | — | 0 | 3 | 7 | — | — | 0 | 1 | 2 | 3 | — | 0 | 3 | 8 | 10 |
| Nebraska§ | — | 0 | 2 | — | 3 | — | 0 | 1 | 2 | — | — | 0 | 1 | 2 | 5 |
| North Dakota | — | 0 | 0 | — | — | — | 0 | 0 | — | 1 | — | 0 | 1 | 2 | 1 |
| South Dakota | — | 0 | 1 | — | — | — | 0 | 1 | 1 | 1 | — | 0 | 1 | 1 | — |
| **S. Atlantic** | — | 44 | 134 | 808 | 404 | 2 | 5 | 14 | 70 | 118 | — | 3 | 11 | 65 | 95 |
| Delaware | — | 8 | 28 | 174 | 148 | — | 0 | 1 | 2 | 3 | — | 0 | 1 | — | 3 |
| District of Columbia | — | 0 | 7 | 6 | 7 | — | 0 | 2 | 3 | — | — | 0 | 1 | — | — |
| Florida | — | 0 | 3 | 13 | 8 | — | 1 | 4 | 17 | 19 | — | 1 | 7 | 25 | 37 |
| Georgia | — | 0 | 1 | — | 1 | — | 1 | 5 | 6 | 43 | — | 0 | 3 | 7 | 9 |
| Maryland§ | — | 23 | 106 | 478 | 213 | — | 1 | 4 | 20 | 20 | — | 0 | 2 | 14 | 6 |
| North Carolina | — | 0 | 4 | 6 | 9 | 2 | 0 | 4 | 7 | 11 | — | 0 | 6 | 6 | 15 |
| South Carolina§ | — | 0 | 2 | 5 | 3 | — | 0 | 2 | 1 | 4 | — | 0 | 2 | 6 | 11 |
| Virginia§ | — | 7 | 36 | 122 | 15 | — | 1 | 4 | 13 | 17 | — | 0 | 2 | 7 | 11 |
| West Virginia | — | 0 | 14 | 4 | — | — | 0 | 1 | 1 | 1 | — | 0 | 2 | — | 3 |
| **E.S. Central** | — | 1 | 4 | 11 | 2 | 1 | 0 | 3 | 12 | 9 | — | 1 | 4 | 25 | 21 |
| Alabama§ | — | 0 | 3 | 2 | 1 | — | 0 | 2 | 1 | 4 | — | 0 | 2 | 6 | 4 |
| Kentucky | — | 0 | 2 | — | — | 1 | 0 | 1 | 3 | 1 | — | 0 | 2 | 4 | 5 |
| Mississippi | — | 0 | 1 | — | — | — | 0 | 1 | 1 | 2 | — | 0 | 4 | 4 | 3 |
| Tennessee§ | — | 0 | 3 | 9 | 1 | — | 0 | 2 | 7 | 2 | — | 0 | 2 | 11 | 9 |
| **W.S. Central** | — | 1 | 6 | 18 | 5 | — | 1 | 7 | 13 | 28 | 1 | 1 | 13 | 40 | 35 |
| Arkansas§ | — | 0 | 0 | — | — | — | 0 | 2 | — | 1 | — | 0 | 2 | 5 | 5 |
| Louisiana | — | 0 | 1 | 2 | — | — | 0 | 2 | 11 | 1 | — | 0 | 4 | 11 | 5 |
| Oklahoma | — | 0 | 0 | — | — | — | 0 | 3 | 1 | 2 | 1 | 0 | 4 | 11 | 8 |
| Texas§ | — | 1 | 6 | 16 | 5 | — | 1 | 6 | 1 | 24 | — | 0 | 9 | 13 | 17 |
| **Mountain** | — | 0 | 3 | 8 | 4 | 1 | 1 | 6 | 20 | 23 | 2 | 1 | 5 | 39 | 36 |
| Arizona | — | 0 | 1 | — | 3 | — | 0 | 3 | 4 | 7 | — | 0 | 3 | 10 | 10 |
| Colorado | — | 0 | 0 | — | — | — | 0 | 2 | 9 | 7 | 1 | 0 | 2 | 14 | 13 |
| Idaho§ | — | 0 | 2 | 2 | — | — | 0 | 1 | — | — | — | 0 | 1 | 2 | 1 |
| Montana§ | — | 0 | 1 | 1 | — | — | 0 | 1 | 1 | 1 | — | 0 | 1 | 1 | 2 |
| Nevada§ | — | 0 | 2 | 5 | — | — | 0 | 1 | 1 | — | — | 0 | 1 | 3 | 3 |
| New Mexico§ | — | 0 | 1 | — | 1 | — | 0 | 1 | — | 1 | — | 0 | 1 | 1 | 1 |
| Utah | — | 0 | 1 | — | — | 1 | 0 | 2 | 5 | 7 | 1 | 0 | 2 | 7 | 4 |
| Wyoming§ | — | 0 | 1 | — | — | — | 0 | 0 | — | — | — | 0 | 2 | 1 | 2 |
| **Pacific** | 2 | 2 | 16 | 43 | 20 | 1 | 3 | 45 | 48 | 72 | 9 | 4 | 48 | 122 | 134 |
| Alaska | — | 0 | 1 | 2 | — | — | 0 | 4 | 2 | 8 | — | 0 | 1 | 1 | 2 |
| California | 2 | 2 | 8 | 41 | 20 | 1 | 2 | 6 | 33 | 56 | 8 | 3 | 10 | 90 | 105 |
| Hawaii | N | 0 | 0 | N | N | — | 0 | 1 | 2 | 2 | — | 0 | 1 | 2 | 4 |
| Oregon§ | — | 0 | 1 | — | — | — | 0 | 3 | 8 | 6 | 1 | 0 | 3 | 15 | 23 |
| Washington | — | 0 | 8 | — | — | — | 0 | 43 | 3 | — | — | 0 | 43 | 14 | — |
| American Samoa | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | — | — |
| C.N.M.I. | U | — | — | U | U | U | — | — | U | U | U | — | — | — | — |
| Guam | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Puerto Rico | N | 0 | 0 | N | N | — | 0 | 1 | 1 | — | — | 0 | 1 | 5 | 4 |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | — | — |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, & W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Pertussis | | | | | Rabies, animal | | | | | Rocky Mountain spotted fever | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 |
| | | Med | Max | | | | Med | Max | | | | Med | Max | | |
| **United States** | 67 | 254 | 1,377 | 2,875 | 5,601 | 30 | 90 | 168 | 1,357 | 1,990 | 37 | 23 | 156 | 272 | 458 |
| **New England** | — | 37 | 78 | 451 | 885 | 5 | 11 | 25 | 190 | 202 | — | 0 | 9 | — | 4 |
| Connecticut | — | 2 | 10 | 18 | 26 | 5 | 4 | 14 | 66 | 51 | — | 0 | 0 | — | — |
| Maine† | — | 2 | 15 | 32 | 23 | — | 2 | 8 | 29 | 33 | N | 0 | 0 | N | N |
| Massachusetts | — | 28 | 45 | 369 | 663 | — | 0 | 7 | — | 86 | — | 0 | 1 | — | 4 |
| New Hampshire | — | 2 | 21 | 16 | 84 | — | 1 | 5 | 14 | — | — | 0 | 1 | — | — |
| Rhode Island† | — | 0 | 31 | — | 21 | — | 0 | 3 | 15 | 6 | — | 0 | 9 | — | — |
| Vermont† | — | 1 | 9 | 16 | 68 | — | 2 | 10 | 66 | 26 | — | 0 | 0 | — | — |
| **Mid. Atlantic** | 2 | 32 | 159 | 427 | 675 | — | 10 | 21 | 121 | 154 | — | 1 | 5 | 16 | 16 |
| New Jersey | — | 3 | 12 | 46 | 139 | — | 0 | 0 | — | — | — | 0 | 2 | — | 7 |
| New York (Upstate) | — | 19 | 150 | 258 | 241 | — | 0 | 0 | — | — | — | 0 | 2 | — | — |
| New York City | — | 1 | 6 | — | 31 | — | 1 | 5 | 24 | 3 | — | 0 | 3 | 6 | 4 |
| Pennsylvania | 2 | 9 | 20 | 123 | 264 | — | 9 | 20 | 97 | 151 | — | 0 | 3 | 10 | 5 |
| **E.N. Central** | 26 | 41 | 80 | 586 | 794 | 2 | 1 | 18 | 31 | 23 | — | 1 | 9 | 6 | 19 |
| Illinois | — | 9 | 23 | 62 | 201 | — | 0 | 7 | 3 | 6 | — | 0 | 4 | 1 | 11 |
| Indiana | — | 2 | 44 | 11 | 74 | 1 | 0 | 2 | 4 | 2 | — | 0 | 1 | 1 | 1 |
| Michigan | 1 | 10 | 39 | 109 | 150 | 1 | 0 | 5 | 7 | 15 | — | 0 | 1 | 1 | — |
| Ohio | 25 | 13 | 56 | 332 | 268 | — | 0 | 12 | 17 | — | — | 0 | 4 | 3 | 6 |
| Wisconsin | — | 3 | 17 | 72 | 101 | — | 0 | 0 | — | — | — | 0 | 0 | — | 1 |
| **W.N. Central** | 6 | 17 | 139 | 176 | 601 | 8 | 6 | 20 | 83 | 91 | 5 | 4 | 13 | 53 | 34 |
| Iowa | — | 4 | 16 | 52 | 154 | — | 1 | 7 | 9 | 12 | — | 0 | 1 | — | 1 |
| Kansas | 2 | 3 | 14 | 64 | 128 | 4 | 2 | 6 | 49 | 31 | — | 0 | 1 | — | — |
| Minnesota | — | 0 | 119 | — | 75 | 2 | 0 | 6 | 6 | 11 | — | 0 | 2 | — | 1 |
| Missouri | 4 | 3 | 10 | 35 | 167 | 2 | 1 | 6 | 8 | 9 | 5 | 3 | 12 | 52 | 30 |
| Nebraska† | — | 1 | 4 | 7 | 61 | — | 0 | 0 | — | — | — | 0 | 5 | 1 | 2 |
| North Dakota | — | 0 | 9 | 4 | 4 | — | 0 | 7 | 6 | 6 | — | 0 | 0 | — | — |
| South Dakota | — | 0 | 4 | 14 | 12 | — | 0 | 3 | 5 | 22 | — | 0 | 0 | — | — |
| **S. Atlantic** | 16 | 18 | 163 | 379 | 406 | 9 | 39 | 62 | 726 | 939 | 32 | 11 | 67 | 139 | 311 |
| Delaware | — | 0 | 1 | 2 | 2 | — | 0 | 0 | — | — | — | 0 | 3 | 4 | 7 |
| District of Columbia | — | 0 | 2 | 2 | 3 | — | 0 | 0 | — | — | — | 0 | 1 | 1 | — |
| Florida | 1 | 4 | 18 | 100 | 87 | — | 0 | 24 | 52 | 176 | — | 0 | 4 | 6 | 7 |
| Georgia | — | 0 | 3 | 5 | 9 | — | 4 | 9 | 46 | 99 | — | 0 | 5 | 3 | 9 |
| Maryland† | — | 2 | 7 | 48 | 74 | — | 5 | 10 | 93 | 156 | — | 1 | 6 | 16 | 15 |
| North Carolina | 15 | 1 | 112 | 145 | 77 | 9 | 11 | 21 | 197 | 152 | 32 | 4 | 61 | 90 | 254 |
| South Carolina† | — | 3 | 11 | 33 | 62 | — | 3 | 11 | 46 | 54 | — | 0 | 5 | 6 | 5 |
| Virginia† | — | 2 | 17 | 37 | 86 | — | 12 | 31 | 260 | 259 | — | 2 | 12 | 12 | 13 |
| West Virginia | — | 0 | 19 | 7 | 6 | — | 1 | 8 | 32 | 43 | — | 0 | 2 | 1 | 1 |
| **E.S. Central** | — | 6 | 24 | 77 | 112 | — | 4 | 13 | 60 | 100 | — | 5 | 27 | 54 | 58 |
| Alabama† | — | 1 | 17 | 23 | 25 | — | 0 | 8 | — | 33 | — | 1 | 9 | 12 | 14 |
| Kentucky | — | 0 | 5 | 2 | 17 | — | 0 | 4 | 8 | 6 | — | 0 | 1 | 1 | — |
| Mississippi | — | 0 | 9 | 9 | 15 | — | 0 | 1 | — | 4 | — | 0 | 1 | — | — |
| Tennessee† | — | 3 | 11 | 43 | 55 | — | 2 | 8 | 52 | 57 | — | 4 | 22 | 41 | 44 |
| **W.S. Central** | — | 17 | 152 | 172 | 254 | — | 15 | 34 | 30 | 343 | — | 1 | 114 | 3 | 9 |
| Arkansas† | — | 2 | 17 | 36 | 26 | — | 0 | 5 | 10 | 15 | — | 0 | 53 | — | 6 |
| Louisiana | — | 0 | 2 | 6 | 8 | — | 0 | 0 | — | — | — | 0 | 1 | — | — |
| Oklahoma | — | 0 | 9 | 1 | 2 | — | 0 | 7 | 20 | 24 | — | 0 | 55 | — | 1 |
| Texas† | — | 13 | 134 | 129 | 218 | — | 14 | 34 | — | 304 | — | 0 | 6 | 3 | 2 |
| **Mountain** | 15 | 29 | 63 | 494 | 1,330 | 1 | 2 | 28 | 33 | 60 | — | 0 | 4 | 1 | 6 |
| Arizona | 4 | 6 | 16 | 125 | 300 | — | 2 | 10 | 29 | 48 | — | 0 | 2 | — | 2 |
| Colorado | 6 | 7 | 18 | 135 | 476 | — | 0 | 0 | — | — | — | 0 | 1 | — | 1 |
| Idaho† | — | 1 | 7 | 18 | 30 | — | 0 | 24 | — | — | — | 0 | 3 | 1 | — |
| Montana† | — | 1 | 8 | 21 | 44 | — | 0 | 2 | — | 5 | — | 0 | 2 | — | — |
| Nevada† | — | 0 | 9 | 3 | 35 | — | 0 | 1 | — | — | — | 0 | 0 | — | — |
| New Mexico† | — | 2 | 8 | 13 | 37 | — | 0 | 1 | 1 | 5 | — | 0 | 1 | — | 2 |
| Utah | 5 | 10 | 48 | 167 | 377 | 1 | 0 | 1 | 2 | 1 | — | 0 | 0 | — | — |
| Wyoming† | — | 1 | 8 | 12 | 31 | — | 0 | 2 | 1 | 1 | — | 0 | 1 | — | 1 |
| **Pacific** | 2 | 25 | 546 | 113 | 544 | 5 | 4 | 13 | 83 | 78 | — | 0 | 1 | — | 1 |
| Alaska | 1 | 1 | 8 | 11 | 31 | 3 | 0 | 6 | 33 | 13 | N | 0 | 0 | N | N |
| California | — | 22 | 225 | — | 397 | 2 | 3 | 12 | 50 | 63 | — | 0 | 0 | — | — |
| Hawaii | — | 0 | 5 | 9 | 51 | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Oregon† | — | 1 | 11 | 41 | 65 | — | 0 | 4 | — | 2 | — | 0 | 1 | — | 1 |
| Washington | 1 | 0 | 376 | 52 | — | — | 0 | 0 | — | — | N | 0 | 0 | N | N |
| American Samoa | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |
| C.N.M.I. | U | — | — | U | U | U | — | — | U | U | U | — | — | U | U |
| Guam | — | — | — | — | — | — | — | — | — | — | N | — | — | N | N |
| Puerto Rico | — | 0 | 1 | — | — | — | 1 | 6 | 19 | 45 | N | 0 | 0 | N | N |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |

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

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Salmonellosis | | | | | Shiga toxin-producing *E. coli* (STEC)† | | | | | Shigellosis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2007 | Cum 2006 |
| **United States** | 277 | 835 | 1,842 | 10,709 | 11,899 | 25 | 72 | 295 | 823 | 793 | 202 | 268 | 749 | 4,326 | 3,904 |
| **New England** | 1 | 39 | 121 | 561 | 1,142 | — | 4 | 22 | 50 | 114 | — | 4 | 21 | 74 | 191 |
| Connecticut | — | 0 | 107 | 107 | 503 | — | 0 | 9 | 9 | 75 | — | 0 | 11 | 11 | 67 |
| Maine§ | — | 2 | 14 | 35 | 33 | — | 1 | 8 | 12 | 4 | — | 0 | 5 | 8 | 2 |
| Massachusetts | — | 24 | 87 | 335 | 548 | — | 2 | 13 | 21 | 30 | — | 3 | 18 | 50 | 115 |
| New Hampshire | 1 | 4 | 26 | 37 | 18 | — | 0 | 4 | 4 | 2 | — | 0 | 2 | 3 | — |
| Rhode Island§ | — | 2 | 15 | 28 | 29 | — | 0 | 2 | 1 | 1 | — | 0 | 3 | 1 | 5 |
| Vermont§ | — | 1 | 6 | 19 | 11 | — | 0 | 4 | 3 | 2 | — | 0 | 2 | 1 | 2 |
| **Mid. Atlantic** | 11 | 96 | 189 | 1,383 | 1,412 | — | 8 | 61 | 82 | 99 | 1 | 13 | 48 | 173 | 335 |
| New Jersey | — | 19 | 50 | 54 | 278 | — | 1 | 16 | 1 | 28 | — | 2 | 34 | 13 | 115 |
| New York (Upstate) | — | 28 | 93 | 431 | 301 | — | 3 | 14 | 36 | 33 | — | 3 | 43 | 39 | 87 |
| New York City | 1 | 23 | 45 | 368 | 387 | — | 0 | 4 | 8 | 14 | 1 | 5 | 12 | 94 | 97 |
| Pennsylvania | 10 | 31 | 66 | 530 | 446 | — | 3 | 47 | 37 | 24 | — | 1 | 6 | 27 | 36 |
| **E.N. Central** | 39 | 97 | 203 | 1,428 | 1,711 | 2 | 9 | 63 | 99 | 118 | 17 | 25 | 75 | 275 | 400 |
| Illinois | — | 29 | 65 | 290 | 486 | — | 1 | 8 | 12 | 14 | — | 9 | 53 | 35 | 135 |
| Indiana | 5 | 15 | 55 | 195 | 195 | 1 | 1 | 8 | 10 | 14 | — | 2 | 17 | 24 | 53 |
| Michigan | 7 | 18 | 35 | 274 | 301 | — | 1 | 6 | 19 | 25 | — | 2 | 5 | 14 | 77 |
| Ohio | 27 | 23 | 56 | 397 | 420 | 1 | 3 | 18 | 42 | 34 | 17 | 4 | 23 | 145 | 57 |
| Wisconsin | — | 17 | 32 | 272 | 309 | — | 2 | 41 | 16 | 31 | — | 4 | 14 | 57 | 78 |
| **W.N. Central** | 28 | 49 | 109 | 873 | 761 | 1 | 12 | 45 | 120 | 116 | 39 | 44 | 85 | 892 | 472 |
| Iowa | — | 8 | 26 | 125 | 132 | — | 2 | 38 | 19 | 22 | — | 2 | 14 | 20 | 16 |
| Kansas | 10 | 7 | 20 | 144 | 114 | 1 | 0 | 4 | 12 | 4 | — | 1 | 11 | 13 | 32 |
| Minnesota | — | 12 | 60 | 209 | 176 | — | 3 | 26 | 51 | 38 | — | 5 | 24 | 93 | 30 |
| Missouri | 18 | 16 | 35 | 279 | 213 | — | 3 | 13 | 23 | 37 | 39 | 14 | 78 | 742 | 321 |
| Nebraska§ | — | 3 | 10 | 58 | 73 | — | 1 | 11 | 14 | 11 | — | 1 | 14 | 7 | 32 |
| North Dakota | — | 0 | 5 | 11 | 6 | — | 0 | 0 | — | — | — | 0 | 18 | 4 | 4 |
| South Dakota | — | 2 | 11 | 47 | 47 | — | 0 | 5 | 1 | 4 | — | 6 | 24 | 13 | 37 |
| **S. Atlantic** | 93 | 227 | 403 | 2,906 | 2,786 | 4 | 13 | 32 | 186 | 136 | 113 | 74 | 150 | 1,529 | 921 |
| Delaware | — | 2 | 10 | 29 | 27 | — | 0 | 3 | 6 | 1 | — | 0 | 2 | 4 | — |
| District of Columbia | — | 1 | 4 | 14 | 23 | — | 0 | 1 | — | — | — | 0 | 5 | 4 | 3 |
| Florida | 68 | 95 | 176 | 1,297 | 1,227 | 4 | 2 | 8 | 56 | 29 | 62 | 37 | 76 | 1,006 | 403 |
| Georgia | 19 | 29 | 76 | 423 | 403 | — | 2 | 7 | 20 | 23 | 51 | 25 | 62 | 413 | 327 |
| Maryland§ | — | 14 | 32 | 201 | 132 | — | 3 | 9 | 34 | 12 | — | 1 | 10 | 25 | 19 |
| North Carolina | 6 | 29 | 130 | 444 | 453 | — | 2 | 11 | 25 | 28 | — | 1 | 14 | 25 | 82 |
| South Carolina§ | — | 18 | 47 | 231 | 243 | — | 0 | 3 | 4 | 3 | — | 0 | 4 | 23 | 65 |
| Virginia§ | — | 20 | 58 | 229 | 245 | — | 3 | 11 | 40 | 40 | — | 2 | 9 | 28 | 22 |
| West Virginia | — | 1 | 31 | 38 | 33 | — | 0 | 5 | 1 | — | — | 0 | 2 | 1 | — |
| **E.S. Central** | 5 | 51 | 139 | 672 | 669 | — | 4 | 21 | 37 | 55 | 3 | 12 | 84 | 323 | 265 |
| Alabama§ | — | 11 | 70 | 199 | 224 | — | 0 | 5 | 8 | 6 | — | 6 | 66 | 141 | 67 |
| Kentucky | 5 | 9 | 23 | 153 | 119 | — | 1 | 12 | 12 | 13 | 3 | 2 | 15 | 41 | 130 |
| Mississippi | — | 12 | 86 | 86 | 139 | — | 0 | 3 | — | 1 | — | 1 | 71 | 71 | 31 |
| Tennessee§ | — | 17 | 32 | 234 | 187 | — | 2 | 9 | 17 | 35 | — | 3 | 14 | 70 | 37 |
| **W.S. Central** | 13 | 84 | 186 | 410 | 1,038 | 3 | 4 | 53 | 49 | 41 | 8 | 38 | 245 | 399 | 489 |
| Arkansas§ | 8 | 13 | 45 | 134 | 276 | — | 1 | 7 | 10 | 8 | 2 | 2 | 10 | 41 | 29 |
| Louisiana | — | 14 | 42 | 120 | 138 | — | 0 | 1 | — | — | — | 3 | 24 | 68 | 9 |
| Oklahoma | 5 | 10 | 103 | 120 | 86 | 3 | 0 | 17 | 11 | 4 | 6 | 2 | 60 | 28 | 32 |
| Texas§ | — | 44 | 107 | 36 | 538 | — | 2 | 48 | 28 | 29 | — | 30 | 174 | 262 | 419 |
| **Mountain** | 33 | 50 | 88 | 843 | 835 | 4 | 8 | 34 | 104 | 89 | 5 | 22 | 84 | 260 | 301 |
| Arizona | 8 | 17 | 44 | 300 | 244 | 4 | 2 | 9 | 42 | 24 | 2 | 10 | 37 | 129 | 161 |
| Colorado | 10 | 12 | 30 | 233 | 246 | — | 1 | 8 | 19 | 23 | — | 3 | 15 | 45 | 45 |
| Idaho§ | — | 3 | 9 | 38 | 48 | — | 1 | 8 | 6 | 13 | — | 0 | 3 | 4 | 6 |
| Montana§ | — | 2 | 10 | 31 | 40 | — | 0 | 0 | — | — | — | 0 | 13 | 11 | 2 |
| Nevada§ | 7 | 4 | 20 | 69 | 54 | — | 0 | 5 | 8 | 11 | 1 | 1 | 20 | 13 | 29 |
| New Mexico§ | — | 4 | 15 | 56 | 73 | — | 1 | 5 | 11 | 7 | — | 2 | 15 | 33 | 37 |
| Utah | 8 | 4 | 14 | 93 | 105 | — | 2 | 14 | 18 | 10 | 2 | 1 | 4 | 8 | 18 |
| Wyoming§ | — | 1 | 4 | 23 | 25 | — | 0 | 3 | — | 1 | — | 0 | 19 | 17 | 3 |
| **Pacific** | 54 | 105 | 890 | 1,633 | 1,545 | 11 | 3 | 164 | 96 | 25 | 16 | 33 | 256 | 401 | 530 |
| Alaska | 3 | 1 | 5 | 32 | 33 | N | 0 | 0 | N | N | — | 0 | 2 | 6 | 4 |
| California | 44 | 89 | 260 | 1,254 | 1,272 | 4 | 0 | 8 | 56 | N | 15 | 28 | 84 | 321 | 449 |
| Hawaii | — | 5 | 16 | 75 | 87 | 1 | 0 | 3 | 6 | 4 | — | 1 | 3 | 13 | 17 |
| Oregon§ | — | 7 | 17 | 90 | 153 | — | 1 | 9 | 12 | 21 | — | 1 | 6 | 19 | 60 |
| Washington | 7 | 0 | 625 | 182 | — | 6 | 0 | 162 | 22 | — | 1 | 0 | 170 | 42 | — |
| American Samoa | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |
| C.N.M.I. | U | — | — | U | U | U | — | — | U | U | U | — | — | U | U |
| Guam | — | — | — | — | — | N | — | — | N | N | — | — | — | — | — |
| Puerto Rico | — | 15 | 66 | 250 | 127 | — | 0 | 0 | — | — | — | 0 | 6 | 11 | 9 |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional.
† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Streptococcal disease, invasive, group A | | | | | *Streptococcus pneumoniae*, invasive disease† Age <5 years | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 |
| | | Med | Max | | | | Med | Max | | |
| **United States** | 44 | 93 | 247 | 2,251 | 2,756 | 9 | 28 | 103 | 663 | 647 |
| **New England** | — | 6 | 28 | 167 | 220 | — | 2 | 11 | 54 | 77 |
| Connecticut | — | 0 | 17 | 35 | 55 | — | 0 | 6 | — | 19 |
| Maine§ | — | 0 | 2 | 8 | 9 | — | 0 | 1 | 1 | — |
| Massachusetts | — | 4 | 10 | 95 | 140 | — | 2 | 6 | 42 | 57 |
| New Hampshire | — | 0 | 9 | 18 | 6 | — | 0 | 4 | 6 | 1 |
| Rhode Island§ | — | 0 | 12 | — | 4 | — | 0 | 3 | 3 | — |
| Vermont§ | — | 0 | 2 | 11 | 6 | — | 0 | 1 | 2 | — |
| **Mid. Atlantic** | 6 | 16 | 39 | 416 | 523 | — | 3 | 19 | 53 | 89 |
| New Jersey | — | 1 | 6 | 28 | 94 | — | 0 | 4 | — | 31 |
| New York (Upstate) | — | 5 | 26 | 149 | 154 | — | 2 | 14 | 53 | 49 |
| New York City | — | 3 | 11 | 96 | 96 | — | 0 | 3 | — | 9 |
| Pennsylvania | 6 | 6 | 11 | 143 | 179 | N | 0 | 0 | N | N |
| **E.N. Central** | 11 | 15 | 29 | 400 | 593 | — | 6 | 14 | 98 | 170 |
| Illinois | — | 4 | 10 | 81 | 184 | — | 1 | 6 | 9 | 46 |
| Indiana | 4 | 2 | 12 | 57 | 63 | — | 0 | 10 | 10 | 21 |
| Michigan | 1 | 4 | 10 | 105 | 121 | — | 1 | 4 | 40 | 42 |
| Ohio | 6 | 4 | 14 | 138 | 154 | — | 1 | 7 | 35 | 34 |
| Wisconsin | — | 1 | 6 | 19 | 71 | — | 0 | 2 | 4 | 27 |
| **W.N. Central** | 4 | 5 | 32 | 186 | 177 | 5 | 2 | 9 | 60 | 52 |
| Iowa | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Kansas | 1 | 1 | 3 | 24 | 36 | — | 0 | 3 | 1 | 11 |
| Minnesota | — | 0 | 29 | 86 | 78 | 5 | 1 | 6 | 40 | 25 |
| Missouri | 3 | 2 | 6 | 52 | 32 | — | 0 | 3 | 14 | 10 |
| Nebraska§ | — | 0 | 2 | 11 | 18 | — | 0 | 2 | 4 | 4 |
| North Dakota | — | 0 | 2 | 9 | 6 | — | 0 | 1 | 1 | 2 |
| South Dakota | — | 0 | 2 | 4 | 7 | — | 0 | 0 | — | — |
| **S. Atlantic** | 13 | 20 | 48 | 504 | 531 | 1 | 3 | 12 | 127 | 33 |
| Delaware | — | 0 | 2 | 3 | 5 | — | 0 | 0 | — | — |
| District of Columbia | — | 0 | 3 | 7 | 7 | — | 0 | 1 | — | — |
| Florida | 7 | 5 | 16 | 127 | 125 | — | 0 | 5 | 31 | — |
| Georgia | 6 | 5 | 11 | 100 | 135 | 1 | 0 | 4 | 39 | — |
| Maryland§ | — | 4 | 8 | 89 | 72 | — | 1 | 6 | 36 | 25 |
| North Carolina | — | 0 | 26 | 56 | 67 | — | 0 | 0 | — | — |
| South Carolina§ | — | 1 | 7 | 45 | 40 | — | 0 | 3 | 11 | — |
| Virginia§ | — | 2 | 11 | 67 | 66 | — | 0 | 3 | 8 | — |
| West Virginia | — | 0 | 5 | 10 | 14 | — | 0 | 4 | 2 | 8 |
| **E.S. Central** | — | 4 | 11 | 90 | 114 | — | 0 | 6 | 42 | 9 |
| Alabama§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Kentucky | — | 1 | 4 | 24 | 28 | — | 0 | 0 | — | — |
| Mississippi | N | 0 | 0 | N | N | — | 0 | 2 | 2 | 9 |
| Tennessee§ | — | 3 | 7 | 66 | 86 | — | 0 | 6 | 40 | — |
| **W.S. Central** | — | 6 | 80 | 138 | 192 | 1 | 4 | 39 | 110 | 87 |
| Arkansas§ | — | 0 | 2 | 12 | 17 | 1 | 0 | 2 | 7 | 14 |
| Louisiana | — | 0 | 2 | 4 | 2 | — | 0 | 4 | 24 | 2 |
| Oklahoma | — | 2 | 21 | 41 | 56 | — | 1 | 12 | 25 | 20 |
| Texas§ | — | 3 | 56 | 81 | 117 | — | 1 | 24 | 54 | 51 |
| **Mountain** | 9 | 11 | 23 | 297 | 364 | 1 | 4 | 12 | 102 | 117 |
| Arizona | 2 | 5 | 11 | 117 | 196 | — | 2 | 7 | 57 | 69 |
| Colorado | 4 | 3 | 9 | 90 | 58 | 1 | 1 | 4 | 30 | 27 |
| Idaho§ | — | 0 | 1 | 6 | 6 | — | 0 | 1 | 2 | 1 |
| Montana§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Nevada§ | — | 0 | 1 | 2 | 1 | — | 0 | 1 | 1 | — |
| New Mexico§ | — | 1 | 6 | 25 | 67 | — | 0 | 4 | 12 | 20 |
| Utah | 3 | 1 | 7 | 54 | 34 | — | 0 | 0 | — | — |
| Wyoming§ | — | 0 | 1 | 3 | 2 | — | 0 | 0 | — | — |
| **Pacific** | 1 | 3 | 9 | 53 | 42 | 1 | 0 | 4 | 17 | 13 |
| Alaska | 1 | 0 | 2 | 15 | N | 1 | 0 | 2 | 15 | — |
| California | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Hawaii | — | 2 | 9 | 38 | 42 | — | 0 | 2 | 2 | 13 |
| Oregon§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Washington | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| American Samoa | U | 0 | 0 | U | U | U | 0 | 0 | U | U |
| C.N.M.I. | U | — | — | U | U | U | — | — | U | U |
| Guam | — | — | — | — | — | N | — | — | N | N |
| Puerto Rico | — | 0 | 0 | — | — | N | 0 | 0 | N | N |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 0 | U | U |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting years 2006 and 2007 are provisional.
† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | *Streptococcus pneumoniae*, invasive disease, drug resistant† | | | | | | | | | | Syphilis, primary and secondary | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All ages | | | | | Age <5 years | | | | | | | | | |
| | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 |
| | | Med | Max | | | | Med | Max | | | | Med | Max | | |
| **United States** | 27 | 46 | 254 | 1,147 | 1,308 | 2 | 7 | 31 | 168 | 163 | 72 | 183 | 315 | 3,223 | 3,600 |
| **New England** | — | 1 | 12 | 24 | 73 | — | 0 | 3 | 4 | 2 | 4 | 4 | 13 | 85 | 76 |
| Connecticut | — | 0 | 5 | — | 57 | — | 0 | 0 | — | — | — | 0 | 10 | 10 | 17 |
| Maine§ | — | 0 | 2 | 5 | 4 | — | 0 | 2 | 1 | 1 | — | 0 | 1 | 1 | 4 |
| Massachusetts | — | 0 | 0 | — | — | — | 0 | 0 | — | — | 3 | 3 | 7 | 54 | 42 |
| New Hampshire | — | 0 | 0 | — | — | — | 0 | 0 | — | — | 1 | 0 | 2 | 10 | 5 |
| Rhode Island§ | — | 0 | 4 | 8 | 4 | — | 0 | 1 | 1 | — | — | 0 | 5 | 9 | 6 |
| Vermont§ | — | 0 | 2 | 11 | 8 | — | 0 | 1 | 2 | 1 | — | 0 | 1 | 1 | 2 |
| **Mid. Atlantic** | — | 3 | 8 | 74 | 75 | — | 0 | 5 | 17 | 10 | 1 | 23 | 44 | 592 | 465 |
| New Jersey | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 3 | 8 | 57 | 71 |
| New York (Upstate) | — | 1 | 5 | 25 | 21 | — | 0 | 4 | 7 | 4 | — | 3 | 14 | 46 | 61 |
| New York City | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 15 | 35 | 396 | 232 |
| Pennsylvania | — | 2 | 6 | 49 | 54 | — | 0 | 2 | 10 | 6 | 1 | 5 | 12 | 93 | 101 |
| **E.N. Central** | 9 | 10 | 40 | 284 | 284 | 1 | 1 | 7 | 35 | 47 | 7 | 15 | 32 | 276 | 357 |
| Illinois | — | 0 | 3 | 3 | 14 | — | 0 | 1 | 1 | 3 | 4 | 6 | 13 | 106 | 196 |
| Indiana | 3 | 2 | 31 | 66 | 68 | — | 0 | 5 | 6 | 13 | — | 2 | 5 | 18 | 31 |
| Michigan | — | 0 | 1 | 1 | 14 | — | 0 | 1 | — | 2 | 1 | 2 | 10 | 46 | 33 |
| Ohio | 6 | 5 | 38 | 214 | 188 | 1 | 1 | 5 | 28 | 29 | 2 | 4 | 9 | 82 | 81 |
| Wisconsin | N | 0 | 0 | N | N | — | 0 | 0 | — | — | — | 1 | 4 | 24 | 16 |
| **W.N. Central** | — | 1 | 124 | 88 | 21 | — | 0 | 15 | 7 | 1 | — | 5 | 14 | 54 | 106 |
| Iowa | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 3 | 3 | 7 |
| Kansas | — | 0 | 10 | 46 | — | — | 0 | 2 | 2 | — | — | 0 | 3 | 8 | 10 |
| Minnesota | — | 0 | 123 | — | — | — | 0 | 15 | — | — | — | 1 | 5 | 21 | 22 |
| Missouri | — | 1 | 6 | 35 | 21 | — | 0 | 2 | 3 | 1 | — | 2 | 8 | 21 | 64 |
| Nebraska§ | — | 0 | 1 | 2 | — | — | 0 | 0 | — | — | — | 0 | 2 | 1 | 2 |
| North Dakota | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | 1 |
| South Dakota | — | 0 | 3 | 5 | — | — | 0 | 1 | 2 | — | — | 0 | 3 | — | — |
| **S. Atlantic** | 18 | 21 | 59 | 517 | 691 | 1 | 3 | 8 | 74 | 60 | 15 | 40 | 185 | 541 | 787 |
| Delaware | — | 0 | 1 | 4 | — | — | 0 | 1 | 1 | — | — | 0 | 3 | 5 | 12 |
| District of Columbia | — | 0 | 2 | 5 | 17 | — | 0 | 0 | — | 2 | 3 | 2 | 11 | 62 | 47 |
| Florida | 14 | 11 | 29 | 302 | 312 | 1 | 2 | 8 | 66 | 57 | — | 12 | 23 | 68 | 293 |
| Georgia | 4 | 6 | 21 | 173 | 295 | — | 0 | 1 | — | 1 | — | 4 | 153 | 20 | 91 |
| Maryland§ | — | 0 | 1 | 1 | — | — | 0 | 0 | — | — | — | 5 | 15 | 116 | 136 |
| North Carolina | — | 0 | 0 | — | — | — | 0 | 0 | — | — | 2 | 5 | 23 | 140 | 117 |
| South Carolina§ | — | 0 | 0 | — | — | — | 0 | 0 | — | — | 1 | 1 | 10 | 43 | 34 |
| Virginia§ | N | 0 | 0 | N | N | — | 0 | 0 | — | — | 9 | 4 | 17 | 84 | 56 |
| West Virginia | — | 1 | 17 | 32 | 67 | — | 0 | 1 | 7 | — | — | 0 | 2 | 3 | 1 |
| **E.S. Central** | — | 2 | 9 | 73 | 98 | — | 0 | 3 | 15 | 16 | 16 | 14 | 29 | 294 | 232 |
| Alabama§ | N | 0 | 0 | N | N | — | 0 | 0 | — | — | 11 | 5 | 17 | 95 | 101 |
| Kentucky | — | 0 | 2 | 15 | 23 | — | 0 | 1 | 1 | 3 | 2 | 1 | 7 | 32 | 32 |
| Mississippi | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 2 | 9 | 47 | 24 |
| Tennessee§ | — | 2 | 8 | 58 | 75 | — | 0 | 3 | 14 | 13 | 3 | 6 | 13 | 120 | 75 |
| **W.S. Central** | — | 1 | 9 | 61 | 11 | — | 0 | 2 | 8 | 3 | 24 | 29 | 56 | 598 | 562 |
| Arkansas§ | — | 0 | 3 | 1 | 5 | — | 0 | 0 | — | 2 | 6 | 1 | 7 | 43 | 33 |
| Louisiana | — | 1 | 3 | 22 | 6 | — | 0 | 1 | 2 | 1 | — | 6 | 30 | 126 | 79 |
| Oklahoma | — | 0 | 8 | 38 | — | — | 0 | 2 | 6 | — | 3 | 1 | 5 | 31 | 32 |
| Texas§ | — | 0 | 0 | — | — | — | 0 | 0 | — | — | 15 | 21 | 31 | 398 | 418 |
| **Mountain** | — | 1 | 5 | 26 | 55 | — | 0 | 5 | 8 | 24 | 3 | 8 | 27 | 107 | 195 |
| Arizona | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 2 | 16 | 29 | 81 |
| Colorado | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 1 | 5 | 12 | 34 |
| Idaho§ | N | 0 | 0 | N | N | — | 0 | 0 | — | — | — | 0 | 1 | 1 | 2 |
| Montana§ | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 1 | 1 | 1 |
| Nevada§ | — | 0 | 3 | 15 | 13 | — | 0 | 2 | 5 | — | 3 | 2 | 12 | 36 | 47 |
| New Mexico§ | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 1 | 7 | 24 | 26 |
| Utah | — | 0 | 5 | 8 | 24 | — | 0 | 4 | 2 | 16 | — | 0 | 2 | 3 | 4 |
| Wyoming§ | — | 0 | 3 | 3 | 18 | — | 0 | 1 | 1 | 8 | — | 0 | 1 | 1 | — |
| **Pacific** | — | 0 | 0 | — | — | — | 0 | 0 | — | — | 2 | 38 | 57 | 676 | 820 |
| Alaska | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 2 | 4 | 5 |
| California | N | 0 | 0 | N | N | — | 0 | 0 | — | — | 1 | 35 | 54 | 614 | 718 |
| Hawaii | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 1 | 2 | 10 |
| Oregon§ | N | 0 | 0 | N | N | — | 0 | 0 | — | — | — | 0 | 6 | 8 | 7 |
| Washington | N | 0 | 0 | N | N | — | 0 | 0 | — | — | 1 | 2 | 11 | 48 | 80 |
| 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 | — | — | N | N | — | — | — | — | — | — | — | — | — | — |
| Puerto Rico | N | 0 | 0 | N | N | — | 0 | 0 | — | — | 4 | 3 | 11 | 56 | 61 |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |

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

**TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 26, 2007, and May 27, 2006 (21st Week)***

| Reporting area | Varicella (chickenpox) | | | | | West Nile virus disease† | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Neuroinvasive | | | | | Non-neuroinvasive§ | | | | |
| | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 | Current week | Previous 52 weeks | | Cum 2007 | Cum 2006 |
| | | Med | Max | | | | Med | Max | | | | Med | Max | | |
| **United States** | 437 | 808 | 1,579 | 19,159 | 25,322 | — | 0 | 178 | — | 10 | — | 1 | 399 | — | 5 |
| **New England** | 1 | 31 | 215 | 310 | 2,183 | — | 0 | 3 | — | — | — | 0 | 2 | — | — |
| Connecticut | — | 10 | 76 | 1 | 865 | — | 0 | 3 | — | — | — | 0 | 1 | — | — |
| Maine¶ | — | 1 | 17 | — | 146 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Massachusetts | — | 0 | 95 | — | 776 | — | 0 | 1 | — | — | — | 0 | 1 | — | — |
| New Hampshire | 1 | 6 | 43 | 123 | 63 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Rhode Island¶ | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Vermont¶ | — | 9 | 66 | 186 | 333 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| **Mid. Atlantic** | 91 | 106 | 195 | 2,369 | 2,648 | — | 0 | 11 | — | — | — | 0 | 4 | — | — |
| New Jersey | N | 0 | 0 | N | N | — | 0 | 2 | — | — | — | 0 | 1 | — | — |
| New York (Upstate) | N | 0 | 0 | N | N | — | 0 | 5 | — | — | — | 0 | 1 | — | — |
| New York City | — | 0 | 0 | — | — | — | 0 | 4 | — | — | — | 0 | 2 | — | — |
| Pennsylvania | 91 | 106 | 195 | 2,369 | 2,648 | — | 0 | 2 | — | — | — | 0 | 1 | — | — |
| **E.N. Central** | 208 | 218 | 568 | 5,637 | 8,885 | — | 0 | 43 | — | 1 | — | 0 | 33 | — | — |
| Illinois | — | 2 | 11 | 71 | 69 | — | 0 | 23 | — | 1 | — | 0 | 23 | — | — |
| Indiana | — | 0 | 0 | — | — | — | 0 | 7 | — | — | — | 0 | 12 | — | — |
| Michigan | 72 | 88 | 258 | 2,220 | 2,581 | — | 0 | 11 | — | — | — | 0 | 2 | — | — |
| Ohio | 132 | 118 | 449 | 2,873 | 5,561 | — | 0 | 11 | — | — | — | 0 | 3 | — | — |
| Wisconsin | 4 | 15 | 57 | 473 | 674 | — | 0 | 2 | — | — | — | 0 | 2 | — | — |
| **W.N. Central** | 58 | 32 | 136 | 1,083 | 1,092 | — | 0 | 36 | — | — | — | 0 | 79 | — | 1 |
| Iowa | N | 0 | 0 | N | N | — | 0 | 3 | — | — | — | 0 | 4 | — | 1 |
| Kansas | 4 | 9 | 52 | 403 | 215 | — | 0 | 3 | — | — | — | 0 | 3 | — | — |
| Minnesota | — | 0 | 0 | — | — | — | 0 | 6 | — | — | — | 0 | 7 | — | — |
| Missouri | 54 | 16 | 78 | 546 | 828 | — | 0 | 14 | — | — | — | 0 | 2 | — | — |
| Nebraska¶ | N | 0 | 0 | N | N | — | 0 | 9 | — | — | — | 0 | 38 | — | — |
| North Dakota | — | 0 | 60 | 84 | 18 | — | 0 | 5 | — | — | — | 0 | 28 | — | — |
| South Dakota | — | 1 | 15 | 50 | 31 | — | 0 | 7 | — | — | — | 0 | 22 | — | — |
| **S. Atlantic** | 41 | 85 | 224 | 2,185 | 2,457 | — | 0 | 2 | — | — | — | 0 | 7 | — | — |
| Delaware | — | 0 | 6 | 12 | 40 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| District of Columbia | — | 0 | 8 | 8 | 18 | — | 0 | 0 | — | — | — | 0 | 1 | — | — |
| Florida | 19 | 0 | 89 | 655 | N | — | 0 | 1 | — | — | — | 0 | 0 | — | — |
| Georgia | N | 0 | 0 | N | N | — | 0 | 1 | — | — | — | 0 | 4 | — | — |
| Maryland¶ | N | 0 | 0 | N | N | — | 0 | 2 | — | — | — | 0 | 2 | — | — |
| North Carolina | — | 0 | 0 | — | — | — | 0 | 1 | — | — | — | 0 | 0 | — | — |
| South Carolina¶ | — | 18 | 72 | 572 | 710 | — | 0 | 1 | — | — | — | 0 | 0 | — | — |
| Virginia¶ | — | 19 | 176 | 331 | 811 | — | 0 | 0 | — | — | — | 0 | 2 | — | — |
| West Virginia | 22 | 25 | 52 | 607 | 878 | — | 0 | 1 | — | — | — | 0 | 0 | — | — |
| **E.S. Central** | — | 6 | 43 | 246 | 50 | — | 0 | 15 | — | 3 | — | 0 | 16 | — | — |
| Alabama¶ | — | 6 | 43 | 244 | 50 | — | 0 | 2 | — | — | — | 0 | 0 | — | — |
| Kentucky | N | 0 | 0 | N | N | — | 0 | 2 | — | — | — | 0 | 1 | — | — |
| Mississippi | — | 0 | 2 | 2 | — | — | 0 | 10 | — | 3 | — | 0 | 16 | — | — |
| Tennessee¶ | N | 0 | 0 | N | N | — | 0 | 4 | — | — | — | 0 | 2 | — | — |
| **W.S. Central** | 1 | 200 | 979 | 5,749 | 6,340 | — | 0 | 58 | — | 4 | — | 0 | 26 | — | 2 |
| Arkansas¶ | 1 | 9 | 105 | 178 | 422 | — | 0 | 4 | — | — | — | 0 | 2 | — | — |
| Louisiana | — | 1 | 11 | 46 | 46 | — | 0 | 13 | — | — | — | 0 | 9 | — | 1 |
| Oklahoma | — | 0 | 0 | — | — | — | 0 | 6 | — | — | — | 0 | 4 | — | — |
| Texas¶ | — | 172 | 873 | 5,525 | 5,872 | — | 0 | 38 | — | 4 | — | 0 | 16 | — | 1 |
| **Mountain** | 37 | 56 | 129 | 1,558 | 1,667 | — | 0 | 61 | — | 2 | — | 0 | 228 | — | 2 |
| Arizona | — | 0 | 0 | — | — | — | 0 | 9 | — | — | — | 0 | 15 | — | — |
| Colorado | 28 | 22 | 62 | 612 | 863 | — | 0 | 10 | — | 2 | — | 0 | 51 | — | 1 |
| Idaho¶ | N | 0 | 0 | N | N | — | 0 | 30 | — | — | — | 0 | 157 | — | 1 |
| Montana¶ | — | 0 | 26 | 194 | N | — | 0 | 3 | — | — | — | 0 | 8 | — | — |
| Nevada¶ | — | 0 | 3 | 1 | 8 | — | 0 | 9 | — | — | — | 0 | 16 | — | — |
| New Mexico¶ | — | 4 | 35 | 216 | 283 | — | 0 | 1 | — | — | — | 0 | 1 | — | — |
| Utah | 9 | 17 | 73 | 522 | 491 | — | 0 | 8 | — | — | — | 0 | 17 | — | — |
| Wyoming¶ | — | 0 | 11 | 13 | 22 | — | 0 | 7 | — | — | — | 0 | 10 | — | — |
| **Pacific** | — | 0 | 9 | 22 | — | — | 0 | 15 | — | — | — | 0 | 51 | — | — |
| Alaska | — | 0 | 9 | 22 | N | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| California | — | 0 | 0 | — | N | — | 0 | 15 | — | — | — | 0 | 37 | — | — |
| Hawaii | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Oregon¶ | N | 0 | 0 | N | N | — | 0 | 2 | — | — | — | 0 | 14 | — | — |
| Washington | N | 0 | 0 | N | N | — | 0 | 0 | — | — | — | 0 | 2 | — | — |
| American Samoa | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |
| C.N.M.I. | U | — | — | U | U | U | — | — | U | U | U | — | — | U | U |
| Guam | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Puerto Rico | 1 | 12 | 26 | 305 | 247 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| U.S. Virgin Islands | U | 0 | 0 | U | U | U | 0 | 0 | U | U | U | 0 | 0 | U | U |

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

**TABLE III. Deaths in 122 U.S. cities,* week ending May 26, 2007 (21st Week)**

| Reporting Area | All causes, by age (years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | ≥65 | 45-64 | 25-44 | 1-24 | <1 | |
| **New England** | 521 | 387 | 95 | 21 | 8 | 10 | 47 |
| Boston, MA | 148 | 106 | 28 | 7 | 4 | 3 | 14 |
| Bridgeport, CT | 33 | 24 | 7 | 1 | 1 | — | 2 |
| Cambridge, MA | 11 | 11 | — | — | — | — | — |
| Fall River, MA | 20 | 18 | — | 2 | — | — | 5 |
| Hartford, CT | 32 | 22 | 8 | 2 | — | — | 3 |
| Lowell, MA | 26 | 19 | 5 | — | 1 | 1 | 4 |
| Lynn, MA | 6 | 5 | 1 | — | — | — | 1 |
| New Bedford, MA | 20 | 16 | 4 | — | — | — | 1 |
| New Haven, CT | 30 | 18 | 4 | 4 | 1 | 3 | 7 |
| Providence, RI | 58 | 50 | 7 | — | — | 1 | — |
| Somerville, MA | 2 | 1 | — | — | — | 1 | — |
| Springfield, MA | 48 | 31 | 13 | 2 | 1 | 1 | 5 |
| Waterbury, CT | 23 | 21 | 2 | — | — | — | 2 |
| Worcester, MA | 64 | 45 | 16 | 3 | — | — | 3 |
| **Mid. Atlantic** | 1,945 | 1,333 | 432 | 122 | 34 | 23 | 100 |
| Albany, NY | 33 | 17 | 9 | 4 | 1 | 2 | 1 |
| Allentown, PA | 27 | 24 | 1 | 2 | — | — | 2 |
| Buffalo, NY | 102 | 69 | 25 | 6 | — | 2 | 4 |
| Camden, NJ | 12 | 7 | 1 | 3 | — | 1 | — |
| Elizabeth, NJ | 18 | 13 | 4 | 1 | — | — | 3 |
| Erie, PA | 45 | 38 | 7 | — | — | — | 2 |
| Jersey City, NJ | 31 | 21 | 6 | 2 | 1 | 1 | 5 |
| New York City, NY | 1,011 | 692 | 235 | 58 | 17 | 8 | 39 |
| Newark, NJ | 33 | 12 | 16 | 5 | — | — | 3 |
| Paterson, NJ | 16 | 8 | 1 | 6 | 1 | — | 2 |
| Philadelphia, PA | 245 | 154 | 60 | 20 | 6 | 5 | 11 |
| Pittsburgh, PA§ | 27 | 20 | 6 | 1 | — | — | 3 |
| Reading, PA | 35 | 30 | 3 | 1 | 1 | — | 2 |
| Rochester, NY | 141 | 110 | 22 | 5 | 1 | 3 | 13 |
| Schenectady, NY | 24 | 20 | 2 | 1 | 1 | — | 2 |
| Scranton, PA | 20 | 15 | 4 | — | 1 | — | — |
| Syracuse, NY | 77 | 54 | 16 | 4 | 3 | — | 7 |
| Trenton, NJ | 25 | 13 | 8 | 2 | 1 | 1 | 1 |
| Utica, NY | 8 | 5 | 2 | 1 | — | — | — |
| Yonkers, NY | 15 | 11 | 4 | — | — | — | — |
| **E.N. Central** | 1,995 | 1,298 | 458 | 133 | 48 | 58 | 123 |
| Akron, OH | 51 | 30 | 16 | 2 | 2 | 1 | 1 |
| Canton, OH | 32 | 24 | 4 | 3 | — | 1 | 6 |
| Chicago, IL | 261 | 152 | 60 | 30 | 7 | 12 | 14 |
| Cincinnati, OH | 94 | 51 | 24 | 9 | 5 | 5 | 7 |
| Cleveland, OH | 235 | 164 | 57 | 8 | 2 | 4 | 9 |
| Columbus, OH | 216 | 140 | 52 | 13 | 8 | 3 | 11 |
| Dayton, OH | 126 | 93 | 24 | 5 | 1 | 3 | 7 |
| Detroit, MI | 149 | 85 | 38 | 18 | 3 | 5 | 16 |
| Evansville, IN | 48 | 33 | 11 | 1 | 2 | 1 | 4 |
| Fort Wayne, IN | 55 | 39 | 10 | 4 | 2 | — | 1 |
| Gary, IN | 16 | 7 | 4 | 3 | 2 | — | — |
| Grand Rapids, MI | 42 | 28 | 12 | 1 | 1 | — | 3 |
| Indianapolis, IN | 206 | 129 | 40 | 20 | 7 | 10 | 10 |
| Lansing, MI | 50 | 41 | 8 | — | — | 1 | 2 |
| Milwaukee, WI | 102 | 59 | 26 | 8 | 3 | 6 | 8 |
| Peoria, IL | 45 | 37 | 5 | 1 | 2 | — | 4 |
| Rockford, IL | 53 | 31 | 17 | 3 | — | 2 | 6 |
| South Bend, IN | 52 | 40 | 11 | 1 | — | — | 3 |
| Toledo, OH | 100 | 68 | 27 | 2 | — | 3 | 6 |
| Youngstown, OH | 62 | 47 | 12 | 1 | 1 | 1 | 5 |
| **W.N. Central** | 662 | 420 | 157 | 42 | 13 | 30 | 42 |
| Des Moines, IA | 95 | 70 | 17 | 8 | — | — | 8 |
| Duluth, MN | 19 | 14 | 4 | — | 1 | — | 1 |
| Kansas City, KS | 20 | 12 | 6 | 1 | — | 1 | 2 |
| Kansas City, MO | 86 | 60 | 18 | 2 | 4 | 2 | 4 |
| Lincoln, NE | 46 | 33 | 8 | 3 | 1 | 1 | 3 |
| Minneapolis, MN | 70 | 36 | 21 | 4 | 2 | 7 | 4 |
| Omaha, NE | 79 | 50 | 20 | 3 | — | 6 | 6 |
| St. Louis, MO | 111 | 54 | 33 | 13 | 3 | 8 | 9 |
| St. Paul, MN | 37 | 29 | 7 | 1 | — | — | 2 |
| Wichita, KS | 99 | 62 | 23 | 7 | 2 | 5 | 3 |
| **S. Atlantic** | 1,077 | 641 | 273 | 98 | 36 | 29 | 60 |
| Atlanta, GA | 26 | 7 | 7 | 8 | 4 | — | 1 |
| Baltimore, MD | 151 | 82 | 35 | 18 | 9 | 7 | 10 |
| Charlotte, NC | 112 | 68 | 29 | 11 | 2 | 2 | 13 |
| Jacksonville, FL | 175 | 98 | 50 | 20 | 4 | 3 | 1 |
| Miami, FL | 85 | 55 | 20 | 5 | 5 | — | 8 |
| Norfolk, VA | 52 | 35 | 10 | 2 | — | 5 | 1 |
| Richmond, VA | 48 | 29 | 14 | 4 | 1 | — | 4 |
| Savannah, GA | 40 | 26 | 11 | 2 | 1 | — | 1 |
| St. Petersburg, FL | 57 | 35 | 12 | 3 | 4 | 3 | 3 |
| Tampa, FL | 201 | 131 | 48 | 12 | 4 | 6 | 15 |
| Washington, D.C. | 119 | 69 | 34 | 11 | 2 | 3 | 2 |
| Wilmington, DE | 11 | 6 | 3 | 2 | — | — | 1 |
| **E.S. Central** | 890 | 593 | 195 | 62 | 20 | 20 | 76 |
| Birmingham, AL | 161 | 108 | 39 | 12 | — | 2 | 10 |
| Chattanooga, TN | 85 | 57 | 20 | 3 | 2 | 3 | 6 |
| Knoxville, TN | 94 | 61 | 20 | 8 | 3 | 2 | 9 |
| Lexington, KY | 55 | 39 | 13 | 1 | 1 | 1 | 3 |
| Memphis, TN | 180 | 124 | 38 | 11 | 2 | 5 | 23 |
| Mobile, AL | 124 | 76 | 26 | 13 | 9 | — | 5 |
| Montgomery, AL | 44 | 31 | 11 | 2 | — | — | 5 |
| Nashville, TN | 147 | 97 | 28 | 12 | 3 | 7 | 15 |
| **W.S. Central** | 1,226 | 808 | 280 | 82 | 25 | 31 | 70 |
| Austin, TX | 106 | 65 | 27 | 12 | — | 2 | 11 |
| Baton Rouge, LA | 45 | 23 | 16 | 5 | — | 1 | 1 |
| Corpus Christi, TX | 58 | 48 | 7 | 2 | — | 1 | 4 |
| Dallas, TX | U | U | U | U | U | U | U |
| El Paso, TX | 46 | 28 | 12 | 4 | — | 2 | 2 |
| Fort Worth, TX | 110 | 77 | 24 | 4 | 1 | 4 | 7 |
| Houston, TX | 368 | 225 | 90 | 35 | 11 | 7 | 8 |
| Little Rock, AR | 82 | 54 | 17 | 3 | 2 | 6 | 2 |
| New Orleans, LA¶ | U | U | U | U | U | U | U |
| San Antonio, TX | 209 | 142 | 42 | 12 | 8 | 5 | 17 |
| Shreveport, LA | 73 | 48 | 20 | 3 | — | 2 | 8 |
| Tulsa, OK | 129 | 98 | 25 | 2 | 3 | 1 | 10 |
| **Mountain** | 654 | 422 | 152 | 48 | 12 | 20 | 39 |
| Albuquerque, NM | U | U | U | U | U | U | U |
| Boise, ID | 48 | 27 | 12 | 6 | 1 | 2 | 3 |
| Colorado Springs, CO | 77 | 57 | 13 | 4 | 1 | 2 | 1 |
| Denver, CO | 94 | 55 | 25 | 7 | 3 | 4 | 9 |
| Las Vegas, NV | 255 | 159 | 57 | 24 | 6 | 9 | 16 |
| Ogden, UT | 30 | 25 | 4 | — | — | 1 | 4 |
| Phoenix, AZ | U | U | U | U | U | U | U |
| Pueblo, CO | 36 | 30 | 6 | — | — | — | 3 |
| Salt Lake City, UT | 114 | 69 | 35 | 7 | 1 | 2 | 3 |
| Tucson, AZ | U | U | U | U | U | U | U |
| **Pacific** | 1,083 | 786 | 196 | 59 | 20 | 22 | 81 |
| Berkeley, CA | 13 | 11 | 1 | 1 | — | — | 2 |
| Fresno, CA | U | U | U | U | U | U | U |
| Glendale, CA | U | U | U | U | U | U | U |
| Honolulu, HI | 69 | 51 | 13 | 2 | 1 | 2 | 6 |
| Long Beach, CA | 50 | 35 | 6 | 6 | 2 | 1 | 5 |
| Los Angeles, CA | U | U | U | U | U | U | U |
| Pasadena, CA | 17 | 12 | 2 | 2 | — | 1 | 2 |
| Portland, OR | 123 | 85 | 22 | 7 | 2 | 7 | 12 |
| Sacramento, CA | 181 | 135 | 38 | 6 | 1 | 1 | 11 |
| San Diego, CA | 143 | 101 | 26 | 10 | 3 | 3 | 17 |
| San Francisco, CA | U | U | U | U | U | U | U |
| San Jose, CA | 157 | 116 | 28 | 6 | 3 | 4 | 6 |
| Santa Cruz, CA | 28 | 20 | 3 | 3 | 2 | — | 2 |
| Seattle, WA | 120 | 84 | 21 | 11 | 3 | 1 | 8 |
| Spokane, WA | 60 | 47 | 11 | 2 | — | — | 5 |
| Tacoma, WA | 122 | 89 | 25 | 3 | 3 | 2 | 5 |
| **Total** | 10,053** | 6,688 | 2,238 | 667 | 216 | 243 | 638 |

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.

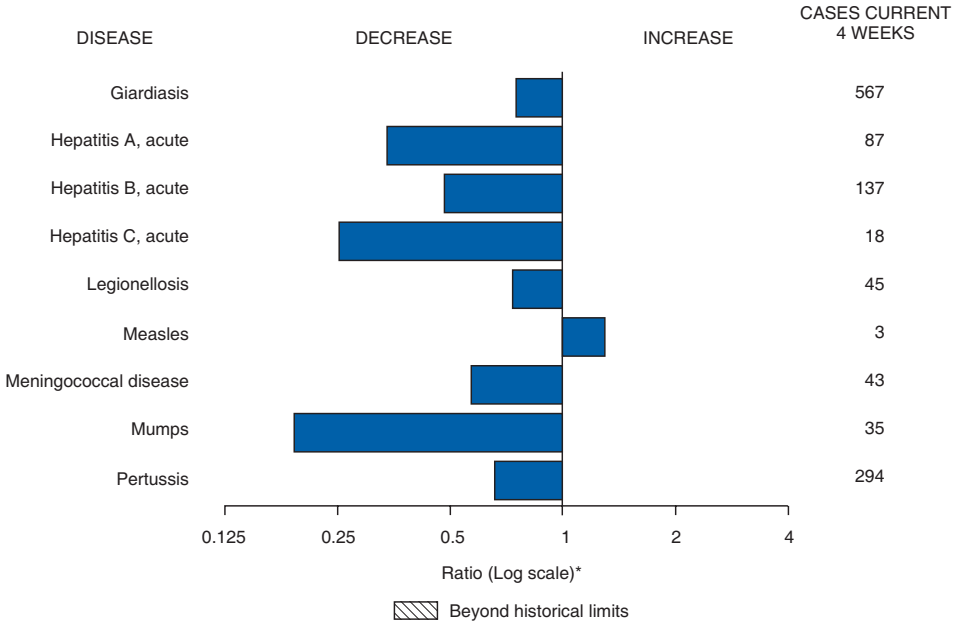
† Pneumonia and influenza.

§ 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 May 26, 2007, with historical data**




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

**Notifiable Disease Data Team and 122 Cities Mortality Data Team**

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