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# Intent to Receive Influenza A (H1N1) 2009 Monovalent and Seasonal Influenza Vaccines — Two Counties, North Carolina, August 2009

On September 15, 2009, the Food and Drug Administration approved the manufacture of four influenza A (H1N1) 2009 monovalent vaccines.* Before release of the first batches of the vaccine on September 30, intent to receive the vaccine was estimated at 50% among selected U.S. adult populations (*1,2*) and as high as 70% for children (*2*). However, studies in previous years of seasonal influenza vaccination in children, who might require 2 doses based on age and prior vaccination status, have indicated poor compliance with recommendations (*3*). To measure intent to receive H1N1 and seasonal influenza vaccines among children and adults, during August 28–29, 2009, the North Carolina Center for Public Health Preparedness, with state and local public health officials, conducted a community assessment in two counties. This report summarizes the results of that assessment, which determined that 64% of adults reported intent to receive H1N1 vaccine. In addition, 65% of parents reported intent to have all their children (aged 6 months to <18 years) vaccinated with H1N1 vaccine, and 51% said they would have all their children vaccinated with both H1N1 and seasonal influenza vaccines. The most commonly reported reasons for not intending to receive H1N1 vaccine were belief in a low likelihood of infection (18%) and concern over vaccine side effects (14%); 85% of participants said they received their H1N1 information from television. To increase coverage with H1N1 and seasonal influenza vaccines, public health departments should use television to focus public health messages on the risks for infection and severe illness and the safety profile of the vaccine.

* Food and Drug Administration. FDA approves vaccines for 2009 H1N1 influenza virus. Available at http://www.fda.gov/newsevents/newsroom/pressannouncements/ucm182399.htm.

Alamance and Orange counties were selected for the assessment because they were convenient venues with population age distributions similar to those for all of North Carolina. However, the education and race/ethnicity profiles of the two counties differ substantially from those of the entire state (Table 1), and Orange County has a generally higher socioeconomic status. A two-stage sampling method consisting of 30 random census tracts with seven randomly distributed households within each tract was used to identify 210 target households in the two counties, using parcel maps and a geographic information system-based toolkit. This sampling and data collection method, developed by CDC and referred to as Community Assessment for Public Health Emergency Response (CASPER),† has been validated and used effectively in postdisaster settings (*4*).

At the time of the survey, in late August 2009, H1N1 vaccine was in production but had not yet been approved by the Food and Drug Administration and released. Based on information available at the time, the survey assumed that 2 doses might be

† Additional information available at http://emergency.cdc.gov/disasters/surveillance/pdf/casper_toolkit_508%20compliant.pdf.

INSIDE



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**TABLE 1. Percentage of population by age group, race/ethnicity, and education level — Alamance and Orange counties and North Carolina, 2008**

| Characteristic | Alamance County % | Orange County % | North Carolina % |
|---|---|---|---|
| **Age group (yrs)** | | | |
| <18 | 24 | 19 | 24 |
| ≥65 | 14 | 10 | 12 |
| **Race/Ethnicity** | | | |
| White, non-Hispanic | 79 | 79 | 74 |
| Black, non-Hispanic | 19 | 13 | 22 |
| Asian | 1 | 6 | 2 |
| Hispanic | 11 | 6 | 7 |
| **Education level** | | | |
| High school | 77 | 88 | 78 |
| Bachelors degree | 19 | 52 | 23 |

**SOURCE:** U.S. Census Bureau. State and county QuickFacts. Available at http://quickfacts.census.gov/qfd/states/37000.html.

needed for adults and children. After the survey was completed, a single dose of vaccine was determined to be sufficient for persons aged ≥10 years.

During August 28–29, 2009, the assessment team visited the 210 households initially targeted. If no one answered at a household or the residents declined to participate, team members visited immediate neighboring households until an interview was completed. Oral informed consent was obtained, and responses were recorded using handheld computers. Household respondents aged ≥18 years represented themselves in the interviews and also any children in the household for questions pertaining to children aged <18 years. The survey consisted of 26 questions and required about 15 minutes to administer. Most questions required a yes/no response, including: "Are you aware that a pandemic H1N1 (or swine flu) vaccine is in production?" "Do you intend to receive the pandemic H1N1 vaccine when it becomes available [if the interviewee had no current knowledge, the interviewer prefaced this question with the fact that pandemic vaccine was in production]?" and "Do you intend to vaccinate all children in your household with pandemic H1N1 vaccine when it becomes available?" Additional questions pertained to prior history of and intent to receive seasonal influenza vaccine, reasons for intending or not intending to receive both vaccines (by selecting one or more from a list of 12 reasons), and level of concern about acquiring H1N1 illness (not at all, somewhat, or very concerned).

Of 258 houses at which a resident answered the door, 207 (80%) interviews were completed; 51 interviews were not completed because the residents declined participation. The median age of respondents was 49 years (range: 18–92 years), and 116 (56%) were female; 140 (68%) were non-Hispanic white, 52 (25%) were non-Hispanic black, and seven (3%) were Hispanic. A total of 165 (80%) respondents were aware that an H1N1 vaccine was in production, but only 75 (36%) were aware that the vaccine might require 2 doses for some persons. Knowledge about H1N1 vaccine was obtained from multiple sources: 85% received information from television, 52% from newspapers, 46% from radio, 36% from the Internet, and 35% from family or friends.

A total of 133 (64%) respondents reported intent to receive the H1N1 vaccine, and 109 (53%) intended to receive both vaccines (Table 2). Young adults aged 18–24 years (64%) were as likely to report intent to receive H1N1 vaccine as persons aged ≥65 years (66%). However, a greater percentage of persons aged ≥65 years (66%) reported intent to receive both H1N1 and seasonal influenza vaccines than persons aged 18–24 years (45%). Among 74 households with children aged <18 years, 48 (65%) respondents reported intent to vaccinate all their children with H1N1 vaccine; 38 (51%) said they would have all their children vaccinated with both H1N1 and seasonal influenza vaccines.

Among 74 (36%) respondents reporting no intent to receive H1N1 vaccine, reasons included the belief that they were unlikely to be infected (18%), concern over vaccine side effects (14%), a perception that if infected the illness would be mild (12%), the belief they were not included in a vaccination priority group (11%), and the inconvenience of a vaccine that might require 2 doses (8%). Intent to receive H1N1 vaccine was associated with intent to receive the 2009–10 seasonal influenza vaccine (prevalence ratio [PR] = 2.6), a high level of concern over becoming ill with the H1N1 virus (PR = 1.9), and previous 2008–09 influenza vaccination (PR = 1.5) (Table 3). Age, sex, and race/ethnicity were not associated with reported intent to receive H1N1 vaccine.

### What is already known on this topic?

Two previous studies of intent to receive influenza A (H1N1) 2009 monovalent vaccine estimated potential vaccination coverage at 50%–53% for adults and 70% for children, using nationally representative samples and online or telephone survey methods.

### What is added by this report?

This survey, conducted in August 2009 before the release of H1N1 vaccine, estimated intent to receive the vaccine in two North Carolina counties at 64% for adults and 65% for children; those with no intent cited belief in a low likelihood of infection (18%) and concern over vaccine side effects (14%), and 85% of participants said they received their H1N1 information from television.

### What are the implications for public health practice?

To increase coverage with H1N1 influenza vaccine, public health departments should use television to focus public health messages on the risk for infection and severe illness and the safety profile of the vaccine.

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**Editorial Note:** This report describes a novel use of CASPER methodology to measure community knowledge of and intent to receive H1N1 and seasonal influenza vaccines. The results indicate that, in late August 2009, the majority of the North Carolina interviewees were aware that an H1N1 vaccine was in production. Among all respondents, 64% reported intent to receive the H1N1 vaccine, a finding consistent among age

**TABLE 2. Number and percentage of persons reporting intent to receive influenza A (H1N1) 2009 monovalent vaccine and intent to receive both H1N1 and seasonal influenza vaccines, by knowledge of vaccine, age group, race/ethnicity, and sex — Alamance and Orange counties, North Carolina, August 2009**

| | Total respondents (N = 207) | Intent to receive H1N1 vaccine (n = 133) | | | Intent to receive both H1N1 and seasonal influenza vaccine (n = 109) | | |
|---|---|---|---|---|---|---|---|
| **Characteristic** | **No.** | **No.** | **%** | **(95% CI)** | **No.** | **%** | **(95% CI)** |
| **Knowledge of vaccine*** | **165** | 103 | 62 | (53–71) | 86 | 52 | (41–63) |
| **Age group (yrs)** | | | | | | | |
| 18–24 | **22** | 14 | 64 | (36–89) | 10 | 45 | (14–76) |
| 25–64 | **138** | 88 | 64 | (54–74) | 68 | 49 | (37–61) |
| ≥65 | **47** | 31 | 66 | (49–83) | 31 | 66 | (49–83) |
| Children aged <18 yrs† | **74** | 48 | 65 | (51–79) | 38 | 51 | (35–67) |
| **Race/Ethnicity§** | | | | | | | |
| White, non-Hispanic | **140** | 87 | 62 | (52–72) | 75 | 54 | (43–65) |
| Black, non-Hispanic | **52** | 36 | 69 | (54–84) | 28 | 54 | (36–72) |
| **Sex** | | | | | | | |
| Male | **91** | 61 | 67 | (55–79) | 49 | 54 | (40–68) |
| Female | **116** | 71 | 61 | (51–73) | 59 | 51 | (38–64) |

* A "yes" response to the question, "Are you aware that a pandemic H1N1 (or swine flu vaccine is in production?"
† Respondents reported intent to vaccinate all children in their household aged <18 years with H1N1 vaccine or with both H1N1 and seasonal influenza vaccines.
§ Sample sizes for other race/ethnicities were too small to provide reliable estimates.

**TABLE 3. Persons reporting intent to receive influenza A (H1N1) 2009 monovalent vaccine, by selected characteristics — Alamance and Orange counties, North Carolina, August 2009**

| Characteristic | No. respondents | Intent to receive H1N1 vaccine (n = 133) | | | |
|---|---|---|---|---|---|
| | | No. | (%) | Prevalence ratio | (95% CI) |
| **All respondents** | **207** | **133** | **(64)** | **—** | |
| **Age group (yrs)** | | | | | |
| 18–24 | 22 | 14 | (64) | Referent | — |
| 25–64 | 138 | 88 | (64) | 1.0 | (0.7–1.4) |
| ≥65 | 47 | 31 | (66) | 1.0 | (0.7–1.5) |
| **Sex** | | | | | |
| Female | 116 | 71 | (61) | Referent | — |
| Male | 91 | 61 | (67) | 1.1 | (0.8–1.3) |
| **Race/Ethnicity** | | | | | |
| White, non-Hispanic | 140 | 87 | (62) | Referent | — |
| Other | 59 | 44 | (75) | 1.2 | (0.9–1.5) |
| **Knowledge of vaccine*** | | | | | |
| No/Don't know | 42 | 30 | (71) | Referent | — |
| Yes | 165 | 103 | (62) | 0.9 | (0.7–1.2) |
| **Level of concern†** | | | | | |
| Not at all concerned | 57 | 26 | (46) | Referent | — |
| Somewhat concerned | 92 | 57 | (62) | 1.3 | (0.9–1.9) |
| Very concerned | 58 | 50 | (86) | 1.9 | (1.4–2.6) |
| **Received 2008–09 seasonal vaccine§** | | | | | |
| No | 102 | 53 | (52) | Referent | — |
| Yes | 105 | 80 | (76) | 1.5 | (1.2–1.8) |
| **Intent to receive 2009–10 seasonal¶ vaccine** | | | | | |
| No | 75 | 24 | (32) | Referent | — |
| Yes | 132 | 109 | (83) | 2.6 | (1.8–3.6) |
| **Children at home**** | | | | | |
| No | 133 | 85 | (64) | Referent | — |
| Yes | 74 | 48 | (65) | 1.0 | (0.8–1.3) |

* In response to the question, "Are you aware that a pandemic H1N1 (or swine flu) vaccine is in production?"
† In response to the question, "How concerned are you about becoming sick with the pandemic H1N1 virus?"
§ In response to the question, "Did you receive seasonal influenza vaccine last year?"
¶ In response to the question, "Do you intend to receive the seasonal influenza vaccine this year?"
** In response to the question, "Do you have children less than 18 years of age currently living in your home?"

groups, among racial/ethnic populations, and by sex. By comparison, national assessments conducted during May 26–June 8 and September 14–20 estimated intent among adults to receive H1N1 vaccine at 50% (*1*) and 53% (*2*) and intent to have their children vaccinated at 70% (*2*). Although the assessment described in this report is not entirely comparable to the national studies (in part because of different methodologies), the findings in this report are similar to the second study (*2*) regarding the two leading reasons offered by respondents for not intending to receive H1N1 vaccine: belief of a low risk for infection and concern over possible vaccine side effects.

The relationship between intent to receive vaccine and actual vaccination has not been well studied. For the assessment described in this report, no vaccine coverage data were available for the two counties. However, intentions to receive H1N1 vaccine (64%) and both H1N1 and 2009–10 seasonal influenza vaccines (54%) were substantially higher than the 33% coverage rate reported for seasonal influenza vaccine among the U.S. population during the 2008–09 season, the most recent data available (*5*). Intent to receive H1N1 vaccine among adults aged ≥65 years (66%) was similar to the seasonal influenza vaccination coverage rate of 65% for that age group reported nationally for 2008–09 (*5*). Additional research on the relationship between intent to receive vaccine and subsequent vaccination is needed.

The finding that respondents received H1N1 vaccine information primarily from popular media, particularly television, affirms the need for public health agencies to work closely with those media outlets most commonly used by the public. Public health agencies might be able to increase vaccination coverage by providing more information regarding 1) who should receive the vaccine first, 2) safety characteristics of the vaccine, and 3) severe illness that can be prevented by vaccination.

The findings in this report are subject to at least three limitations. First, the survey sample size was small, which reduced the precision of the estimates, especially for smaller subgroups.

Second, the results are representative only of the populations of the two counties and are not generalizable to the entire population of North Carolina. Finally, widespread media coverage and face-to-face interviews might have increased the possibility of social desirability bias, resulting in an overestimate of the percentage of participants with intent to be vaccinated.

Influenza vaccination is the most effective method for preventing influenza and influenza-related complications. Currently available seasonal vaccine is unlikely to be protective against H1N1 (*6*). CDC has issued recommendations for use of influenza A (H1N1) 2009 monovalent vaccine (*7*).

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# Impact of Seasonal Influenza-Related School Closures on Families — Southeastern Kentucky, February 2008

During influenza epidemics, little is known about how influenza-related school closures affect families (*1–6*). Many children meet nutritional needs through school food programs (*7*), and schools provide child care both during and after school. Moreover, schools rely on student attendance to meet federal and state funding and educational requirements. To assess the impact of school closings on families, the Kentucky Department for Public Health (KDPH) conducted a telephone survey of randomly sampled households whose children attended schools in two adjacent school districts that had been closed because of high absenteeism during an outbreak of seasonal influenza in the community in February 2008. This report summarizes the results of that survey, which indicated that 97.0% of respondents agreed with the decision to close schools. In 29.1% of households, an adult had to miss work to provide child care, and in 15.7% of households, at least one adult lost pay because of missed work. Although the schools closed because of high absenteeism affecting school operations and funding, this was not fully communicated to families; 64.4% of respondents believed the closures would "keep people from getting ill," and 90.8% thought it was "extremely or very important" to disinfect schools while closed to reduce community spread of influenza. School districts and health departments should provide families with specific information about the reason for school closings and provide recommendations for reducing the spread of influenza while students are dismissed from school.

School closures can be triggered by illness-related absenteeism during periods of peak influenza activity (*1*), primarily when local officials decide that high absenteeism compromises the school's ability to function normally. On February 4, 2008, officials in two school districts (school districts A and B) in rural, southeastern Kentucky closed all schools for 3 (district A) or 4 school days (district B) because of high absenteeism related to a community outbreak of seasonal influenza. In 2008, the two districts enrolled approximately 7,300 students in grades K–12. Districts did not differ on grade distribution of students. School officials informed the community that schools were closing because of "high absenteeism due to illness" in the community via radio announcements and information sent home with students. The information sent home by school district A included a CDC handout that described ways of lowering the risk for influenza.

As of the 2000 census, the racial/ethnic composition of the population was approximately 98% white in both districts. School district A is in a rural, farming area with some manufacturing and coal mining. District A schools are located mainly in two cities that have a combined population of 7,884 covering one county with a population of 35,865. School district B is located in a city with a population of 7,742 that is legally incorporated into two counties with 17,558 persons living in the surrounding suburban developments. It is at the epicenter of three county seats with a cumulative population of approximately 100,000. The area was built on the rail industry, the major employers are in manufacturing, and the area is home to the regional medical referral center for southeastern Kentucky. In this rural, mountainous setting, school closures caused by weather conditions are common; therefore, the community has a heightened level of logistical preparedness.

To examine the effects of school closure on families, KDPH asked CDC to help conduct a telephone survey approximately

3 weeks after the closing, during Wednesday, February 27, through Monday, March 3, 2008, in a random sample of households. Telephone numbers for all households were obtained for all 14 schools in districts A and B, and a random sample of 602 households (11%) was selected. Of the 602 telephone numbers dialed, 282 (46.8%) did not result in contact, and 58 (9.6%) reached households in which a person either hung up or refused to participate in the survey. For each household, interviews were conducted with one adult parent or guardian of a school-aged child. Of the 320 households reached by telephone, a total of 262 surveys (81.9%) were completed; one respondent was not an adult member of the household, and that household was excluded from the analyses. Thus, the response rate, based on Council of American Survey and Research Organizations (CASRO) guidelines, was 43.3% (261 of 602 households). Surveys were conducted by staff members of KDPH, the local county health department, and CDC, mainly during 4:00–8:00 p.m., with follow-up calls conducted at times requested by respondents. All statistical tests of proportions were conducted using chi-square tests.

A total of 480 children lived in the 261 surveyed households (1.8 per household). Of the 480 children, 327 (69.3%) attended school district A, and 145 (30.7%) attended school district B; for eight children, the school district was unknown. In 112 (42.9%) households, at least one child was enrolled in a school meal program (the National School Lunch Program or the School Breakfast Program). School district A has a lower socioeconomic status than school district B; school district B households were significantly less likely to have children participating in the school meal programs than were school district A households ($p<0.05$), and school district B households had significantly higher annual household income and education levels than school district A households ($p<0.05$) (Table 1). In 11 (10.0%) households with children enrolled in the school meal programs (4.2% of all households surveyed), the school closure caused difficulty for their family because of the loss of these meals.*

The survey inquired into what places in the community children visited during the school closures, and in what activities they participated (Table 2). Children in school district B were more likely to have attended religious services while schools were closed than children in school district A ($p<0.05$), and although not statistically significant, children in school district B also more frequently visited restaurants, a friend, sporting events, and social gatherings. Of note, some parents expressed concern that school athletic events such as practices and games were still held on the days when schools were otherwise closed.

* Based on a "yes" response to the survey question, "Did the school closure cause difficulty for your family because of the loss of these meals?"

The most frequent activities for both districts were visiting strip malls or Wal-Mart (the only large store in the area) (113 [43.3%]) or visiting family (112 [42.9%]) while schools were closed.

Of the 261 households surveyed, in only 39 (14.9%) did any adult have the option to work from home. A total of 104 (39.8%) households had a "nonworking adult household member or homemaker" provide child care during the closure,† and 157 (60.1%) households had to make alternative arrangements to provide child care for at least one child in the household. In 76 (29.1%) households, a "working adult household member" provided child care during the closure, and in 41 (15.7%) households, at least one adult missed work and lost pay, and all 41 adults took care of a child who was not ill. No statistically significant differences were observed between school districts for provision of child care or work missed.

A total of 233 (89.3%) household respondents stated that they knew ways to lower the risk for acquiring influenza, and 200 (76.6%) stated that they did (or told their children to do) something to lower their risk.§ A total of 171 (65.5%) household respondents reported that they washed their hands to lower their risk for becoming ill or told their children to do so, and 73 (28.0%) household respondents reported telling their children to cover coughs and sneezes or did so themselves as a way to reduce risk for influenza (Table 3).

A total of 252 household respondents (96.6%) agreed with the decision to close schools.¶ When asked why they agreed, 168 (64.4%) said that it would keep more persons from becoming ill, 97 (37.2%) specifically mentioned that it would keep their children from becoming ill, and 237 (90.8%) households stated that it was either "extremely important or very important" to disinfect the schools while they were closed.**††

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† Based on a "yes" response to the survey question, "Is there usually an adult capable of providing child care at home during the day?"

§ Based on responses to the survey questions "Did you do (or did you tell your child or children to do) any of these things to lower their risk of getting sick?" and "If yes, what did you do or tell them to do?"

¶ Based on a "yes" response to the survey question, "Did you agree with the decision to close the schools?"

** Based on response to the survey question, "How important do you think it is for schools to be disinfected while the school is closed to prevent the spread of illness?"

†† School staff members should routinely clean areas that students and staff touch often with the cleaners they typically use. CDC does not believe any additional disinfection of environmental surfaces beyond the recommended routine cleaning is required (*8*).

**TABLE 1. Socioeconomic characteristics of households in two adjacent school districts — southeastern Kentucky, February 2008**

| Characteristic | Total households (N = 261)* | | Households in district A (n = 172) | | Households in district B (n = 86) | |
|---|---|---|---|---|---|---|
| | No. | (%) | No. | (%) | No. | (%) |
| **Annual household income†** | | | | | | |
| <$20,000 | **49** | **(19.1)** | 42 | (24.6) | 7 | (8.1) |
| $20,000–$29,999 | **37** | **(14.4)** | 32 | (18.7) | 5 | (5.8) |
| $30,000–$49,999 | **50** | **(19.5)** | 33 | (19.3) | 17 | (19.8) |
| $50,000–$74,999 | **39** | **(15.2)** | 20 | (11.7) | 19 | (22.1) |
| $75,000–$99,999 | **24** | **(9.3)** | 15 | (8.8) | 9 | (10.5) |
| ≥$100,000 | **18** | **(7.0)** | 5 | (2.9) | 13 | (15.1) |
| Prefer not to answer | **40** | **(15.6)** | 24 | (14.0) | 16 | (18.6) |
| **Highest education level§** | | | | | | |
| Less than grade 12 | **29** | **(11.3)** | 28 | (16.4) | 1 | (1.2) |
| High school graduate or GED¶ | **103** | **(40.2)** | 72 | (42.1) | 31 | (36.5) |
| 1–3 yrs of college | **49** | **(19.1)** | 33 | (19.3) | 16 | (18.8) |
| ≥4 yrs of college | **48** | **(18.8)** | 23 | (13.5) | 25 | (29.4) |
| Graduate or professional school | **22** | **(8.6)** | 12 | (7.0) | 10 | (11.8) |
| Prefer not to answer | **5** | **(2.0)** | 3 | (1.8) | 2 | (2.4) |
| **At least one child participates in free or reduced breakfast or lunch program**** | **112** | **(42.9)** | 92 | (53.8) | 19 | (22.1) |

* Data on school district missing for three households.
† Excludes four households; p<0.05 by chi-square test of overall difference between districts.
§ Excludes five households; p<0.05 by chi-square test of overall difference between districts.
¶ General Education Development certificate.
** Excludes four households; p<0.05 by chi-square test of difference between districts.

**TABLE 2. Community sites visited and activities engaged in by children in two adjacent school districts while schools were closed — southeastern Kentucky, February 2008**

| Sites and activities | Total households (N = 261)* | | Households in district A (n = 172) | | Households in district B (n = 86) | |
|---|---|---|---|---|---|---|
| | No. | (%)† | No. | (%) | No. | (%) |
| Strip malls or Wal-Mart | **113** | **(43.3)** | 75 | (43.6) | 36 | (41.9) |
| Visit family | **112** | **(42.9)** | 76 | (44.2) | 35 | (40.7) |
| Grocery shopping | **101** | **(38.7)** | 64 | (37.2) | 35 | (40.7) |
| Restaurants | **85** | **(32.6)** | 49 | (28.6) | 34 | (39.5) |
| Friends' houses or friends visiting their house | **79** | **(30.3)** | 46 | (26.7) | 31 | (36.1) |
| Religious services§ | **76** | **(29.1)** | 40 | (23.3) | 34 | (39.5) |
| Sports activities (e.g., practices, games, events, roller rink, or four-wheeling) | **62** | **(23.8)** | 34 | (19.8) | 28 | (32.6) |
| Public gatherings (e.g., concerts, movies, or festivals) | **46** | **(17.6)** | 25 | (14.5) | 20 | (23.3) |
| Part-time job | **22** | **(8.4)** | 14 | (8.1) | 7 | (8.1) |

* Data on school district missing for three households.
† Excludes households with missing data and when questions did not apply. Categories are not mutually exclusive.
§ p<0.05 by chi-square test of difference between districts.

**Editorial Note:** During seasonal influenza epidemics, decisions about school closure are made by state and local authorities. However, little is known about the impact of school closures on families with respect to work time lost, provision of child care, and loss of school meals. A principle of such school closures is that they must balance the potential negative consequences of school closure with the reasons for closing the school (*1*). Communities generally are supportive of school closures during large community outbreaks to reduce risk for children getting ill (*3*), but without accurate public health messages, the spread of communicable illness might not be mitigated (*6*). In this report, schools were closed because of influenza-related absenteeism >15%, which affected school funding and operation. Parents were told that the schools were closing because of "high absenteeism due to illness," and they inferred that the closing was to disinfect the schools and reduce transmission. Despite this, the children who attended the closed schools gathered in many social activities during the closure.

For the 3–4 day school closure described in this report, provision of child care in the home was available for approximately two thirds of households, but adults missed work in nearly one quarter of households, and only a small percentage of households had an adult who could work from home. When schools are closed for longer periods, parents might need alternative means of child care to avoid missing work beyond what is described in this report. Findings from a recent public deliberation indicated that participants were concerned about job security and economic strain on families in the event of prolonged school closures (*9*). During the short school closures described in this report, substantial socioeconomic differences between school district A and school district B appeared to influence several of the children's activities and sites visited during the closure but did not influence child care arrangements, workplace absenteeism, or use of risk-reduction methods. However, whether this lack of difference by socioeconomic variables would be maintained during a longer school closure period is unknown.

The findings in this report are subject to at least three limitations. First, telephone numbers (for landline and cellular telephones) were randomly sampled from school district rosters available at the time of survey administration. Student households without a telephone were not eligible to be sampled. Second, the response rate among households successfully contacted was high (81.9%); however, a substantial proportion of telephone numbers originally sampled were unreachable (e.g., no answer, phone disconnected, or not accepting calls), which might have introduced response bias. Finally, because household respondents were surveyed retrospectively on events occurring approximately 3 weeks before, recall bias might have reduced the accuracy of responses.

CDC policies for school closures during the current pandemic of influenza A (H1N1) (*8*) have been used to guide state and local officials, who must weigh public perception, the need to reduce spread of illness, severity of the illness, and protection of high-risk students and staff, in addition to considerations of the impact on children and families and whether high absenteeism compromises the school's ability to function normally. If school closure is necessary, school districts and health departments should work together to explain to parents their reasons for closing schools and appropriate actions to take (e.g., staying home if ill) while students are dismissed from school.

**What is already known on this topic?**

Public health and education officials base their recommendation to close schools during influenza outbreaks on local circumstances, such as attendance rates, prevalence of illness in their community, severity of the illness, and the community's acceptability of the actions of officials.

**What is added by this report?**

This report indicates that despite parental concerns about reducing risk for illness during a seasonal influenza epidemic in 2008, nearly 40% of children gathered for social activities during a school closure, and parents' perceptions about the reasons for the closure often were inaccurate; in 15.7% of households, at least one adult lost pay because of missed work during the closings.

**What are the implications for public health practice?**

When school closures are necessary, school districts and health departments should enumerate the reasons and recommend measures to reduce the transmission of influenza during the closures.

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**TABLE 3. Behaviors respondents thought could reduce the risk for becoming ill from influenza and frequency of use of those behaviors by households in two adjacent school districts (N = 261) — southeastern Kentucky, February 2008**

| | Thought behavior could reduce risk for influenza | | Engaged in or told child to engage in the behavior | |
|---|---|---|---|---|
| **Behavior*** | **No.** | **(%)** | **No.** | **(%)** |
| Wash hands | 196 | (75.0) | 171 | (65.5) |
| Cover cough or sneeze | 79 | (30.3) | 73 | (28.0) |
| Avoid sharing drinks and utensils | 54 | (20.7) | 69 | (26.4) |
| Stay home | 38 | (14.6) | 25 | (9.6) |
| Avoid crowds | 44 | (16.9) | 23 | (8.8) |
| Use hand sanitizer | 11 | (4.2) | 16 | (6.1) |
| Eat right | 16 | (6.1) | 13 | (5.0) |
| Vaccination ("flu shot") | 55 | (21.1) | 10 | (3.8) |
| Get enough sleep | 10 | (3.8) | 9 | (3.5) |
| Take vitamins | 13 | (5.0) | 9 | (3.5) |
| Stay warm | 9 | (3.4) | 7 | (2.7) |
| Clean surfaces | 12 | (4.6) | 5 | (1.9) |
| Keep child out of school (beyond the school closure) | 9 | (3.4) | 4 | (1.5) |
| Keep hands away from mouth | 3 | (1.2) | 3 | (1.2) |

* Categories are not mutually exclusive.

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# Hantavirus Pulmonary Syndrome in Five Pediatric Patients — Four States, 2009

Hantavirus pulmonary syndrome (HPS) is a reportable infectious disease with a high case-fatality rate, transmitted to humans by exposure to rodents. Each year, 20–40 cases of HPS occur in the United States; cases in persons aged <17 years make up fewer than 7% of those cases, and cases in children aged <10 years are exceptionally rare. CDC received reports of five pediatric cases of HPS occurring during May 16–November 25, 2009, among children aged 6–14 years from Arizona, California, Colorado, and Washington. Three of the children were aged <10 years, and all five had exposure to rodents. This report summarizes the five cases, including the clinical findings and likely means of transmission of a hantavirus. Thrombocytopenia, elevated white blood cell (WBC) count, and pulmonary infiltrates were observed in all five children; elevated hematocrit was observed in three. One child died, and three of the four children who recovered required mechanical ventilation during hospitalization. Clinicians should consider HPS in the differential diagnosis for children with unexplained acute respiratory distress, especially if recent rodent exposure is noted. Public health agencies should promote preventive measures, including rodent control in housing and play areas, and children should be advised to avoid contact with rodents and areas of infestation.

## Case 1

On May 16, a boy aged 6 years who lived in Colorado went to a Texas hospital with a 2-day history of diarrhea and shortness of breath. On initial examination, the child had cyanotic lips and nail beds, with cold extremities. His pulse was 163, and his temperature was 101°F (38.3°C). Soon after arrival at the hospital, the child became apneic and had no palpable pulse. Chest compressions were initiated, and the child was intubated and ventilated. A chest radiograph revealed bilateral infiltrates, and blood analysis demonstrated elevated hematocrit, elevated WBC count, and thrombocytopenia (Table). Within 2 hours of admission to the hospital, the boy died from apparent cardiac failure secondary to shock. The child had been treated with intravenous fluids, ceftriaxone, epinephrine, atropine, and albuterol. The working diagnosis at the time of the child's death was shock and sepsis caused by pneumonia.

An enzyme-linked immunosorbant assay (ELISA) performed by the Colorado Department of Public Health and Environment revealed Sin Nombre hantavirus–specific serum immunoglobulin M (IgM). An environmental assessment conducted at the boy's home in Colorado found rodent droppings and nesting materials under his bed and in bushes in front of the home where the boy had played.

## Case 2

On June 7, an adolescent boy aged 14 years went to a Washington emergency department with a 5-day history of shortness of breath, chest pain, cough, and fever. Upon admission, the child had a fever of 103°F (39.4°C), pulse of 100, and a respiratory rate varying between 40 and 60. He was thrombocytopenic and had elevated WBC with atypical lymphocytosis (Table). A chest radiograph revealed bilateral interstitial infiltrates. No details were provided regarding treatment or any suspicion of HPS.

Because of worsening respiratory distress and hypoxia, the patient was intubated and mechanically ventilated for approximately 24 hours. He improved and was discharged home on June 13. An ELISA of serum detected Sin Nombre hantavirus–specific IgM at the Washington State Public Health Laboratories. A follow-up environmental assessment found rodent fecal contamination in a container of corn that the youth reported hand-grinding 8 days before illness onset.

## Case 3

On July 12, a boy aged 6 years went to a Colorado emergency department with a 5-day history of fever (maximum 103°F [39.4°C]), erythematous facial rash, and myalgia. Upon admission the boy's pulse was 120, respiratory rate 48, and oxygen saturation 72% on room air. Dyspnea was apparent with coarse breath sounds, wheezes, and crackles on auscultation. His WBC count was elevated, and thrombocytopenia was noted (Table). A chest radiograph revealed bilateral diffuse pulmonary infiltrates with pleural effusions. HPS was suspected, and the boy was treated with intravenous fluids, ceftriaxone, and azithromycin.

The boy was intubated and mechanically ventilated from July 12 to July 20; he was discharged on July 22. Serum ELISA performed by the Colorado Department of Public Health and Environment revealed positive Sin Nombre hantavirus IgM. Family members reported that approximately 10 days before hospitalization the child was bitten on the finger by a mouse. During environmental assessment, evidence of rodent infestation was observed in outbuildings and abandoned vehicles but not within the house.

## Case 4

On July 12, a girl aged 9 years living in Arizona went to a New Mexico hospital with chest pain and shortness of breath. Symptoms began with abdominal discomfort on July 6, which was followed by headache, vomiting, and myalgia. Upon examination, the girl's temperature was 99.9°F (37.7°C), and her pulse was 162. Laboratory findings included thrombocytopenia, elevated hematocrit, and elevated WBC count (Table). A chest radiograph revealed diffuse interstitial infiltrates. During transport to a tertiary care facility for further treatment, the child's temperature reached 103.8°F (39.9°C). HPS was suspected, and the girl was treated with intravenous fluids, ceftriaxone, and vancomycin.

Because of worsening signs of pulmonary distress, the girl was intubated and received extracorporeal membrane oxygenation therapy for 4 days. She remained on a ventilator until July 22 and was hospitalized until August 5. Serum tested with a commercial immunoblot assay revealed Sin Nombre hantavirus immunoglobulin G (IgG). Evidence of rodents was found at three residences frequented by the girl in Arizona: the family home, grandparents' home, and a summer home where she played in an underground dugout that had rodent burrows.

## Case 5

On November 25, an adolescent boy aged 13 years went to a California emergency department with a 5-day history of fever (maximum 102.6°F [39.2°C]), cough, posttussive vomiting, diarrhea, and abdominal pain. Physical examination revealed a tender chest, with crackles and diminished breath sounds in the lower lobes of the lungs, and a respiratory rate of 30. Laboratory findings included elevated WBC, elevated hematocrit, and thrombocytopenia (Table). Chest radiographs revealed diffuse interstitial opacities with pleural effusion. Treatment included intravenous fluids, ceftriaxone, clindamycin, and azithromycin. The patient received supplemental oxygen by nasal cannula and was discharged home on December 3.

Testing for hantavirus was requested on day 4 of hospitalization. Serum was submitted to a commercial diagnostic laboratory, and Sin Nombre hantavirus IgM and IgG antibodies were detected by immunoblot assay. Extensive remodeling was under way in the youth's home at the time of illness, including removal and replacement of floors and walls. Three mice were trapped in the youth's kitchen and garage approximately 3 months before disease onset, but the patient had no known direct or indirect contact with the rodents.

**TABLE. Cases of hantavirus pulmonary syndrome, by selected patient and clinical characteristics — four states, 2009**

| Characteristic | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 |
|---|---|---|---|---|---|
| State of residence | Colorado | Washington | Colorado | Arizona | California |
| Patient age (yrs) | 6 | 14 | 6 | 9 | 13 |
| Days from illness onset to hospitalization | 2 | 5 | 5 | 6 | 5 |
| Days in hospital | 1 | 6 | 11 | 25 | 8 |
| Maximum white blood cell count (x $10^9$/L) (reference range: 4–11 x $10^9$/L) | 57 | 25 | 15 | 38 | 27 |
| Maximum hematocrit (%) (reference range*: males, 36%–47%; females, 35%–45%) | 55 | 39 | 33 | 52 | 63 |
| Minimum platelets (x $10^9$/L) (reference range: 150–400 x $10^9$/L) | 40 | 19 | 56 | 24 | 39 |
| Chest radiograph with infiltrates | Yes | Yes | Yes | Yes | Yes |
| Outcome | Died | Fully recovered | Fully recovered | Fully recovered | Fully recovered |

* For persons aged 10–18 years.

**What is already known on this topic?**

Hantavirus pulmonary syndrome (HPS) is an uncommon but severe disease that can occur after contact with an infected rodent or rodent-infested area.

**What is added by this report?**

Although reports of HPS are uncommon in children, the five pediatric cases in this report affirm that children can experience severe morbidity and a clinical course similar to that of adults.

**What are the implications for public health practice?**

HPS should be considered in children with unexplained acute respiratory distress, especially if rodent exposure is noted; preventive measures include rodent control in housing and play areas and instructing children to avoid contact with rodents or areas of infestation.

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**Editorial Note:** HPS was first described in 1993 and has been a nationally notifiable disease* since 1995. As of December 18, 2009, a total of 537 cases of HPS had been reported to CDC, with a case-fatality rate of 36%. Of all confirmed cases, <7% have occurred in children aged <17 years, and only four cases have occurred in children aged <10 years, including the two children aged 6 years and one child aged 9 years described in this report (the fourth case was in a child aged 8 years). Although reports of HPS in persons aged <17 years are uncommon, the clinical illnesses of the pediatric patients in this report were similar to those observed in adults. HPS typically has a 2–10 day prodrome with nonspecific viral symptoms, and the acute respiratory phase often commences abruptly (*2*). In all five cases summarized in this report, the children had illnesses for 2–6 days preceding onset of acute respiratory symptoms. Thrombocytopenia and elevated WBC count were observed in all five cases, and three children had elevated hematocrit; these hematologic signs are comparable to those typical of HPS in adult patients (*3,4*). A previous review of 12 pediatric HPS cases in New Mexico found thrombocytopenia in 100% and elevated WBC count and hemoconcentration in 27% of cases (*5*).

Children infected with hantavirus can develop severe illness, similar to adults. Antivirals have not been shown to be effective in the treatment of HPS (*6*); therefore, medical interventions consist primarily of supportive care. Respiratory distress requiring mechanical ventilation was observed in four of the cases described in this report, similar to trends observed nationally (*4*). In case 1, the child died from apparent cardiac failure secondary to shock. Although cardiac functioning tests could not be obtained, abnormally low cardiac index and stroke volume with increased vascular resistance has been reported previously in HPS cases and is considered to be an important cause of death in persons with HPS (*7*). In case 4, the patient received extracorporeal membrane oxygenation therapy, which might be of benefit to HPS patients who require both oxygenation and circulatory support (*8*).

Hantaviruses are transmitted from rodent hosts to humans through inhalation of infectious aerosols of rodent excreta or direct inoculation into broken skin. In North America, Sin Nombre virus is the most common cause of HPS, and its reservoir is the deer mouse (*Peromyscus maniculatus*). The largest number of HPS illnesses has occurred in the southwestern United States, although cases have been reported in 31 states. Several rodent species distributed throughout the United States have been identified as reservoirs for hantaviruses, many of which have been associated with HPS. All the patients in this report had evidence of rodents in and around their homes, including places where the patients in cases 1 and 4 played. The patient in case 2 likely was exposed by hand-grinding contaminated corn; the patient in case 5 might have been exposed to rodent-contaminated areas or a virus-containing aerosol during remodeling of his home. The likely means of hantavirus transmission to the patient in case 3 was a mouse bite, reported previously in two pediatric cases (*9*). No evidence exists of person-to-person hantavirus transmission in the United States.

Current CDC recommendations to reduce the risk for hantavirus infection include trapping and excluding rodents and using personal protective equipment when handling potentially infected rodents or disturbing areas of rodent infestation. Recommended cleaning agents include household disinfectant or bleach solution (*10*). Rodent control activities should include outbuildings and places where children play. Educational efforts aimed at parents and children, including

* A clinical case of HPS is defined by CDC as illness in a previously healthy person with acute febrile respiratory illness and thrombocytopenia, characterized by bilateral diffuse interstitial edema that can radiographically resemble acute respiratory distress syndrome, with respiratory compromise requiring supplemental oxygen, and/or an autopsy examination demonstrating noncardiogenic pulmonary edema without an identifiable cause. A confirmed case requires detection of hantavirus-specific IgM or IgG, a positive reverse transcription–polymerase chain reaction result in clinical specimens, or detection of antigen by immunohistochemistry (*1*).

how to recognize the signs of rodent infestation and take proper precautions, are recommended. Although the reasons for the infrequent occurrence of HPS in children remain unknown, the cases in this report serve as a reminder that children are susceptible to hantavirus infection. More information is available from CDC at http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm.

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# Coal Workers' Pneumoconiosis-Related Years of Potential Life Lost Before Age 65 Years — United States, 1968–2006

Coal workers' pneumoconiosis (CWP) is a preventable, slowly progressive parenchymal lung disease caused by inhalation and deposition of coal mine dust in the lungs. The incidence and rate of CWP progression is related to the amount of respirable coal dust to which miners were exposed during their working lifetime (*1*). Early pneumoconiosis can be asymptomatic, but advanced disease often leads to disability and premature death (*1,2*). To characterize the impact of premature mortality attributed to CWP in the United States, CDC's National Institute for Occupational Safety and Health (NIOSH) analyzed annual underlying cause of death data from 1968–2006, the most recent years for which complete data were available. Years of potential life lost before age 65 years (YPLL), and mean YPLL were calculated using standard methodology. This report describes the results of that analysis, which indicate that during 1968–2006, a total of 22,625 YPLL were attributed to CWP (mean per decedent: 5.7). Annual YPLL attributed to CWP decreased 91.2%, from an average of 1,484 YPLL per year during 1968–1972 to 154 per year during 2002–2006. However, annual YPLL from CWP have been increasing since 2002, from 135 in that year to 169 YPLL in 2006, suggesting a need for strengthening CWP prevention measures. CDC intends to maintain surveillance of CWP deaths to determine future trends and promote safer work environments.

NIOSH maintains a mortality surveillance system for work-related respiratory diseases.* Data are drawn from CDC's National Center for Health Statistics (NCHS) multiple cause-of-death data files, which include all deaths in the United States since 1968. YPLL and mean YPLL (*3*) were calculated using mortality data for 5-year age groups. For this analysis, decedents for whom the *International Classification of Diseases* (ICD) code for CWP was listed as the underlying† cause of death were identified from 1968–2006 mortality data.§ Deaths with the ICD-10 underlying cause of death coded as J65 (pneumoconiosis associated with tuberculosis) were included if code J60 (coal workers' pneumoconiosis) also was recorded on the death certificate.¶ Because CWP results solely from >10 years of occupational exposure (*1,2*), only deaths of persons aged ≥25 years were considered. A simple linear regression model was used for time-trend analysis of YPLL (using 5-year moving averages).

During 1968–2006, CWP was identified as the underlying cause of death for 28,912 decedents aged ≥25 years. Of these, 3,983 (13.8%) were aged 25–64 years, including four (0.1%) aged 25–34 years, 40 (1.0%) aged 35–44 years, 494 (12.4%) aged 45–54 years, and 3,445 (86.5%) aged 55–64 years, accounting for 22,625 YPLL (mean per decedent: 5.7). Among CWP decedents aged 25–64 years, 3,954 (99.3%) were male and 3,891 (97.7%) were white, accounting for 22,283

* Information available at http://webappa.cdc.gov/ords/norms.html.

† Underlying cause of death is defined as "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury," in accordance with ICD guidance. Additional information available at http://www.cdc.gov/nchs/injury/injury_mortality.htm.

§ ICDA-8 code 515.1 (anthracosilicosis) for years 1968–1978, ICD-9 code 500 (coal workers' pneumoconiosis) for years 1979–1998, and ICD-10 code J60 (coal workers' pneumoconiosis) for years 1999–2006.

¶ Multiple cause-of-death data code-field "entity axis" includes information on all of the diseases, injuries, or medical complications, and the location (part, line, and sequence) of the information recorded on each death certificate. Data available at http://www.cdc.gov/nchs/about/major/dvs/mcd/msb.htm.

(98.5%) and 21,893 (96.8%) YPLL, respectively (Table). The mean YPLL per decedent was greatest for the few females (11.8) and blacks (8.1).

Overall, CWP deaths among U.S. residents aged ≥25 years declined 73%, from an average of 1,106.2 per year during 1968–1972 to 300.0 per year during 2002–2006 (regression trend, $p<0.001$). Age-adjusted death rates among residents aged 25–64 years declined 96%, from 1.78 per million in 1968 to 0.07 in 2006; age-adjusted death rates among residents aged ≥65 years declined 84%, from 6.24 per million in 1968 to 1.02 in 2006 (Figure 1).

CWP-attributable YPLL varied annually, from a high of 1,768 (mean per decedent: 6.0) in 1970 to a low of 66 (mean per decedent: 5.5) in 2001 (Figure 2). YPLL increased from 66 in 2001 to 198 in 2005, and then declined to 169 in 2006. Overall, YPLL decreased 91%, from an average of 1,484.2 per year during 1968–1972 to 153.8 per year during 2002–2006 (regression trend, $p<0.001$). The mean YPLL per decedent increased 47%, from 5.3 per decedent during 1968–1972 to 7.8 during 2002–2006 (regression trend, $p<0.001$). During 1968–2006, CWP deaths in Pennsylvania (2,845; 15,420 YPLL), West Virginia (281; 1,640 YPLL), Virginia (191; 1,314 YPLL), Kentucky (209; 1,273 YPLL), and Ohio (91; 543 YPLL) accounted for 90.8% of all decedents aged 25–64 years with CWP as the underlying cause of death and 89.2% of the total YPLL attributed to CWP (Table).

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**Editorial Note:** Age-adjusted CWP death rates have declined dramatically during the past 38 years (1968–2006) in the United States, and annual CWP-attributable YPLL before age 65 years also have decreased, from a high of nearly 1,800 in 1970 to a low of 66 in 2001. However, the findings in this report indicate that YPLL before age 65 years have been increasing since 2002. This is consistent with the observed increase in the percentage of underground coal miners identified with CWP, in particular among younger workers (*2,4*). In addition, the mean YPLL per decedent has been increasing since the early 1990s, and, like annual YPLL, has increased more sharply since 2002. Continuing surveillance of CWP deaths is needed to ascertain whether these trends will continue and to promote safer work environments.

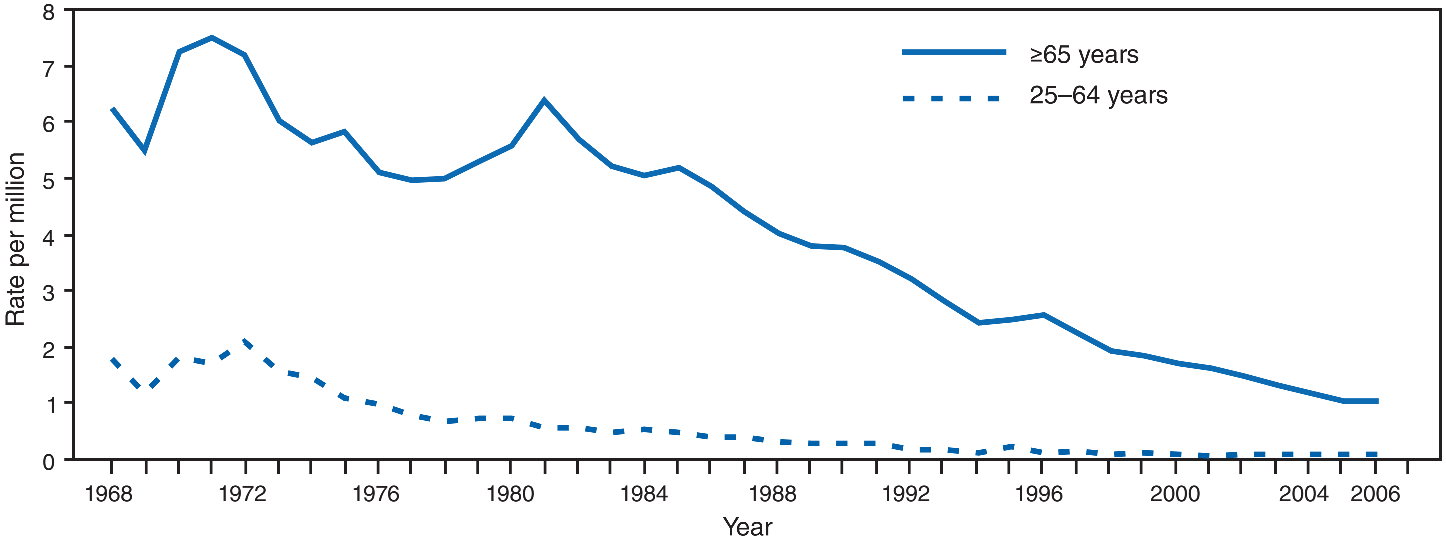
One cause of the increased YPLL in recent years might be greater exposure of workers to coal dust. Inadequate enforcement standards (i.e., exposure limits that are too high) and unrepresentative dust measurements (i.e., dust levels reported for enforcement purposes that do not reflect individual exposure) might contribute to the continued occurrence of CWP-attributable YPLL (*2*). Additionally, increased coal

**TABLE. Years of potential life lost before age 65 years (YPLL) for decedents aged 25–64 years with coal workers' pneumoconiosis as the underlying cause of death, by sex, race, and state of residence* — United States, 1968–2006**

| Characteristics | Deaths No. | Deaths (%)† | YPLL No. | YPLL (%)† | Mean YPLL per decedent |
|---|---|---|---|---|---|
| **Total** | **3,983** | **(100.0)** | **22,625** | **(100.0)** | **5.7** |
| **Sex** | | | | | |
| Male | 3,954 | (99.3) | 22,283 | (98.5) | 5.6 |
| Female | 29 | (0.7) | 342 | (1.5) | 11.8 |
| **Race** | | | | | |
| White | 3,891 | (97.7) | 21,893 | (96.8) | 5.6 |
| Black | 89 | (2.2) | 718 | (3.2) | 8.1 |
| Other | 3 | (0.1) | 14 | (0.1) | 4.7 |
| **State/Area of residence** | | | | | |
| Alabama | 27 | (0.7) | 228 | (1.0) | 8.4 |
| Alaska | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Arizona | 9 | (0.2) | 57 | (0.3) | 6.3 |
| Arkansas | 1 | (0.0) | 8 | (0.0) | 8.0 |
| California | 19 | (0.5) | 144 | (0.6) | 7.6 |
| Colorado | 7 | (0.2) | 51 | (0.2) | 7.3 |
| Connecticut | 3 | (0.1) | 9 | (0.0) | 3.0 |
| Delaware | 2 | (0.1) | 6 | (0.0) | 3.0 |
| District of Columbia | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Florida | 40 | (1.0) | 217 | (1.0) | 5.4 |
| Georgia | 10 | (0.3) | 50 | (0.2) | 5.0 |
| Hawaii | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Idaho | 2 | (0.1) | 21 | (0.1) | 10.5 |
| Illinois | 32 | (0.8) | 183 | (0.8) | 5.7 |
| Indiana | 28 | (0.7) | 154 | (0.7) | 5.5 |
| Iowa | 2 | (0.1) | 11 | (0.0) | 5.5 |
| Kansas | 3 | (0.1) | 19 | (0.1) | 6.3 |
| Kentucky | 209 | (5.2) | 1,273 | (5.6) | 6.1 |
| Louisiana | 9 | (0.2) | 112 | (0.5) | 12.4 |
| Maine | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Maryland | 10 | (0.3) | 50 | (0.2) | 5.0 |
| Massachusetts | 5 | (0.1) | 12 | (0.1) | 2.4 |
| Michigan | 19 | (0.5) | 118 | (0.5) | 6.2 |
| Minnesota | 1 | (0.0) | 3 | (0.0) | 3.0 |
| Mississippi | 1 | (0.0) | 3 | (0.0) | 3.0 |
| Missouri | 5 | (0.1) | 35 | (0.2) | 7.0 |
| Montana | 1 | (0.0) | 8 | (0.0) | 8.0 |
| Nebraska | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Nevada | 2 | (0.1) | 31 | (0.1) | 15.5 |
| New Hampshire | 2 | (0.1) | 11 | (0.0) | 5.5 |
| New Jersey | 28 | (0.7) | 206 | (0.9) | 7.4 |
| New Mexico | 4 | (0.1) | 17 | (0.1) | 4.3 |
| New York | 18 | (0.5) | 71 | (0.3) | 3.9 |
| North Carolina | 12 | (0.3) | 66 | (0.3) | 5.5 |
| North Dakota | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Ohio | 91 | (2.3) | 543 | (2.4) | 6.0 |
| Oklahoma | 7 | (0.2) | 86 | (0.4) | 12.3 |
| Oregon | 1 | (0.0) | 8 | (0.0) | 8.0 |
| Pennsylvania | 2,845 | (71.4) | 15,420 | (68.2) | 5.4 |
| Rhode Island | 0 | (0.0) | 0 | (0.0) | 0.0 |
| South Carolina | 2 | (0.1) | 11 | (0.0) | 5.5 |
| South Dakota | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Tennessee | 38 | (1.0) | 274 | (1.2) | 7.2 |
| Texas | 3 | (0.1) | 29 | (0.1) | 9.7 |
| Utah | 4 | (0.1) | 17 | (0.1) | 4.3 |
| Vermont | 0 | (0.0) | 0 | (0.0) | 0.0 |
| Virginia | 191 | (4.8) | 1,314 | (5.8) | 6.9 |
| Washington | 5 | (0.1) | 52 | (0.2) | 10.4 |
| West Virginia | 281 | (7.1) | 1,640 | (7.2) | 5.8 |
| Wisconsin | 2 | (0.1) | 6 | (0.0) | 3.0 |
| Wyoming | 2 | (0.1) | 51 | (0.2) | 25.5 |

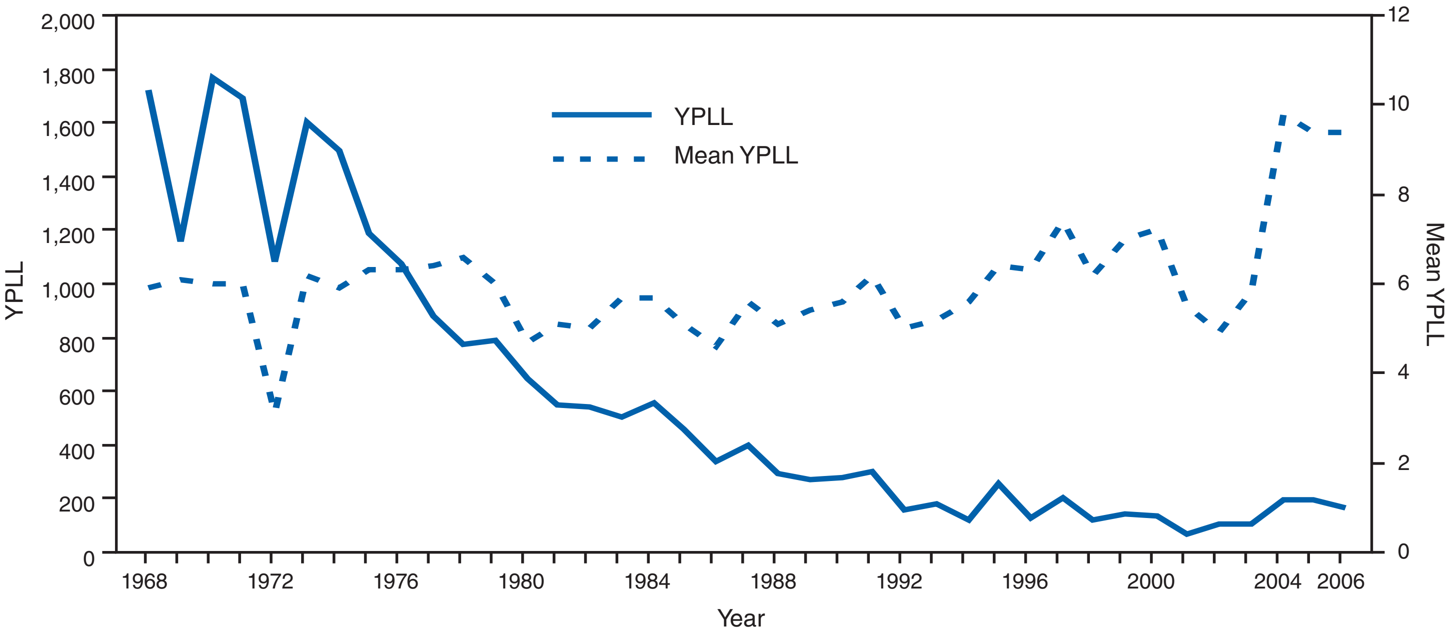
* Based on multiple cause-of-death data files, National Center for Health Statistics, CDC.
† Percentages might not total 100% because of rounding.

FIGURE 1. Age-adjusted death rates* (per million) for decedents aged ≥25 years with coal workers' pneumoconiosis as the underlying cause of death — United States, 1968–2006




* Based on annual multiple cause-of-death data, National Center for Health Statistics, CDC.

FIGURE 2. Years of potential life lost (YPLL) before age 65 years and mean YPLL per decedent* for decedents aged ≥25 years with coal workers' pneumoconiosis as the underlying cause of death — United States, 1968–2006




* Based on annual underlying cause of death obtained from multiple cause-of-death data files, National Center for Health Statistics, CDC.

production per shift** (*5*) can make dust suppression more difficult. Technology advances aimed at improving the health of coal workers in the United States, including improvements in ventilation systems and the development of dust suppression devices, might not be keeping pace with technology advances that have increased production (*6*). Larger, more powerful machines generate larger quantities of dust in shorter periods, potentially exposing workers to higher concentrations of dust

** Previously, NIOSH examined industry and occupation data for the 4,893 CWP deaths that occurred during 1990–1999, the most recent year for which such data are available. After 1999, coding information for industry and occupation were no longer available. Among all industries reported, the greatest significant proportionate mortality ratio (PMR) was found for coal mining (53.2; 95% confidence interval [CI] = 51.5–54.9), and among all occupations reported, the greatest significant PMR was for mining machine operators (51.7; CI = 50.0–53.4) (*5*).

(*7*). Among coal mine dust samples collected by Mine Safety and Health Administration inspectors during 1995–2003, 24.6% exceeded the NIOSH recommended exposure limit of 1.0 mg/m$^3$ for respirable coal dust (*4*). Dust hazards also might increase when workers cut into quartz-bearing rock in thin-seam underground mines, which creates maintenance problems for the machine and dust control systems, and is associated with high exposure to silica dust (*1,2*).

In addition, the total number of hours worked in underground coal mines increased 25.6%, from an annual average of 1,671 per miner during 1978–1982 to 2,099 per miner during 2003–2007 (*5*). Increased hours of work can result in increased inhaled dust, which might exceed the lungs' ability to remove dust. CWP survival decreases with increasing dust exposure (*1*). Finally, another cause of increased CWP-attributable YPLL could be missed opportunities by miners for early disease screening, which could exacerbate disease progression (*1,2*).

The findings in this report are subject to at least five limitations. First, this report used a death certificate–based definition of CWP as the underlying cause of death. Because some deaths from CWP might have been attributed to other diseases (e.g., unspecified pneumoconiosis or silicosis) instead of to CWP, the findings in this report likely underestimate deaths and YPLL attributable to CWP. Second, complete work histories are not listed on death certificates, and the relevance of the reported usual industry and occupation to actual hazardous exposures could not be verified. Although no studies have examined the accuracy of usual industry and occupation information on death certificates specifically for CWP decedents, research suggests a generally good agreement of this information compared with that from other sources (*8*). Third, the state issuing a death certificate is not always the state in which the decedent's coal dust exposure occurred. Fourth, although women and blacks appeared to die earlier from CWP than men and other races, this observation was based on a small percentage of overall deaths. However, a similar effect has been observed for silicosis deaths (*9*). Finally, ICD cause-of-death codes used in this analysis changed twice during 1968–2005. Slight differences exist in the ICD coding for CWP between the 8th and 9th revisions. In the 9th and 10th revisions, the rubric for code 500 is "coal workers' pneumoconiosis," whereas the 8th revision used "anthracosilicosis." The overall effect of this change is unclear but might have resulted in an increase in the number of cases between the 8th and 9th revisions (i.e., between 1978 and 1979).

The continuing occurrence of fatal cases of CWP (CWP-attributable YPLL) underscores the need for increased efforts to prevent this disease. In 2006, NIOSH published the results of a collaborative study designed to verify the performance of the personal respirable dust monitor in laboratory and underground coal mine environments. The monitor was shown to be acceptable to miners and accurate, precise, and durable in providing continuous exposure information previously not available to coal miners and coal mine operators. Use of the monitor can assist in rapid action to correct adverse conditions (*10*).

CDC continues to conduct surveillance for CWP deaths to follow future trends and to identify problems. Guidance for persons concerned about exposure to coal mine dust, and for health-care providers about working with potentially exposed patients, is available at http://www.cdc.gov/niosh/topics/pneumoconioses.

What is already known on this topic?

Coal workers' pneumoconiosis (CWP) is an occupational lung disease that can lead to disability and premature mortality but is preventable through appropriate control of coal mine dust exposures.

What is added by this report?

The annual years of potential life lost before age 65 years (YPLL) attributed to CWP decreased 91.2%, from an average of 1,484 YPLL per year during 1968–1972 to 154 per year during 2002–2006; however, both YPLL and mean YPLL per decedent have been increasing since 2002, from 135 to 169 YPLL in 2006 and from 4.9 in 2002 to 9.4 YPLL in 2006.

What are the implications for public health practice?

Prevention and elimination efforts for CWP should be strengthened, and surveillance for CWP deaths should continue to follow future trends.

**Acknowledgments**

This report is based, in part, on contributions by EL Petsonk, MD, West Virginia University, and MD Attfield, PhD, National Institute for Occupational Safety and Health, CDC.

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## Errata: Vol. 58, No. 13

In the report, "HIV-Associated Behaviors Among Injecting-Drug Users — 23 Cities, United States, May 2005–February 2006," errors occurred in the text and table. Following are the corrected text and table. An explanation of changes is available at http://www.cdc.gov/hiv/resources/reports/mmwr/mm5813_err/mm5813_err_qa.htm.

The third sentence of the first paragraph should read: "The results of that analysis indicated that, during that period, 32.8% of participating IDUs reported sharing syringes, and 63.4% had unprotected vaginal sex; 66.3% had been tested for HIV, and 29.7% had participated in an HIV behavioral intervention."

The last sentence of the fifth paragraph should read: "Overall, by demographic characteristic, the highest percentages of participants were men (67.3%), non-Hispanic blacks (46.0%), and persons aged 45–54 years (37.2%)."

The sixth, seventh, and eighth paragraphs should read: "Among the participating IDUs, 32.8% reported sharing syringes, and 58.5% reported sharing injection equipment during the preceding 12 months (Table). Syringes were shared most commonly among non-Hispanic white IDUs (41.1%) and persons aged 18–24 years (45.4%).

Overall, 82.4% of the IDUs reported having vaginal sex, and 63.4% reported having unprotected vaginal sex; 47.8% had more than one opposite-sex partner during the preceding 12 months. The prevalence of having unprotected vaginal sex was highest among those aged 18–24 years (68.4%). The prevalence of having more than one opposite-sex partner was highest among those aged 18–24 years (60.3%) (Table).

During the 12 months preceding their interviews, 66.3% of participants had been tested for HIV infection; the prevalence of testing was lowest among men (64.4%), non-Hispanic whites (62.4%), and persons aged 45–54 years (63.6%). Among the IDUs, 29.7% reported participating in an individual or group HIV behavioral intervention; such participation was least common among non-Hispanic whites (23.4%). HCV testing or diagnosis had been received by 72.7% of participants at some time in their lives; HCV testing was least common among those aged 18–24 years (66.0%) (Table)."

In the first paragraph of the Editorial Note, the second and fourth sentences should read: "The finding that approximately one third of participants reported sharing syringes and over half reported sharing injection equipment (32.8% and 58.5%, respectively) underscores the need to continue to focus HIV prevention strategies on these behaviors despite declines in HIV incidence among IDUs (*1*)." … "However, the NHBS data also indicate that approximately half of participants had unprotected vaginal sex (63.4%) or multiple opposite-sex partners (47.8%), suggesting that a substantial proportion of IDUs are at risk for acquiring HIV infection through their sexual behavior in addition to their drug use practices."

In the second paragraph of the Editorial Note, the second sentence should read: "However, only 29.7% of NHBS participants had participated in individual or group HIV behavioral interventions during the preceding 12 months."

**TABLE. Estimated percentage* of injecting-drug users (IDUs) engaging in selected behaviors associated with human immunodeficiency virus (HIV) infection during the preceding 12 months,† by sex, race/ethnicity, and age group — National HIV Behavioral Surveillance System, 23 cities,§ United States, May 2005–February 2006**

| Characteristic | Shared syringes % (SE¶) | Shared injection equipment % (SE) | Had vaginal sex % (SE) | Had unprotected vaginal sex % (SE) | Had more than one opposite-sex partner % (SE) | Tested for HIV infection % (SE) | Participated in HIV behavioral intervention % (SE) | Tested for hepatitis C % (SE) |
|---|---|---|---|---|---|---|---|---|
| **Overall** | **32.8 (0.9)** | **58.5 (1.0)** | **82.4 (0.8)** | **63.4 (1.0)** | **47.8 (1.0)** | **66.3 (0.9)** | **29.7 (0.9)** | **72.7 (0.9)** |
| **Sex** | | | | | | | | |
| Men | 33.1 (1.1) | 58.9 (1.2) | 83.5 (0.9) | 63.6 (1.2) | 51.7 (1.1) | 64.4 (1.1) | 28.5 (1.0) | 74.4 (1.0) |
| Women | 32.4 (1.6) | 57.6 (1.9) | 80.3 (1.5) | 62.9 (1.8) | 40.1 (1.6) | 69.8 (1.6) | 32.3 (1.7) | 69.5 (1.7) |
| **Race/Ethnicity** | | | | | | | | |
| White, non-Hispanic | 41.1 (1.7) | 65.9 (1.7) | 82.0 (1.3) | 65.0 (1.7) | 48.6 (1.8) | 62.4 (1.7) | 23.4 (1.5) | 75.8 (1.5) |
| Black, non-Hispanic | 29.9 (1.2) | 55.8 (1.4) | 85.5 (1.0) | 65.1 (1.3) | 52.5 (1.3) | 66.2 (1.2) | 31.1 (1.2) | 69.2 (1.2) |
| Hispanic | 30.1 (2.1) | 56.7 (2.5) | 77.3 (2.3) | 58.7 (2.5) | 39.1 (2.3) | 70.2 (2.1) | 33.3 (2.2) | 75.1 (2.1) |
| Other** | 37.5 (5.0) | 63.5 (4.8) | 82.5 (3.4) | 60.2 (4.6) | 49.2 (5.3) | 64.0 (4.5) | 35.1 (5.1) | 78.5 (3.9) |
| **Age group (yrs)** | | | | | | | | |
| 18–24 | 45.4 (4.8) | 70.5 (4.3) | 88.7 (2.6) | 68.4 (3.9) | 60.3 (4.4) | 72.6 (3.3) | 24.4 (4.7) | 66.0 (4.1) |
| 25–34 | 40.2 (2.3) | 63.0 (2.3) | 87.6 (1.6) | 65.5 (2.4) | 58.9 (2.0) | 70.2 (1.8) | 29.9 (2.2) | 69.0 (2.1) |
| 35–44 | 33.1 (1.6) | 59.9 (1.8) | 84.4 (1.5) | 67.5 (1.7) | 48.8 (1.7) | 67.4 (1.6) | 32.5 (1.7) | 67.9 (1.8) |
| 45–54 | 33.0 (1.4) | 58.5 (1.6) | 80.8 (1.3) | 62.8 (1.6) | 44.7 (1.6) | 63.6 (1.5) | 29.9 (1.4) | 77.7 (1.4) |
| ≥55 | 24.9 (2.5) | 51.7 (3.0) | 71.1 (2.8) | 49.6 (2.7) | 37.7 (2.8) | 65.1 (2.8) | 24.3 (2.4) | 79.9 (2.1) |

* Percentages were weighted to adjust for differences in recruitment, the size of participant IDU peer networks, and the size of the IDU population in each city.

† Sharing syringes was defined as "using needles that might have already been used by someone else," and sharing injection equipment was defined as using equipment such as cookers, cottons, or water used to rinse needles or prepare drugs "that someone else used." Unprotected vaginal sex was defined as "sex without a condom." Persons tested for HIV infection include those with results that were negative, indeterminate, or unknown. Participating in an individual or group HIV behavioral intervention did not include counseling received as part of an HIV test. Testing for hepatitis C virus infection was measured as ever tested or ever received a diagnosis of hepatitis C.

§ Atlanta, Georgia; Baltimore, Maryland; Boston, Massachusetts; Chicago, Illinois; Dallas, Texas; Denver, Colorado; Detroit, Michigan; Fort Lauderdale, Florida; Houston, Texas; Las Vegas, Nevada; Los Angeles, California; Miami, Florida; Nassau-Suffolk, New York; New Haven, Connecticut; New York, New York; Newark, New Jersey; Norfolk, Virginia; Philadelphia, Pennsylvania; San Diego, California; San Francisco, California; San Juan, Puerto Rico; St. Louis, Missouri; and Seattle, Washington.

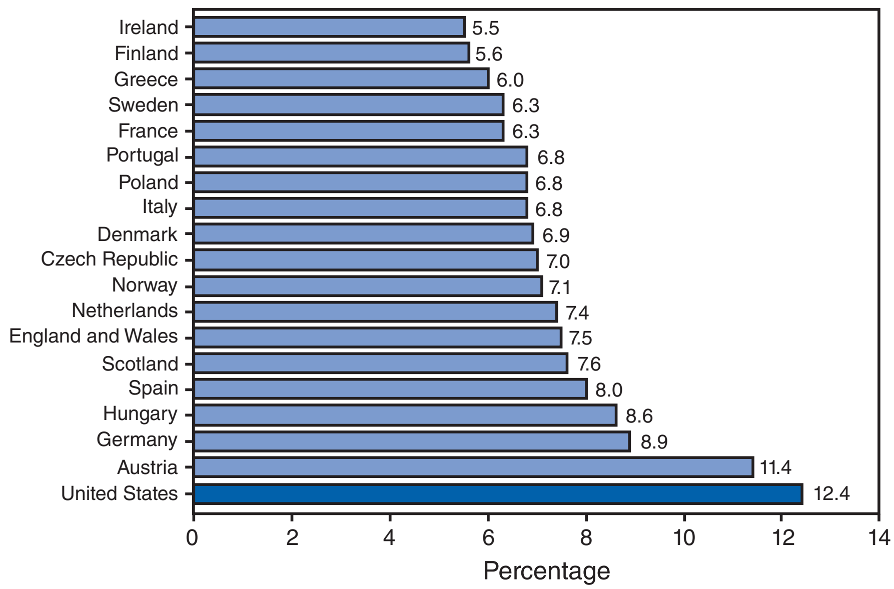
¶ Standard error.

** Includes American Indian/Alaska Natives, Asians, Native Hawaiian or other Pacific Islanders, persons of multiple race, and those for whom race/ethnicity information was missing.

# QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

## Percentage of Preterm Births* — United States and Selected European Countries, 2004




* Excludes births at <22 weeks of gestation to promote comparability between countries. Preterm births are those from 22 to 36 weeks of gestation.

Compared with 18 European countries, the United States had the highest percentage of preterm births (12.4%) in 2004. Except for Austria (11.4%), the other countries had levels of 8.9% or less. Ireland had the lowest percentage (5.5%), followed by Finland (5.6%) and Greece (6.0%), each less than half the U.S. percentage. Because preterm infants are at greater risk for death than term infants, countries with a higher percentage of preterm births tend to have higher infant mortality rates.

**SOURCE:** MacDorman MF, Mathews TJ. Behind international rankings of infant mortality: How the United States compares with Europe. NCHS data brief, no 23. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2009. Available at http://www.cdc.gov/nchs/data/databriefs/db23.pdf.

**TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending December 19, 2009 (50th week)***

| Disease | Current week | Cum 2009 | 5-year weekly average† | Total cases reported for previous years 2008 | 2007 | 2006 | 2005 | 2004 | States reporting cases during current week (No.) |
|---|---|---|---|---|---|---|---|---|---|
| Anthrax | — | — | — | — | 1 | 1 | — | — | |
| Botulism: | | | | | | | | | |
| foodborne | — | 12 | 1 | 17 | 32 | 20 | 19 | 16 | |
| infant | — | 55 | 2 | 109 | 85 | 97 | 85 | 87 | |
| other (wound and unspecified) | — | 21 | 1 | 19 | 27 | 48 | 31 | 30 | |
| Brucellosis | 1 | 93 | 3 | 80 | 131 | 121 | 120 | 114 | FL (1) |
| Chancroid | — | 23 | 1 | 25 | 23 | 33 | 17 | 30 | |
| Cholera | — | 8 | 0 | 5 | 7 | 9 | 8 | 6 | |
| Cyclosporiasis§ | — | 120 | 2 | 139 | 93 | 137 | 543 | 160 | |
| Diphtheria | 1 | 1 | — | — | — | — | — | — | OH (1) |
| Domestic arboviral diseases§,¶: | | | | | | | | | |
| California serogroup | — | 39 | 0 | 62 | 55 | 67 | 80 | 112 | |
| eastern equine | — | 4 | 0 | 4 | 4 | 8 | 21 | 6 | |
| Powassan | — | 1 | — | 2 | 7 | 1 | 1 | 1 | |
| St. Louis | — | 10 | — | 13 | 9 | 10 | 13 | 12 | |
| western equine | — | — | — | — | — | — | — | — | |
| Ehrlichiosis/Anaplasmosis§,**: | | | | | | | | | |
| *Ehrlichia chaffeensis* | 4 | 776 | 21 | 1,137 | 828 | 578 | 506 | 338 | NY (3), OH (1) |
| *Ehrlichia ewingii* | — | 6 | — | 9 | — | — | — | — | |
| *Anaplasma phagocytophilum* | 21 | 678 | 35 | 1,026 | 834 | 646 | 786 | 537 | NY (1), MN (19), MO (1) |
| undetermined | — | 115 | 3 | 180 | 337 | 231 | 112 | 59 | |
| *Haemophilus influenzae,*†† | | | | | | | | | |
| invasive disease (age <5 yrs): | | | | | | | | | |
| serotype b | — | 25 | 1 | 30 | 22 | 29 | 9 | 19 | |
| nonserotype b | 2 | 196 | 5 | 244 | 199 | 175 | 135 | 135 | CO (1), WA (1) |
| unknown serotype | 2 | 209 | 4 | 163 | 180 | 179 | 217 | 177 | MD (1), WA (1) |
| Hansen disease§ | — | 57 | 2 | 80 | 101 | 66 | 87 | 105 | |
| Hantavirus pulmonary syndrome§ | — | 12 | 1 | 18 | 32 | 40 | 26 | 24 | |
| Hemolytic uremic syndrome, postdiarrheal§ | 1 | 202 | 8 | 330 | 292 | 288 | 221 | 200 | FL (1) |
| Hepatitis C viral, acute | 8 | 814 | 26 | 878 | 845 | 766 | 652 | 720 | PA (1), MI (1), MD (1), FL (1), OK (1), TX (1), CA (2) |
| HIV infection, pediatric (age <13 years)§§ | — | — | 4 | — | — | — | 380 | 436 | |
| Influenza-associated pediatric mortality§,¶¶ | 9 | 352 | 0 | 90 | 77 | 43 | 45 | — | NY (2), NJ (1), OH (1), IA (3), SC (1), WV (1) |
| Listeriosis | 9 | 728 | 20 | 759 | 808 | 884 | 896 | 753 | NY (2), OH (1), MO (1), NC (1), FL (1), WA (1), CA (2) |
| Measles*** | 1 | 63 | 1 | 140 | 43 | 55 | 66 | 37 | FL (1) |
| Meningococcal disease, invasive†††: | | | | | | | | | |
| A, C, Y, and W-135 | 7 | 251 | 7 | 330 | 325 | 318 | 297 | — | NC (2), CO (2), WA (3) |
| serogroup B | 5 | 135 | 5 | 188 | 167 | 193 | 156 | — | CO (1), WA (4) |
| other serogroup | — | 21 | 1 | 38 | 35 | 32 | 27 | — | |
| unknown serogroup | 6 | 440 | 16 | 616 | 550 | 651 | 765 | — | MO (1), MD (1), FL (1), OR (1), CA (2) |
| Mumps | 64 | 938 | 22 | 454 | 800 | 6,584 | 314 | 258 | NY (64) |
| Novel influenza A virus infections | — | §§§ | 0 | 2 | 4 | N | N | N | |
| Plague | — | 7 | 0 | 3 | 7 | 17 | 8 | 3 | |
| Poliomyelitis, paralytic | — | — | — | — | — | — | 1 | — | |
| Polio virus infection, nonparalytic§ | — | — | — | — | — | N | N | N | |
| Psittacosis§ | — | 8 | 0 | 8 | 12 | 21 | 16 | 12 | |
| Q fever total§,¶¶¶: | — | 81 | 3 | 124 | 171 | 169 | 136 | 70 | |
| acute | — | 68 | 1 | 110 | — | — | — | — | |
| chronic | — | 13 | — | 14 | — | — | — | — | |
| Rabies, human | — | 4 | 0 | 2 | 1 | 3 | 2 | 7 | |
| Rubella**** | — | 4 | 0 | 16 | 12 | 11 | 11 | 10 | |
| Rubella, congenital syndrome | — | 1 | — | — | — | 1 | 1 | — | |
| SARS-CoV§,†††† | — | — | — | — | — | — | — | — | |
| Smallpox§ | — | — | — | — | — | — | — | — | |
| Streptococcal toxic-shock syndrome§ | — | 123 | 4 | 157 | 132 | 125 | 129 | 132 | |
| Syphilis, congenital (age <1 yr) | — | 251 | 9 | 434 | 430 | 349 | 329 | 353 | |
| Tetanus | — | 12 | 1 | 19 | 28 | 41 | 27 | 34 | |
| Toxic-shock syndrome (staphylococcal)§ | 1 | 76 | 3 | 71 | 92 | 101 | 90 | 95 | OH (1) |
| Trichinellosis | — | 12 | 0 | 39 | 5 | 15 | 16 | 5 | |
| Tularemia | 2 | 76 | 3 | 123 | 137 | 95 | 154 | 134 | CO (1), WA (1) |
| Typhoid fever | 1 | 316 | 8 | 449 | 434 | 353 | 324 | 322 | MO (1) |
| Vancomycin-intermediate *Staphylococcus aureus*§ | — | 69 | 1 | 63 | 37 | 6 | 2 | — | |
| Vancomycin-resistant *Staphylococcus aureus*§ | — | — | 0 | — | 2 | 1 | 3 | 1 | |
| Vibriosis (noncholera *Vibrio* species infections)§ | 7 | 575 | 6 | 492 | 549 | N | N | N | GA (1), FL (4), CA (2) |
| Yellow fever | — | — | — | — | — | — | — | — | |

See Table I footnotes on next page.

**TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending December 19, 2009 (50th week)***

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

* Incidence data for reporting year 2009 is provisional, whereas data for 2004 through 2008 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. The total sum of incident cases is then divided by 25 weeks. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

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

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

** The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).

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

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

¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since April 26, 2009, a total of 241 influenza-associated pediatric deaths associated with 2009 pandemic influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 221 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 130 influenza-associated pediatric death occurring during the 2008-09 influenza season have been reported.

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

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

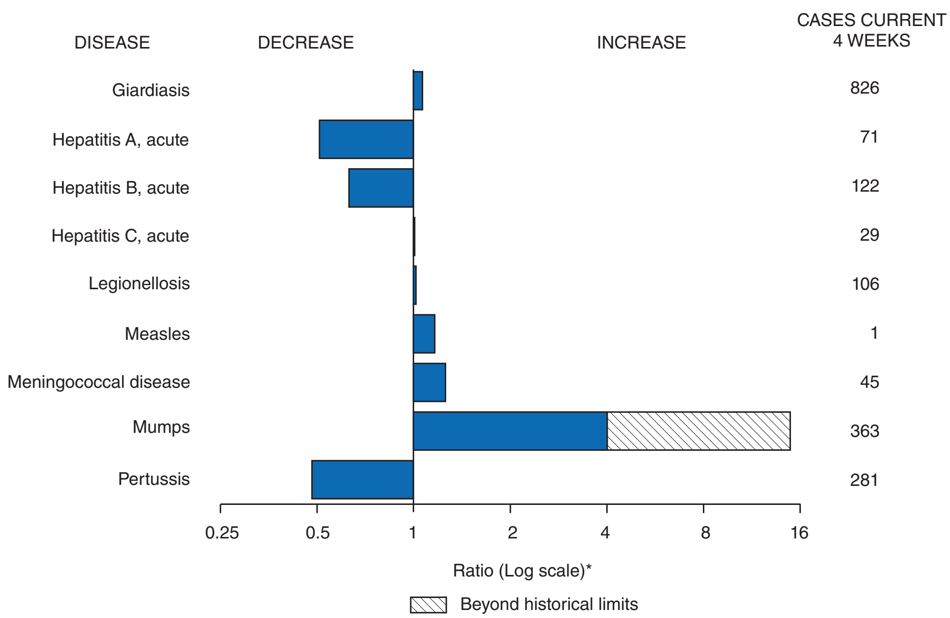
§§§ CDC discontinued reporting of individual confirmed and probable cases of novel influenza A (H1N1) viruses infections on July 24, 2009. CDC will report the total number of novel influenza A (H1N1) hospitalizations and deaths weekly on the CDC H1N1 influenza website (http://www.cdc.gov/h1n1flu).

¶¶¶ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

**** 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.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals December 19, 2009, 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**

Patsy A. Hall

| | |
|---|---|
| Deborah A. Adams | Rosaline Dhara |
| Willie J. Anderson | Michael S. Wodajo |
| Jose Aponte | Pearl C. Sharp |
| Lenee Blanton | |

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending December 19, 2009, and December 13, 2008 (50th week)***

| Reporting area | Chlamydia† | | | | | Coccidiodomycosis | | | | | Cryptosporidiosis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 week Med | Previous 52 week Max | Cum 2009 | Cum 2008 |
| **United States** | 9,779 | 22,372 | 26,455 | 1,081,083 | 1,144,923 | 139 | 240 | 507 | 12,034 | 6,749 | 50 | 114 | 369 | 6,502 | 8,580 |
| **New England** | 939 | 760 | 1,655 | 38,529 | 35,851 | — | 0 | 1 | 1 | 1 | — | 6 | 45 | 409 | 384 |
| Connecticut | 354 | 225 | 1,306 | 11,184 | 10,647 | N | 0 | 0 | N | N | — | 0 | 38 | 38 | 41 |
| Maine§ | 59 | 47 | 75 | 2,359 | 2,480 | N | 0 | 0 | N | N | — | 0 | 4 | 43 | 45 |
| Massachusetts | 423 | 375 | 944 | 18,837 | 16,416 | N | 0 | 0 | N | N | — | 2 | 16 | 164 | 167 |
| New Hampshire | 3 | 34 | 61 | 1,519 | 2,009 | — | 0 | 1 | 1 | 1 | — | 1 | 5 | 70 | 58 |
| Rhode Island§ | 70 | 63 | 244 | 3,507 | 3,180 | — | 0 | 0 | — | — | — | 0 | 8 | 20 | 10 |
| Vermont§ | 30 | 22 | 63 | 1,123 | 1,119 | N | 0 | 0 | N | N | — | 1 | 9 | 74 | 63 |
| **Mid. Atlantic** | 2,203 | 3,015 | 6,734 | 149,758 | 141,854 | — | 0 | 0 | — | — | 5 | 13 | 37 | 764 | 717 |
| New Jersey | — | 431 | 838 | 20,556 | 21,400 | N | 0 | 0 | N | N | — | 1 | 5 | 42 | 40 |
| New York (Upstate) | 662 | 589 | 4,563 | 30,726 | 26,744 | N | 0 | 0 | N | N | 3 | 3 | 12 | 208 | 256 |
| New York City | 1,047 | 1,160 | 1,956 | 57,650 | 53,701 | N | 0 | 0 | N | N | — | 1 | 8 | 72 | 105 |
| Pennsylvania | 494 | 830 | 1,001 | 40,826 | 40,009 | N | 0 | 0 | N | N | 2 | 8 | 19 | 442 | 316 |
| **E.N. Central** | 782 | 3,399 | 4,281 | 163,274 | 185,511 | — | 1 | 4 | 35 | 40 | 11 | 27 | 54 | 1,428 | 2,109 |
| Illinois | 4 | 1,046 | 1,426 | 48,499 | 56,844 | N | 0 | 0 | N | N | — | 2 | 8 | 138 | 202 |
| Indiana | — | 407 | 695 | 20,410 | 20,865 | N | 0 | 0 | N | N | — | 4 | 17 | 185 | 181 |
| Michigan | 533 | 872 | 1,332 | 43,873 | 42,947 | — | 0 | 3 | 19 | 30 | 1 | 5 | 11 | 266 | 272 |
| Ohio | 37 | 770 | 1,177 | 32,970 | 44,395 | — | 0 | 2 | 16 | 10 | 9 | 6 | 16 | 375 | 678 |
| Wisconsin | 208 | 357 | 463 | 17,522 | 20,460 | N | 0 | 0 | N | N | 1 | 7 | 24 | 464 | 776 |
| **W.N. Central** | 230 | 1,338 | 1,697 | 63,801 | 64,834 | — | 0 | 1 | 10 | 3 | 5 | 18 | 61 | 994 | 963 |
| Iowa | 165 | 174 | 256 | 9,055 | 8,883 | N | 0 | 0 | N | N | 3 | 3 | 14 | 199 | 281 |
| Kansas | 1 | 178 | 561 | 9,526 | 8,780 | N | 0 | 0 | N | N | — | 1 | 6 | 61 | 83 |
| Minnesota | — | 254 | 338 | 12,135 | 13,799 | — | 0 | 0 | — | — | 2 | 4 | 34 | 336 | 221 |
| Missouri | — | 509 | 638 | 24,368 | 23,604 | — | 0 | 1 | 10 | 3 | — | 3 | 12 | 179 | 175 |
| Nebraska§ | 64 | 104 | 225 | 5,186 | 5,203 | N | 0 | 0 | N | N | — | 2 | 9 | 111 | 112 |
| North Dakota | — | 29 | 77 | 1,386 | 1,762 | N | 0 | 0 | N | N | — | 0 | 10 | 13 | 6 |
| South Dakota | — | 54 | 80 | 2,145 | 2,803 | N | 0 | 0 | N | N | — | 1 | 10 | 95 | 85 |
| **S. Atlantic** | 1,641 | 3,839 | 5,395 | 188,476 | 235,030 | — | 0 | 1 | 5 | 5 | 7 | 19 | 45 | 1,015 | 1,016 |
| Delaware | 72 | 88 | 180 | 4,529 | 3,627 | — | 0 | 1 | 1 | 2 | — | 0 | 2 | 12 | 12 |
| District of Columbia | — | 124 | 226 | 6,210 | 6,620 | — | 0 | 0 | — | — | — | 0 | 1 | 2 | 15 |
| Florida | 547 | 1,420 | 1,671 | 69,713 | 67,829 | N | 0 | 0 | N | N | 4 | 8 | 24 | 442 | 458 |
| Georgia | 4 | 696 | 1,909 | 28,957 | 39,382 | N | 0 | 0 | N | N | 3 | 5 | 23 | 316 | 250 |
| Maryland§ | 486 | 425 | 889 | 21,371 | 22,975 | — | 0 | 1 | 4 | 3 | — | 1 | 5 | 40 | 51 |
| North Carolina | — | 0 | 998 | — | 35,742 | N | 0 | 0 | N | N | — | 0 | 9 | 58 | 75 |
| South Carolina§ | — | 524 | 1,421 | 23,838 | 25,660 | N | 0 | 0 | N | N | — | 1 | 7 | 54 | 54 |
| Virginia§ | 532 | 602 | 926 | 30,424 | 30,050 | N | 0 | 0 | N | N | — | 1 | 7 | 75 | 77 |
| West Virginia | — | 69 | 136 | 3,434 | 3,145 | N | 0 | 0 | N | N | — | 0 | 2 | 16 | 24 |
| **E.S. Central** | 1,252 | 1,756 | 2,209 | 86,204 | 82,373 | — | 0 | 0 | — | — | — | 3 | 10 | 208 | 169 |
| Alabama§ | 15 | 462 | 629 | 22,135 | 23,694 | N | 0 | 0 | N | N | — | 1 | 5 | 56 | 72 |
| Kentucky | 543 | 249 | 642 | 13,166 | 11,723 | N | 0 | 0 | N | N | — | 1 | 4 | 62 | 35 |
| Mississippi | — | 457 | 840 | 21,808 | 20,093 | N | 0 | 0 | N | N | — | 0 | 3 | 15 | 17 |
| Tennessee§ | 694 | 569 | 809 | 29,095 | 26,863 | N | 0 | 0 | N | N | — | 1 | 5 | 75 | 45 |
| **W.S. Central** | 971 | 2,973 | 5,809 | 146,258 | 144,421 | — | 0 | 1 | 1 | 3 | 8 | 9 | 271 | 499 | 2,248 |
| Arkansas§ | 312 | 266 | 417 | 13,120 | 13,746 | N | 0 | 0 | N | N | — | 1 | 5 | 54 | 91 |
| Louisiana | 440 | 515 | 1,130 | 24,986 | 21,706 | — | 0 | 1 | 1 | 3 | — | 0 | 6 | 29 | 65 |
| Oklahoma | 219 | 172 | 2,717 | 12,901 | 12,630 | N | 0 | 0 | N | N | 2 | 2 | 11 | 125 | 132 |
| Texas§ | — | 2,011 | 2,521 | 95,251 | 96,339 | N | 0 | 0 | N | N | 6 | 5 | 258 | 291 | 1,960 |
| **Mountain** | 459 | 1,424 | 2,088 | 71,756 | 73,024 | 62 | 194 | 454 | 9,678 | 4,407 | 1 | 8 | 26 | 493 | 566 |
| Arizona | 86 | 496 | 758 | 23,951 | 23,748 | 62 | 192 | 452 | 9,582 | 4,309 | — | 1 | 3 | 33 | 87 |
| Colorado | 332 | 314 | 727 | 16,362 | 17,914 | N | 0 | 0 | N | N | 1 | 2 | 10 | 133 | 109 |
| Idaho§ | — | 69 | 184 | 3,501 | 3,915 | N | 0 | 0 | N | N | — | 1 | 7 | 91 | 69 |
| Montana§ | — | 56 | 87 | 2,807 | 2,953 | N | 0 | 0 | N | N | — | 1 | 4 | 54 | 44 |
| Nevada§ | — | 170 | 477 | 9,341 | 9,220 | — | 1 | 4 | 54 | 51 | — | 0 | 2 | 5 | 17 |
| New Mexico§ | — | 182 | 540 | 8,677 | 8,074 | — | 0 | 2 | 10 | 33 | — | 2 | 8 | 122 | 171 |
| Utah | 15 | 113 | 176 | 5,247 | 5,706 | — | 0 | 2 | 31 | 12 | — | 0 | 3 | 31 | 46 |
| Wyoming§ | 26 | 33 | 69 | 1,870 | 1,494 | — | 0 | 1 | 1 | 2 | — | 0 | 2 | 24 | 23 |
| **Pacific** | 1,302 | 3,460 | 4,686 | 173,027 | 182,025 | 77 | 40 | 172 | 2,304 | 2,290 | 13 | 14 | 25 | 692 | 408 |
| Alaska | — | 96 | 199 | 3,994 | 4,503 | N | 0 | 0 | N | N | — | 0 | 1 | 6 | 3 |
| California | 1,068 | 2,687 | 3,592 | 135,548 | 140,713 | 77 | 40 | 172 | 2,304 | 2,290 | 9 | 8 | 20 | 427 | 248 |
| Hawaii | — | 117 | 147 | 5,376 | 5,728 | N | 0 | 0 | N | N | — | 0 | 1 | 1 | 2 |
| Oregon§ | — | 188 | 387 | 9,332 | 10,380 | N | 0 | 0 | N | N | — | 3 | 9 | 171 | 63 |
| Washington | 234 | 388 | 571 | 18,777 | 20,701 | N | 0 | 0 | N | N | 4 | 1 | 8 | 87 | 92 |
| American Samoa | — | 0 | 0 | — | 73 | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | 124 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Puerto Rico | — | 135 | 331 | 6,826 | 6,734 | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| U.S. Virgin Islands | — | 8 | 17 | 369 | 586 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is 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 December 19, 2009, and December 13, 2008 (50th week)*

| Reporting area | Giardiasis | | | | | Gonorrhea | | | | | *Haemophilus influenzae*, invasive All ages, all serotypes† | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 |
| **United States** | 188 | 323 | 498 | 16,948 | 17,821 | 2,181 | 5,349 | 6,562 | 257,177 | 319,842 | 34 | 59 | 124 | 2,767 | 2,628 |
| **New England** | 5 | 30 | 64 | 1,593 | 1,595 | 117 | 97 | 301 | 4,908 | 4,968 | 2 | 3 | 16 | 182 | 169 |
| Connecticut | — | 6 | 15 | 269 | 317 | 71 | 48 | 275 | 2,392 | 2,426 | 1 | 0 | 12 | 50 | 41 |
| Maine§ | 2 | 3 | 13 | 207 | 181 | 4 | 2 | 9 | 135 | 92 | — | 0 | 2 | 18 | 18 |
| Massachusetts | — | 12 | 36 | 672 | 654 | 37 | 38 | 112 | 1,909 | 2,015 | — | 2 | 5 | 89 | 78 |
| New Hampshire | — | 3 | 11 | 175 | 157 | — | 2 | 6 | 109 | 99 | 1 | 0 | 2 | 12 | 9 |
| Rhode Island§ | — | 1 | 6 | 59 | 87 | 3 | 6 | 19 | 314 | 301 | — | 0 | 2 | 8 | 15 |
| Vermont§ | 3 | 4 | 14 | 211 | 199 | 2 | 1 | 5 | 49 | 35 | — | 0 | 1 | 5 | 8 |
| **Mid. Atlantic** | 26 | 61 | 104 | 3,056 | 3,331 | 383 | 588 | 1,138 | 30,227 | 31,308 | 7 | 12 | 25 | 588 | 503 |
| New Jersey | — | 4 | 17 | 215 | 495 | — | 91 | 124 | 4,290 | 5,054 | — | 2 | 7 | 105 | 92 |
| New York (Upstate) | 17 | 24 | 81 | 1,289 | 1,182 | 92 | 106 | 664 | 5,642 | 5,834 | 1 | 3 | 20 | 153 | 148 |
| New York City | 2 | 15 | 25 | 764 | 812 | 163 | 212 | 366 | 10,735 | 9,954 | — | 2 | 11 | 117 | 86 |
| Pennsylvania | 7 | 15 | 34 | 788 | 842 | 128 | 193 | 263 | 9,560 | 10,466 | 6 | 4 | 10 | 213 | 177 |
| **E.N. Central** | 16 | 44 | 72 | 2,259 | 2,638 | 250 | 1,086 | 1,394 | 51,038 | 66,185 | 2 | 12 | 28 | 551 | 435 |
| Illinois | — | 9 | 18 | 440 | 683 | — | 341 | 524 | 15,439 | 19,784 | — | 3 | 9 | 141 | 144 |
| Indiana | N | 0 | 11 | N | N | — | 139 | 223 | 6,436 | 8,282 | — | 1 | 22 | 70 | 68 |
| Michigan | 4 | 12 | 24 | 613 | 590 | 183 | 277 | 501 | 14,183 | 16,350 | — | 0 | 3 | 24 | 27 |
| Ohio | 12 | 16 | 28 | 783 | 860 | 14 | 252 | 431 | 10,532 | 15,825 | 2 | 2 | 6 | 97 | 130 |
| Wisconsin | — | 9 | 19 | 423 | 505 | 53 | 86 | 143 | 4,448 | 5,944 | — | 3 | 20 | 219 | 66 |
| **W.N. Central** | 18 | 24 | 141 | 1,690 | 1,930 | 31 | 274 | 365 | 13,587 | 16,171 | — | 3 | 15 | 154 | 190 |
| Iowa | 1 | 6 | 15 | 288 | 310 | 10 | 32 | 47 | 1,543 | 1,604 | — | 0 | 0 | — | 2 |
| Kansas | — | 2 | 11 | 96 | 157 | 2 | 43 | 83 | 2,236 | 2,182 | — | 0 | 2 | 13 | 20 |
| Minnesota | — | 0 | 124 | 539 | 665 | — | 40 | 65 | 2,002 | 2,920 | — | 0 | 10 | 54 | 57 |
| Missouri | 12 | 9 | 27 | 505 | 447 | — | 125 | 173 | 6,127 | 7,629 | — | 1 | 4 | 56 | 70 |
| Nebraska§ | 5 | 3 | 9 | 170 | 200 | 19 | 24 | 55 | 1,334 | 1,356 | — | 0 | 4 | 25 | 29 |
| North Dakota | — | 0 | 16 | 27 | 19 | — | 1 | 14 | 87 | 136 | — | 0 | 4 | 6 | 12 |
| South Dakota | — | 1 | 5 | 65 | 132 | — | 5 | 20 | 258 | 344 | — | 0 | 0 | — | — |
| **S. Atlantic** | 46 | 69 | 109 | 3,497 | 2,929 | 512 | 1,125 | 1,776 | 54,534 | 82,156 | 13 | 13 | 31 | 683 | 666 |
| Delaware | — | 0 | 3 | 25 | 42 | 16 | 18 | 37 | 924 | 989 | — | 0 | 1 | 4 | 8 |
| District of Columbia | — | 0 | 5 | 22 | 64 | — | 49 | 88 | 2,448 | 2,515 | — | 0 | 1 | 2 | 8 |
| Florida | 36 | 38 | 59 | 1,870 | 1,295 | 196 | 409 | 476 | 19,996 | 22,352 | 3 | 4 | 10 | 218 | 182 |
| Georgia | — | 10 | 67 | 750 | 665 | 2 | 216 | 876 | 9,860 | 14,890 | 1 | 3 | 9 | 145 | 135 |
| Maryland§ | 2 | 5 | 13 | 263 | 273 | 109 | 114 | 208 | 5,784 | 6,228 | 4 | 1 | 6 | 92 | 91 |
| North Carolina | N | 0 | 0 | N | N | — | 0 | 383 | — | 15,307 | 4 | 0 | 17 | 69 | 74 |
| South Carolina§ | 2 | 2 | 8 | 101 | 131 | — | 160 | 412 | 7,504 | 9,161 | 1 | 1 | 5 | 68 | 58 |
| Virginia§ | 5 | 8 | 31 | 413 | 388 | 189 | 147 | 276 | 7,567 | 9,998 | — | 1 | 6 | 56 | 84 |
| West Virginia | 1 | 1 | 5 | 53 | 71 | — | 9 | 20 | 451 | 716 | — | 0 | 3 | 29 | 26 |
| **E.S. Central** | 8 | 7 | 22 | 382 | 485 | 333 | 500 | 687 | 24,709 | 29,327 | 4 | 3 | 9 | 151 | 142 |
| Alabama§ | 3 | 3 | 11 | 177 | 272 | 9 | 137 | 184 | 6,406 | 9,340 | 1 | 1 | 4 | 36 | 24 |
| Kentucky | N | 0 | 0 | N | N | 138 | 72 | 156 | 3,795 | 4,405 | — | 0 | 5 | 19 | 8 |
| Mississippi | N | 0 | 0 | N | N | — | 142 | 252 | 6,756 | 7,085 | — | 0 | 1 | 5 | 13 |
| Tennessee§ | 5 | 4 | 18 | 205 | 213 | 186 | 156 | 230 | 7,752 | 8,497 | 3 | 2 | 6 | 91 | 97 |
| **W.S. Central** | 5 | 7 | 22 | 403 | 442 | 278 | 876 | 1,556 | 42,766 | 48,869 | — | 2 | 22 | 109 | 108 |
| Arkansas§ | 2 | 2 | 9 | 145 | 136 | 88 | 82 | 134 | 4,040 | 4,409 | — | 0 | 3 | 19 | 15 |
| Louisiana | — | 1 | 7 | 96 | 147 | 128 | 167 | 418 | 8,095 | 9,094 | — | 0 | 1 | 12 | 11 |
| Oklahoma | 3 | 3 | 18 | 162 | 159 | 62 | 62 | 612 | 4,307 | 4,606 | — | 1 | 20 | 73 | 72 |
| Texas§ | N | 0 | 0 | N | N | — | 556 | 695 | 26,324 | 30,760 | — | 0 | 1 | 5 | 10 |
| **Mountain** | 18 | 26 | 59 | 1,464 | 1,583 | 47 | 175 | 243 | 8,411 | 11,116 | 3 | 5 | 11 | 228 | 279 |
| Arizona | 2 | 3 | 7 | 188 | 137 | 22 | 58 | 110 | 2,942 | 3,304 | — | 1 | 7 | 77 | 103 |
| Colorado | 11 | 8 | 26 | 469 | 544 | 23 | 43 | 106 | 2,261 | 3,577 | 3 | 1 | 6 | 68 | 54 |
| Idaho§ | 1 | 3 | 10 | 198 | 196 | — | 2 | 8 | 95 | 178 | — | 0 | 1 | 4 | 12 |
| Montana§ | 1 | 2 | 11 | 125 | 90 | — | 1 | 5 | 73 | 115 | — | 0 | 1 | 2 | 5 |
| Nevada§ | — | 1 | 10 | 69 | 117 | — | 28 | 93 | 1,642 | 2,065 | — | 0 | 2 | 15 | 16 |
| New Mexico§ | — | 2 | 8 | 104 | 103 | — | 22 | 52 | 1,064 | 1,297 | — | 0 | 3 | 27 | 47 |
| Utah | — | 5 | 12 | 251 | 349 | — | 5 | 12 | 262 | 459 | — | 1 | 2 | 32 | 38 |
| Wyoming§ | 3 | 1 | 4 | 60 | 47 | 2 | 1 | 7 | 72 | 121 | — | 0 | 1 | 3 | 4 |
| **Pacific** | 46 | 51 | 130 | 2,604 | 2,888 | 230 | 544 | 764 | 26,997 | 29,742 | 3 | 2 | 8 | 121 | 136 |
| Alaska | — | 2 | 7 | 104 | 103 | — | 17 | 29 | 733 | 532 | — | 0 | 3 | 20 | 19 |
| California | 30 | 34 | 60 | 1,713 | 1,901 | 199 | 451 | 657 | 22,743 | 24,414 | — | 0 | 4 | 25 | 43 |
| Hawaii | — | 0 | 2 | 17 | 41 | — | 12 | 24 | 576 | 583 | — | 0 | 3 | 24 | 19 |
| Oregon§ | 7 | 7 | 18 | 387 | 444 | — | 20 | 44 | 945 | 1,188 | 1 | 1 | 4 | 47 | 53 |
| Washington | 9 | 7 | 74 | 383 | 399 | 31 | 39 | 71 | 2,000 | 3,025 | 2 | 0 | 2 | 5 | 2 |
| American Samoa | — | 0 | 0 | — | — | — | 0 | 0 | — | 3 | — | 0 | 0 | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | — | — | 0 | 0 | — | 73 | — | 0 | 0 | — | — |
| Puerto Rico | — | 2 | 10 | 102 | 206 | — | 3 | 24 | 219 | 271 | — | 0 | 1 | 3 | 1 |
| U.S. Virgin Islands | — | 0 | 0 | — | — | — | 2 | 7 | 93 | 118 | N | 0 | 0 | N | N |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is 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 December 19, 2009, and December 13, 2008 (50th week)***

| | Hepatitis (viral, acute), by type† | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | | | | | B | | | | | Legionellosis | | | | |
| | Current | Previous 52 weeks | | Cum | Cum | Current | Previous 52 weeks | | Cum | Cum | Current | Previous 52 weeks | | Cum | Cum |
| Reporting area | week | Med | Max | 2009 | 2008 | week | Med | Max | 2009 | 2008 | week | Med | Max | 2009 | 2008 |
| **United States** | 20 | 36 | 89 | 1,784 | 2,427 | 42 | 61 | 197 | 2,917 | 3,666 | 26 | 54 | 158 | 3,028 | 2,970 |
| **New England** | — | 2 | 5 | 92 | 127 | — | 1 | 3 | 44 | 76 | 2 | 2 | 17 | 170 | 218 |
| Connecticut | — | 0 | 2 | 18 | 26 | — | 0 | 3 | 14 | 28 | 2 | 1 | 5 | 53 | 45 |
| Maine§ | — | 0 | 1 | 1 | 18 | — | 0 | 2 | 15 | 12 | — | 0 | 3 | 8 | 11 |
| Massachusetts | — | 1 | 4 | 56 | 57 | — | 0 | 2 | 12 | 21 | — | 1 | 9 | 73 | 84 |
| New Hampshire | — | 0 | 1 | 7 | 12 | — | 0 | 1 | 3 | 8 | — | 0 | 2 | 10 | 30 |
| Rhode Island§ | — | 0 | 1 | 8 | 12 | — | 0 | 0 | — | 4 | — | 0 | 4 | 19 | 43 |
| Vermont§ | — | 0 | 1 | 2 | 2 | — | 0 | 0 | — | 3 | — | 0 | 1 | 7 | 5 |
| **Mid. Atlantic** | 1 | 5 | 10 | 244 | 312 | 4 | 5 | 17 | 287 | 424 | 7 | 15 | 69 | 1,081 | 985 |
| New Jersey | — | 1 | 5 | 55 | 77 | — | 1 | 6 | 66 | 117 | — | 2 | 13 | 155 | 141 |
| New York (Upstate) | — | 1 | 3 | 45 | 62 | 3 | 1 | 11 | 51 | 61 | 4 | 5 | 29 | 340 | 328 |
| New York City | — | 2 | 5 | 81 | 106 | — | 1 | 4 | 67 | 98 | — | 3 | 20 | 207 | 129 |
| Pennsylvania | 1 | 1 | 6 | 63 | 67 | 1 | 2 | 7 | 103 | 148 | 3 | 6 | 25 | 379 | 387 |
| **E.N. Central** | — | 4 | 18 | 245 | 327 | 4 | 7 | 21 | 357 | 499 | 3 | 9 | 34 | 578 | 642 |
| Illinois | — | 2 | 12 | 107 | 108 | — | 1 | 7 | 79 | 180 | — | 1 | 10 | 104 | 119 |
| Indiana | — | 0 | 4 | 15 | 19 | — | 1 | 18 | 56 | 47 | — | 1 | 4 | 44 | 55 |
| Michigan | — | 1 | 4 | 69 | 118 | 1 | 2 | 8 | 110 | 141 | 1 | 2 | 11 | 142 | 171 |
| Ohio | — | 0 | 3 | 36 | 49 | 3 | 1 | 13 | 84 | 114 | 2 | 4 | 17 | 278 | 259 |
| Wisconsin | — | 0 | 4 | 18 | 33 | — | 0 | 4 | 28 | 17 | — | 0 | 2 | 10 | 38 |
| **W.N. Central** | — | 2 | 16 | 109 | 237 | — | 3 | 16 | 164 | 83 | — | 2 | 6 | 104 | 138 |
| Iowa | — | 0 | 3 | 32 | 107 | — | 0 | 3 | 30 | 22 | — | 0 | 2 | 21 | 20 |
| Kansas | — | 0 | 1 | 7 | 15 | — | 0 | 2 | 5 | 8 | — | 0 | 1 | 3 | 2 |
| Minnesota | — | 0 | 12 | 21 | 36 | — | 0 | 11 | 26 | 10 | — | 0 | 4 | 12 | 23 |
| Missouri | — | 0 | 3 | 25 | 34 | — | 1 | 5 | 79 | 33 | — | 1 | 5 | 53 | 69 |
| Nebraska§ | — | 0 | 3 | 20 | 41 | — | 0 | 2 | 22 | 9 | — | 0 | 2 | 12 | 21 |
| North Dakota | — | 0 | 2 | 1 | — | — | 0 | 1 | — | 1 | — | 0 | 3 | 2 | — |
| South Dakota | — | 0 | 1 | 3 | 4 | — | 0 | 1 | 2 | — | — | 0 | 1 | 1 | 3 |
| **S. Atlantic** | 8 | 8 | 14 | 404 | 380 | 14 | 16 | 32 | 841 | 919 | 9 | 10 | 21 | 533 | 475 |
| Delaware | — | 0 | 1 | 4 | 7 | U | 0 | 1 | U | U | — | 0 | 5 | 18 | 13 |
| District of Columbia | U | 0 | 0 | U | U | U | 0 | 0 | U | U | — | 0 | 2 | 9 | 16 |
| Florida | 3 | 3 | 9 | 173 | 142 | 13 | 6 | 11 | 294 | 321 | 4 | 3 | 10 | 191 | 139 |
| Georgia | 1 | 1 | 3 | 53 | 54 | 1 | 3 | 9 | 132 | 178 | — | 1 | 5 | 50 | 39 |
| Maryland§ | — | 1 | 4 | 41 | 43 | — | 1 | 5 | 67 | 80 | 3 | 3 | 12 | 143 | 132 |
| North Carolina | 4 | 0 | 3 | 31 | 62 | — | 0 | 19 | 148 | 76 | — | 0 | 6 | 39 | 37 |
| South Carolina§ | — | 1 | 4 | 57 | 19 | — | 1 | 4 | 50 | 67 | 1 | 0 | 2 | 13 | 11 |
| Virginia§ | — | 1 | 3 | 40 | 48 | — | 1 | 10 | 88 | 114 | 1 | 1 | 5 | 61 | 59 |
| West Virginia | — | 0 | 2 | 5 | 5 | — | 0 | 19 | 62 | 83 | — | 0 | 2 | 9 | 29 |
| **E.S. Central** | — | 1 | 4 | 41 | 77 | 2 | 7 | 11 | 316 | 388 | — | 2 | 12 | 130 | 111 |
| Alabama§ | — | 0 | 2 | 10 | 12 | — | 1 | 7 | 79 | 103 | — | 0 | 2 | 15 | 17 |
| Kentucky | — | 0 | 1 | 10 | 30 | — | 2 | 6 | 83 | 95 | — | 1 | 3 | 49 | 53 |
| Mississippi | — | 0 | 2 | 12 | 5 | — | 1 | 2 | 30 | 47 | — | 0 | 2 | 4 | 1 |
| Tennessee§ | — | 0 | 2 | 9 | 30 | 2 | 2 | 5 | 124 | 143 | — | 1 | 9 | 62 | 40 |
| **W.S. Central** | 3 | 3 | 43 | 169 | 235 | 9 | 9 | 99 | 470 | 720 | 2 | 2 | 21 | 113 | 93 |
| Arkansas§ | — | 0 | 1 | 8 | 10 | — | 1 | 5 | 48 | 61 | — | 0 | 1 | 8 | 14 |
| Louisiana | — | 0 | 1 | 3 | 11 | — | 0 | 4 | 33 | 91 | — | 0 | 2 | 4 | 10 |
| Oklahoma | — | 0 | 6 | 6 | 7 | 2 | 2 | 17 | 101 | 109 | — | 0 | 2 | 6 | 10 |
| Texas§ | 3 | 3 | 37 | 152 | 207 | 7 | 6 | 76 | 288 | 459 | 2 | 2 | 19 | 95 | 59 |
| **Mountain** | 2 | 3 | 8 | 153 | 211 | — | 2 | 6 | 114 | 195 | 1 | 2 | 7 | 128 | 96 |
| Arizona | 1 | 1 | 4 | 70 | 112 | — | 1 | 3 | 41 | 76 | 1 | 1 | 4 | 49 | 23 |
| Colorado | 1 | 1 | 5 | 49 | 36 | — | 0 | 2 | 20 | 33 | — | 0 | 2 | 19 | 14 |
| Idaho§ | — | 0 | 1 | 4 | 17 | — | 0 | 2 | 11 | 9 | — | 0 | 2 | 7 | 3 |
| Montana§ | — | 0 | 1 | 6 | 1 | — | 0 | 0 | — | 2 | — | 0 | 2 | 7 | 4 |
| Nevada§ | — | 0 | 2 | 8 | 12 | — | 0 | 3 | 27 | 43 | — | 0 | 1 | 11 | 12 |
| New Mexico§ | — | 0 | 1 | 7 | 17 | — | 0 | 2 | 6 | 12 | — | 0 | 2 | 8 | 11 |
| Utah | — | 0 | 2 | 7 | 13 | — | 0 | 1 | 5 | 14 | — | 0 | 4 | 23 | 29 |
| Wyoming§ | — | 0 | 1 | 2 | 3 | — | 0 | 2 | 4 | 6 | — | 0 | 2 | 4 | — |
| **Pacific** | 6 | 6 | 17 | 327 | 521 | 9 | 6 | 36 | 324 | 362 | 2 | 3 | 12 | 191 | 212 |
| Alaska | — | 0 | 1 | 3 | 5 | — | 0 | 1 | 4 | 10 | — | 0 | 1 | 1 | 3 |
| California | 5 | 5 | 16 | 261 | 427 | 7 | 4 | 28 | 234 | 260 | 2 | 3 | 10 | 150 | 168 |
| Hawaii | — | 0 | 2 | 6 | 18 | — | 0 | 1 | 5 | 7 | — | 0 | 1 | 1 | 8 |
| Oregon§ | — | 0 | 2 | 17 | 25 | — | 1 | 4 | 40 | 41 | — | 0 | 2 | 15 | 17 |
| Washington | 1 | 1 | 4 | 40 | 46 | 2 | 1 | 8 | 41 | 44 | — | 0 | 4 | 24 | 16 |
| American Samoa | — | 0 | 0 | — | — | — | 0 | 0 | — | — | N | 0 | 0 | N | N |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Puerto Rico | — | 0 | 2 | 18 | 23 | — | 0 | 5 | 22 | 46 | — | 0 | 1 | 1 | — |
| U.S. Virgin Islands | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is 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 December 19, 2009, and December 13, 2008 (50th week)***

| Reporting area | Lyme disease | | | | | Malaria | | | | | Meningococcal disease, invasive† All groups | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 |
| **United States** | 189 | 309 | 1,918 | 28,707 | 32,566 | 11 | 22 | 46 | 1,132 | 1,167 | 18 | 17 | 48 | 847 | 1,097 |
| **New England** | 5 | 59 | 457 | 5,734 | 11,373 | — | 1 | 5 | 49 | 53 | — | 0 | 4 | 33 | 35 |
| Connecticut | — | 0 | 23 | — | 3,850 | — | 0 | 4 | 6 | 10 | — | 0 | 2 | 5 | 1 |
| Maine§ | 5 | 10 | 76 | 876 | 869 | — | 0 | 1 | 2 | 1 | — | 0 | 1 | 4 | 6 |
| Massachusetts | — | 18 | 306 | 3,229 | 4,546 | — | 0 | 3 | 30 | 32 | — | 0 | 3 | 16 | 23 |
| New Hampshire | — | 10 | 87 | 1,035 | 1,584 | — | 0 | 1 | 3 | 4 | — | 0 | 1 | 3 | 4 |
| Rhode Island§ | — | 1 | 78 | 212 | 130 | — | 0 | 1 | 5 | 2 | — | 0 | 1 | 4 | 1 |
| Vermont§ | — | 4 | 40 | 382 | 394 | — | 0 | 1 | 3 | 4 | — | 0 | 1 | 1 | — |
| **Mid. Atlantic** | 132 | 171 | 1,401 | 16,295 | 13,300 | 2 | 6 | 13 | 290 | 313 | — | 2 | 6 | 94 | 123 |
| New Jersey | — | 37 | 376 | 4,050 | 3,419 | — | 0 | 1 | 1 | 64 | — | 0 | 2 | 8 | 16 |
| New York (Upstate) | 54 | 51 | 1,368 | 4,060 | 5,333 | — | 1 | 10 | 49 | 30 | — | 0 | 2 | 25 | 32 |
| New York City | — | 3 | 24 | 260 | 786 | 2 | 3 | 11 | 187 | 179 | — | 0 | 2 | 16 | 26 |
| Pennsylvania | 78 | 74 | 631 | 7,925 | 3,762 | — | 1 | 4 | 53 | 40 | — | 1 | 4 | 45 | 49 |
| **E.N. Central** | — | 17 | 215 | 2,334 | 2,304 | 2 | 2 | 10 | 140 | 148 | — | 3 | 9 | 144 | 200 |
| Illinois | — | 1 | 11 | 123 | 108 | — | 1 | 4 | 54 | 75 | — | 1 | 4 | 40 | 81 |
| Indiana | — | 1 | 6 | 61 | 41 | — | 0 | 3 | 15 | 5 | — | 0 | 3 | 32 | 26 |
| Michigan | — | 1 | 10 | 99 | 89 | — | 0 | 3 | 27 | 18 | — | 0 | 5 | 20 | 32 |
| Ohio | — | 1 | 5 | 55 | 45 | 2 | 1 | 6 | 37 | 29 | — | 1 | 3 | 42 | 40 |
| Wisconsin | — | 15 | 197 | 1,996 | 2,021 | — | 0 | 1 | 7 | 21 | — | 0 | 2 | 10 | 21 |
| **W.N. Central** | 24 | 5 | 336 | 295 | 1,072 | 1 | 1 | 8 | 68 | 71 | 1 | 1 | 9 | 74 | 94 |
| Iowa | — | 1 | 14 | 94 | 107 | — | 0 | 1 | 10 | 12 | — | 0 | 2 | 12 | 18 |
| Kansas | — | 0 | 2 | 14 | 16 | — | 0 | 1 | 4 | 9 | — | 0 | 2 | 8 | 8 |
| Minnesota | 24 | 0 | 326 | 164 | 928 | — | 0 | 8 | 32 | 28 | — | 0 | 4 | 13 | 24 |
| Missouri | — | 0 | 1 | 3 | 6 | 1 | 0 | 2 | 12 | 14 | 1 | 0 | 3 | 28 | 26 |
| Nebraska§ | — | 0 | 3 | 19 | 12 | — | 0 | 1 | 8 | 8 | — | 0 | 1 | 10 | 12 |
| North Dakota | — | 0 | 10 | — | — | — | 0 | 1 | 1 | — | — | 0 | 3 | 1 | 3 |
| South Dakota | — | 0 | 1 | 1 | 3 | — | 0 | 1 | 1 | — | — | 0 | 1 | 2 | 3 |
| **S. Atlantic** | 19 | 60 | 236 | 3,715 | 4,176 | 4 | 6 | 17 | 331 | 284 | 4 | 2 | 9 | 145 | 152 |
| Delaware | 2 | 12 | 65 | 945 | 759 | — | 0 | 1 | 5 | 3 | — | 0 | 1 | 4 | 2 |
| District of Columbia | — | 0 | 5 | 20 | 72 | — | 0 | 2 | 8 | 5 | — | 0 | 0 | — | — |
| Florida | — | 2 | 11 | 114 | 85 | 2 | 1 | 7 | 89 | 58 | 1 | 1 | 4 | 51 | 50 |
| Georgia | — | 1 | 6 | 53 | 35 | 2 | 1 | 5 | 69 | 57 | — | 0 | 2 | 29 | 18 |
| Maryland§ | 4 | 25 | 125 | 1,747 | 2,162 | — | 1 | 13 | 77 | 78 | 1 | 0 | 1 | 11 | 19 |
| North Carolina | 1 | 0 | 14 | 63 | 46 | — | 0 | 5 | 21 | 28 | 2 | 0 | 5 | 21 | 13 |
| South Carolina§ | — | 0 | 3 | 35 | 28 | — | 0 | 1 | 4 | 9 | — | 0 | 1 | 11 | 22 |
| Virginia§ | 12 | 10 | 61 | 569 | 856 | — | 1 | 5 | 56 | 44 | — | 0 | 2 | 12 | 23 |
| West Virginia | — | 0 | 33 | 169 | 133 | — | 0 | 1 | 2 | 2 | — | 0 | 2 | 6 | 5 |
| **E.S. Central** | 1 | 0 | 2 | 35 | 46 | — | 0 | 3 | 27 | 24 | — | 0 | 4 | 33 | 53 |
| Alabama§ | — | 0 | 1 | 3 | 9 | — | 0 | 3 | 8 | 5 | — | 0 | 1 | 10 | 10 |
| Kentucky | — | 0 | 1 | 1 | 5 | — | 0 | 2 | 9 | 5 | — | 0 | 1 | 6 | 9 |
| Mississippi | — | 0 | 0 | — | 1 | — | 0 | 1 | 1 | 1 | — | 0 | 1 | 3 | 12 |
| Tennessee§ | 1 | 0 | 2 | 31 | 31 | — | 0 | 3 | 9 | 13 | — | 0 | 2 | 14 | 22 |
| **W.S. Central** | 2 | 1 | 21 | 48 | 120 | 1 | 1 | 10 | 52 | 82 | — | 1 | 12 | 79 | 118 |
| Arkansas§ | — | 0 | 0 | — | — | — | 0 | 1 | 4 | 1 | — | 0 | 2 | 9 | 15 |
| Louisiana | — | 0 | 0 | — | 3 | — | 0 | 1 | 3 | 4 | — | 0 | 3 | 11 | 24 |
| Oklahoma | — | 0 | 2 | — | — | — | 0 | 1 | 1 | 4 | — | 0 | 2 | 14 | 18 |
| Texas§ | 2 | 1 | 21 | 48 | 117 | 1 | 1 | 9 | 44 | 73 | — | 1 | 9 | 45 | 61 |
| **Mountain** | — | 1 | 13 | 46 | 51 | — | 0 | 6 | 29 | 35 | 3 | 1 | 4 | 60 | 58 |
| Arizona | — | 0 | 2 | 6 | 8 | — | 0 | 2 | 9 | 14 | — | 0 | 2 | 14 | 9 |
| Colorado | — | 0 | 1 | 4 | 3 | — | 0 | 3 | 8 | 5 | 3 | 0 | 2 | 23 | 15 |
| Idaho§ | — | 0 | 3 | 15 | 9 | — | 0 | 1 | 3 | 3 | — | 0 | 1 | 7 | 5 |
| Montana§ | — | 0 | 13 | 3 | 4 | — | 0 | 3 | 5 | — | — | 0 | 2 | 4 | 4 |
| Nevada§ | — | 0 | 1 | 4 | 12 | — | 0 | 0 | — | 5 | — | 0 | 1 | 2 | 7 |
| New Mexico§ | — | 0 | 1 | 5 | 8 | — | 0 | 0 | — | 3 | — | 0 | 1 | 3 | 8 |
| Utah | — | 0 | 1 | 7 | 4 | — | 0 | 2 | 4 | 5 | — | 0 | 1 | 2 | 8 |
| Wyoming§ | — | 0 | 1 | 2 | 3 | — | 0 | 0 | — | — | — | 0 | 2 | 5 | 2 |
| **Pacific** | 6 | 4 | 13 | 205 | 124 | 1 | 3 | 9 | 146 | 157 | 10 | 3 | 14 | 185 | 264 |
| Alaska | — | 0 | 1 | 3 | 6 | — | 0 | 1 | 2 | 6 | — | 0 | 2 | 6 | 8 |
| California | 6 | 3 | 10 | 153 | 69 | 1 | 2 | 6 | 111 | 117 | 2 | 2 | 8 | 110 | 189 |
| Hawaii | N | 0 | 0 | N | N | — | 0 | 1 | 1 | 3 | — | 0 | 1 | 4 | 5 |
| Oregon§ | — | 0 | 4 | 34 | 38 | — | 0 | 2 | 11 | 4 | 1 | 0 | 6 | 42 | 38 |
| Washington | — | 0 | 12 | 15 | 11 | — | 0 | 3 | 21 | 27 | 7 | 0 | 6 | 23 | 24 |
| American Samoa | N | 0 | 0 | N | N | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | — | — | 0 | 0 | — | 3 | — | 0 | 0 | — | — |
| Puerto Rico | N | 0 | 0 | N | N | — | 0 | 1 | 3 | 2 | — | 0 | 0 | — | 3 |
| U.S. Virgin Islands | N | 0 | 0 | N | N | — | 0 | 0 | — | — | — | 0 | 0 | — | — |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and 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 December 19, 2009, and December 13, 2008 (50th week)***

| | Pertussis | | | | | Rabies, animal | | | | | Rocky Mountain spotted fever | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Previous 52 weeks | | | | | Previous 52 weeks | | | | | Previous 52 weeks | | | |
| Reporting area | Current week | Med | Max | Cum 2009 | Cum 2008 | Current week | Med | Max | Cum 2009 | Cum 2008 | Current week | Med | Max | Cum 2009 | Cum 2008 |
| **United States** | 78 | 269 | 1,697 | 13,030 | 10,735 | 25 | 64 | 140 | 3,515 | 4,041 | 5 | 23 | 179 | 1,369 | 2,308 |
| **New England** | — | 12 | 27 | 558 | 986 | 5 | 6 | 24 | 346 | 411 | — | 0 | 2 | 11 | 7 |
| Connecticut | — | 0 | 4 | 37 | 53 | 3 | 2 | 22 | 149 | 192 | — | 0 | 0 | — | — |
| Maine† | — | 1 | 10 | 77 | 45 | — | 1 | 4 | 50 | 58 | — | 0 | 2 | 5 | 1 |
| Massachusetts | — | 7 | 19 | 327 | 751 | — | 0 | 0 | — | — | — | 0 | 1 | 5 | 2 |
| New Hampshire | — | 1 | 7 | 75 | 41 | 1 | 0 | 3 | 32 | 56 | — | 0 | 0 | — | 1 |
| Rhode Island† | — | 0 | 7 | 31 | 84 | — | 1 | 7 | 51 | 33 | — | 0 | 0 | — | 3 |
| Vermont† | — | 0 | 1 | 11 | 12 | 1 | 1 | 5 | 64 | 72 | — | 0 | 1 | 1 | — |
| **Mid. Atlantic** | 17 | 22 | 64 | 1,079 | 1,150 | 10 | 11 | 23 | 569 | 909 | — | 1 | 29 | 66 | 123 |
| New Jersey | — | 3 | 12 | 151 | 220 | — | 0 | 0 | — | — | — | 0 | 1 | — | 83 |
| New York (Upstate) | 15 | 4 | 41 | 249 | 408 | 10 | 7 | 22 | 429 | 489 | — | 0 | 29 | 11 | 14 |
| New York City | — | 1 | 21 | 92 | 85 | — | 0 | 3 | 22 | 19 | — | 0 | 4 | 32 | 11 |
| Pennsylvania | 2 | 12 | 33 | 587 | 437 | — | 0 | 16 | 118 | 401 | — | 0 | 2 | 23 | 15 |
| **E.N. Central** | 29 | 56 | 238 | 2,893 | 1,879 | 2 | 2 | 19 | 219 | 255 | — | 1 | 7 | 87 | 148 |
| Illinois | — | 12 | 33 | 570 | 556 | — | 1 | 9 | 87 | 103 | — | 0 | 6 | 49 | 109 |
| Indiana | — | 7 | 158 | 317 | 103 | — | 0 | 6 | 21 | 10 | — | 0 | 3 | 13 | 6 |
| Michigan | 12 | 13 | 40 | 822 | 292 | 1 | 1 | 6 | 65 | 78 | — | 0 | 2 | 5 | 3 |
| Ohio | 17 | 19 | 57 | 1,052 | 747 | 1 | 0 | 5 | 46 | 64 | — | 0 | 4 | 18 | 30 |
| Wisconsin | — | 3 | 12 | 132 | 181 | N | 0 | 0 | N | N | — | 0 | 1 | 2 | — |
| **W.N. Central** | 12 | 31 | 872 | 1,645 | 1,363 | — | 7 | 18 | 325 | 303 | 1 | 3 | 27 | 339 | 435 |
| Iowa | — | 4 | 10 | 185 | 233 | — | 0 | 3 | 24 | 29 | — | 0 | 1 | 4 | 8 |
| Kansas | — | 3 | 9 | 146 | 89 | — | 1 | 6 | 60 | 64 | — | 0 | 1 | 2 | — |
| Minnesota | — | 0 | 808 | 165 | 226 | — | 0 | 11 | 61 | 64 | — | 0 | 2 | 4 | — |
| Missouri | 8 | 18 | 47 | 948 | 497 | — | 1 | 5 | 65 | 64 | 1 | 3 | 26 | 317 | 404 |
| Nebraska† | 4 | 2 | 14 | 142 | 250 | — | 1 | 6 | 77 | 33 | — | 0 | 2 | 12 | 20 |
| North Dakota | — | 0 | 24 | 29 | 1 | — | 0 | 9 | 11 | 25 | — | 0 | 1 | — | — |
| South Dakota | — | 0 | 6 | 30 | 67 | — | 0 | 4 | 27 | 24 | — | 0 | 0 | — | 3 |
| **S. Atlantic** | 4 | 30 | 71 | 1,519 | 949 | 8 | 26 | 111 | 1,593 | 1,586 | 3 | 8 | 27 | 450 | 920 |
| Delaware | — | 0 | 2 | 13 | 18 | — | 0 | 0 | — | — | — | 0 | 3 | 17 | 32 |
| District of Columbia | — | 0 | 1 | 3 | 7 | — | 0 | 0 | — | — | — | 0 | 0 | — | 6 |
| Florida | — | 9 | 29 | 494 | 291 | — | 0 | 95 | 153 | 138 | 1 | 0 | 2 | 10 | 16 |
| Georgia | — | 3 | 11 | 187 | 105 | — | 0 | 72 | 409 | 370 | 2 | 0 | 7 | 48 | 78 |
| Maryland† | 2 | 2 | 8 | 130 | 153 | 6 | 7 | 15 | 379 | 411 | — | 0 | 3 | 36 | 91 |
| North Carolina | — | 0 | 65 | 223 | 79 | N | 4 | 4 | N | N | — | 4 | 25 | 264 | 486 |
| South Carolina† | 1 | 4 | 18 | 244 | 131 | — | 0 | 0 | — | — | — | 0 | 5 | 18 | 56 |
| Virginia† | 1 | 4 | 24 | 194 | 154 | — | 10 | 26 | 536 | 591 | — | 1 | 8 | 53 | 145 |
| West Virginia | — | 0 | 5 | 31 | 11 | 2 | 3 | 6 | 116 | 76 | — | 0 | 1 | 4 | 10 |
| **E.S. Central** | 5 | 14 | 30 | 727 | 426 | — | 1 | 6 | 83 | 178 | — | 3 | 16 | 253 | 333 |
| Alabama† | — | 4 | 19 | 275 | 61 | — | 0 | 0 | — | — | — | 1 | 7 | 63 | 91 |
| Kentucky | — | 4 | 15 | 210 | 159 | — | 1 | 4 | 45 | 45 | — | 0 | 1 | 1 | 1 |
| Mississippi | — | 1 | 4 | 56 | 100 | — | 0 | 1 | 4 | 7 | — | 0 | 1 | 7 | 11 |
| Tennessee† | 5 | 3 | 9 | 186 | 106 | — | 0 | 4 | 34 | 126 | — | 3 | 14 | 182 | 230 |
| **W.S. Central** | — | 61 | 389 | 2,756 | 1,816 | — | 0 | 13 | 70 | 89 | 1 | 1 | 161 | 140 | 294 |
| Arkansas† | — | 5 | 38 | 265 | 157 | — | 0 | 10 | 36 | 45 | — | 0 | 61 | 61 | 65 |
| Louisiana | — | 1 | 8 | 90 | 85 | — | 0 | 0 | — | — | — | 0 | 1 | 2 | 6 |
| Oklahoma | — | 0 | 45 | 76 | 53 | — | 0 | 13 | 33 | 42 | — | 0 | 98 | 53 | 170 |
| Texas† | — | 52 | 304 | 2,325 | 1,521 | — | 0 | 1 | 1 | 2 | 1 | 0 | 6 | 24 | 53 |
| **Mountain** | 5 | 18 | 32 | 858 | 819 | — | 1 | 6 | 82 | 107 | — | 0 | 3 | 22 | 45 |
| Arizona | 1 | 4 | 12 | 207 | 214 | N | 0 | 0 | N | N | — | 0 | 1 | 7 | 16 |
| Colorado | 4 | 5 | 13 | 241 | 145 | — | 0 | 0 | — | — | — | 0 | 1 | 1 | 1 |
| Idaho† | — | 1 | 15 | 86 | 36 | — | 0 | 0 | — | 11 | — | 0 | 1 | 1 | 1 |
| Montana† | — | 0 | 6 | 55 | 84 | — | 0 | 4 | 25 | 13 | — | 0 | 2 | 8 | 3 |
| Nevada† | — | 0 | 3 | 9 | 28 | — | 0 | 1 | 1 | 12 | — | 0 | 0 | — | 3 |
| New Mexico† | — | 1 | 7 | 59 | 85 | — | 0 | 2 | 24 | 29 | — | 0 | 1 | 1 | 4 |
| Utah | — | 3 | 19 | 181 | 210 | — | 0 | 2 | 11 | 14 | — | 0 | 1 | 1 | 7 |
| Wyoming† | — | 0 | 5 | 20 | 17 | — | 0 | 4 | 21 | 28 | — | 0 | 1 | 3 | 10 |
| **Pacific** | 6 | 23 | 67 | 995 | 1,347 | — | 4 | 12 | 228 | 203 | — | 0 | 1 | 1 | 3 |
| Alaska | — | 1 | 8 | 47 | 262 | — | 0 | 2 | 12 | 14 | N | 0 | 0 | N | N |
| California | — | 9 | 22 | 417 | 506 | — | 4 | 12 | 201 | 176 | — | 0 | 1 | 1 | — |
| Hawaii | — | 0 | 3 | 26 | 17 | — | 0 | 0 | — | — | N | 0 | 0 | N | N |
| Oregon† | — | 3 | 15 | 244 | 174 | — | 0 | 3 | 15 | 13 | — | 0 | 0 | — | 3 |
| Washington | 6 | 5 | 58 | 261 | 388 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| American Samoa | — | 0 | 0 | — | — | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | — | — | 0 | 0 | — | — | N | 0 | 0 | N | N |
| Puerto Rico | — | 0 | 1 | 1 | — | — | 1 | 3 | 38 | 58 | N | 0 | 0 | N | N |
| U.S. Virgin Islands | — | 0 | 0 | — | — | N | 0 | 0 | N | N | N | 0 | 0 | N | N |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is 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 December 19, 2009, and December 13, 2008 (50th week)***

| Reporting area | Salmonellosis | | | | | Shiga toxin-producing *E. coli* (STEC)[†] | | | | | Shigellosis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 | Current week | Previous 52 weeks Med | Previous 52 weeks Max | Cum 2009 | Cum 2008 |
| **United States** | 514 | 848 | 2,323 | 43,233 | 46,711 | 31 | 85 | 255 | 4,205 | 4,903 | 182 | 285 | 1,268 | 14,059 | 20,463 |
| **New England** | 1 | 32 | 431 | 1,990 | 2,163 | — | 3 | 67 | 273 | 253 | — | 4 | 45 | 318 | 236 |
| Connecticut | — | 0 | 406 | 406 | 491 | — | 0 | 67 | 67 | 47 | — | 0 | 40 | 40 | 40 |
| Maine[§] | — | 2 | 7 | 118 | 148 | — | 0 | 3 | 19 | 23 | — | 0 | 2 | 5 | 20 |
| Massachusetts | — | 21 | 50 | 1,045 | 1,169 | — | 2 | 6 | 89 | 112 | — | 3 | 27 | 226 | 154 |
| New Hampshire | — | 3 | 42 | 240 | 151 | — | 1 | 3 | 36 | 31 | — | 0 | 4 | 19 | 5 |
| Rhode Island[§] | — | 2 | 11 | 122 | 110 | — | 0 | 26 | 38 | 10 | — | 0 | 7 | 23 | 12 |
| Vermont[§] | 1 | 1 | 5 | 59 | 94 | — | 0 | 3 | 24 | 30 | — | 0 | 1 | 5 | 5 |
| **Mid. Atlantic** | 41 | 89 | 196 | 4,895 | 5,630 | 4 | 6 | 21 | 340 | 456 | 14 | 57 | 87 | 2,593 | 2,431 |
| New Jersey | — | 13 | 46 | 799 | 1,271 | — | 0 | 4 | 33 | 132 | — | 9 | 27 | 516 | 882 |
| New York (Upstate) | 24 | 23 | 66 | 1,278 | 1,409 | 2 | 3 | 9 | 145 | 177 | 2 | 4 | 23 | 218 | 569 |
| New York City | — | 22 | 42 | 1,144 | 1,243 | — | 1 | 5 | 56 | 54 | — | 8 | 15 | 425 | 717 |
| Pennsylvania | 17 | 30 | 65 | 1,674 | 1,707 | 2 | 2 | 8 | 106 | 93 | 12 | 27 | 63 | 1,434 | 263 |
| **E.N. Central** | 18 | 91 | 152 | 4,503 | 5,013 | 5 | 15 | 34 | 767 | 845 | 25 | 48 | 121 | 2,239 | 4,044 |
| Illinois | — | 24 | 51 | 1,252 | 1,463 | — | 2 | 10 | 136 | 133 | — | 10 | 25 | 480 | 941 |
| Indiana | — | 6 | 50 | 344 | 583 | — | 1 | 7 | 71 | 92 | — | 1 | 21 | 56 | 578 |
| Michigan | 1 | 18 | 34 | 900 | 929 | 1 | 3 | 8 | 154 | 212 | 1 | 4 | 21 | 209 | 212 |
| Ohio | 17 | 27 | 52 | 1,377 | 1,296 | 4 | 3 | 11 | 131 | 188 | 23 | 20 | 67 | 1,079 | 1,761 |
| Wisconsin | — | 12 | 29 | 630 | 742 | — | 5 | 20 | 275 | 220 | 1 | 7 | 26 | 415 | 552 |
| **W.N. Central** | 20 | 45 | 109 | 2,428 | 2,701 | 4 | 11 | 37 | 691 | 787 | 55 | 21 | 64 | 1,237 | 893 |
| Iowa | 4 | 7 | 16 | 379 | 414 | — | 2 | 14 | 149 | 203 | — | 1 | 10 | 52 | 192 |
| Kansas | — | 6 | 18 | 269 | 444 | — | 0 | 4 | 32 | 50 | — | 3 | 11 | 159 | 65 |
| Minnesota | 6 | 12 | 51 | 570 | 680 | 3 | 2 | 19 | 222 | 187 | — | 2 | 8 | 80 | 295 |
| Missouri | 8 | 12 | 30 | 648 | 732 | 1 | 2 | 10 | 136 | 148 | 55 | 13 | 58 | 905 | 216 |
| Nebraska[§] | 2 | 5 | 41 | 335 | 235 | — | 1 | 6 | 85 | 146 | — | 0 | 3 | 32 | 16 |
| North Dakota | — | 0 | 30 | 71 | 44 | — | 0 | 28 | 7 | 2 | — | 0 | 9 | 5 | 33 |
| South Dakota | — | 2 | 22 | 156 | 152 | — | 0 | 12 | 60 | 51 | — | 0 | 1 | 4 | 76 |
| **S. Atlantic** | 198 | 271 | 451 | 13,099 | 12,190 | 9 | 12 | 30 | 617 | 784 | 21 | 44 | 79 | 2,211 | 3,069 |
| Delaware | — | 2 | 9 | 134 | 145 | — | 0 | 2 | 13 | 13 | — | 3 | 10 | 145 | 11 |
| District of Columbia | — | 0 | 5 | 23 | 60 | — | 0 | 1 | 1 | 6 | — | 0 | 2 | 8 | 21 |
| Florida | 133 | 126 | 278 | 6,483 | 5,061 | 6 | 4 | 7 | 170 | 138 | 3 | 9 | 24 | 448 | 781 |
| Georgia | 31 | 41 | 98 | 2,320 | 2,238 | — | 1 | 4 | 67 | 87 | 14 | 12 | 29 | 634 | 1,082 |
| Maryland[§] | 4 | 15 | 32 | 764 | 844 | — | 2 | 5 | 92 | 122 | 1 | 6 | 19 | 355 | 121 |
| North Carolina | 4 | 17 | 92 | 1,052 | 1,463 | — | 2 | 21 | 86 | 119 | 1 | 5 | 27 | 308 | 244 |
| South Carolina[§] | 17 | 16 | 67 | 1,121 | 1,135 | — | 0 | 3 | 29 | 43 | 1 | 3 | 9 | 119 | 541 |
| Virginia[§] | 9 | 21 | 88 | 993 | 1,036 | 3 | 2 | 16 | 130 | 224 | 1 | 4 | 59 | 185 | 235 |
| West Virginia | — | 4 | 23 | 209 | 208 | — | 0 | 5 | 29 | 32 | — | 0 | 3 | 9 | 33 |
| **E.S. Central** | 9 | 50 | 113 | 2,782 | 3,416 | 1 | 4 | 12 | 207 | 278 | 3 | 13 | 46 | 748 | 1,886 |
| Alabama[§] | 2 | 14 | 33 | 743 | 971 | — | 1 | 4 | 45 | 63 | — | 2 | 11 | 125 | 406 |
| Kentucky | — | 7 | 18 | 428 | 472 | — | 1 | 4 | 66 | 100 | — | 2 | 25 | 212 | 259 |
| Mississippi | — | 14 | 45 | 839 | 1,058 | — | 0 | 1 | 6 | 5 | — | 1 | 4 | 47 | 295 |
| Tennessee[§] | 7 | 14 | 33 | 772 | 915 | 1 | 2 | 10 | 90 | 110 | 3 | 7 | 20 | 364 | 926 |
| **W.S. Central** | 95 | 94 | 1,333 | 4,677 | 6,866 | 2 | 5 | 139 | 257 | 379 | 38 | 48 | 967 | 2,423 | 4,952 |
| Arkansas[§] | 5 | 10 | 25 | 594 | 759 | — | 1 | 4 | 43 | 57 | 7 | 6 | 16 | 303 | 559 |
| Louisiana | — | 7 | 43 | 599 | 1,093 | — | 0 | 1 | — | 8 | — | 2 | 8 | 108 | 632 |
| Oklahoma | 11 | 13 | 102 | 606 | 781 | — | 0 | 82 | 30 | 52 | 6 | 5 | 61 | 286 | 170 |
| Texas[§] | 79 | 56 | 1,204 | 2,878 | 4,233 | 2 | 4 | 55 | 184 | 262 | 25 | 33 | 889 | 1,726 | 3,591 |
| **Mountain** | 18 | 52 | 128 | 2,719 | 3,260 | 1 | 9 | 26 | 509 | 613 | 5 | 20 | 49 | 1,081 | 1,185 |
| Arizona | 5 | 20 | 50 | 1,017 | 1,092 | — | 1 | 4 | 70 | 63 | 3 | 16 | 42 | 792 | 596 |
| Colorado | 12 | 11 | 33 | 597 | 682 | — | 3 | 13 | 154 | 200 | 2 | 2 | 8 | 97 | 139 |
| Idaho[§] | 1 | 3 | 10 | 167 | 191 | 1 | 1 | 7 | 89 | 145 | — | 0 | 2 | 9 | 14 |
| Montana[§] | — | 1 | 7 | 97 | 123 | — | 0 | 7 | 35 | 36 | — | 0 | 5 | 13 | 8 |
| Nevada[§] | — | 3 | 11 | 167 | 225 | — | 0 | 3 | 14 | 19 | — | 1 | 7 | 62 | 226 |
| New Mexico[§] | — | 5 | 29 | 317 | 512 | — | 1 | 3 | 34 | 50 | — | 1 | 8 | 90 | 157 |
| Utah | — | 6 | 15 | 273 | 353 | — | 1 | 10 | 98 | 87 | — | 0 | 3 | 16 | 38 |
| Wyoming[§] | — | 1 | 9 | 84 | 82 | — | 0 | 2 | 15 | 13 | — | 0 | 1 | 2 | 7 |
| **Pacific** | 114 | 126 | 537 | 6,140 | 5,472 | 5 | 9 | 31 | 544 | 508 | 21 | 24 | 66 | 1,209 | 1,767 |
| Alaska | — | 1 | 7 | 68 | 56 | — | 0 | 0 | — | 6 | — | 0 | 1 | 2 | 1 |
| California | 95 | 97 | 516 | 4,626 | 4,038 | 5 | 5 | 15 | 261 | 249 | 21 | 19 | 65 | 987 | 1,530 |
| Hawaii | — | 5 | 59 | 293 | 251 | — | 0 | 2 | 8 | 13 | — | 0 | 4 | 35 | 44 |
| Oregon[§] | 4 | 8 | 19 | 400 | 417 | — | 1 | 11 | 78 | 64 | — | 1 | 3 | 39 | 93 |
| Washington | 15 | 13 | 85 | 753 | 710 | — | 3 | 17 | 197 | 176 | — | 3 | 11 | 146 | 99 |
| American Samoa | — | 0 | 1 | — | 2 | — | 0 | 0 | — | — | — | 1 | 2 | 3 | 1 |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | 13 | — | 0 | 0 | — | — | — | 0 | 0 | — | 15 |
| Puerto Rico | — | 7 | 40 | 376 | 762 | — | 0 | 0 | — | — | — | 0 | 2 | 10 | 31 |
| U.S. Virgin Islands | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is 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 December 19, 2009, and December 13, 2008 (50th week)***

| | Streptococcal diseases, invasive, group A | | | | | *Streptococcus pneumoniae,* invasive disease, nondrug resistant† Age <5 years | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Previous 52 weeks | | | | | Previous 52 weeks | | | |
| Reporting area | Current week | Med | Max | Cum 2009 | Cum 2008 | Current week | Med | Max | Cum 2009 | Cum 2008 |
| **United States** | 43 | 98 | 239 | 4,712 | 5,180 | 21 | 32 | 122 | 1,664 | 1,772 |
| **New England** | — | 5 | 28 | 274 | 356 | — | 1 | 11 | 68 | 94 |
| Connecticut | — | 0 | 21 | 72 | 96 | — | 0 | 11 | 11 | 11 |
| Maine§ | — | 0 | 2 | 18 | 26 | — | 0 | 1 | 6 | 2 |
| Massachusetts | — | 2 | 10 | 120 | 167 | — | 0 | 4 | 35 | 60 |
| New Hampshire | — | 0 | 4 | 35 | 27 | — | 0 | 2 | 11 | 11 |
| Rhode Island§ | — | 0 | 2 | 11 | 27 | — | 0 | 1 | 1 | 10 |
| Vermont§ | — | 0 | 3 | 18 | 13 | — | 0 | 1 | 4 | — |
| **Mid. Atlantic** | 7 | 18 | 43 | 934 | 1,026 | 5 | 4 | 33 | 230 | 222 |
| New Jersey | — | 2 | 7 | 124 | 184 | — | 0 | 4 | 38 | 70 |
| New York (Upstate) | 6 | 6 | 25 | 310 | 317 | 5 | 2 | 17 | 119 | 97 |
| New York City | — | 4 | 12 | 177 | 193 | — | 0 | 31 | 73 | 55 |
| Pennsylvania | 1 | 5 | 18 | 323 | 332 | N | 0 | 2 | N | N |
| **E.N. Central** | 4 | 17 | 42 | 845 | 940 | 2 | 6 | 18 | 269 | 321 |
| Illinois | — | 4 | 13 | 239 | 251 | — | 1 | 3 | 41 | 93 |
| Indiana | — | 2 | 23 | 128 | 124 | — | 0 | 13 | 37 | 31 |
| Michigan | — | 3 | 11 | 144 | 174 | — | 1 | 4 | 69 | 83 |
| Ohio | 3 | 3 | 13 | 205 | 253 | 2 | 1 | 6 | 77 | 60 |
| Wisconsin | 1 | 2 | 11 | 129 | 138 | — | 1 | 3 | 45 | 54 |
| **W.N. Central** | 1 | 6 | 37 | 372 | 364 | 2 | 2 | 12 | 145 | 105 |
| Iowa | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Kansas | — | 0 | 5 | 37 | 37 | N | 0 | 1 | N | N |
| Minnesota | — | 0 | 34 | 171 | 166 | — | 0 | 10 | 81 | 41 |
| Missouri | 1 | 2 | 8 | 84 | 89 | — | 0 | 4 | 36 | 35 |
| Nebraska§ | — | 1 | 3 | 42 | 39 | 2 | 0 | 2 | 16 | 9 |
| North Dakota | — | 0 | 4 | 17 | 10 | — | 0 | 3 | 5 | 9 |
| South Dakota | — | 0 | 3 | 21 | 23 | — | 0 | 2 | 7 | 11 |
| **S. Atlantic** | 14 | 21 | 49 | 1,087 | 1,097 | 3 | 6 | 18 | 313 | 347 |
| Delaware | — | 0 | 1 | 11 | 9 | — | 0 | 0 | — | — |
| District of Columbia | — | 0 | 3 | 13 | 14 | N | 0 | 0 | N | N |
| Florida | 6 | 5 | 12 | 270 | 258 | 2 | 1 | 6 | 72 | 67 |
| Georgia | 2 | 5 | 13 | 251 | 252 | — | 1 | 6 | 82 | 100 |
| Maryland§ | — | 3 | 12 | 187 | 184 | — | 1 | 7 | 78 | 58 |
| North Carolina | 1 | 2 | 12 | 91 | 134 | N | 0 | 0 | N | N |
| South Carolina§ | 2 | 1 | 5 | 71 | 72 | 1 | 1 | 6 | 45 | 65 |
| Virginia§ | 3 | 3 | 9 | 155 | 135 | — | 0 | 4 | 23 | 44 |
| West Virginia | — | 1 | 4 | 38 | 39 | — | 0 | 3 | 13 | 13 |
| **E.S. Central** | 1 | 3 | 10 | 186 | 182 | 3 | 2 | 7 | 101 | 90 |
| Alabama§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Kentucky | — | 1 | 5 | 36 | 39 | N | 0 | 0 | N | N |
| Mississippi | N | 0 | 0 | N | N | — | 0 | 2 | 20 | 10 |
| Tennessee§ | 1 | 3 | 9 | 150 | 143 | 3 | 1 | 6 | 81 | 80 |
| **W.S. Central** | 9 | 8 | 79 | 421 | 490 | 1 | 5 | 46 | 275 | 286 |
| Arkansas§ | 1 | 0 | 3 | 20 | 11 | — | 0 | 4 | 26 | 15 |
| Louisiana | — | 0 | 3 | 11 | 18 | — | 0 | 3 | 13 | 13 |
| Oklahoma | 3 | 2 | 20 | 127 | 113 | — | 1 | 7 | 55 | 66 |
| Texas§ | 5 | 5 | 59 | 263 | 348 | 1 | 3 | 34 | 181 | 192 |
| **Mountain** | 7 | 10 | 22 | 435 | 555 | 5 | 4 | 16 | 232 | 259 |
| Arizona | 4 | 3 | 7 | 151 | 191 | 3 | 2 | 10 | 115 | 114 |
| Colorado | 3 | 2 | 7 | 123 | 139 | 2 | 0 | 4 | 49 | 60 |
| Idaho§ | — | 0 | 2 | 10 | 16 | — | 0 | 2 | 9 | 5 |
| Montana§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Nevada§ | — | 0 | 1 | 5 | 13 | — | 0 | 1 | — | 5 |
| New Mexico§ | — | 1 | 7 | 79 | 133 | — | 0 | 4 | 24 | 37 |
| Utah | — | 1 | 6 | 66 | 55 | — | 0 | 5 | 35 | 36 |
| Wyoming§ | — | 0 | 1 | 1 | 8 | — | 0 | 0 | — | 2 |
| **Pacific** | — | 3 | 9 | 158 | 170 | — | 0 | 4 | 31 | 48 |
| Alaska | — | 1 | 4 | 37 | 38 | — | 0 | 3 | 23 | 29 |
| California | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Hawaii | — | 2 | 8 | 121 | 132 | — | 0 | 2 | 8 | 19 |
| Oregon§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| Washington | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| American Samoa | — | 0 | 0 | — | 30 | N | 0 | 0 | N | N |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Puerto Rico | N | 0 | 0 | N | N | N | 0 | 0 | N | N |
| U.S. Virgin Islands | — | 0 | 0 | — | — | N | 0 | 0 | N | N |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is 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 December 19, 2009, and December 13, 2008 (50th week)***

| | *Streptococcus pneumoniae*, invasive disease, drug resistant† | | | | | | | | | | Syphilis, primary and secondary | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All ages | | | | | Aged <5 years | | | | | | | | | |
| | | Previous 52 weeks | | | | | Previous 52 weeks | | | | | Previous 52 weeks | | | |
| Reporting area | Current week | Med | Max | Cum 2009 | Cum 2008 | Current week | Med | Max | Cum 2009 | Cum 2008 | Current week | Med | Max | Cum 2009 | Cum 2008 |
| **United States** | 41 | 51 | 276 | 2,658 | 3,028 | 6 | 8 | 20 | 429 | 497 | 78 | 269 | 452 | 12,707 | 12,606 |
| **New England** | — | 1 | 50 | 105 | 116 | — | 0 | 11 | 14 | 17 | 3 | 6 | 15 | 307 | 297 |
| Connecticut | — | 0 | 50 | 50 | 55 | — | 0 | 11 | 11 | 5 | — | 1 | 5 | 54 | 31 |
| Maine§ | — | 0 | 2 | 19 | 18 | — | 0 | 1 | 1 | 2 | 1 | 0 | 1 | 4 | 10 |
| Massachusetts | — | 0 | 1 | 3 | — | — | 0 | 1 | 2 | — | 2 | 4 | 10 | 222 | 209 |
| New Hampshire | — | 0 | 3 | 5 | — | — | 0 | 0 | — | — | — | 0 | 2 | 14 | 19 |
| Rhode Island§ | — | 0 | 4 | 15 | 29 | — | 0 | 0 | — | 8 | — | 0 | 5 | 13 | 18 |
| Vermont§ | — | 0 | 2 | 13 | 14 | — | 0 | 0 | — | 2 | — | 0 | 1 | — | 10 |
| **Mid. Atlantic** | 1 | 3 | 14 | 168 | 294 | — | 0 | 3 | 25 | 30 | 13 | 34 | 50 | 1,705 | 1,627 |
| New Jersey | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 4 | 13 | 203 | 208 |
| New York (Upstate) | 1 | 1 | 10 | 77 | 67 | — | 0 | 2 | 14 | 9 | 1 | 2 | 8 | 116 | 137 |
| New York City | — | 0 | 4 | 7 | 121 | — | 0 | 2 | — | 4 | 9 | 22 | 39 | 1,055 | 1,021 |
| Pennsylvania | — | 1 | 8 | 84 | 106 | — | 0 | 2 | 11 | 17 | 3 | 7 | 13 | 331 | 261 |
| **E.N. Central** | 8 | 11 | 41 | 590 | 600 | 1 | 2 | 7 | 88 | 78 | 4 | 24 | 39 | 1,179 | 1,245 |
| Illinois | N | 0 | 0 | N | N | N | 0 | 0 | N | N | — | 11 | 29 | 534 | 516 |
| Indiana | — | 3 | 32 | 186 | 202 | — | 0 | 6 | 27 | 23 | — | 2 | 10 | 137 | 130 |
| Michigan | — | 0 | 2 | 24 | 21 | — | 0 | 1 | 3 | 2 | 4 | 4 | 13 | 229 | 206 |
| Ohio | 8 | 7 | 18 | 380 | 377 | 1 | 1 | 4 | 58 | 53 | — | 5 | 12 | 243 | 329 |
| Wisconsin | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 3 | 36 | 64 |
| **W.N. Central** | — | 2 | 161 | 113 | 201 | — | 0 | 3 | 21 | 40 | — | 6 | 12 | 298 | 391 |
| Iowa | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 2 | 19 | 16 |
| Kansas | — | 0 | 5 | 38 | 77 | — | 0 | 2 | 13 | 6 | — | 0 | 3 | 29 | 29 |
| Minnesota | — | 0 | 156 | — | 28 | — | 0 | 3 | — | 28 | — | 1 | 4 | 69 | 111 |
| Missouri | — | 1 | 5 | 61 | 85 | — | 0 | 1 | 6 | 3 | — | 3 | 8 | 159 | 219 |
| Nebraska§ | — | 0 | 1 | 2 | — | — | 0 | 0 | — | — | — | 0 | 3 | 17 | 15 |
| North Dakota | — | 0 | 3 | 10 | 2 | — | 0 | 0 | — | — | — | 0 | 1 | 4 | — |
| South Dakota | — | 0 | 2 | 2 | 9 | — | 0 | 2 | 2 | 3 | — | 0 | 1 | 1 | 1 |
| **S. Atlantic** | 23 | 24 | 53 | 1,247 | 1,287 | 3 | 3 | 12 | 208 | 240 | 35 | 63 | 262 | 3,099 | 2,804 |
| Delaware | — | 0 | 2 | 18 | 3 | — | 0 | 2 | 3 | — | — | 0 | 3 | 27 | 15 |
| District of Columbia | N | 0 | 0 | N | N | N | 0 | 0 | N | N | — | 3 | 8 | 163 | 143 |
| Florida | 16 | 14 | 36 | 733 | 730 | 3 | 2 | 9 | 127 | 150 | 3 | 19 | 32 | 953 | 995 |
| Georgia | 7 | 8 | 25 | 393 | 436 | — | 1 | 5 | 70 | 76 | 1 | 14 | 227 | 737 | 668 |
| Maryland§ | — | 0 | 1 | 4 | 7 | — | 0 | 0 | — | 1 | 7 | 6 | 16 | 279 | 345 |
| North Carolina | N | 0 | 0 | N | N | N | 0 | 0 | N | N | 20 | 9 | 31 | 541 | 276 |
| South Carolina§ | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 2 | 6 | 109 | 92 |
| Virginia§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N | 4 | 6 | 15 | 286 | 258 |
| West Virginia | — | 1 | 13 | 99 | 111 | — | 0 | 2 | 8 | 13 | — | 0 | 2 | 4 | 12 |
| **E.S. Central** | 7 | 4 | 25 | 250 | 306 | 2 | 0 | 3 | 34 | 57 | 11 | 22 | 36 | 1,081 | 1,074 |
| Alabama§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N | 1 | 8 | 18 | 398 | 432 |
| Kentucky | — | 1 | 5 | 71 | 74 | — | 0 | 2 | 8 | 11 | 5 | 1 | 13 | 80 | 81 |
| Mississippi | — | 0 | 3 | 4 | 41 | — | 0 | 1 | 3 | 14 | — | 4 | 16 | 211 | 164 |
| Tennessee§ | 7 | 2 | 23 | 175 | 191 | 2 | 0 | 3 | 23 | 32 | 5 | 8 | 15 | 392 | 397 |
| **W.S. Central** | 2 | 1 | 6 | 86 | 98 | — | 0 | 3 | 16 | 16 | 7 | 53 | 79 | 2,481 | 2,250 |
| Arkansas§ | 2 | 1 | 5 | 54 | 21 | — | 0 | 3 | 11 | 5 | 7 | 5 | 35 | 250 | 166 |
| Louisiana | — | 0 | 5 | 32 | 77 | — | 0 | 1 | 5 | 11 | — | 12 | 41 | 602 | 667 |
| Oklahoma | N | 0 | 0 | N | N | N | 0 | 0 | N | N | — | 1 | 5 | 70 | 81 |
| Texas§ | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 31 | 49 | 1,559 | 1,336 |
| **Mountain** | — | 2 | 7 | 96 | 124 | — | 0 | 2 | 21 | 17 | 2 | 8 | 18 | 420 | 576 |
| Arizona | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 3 | 9 | 170 | 302 |
| Colorado | — | 0 | 0 | — | — | — | 0 | 0 | — | — | 2 | 1 | 4 | 83 | 126 |
| Idaho§ | N | 0 | 1 | N | N | N | 0 | 1 | N | N | — | 0 | 1 | 3 | 7 |
| Montana§ | — | 0 | 0 | — | 1 | — | 0 | 0 | — | — | — | 0 | 7 | 1 | — |
| Nevada§ | — | 0 | 4 | 32 | 53 | — | 0 | 2 | 6 | 6 | — | 1 | 10 | 90 | 74 |
| New Mexico§ | — | 0 | 1 | 1 | — | — | 0 | 0 | — | — | — | 1 | 5 | 54 | 40 |
| Utah | — | 1 | 5 | 51 | 67 | — | 0 | 2 | 13 | 11 | — | 0 | 2 | 16 | 24 |
| Wyoming§ | — | 0 | 2 | 12 | 3 | — | 0 | 1 | 2 | — | — | 0 | 1 | 3 | 3 |
| **Pacific** | — | 0 | 1 | 3 | 2 | — | 0 | 1 | 2 | 2 | 3 | 43 | 68 | 2,137 | 2,342 |
| Alaska | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | 1 |
| California | N | 0 | 0 | N | N | N | 0 | 0 | N | N | 2 | 40 | 61 | 1,945 | 2,111 |
| Hawaii | — | 0 | 1 | 3 | 2 | — | 0 | 1 | 2 | 2 | — | 0 | 3 | 27 | 28 |
| Oregon§ | N | 0 | 0 | N | N | N | 0 | 0 | N | N | — | 1 | 5 | 44 | 23 |
| Washington | N | 0 | 0 | N | N | N | 0 | 0 | N | N | 1 | 2 | 7 | 121 | 179 |
| American Samoa | N | 0 | 0 | N | N | N | 0 | 0 | N | N | — | 0 | 0 | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Puerto Rico | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 3 | 17 | 209 | 154 |
| U.S. Virgin Islands | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is 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 December 19, 2009, and December 13, 2008 (50th week)***

| | Varicella (chickenpox) | | | | | West Nile virus disease† Neuroinvasive | | | | | West Nile virus disease† Nonneuroinvasive§ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Previous 52 weeks | | | | | Previous 52 weeks | | | | | Previous 52 weeks | | | |
| Reporting area | Current week | Med | Max | Cum 2009 | Cum 2008 | Current week | Med | Max | Cum 2009 | Cum 2008 | Current week | Med | Max | Cum 2009 | Cum 2008 |
| **United States** | 103 | 316 | 1,035 | 16,697 | 28,315 | — | 0 | 44 | 359 | 688 | — | 0 | 47 | 325 | 667 |
| **New England** | 4 | 7 | 33 | 344 | 1,657 | — | 0 | 0 | — | 7 | — | 0 | 0 | — | 3 |
| Connecticut | — | 0 | 14 | — | 832 | — | 0 | 0 | — | 5 | — | 0 | 0 | — | 3 |
| Maine¶ | — | 0 | 12 | 105 | 258 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Massachusetts | — | 0 | 2 | 2 | — | — | 0 | 0 | — | 1 | — | 0 | 0 | — | — |
| New Hampshire | 4 | 3 | 10 | 190 | 256 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Rhode Island¶ | — | 0 | 1 | 4 | — | — | 0 | 0 | — | 1 | — | 0 | 0 | — | — |
| Vermont¶ | — | 0 | 7 | 43 | 311 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| **Mid. Atlantic** | 14 | 30 | 56 | 1,493 | 2,300 | — | 0 | 2 | 7 | 50 | — | 0 | 1 | 1 | 20 |
| New Jersey | N | 0 | 0 | N | N | — | 0 | 1 | 2 | 6 | — | 0 | 0 | — | 4 |
| New York (Upstate) | N | 0 | 0 | N | N | — | 0 | 1 | 3 | 24 | — | 0 | 1 | 1 | 7 |
| New York City | — | 0 | 0 | — | — | — | 0 | 1 | 2 | 8 | — | 0 | 0 | — | 7 |
| Pennsylvania | 14 | 30 | 56 | 1,493 | 2,300 | — | 0 | 0 | — | 12 | — | 0 | 0 | — | 2 |
| **E.N. Central** | 56 | 121 | 232 | 6,057 | 7,477 | — | 0 | 4 | 9 | 44 | — | 0 | 3 | 4 | 20 |
| Illinois | 10 | 32 | 73 | 1,528 | 1,416 | — | 0 | 3 | 5 | 12 | — | 0 | 0 | — | 8 |
| Indiana | — | 7 | 30 | 379 | — | — | 0 | 1 | 2 | 3 | — | 0 | 1 | 2 | 1 |
| Michigan | 25 | 41 | 84 | 1,822 | 2,941 | — | 0 | 1 | 1 | 11 | — | 0 | 0 | — | 6 |
| Ohio | 19 | 36 | 88 | 1,869 | 2,289 | — | 0 | 0 | — | 14 | — | 0 | 2 | 2 | 1 |
| Wisconsin | 2 | 8 | 55 | 459 | 831 | — | 0 | 1 | 1 | 4 | — | 0 | 0 | — | 4 |
| **W.N. Central** | 2 | 14 | 114 | 859 | 1,276 | — | 0 | 5 | 26 | 51 | — | 0 | 11 | 73 | 134 |
| Iowa | N | 0 | 0 | N | N | — | 0 | 0 | — | 3 | — | 0 | 1 | 5 | 3 |
| Kansas | — | 2 | 19 | 183 | 464 | — | 0 | 1 | 4 | 14 | — | 0 | 2 | 8 | 17 |
| Minnesota | — | 0 | 0 | — | — | — | 0 | 1 | 1 | 2 | — | 0 | 1 | 3 | 8 |
| Missouri | 2 | 8 | 51 | 576 | 757 | — | 0 | 2 | 4 | 12 | — | 0 | 1 | 1 | 3 |
| Nebraska¶ | N | 0 | 0 | N | N | — | 0 | 2 | 11 | 7 | — | 0 | 6 | 40 | 40 |
| North Dakota | — | 0 | 108 | 83 | — | — | 0 | 0 | — | 2 | — | 0 | 1 | 1 | 35 |
| South Dakota | — | 0 | 2 | 17 | 55 | — | 0 | 3 | 6 | 11 | — | 0 | 2 | 15 | 28 |
| **S. Atlantic** | 21 | 32 | 146 | 1,814 | 4,549 | — | 0 | 3 | 12 | 20 | — | 0 | 1 | 3 | 20 |
| Delaware | — | 0 | 2 | 12 | 46 | — | 0 | 0 | — | — | — | 0 | 0 | — | 1 |
| District of Columbia | — | 0 | 3 | 13 | 24 | — | 0 | 0 | — | 4 | — | 0 | 0 | — | 4 |
| Florida | 16 | 18 | 67 | 1,117 | 1,616 | — | 0 | 1 | 2 | 3 | — | 0 | 1 | 1 | — |
| Georgia | N | 0 | 0 | N | N | — | 0 | 1 | 4 | 4 | — | 0 | 0 | — | 4 |
| Maryland¶ | N | 0 | 0 | N | N | — | 0 | 0 | — | 6 | — | 0 | 1 | 2 | 8 |
| North Carolina | N | 0 | 0 | N | N | — | 0 | 0 | — | 2 | — | 0 | 0 | — | 1 |
| South Carolina¶ | — | 0 | 54 | 154 | 849 | — | 0 | 2 | 3 | — | — | 0 | 0 | — | 1 |
| Virginia¶ | — | 0 | 119 | 28 | 1,347 | — | 0 | 1 | 3 | — | — | 0 | 0 | — | 1 |
| West Virginia | 5 | 9 | 32 | 490 | 667 | — | 0 | 0 | — | 1 | — | 0 | 0 | — | — |
| **E.S. Central** | — | 10 | 29 | 521 | 1,109 | — | 0 | 6 | 36 | 48 | — | 0 | 4 | 26 | 57 |
| Alabama¶ | — | 10 | 27 | 516 | 1,095 | — | 0 | 0 | — | 11 | — | 0 | 0 | — | 7 |
| Kentucky | N | 0 | 0 | N | N | — | 0 | 1 | 3 | 3 | — | 0 | 0 | — | — |
| Mississippi | — | 0 | 2 | 5 | 14 | — | 0 | 5 | 29 | 22 | — | 0 | 4 | 22 | 43 |
| Tennessee¶ | N | 0 | 0 | N | N | — | 0 | 2 | 4 | 12 | — | 0 | 1 | 4 | 7 |
| **W.S. Central** | — | 79 | 747 | 4,312 | 7,702 | — | 0 | 17 | 109 | 69 | — | 0 | 6 | 34 | 62 |
| Arkansas¶ | — | 0 | 25 | 115 | 746 | — | 0 | 1 | 6 | 7 | — | 0 | 0 | — | 2 |
| Louisiana | — | 1 | 7 | 76 | 70 | — | 0 | 2 | 10 | 18 | — | 0 | 4 | 11 | 31 |
| Oklahoma | N | 0 | 0 | N | N | — | 0 | 2 | 8 | 4 | — | 0 | 2 | 2 | 5 |
| Texas¶ | — | 72 | 721 | 4,121 | 6,886 | — | 0 | 14 | 85 | 40 | — | 0 | 4 | 21 | 24 |
| **Mountain** | 6 | 19 | 65 | 1,209 | 2,108 | — | 0 | 12 | 75 | 103 | — | 0 | 17 | 122 | 184 |
| Arizona | — | 0 | 0 | — | — | — | 0 | 4 | 12 | 62 | — | 0 | 2 | 8 | 52 |
| Colorado | 6 | 9 | 33 | 501 | 843 | — | 0 | 7 | 35 | 17 | — | 0 | 14 | 66 | 54 |
| Idaho¶ | N | 0 | 0 | N | N | — | 0 | 3 | 9 | 4 | — | 0 | 5 | 29 | 35 |
| Montana¶ | — | 0 | 16 | 105 | 319 | — | 0 | 1 | 2 | — | — | 0 | 1 | 4 | 5 |
| Nevada¶ | N | 0 | 0 | N | N | — | 0 | 2 | 7 | 9 | — | 0 | 1 | 5 | 7 |
| New Mexico¶ | — | 0 | 20 | 134 | 216 | — | 0 | 2 | 6 | 5 | — | 0 | 1 | 2 | 3 |
| Utah | — | 7 | 32 | 469 | 720 | — | 0 | 0 | — | 6 | — | 0 | 0 | — | 20 |
| Wyoming¶ | — | 0 | 1 | — | 10 | — | 0 | 1 | 4 | — | — | 0 | 2 | 8 | 8 |
| **Pacific** | — | 1 | 6 | 88 | 137 | — | 0 | 12 | 85 | 296 | — | 0 | 11 | 62 | 167 |
| Alaska | — | 1 | 5 | 53 | 74 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| California | — | 0 | 0 | — | — | — | 0 | 7 | 59 | 291 | — | 0 | 6 | 45 | 153 |
| Hawaii | — | 0 | 4 | 35 | 63 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Oregon¶ | N | 0 | 0 | N | N | — | 0 | 1 | 1 | 3 | — | 0 | 3 | 6 | 13 |
| Washington | N | 0 | 0 | N | N | — | 0 | 6 | 25 | 2 | — | 0 | 3 | 11 | 1 |
| American Samoa | N | 0 | 0 | N | N | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Guam | — | 0 | 0 | — | 63 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| Puerto Rico | — | 6 | 26 | 405 | 575 | — | 0 | 0 | — | — | — | 0 | 0 | — | — |
| U.S. Virgin Islands | — | 0 | 0 | — | — | — | 0 | 0 | — | — | — | 0 | 0 | — | — |

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† 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 reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting 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 December 19, 2009 (50th week)**

| Reporting area | All causes, by age (years) | | | | | | P&I† |
|---|---|---|---|---|---|---|---|
| | All Ages | ≥65 | 45–64 | 25–44 | 1–24 | <1 | Total |
| **New England** | 525 | 366 | 127 | 24 | 4 | 4 | 63 |
| Boston, MA | 158 | 90 | 54 | 10 | — | 4 | 18 |
| Bridgeport, CT | 35 | 28 | 6 | 1 | — | — | 2 |
| Cambridge, MA | 18 | 15 | 2 | 1 | — | — | — |
| Fall River, MA | 29 | 25 | 3 | 1 | — | — | 4 |
| Hartford, CT | 46 | 32 | 12 | 1 | 1 | — | 5 |
| Lowell, MA | 29 | 22 | 6 | — | 1 | — | 5 |
| Lynn, MA | 6 | 4 | 1 | 1 | — | — | 2 |
| New Bedford, MA | 20 | 15 | 5 | — | — | — | — |
| New Haven, CT | 24 | 19 | 5 | — | — | — | 4 |
| Providence, RI | 32 | 21 | 9 | 1 | 1 | — | 2 |
| Somerville, MA | 2 | 2 | — | — | — | — | 1 |
| Springfield, MA | 39 | 27 | 9 | 3 | — | — | 2 |
| Waterbury, CT | 24 | 20 | 4 | — | — | — | 3 |
| Worcester, MA | 63 | 46 | 11 | 5 | 1 | — | 15 |
| **Mid. Atlantic** | 1,920 | 1,314 | 442 | 106 | 32 | 26 | 89 |
| Albany, NY | 39 | 29 | 8 | — | 1 | 1 | 1 |
| Allentown, PA | 26 | 19 | 5 | 1 | 1 | — | — |
| Buffalo, NY | 71 | 55 | 12 | 1 | 2 | 1 | 11 |
| Camden, NJ | U | U | U | U | U | U | U |
| Elizabeth, NJ | 17 | 12 | 4 | 1 | — | — | 1 |
| Erie, PA | 38 | 30 | 6 | 1 | 1 | — | 3 |
| Jersey City, NJ | 14 | 6 | 7 | 1 | — | — | 1 |
| New York City, NY | 1,022 | 708 | 236 | 53 | 14 | 11 | 41 |
| Newark, NJ | 20 | 11 | 5 | 3 | — | 1 | 1 |
| Paterson, NJ | 6 | 3 | — | 1 | 1 | 1 | — |
| Philadelphia, PA | 295 | 172 | 82 | 26 | 8 | 7 | 13 |
| Pittsburgh, PA§ | 52 | 33 | 16 | 1 | 2 | — | 3 |
| Reading, PA | 26 | 22 | 4 | — | — | — | 3 |
| Rochester, NY | 89 | 68 | 14 | 4 | 1 | 2 | 1 |
| Schenectady, NY | 21 | 15 | 2 | 4 | — | — | — |
| Scranton, PA | 30 | 19 | 9 | 2 | — | — | — |
| Syracuse, NY | 99 | 74 | 19 | 3 | 1 | 2 | 7 |
| Trenton, NJ | 24 | 15 | 7 | 2 | — | — | — |
| Utica, NY | 10 | 7 | 3 | — | — | — | 3 |
| Yonkers, NY | 21 | 16 | 3 | 2 | — | — | — |
| **E.N. Central** | 1,661 | 1,141 | 364 | 93 | 35 | 28 | 124 |
| Akron, OH | 56 | 39 | 10 | 3 | 2 | 2 | 7 |
| Canton, OH | 39 | 25 | 13 | 1 | — | — | 4 |
| Chicago, IL | U | U | U | U | U | U | U |
| Cincinnati, OH | 120 | 75 | 27 | 11 | 6 | 1 | 9 |
| Cleveland, OH | 254 | 170 | 62 | 15 | 1 | 6 | 16 |
| Columbus, OH | 198 | 138 | 35 | 15 | 6 | 4 | 19 |
| Dayton, OH | 140 | 103 | 22 | 11 | 3 | 1 | 15 |
| Detroit, MI | U | U | U | U | U | U | U |
| Evansville, IN | 60 | 43 | 14 | 3 | — | — | 8 |
| Fort Wayne, IN | 71 | 49 | 15 | 5 | 1 | 1 | 2 |
| Gary, IN | 14 | 8 | 4 | 1 | — | 1 | — |
| Grand Rapids, MI | 56 | 40 | 15 | — | — | 1 | 3 |
| Indianapolis, IN | 174 | 112 | 41 | 10 | 5 | 6 | 9 |
| Lansing, MI | 39 | 28 | 10 | 1 | — | — | 4 |
| Milwaukee, WI | 102 | 67 | 23 | 7 | 3 | 2 | — |
| Peoria, IL | 43 | 29 | 10 | 2 | 2 | — | 4 |
| Rockford, IL | 65 | 47 | 10 | 3 | 4 | 1 | 4 |
| South Bend, IN | 67 | 47 | 17 | 3 | — | — | 1 |
| Toledo, OH | 96 | 67 | 24 | 2 | 2 | 1 | 15 |
| Youngstown, OH | 67 | 54 | 12 | — | — | 1 | 4 |
| **W.N. Central** | 670 | 433 | 155 | 42 | 22 | 18 | 51 |
| Des Moines, IA | 55 | 40 | 10 | 4 | — | 1 | 4 |
| Duluth, MN | 31 | 22 | 8 | 1 | — | — | 3 |
| Kansas City, KS | 30 | 18 | 9 | 3 | — | — | 4 |
| Kansas City, MO | 112 | 73 | 23 | 6 | 4 | 6 | 5 |
| Lincoln, NE | 54 | 47 | 6 | 1 | — | — | 3 |
| Minneapolis, MN | 66 | 40 | 18 | 6 | — | 2 | 7 |
| Omaha, NE | 95 | 69 | 20 | 1 | 2 | 3 | 8 |
| St. Louis, MO | 79 | 25 | 29 | 10 | 12 | 3 | 6 |
| St. Paul, MN | 55 | 36 | 13 | 1 | 4 | 1 | 4 |
| Wichita, KS | 93 | 63 | 19 | 9 | — | 2 | 7 |
| **S. Atlantic** | 1,111 | 698 | 272 | 88 | 22 | 31 | 62 |
| Atlanta, GA | 156 | 86 | 47 | 11 | 2 | 10 | 3 |
| Baltimore, MD | 169 | 91 | 54 | 19 | 3 | 2 | 13 |
| Charlotte, NC | U | U | U | U | U | U | U |
| Jacksonville, FL | 142 | 98 | 29 | 7 | 4 | 4 | 10 |
| Miami, FL | 120 | 63 | 27 | 24 | 2 | 4 | 8 |
| Norfolk, VA | 69 | 48 | 9 | 4 | 2 | 6 | 3 |
| Richmond, VA | 59 | 37 | 19 | 2 | 1 | — | 1 |
| Savannah, GA | 57 | 39 | 16 | 2 | — | — | 6 |
| St. Petersburg, FL | 58 | 35 | 18 | 1 | 1 | 3 | 3 |
| Tampa, FL | 175 | 124 | 35 | 12 | 3 | 1 | 9 |
| Washington, D.C. | 100 | 73 | 17 | 6 | 3 | 1 | 5 |
| Wilmington, DE | 6 | 4 | 1 | — | 1 | — | 1 |
| **E.S. Central** | 976 | 651 | 238 | 59 | 10 | 18 | 88 |
| Birmingham, AL | 214 | 148 | 48 | 9 | 2 | 7 | 29 |
| Chattanooga, TN | 59 | 36 | 15 | 7 | 1 | — | 2 |
| Knoxville, TN | 117 | 81 | 25 | 10 | 1 | — | 10 |
| Lexington, KY | 59 | 37 | 18 | 3 | — | 1 | 6 |
| Memphis, TN | 210 | 135 | 48 | 17 | 3 | 7 | 19 |
| Mobile, AL | 118 | 86 | 28 | 4 | — | — | 4 |
| Montgomery, AL | 43 | 28 | 11 | 2 | 1 | 1 | 7 |
| Nashville, TN | 156 | 100 | 45 | 7 | 2 | 2 | 11 |
| **W.S. Central** | 1,522 | 996 | 359 | 92 | 42 | 29 | 94 |
| Austin, TX | 101 | 69 | 22 | 5 | 2 | 3 | 7 |
| Baton Rouge, LA | 53 | 43 | 4 | 2 | 3 | 1 | — |
| Corpus Christi, TX | 58 | 38 | 13 | 3 | 2 | 2 | 6 |
| Dallas, TX | 196 | 121 | 49 | 12 | 10 | 4 | 13 |
| El Paso, TX | 69 | 45 | 21 | 2 | — | 1 | 2 |
| Fort Worth, TX | U | U | U | U | U | U | U |
| Houston, TX | 486 | 305 | 118 | 38 | 13 | 8 | 33 |
| Little Rock, AR | 93 | 65 | 21 | 2 | 4 | 1 | 4 |
| New Orleans, LA | U | U | U | U | U | U | U |
| San Antonio, TX | 266 | 187 | 53 | 17 | 6 | 3 | 14 |
| Shreveport, LA | 76 | 47 | 21 | 2 | 1 | 5 | 4 |
| Tulsa, OK | 124 | 76 | 37 | 9 | 1 | 1 | 11 |
| **Mountain** | 949 | 630 | 211 | 64 | 23 | 21 | 72 |
| Albuquerque, NM | 135 | 94 | 28 | 7 | 2 | 4 | 13 |
| Boise, ID | 53 | 41 | 7 | 3 | 2 | — | 3 |
| Colorado Springs, CO | 81 | 49 | 18 | 6 | 4 | 4 | — |
| Denver, CO | 77 | 45 | 20 | 8 | — | 4 | 2 |
| Las Vegas, NV | 290 | 181 | 77 | 22 | 5 | 5 | 28 |
| Ogden, UT | 42 | 28 | 7 | 4 | 3 | — | 6 |
| Phoenix, AZ | U | U | U | U | U | U | U |
| Pueblo, CO | 39 | 30 | 8 | 1 | — | — | 2 |
| Salt Lake City, UT | 131 | 87 | 31 | 8 | 3 | 2 | 13 |
| Tucson, AZ | 101 | 75 | 15 | 5 | 4 | 2 | 5 |
| **Pacific** | 1,718 | 1,193 | 369 | 104 | 34 | 18 | 153 |
| Berkeley, CA | 14 | 10 | 1 | 1 | 2 | — | 1 |
| Fresno, CA | 148 | 100 | 31 | 10 | 5 | 2 | 11 |
| Glendale, CA | 30 | 22 | 8 | — | — | — | 6 |
| Honolulu, HI | 75 | 56 | 16 | 2 | — | 1 | 7 |
| Long Beach, CA | 82 | 55 | 15 | 6 | 6 | — | 12 |
| Los Angeles, CA | 293 | 197 | 68 | 18 | 6 | 4 | 38 |
| Pasadena, CA | U | U | U | U | U | U | U |
| Portland, OR | 114 | 73 | 31 | 10 | — | — | 3 |
| Sacramento, CA | 240 | 167 | 50 | 18 | 3 | 2 | 22 |
| San Diego, CA | U | U | U | U | U | U | U |
| San Francisco, CA | 149 | 108 | 33 | 3 | 3 | 2 | 18 |
| San Jose, CA | 201 | 145 | 38 | 14 | 2 | 2 | 18 |
| Santa Cruz, CA | 44 | 34 | 8 | 2 | — | — | 3 |
| Seattle, WA | 129 | 86 | 26 | 10 | 3 | 4 | 6 |
| Spokane, WA | 68 | 50 | 14 | 1 | 2 | 1 | 4 |
| Tacoma, WA | 131 | 90 | 30 | 9 | 2 | — | 4 |
| **Total¶** | **11,052** | **7,422** | **2,537** | **672** | **224** | **193** | **796** |

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.

¶ Total includes unknown ages.

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